

**A SYSTEMATIC LITERATURE REVIEW ON THE ROLE OF E-COMMERCE ON
THE GROWTH OF SMALL AND MEDIUM ENTERPRISES (SMEs)**

BY

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DECLARATION:

In accordance with Rule G5.6.3, I hereby declare that the above-mentioned treatise/dissertation/thesis is my own work and that I have not previously submitted to another University or for another qualification.


.....

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I want to express my most incredible gratitude and appreciation to the following individuals who have lent an ear to all my concerns and provided me with much-needed support.

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ABSTRACT

Small and Medium-sized Enterprises play a vital role in global economies, yet the precise impact of e-commerce on their growth remains inconsistently understood across existing research. This study addresses this gap by conducting a systematic literature review to comprehensively investigate the role of e-commerce in SME growth. The primary objective was to clarify how e-commerce influences SME development, summarize its various impacts, and provide a conceptual framework illustrating these relationships.

Employing a rigorous qualitative mono-method systematic literature review, this research analysed journal publications from academic databases such as Google Scholar, Mendeley, Scopus, and Web of Science, published between 2015 and 2025. The data was subjected to thematic analysis, with emergent themes interpreted through the lens of the Technology Acceptance Model, focusing on Perceived Usefulness and Perceived Ease of Use.

The findings reveal two overarching themes influencing the impact of e-commerce on SME growth: "E-commerce-Driven Economic and Business Growth" and "Digital Transformation & Growth of SMEs." These themes encompass a range of factors including market access, operational efficiency, innovation, infrastructure and connectivity, government support, and various internal and external barriers. The study demonstrates that SMEs' adoption and successful integration of e-commerce are critically shaped by their perceptions of its usefulness and ease of use.

This research contributes academically by synthesizing fragmented knowledge, identifying key drivers and impediments to e-commerce adoption, and offering a conceptual framework for understanding its impact on SMEs. Practically the insights provided can guide SME owners and managers in strategic decision-making regarding digital transformation and assist policymakers in developing more effective support mechanisms to foster SME growth in the digital economy.

Key Terms: E-commerce, Small-medium enterprises SMEs, and Systematic literature review (SLR)

Table of Contents

DECLARATION BY CANDIDATE	i
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
LIST OF TABLES	viii
LIST OF FIGURES.....	viii
CHAPTER ONE	1
INTRODUCTION, PROBLEM STATEMENT, AND SCOPE OF STUDY.....	1
1.1 INTRODUCTION AND BACKGROUND TO THE STUDY	1
1.2 PROBLEM STATEMENT	2
1.3 RESEARCH OBJECTIVES	3
1.3.1 PRIMARY RESEARCH OBJECTIVE.....	3
1.3.2 SECONDARY RESEARCH OBJECTIVES.....	3
1.3.3 METHODOLOGICAL RESEARCH OBJECTIVES.....	4
1.4 SCOPE AND DELIMITATION OF STUDY.....	4
1.5 KEY CONCEPTS	4
1.5.1 E-COMMERCE.....	4
1.5.2 SMEs	5
1.5.3 SYSTEMATIC LITERATURE REVIEW	5
1.6 SIGNIFICANCE OF THE STUDY.....	6
1.7 STRUCTURE OF THE RESEARCH TO FOLLOW	6
1.8 SUMMARY	7
CHAPTER 2	8
LITERATURE OVERVIEW.....	8
2.1 INTRODUCTION.....	8
2.2 NATURE OF SMEs	8

2.2.1 CLASSIFICATION OF SMEs.....	8
2.2.2 IMPORTANCE OF SMEs	9
2.2.3 CHALLENGES OF SMEs	9
2.3 E-COMMERCE IN THE CONTEXT OF SMES	11
2.3.1 EVOLUTION OF E-COMMERCE	11
2.3.2 E-COMMERCE ADOPTION BY SME.....	11
2.4 BARRIERS TO E-COMMERCE ADOPTION	13
2.5 BENEFIT OF E-COMMERCE FOR SME	14
2.6 IMPACT OF E-COMMERCE ON GROWTH OF SME.....	15
2.7 THEORETICAL FRAMEWORK.....	15
2.7.1 RELEVANCE OF TAM TO E-COMMERCE ADOPTION IN SMES	17
2.9.2 TAM CONSISTS OF THE FOLLOWING PRIMARY CONSTRUCTS THAT INTERACT TO INFLUENCE BEHAVIOURAL INTENTION AND EVENTUAL USAGE:.....	17
2.10 EMPIRICAL EVIDENCE SUPPORTING TAM IN SME E-COMMERCE STUDIES	18
2.11 SUMMARY	18
CHAPTER 3	19
RESEARCH DESIGN AND METHODOLOGY	19
3.1 INTRODUCTION.....	19
3.2 LITERATURE REVIEW	19
3.3 EMPIRICAL INVESTIGATION: RESEARCH METHODOLOGY	20
3.3.1 REARCH STRATEGY	23
3.3.2 STEPS IN UNDERTAKING A SYSTEMATIC LITERATURE REVIEW	24
3.4 RESEARCH RIGOUR	26
3.5 ETHICAL CONSIDERATIONS	28
3.6 SUMMARY	29
CHAPTER 4	30

EMPIRICAL RESULTS	30
4.1 INTRODUCTION.....	30
4.2 DESCRIPTIVE ANALYSIS	30
4.2.1 ARTICLE	30
4.3 THEMATIC ANALYSIS	36
4.3.1 THEME ONE: E-COMMERCE-DRIVEN ECONOMIC AND BUSINESS GROWTH	36
4.3.1.1 ADOPTION AND DEVELOPMENT	38
4.3.1.2 BUSINESS GROWTH & OPPORTUNITIES.....	39
4.3.1.3 MARKET & CONSUMER DYNAMICS.....	40
4.3.1.4 DATA & INFORMATION MANAGEMENT	40
4.3.1.5 INFRASTRUCTURE & CONNECTIVITY.....	41
4.3.1.6 ECONOMIC & SOCIAL IMPACT	41
4.3.1.7 INNOVATION & TRANSFORMATION	42
4.3.1.8 CHALLENGES & BARRIERS	43
4.3.1.9 GOVERNMENT & INSTITUTIONAL SUPPORT.....	43
4.3.1.10 COST & RESOURCE OPTIMIZATION.....	44
4.3.1.11 PROMOTION & CHANNELS.....	45
4.3.2 THEME TWO: DIGITAL TRANSFORMATION & GROWTH OF SMES.....	45
4.3.2.1 ACCESS & CONNECTIVITY	47
4.3.2.2 ADOPTION & INTEGRATION	47
4.3.2.3 BUSINESS OPERATIONS & EFFICIENCY.....	48
4.3.2.4 CONSUMER & MARKET ENGAGEMENT	49
4.3.2.5 DATA & KNOWLEDGE MANAGEMENT	49
4.3.2.6 GROWTH & DEVELOPMENT	49
4.3.2.7 INNOVATION & EXPERIMENTATION.....	49
4.3.2.8 INFLUENCE & EXTERNAL FACTORS	50

4.3.2.9 TRANSFORMATION & PROBLEM SOLVING	50
4.4 SUMMARY.....	50
CHAPTER 5.....	51
SUMMARY, RECOMMENDATIONS, AND CONCLUSION	51
5.1 INTRODUCTION.....	51
5.2 OVERVIEW OF THIS STUDY.....	51
5.3 DISCUSSION OF EMPIRICAL FINDINGS AND RECOMMENDATIONS	54
5.3.1 DESCRIPTIVE FINDINGS RELATING TO JOURNAL PUBLICATIONS	54
5.3.2 FACTORS INFLUENCING THE IMPACT OF E-COMMERCE ON SME GROWTH	55
5.3.2.1 E-COMMERCE-DRIVEN ECONOMIC AND BUSINESS GROWTH.....	59
5.3.2.2 DIGITAL TRANSFORMATION & GROWTH OF SMES	63
5.4 CONCEPTUAL FRAMEWORK ON E-COMMERCE AND SME GROWTH	65
5.5 LIMITATIONS OF THIS STUDY.....	67
5.6 CONTRIBUTIONS OF THIS RESEARCH.....	68
5.6.1 ACADEMIC CONTRIBUTIONS:	68
5.6.2 PRACTICAL CONTRIBUTIONS	69
5.7 CONCLUSION	69
REFERENCES.....	70
ANNEXURE A.....	78
ANNEXURE B	85
ANNEXURE C.....	89
ANNEXURE D.....	90

LIST OF TABLES

Table 2.1. Medium, Small and Micro -Sized Enterprises as Employment Levels (EC).....	8
Table 2.2: Comparison of SMEs and large businesses.....	10
Table 2.3: Technology/E-commerce adoption factors.....	12
Table 3.1 Research Methodology.....	20
Table 3.3: Trustworthiness justification for this study.....	28
Table 4.1.: Most cited articles.....	31
Table 4.2: Least cited articles.....	32
Table 4.3: Underlying Theories.....	34
Table 4.3: E-commerce impact.....	36
Table 4.4: Influence mechanisms.....	45
Table 5.1: Accomplishment of research objectives per chapter.....	52
Table 5.2: Summary of Factors Influencing the Impact of E-commerce on SME Growth.....	55

LIST OF FIGURES

Figure 2.1: Barriers to e-commerce framework.....	14
Figure 2.2: Technology Acceptance Model (TAM).....	16
FIGURE 2.3: Core Constructs of TAM.....	17
Figure 3.1: Research onion.....	20
Figure 3.2: Stages in conducting a SLR.....	24
Figure 4.1: Methodological approach.....	34
Figure 4.2: Number of included articles published per year.....	35
Figure 4.3: Regions of article publications.....	36

CHAPTER ONE

INTRODUCTION, PROBLEM STATEMENT, AND SCOPE OF STUDY

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

The Digital Revolution, sometimes referred to as the Third Industrial Revolution, is characterised by the use of computers, the Internet, and mobile communication technologies (Vayyavur, 2024:26). Two significant advantages of the Internet are the development of technologies appropriate for various age groups and the promotion of continuous innovation (Ibrahim, 2021:20). Additionally, it is widely regarded as one of the most groundbreaking innovations in human history, drastically altering communication techniques, international relations, and business practices. Since its inception as a basic network of static web pages, the Internet has grown into intelligent, decentralised systems that have significantly altered both the state of the economy and how people interact with one another (Solanke, 2024:961). Additionally, the growth of e-commerce has been primarily driven by increased Internet penetration and accessibility, which has coincided with a notable increase in the use of e-commerce platforms across a variety of market segments, including Business to Business (B2B), Business to Consumer (B2C), Consumer to Consumer (C2C), and Online to Offline (O2O) models (Santos, 2021:1).

Due to the tremendous growth and development of e-commerce in recent years, particularly in developing countries, many businesses now choose to operate online rather than in traditional brick-and-mortar stores (Zhong, 2023:7621). Electronic commerce has significantly impacted the global business environment, competition, and the growth of organisations by enhancing their purchasing and sales processes (Raji, Olawore & Osahor, 2023:1412). As competition in this industry heats up, e-commerce has emerged as a critical element of the modern business environment, contributing significantly to the growth and viability of small and medium-sized businesses (SMEs) (Adams, 2022:10). Without having to make the costly investments in physical infrastructure, SMEs can reach a wider audience through e-commerce platforms (Yadav, n.d.:31). As a result, SMEs must modify their plans to conform to the e-commerce environment (Alzahrani, 2019:74).

SMEs play an essential role in economic growth, particularly in developing countries. The increasing development of e-commerce and digital technology has given SMEs new chances to expand their market reach, boost productivity, and boost revenue (Al-Alawi, Munir & Munir, 2024:4). SMEs have also been affected by the significant changes brought about by the expansion of online marketplaces (Raji et al., 2023:1412). By eliminating regional restrictions, providing reasonably priced marketing and sales options, and providing access to a global consumer base, e-commerce has drastically altered SME operations (Celestin, Vasuki & Kumar, 2024:15). Thus, the purpose of this study is to investigate how e-commerce contributes to the expansion of SMEs.

1.2 PROBLEM STATEMENT

SMEs are important in many economies worldwide, even though e-commerce is essential. This is primarily because of their contributions to innovation, regional development, and job creation, all of which raise their nations' economic standing (Shemi & Procter, 2018:501). SMEs operating in dynamic economic environments must maintain flexibility, adaptability, and inventiveness to effectively utilise e-commerce (Octavia, Indrawijaya, Sriayudha & Hasbullah, 2020:517). E-commerce has become essential in the current business climate, significantly impacting SMEs' expansion and viability as competition on digital platforms rises (Adams, 2022:10).

A growing number of SMEs are increasingly embracing e-commerce at various stages of operations (Ramanathan, Ramanathan & Hsiao, 2012:935). Past studies show that adopting e-commerce can drive SME growth by allowing them to explore new markets and connect with past untapped customer segments (Loo, Ramachandran & Raja Yusof, 2024:2). The use of technology in SMEs presents various benefits, like improved transparency, heightened customer satisfaction, enhanced market competitiveness, better data access, upgraded services and facilities, promotion of environmental sustainability, and more efficient supply chain operations (Al-Alawi et al., 2024:4).

The quick development of e-commerce has given SMEs new chances to expand their operations beyond conventional physical stores (Sharma, 2023:3). Thanks to

e-commerce, SMEs can also ship goods and services to distant locations. By using e-commerce to increase the precision and effectiveness of information sharing, these businesses can reduce transaction costs. Gharibyan (2016:10) asserts that "electronic commerce can boost sales and reduce expenses."

Although SMEs increasingly use e-commerce, it is still unknown how much e-commerce influences SME expansion. Even though some SMEs benefit greatly, they face financial constraints, a lack of digital expertise, and restricted access to technology (Rahayu & Day, 2017:26). Even though much research has been done on the topic, the results are frequently inconsistent and difficult to compare, making it difficult to fully comprehend how e-commerce affects the growth of SMEs. To understand the actual effect of e-commerce on SME growth, it is imperative to perform a thorough review and analysis of the body of existing literature.

1.3 RESEARCH OBJECTIVES

1.3.1 PRIMARY RESEARCH OBJECTIVE

The primary research objective of this study is to conduct a systematic literature review (SLR) regarding the impact of e-commerce on the growth of small and medium-sized enterprises (SMEs).

1.3.2 SECONDARY RESEARCH OBJECTIVES

To achieve the primary research objective for this study, the following secondary research objectives have been formulated:

SO1: To descriptively analyse the journal publications focusing on the impact of e-commerce on the growth of small and medium enterprises (SMEs).

SO2: To descriptively analyse the theories and methodologies used in research focusing on the impact of e-commerce on the growth of SMEs.

SO3: To comprehensively summarise and analyse the ways in which e-commerce influences the growth of SMEs.

SO4: To provide a conceptual framework illustrating the impact of e-commerce on the growth of SMEs.

SO5: To identify research gaps and avenues for future research in the context of the impact of e-commerce on the growth of SMEs.

1.3.3 METHODOLOGICAL RESEARCH OBJECTIVES

MO1: To conduct a literature overview on the nature and importance of small and medium enterprises (SMEs), the role of e-commerce, as well as factors influencing SME growth.

MO2: To determine the best suited research methodology to address the primary and secondary objectives.

MO3: To develop the theoretical frameworks that will guide the collection and analysis of the data.

MO4: To collect the data from academic journals that are relevant to the primary objective.

MO5: To analyse the collected data in accordance with appropriate methods.

MO6: To provide conclusions and recommendations for future research.

1.4 SCOPE AND DELIMITATION OF STUDY

The primary objective of this research was to identify and analyse the impact of e-commerce on the growth of small and medium enterprises (SMEs). Accordingly, the systematic literature review (SLR) data pertains exclusively to SMEs and how adopting e-commerce technologies influences their overall development and growth. The scope was limited to research that explicitly explores e-commerce adoption concerning SME performance, scalability, market reach, and operational efficiency. Data was sourced from academic journal articles from Google Scholar and Mendeley. Furthermore, only full-text articles published in English were included for analysis, with priority given to peer-reviewed and high-quality publications.

1.5 KEY CONCEPTS

1.5.1 E-COMMERCE

E-commerce, also known as electronic commerce (Jain *et al.*, 2021:665), has one or many definitions. According to Taher (2021:156), e-commerce involves using computers, the internet, and shared software technologies to share product descriptions and visuals, procurement details, and other necessary information with consumers, suppliers, employees, or the public. Kedah (2023:53) sees e-commerce as a process that includes trading goods, services, and information through computer networks. Simakov (2020:84) describes e-commerce broadly as the use of electronic

transmission methods to facilitate the exchange process, including purchasing and selling goods and services that need transportation, both in the physical and digital sense, from one location to another.

1.5.2 SMEs

The meaning of SMEs changes from country to country. These definitions are generally shaped by the magnitude of a nation's economic activities and its level of development (Ayawei, 2022:7). There are three main reasons why SME definitions differ: those set by international organisations, those required by national law, and those that are specific to certain industries. The difficulty of creating a universal standard has drawn considerable criticism from institutionalists, economists, scholars, and industry experts (Berisha & Pula, 2015:18). Institutionalists, economists, academics, and industry professionals have all strongly criticised the difficulty of creating a universal standard (Berisha & Pula, 2015:18). Gharibyan (2016:11) says that the European Commission (2015) divides SMEs into three groups: micro enterprises, which have fewer than 10 employees and make less than 2 million euros a year; small enterprises, which have 10 to 49 employees and make less than 10 million euros a year; and medium-sized enterprises, which have 50 to 249 employees and make less than 50 million euros a year. In the literature, definitions of SMEs often depend on how much money they make or how many people work for them.

1.5.3 SYSTEMATIC LITERATURE REVIEW

Systematic literature reviews (SLRs) are a method of consolidating scientific evidence to address specific research questions transparently and reproducibly. They aim to encompass all relevant published evidence on the subject and assess its quality (Lame, 2019:1633). These reviews can achieve several important objectives that are difficult to fulfil with standard empirical studies, such as identifying and discussing the most substantial evidence, addressing conflicting results, and highlighting gaps in the existing literature (Gupta et al., 2018:1481).

1.6 SIGNIFICANCE OF THE STUDY

SMEs are crucial for driving economic growth, and the emergence of e-commerce provides them with new avenues for expansion, increased efficiency, and access to broader markets. However, the actual effect of e-commerce on the growth of SMEs remains uncertain, as current research often presents inconsistent findings due to diverse contexts and challenges, including limited digital skills and infrastructure. This study is important because it performs a systematic literature review (SLR) to clarify how e-commerce adoption affects SME growth. It identifies significant barriers to effective implementation, highlights enabling technologies, and reveals gaps in existing research. The findings aim to provide both academic contributions and practical insights for SMEs looking to utilise e-commerce as a strategic tool for growth in the digital economy.

1.7 STRUCTURE OF THE RESEARCH TO FOLLOW

This study's structure comprises five chapters, each outlined below and its content. Chapter One provides an introduction and background to the study. It presents the problem statement, the research question, and the primary, secondary, and methodological objectives. The scope and delimitation of the study are then explained, followed by the definition of key concepts. This chapter concludes by underlining the significance of the study and offering a brief overview of the following chapters.

Chapter Two offers a comprehensive literature overview of small and medium enterprises (SMEs), focusing on their economic importance and the opportunities and challenges they face in adopting e-commerce. The chapter also explores relevant theoretical frameworks that inform the relationship between e-commerce and SME growth. Previous studies are critically reviewed to identify existing findings and gaps in the literature. This chapter highlights how the literature informs the need for a systematic review and the foundation for the current study.

Chapter Three outlines the research design and methodology used to conduct this study. It discusses the research paradigm, approach to theory development, methodological choices, time horizon, and data collection and analysis procedures. Special attention is given to the systematic literature review (SLR) process and the

steps to ensure research rigour. The chapter concludes by addressing the ethical considerations relevant to the study.

Chapter Four outlines the empirical findings of the research. It starts with a descriptive summary of the analysed articles, highlighting trends in publication and the sources of the journals. Next, there is a thematic analysis of the results, identifying and discussing key themes about how e-commerce influences the growth of SMEs, aligned with the theoretical framework. The chapter wraps up by summarising the main findings and preparing for the final reflections in Chapter Five.

Chapter Five is the concluding chapter of the study. It opens with a summary of the main points from each chapter and evaluates the extent to which the research objectives have been achieved. This is followed by discussing Chapter Four's descriptive and thematic findings. Based on these findings, practical recommendations for SMEs and suggestions for future research are provided. The chapter concludes by proposing a conceptual framework on the impact of e-commerce on SME growth and reflecting on the study's limitations and contributions to the broader academic discourse.

1.8 SUMMARY

Chapter one provided an introduction and background to the study. It presented the problem statement and outlined the research question and the primary, secondary, and methodological objectives. The scope and delimitation of the study were then explained, followed by the definition of key concepts. This chapter concluded by underlining the significance of the study and offering a brief overview of the following chapters. Chapter two will offer a literature review that examines current research, theories, and gaps related to this subject.

CHAPTER 2

LITERATURE OVERVIEW

2.1 INTRODUCTION

The previous chapter provided an introduction and background to the study. It presented the problem statement and outlined the research question, along with the primary, secondary, and methodological objectives. The scope and delimitation of the study were then explained, followed by the definition of key concepts. The chapter concluded by underlining the significance of the study and offering a brief overview of the chapters that follow. Chapter two offers a literature review that examines current research, theories, and gaps related to this subject.

2.2 NATURE OF SMEs

2.2.1 CLASSIFICATION OF SMEs

There is no universal definition of SMEs (Melo, Queiroz, Junior, de Sousa, Yushimito & Pereira, 2023:3), which suggests that various nations have their own interpretations influenced by distinct geographical and cultural contexts. Nevertheless, numerous countries categorise SMEs based on employee count, sales figures, revenue, asset size, capital investment, and sector type (Sidek, Rosli, Hasbolah & Khadri, 2020:1318). A commonly held perspective characterises SMEs as privately owned businesses that are not leaders in their sector and adhere to specific industry standards to maintain profitability (Morina & Gashi, 2016:2). Definitions of SMEs generally fit into three main categories: those set by international organisations, national legislation, and sector-specific guidelines. The lack of a universal definition continues to fuel discussions among institutionalists, economists, scholars, and professionals in the field (Berisha & Pula, 2015:18). Table 2.1 below outlines the criteria employed by the European Commission to define an SME.

Table 2.1. Medium, Small and Micro -Sized Enterprises as Employment Levels (EC)

Enterprise Category	Persons Employed	Turnover	Balance Sheet Total
Medium	<250	≤ €50 million	≤ €43 million

Small	<50	≤ €10 million	≤ €10 million
Micro	<10	≤ €2 million	≤ €2 million

Adapted from Algan, (2019:57)

2.2.2 IMPORTANCE OF SMEs

SMEs are important for many economies worldwide, especially in developing and emerging countries (Gherghina et al., 2020:1). They are also essential for economic growth. They are known to be a significant source of income and jobs, and they help a lot with poverty reduction and gross local product (Manzoor, Wei & Siraj, 2021:1). Also, SMEs encourage new ideas in how things are made, which is something that customers really value (Morina & Gashi, 2016:4).

The success of small and medium-sized businesses (SMEs) in the market, as well as their number and health, are significant for the economy (Rodrigues, Franco, Silva & Oliveira, 2021:1). SMEs are crucial in fostering entrepreneurial skills, driving innovation, and creating jobs, while also enhancing competition in pricing, product development, and operational efficiency. Large companies often depend on SMEs for raw materials, components, and the distribution of their products; without SMEs, there is a risk that larger firms could dominate the market (Algan, 2019:56). Furthermore, SMEs are essential for promoting equitable income distribution, alleviating poverty, supporting export activities, and encouraging innovation and entrepreneurship, primarily as they operate in more diverse locations than large corporations. The SME sector also generates income opportunities for small-scale entrepreneurs from low-income and marginalised communities (Sidek *et al.*, 2020:1312).

2.2.3 CHALLENGES OF SMEs

When opposed to larger organisations, SMEs usually face distinct challenges (Mittal, Khan, Romero & Wuest, 2018:194). In addition to their organisational structure facilitating quicker decision-making, SMEs exhibit considerable flexibility that enables them to better respond to technological advancements, distribute income efficiently, and adjust more easily to changes in the market and changing customer demands (Gherghina, Botezatu, Hosszu & Simionescu, 2020:1). Because they are more sensitive to client needs, have a better grasp of customer preferences, and have tighter ties with their staff, SMEs are more flexible in their operations, marketing, and

production than larger firms (Kivenko, Benics, Kalkan & Tick, 2021:106). According to Mohamed and Weber (2020:4), SMEs frequently lack the same R&D (research and development) capabilities as larger businesses. They may also lack managerial skills, expertise, and specialised knowledge in cloud computing, big data analytics, and artificial intelligence (AI) implementation. Smaller businesses may find external knowledge sourcing, a crucial component of open innovation, critical due to their limited internal knowledge resources and limited investment in acquiring such expertise (Petković, 2023:3). An overview of the fundamental distinctions between SMEs and large enterprises in terms of resources, organisational structure, strategy, and technological capability is given in Table 2.2.

Table 2.2: Comparison of SMEs and large businesses

Number	Feature	SMEs	Large Businesses
1	Financial Resources	Low	High
2	Use of Advanced Manufacturing Technologies (AMTs)	Low (Very)	High
3	Software Umbrella (incl. Data Analytics)	Low (Often Tailored Solutions)	High (With More Standardized Solutions)
4	Research & Development	Low	High
5	Nature of Product	Specialization High	Specialization Low
6	Standards Consideration	Low	High
7	Organization Culture / Leadership Flexibility	Low	High
8	Company Strategy	Dictated by Instinct of Leader (Owner)	Based on Market Research & Accurate Analyses
9	Decision Making	Restricted to Leader / Few Knowledge Carriers	Board of Advisors & (Internal/External) Consultants
10	Organizational Structure	Less Complex and Informal	Complex and Formal
11	Human Resources Engagement	Multiple Domains	Specialized Domains
12	Exposure to Human Resource Development	High in the Industry / Low Outside the Industry	Low Within the Industry / High Outside the Industry

13	Knowledge and Experience	Industry-Focused in a Specific Area	Spread Around Different Areas
14	Alliances with Universities / Research Institutions	Low	High
15	Important Activities	Outsourced	Internal to the Organization
16	Dependence on Collaborative Network	High	Low
17	Customer / Supplier Relations	High (Strong)	Low (Not So Strong)

Adapted from sources Mittal *et al.* (2018:195)

2.3 E-COMMERCE IN THE CONTEXT OF SMES

2.3.1 EVOLUTION OF E-COMMERCE

Modern companies rely heavily on technology, which is characterised by its significance and constant evolution. In a continuously changing world, technological advancements force businesses to explore new areas and assist change, requiring constant development, adaptation, and strategic adjustments (Reddy, 2024:289). Rapid technical advancement and changing consumer behaviour have caused significant changes in the global e-commerce landscape. The development of e-commerce in this dynamic digital age demonstrates how technology affects company practices and how customers interact with the marketplace (Niranjani, n.d.:105).

The emergence of e-commerce, a significant turning point in the history of commerce, has fundamentally altered the traditional retail environment (Ntumba et al., 2023:101). A common and accepted transaction technique is online commerce, which encompasses buying and selling (Sulova, 2023:220). E-commerce has completely changed how firms operate by prioritising customer requirements over production and broadening their offerings to include actual items, services, and information. To remain competitive in the quickly evolving digital market, businesses, particularly SMEs, are urged to embrace e-commerce technologies (Rahayu & Day, 2015:142).

2.3.2 E-COMMERCE ADOPTION BY SME

The adoption of e-commerce entails developing a company website to share information, manage relationships, and conduct transactions via electronic networks (Sin *et al.*, 2016:435). SMEs need to be more integrated into global information

networks, as the effect of digitisation on productivity is influenced by factors like human capital, innovation, and organizational change (Alfonso-Orjuela *et al.*, 2022:230). Table 2.3 presents a summary of various studies aimed at identifying the drivers of e-commerce adoption among SMEs, particularly at the firm level and in developing countries.

Table 2.3: Technology/E-commerce adoption factors

Subject	Constructs	Level of Analysis	Literature
E-commerce adoption / Non-adoption	Organizational readiness, Perceived usefulness, Compatibility, External pressure, Ease of use, Managerial aid, Organizational support	SME	Pearson and Grandon (2005)
E-commerce adoption	Entrepreneurial orientation, Organizational readiness, External factors, Perceived ease of use, Perceived usefulness, Perceived strategic value	Thailand / SMEs	Sutanonpaiboon and Pearson (2006)
E-commerce adoption	Organizational support, Managerial productivity, Perceived strategic value, Organizational readiness, External pressure, Perceived ease of use, Perceived usefulness, Strategic decision aids	USA / SME	Grandon and Pearson (2004)
E-commerce adoption	Intention, Attitude, Subjective norm, Perceived behavioural control	Chile / SME	Nasco et al. (2008)
E-commerce adoption	Size, Information intensity of product, Competition, Buyer/supplier pressure, Technology vendors support,	New Zealand / SME	Al-Qirim (2007)

	Relative advantage, Cost, Compatibility, CEO involvement, CEO innovativeness		
E-commerce adoption	Relative advantage, Compatibility, Complexity, Security and confidentiality, Triability, Observability	Thailand / SME	Limthongchai and Speece (2003)
E-commerce adoption	Organizational readiness, Managerial productivity, External pressure, Decision aids, Compatibility, Perceived usefulness, Organizational support, Ease of use	Chile / SME	Grandon and Pearson (2004)
Adoption of cloud computing	Cost reduction, Ease of use and convenience, Security and privacy, Sharing and collaboration	SMEs	Gupta et al. (2013)

Adapted from Awiagah, Kang and Lim (2016:820)

2.4 BARRIERS TO E-COMMERCE ADOPTION

Barriers to e-commerce adoption are divided into two main categories: external and internal barriers (Wijaya & Kuncoro, 2021:17). External barriers include challenges such as difficulty in securing financing, lack of technical information, misalignment of company products or services with e-commerce, and an owner's business practices not aligning with e-commerce usage. Internal barriers encompass insufficient management and technical skills, as well as incompatibility of e-commerce with the existing company culture (Rehman & Alam, 2016:68). Figure 2.1 illustrates a framework that outlines the main barriers to e-commerce adoption, organised into five key dimensions: organisational, financial, technological, legal and regulatory, and behavioural.



Figure 2.1: Barriers to e-commerce framework

Adapted from Rehman and Alam (2016:68).

Organisational barriers are obstacles to fostering innovation within a company, stemming from an unresponsive and inefficient organisational structure and culture (Esmailpour, Hoseini & Jafarpour, 2016:5). Financial barriers encompass the expenses involved in investment, maintenance, and the risks associated with implementing an e-commerce system, acting as constraints on financial resources (Wijaya & Kuncoro, 2021:16). Technological barriers pertain to the challenges of adopting e-commerce through various ICT tools and network technologies in the context of small and medium-sized enterprises (Nazir & Roomi, 2020:46). Behavioural barriers focus on resistance to altering work habits, a lack of understanding of perceived advantages, difficulties in usability, and the uncertainty that technology creates for individuals (Wijaya & Kuncoro, 2021:16).

2.5 BENEFIT OF E-COMMERCE FOR SME

According to Dima Nuary (2010), leveraging technology for specific purposes, such as developing e-commerce to broaden marketing reach and effectively target consumers, can lead to significant advantages for SMEs, as this utilisation stems from heightened strategic focus. E-commerce allows sellers to market their products swiftly, effortlessly, and cheaply (Hendrawan, Sucahyowati & Cahyandi, 2018:210).

Previous studies have highlighted the various advantages that SMEs can attain by embracing E-Commerce. These advantages can be categorised as either tangible or intangible. A key tangible benefit is reducing production and operational costs (Kartiwi, Hussin, Suhaimi, Mohamed Jalaldeen, & Amin, 2018:2). E-commerce has also minimised errors in data processing, enhanced organisational communication, expanded markets and customer bases, strengthened marketing efforts, boosted competitiveness, facilitated supplier connections, improved internal efficiency, increased sales, optimised distribution channels, enhanced customer service, and lowered operational costs (Kareen, Purwandari, Wilarso & Pratama, 2018:1).

2.6 IMPACT OF E-COMMERCE ON GROWTH OF SME

E-commerce involves online business transactions that leverage the speed and flexibility of electronic communication between buyers and sellers. By transforming conventional business methods, e-commerce results in considerable cost savings, increased competitiveness, and greater efficiency for SMEs (Rahayu & Day, 2017:28). E-commerce not only lowers the investment and transaction expenses linked to creating marketing and distribution channels but also addresses transportation issues and eliminates physical constraints of time and distance. This allows SMEs to broaden their customer reach (Saridakis, Lai, Mohammed & Hansen, 2018:56).

Adopting e-commerce in the context of SMEs increases sales revenue and makes it simpler for customers to obtain information about prices and items (Amornkitvikai, Tham, Harvie & Buachoom, 2022: 8). According to studies, the use of digital technologies, particularly information and communication technologies (ICT), in e-business, e-marketing, and e-commerce has significantly changed business processes around the world (Park, Meng & Lee, 2024: 70). Access to information on all kinds of SMEs and their goods, as well as timely and accurate details that facilitate the buying and selling process, are just a few of the many benefits this system offers (Octavia, Indrawijaya, Sriayudha & Hasbullah, 2020:521).

2.7 THEORETICAL FRAMEWORK

A suggested theoretical framework is presented in order to achieve MO3. This framework systematically composes ideas and hypotheses drawn from published, tried-and-true knowledge. A theoretical basis that facilitates the analysis and

interpretation of the research data is provided by the synthesis of this knowledge (Kivunja, 2018:46). The researcher must define any theories and concepts that will serve as the foundation for the study, connect them logically, and connect them to the research being conducted in order to develop a theoretical framework (Varpio, Paradis, Uijtdehaage & Young, 2020:990).

A handful of theoretical models can help systematically review how SMEs grow in e-commerce. Approaches like the Technology-Organisation-Environment (TOE) framework, Theory of Planned Behaviour (TPB), Resource-Based View (RBV), and Technology Acceptance Model (TAM) all come into play. The TOE framework nails down the connection between groups, instead of zeroing in on what specific sectors do. It tops up its focus by highlighting how technological, social, environmental, and financial pieces push the adoption and rollout of fresh strategies (Lin & Chen, 2023:5850). TPB has mapped and guessed how people act: working out, drug habits, recycling, going places, picking tech, and even handling privacy topics (Ajzen, 2020:314). The RBV strategy checks out what a business has its hands on and behind-the-scenes assets, know-how, and skills to see where it stands out in the market (Lubis, 2022:587). This research is going with TAM as its key model.

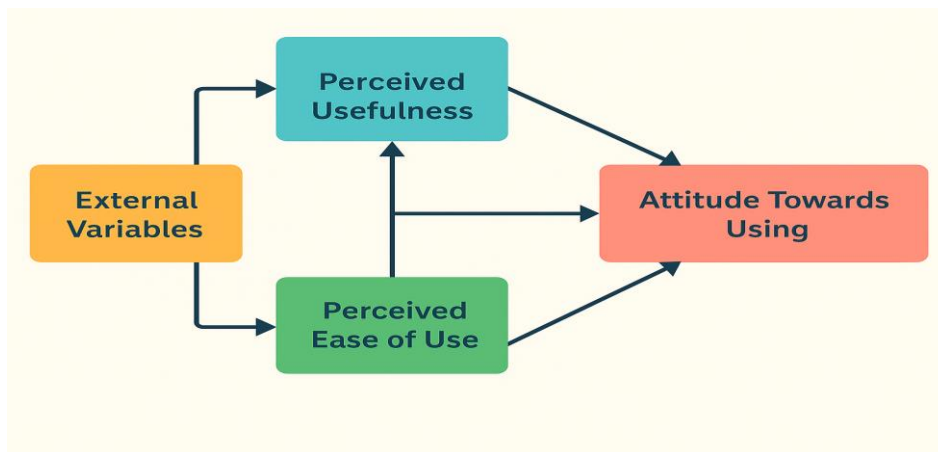


Figure 2.2: Technology Acceptance Model (TAM)

Source: Researcher's construction (2025)

A popular framework in information systems (IS) and digital technology adoption research, the Technology Acceptance Model (TAM) is renowned for its empirical validity and ease of use (Venkatesh & Davis, 2000:187). According to Davis (1989) and Alharbi and Drew (2014) its main advantage is its capacity to clarify users' intentions to adopt technology through two primary constructs: Perceived Ease of Use

(PEOU) and Perceived Usefulness (PU). The adoption of e-commerce by small and medium-sized enterprises (SMEs) is one of the technical contexts where TAM has been applied more recently (Dwivedi et al., 2019:122; Masadeh et al., 2022:1).

2.7.1 RELEVANCE OF TAM TO E-COMMERCE ADOPTION IN SMES

In the realm of SMEs TAM offers valuable insights into how perceptions of technology impact the adoption of e-commerce platforms. Unlike larger corporations SMEs typically grapple with limited resources, underdeveloped IT infrastructure, and constrained human resources. This makes their assessment of a system's usefulness and ease of use particularly important (Piaralal et al., 2016:94). Numerous studies have affirmed the relevance of TAM in the context of small businesses showing that favourable views regarding a system's usability and utility significantly boost the intention to adopt (Nguyen et al., 2020:8; Ndayizigamiye & Zulu, 2022:75). TAM consists of the following primary constructs that interact to influence behavioural intention and eventual usage:

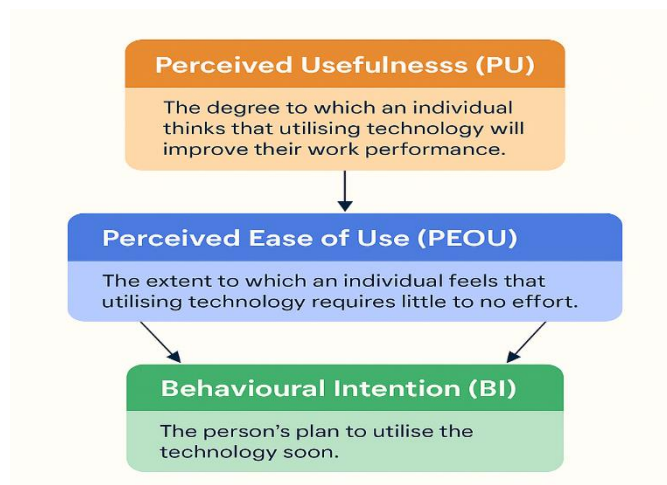


FIGURE 2.3 Core Constructs of TAM

Source: Researcher's construction (2025)

2.9.2 TAM CONSISTS OF THE FOLLOWING PRIMARY CONSTRUCTS THAT INTERACT TO INFLUENCE BEHAVIOURAL INTENTION AND EVENTUAL USAGE:

Recent research indicates that perceived usefulness is often affected by factors such as expanded market access, lower transaction costs, and increased customer interaction, which are key advantages provided by e-commerce platforms for SMEs (Apuke & Iyendo, 2018:86; Boateng et al., 2016:116). Conversely, perceived ease of

use can be influenced by the design of the user interface, ease of navigation, and the availability of training (Arfi, Nasiri & Hikkerova, 2021:5).

2.10 EMPIRICAL EVIDENCE SUPPORTING TAM IN SME E-COMMERCE STUDIES

A growing body of research has shown how well the Technology Acceptance Model (TAM) explains SMEs' adoption of e-commerce in various settings. For instance, Ahmed et al.'s (2019:264) study on Malaysian SMEs revealed that the adoption of online retail platforms was highly impacted by perceived usefulness (PU) and perceived ease of use (PEOU). Similarly, PU was found to be the primary driver of e-commerce adoption among small businesses in Sub-Saharan Africa outweighing factors like cost and internet connectivity. These studies validate the use of the Technology Acceptance Model (TAM) in this study on small and medium-sized firms' (SMEs') adoption of e-commerce by highlighting its applicability in various economic, cultural, and sectoral contexts.

2.11 SUMMARY

Chapter Two offered a comprehensive literature overview related to small and medium enterprises (SMEs), focusing on their economic importance and the opportunities and challenges they face in adopting e-commerce. The chapter also explored relevant theoretical frameworks that inform the relationship between e-commerce and SME growth. Previous studies were critically reviewed to identify existing findings and gaps in the literature. This chapter highlighted how the literature informs the need for a systematic review and the foundation for the current study. Chapter Three will outline the research methodology, detailing the application of a systematic literature review to inform data collection and analysis.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Chapter two offered a comprehensive literature overview related to small and medium enterprises (SMEs), with a particular focus on their economic importance and the opportunities and challenges they face in adopting e-commerce. The chapter also explored relevant theoretical frameworks that inform the relationship between e-commerce and SME growth. Previous studies were critically reviewed to identify existing findings and gaps in the literature. This chapter concluded by highlighting how the literature informs the need for a systematic review and the foundation for the current study. Chapter three will outline the research methodology, detailing the application of a systematic literature review to inform data collection and analysis.

3.2 LITERATURE REVIEW

A literature review, commonly known as a traditional literature review or theoretical background, is a compilation of scholarly works related to the subject being investigated. It establishes a theoretical basis and guides any research endeavour (Lim, Kumar & Ali, 2022:484). This type of review provides a historical overview of notable contributions to the field and highlights what is currently understood and what remains unknown about the research topic (Chigbu, Atiku & Du Plessis, 2023:6). It is a crucial aspect of any study, as it grants the researcher insight into the field and lays the groundwork for contributing to the existing literature (Snyder, 2019:334). Literature reviews help in clarifying important concepts and definitions, identifying gaps in knowledge, and are typically conducted before a formal systematic review of the literature (Chigbu *et al.*, 2023:2). The literature review for this research was detailed in Chapter two, sourced from various databases and articles, primarily utilising Google Scholar and Mendeley. Search terms and keywords included phrases such as "e-commerce" and "SMEs," "SMEs growth," and "impact of e-commerce on SMEs performance."

3.3 EMPIRICAL INVESTIGATION: RESEARCH METHODOLOGY

The methodology is guided by the research onion framework, which is a diagram that presents a systematic approach to defining the essential elements of research design (Mardiana, 2020:1). Gamage (2025:100) explains that the Research Onion begins with the philosophical underpinnings of the study and moves through increasingly specific layers, including the approach to theory development, methodological selection, research strategy, and ultimately, the time frame. Figure 3.1 below depicts the research onion.

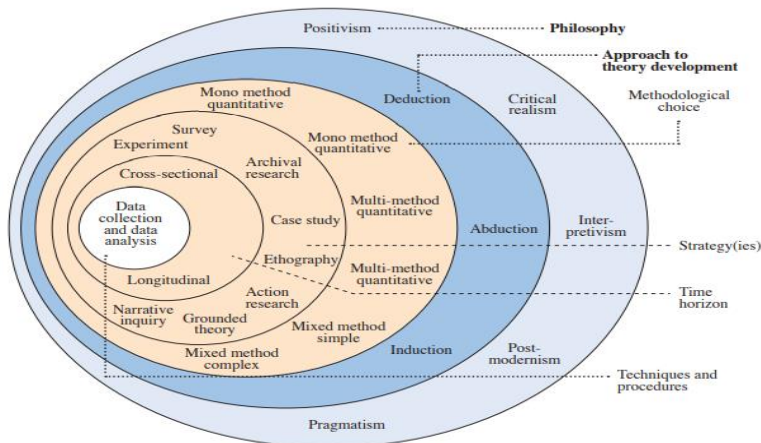


Figure 1. Research onion¹

Figure 3.1: Research onion

Source: Mardiana (2020:1)

Table 3.1 outlines the reasoning and rationale behind the decisions made for this study's empirical collection investigation. Subsequently, a detailed explanation of the research strategy and the methods and processes used for data collection and analysis is provided.

Table 3.1 Research Methodology

Research Onion	Choice Description and Justification
RESEARCH PHILOSOPHY	Research philosophy defines the framework for conducting research, enabling researchers to explain their chosen methods and comprehend the expectations that underlie those techniques (Abdelhakim, 2021:100). In this study, interpretivism was utilised. This epistemology emphasises the importance of

	<p>understanding the differences among individuals as social actors (Iovino & Tsitsianis, 2020:87). Interpretivism is particularly relevant in the social sciences, where grasping human perceptions and contextual nuances is essential (Bell, Harley & Bryman, 2022:31). It is therefore fitting for this study, as it facilitates an exploration of how SMEs perceive and engage with e-commerce within their specific contexts, revealing more profound insights into the motivations and challenges that influence SME growth.</p>
<p>APPROACH TO THEORY DEVELOPMENT</p>	<p>The theory is a network of hypotheses that conceptualise and explain a specific social or natural phenomenon. Each hypothesis makes a statement regarding the relationship between two or more variables, which are the fundamental components of theories (Abdelhakim, 2021:103). In this study, the inductive research approach is chosen. It is a systematic method utilised in empirical investigations to develop theories or insights based on specific observations and data. This approach involves progressing from specific cases to broader generalisations or theories (Gamage, 2025:96). The inductive method is particularly effective for revealing patterns and themes related to the impact of e-commerce on SME growth, allowing insights to emerge from the data without the influence of pre-existing theories. This is especially useful for exploring topics with limited prior research and varied contextual factors.</p>
<p>METHODOLOGICAL CHOICE</p>	<p>The choice of methodology influences whether research employs quantitative, qualitative, or a combination of both approaches (Melnikovas, 2018:34). This study will utilise a qualitative methodological approach. Unlike quantitative research, which generates generalisations about a population (Gamage, 2025:97), qualitative</p>

	<p>research focuses on non-numerical data, including text, images, videos, human movement, and gestures (Mardiana, 2020:3). This study will employ a qualitative mono method, which involves a single technique for data collection, followed by relevant qualitative or quantitative analytical procedures (Plan & Collectives). A qualitative mono method is appropriate as it facilitates a thorough, concentrated examination of SMEs' views on e-commerce through interviews. This strategy promotes consistency and depth, essential for revealing intricate insights regarding the effects of growth.</p>
<p>RESEARCH STRATEGY</p>	<p>The research strategy serves as a broad framework for addressing the research question(s), encompassing clarifying research goals, identifying data collection sources, and considering research limitations. Various research strategies include experiments, surveys, case studies, grounded theory, ethnography, action research, and archival research (Al-Ababneh, 2020:87). A systematic review is a research method that involves identifying and critically assessing pertinent studies, as well as collecting and analysing data from those studies (Snyder, 2019:334). Archival research involves thoroughly investigating primary sources in archives to gather evidence or gain a deeper understanding, without resorting to secondary sources related to the research topic (Plan & Collectives). The research strategy employed in this study was a systematic literature review (SLR), with the specific phases and steps detailed in Section 3.3.2, drawing data from existing literature.</p>
<p>TIME HORIZON</p>	<p>This section specifies the length of the study, which may be longitudinal or cross-sectional. Cross-sectional studies were chosen for this investigation. While longitudinal studies gather data repeatedly over a more</p>

	<p>extended period for comparison, cross-sectional studies only gather data once (Melnikovas, 2018:34). By acting as snapshots, cross-sectional studies enable researchers to look at a specific occurrence at a particular moment. According to Iovino and Tsitsianis (2020:93), these investigations only collect data once, reflecting that instant. It is beneficial to use a cross-sectional timeline because it records SMEs' experiences and perceptions of e-commerce at a particular moment in time, which makes it helpful in comprehending current trends and issues without requiring extensive observation.</p>
<p>TECHNIQUES AND PROCEDURES</p>	<p>In order to collect and analyse data, methods and procedures include conducting interviews, selecting sample populations, creating questionnaire material, and using both primary and secondary sources (Melnikovas, A., 2018:34). One technique for "identifying, analysing, and presenting themes within data" is thematic analysis (TA). It is described as a descriptive strategy that complements other data analysis techniques by flexibly streamlining data (Castleberry & Nolen, 2018:808). Thematic analysis is especially useful for identifying, evaluating, and summarising trends in qualitative data collected from SMEs, which helps academics comprehend recurring themes related to the effects of e-commerce.</p>

Source: Researcher's construction (2025)

3.3.1 RESEARCH STRATEGY

The current study employs systematic literature review (SLR) and archival research as its research strategies. SLRS serve as a method to synthesise scientific evidence to address specific research questions transparently and reproducibly, aiming to encompass all published literature on a topic and evaluate its quality (Lame, 2019:1633). According to Paul and Barari (2022:1100), an SLR is a "process for

assembling, arranging, and assessing existing literature in a research domain." A methodical strategy to assessing secondary research and literature must follow defined procedures and research protocols (Paul, Khatri & Kaur Duggal, 2024:537). Archival research, on the other hand, involves utilising existing or secondary data that was originally gathered for different purposes to address the research question of this study (Moore, Salter, Stanley & Tamboukou, 2016:3). The research aims to assess the influence of e-commerce on the growth of small and medium-sized enterprises (SMEs) by analysing available secondary data and systematically adhering to several established steps and search protocols for data collection and analysis, as outlined below.

3.3.2 STEPS IN UNDERTAKING A SYSTEMATIC LITERATURE REVIEW

Figure 5 provides an overview of the different stages of conducting the systematic literature review (SLR). It also details the steps for each of the six phases to promote transparency and reproducibility in the process.

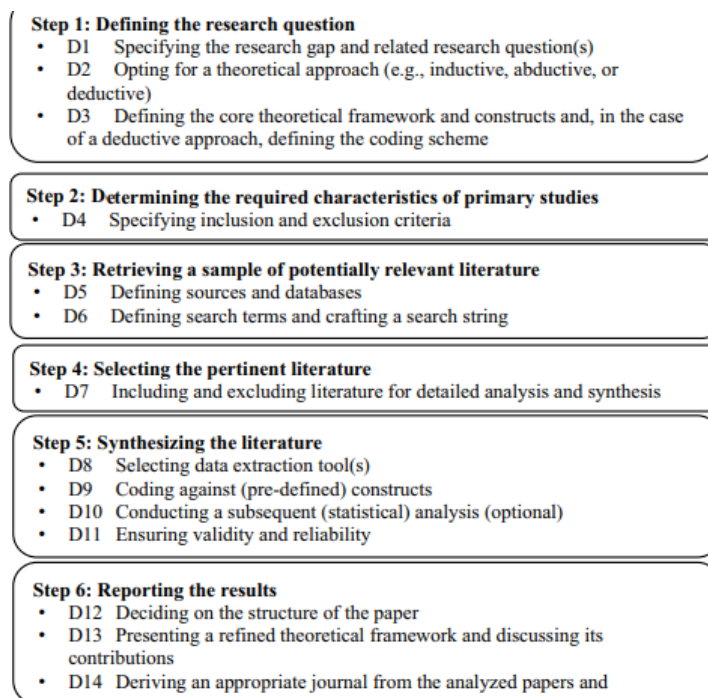


Fig.1 The 6 steps and 14 decisions of the SLR process

Figure 3.2: Stages in conducting a SLR

Source: Sauer and Seuring (2023:1915)

The crucial initial step in conducting a systematic review is to establish the research question (Naumann, 2024:154). This first step involved assessing the need for a SLR

by critically analysing existing research related to e-commerce and the development of SMEs. This evaluation allowed for the identification of a research gap and facilitated the development and conceptualisation of the research topic and question (Lame, 2019:1635). The review of current scholarly work revealed a notable gap: while there has been an increase in e-commerce adoption among SMEs, the literature is still fragmented, and the impact of e-commerce on SME growth is not fully understood. This gap, as stated in the problem statement of Chapter One, emphasises the necessity for a comprehensive study on how e-commerce influences SME performance. Additionally, Sauer & Seuring, (2023:1917) emphasised the importance of selecting a theoretical approach and defining the theoretical framework as essential steps in step one of an SLR. As indicated in Table 3.1, this study adopted an inductive approach, and the selected framework laid the theoretical foundation for analysing the impact of e-commerce on SME growth.

In Step two, we established the criteria for including and excluding literature, identified the sources and databases to search, and developed relevant search terms and strings. The literature selected for the SLR needed to fulfil the following criteria:

- Must be published in reputable journals.
- Must be in English.
- Must relate to research on the impact of e-commerce on the growth of SMEs.
- It must be in the form of articles (either final publications or articles in the press).
- Must be published between 2015 and 2025.
- Must have full-text access available.

By exclusively choosing articles that met these inclusion criteria and could be found in the specified databases, we avoided subpar literature and ensured the research quality remained high. Failing to do this could have compromised the integrity of the study.

The databases utilised in the search included Scopus, Web of Science (WoS), and Google Scholar. To find relevant articles for inclusion, specific search terms connected

to the research topic and questions were determined. Examples of these terms are: "e-commerce" and "SMEs", "e-commerce" and "SMEs growth", "impact of e-commerce on SMEs performance", "systematic literature review" and "e-commerce" and "SMEs", and "literature review" and "e-commerce" AND "small businesses".

Finding articles in the designated databases was the next step. Finding the right place for the search phrases in the literature, in the title alone, in the title and abstract, or throughout the text, is essential, claim Sauer & Seuring (2023:1920). Articles that contained the search terms in the title, abstract, or body of the text were eligible for selection for this study. Following the completion of the book collection in step three, step four got underway. Articles that did not fit the requirements for inclusion set out in step two were not included. To assess whether a record satisfies the inclusion requirements, Randles & Finnegan (2023:3) advise looking at the title, abstract, and, if necessary, the complete text. Articles that satisfied these requirements underwent additional content synthesis and analysis, with consideration given to the calibre of the literature. The benefit of utilising the WoS and Scopus databases is their vast array of management journals with impact factors, which aid in evaluating the calibre of the sourced material (Sauer et al., 2023:1919).

In step five, we synthesised and analysed the chosen literature, with a more in-depth discussion on ensuring validity and reliability in Section 3.4. We extracted information about the journals in which the articles were published, presenting it through descriptive statistics. Subsequently, we coded and categorised relevant data from the articles concerning the impact of e-commerce on SME growth according to the main themes that align with the identified theoretical framework. In Step Six, we reported the results from the previous stage, discussing and interpreting the key findings and emerging themes in greater detail. We also examined the implications of these findings and offered recommendations for future research on the relationship between e-commerce and SME growth.

3.4 RESEARCH RIGOUR

The literature increasingly recognises the necessity of ensuring rigour, or trustworthiness, in qualitative research, highlighting the need for a thorough approach and detailed reporting of findings (Cloutier & Ravasi, 202:115). The trustworthiness, which encompasses the validity and reliability of research, reflects the overall quality

of the research design and the credibility of the findings (Cypress, 2017:254). Trustworthiness is established when specific criteria, credibility, transferability, dependability, and confirmability, are met (Haq, Rasheed, Rashid & Akhter, 2023:150). Table 3.3 presents the measures taken in this research to ensure trustworthiness. The main criteria for maintaining quality in qualitative research include credibility, which is achieved through prolonged engagement, continuous observation, and triangulation; transferability, supported by thorough and detailed descriptions; dependability, ensured by meticulous documentation and an audit trail; and confirmability, fostered through peer debriefing, member checking, and reflective journaling (Ahmed, 2024:1).

Achieving internal validity, or credibility, requires the appropriate selection of tools, processes, and data to effectively address the research problem (Heale & Twycross, 2015:66). When a researcher can justify their research design in relation to the problem, methods of data collection, analysis techniques, and how findings are reported, the criteria for internal validity are satisfied (Leung, 2015:325). Reliability, which is akin to dependability, is confirmed in qualitative research when accepted methodologies are applied, as recognised by the research community (Moon, Brewer, Januchowski-Hartley, Adams & Blackman, 2016:2). In quantitative studies, reliability refers to the exact reproduction of procedures and results. However, in qualitative research, where paradigms vary, establishing reliability in this manner becomes difficult. Instead, reliability in qualitative research is more about consistency (Leung, 2015:326). Transferability relates to how well research findings can be applied to different contexts or situations. Qualitative researchers strive to provide detailed and complex portrayals of their study's setting, participants, and methods to improve transferability (Ahmed, 2024:2). Confirmability refers to the degree to which other individuals can validate the research findings through participant reviews, evaluations by supervisors and colleagues, maintaining researcher validity, addressing conflicting cases, and providing detailed explanations (Ghafouri & Ofoghi, 2016:1917). To evaluate confirmability, questions like "Are the methods and procedures of the study described clearly and in detail? Do we have a complete understanding, including 'behind-the-scenes' information?" are critical (L. Haven & Van Grootel, 2019:238). To ensure findings are reported objectively and free from researcher bias, the researcher needs to show that the conclusions stem from the data collected (Nowell, Norris, White & Moules, 2017:2).

Table 3.3: Trustworthiness justification for this study

Trustworthiness Criteria	Actions Taken in the Study
Credibility	Developed using a structured approach to systematic literature review methods, which involved defined inclusion and exclusion criteria, careful database selection, and quality assessments. The use of peer-reviewed sources and thematic analysis of reputable literature bolstered credibility.
Transferability	A comprehensive explanation of the research methods, inclusion criteria, and theoretical background enables readers to evaluate the paper's applicability in different contexts. The extensive search strategy increases its relevance across various regions.
Dependability	A systematic research approach was adhered to through organised SLR phases. Every stage of the SLR was recorded to create an audit trail, ensuring transparency in the decision-making process.
Confirmability	The conclusions are derived from evidence found in published literature. A thorough documentation process was followed to reduce researcher bias, multiple sources were reviewed, and reflexive journaling was employed.

Source: Researcher's construction (2025)

3.5 ETHICAL CONSIDERATIONS

Research ethics has played an important role in our daily research activities. This makes it necessary that researchers safeguard the dignity of their participants and accurately publish their findings (Akaranga & Makau, 2016:2). In qualitative research ethical concerns are especially significant due to the in-depth nature of the study process (Arifin, 2018:30). The current research was conducted through desk research involving data collection without direct participation from individuals. Because the data gathered is not private or personal and was collected without human involvement,

there is no need for special ethical approval. Nevertheless, in line with the ethical standards of Nelson Mandela University, an ethics form (Form E) was completed and signed by the researcher, their study leader, and the Head of the Department of Business Management. Form E is included as Annexure A.

3.6 SUMMARY

Chapter three outlines the research design and methodology used to conduct this study. It discusses the research paradigm, approach to theory development, methodological choices, time horizon, and data collection and analysis procedures. Special attention is given to the systematic literature review (SLR) process and the steps taken to ensure research rigour. The chapter concludes by addressing the ethical considerations relevant to the study. Chapter four will discuss the empirical results.

CHAPTER 4

EMPIRICAL RESULTS

4.1 INTRODUCTION

Chapter three outlined the research design and methodology used to conduct this study. It discussed the research paradigm, approach to theory development, methodological choices, time horizon, and data collection and analysis procedures. Special attention is given to the systematic literature review (SLR) process and the steps taken to ensure research rigour. The chapter concluded by addressing the ethical considerations relevant to the study. In chapter four, the results of the empirical inquiry are given, starting with the descriptive analysis and moving on to the theme analysis. In presenting these results, chapter four addresses secondary objectives SO1, SO2, and SO3. The thematic analysis of the articles included in the SLR enabled the identification of the themes relating to the role of e-commerce on the growth of the SMEs and answered the research question.

4.2 DESCRIPTIVE ANALYSIS

This section of the study provides an overview of the 18 articles in the systematic literature review (SLR). The articles will be labelled as A1 through A18. All articles used were published before the end of August 2025. The descriptive analysis shown in the chapter is qualitative. It focuses on highlighting broad patterns across the articles that have been chosen and reviewed. While most of the articles included mainly used quantitative or mixed methods, the emphasis in this treatise remains on the qualitative findings. The quantitative results are indicated when they support the Technology Acceptance Model (TAM) constructs, the treatise's guiding theoretical framework model (TAM) constructs, which serve as this study's guiding theoretical framework.

4.2.1 ARTICLE

Initially, the database search used the keyword string "*E-commerce impact on SME growth.*" The results came up with 121 articles. The results were further reduced by applying a publication year filter. Articles that were published from 2015 to 2025 were chosen. This reduced the pool to 67 articles. Articles were further screened based on their relevance to TAM, as this was the theoretical framework chosen for this study. A

lot of the articles adopted the quantitative methodology. Some of the articles used the mixed method and qualitative methodology. Despite this, the articles that were chosen will be described qualitatively. This is to ensure that the findings that will be discussed align with the methodological choice of this systematic review. The selection process resulted in a final sample of 18 articles.

Data is collected regarding the articles related to the number of authors and citations, the year of publication, and the underlying theories and methodological approaches used. The average number of authors per article is three, with three articles, A3, A11, and A16, having a single author. The average number of citations across all articles is 40. Article A5 has received the most citations (339) to date. The articles with the top five most citations are summarised in Table 4.1.

Table 4.1.: Most cited articles

#	Article Title	Authors	Year	Journal	Citations
A5	Factors affecting e-commerce adoption among SMEs	Awiagah, Kang and Lim (2016)	2016	<i>Information Development</i>	339
A1	Industry characteristics, stages of E-commerce communications, and entrepreneurs and SMEs' revenue growth.	Saridakis, Lai, Mohammed and Hansen (2018)	2018	<i>Technological Forecasting and Social Change</i>	132
A9	Factors stimulating value micro-businesses attribute to digital marketing technology (DMT) adoption	Eze, Chinedu-Eze, Awa and Alharthi (2021)	2021	<i>Plos one</i>	35
A15	The Interplay of E-commerce, Resilience and Exports in the Context of COVID-19	Onjewu, Hussain and Haddoud (2022)	2022	<i>Information Systems Frontiers</i>	31

A13	Evaluating the utilization of technological factors to promote e-commerce adoption in small and medium enterprises	Hossain, Dewan, Senin and Illes (2025)	2025	<i>Electronic Commerce Research</i>	29
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Source: Researcher's construction (2025)

Article A7 and A16 have received the least citations (2) to date. The articles with the top five least citations are summarised in Table 4.2. It can be seen that the most recent publications have the fewest citations.

Table 4.2: Least cited articles

#	Article Title	Authors	Year	Journal	Citations
A7	Factors Influencing The Adoption of E-commerce in Jordanian SMEs	Qatanani and Qusef (2023)	2023	In 2023 <i>International Conference on Information Technology (ICIT)</i>	2
A16	Mapping the digitalization in SMEs of Middle East region: trends and insights from bibliometric analysis	Tripathi (2024)	2024	<i>Future Business Journal</i>	2

A3	Determinants Affecting Tax Compliance Behavior of Small and Medium Enterprises in the Development Context of E-Commerce, Vietnam	Trang (2023)	2023	<i>Montenegrin Journal of Economics</i>	5
A4	Barriers to e-commerce adoption: Evidence from the retail and food and beverage sectors in Malaysia	Kam and Tham (2022)	2022	<i>Asian Pacific Economic Literature</i>	9
A12	Organizational factors and e-commerce adoption in SMEs of United Arab Emirates: mediating role of perceived strategic value	Kaabous Alzaabi, Omar and Romle (2021)	2021	<i>International Journal of Entrepreneurship</i>	9

Source: Researcher's construction (2025)

Amongst the articles included in this review, the most commonly adopted methodological approach was quantitative (13 articles), followed by a qualitative approach (three articles), and mixed methods, with two articles using this approach. The methodological approach is presented in Figure 4.1

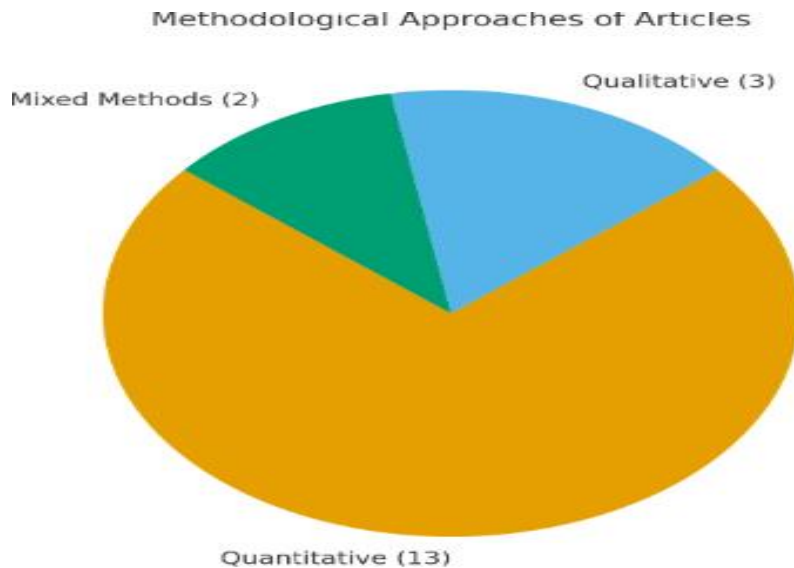


Figure 4.1: Methodological approach

Source: Researcher's construction (2025)

Table 4.3 represents the underlying theories used in the 18 articles and their relative frequency of use. The TOE is the most common, with two articles using the TAM, one using TPB, another using RBV and DCV, and one using the economic growth model. Nine articles made no mention of an underlying theory.

Table 4.3: Underlying Theories

Underlying Theory	Relative Frequency
Technology-Organisation-Environment Framework (TOE)	Very high
Technology Acceptance Model (TAM)	Very high
Dynamic Capabilities View (DCV)	High
Resource-Based View (RBV)	Moderate
Theory of Planned Behaviour	Moderate to Low
Economic-growth model	Variable (Often high within economics)

Source: Researcher's construction (2025)

Figures 4.2 and 4.3 present data for the year of article publication and the region in which the study was undertaken (location from where the data was retrieved). Of the included articles, zero publications were in 2015, 2017, and 2020. The year 2024 had the greatest number of publications, with five articles published.

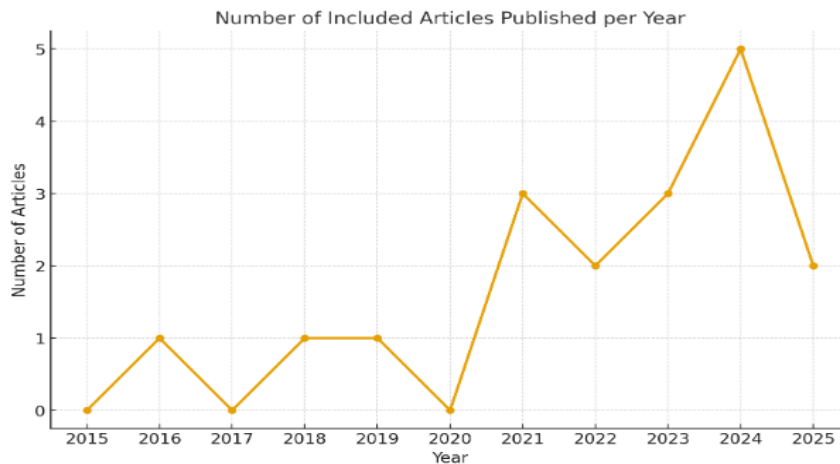


Figure 4.2: Number of included articles published per year

Source: Researcher's construction (2025)

Most articles (eight articles) are related to studies done in Asia. Of these eight, four articles studied in Southeast Asia, three in East Asia, and one in South Asia. One article conducted research throughout the Middle Eastern region, mainly Southwest Asia. Two countries (Egypt and Turkey) in the Middle East are transcontinental. Three articles were based on research conducted in Africa. Four articles are related to studies done in Europe. One article was approached systematically (Raji, Olawore & Osahor, 2023:1418). The remaining article did not indicate where its study was conducted (Macca, Shehzad, Kovacova & Santoro, 2024).

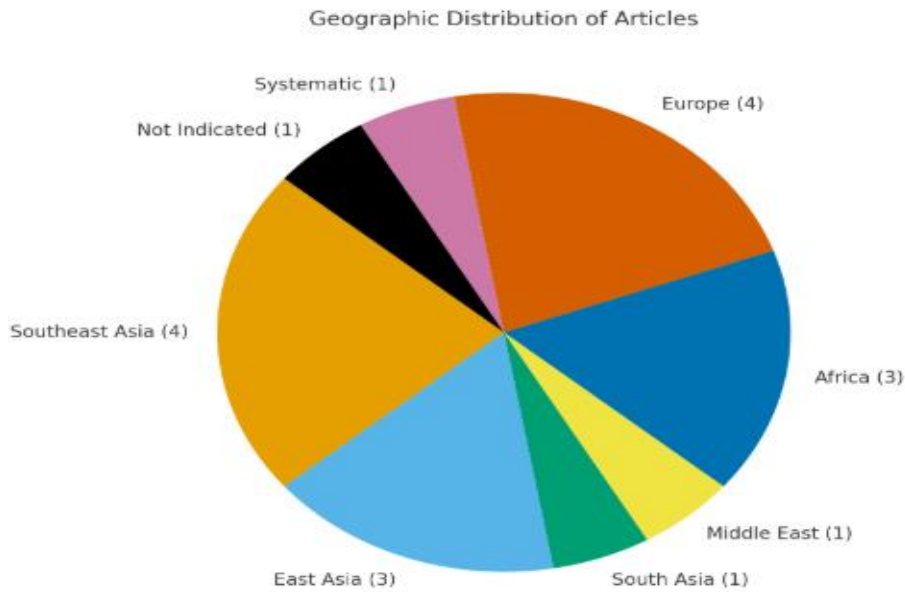


Figure 4.3: Regions of article publications

Source: Researcher's construction (2025)

4.3 THEMATIC ANALYSIS

A thematic analysis was undertaken to identify the factors that impact e-commerce on SME growth. Given that an inductive approach was taken, the themes emerged inductively rather than being derived from the chosen model for the study, TAM. Although these themes do not derive from TAM, they can be understood in relation to the constructs of TAM, which include perceived ease of use (PEOU) and perceived usefulness (PU). The development of the two themes into which the various factors that influence E-commerce impact on SME growth is summarised and discussed in the following sections.

4.3.1 THEME ONE: E-COMMERCE-DRIVEN ECONOMIC AND BUSINESS GROWTH

Table 4.3: E-commerce impact

Theme	Sub-Themes	Codes
E-commerce-Driven Economic and	Adoption & Development	Adoption, ICT Adoption, E-commerce Adoption, E-commerce Development, E-commerce Growth, Digital Ecosystem, Rural E-commerce, Interest in E-commerce

Business Growth	Business Growth & Opportunities	Business Growth, Growth, Growth Factor, Growth Impact, Growth Opportunities, Growth Potential, Expansion, SME Growth, SMEs, Opportunities, First-Mover Effects, Positive Development, Positive Effect, Positive Impact, Inclusive Growth
	Market & Consumer Dynamics	Competition, Competitiveness, Consumer Demographics, Demand, Market Access, Market Reach, Sales Channels, Sales Growth, Sales Increase, Customer Insights, Customer Service, Customer Engagement
	Data & Information Management	Data Access, Data Accuracy, Data Availability, Data Delivery, Data Importance, Data Management, Policy Insights, Research Development, R&D Importance
	Infrastructure & Connectivity	Connectivity, Internet Availability, Internet Connectivity, Internet Quality, Infrastructure, Infrastructure Improvement, Logistics, Transportation Costs, Warehousing Costs
	Economic & Social Impact	Economic Benefits, Economic Growth, Global Economy, Empowerment, Poverty Alleviation, Poverty Reduction, Inequality Reduction, Rural Development, Development Challenges
	Innovation & Transformation	Innovation, Strategic Innovation, Technology Impact, Product Development, New Ideas, Transformation, Problem Solving
	Challenges & Barriers	Challenges, Development Challenges, Expertise Constraints, Obstacles, Sales Limitations, Insignificant Relationship, Limited Value, Negative Impact, Weak R&D Relationship

	Government & Institutional Support	Bangladesh, Government Recognition, Government Support, Model Counties, Regional Focus
	Cost & Resource Optimization	Cost Reduction, Resource Demand, Funding, Value Addition, Output, Productivity, Productivity Growth, Training Effectiveness, Skilled Labor
	Promotion & Channels	E-commerce Promotion, E-marketplaces, Social Media, Traditional Methods

Source: Researchers' construction (2025)

4.3.1.1 ADOPTION AND DEVELOPMENT

The findings have shown that SME e-commerce adoption and development can be interpreted in two central constructs of the Technology Acceptance Model (TAM): Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

The article labelled A6 (Macca et al., 2024) has shown that SMEs adopted e-commerce as a reaction to the COVID-19 pandemic. SMEs did this often by setting up marketplaces or basic websites to ensure that they survive. Although it was not always strategically planned, this quick adoption reflected Perceived Usefulness (PU): businesses recognised that online channels are important for maintaining business continuity and reaching consumers during lockdowns.

A11 (Türkeş, 2024) notes that SMEs using an e-marketing orientation (EMO) can maintain communication with target groups and smoothly conclude transactions. It appears that this connects to PU since companies viewed digital moves as providing definite practical advantages, allowing them to remain open, expand their reach, and meet buyers' needs.

Additionally, A12 (Kaabous Alzaabi et al., 2021) confirms that company factors combined with how leaders perceive strategic value significantly influence their willingness to adopt. This makes it clear that PU is shaped by how well e-commerce

aligns with business aims, making SMEs choose technology more frequently if they believe it contributes to growth and keeping ahead.

However, A7 (Qatanani & Qusef, 2023) suggests that matching current systems pushes adoption rates, while also highlighting that the technology can still hinder progress. These ideas line up with PEOU, as businesses tend to find getting into e-commerce simpler when it integrates effortlessly with their current routines. On the other hand, a lack of technical expertise can create the perception that these systems are too rigid to use, thereby reducing adoption.

Overall, the results support using TAM to explore how SMEs adopt e-commerce: PU explains why they adopt digital tools if survival or plans depend on it, while PEOU shows how technical expertise and a smooth fit influence easy adoption.

4.3.1.2 BUSINESS GROWTH & OPPORTUNITIES

According to A12 (Kaabous Alzaabi et al., 2021), SMES' adoption of e-commerce facilitates an expansion of market access both domestically and internationally while simultaneously enhancing customer-related efficiency. This reinforces the Perceived Usefulness (PU) in TAM, as SMEs perceive digital integration to be a mechanism that massively bolsters competitiveness, reputation, and growth prospects within contemporary economies.

Article A15 (Onjewu et al., 2022) finds that e-commerce advances SME survival rates and fosters international development through reductions in distribution expenditures, generation of marketing insights, and elevating supply chain effectiveness. These strategic perceived benefits reinforce the PU since businesses are inclined towards e-commerce when they recognise sustained profitability alongside improved operational performance.

Article A18 (Raji et al., 2023) confirms that e-commerce platforms make it possible for SMEs to access global markets, raise visibility and sales. Collaborative networks amplify value creation by sharing logistics, marketing, and technological resources. This reflects PU by demonstrating how adopting e-commerce makes it simple to access markets and it creates innovative opportunities for revenue growth. Moreover,

sustainable practices such as eco-friendly packaging and ethical sourcing strengthen long-term competitiveness, showing that SMEs perceive e-commerce helpful in aligning with consumer values of responsibility and sustainability.

4.3.1.3 MARKET & CONSUMER DYNAMICS

According to A1 (Saridakis et al., 2018), websites and social media enhance SMEs' sales channels and market access by eliminating geographic and time barriers. Social media's interactive features also strengthen consumer engagement, providing SMEs with more opportunities for sales growth. From a TAM perspective, this aligns with PU, as SMEs view digital platforms as tools that directly expand market reach and increase competitiveness. The ease of engaging with customers via social media also supports PEOU, as it simplifies communication and consumer interaction compared to traditional methods.

Findings in A6 (Macca et al., 2024) show that multichannel management, integrating offline and online platforms, was critical in attracting diverse consumer groups. For instance, firms showcased products at fairs or physical retailers and then guided customers to online platforms for purchases and follow-ups. This approach enabled SMEs to collect valuable consumer data (emails, databases) and strengthen long-term engagement. From a TAM standpoint, SMEs perceived digital channels as strategically advantageous PU because they enabled data-driven marketing and brand presence. In contrast, the straightforward integration between offline and online channels reduced complexity PEOU, reinforcing adoption.

4.3.1.4 DATA & INFORMATION MANAGEMENT

Article 11 (Türkeş, 2024) highlights the importance of analysing digital indicators to measure the success of e-marketing initiatives. By using data-driven segmentation and targeted strategies, SMEs can allocate resources more effectively, personalise messages, and improve customer engagement. From a TAM perspective, this supports PU because SMEs see data analytics as providing strategic value in improving marketing efficiency and customer outcomes. At the same time, the usability of analytical tools, PEOU, determines whether SMEs feel confident in adopting them,

as tools that simplify segmentation and reporting reduce complexity and drive adoption.

A13 (Hossain et al., 2025) shows that internet connectivity is a backbone of e-commerce adoption, yet poor and unreliable connectivity undermines SMEs' ability to participate effectively in digital markets. Data management was found to have an insignificant relationship with adoption due to challenges in safe storage and internet access, as well as the lack of skilled analysts to derive value from big data. From a TAM lens, weak infrastructure negatively impacts PEOU, since unreliable connectivity increases frustration and effort. At the same time, insufficient skills and data management hinder *the perceived usefulness* of PU, as SMEs fail to see tangible benefits from poorly executed data practices.

4.3.1.5 INFRASTRUCTURE & CONNECTIVITY

Article 1 (Saridakis et al., 2018) states that e-commerce improves SMEs' access to broader digital markets by reducing transport and physical obstacles. This directly enhances PU because SMEs see tangible business benefits, such as expanded market reach and reduced costs associated with traditional distribution. When SMEs recognise that e-commerce enables them to overcome physical limitations, their adoption intentions are strengthened.

Article 18 (Raji et al., 2023) states that infrastructure gaps (e.g., weak broadband, underdeveloped payment systems, and poor logistics) lower both perceived ease of use PEOU and PU. Without reliable infrastructure, using e-commerce platforms becomes frustrating and less efficient, undermining ease of use. At the same time, if SMEs cannot ensure fast delivery or secure payments, the perceived usefulness of adopting digital tools declines. According to TAM, these barriers reduce SMEs' behavioural intention to adopt e-commerce.

4.3.1.6 ECONOMIC & SOCIAL IMPACT

Article 1 (Saridakis et al., 2018) SMEs report economic benefits such as sales growth, revenue increases, and stronger digital economy participation. These outcomes directly raise PU within TAM, since SMEs can see how adopting e-commerce leads to

tangible performance improvements. When firms experience higher profitability and competitiveness, their belief in the utility of the technology strengthens, which fosters stronger behavioural intention to adopt.

Article 10 (Qi et al., 2024) shows that expanding internet usage and cross-border trade enhance opportunities for SMEs to engage in international e-commerce. This reflects an improvement in PU as well because SMEs see that e-commerce adoption extends market reach beyond local boundaries, opening access to exports and regional growth. Additionally, as digital exports become more normalised social influence also plays a role. Firms may adopt e-commerce to remain competitive in a globalising economy where peers are already leveraging cross-border trade.

4.3.1.7 INNOVATION & TRANSFORMATION

Article 1 (Saridakis et al., 2018) results state that SMES expand reach and efficiency by shifting operations from traditional to digital channels. This transition boosts PU since firms see how adopting e-commerce drives strategic growth and competitive positioning, not just operational continuity.

Article 13 (Hossain et al., 2025) findings state that strategic innovation positively influences adoption. This aligns with PU because innovation demonstrates that e-commerce adoption is not only functional but also a driver of long-term digital presence and productivity gains. SMEs that innovate look at digital adoption as more beneficial, encouraging a stronger intention to adopt.

Article 17 (Zhu et al., 2021) shows that process innovation mediates e-commerce adoption and firm performance. This relates to PEOU because when innovative processes simplify workflows (e.g. automating order fulfilment, integrating digital logistics) they make e-commerce less complex for employees and managers. At the same time it reinforces PU since innovation makes sure that e-commerce is not treated as just a sales add-on but that it is treated as a transformative tool to maximise capacity utilisation and efficiency.

4.3.1.8 CHALLENGES & BARRIERS

The findings in A2 (Xuhu *et al.*, 2019). reveal that while higher adoption levels support growth and cost reduction, the advantages in innovation plateau across the adoption stages. This highlights a limitation and barrier for SMEs in fully capitalising on innovation benefits suggesting gaps in capacity to leverage technology for sustained transformation. The study in A3 (Trang, 2023) highlights the non-compliance of SMEs with tax laws, including tax avoidance, tax evasion, and tax debt, as significant obstacles. The findings suggest that fraud detection and the handling of fraud are minimal, and few cases are addressed, creating barriers to fair competition and sustainable growth in e-commerce.

A4 shows that organisational barriers emerge as the most significant constraints for SMEs in adopting e-commerce. These barriers include the lack of skilled employees, insufficient financial capacity, and limited training opportunities. Non-adopters, in particular, perceive their firms as too small or their products as unsuitable for e-commerce transactions. In contrast, adopters regard these issues as less relevant since their decision to adopt is often based on production capacity and product marketability. Market-related barriers further exacerbate these challenges, with non-adopters perceiving insufficient government incentives and lacking qualified vendors to help SMEs develop and maintain websites. Technological barriers, particularly infrastructural concerns, are also present, though they matter more for small firms than adopters already equipped with e-commerce infrastructure (Kam & Tham, 2022). These findings align with PEOU, as SMEs perceive e-commerce as difficult to adopt due to financial, organisational, and technological constraints, lowering their intention to adopt despite recognising potential usefulness.

4.3.1.9 GOVERNMENT & INSTITUTIONAL SUPPORT

A 4 and A5 states that government and institutional support play an important role in e-commerce adoption. Both adopters and non-adopters emphasise the need for the government to improve standards, regulations, and incentives related to e-commerce (Kam & Tham, 2022). Government support emerged as the most decisive influence on behavioural intention to adopt e-commerce. Policies, subsidies, and ICT sector liberalisation have helped, but more comprehensive measures, such as tax incentives,

infrastructure investment, and awareness campaigns, are required (Awiagah *et al.*, 2016). In A11, policy recommendations suggest governments should simplify regulatory frameworks, provide grants and subsidies for sustainable initiatives, and incentivise technological innovation (Türkeş, 2024). A11 connects to PU, as SMEs see such support as enhancing the usefulness of adopting technology, and to PEOU, since simplified regulations and financial support reduce the perceived difficulty of adoption, encouraging stronger behavioural intention.

4.3.1.10 COST & RESOURCE OPTIMIZATION

Article 15 (Onjewu *et al.*, 2022) shows that adopting e-commerce reduces distribution and transaction costs, allowing SMEs to optimise scarce resources during crises. Indirect exporting through intermediaries also helps SMEs save costs but limits the need for resilience. This reflects PU, since SMEs view e-commerce as helpful in achieving cost efficiency and resource optimisation, strengthening their intention to adopt such platforms.

Article 16 (Tripathi, 2024) results show that advanced technologies like blockchain and supply chain digitalisation are associated with resource efficiency and optimisation, particularly in sustainability-focused practices. This demonstrates **PU**, as SMEs see these tools as valuable for enhancing efficiency and sustainability. The implementation complexity is also tied to PEOU, influencing how smoothly these technologies are integrated.

Raji *et al.* (2023) claimed in Article 18 that SME industry can overwhelmingly benefit from collaborative strategy to cut cost on logistics, marketing and bargaining with suppliers or platform. Automation powered by AI and predictive analytics, meanwhile, streamlines efficiency through inventory management and waste elimination, while sustainable packaging and shorter delivery routes reduce both costs and ecological strain. These results resonate well with PU as SMEs sense that the collective endeavour (collaboration) and their working time saving creates a synergy effect to performance, financially and environmentally, encouraging adoption.

4.3.1.11 PROMOTION & CHANNELS

Article 1 (Saridakis et al., 2018) confirms that websites, social media, and third-party platforms serve as crucial promotional and sales channels, demonstrating strong PU. SMEs perceive e-commerce as applicable because these channels eliminate geographic barriers, expand visibility, and enable two-way customer interaction, directly enhancing sales potential.

On the other hand, article 2 (Xuhu et al., 2019) shows how the credibility and improved image gained through electronic promotion also reflect PU. When SMEs see that digital promotion increases awareness and boosts trust and brand reputation, they recognise e-commerce adoption as a valuable long-term strategy.

Article 12 (Kaabous Alzaabi et al., 2021) findings indicate that the improved communication channels align with PU and PEOU. On the usefulness side, SMEs benefit from stronger customer relationships and quality information sharing. On the ease-of-use side, digital tools (e.g., email automation, social platforms) simplify communication, making interaction less resource-intensive than traditional methods.

Article 17 (Zhu et al., 2021) reveals that e-commerce is often used as a promotional tool without operational backing, highlighting a PU gap. SMEs may perceive e-commerce as applicable for visibility, but its full usefulness remains unrealised without integration into logistics, inventory, or operations.

4.3.2 THEME TWO: DIGITAL TRANSFORMATION & GROWTH OF SMES

Table 4.4: Influence mechanisms

Theme	Sub-Themes	Codes
Digital Transformation & Growth of SMEs	Access & Connectivity	Access, Channel Access, Connectivity, Internet Connectivity, Internet Issues, Information Access, Market Access, Market Reach, Data Access
	Adoption & Integration	Adoption, E-commerce Adoption, ICT Adoption, ICT Influence, E-commerce Introduction, E-commerce Influence

	Business Operations & Efficiency	Business Operations, Operational Capabilities, Operational Efficiency, Logistics, Cost Efficiency, Productivity
	Consumer Market Engagement	Consumer Engagement, Customer Service, Online Purchasing, Online Trading, Social Media, Promotion, Sales Channel
	Data & Knowledge Management	Data Challenges, Data Management, Knowledge Transfer, Research & Development, Research and Development
	Growth & Development	Growth, Growth Facilitation, Growth Mechanism, Growth Opportunities, Product Growth, Sales Boost, Sales Increase, Sales Volumes, SME Growth, Income Effects, Economic Contribution, Economic Empowerment, Empowerment
	Innovation & Experimentation	Innovation, Strategic Innovation, Experimentation, Exploration, First-Mover Effects, Positive Externalities
	Challenges & Barriers	Challenges, Growth Hurdles, Obstacles, Expertise Limitations, Skill Gap, Training Issues, Negative Influence, Lack of Influence, Dependency
	Influence & External Factors	Influence, Positive Influence, Indirect Influence, Government Facilitation, Government Support, Economic Conditions
	Transformation & Problem Solving	Transformation, Problem Solving, Mechanisms

Source: Researcher's construction (2025)

4.3.2.1 ACCESS & CONNECTIVITY

The results of A10 (Qi et al., 2024) show that the rapid growth of internet users expanded online access and widened participation in e-commerce. Similarly, A6 suggests that expanding online channels improved customer access, particularly when firms embraced marketplaces during the pandemic to maintain consumer engagement. These findings align with PEOU in TAM, as greater connectivity and simplified access to digital platforms reduce the effort required by SMEs and their customers to engage in e-commerce. However, connectivity challenges and reliance on external logistics providers highlight barriers to PEOU, since interruptions or complexity can discourage adoption (Macca et al., 2024).

A12 (Kaabous Alzaabi et al., 2021) emphasises that successful adoption depends on SMEs equipping employees with modern digital tools. This reflects PEOU, as providing user-friendly technologies and adequate training lowers the perceived difficulty of using e-commerce systems, thus fostering higher adoption intentions.

Furthermore, A14 (Yang et al., 2025) underscores that digital development, such as digital payments and finance infrastructure, increases adoption probabilities, particularly in rural areas. This links to Perceived Usefulness (PU), as SMEs and consumers see clear value in using digital systems that improve transaction efficiency, accessibility, and trust. Secure payment and finance infrastructure availability enhances perceptions that e-commerce provides tangible benefits to business growth and customer satisfaction.

Overall, the findings collectively demonstrate how access and infrastructure shape PEOU and PU, the two central TAM constructs, by influencing how SMEs and their customers perceive the effort required to engage with e-commerce platforms and the benefits gained.

4.3.2.2 ADOPTION & INTEGRATION

Article 15 (Onjewu et al., 2022) shows that SMEs integrate e-commerce into operations to enhance resilience and enable direct exporting. Resilience is a strategic capability supporting the adoption and integration of online channels. This connects to PU, as SMEs perceive e-commerce integration as helpful in building resilience and accessing broader markets, strengthening their behavioural intention to adopt.

Article 16 (Tripathi, 2024) emphasises the integration of digital tools such as blockchain and supply chain digitalisation, demonstrating structured approaches SMEs use for adopting and integrating digital systems. This reflects both PU and PEOU. Usefulness is seen in efficiency and resource optimisation, while structured integration reduces perceived difficulty, making adoption more feasible and sustainable.

4.3.2.3 BUSINESS OPERATIONS & EFFICIENCY

Article 11 (Türkeş, 2024) shows that technology orientation (TO) significantly improves operational efficiency through innovation adoption, automation, and training. This reflects PU, as SMEs clearly perceive digital tools as useful for improving efficiency and competitiveness. The role of training links to PEOU since ease of learning and application influences the level of integration.

Article 8 (Hu et al., 2024) finds that reliance on digital platforms significantly improved operational efficiency. Fast and cheap delivery through e-commerce platforms enhanced customer satisfaction and process effectiveness. At the same time, digital strategies such as social media accounts and online stores enabled SMEs to manage branding and communication more effectively. However, operational risks remained in areas like price monitoring and controlling marketing activities delegated to importers and agents. This aligns with PU, as SMEs see clear value in efficiency and customer satisfaction. However, it also points to potential barriers in PEOU, where risks and complexities in managing operations may affect confidence and behavioural intention.

Article 9 (Eze et al., 2021) highlights that efficiency gains are central to the value attached to digital marketing tools. Service delivery emerged as a key organisational expectation, with firms valuing technologies that circulate reliable information, improve processes, and enable fast decision-making. Adaptive training was also important; firms preferred minimal training tools and avoided significant time investments. These findings connect strongly with both PU and PEOU. SMEs prioritise usefulness regarding streamlined operations and improved performance, but they also place high value on ease of use, preferring tools that minimise resource strain and reduce adoption complexity.

4.3.2.4 CONSUMER & MARKET ENGAGEMENT

Articles 9 and 8 (Eze et al., 2021; Hu et al., 2024) show that digital marketing devices were valuable primarily when they enhanced consumer engagement and fulfilment. Firms noted that customer satisfaction was critical to adoption decisions, emphasising that technologies supporting faster service, reliable communication, and effective market positioning were essential to maintaining competitiveness. This connects to PU, as SMEs perceive these tools as helpful in driving customer loyalty and growth.

4.3.2.5 DATA & KNOWLEDGE MANAGEMENT

Together, the results from A12, A13 and A5 highlight that credibility management plays a pivotal role in shaping SMEs' adoption behaviour. Dependable information (A12) and the capability to deal with data (A13) can directly determine PU as SMEs see these activities applicable for competitiveness, customer involvement and innovation. There are, however, a number of challenges associated with integrating these systems into large-scale facilities at the same time barriers like storage capacity, trained analysts, and security highlight issues in PEOU since complex systems and inadequate resources make adoption feel more difficult and less manageable. Finally, the role of credibility, security, and trustworthiness of digital systems (A5) links directly to PU, as SMEs are more willing to adopt technologies that they consider reliable and safe. Together these studies show that knowledge management, data capabilities, and perceived system credibility are critical enablers or barriers within TAM shaping SMEs' perceptions of usefulness, ease of use, and their ultimate intention to adopt.

4.3.2.6 GROWTH & DEVELOPMENT

A8 findings show that SMEs are able to enter new segments, expand visibility, and co-create value with intermediaries, institutions, and consumers through e-commerce (Hu et al., 2024). By adopting e-commerce SMEs can strengthen their position in global markets, contributing to long-term development and competitiveness. The research in A12 has identified adoption as a pathway to growth for product and service providers at both local and international levels (Kaabous Alzaabi et al., 2021).

4.3.2.7 INNOVATION & EXPERIMENTATION

Article 11 (Türkeş, 2024) shows that technology orientation fosters experimentation with innovation policies and advanced capabilities. SMEs are encouraged to adopt future-oriented entrepreneurial practices, explore technological diffusion, and develop

new approaches to sustainability-driven innovation. This connects to PU as SMEs perceive technology orientation as applicable for long-term competitiveness and sustainability.

4.3.2.8 INFLUENCE & EXTERNAL FACTORS

In A9 external pressures such as competition and the need to remain commercially viable shaped how micro-businesses valued digital marketing tools. The expectancy framework reflects these pressures by highlighting that SMEs adopt technologies mainly when they can promise quick profitability and market growth despite limited resources (Eze *et al.*, 2021). Lastly, Figure 16 has shown that Government support and international collaborations act as external enablers of SME digitalisation in the region (Tripathi, 2024).

4.3.2.9 TRANSFORMATION & PROBLEM SOLVING

The findings in A9 (Eze *et al.*, 2021) suggest that transformation occurs when SMEs adopt simple, integrative technologies that can reduce costs while encouraging growth. This reflects PEOU as ease of use and system integration make adoption more attractive for resource-constrained firms. At the same time emphasising efficiency, customer satisfaction, and profitability highlights PU since SMEs perceive digital tools as valuable only when they generate tangible benefits.

4.4 SUMMARY

Chapter four outlined the empirical findings of the research. It starts with a descriptive summary of the analysed articles, highlighting trends in publication and the sources of the journals. Next, there is a thematic analysis of the results, identifying and discussing key themes about how e-commerce influences the growth of SMEs, aligned with the theoretical framework. The chapter wraps up by summarising the main findings and preparing for the final reflections in chapter five.

CHAPTER 5

SUMMARY, RECOMMENDATIONS, AND CONCLUSION

5.1 INTRODUCTION

Chapter four outlined the empirical findings of the research. It began with a descriptive summary of the analysed articles, highlighting trends in publication and the sources of the journals. This was followed by a thematic analysis of the results, identifying and discussing key themes about how e-commerce influences the growth of SMEs, aligned with the theoretical framework. The chapter concluded by summarising the main findings and preparing for the final reflections in chapter five. Chapter five is the concluding chapter of the study. It opens with a summary of the main points from each chapter and evaluates the extent to which the research objectives have been achieved. This is followed by a discussion of chapter four's descriptive and thematic findings. Based on these findings, practical recommendations for SMEs and suggestions for future research are provided. The chapter concludes by proposing a conceptual framework on the impact of e-commerce on SME growth and reflecting on the study's limitations and contributions to the broader academic discourse.

5.2 OVERVIEW OF THIS STUDY

Chapter one introduced and provided a brief background to this study. The problem statement and research objectives followed this. The study scope was then presented, and key concepts were described. Chapter one concluded by highlighting the significance of this study and providing an outline of the forthcoming chapters. Chapter two provided the literature overview in which small and medium enterprises (SMEs) and related concepts were introduced and discussed. The discussion of SMEs focused on their economic importance and the opportunities and challenges they faced in adopting e-commerce. One theoretical framework, TAM, was identified and described. Chapter two concludes with a summary of common factors identified in the literature and the impact of e-commerce on SME growth in general.

Chapter three outlined the research design and methodology. The research paradigm, approach to theory development, methodological choice, time dimension, and data collection and analysis techniques were identified and described. The steps taken

when conducting the systematic literature review and the considerations to ensure rigour within this research were highlighted. Chapter three concluded by explaining the ethical aspects considered. Chapter four presented the empirical results obtained from the SLR. A total of 18 articles met the inclusion criteria. The results of the descriptive analysis of these articles were then provided.

The chapter proceeded with the thematic analysis, during which the factors identified as influencing the impact of e-commerce on SME growth within the selected articles were identified and grouped as E-commerce-Driven Economic and Business Growth, and Digital Transformation & Growth of SMEs factors. These factors were then described in the context of TAM. Chapter five will elaborate on these empirical results. This study overview confirms the primary, secondary, and methodological objectives achieved. In Table 5.1, the relevant research objective, along with the chapter in which it was achieved, is provided.

Table 5.1: Accomplishment of research objectives per chapter

Type of Research Objective	Objective Code	Description	Chapter
Primary Research Objective	—	The primary research objective of this study is to conduct a systematic literature review (SLR) regarding the impact of e-commerce on the growth of small and medium-sized enterprises (SMEs).	Chapter 4
Secondary Research Objectives	SO1	To descriptively analyse the journal publications focusing on the impact of e-commerce on the growth of small and medium enterprises (SMEs).	Chapter 4
	SO2	To descriptively analyse the theories and methodologies used in research focusing on the impact of e-commerce on the growth of SMEs.	Chapter 4

	SO3	To comprehensively summarise and analyse the ways in which e-commerce influences the growth of SMEs.	Chapters 4 & 5
	SO4	To provide a conceptual framework illustrating the impact of e-commerce on the growth of SMEs	Chapter 5
	SO5	To identify research gaps and avenues for future research in the context of the impact of e-commerce on the growth of SMEs.	Chapter 5
Methodological Research Objectives	MO1	To conduct a literature overview on the nature and importance of small and medium enterprises (SMEs), the role of e-commerce, as well as factors influencing SME growth.	Chapter 2
	MO2	To determine the best suited research methodology to address the primary and secondary objectives.	Chapter 3
	MO3	To develop the theoretical frameworks that will guide the collection and analysis of the data.	Chapter 2
	MO4	: To collect the data from academic journals that are relevant to the primary objective.	Chapter 4
	MO5	To analyse the collected data in accordance with appropriate methods.	Chapter 4
	MO6	To provide conclusions and recommendations for future research.	Chapter 5

Source: Researcher's construction (2025)

5.3 DISCUSSION OF EMPIRICAL FINDINGS AND RECOMMENDATIONS

In this section, the empirical results relating to the descriptive and thematic analysis are discussed in terms of addressing the research objectives set out for this study. Additionally, a recommendation is provided within the discussion of the empirical results.

5.3.1 DESCRIPTIVE FINDINGS RELATING TO JOURNAL PUBLICATIONS

The descriptive analyses set out to describe the articles focusing on the impact of e-commerce on the growth of small and medium enterprises in terms of the number of authors, total citations, years of article publication, regions in which the studies took place, as well as theories and methodologies used in the research. The average number of authors per article was three, with three articles, A3, A11, and A16, having a single author. The average number of citations across all articles was 40, with Article A5 receiving the most citations to date, with 339. The five most cited articles in this systematic literature review are A5, A1, A9, A15, and A13. Conversely, the articles with the top five fewest citations include A7, A16, A3, A4, and A12. It is worth noting that more recent publications tend to have fewer citations.

The 18 articles included in the SLR were published between 2015 and 2025. Specifically, there were no publications in 2015, 2017, and 2020. The year 2024 had the most significant number of publications, with five articles, suggesting a growing research interest in the impact of e-commerce on SMEs. Although most research on the impact of e-commerce on SMEs has taken place in Asia (eight articles, with four in Southeast Asia, three in East Asia, and one in South Asia), studies were also conducted in the Middle Eastern region (one article), Africa (three articles), and Europe (four articles). Undertaking research in different countries is important for understanding the impact of e-commerce on SMEs in diverse cultural and economic contexts.

A quantitative methodological approach was most common, followed by qualitative and mixed methods (used in two articles). The underlying theories identified in the 18 articles included the Technology-Organisation-Environment Framework (most common), Technology Acceptance Model (most common), Dynamic Capabilities View, Resource-Based View, Theory of Planned Behaviour, and the Economic-growth model. Nine articles made no explicit mention of an underlying theory. Overall, using

various theoretical foundations across the 18 articles is beneficial, as it allows for research from multiple perspectives and through different disciplinary lenses. Future research should use unutilised theoretical perspectives to explain the impact of e-commerce on SMEs and their growth. More research on the impact of e-commerce on SMEs using qualitative methods would also be advantageous, given that qualitative research promotes interaction between research participants and the researcher and hence allows for a more in-depth understanding of the research question at hand.

5.3.2 FACTORS INFLUENCING THE IMPACT OF E-COMMERCE ON SME GROWTH

As described in Chapter Four, two overarching themes of factors were identified as influencing the impact of e-commerce on SME growth, namely, E-commerce-Driven Economic and Business Growth and Digital Transformation & Growth of SMEs. These themes are interpreted through the lens of the Technology Acceptance Model, particularly its central constructs of Perceived Usefulness and Perceived Ease of Use. The various factors categorised under each theme are summarised in Table 5.2, aligning with SO3 of this study. The following discussion highlights how these factors contribute to or hinder the impact of e-commerce on SME growth.

Table 5.2: Summary of Factors Influencing the Impact of E-commerce on SME Growth

Theme	Sub-Themes	Key Factors	Interpretation
E-commerce-Driven Economic and Business Growth (4.3.1)	Adoption & Development (4.3.1.1)	Adoption, ICT Adoption, E-commerce Adoption, E-commerce Development, Digital Ecosystem, Rural E-commerce, Interest in E-commerce, Compatibility, Technical Knowledge	PU (survival, strategic benefits); PEOU (integration with workflows, technical expertise)
	Business Growth & Opportunities (4.3.1.2)	Business Growth, Growth Factor, Growth Impact, Growth Opportunities, Growth Potential, Expansion, SME Growth, Opportunities, First-Mover Effects, Positive Development,	PU (improved competitiveness, reputation, long-term profitability, operational efficiency, revenue growth)

		Positive Effect, Positive Impact, Inclusive Growth	
	Market & Consumer Dynamics (4.3.1.3)	Competition, Competitiveness, Consumer Demographics, Demand, Market Access, Market Reach, Sales Channels, Sales Growth, Sales Increase, Customer Insights, Customer Service, Customer Engagement	PU (expanded market reach, increased competitiveness); PEOU (simplified communication, consumer interaction)
	Data & Information Management (4.3.1.4)	Data Access, Data Accuracy, Data Availability, Data Delivery, Data Importance, Data Management, Policy Insights, Research Development, R&D Importance	PU (strategic value in marketing efficiency, customer outcomes); PEOU (usability of analytical tools, infrastructure, skilled analysts)
	Infrastructure & Connectivity (4.3.1.5)	Connectivity, Internet Availability, Internet Connectivity, Internet Quality, Infrastructure, Infrastructure Improvement, Logistics, Transportation Costs, Warehousing Costs	PU (expanded market reach, reduced costs); PEOU (ease of use, efficiency, secure payments)
	Economic & Social Impact (4.3.1.6)	Economic Benefits, Economic Growth, Global Economy, Empowerment, Poverty Alleviation, Poverty Reduction, Inequality Reduction, Rural Development, Development Challenges	PU (tangible performance improvements, profitability, competitiveness, extended market reach)
	Innovation & Transformation (4.3.1.7)	Innovation, Strategic Innovation, Technology Impact, Product Development, New	PU (strategic growth, competitive positioning, long- term digital presence,

		Ideas, Transformation, Problem Solving	productivity gains); PEOU (simplified workflows, capacity utilisation)
	Challenges & Barriers (4.3.1.8)	Challenges, Development Challenges, Expertise Constraints, Obstacles, Sales Limitations, Insignificant Relationship, Limited Value, Negative Impact, Weak R&D Relationship, Lack of Skilled Employees, Insufficient Financial Capacity, Limited Training Opportunities	PEOU (financial, organizational, technological constraints); PU (limited capacity to leverage technology for sustained transformation)
	Government & Institutional Support (4.3.1.9)	Bangladesh, Government Recognition, Government Support, Model Counties, Regional Focus, Policies, Subsidies, ICT Sector Liberalisation, Tax Incentives, Infrastructure Investment, Awareness Campaigns	PU (enhances usefulness of technology); PEOU (reduces perceived difficulty of adoption)
	Cost & Resource Optimization (4.3.1.10)	Cost Reduction, Resource Demand, Funding, Value Addition, Output, Productivity, Productivity Growth, Training Effectiveness, Skilled Labor	PU (cost efficiency, resource optimization, efficiency gains, sustainability); PEOU (complexity of implementation)
	Promotion & Channels (4.3.1.11)	E-commerce Promotion, E- marketplaces, Social Media, Traditional Methods, Credibility, Improved Image,	PU (eliminates geographic barriers, expands visibility, enhances sales potential, boosts trust and brand reputation); PEOU

		Communication Channels	(simplifies communication)
Digital Transformation & Growth of SMEs (4.3.2)	Access & Connectivity (4.3.2.1)	Access, Channel Access, Connectivity, Internet Connectivity, Internet Issues, Information Access, Market Access, Market Reach, Data Access	PEOU (greater connectivity, simplified access); PU (transaction efficiency, accessibility, trust, tangible benefits)
	Adoption & Integration (4.3.2.2)	Adoption, E-commerce Adoption, ICT Adoption, ICT Influence, E-commerce Introduction, E-commerce Influence	PU (resilience, accessing wider markets, efficiency, resource optimization); PEOU (structured integration reduces difficulty)
	Business Operations & Efficiency (4.3.2.3)	Business Operations, Operational Capabilities, Operational Efficiency, Logistics, Cost Efficiency, Productivity	PU (improved efficiency, competitiveness, customer satisfaction); PEOU (ease of learning, application, managing risks and complexities)
	Consumer & Market Engagement (4.3.2.4)	Consumer Engagement, Customer Service, Online Purchasing, Online Trading, Social Media, Promotion, Sales Channel	PU (customer loyalty, growth, faster service, reliable communication, effective market positioning)
	Data & Knowledge Management (4.3.2.5)	Data Challenges, Data Management, Knowledge Transfer, Research & Development	PU (competitiveness, customer engagement, innovation, system credibility, security); PEOU (limited storage, lack of skilled analysts, security concerns)
	Growth & Development (4.3.2.6)	Growth, Growth Facilitation, Growth Mechanism, Growth Opportunities, Product Growth,	PU (new segments, expanded visibility, value co-creation, global markets, long-term)

		Sales Boost, Sales Increase, Sales Volumes, SME Growth, Income Effects, Economic Contribution, Economic Empowerment, Empowerment	development, competitiveness)
	Innovation & Experimentation (4.3.2.7)	Innovation, Strategic Innovation, Experimentation, Exploration, First-Mover Effects, Positive Externalities	PU (long-term competitiveness, sustainability)
	Influence & External Factors (4.3.2.8)	Influence, Positive Influence, Indirect Influence, Government Facilitation, Government Support, Economic Conditions	PU (quick profitability, market growth); PEOU (government support and international collaborations as enablers)
	Transformation & Problem Solving (4.3.2.9)	Transformation, Problem Solving, Mechanisms	PEOU (simple, integrative technologies, cost reduction); PU (efficiency, customer satisfaction, profitability, tangible benefits)

Source: Researcher's construction (2025)

5.3.2.1 E-COMMERCE-DRIVEN ECONOMIC AND BUSINESS GROWTH

The growth of small and medium enterprises is influenced by e-commerce. The influence e-commerce has enables SMEs access to broader markets, it enhances operational efficiency, and it encourages innovation. This influence can be understood through the Technology Acceptance Model. This is because a focus will be placed on how SMEs perceive the usefulness and ease of use of e-commerce technologies.

The ability of SMEs to adopt and develop e-commerce is directly tied to the TAM perceptions. During the COVID-19 pandemic, firms reacted to the event by adopting e-commerce. This is because businesses have recognised the perceived usefulness

of online channels for business continuity and reaching consumers (A6). The e-marketing orientation, offering efficient communication and transactions, further highlights PU (A11). At the same time, organisational factors and perceived strategic value influence the intention of adoption. This demonstrates how PU is shaped by aligning e-commerce with business long-term goals. Conversely, Perceived Ease of Use plays a crucial role, with compatibility with existing processes driving adoption and a lack of technical knowledge acting as a barrier; when e-commerce integrates smoothly, it is easier to adopt, but limited expertise increases perceived difficulty (A7).

As a result of this assimilation, expansion and opportunities will perform greater (SME) markets, over nationally and internationally, with the efficiency of customers which conforms to the Perceived Usefulness aspects of E-Commerce as an object of improvement of competitiveness, reputation and growth of it (A12). For e-commerce also assists in the survival and in the international development of (SME) by decreasing the costs of distribution, by the calculation of certain useful marketing data found for it, and improvement in the efficiency of the supply chain (A15). Likewise, e-commerce facilitates the door of the entire world, increases the visibility and the sales of it, as well as with manufacture, collaborative networks for the sharing of resources that reinforces PU creating innovative revenue opportunities (A18).

The effect of e-commerce on market and consumer behaviours is marked. Websites and social media provide a retailing channel for customers, and their interface speeds up access to the market since they facilitate the removal of geographical location and time as barriers. Social media by their interactive features provide a good medium for customers to be involved with the purchasing activity directly related to PU (A1). The openness of social media for customers' participation is also an important contributor to PEOU (A1). A policy of multi-channel management which is operating in both the online and offline is an important factor of sales for diverse groups of customers and a great producer of data of great worth reinforcing the significance of the word competitive in relation to the strategic usefulness of digital channels and the ease of access thereto (A6).

Effective management of data and information is another element of e-commerce growth. By analysing digital measures, segmenting based on data and employing targeted strategies, greater marketing efficiencies and customer outcomes are

obtained, enhancing PU. It is, however, the usability of analytical tools which determines PEOU, for simpler devices encourage adoption (A11). Problems such as limited internet connectivity hamper PEOU, giving rise to frustration. At the same time, problems with data storage and access and a shortage of skilled analysts limit PU, for tangible benefits gained from badly kept data practices are not likely due (A13).

Infrastructure and connectivity are foundational. E-commerce eases the access of digital markets to SMEs as it overcomes physical barriers and increases PU from wider coverage and lower costs (A1). But both PU and PEOU are significantly reduced due to infrastructure gaps. Unstable infrastructure renders e-commerce frustrating and useless, therefore contradicting PEOU. At the same time, this can lead to lower perceived usefulness of digital tools through the lack of guarantee that the delivery will occur quickly, and low trust that payments will be secure, which results in a low behavioural intention to adopt technology by SMEs (A18).

Economically and socially, the impact is overwhelmingly positive. Economic rewards such as increased sales, revenue expansion and more prominent participation in the digital economy reported SMEs positively boosting PU by providing measurable performance improvements (A1). It is suggested that the increased use of the internet and cross-border trade in the era of the global village could augment possibilities for international e-commerce because PU (which is achieved by extending the boundaries and targets of a specific market beyond local markets) has been improved. Social forces also drive adoption as firms work to be competitive in a world economy (A10).

Innovation and transformation is also key drivers. Shifting operations from traditional to digital channels expands reach and efficiency. This boosts PU as firms perceive e-commerce as a driver of strategic growth (A1). Strategic innovation positively influences adoption, aligning with PU by demonstrating e-commerce as a tool for long-term digital presence and productivity gains (A13). Process innovation mediates e-commerce adoption and firm performance, relating to PEOU by simplifying workflows, and reinforcing PU by ensuring e-commerce is a transformative tool for efficiency (A17).

Despite these benefits, challenges and barriers persist. While higher adoption supports growth, innovation advantages may plateau, indicating limitations for SMEs in leveraging technology for sustained transformation (A2). Non-compliance with tax

laws and minimal fraud detection prevent fair competition and sustainable growth (A3). Organisational barriers, such as a lack of skilled employees, insufficient financial capacity, and limited training, are significant constraints for SMEs. These factors, alongside market-related and technological barriers, reduce PEOU, making e-commerce adoption difficult and lowering intention despite potential usefulness (A4).

Government and institutional support play a critical role. Both adopters and non-adopters emphasise the need for improved standards, regulations, and incentives, with government support emerging as the most decisive influence on behavioural intention to adopt e-commerce (A4) (A5). Policy recommendations, including simplified regulatory frameworks, grants, and incentives for technological innovation, enhance PU by making technology more useful and improve PEOU by reducing perceived difficulty (A11).

E-commerce directly benefits cost and resource optimisation. Adopting e-commerce reduces distribution and transaction costs, allowing SMEs to optimise scarce resources, reflecting PU (A15). Advanced technologies like blockchain and supply chain digitalisation are associated with efficiency and resource optimisation, though their implementation complexity relates to PEOU (A16). Collaborative arrangements, automation, and sustainable practices lead to significant efficiency gains and cost reductions, strongly connecting with PU as SMEs perceive these as beneficial for financial and environmental outcomes (A18).

Finally, promotion and channels are vital for market engagement. Websites, social media, and third-party platforms are crucial promotional and sales channels, demonstrating strong PU. SMEs perceive e-commerce as applicable because these channels eliminate geographic barriers, expand visibility, and enable two-way customer interaction, directly enhancing sales potential (A1). The credibility and improved image gained through electronic promotion also reflect PU (A2). Improved communication channels align with both PU (stronger customer relationships) and PEOU (digital tools simplify communication) (A12). However, using e-commerce solely as a promotional tool without operational backing highlights a PU gap, as its full usefulness remains unrealised without integration into logistics or inventory (A17).

In essence, e-commerce drives economic and business growth for SMEs by offering perceived benefits in market access, efficiency, and innovation. However, the extent

of this growth is mediated by factors influencing the perceived ease of adopting and integrating these digital solutions and by the supportive external environment.

5.3.2.2 DIGITAL TRANSFORMATION & GROWTH OF SMES

The second central theme, "Digital Transformation & Growth of SMEs," elucidates how the adoption and integration of digital technologies, particularly e-commerce, drive the growth of Small and Medium Enterprises. This theme is analysed through the lens of the Technology Acceptance Model, focusing on how Perceived Usefulness and Perceived Ease of Use influence SMEs' journey toward digital transformation and subsequent growth.

Digital transformation begins with enhanced access and connectivity, significantly influencing PU and PEOU. The widespread growth of internet users and the strategic use of online channels, especially during events like the pandemic, have expanded online accessibility and participation in e-commerce, improving customer access (A6) (A10). This increased accessibility directly relates to PEOU, as it reduces the effort required for SMEs and their customers to engage with digital platforms. However, connectivity issues and reliance on external logistics providers still pose barriers to PEOU. Equipping employees with modern digital tools is crucial for fostering PEOU by lowering the perceived difficulty of using e-commerce systems through user-friendly interfaces and adequate training (A12). The development of digital payments and finance infrastructure further boosts adoption probabilities, particularly in rural areas, aligning with PU as SMEs and consumers recognise the clear value in improved transaction efficiency, accessibility, and trust offered by such systems (A14).

The adoption and integration of e-commerce are strategic imperatives for SMEs seeking growth. Integrating e-commerce into operations enhances resilience and facilitates direct exporting, linking to PU as SMEs perceive this integration as helpful in building resilience and accessing broader markets (A15). Structured integration of advanced digital tools, such as blockchain and supply chain digitalisation, demonstrates both PU (through efficiency and resource optimisation) and PEOU (by reducing perceived difficulty through structured implementation) (A16).

Digital transformation profoundly impacts business operations and efficiency. A technology-oriented approach improves operational efficiency through innovation, automation, and training. This reflects PU, as SMEs perceive digital tools as helpful in

enhancing efficiency and competitiveness, while the availability of training influences PEOU by affecting the ease of learning and application (A11). Digital platforms have improved operational efficiency, enabled fast, cost-effective delivery and enhanced customer satisfaction. Digital strategies, including social media and online stores, facilitate more effective brand management and communication (A8). These benefits underscore PU, though operational risks may introduce complexities that affect PEOU. Efficiency gains are a central value of digital marketing tools, with firms prioritising technologies that streamline operations, provide reliable information, and enable rapid decision-making. This connects strongly with both PU (streamlined operations, improved performance) and PEOU (minimal training, reduced resource strain) (A9).

E-commerce also transforms consumer and market engagement. Digital marketing tools are highly valued when they enhance consumer engagement and fulfilment. Customer satisfaction is a critical driver for adoption, with technologies supporting faster service, reliable communication, and effective market positioning being essential for competitiveness. This aligns with PU, as SMEs perceive these tools as helpful in fostering customer loyalty and driving growth (A8) (A9).

Effective data and knowledge management is crucial for e-commerce-driven growth. Managing information, data, and system credibility strongly influences SMEs' adoption behaviours. Reliable and accurate information provision and the ability to manage and interpret data effectively directly shape PU, as these practices are perceived as applicable for competitiveness, customer engagement, and innovation. Conversely, barriers such as limited storage capacity, a lack of skilled analysts, and security concerns highlight challenges in PEOU, making complex systems and inadequate resources more difficult to manage. The credibility, security, and trustworthiness of digital systems also link directly to PU, as SMEs are more willing to adopt technologies, they consider reliable and safe (A5) (A12) (A13).

Ultimately, digital transformation inherently drives growth and development. E-commerce enables SMEs to enter new market segments, expand visibility, and co-create value with intermediaries, institutions, and consumers (A8). By adopting e-commerce, SMEs can strengthen their position in global markets, contributing to long-term development and competitiveness. Adoption is therefore identified as a direct

pathway to growth for product and service providers at both local and international levels (A12).

Digital transformation fosters innovation and experimentation. A technology-oriented approach encourages experimentation with innovation policies and advanced capabilities. SMEs are prompted to adopt future-oriented entrepreneurial practices, explore technological diffusion, and develop new approaches to sustainability-driven innovation. This connects to PU, as SMEs perceive technology orientation as useful for achieving long-term competitiveness and sustainability (A11).

Influence and external factors also play a significant role. External pressures, such as intense competition and the necessity for commercial viability, shape how micro-businesses value digital marketing tools, leading them to adopt technologies that promise quick profitability and market growth (A9). Government support and international collaborations are crucial external enablers of SME digitalisation (A16).

Finally, transformation and problem-solving occur when SMEs adopt simple, integrative technologies that reduce costs and foster growth. This reflects PEOU, as ease of use and seamless system integration make adoption more attractive for resource-constrained firms. Simultaneously, emphasising efficiency, customer satisfaction, and profitability highlights PU, as SMEs perceive digital tools as valuable only when they generate tangible benefits (A9).

In summary, the digital transformation and growth of SMEs through e-commerce is a multifaceted process driven by the perceived usefulness and ease of use of digital technologies across all aspects of their operations, from market access and efficiency to innovation and customer engagement. It is also significantly shaped by external support and internal capabilities.

5.4 CONCEPTUAL FRAMEWORK ON E-COMMERCE AND SME GROWTH

The conceptual framework developed within this study illustrates how various factors influence the adoption of e-commerce by Small and Medium-sized Enterprises, ultimately leading to their growth. This framework highlights that internal and external factors shape SMEs' perceptions of e-commerce. This drives their behavioural intention to integrate these digital tools into their operations, ultimately resulting in specific growth outcomes. External enablers, such as government policies,

institutional support, and competitive market pressures, significantly influence SMEs' Perceived Usefulness (e.g., how beneficial e-commerce is) and Perceived Ease of Use (e.g., how easy e-commerce is to implement and operate). Government support, including policies, subsidies, and ICT sector liberalisation, strongly influences behavioural intention to adopt e-commerce, enhancing perceived usefulness and reducing perceived difficulty. Internal factors, such as resource availability, existing digital skills, and overall organisational readiness, determine the feasibility and sustainability of e-commerce adoption, also playing a role in shaping both Perceived Usefulness and Perceived Ease of Use. Organisational barriers, including lack of skilled employees, insufficient financial capacity, and limited training, are significant constraints to adoption, influencing the perceived ease of use.

The combined influence of perceived usefulness and perceived ease of use leads to a behavioural intention to adopt e-commerce, which drives the actual integration of e-commerce into the SME's operational processes. Perceived usefulness is evident in the enhanced market reach, efficiency improvements, and competitive advantages that e-commerce offers. For instance, SMEs adopting e-commerce expand their market reach, improve customer efficiency (A12), and enhance survival and international expansion by lowering distribution costs and generating marketing data (A15). Similarly, websites and social media improve sales channels, market access, and strengthen consumer engagement (A1). Perceived ease of use is affected by system compatibility, technical knowledge, and the availability of reliable infrastructure. The successful integration of e-commerce ultimately leads to Growth Outcomes, including efficiency improvements, market expansion, innovation, and enhanced long-term competitiveness. For example, technology orientation significantly improves operational efficiency through innovation adoption, automation, and training (A11). This framework is guided by the Technology Acceptance Model, which uses perceived usefulness and ease of use as central determinants of technology adoption.

5.4.1 AVENUES FOR FUTURE RESEARCH IN THE CONTEXT OF E-COMMERCE AND SME GROWTH

To build upon the insights of this systematic literature review and address identified gaps, the study includes among its secondary research objectives the identification of

research gaps and avenues for future research. While the detailed discussion of these specific avenues is beyond the scope of the chapters reviewed here, the study acknowledges its reliance on secondary data from published academic articles, which limited its scope to existing knowledge, and its focus on English-language sources. These limitations inherently suggest areas where future research could expand. Future research should also consider the varying contexts and challenges, including limited digital skills and infrastructure, which lead to inconsistent findings in current research on the effect of e-commerce on SME growth. Ultimately, the systematic literature review provides a foundation for future inquiries into the ongoing impact of e-commerce on SME development.

5.5 LIMITATIONS OF THIS STUDY

Several limitations coming from this systematic literature review's design and scope should be considered to appropriately evaluate the findings. Firstly, the scope of the literature search was limited to specific databases. The systematic literature review sourced its articles primarily from Google Scholar and Mendeley. While these are reputable databases, excluding other potentially relevant academic databases might have limited the comprehensiveness of the research. This could mean the possibility of overlooking valuable insights on e-commerce and SME growth.

Secondly, the study imposed a language restriction. This included an only full-text articles published in English for analysis. This limitation means that relevant contributions published in other languages, which could offer diverse regional or cultural insights, were not considered. This could have potentially affected the global understanding of the topic.

Thirdly, a specific temporal boundary was set for article inclusion focusing only on publications between 2015 and 2025. While this ensures currency it might exclude foundational or historically significant research published outside this timeframe that could provide a broader evolutionary context for e-commerce adoption by SMEs.

Furthermore, the research strictly delimited its focus to "e-commerce adoption in relation to SME performance, scalability, market reach, and operational efficiency." This specific scope, while necessary for a systematic review, means that other

potentially impactful aspects of e-commerce on SME or the broader socio-economic implication might not have been fully explored.

Additionally, the study by design as a systematic literature review relies only on secondary data (published academic articles). This approach means that the study's insights are limited to existing knowledge and do not incorporate empirical evidence through primary data collection methods such as case studies, surveys, or interviews, which could directly capture the lived experiences and nuanced challenges of SMEs.

Moreover, while the study utilises the Technology Acceptance Model as its primary theoretical framework it also acknowledges the existence of various other theoretical frameworks applicable to this field, such as the Technology-Organisation-Environment framework, the Theory of Planned Behaviour, and the Resource-Based View. Relying solely on TAM while providing a focused lens might limit the breadth of theoretical interpretation or overlook insights that alternative frameworks could offer regarding the complex motivations and challenges influencing e-commerce adoption among SMEs.

Lastly, the thematic analysis presented in Chapter Four identifies various factors influencing e-commerce's impact on SME growth and relates them to the constructs of TAM. However, the study does not explicitly get into the complex interplay between these identified factors or the potential mediating roles one factor might have on another. This limits the discussion on how different barriers or enablers might interact to influence SMEs' intentions and e-commerce adoption outcomes.

5.6 CONTRIBUTIONS OF THIS RESEARCH

This systematic literature review makes several significant contributions to the existing body of knowledge concerning the role of e-commerce on the growth of Small and Medium-sized Enterprises along with practical implications for relevant stakeholders.

5.6.1 ACADEMIC CONTRIBUTIONS:

Firstly, this study clarifies how e-commerce adoption affects SME growth by performing a systematic literature review addressing the problem of disjointed and incomparable findings in existing research. By doing so it provides a comprehensive and structured understanding of the actual impact of e-commerce on SME development. Secondly, the research contributes by identifying significant barriers to the effective implementation of e-commerce. This highlights technologies and

revealing existing gaps in the current research landscape. This includes the explicit objective of identifying research gaps and avenues for future research in e-commerce and SME growth. Furthermore, the study provides a conceptual framework showing the impact of e-commerce on the growth of SMEs. It also systematically analyses the journal publications and the theories and methodologies used in research focusing on this topic, summarising and analysing the ways e-commerce influences SME growth. The study's use of the Technology Acceptance Model as a guiding theoretical framework interpreting thematic findings through its constructs demonstrates its applicability in understanding SME e-commerce adoption behaviours.

5.6.2 PRACTICAL CONTRIBUTIONS

The findings of this study offer valuable practical insights for SMEs aiming to leverage e-commerce as a strategic tool for growth within the digital economy. By identifying key barriers and enabling technologies the research can assist SME owners and managers understand the critical factors influencing e-commerce adoption and its outcomes. This understanding can inform strategic decisions related to investment in digital skills, infrastructure, and the selection of e-commerce platforms. Additionally, by highlighting areas such as government and institutional support the study provides insights that can guide policymakers and support organisations in developing more effective policies, incentives, and infrastructure to foster e-commerce adoption and, as a result the growth of SMEs.

5.7 CONCLUSION

This study undertook a systematic literature review to understand the impact of e-commerce on the growth of Small and Medium-sized Enterprises. Recognising the critical role of SMEs in global economies and the increasing yet often disjointed research on e-commerce adoption, the primary objective was to clarify how e-commerce influences SME development. The study aimed to analyse relevant journal publications descriptively, summarise how e-commerce influences SME growth, and provide a conceptual framework illustrating this impact.

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ANNEXURE A

ANNEXURE XX: ETHICAL CLEARANCE (FORM E)



FACULTY OF BUSINESS AND ECONOMIC SCIENCES
DEPARTMENT OF BUSINESS MANAGEMENT

ETHICAL CONSIDERATION FOR HONOURS TREATISE (non-publication route)

INSTRUCTIONS

- Should be completed by study leader and student.
- Must be signed off by the student, study leader and HOD.
- Submit the completed and signed form to the module coordinator who will submit to Mrs Kim.Alexander@mandela.ac.za.
- Please ensure that a summary of the research methodology section of the treatise is attached to this form (*Complete Annexure A to this Form*).
- **Please note that by following this ethics route, the study will NOT be allocated an ethics clearance number.**

SECTION A – STUDENT ACKNOWLEDGMENT

- The student acknowledges that their research project is for academic qualification purposes only. As such, the research report or any sections thereof **may not be published**.
- The student also acknowledges that their research project **will be a desktop study** and will **make use of publicly available documents or secondary data**. No human subjects will be involved in the study as primary sources of data.

Secondary data, in this instance, refers to data that was collected and processed by someone else for some other purpose but is now being used by the researcher for another reason (Tripathy, 2013). Research utilising secondary data that both exists and has been collected in a public, academic database, for example Google Scholar, is considered desktop research, and generally does not require full ethical approval (Creswell & Poth 2017).

SECTION B – STUDENT AND RESEARCH PROJECT DETAILS

Student name & surname	Clementine Maake
Student number	225326183
Title of treatise	The impact of e-commerce on the growth of Small and Medium Enterprises (SMEs)
Qualification	BCOM HONS BUSINESS MANAGEMENT

SECTION C –

Department	Business Management
Study leader	Ms N Khumalo

ETHICS CRITERIA

<i>(Please tick the appropriate block)</i>		YES	NO
1.	Is there any risk of harm, embarrassment of offence, however slight or temporary, to the participant, third parties or to the communities at large? Is the study based on a research population defined as 'vulnerable' in		✓
2.	terms of age, physical characteristics and/or disease status?		✓
2.1	Are subjects/participants/respondents of your study:		
2.1.1	Children under the age of 18?		✓
2.1.2	NMU staff?		✓
2.1.3	NMU students?		✓
2.1.4	The elderly/persons over the age of 60?		✓
2.1.5	A sample from an institution (e.g. hospital/school)?		✓
2.1.6	Handicapped (e.g. mentally or physically)?		✓
3.	Does the data that will be collected require consent of an institutional authority for this study? (An institutional authority refers to an organisation that is established by government to protect vulnerable people)		✓
3.1	Are you intending to access participant data from an existing, stored repository (e.g. school, institutional or university records)?		✓
4.	Will the participant's privacy, anonymity or confidentiality be compromised?		✓
4.1	Are you administering a questionnaire/survey that:		
4.1.1	Collects sensitive/identifiable data from participants?		✓
4.1.2	Does not guarantee the anonymity of the participant?		✓
4.1.3	Does not guarantee the confidentiality of the participant and the data?		✓
4.1.4	Will offer an incentive to respondents to participate, i.e. a lucky draw or any other prize?		✓
4.1.5	Will create doubt whether sample control measures are in place?		✓
5.	Do you wish to publish any research output (i.e. article) from this study?		✓

Please note that if **ANY** of the questions above have been answered in the affirmative (**YES**) the student will need to complete the full ethics clearance form (MEOS REC-H application) and submit it with the relevant documentation to the Faculty RECH (Ethics) committee.

SECTION D –

The student hereby certifies that he/she has given his/her research careful ethical consideration and full ethics approval is not required.

INFORMATION TO BE INCLUDED INTO THE RESEARCH REPORT

(The section below should be edited and aligned to the specifics of the study)

1. ETHICAL CONSIDERATIONS

This study will follow the ethical research considerations that apply to all research in the social sciences, which are defined as moral rules and professional codes of conduct to the collection, analysis, reporting, and publication of information about research subjects (Pietilä, Nurmi, Halkoaho & Kyngäs, 2020:49). The research will, at all times, adhere to the following ethical considerations:

1.1 Informed Consent

Where data is freely available on the Internet, books or other public forum, permission for further use and analysis is implied, however, the ownership of the original data must be acknowledged (Tripathy, 2013).

1.2 Anonymity and Confidentiality

To ensure privacy and to protect individuals or institutions within the secondary data, a privacy plan or protocol will be in place to protect the confidentiality of the users. This may include removing identifiable information, securely storing the data and removing any sensitive information prior to distribution of the outcome of the study (where needed).

1.3 Action and Competence of Researchers

The study will be undertaken in an ethically correct manner. Under no circumstances would the researcher in this study make judgments about data, falsify data or plagiarise.

1.4 Respect of Intellectual Property

Intellectual property is the creation arising from intellectual activity, and this study will acknowledge and reference all ideas and sources used in the study.

1.5 Beneficence

The study topic being researched is for degree purposes only and will not be published.

1.6 Non-Maleficence

Non-maleficence makes sure that what is being done is not harmful and that harm is not done by omitting care or treatment. This study will make sure that no harm will come to anyone connected to the study. This body of work and the documents consulted will also adhere to the Protection of Personal Information Act (PoPIA). POPIA governs the collection, processing and sharing of personally identifiable information (PII).

SECTION E –**1.7 Applying for ethical consideration**

The researcher will apply for ethical consideration from the *Department of Business Management* (Nelson Mandela University) to have the right to research within the intended domain. The research process, in particular data collection, may only be conducted once ethical clearance has been granted, i.e., the ethics form has been signed by the student, the study leader and the Head of Department.

SIGNATURES AND DATES

STUDENT

21 APRIL 2025
DATE

Nobukululako Khumalo
STUDY LEADER

03 April 2025 DATE

HEAD OF DEPARTMENT

DATE

REFERENCES

- Cilliers, L. & Viljoen, K. (2021). A framework of ethical issues to consider when conducting internet-based research. *South African Journal of Information Management*, 23(1).
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-

ANNEXURE A: BCOM HONOURS TREATISE – SUMMARY OF RESEARCH METHODOLOGY

Please provide a summary of the research design and methodology employed in the study by completing the following template.

Treatise details	Title of treatise
	IMPACT OF E-COMMERCE ON SMEs
Background to the study	Introduction and background The rise of e-commerce has significantly transformed the way businesses operate, opening up new markets and opportunities, particularly for small and medium-sized enterprises (SMEs). However, while the digital space presents various advantages such as reduced overheads and wider reach, many SMEs continue to struggle with building consumer trust online. Unlike larger, well-established brands, SMEs often lack the resources and brand recognition necessary to immediately earn customer confidence. This research focuses on the role of consumer trust in shaping the success or failure of SMEs in the e-commerce space, identifying key challenges and exploring strategies to overcome them.
	Problem statement Despite the increasing popularity of e-commerce, numerous small and medium-sized enterprises (SMEs) struggle due to consumers' lack of trust in their online platforms. This scepticism- often stemming from worries about website security, unsatisfactory user experience, or the fear that products won't match their online images- impedes their efforts to attract and retain customers. As consumers are unable to physically evaluate products before making purchases, this distrust ultimately impacts the growth and competitiveness of SMEs in the digital market.
Objectives of the study	Primary objective To investigate and examine the elements that lead to consumers' distrust in e-commerce platforms of SMEs, and to formulate strategies the SMEs can adopt to improve consumer trust and confidence in their online platforms.
	Secondary objectives To create targeted, practical strategies that SMEs can adopt to improve consumer trust, such as strengthening website security, implementing clear return policies, and ensuring high-quality customer service
	Methodological objectives
	<ul style="list-style-type: none"> • To examine current consumer feedback and reviews to identify prevalent trust-related challenges and concerns • To investigate technological solutions that can assist SMEs in boosting consumer trust, including secure payment systems, encryption methods, and user-friendly website designs.

Research design & methodology	Research philosophy / Paradigm (positivism, interpretivism etc.) Interpretivism
	Approach to theory development (inductive, deductive, abductive) Inductive
	Purpose of study (descriptive, exploratory, comparative) Exploratory
	Methodological choice (mono, multi, mixed methods) Mono
	Research approach (quantitative, qualitative, mixed) Qualitative
	Research strategy (SLR, literature review, archival research, case study) Systematic Literature Review
	Time dimension (cross-sectional, longitudinal) Cross-sectional
Data collection*	Technique and procedures (desktop study / desk research) A desktop study will be conducted using publicly available secondary data. This includes online customer reviews, SME case studies, academic journal articles, and reports from credible business and technology sources. No fieldwork or primary data collection will be involved.
	Search strategy: Data inclusion criteria Data will be included based on relevance to SMEs, e-commerce, and consumer trust. Sources must be credible, current, and directly related to the research objectives.
	Search strategy: Sources of data (databases, websites etc.) Sources will include academic databases such as Google Scholar and Mendely.
	Search strategy: Search terms or word strings Search terms will include combinations of keywords such as:
	<ul style="list-style-type: none"> • "Consumer trust in e-commerce" • "SMEs online trust issues" • "E-commerce security SMEs" • "Customer feedback online shopping" • "Technology adoption in small businesses"
	Data analysis techniques (content analysis, thematic analysis)

Data analysis*	Thematic analysis
Trustworthiness*	<p>Quality criteria (credibility, dependability, transferability, and confirmability) (How will each of the aforementioned be ensured?)</p> <p>Credibility: Ensured by using diverse and credible secondary sources and by cross-referencing themes across multiple documents.</p> <p>Dependability: Maintained through a consistent process of data selection, coding, and thematic analysis.</p> <p>Transferability: Findings will be discussed in a way that highlights how they may apply to various SME contexts beyond the specific cases analysed.</p> <p>Confirmability: Achieved by maintaining transparency in how data was selected and analysed, allowing others to trace the logic of the findings.</p>

* The details in these section could vary. Be guided by your study leader.

REFERENCES:

Add any references used in Annexure A here.

ANNEXURE B

ANNEXURE XX: LEARNING AGREEMENT

FACULTY OF BUSINESS AND ECONOMIC SCIENCES
LEARNING AGREEMENT BETWEEN STUDY LEADER AND POSTGRADUATE
STUDENT FOR BCOM HONS MINI-TREATISE QUALIFICATIONS

The aim of this learning agreement is to provide postgraduate students and their study leaders an opportunity to develop a sound and productive working plan. This document should be read in conjunction with the following Nelson Mandela University Policy documents:

- The General Prospectus
- Faculty of Business and Economic Sciences Prospectus
- University Code of Ethics Policy
- Policy on Intellectual Property
- Promotion of Academic Integrity and Prevention of Plagiarism

These documents are available on the Nelson Mandela University's website (<http://my.mandela.ac.za/default.asp?id=308&IRCno=>)

The Faculty of Business and Economic Sciences requires all postgraduate students and their study leader(s) to complete a learning agreement. Postgraduate students and their study leader(s) should discuss the issues outlined in this agreement, to have clarity and consistency regarding the conduct of the Postgraduate student and study leader. The document should be signed in each other's physical presence.

The postgraduate student and study leader should keep a copy of this learning agreement, and a copy must be sent to the module coordinator (Shelley.Farrington@mandela.ac.za).

PART A: DETAILS OF POSTGRADUATE STUDENT, STUDY LEADER(S) AND QUALIFICATION

NAME & SURNAME:	CLEMENTINE MAAKE
STUDENT NUMBER:	225326183
QUALIFICATION:	BCOM HONS BUSINESS MANAGEMENT
YEAR OF REGISTRATION:	2025
DEPARTMENT:	BUSINESS MANAGEMENT
STUDY LEADER:	N KHUMALO

PART B: ROLES AND RESPONSIBILITIES OF THE POSTGRADUATE STUDENT AND STUDY LEADER(S)

• **POSTGRADUATE STUDENT:**

As a postgraduate candidate, the student is expected to apply him- or herself to meeting the following reasonable responsibilities.

The postgraduate Student accepts and undertake the following responsibilities:

DESCRIPTION	INITIAL
Complete all the required components of the academic programme as stipulated.	C.M
Plan and execute the research study as agreed to with the guidance of the study leader (and co-study leader, where applicable).	C.M
Ensure that the research proposal (Chapter 1-3) is submitted at the stipulated date.	C.M
Adhere to the principles of accepted safety and health standards, ethical research practice as per Nelson Mandela University Code of Conduct for Researchers (IRC 404.01), Policy on Research Ethics (IRC 404.02), specific codes of the discipline (where applicable) and conventions regarding plagiarism as per Nelson Mandela Policy for the Promotion of Academic Integrity and Prevention of Plagiarism (IRC 305.04).	C.M
Make regular appointments with study leader(s) to update study leaders(s) on progress or any difficulties encountered in executing the academic project as planned to ensure timeous remedial action where required.	C.M
Keep written record of supervision sessions and the decisions agreed to.	C.M
Submit regular outputs from the academic project to ensure effective guidance and input by study leader(s).	C.M
Ensure that written work submitted has been proofread and of an acceptable academic standard.	C.M
Ensure that the necessary amendments or revisions decided upon with study leader(s) are made regularly and resubmitted as agreed for further guidance.	C.M
Take responsibility for the final production of the treatise for examination and final submission at the specified dates.	C.M
Submit a manuscript to the study leader prior to the time of the approval of examiner reports (for purpose of awarding the doctoral degree).	C.M
The postgraduate student has read all the relevant strategic and policy documents related to their relevant qualification.	C.M
The postgraduate student has familiarised him- or herself with the internet-based plagiarism detection service; Turnitin software.	C.M
The postgraduate student endeavours to partake in workshops and training related to the research project	C.M

• **STUDY LEADER / CO-STUDY LEADER:**

The responsibilities outlined below are reasonable expectations of academics or any other persons who are undertaking the supervision of candidates.

The study leader(s) accepts and undertake the following responsibilities:

DESCRIPTION	INITIAL
Clarify respective roles of student, study leader, and co-study leader (where relevant) to ensure that student and study leader (s) are clear about channels of communication as well as expectations. Preferably such clarification should be contained in a study leader or learning agreement	NK
Confer or make contact with the student regularly (minimum once a month) to provide academic guidance to ensure the development of research skills and competencies	NK

relevant to the discipline and the specific study, and to ensure adherence to university requirements and/or discipline standards.	NK
Monitor progress of the student and submit reports on student progress as required by the university and by relevant scholarship funding bodies.	NK
Keep a record of supervision sessions and provide feedback, within the timeframe agreed upon, to enable student progress.	NK
Study leaders must maintain an adherence to accepted safety and health standards, as well as ethical research practice as per Nelson Mandela University Code of Conduct for Researchers (IRC 404.01), Policy on Research Ethics (IRC 404.02), specific codes of the discipline (where applicable) and conventions regarding plagiarism as per Nelson Mandela Policy for the Promotion of Academic Integrity and Prevention of Plagiarism (IRC 305.04) and advise their students to maintain these standards as well.	NK
Provide the relevant information to the student so that the candidate submits the treatise for examination and final submission on the correct date and format.	NK
The study leader(s) to consult Turnitin report submitted by the student to the internet-based plagiarism detection service; Turnitin software.	NK

PART C: TERMS OF LEARNING AGREEMENT

FREQUENCY OF COMMUNICATION			
The contact details of the study leader(s) were provided to the postgraduate student.	<table border="1"> <tr> <td>YES <input checked="" type="checkbox"/></td> <td>NO <input type="checkbox"/></td> </tr> </table>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>		
Specify frequency and communication channel for meetings (i.e. telephone, email, face-to-face).	Emails monthly MS Teams meetings when necessary		
In case of the appointment of a co-study leader(s), how will meetings and communication between all be organised?	N/A - but should a co-supervisor be appointed. The supervisor will organise meetings. The student will CC both, supervisor and co-supervisor, in all email correspondence.		
Specify who is responsible for scheduling meetings and how far in advance these meetings should be scheduled.	Supervisor is responsible for scheduling meetings. Meetings will be scheduled at least one week in advance. In instances where the student needs urgent assistance or guidance, meetings may be scheduled on short notice, given that the time of such a meeting suits both parties.		
Specify the procedure for changing the meeting date and time.	Notice will be given via email and possible times/dates for rescheduling must be provided by party who rescheduled.		
Specify frequency and duration of meetings (approx.).	Monthly meetings, duration between 30 minutes – 1 hour.		
Specify who will set the agenda and take notes.	per chapter – supervisor; special meetings – student; student responsible for note taking always.		
Clarify whether there will be any expectation regarding regular email communication.	Communication can be expected on feedback and progress, monthly. Response time will be maximum 72 hours (except over weekends)		
Indicate the availability of communication of study leader during period of research and/or ordinary leave.	Unavailable during leave.		
List the roles, responsibilities of study leader, co-study leader(s) and student.	Discussed in introductory meeting		
Comments:			
RESEARCH PLAN / TIMEFRAME			
Specify the research plan and timeframe	As per Module submission dates		
Specify how changes to the research plan / timeframe will be dealt with.	Discussed and agreed upon in a meeting		
Was the postgraduate student informed of the timeframes	<table border="1"> <tr> <td>YES <input checked="" type="checkbox"/></td> <td>NO <input type="checkbox"/></td> </tr> </table>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>		
Specify remedial action if schedule is not adhered to?	Module co-ordinator will be consulted		
Comments:			

SUBMISSION OF WRITTEN MATERIAL AND FEEDBACK	
Specify how often written work should be submitted to the study leader(s).	At least once a month, if work not submitted, student must communicate about progress being made
Specify the timeframe for feedback.	maximum 2 weeks after the submission date. Student to continue working whilst they wait for feedback
Specify remedial action if feedback agreement is not adhered to?	Module co-ordinator will be consulted

ETHICS APPROVAL		
	YES	NO
The postgraduate student was informed that all research projects require ethical approval?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The postgraduate student was informed that it is his/her responsibility to apply for ethics?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comments: Student was informed that this study will only require Form E, with which the supervisor will assist completing		
INTELLECTUAL PROPERTY		
	YES	NO
The postgraduate student was informed that all intellectual property resulting from research conducted for postgraduate degrees, including all publications, is governed by the Intellectual Property Policy (IRC 401.01)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The student was informed that the intellectual property rights resulting from a postgraduate's research shall vest in the University	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comments:		

The **STUDENT** and the **STUDY LEADER** confirms that:

1. They have read and understood this Learning Agreement,
2. They agree to accept its content for the duration of the study period as per the qualification stipulated above.

SIGNATURES:

Student:


.....

Date:

21 APRIL 2025
.....

Study leader:

Nonkululako Khumalo
.....

Co-study leader:

.....N/A.....

Date:

03 April 2025
.....

ANNEXURE C

NELSON MANDELA
UNIVERSITY

DEPARTMENT OF BUSINESS MANAGEMENT

EBMI402 – ADVANCED STRATEGIC AND INTERNATIONAL MARKETING
GenAI declaration

Generative Artificial Intelligence (GenAI) tools could be essential resources, but it could also hinder your learning process. It is valuable for you to engage critically with these tools and explore their use in generating content that could be relevant to assessments in this module, including case studies and marketing plans. You could use GenAI tools to help generate ideas. However, you should note that the material generated by these tools may be inaccurate, incomplete, and biased. We encourage you to consider how GenAI complements, replaces, or fails to replace your contributions, abilities and insights.

You remain responsible for all content you submit for assessments. You cannot include content that was generated, in whole or in part, by Gen AI tools (including, but not limited to, ChatGPT and other large language models) in work submitted for evaluation/assessment in this module. If GenAI-generated content is included in your assessments, it would be considered Academic Misconduct, violating the University's Plagiarism Policy.

If you consult GenAI tools, use the ideas noted through this exercise to further investigate topics and do research, to ensure that you rather consult valid and reliable, scientific sources. As always, you are responsible to accurately reference sources consulted, to acknowledge these sources.

I hereby acknowledge an understanding of the above and will adhere to using GenAI tools responsibly while completing this module.

SURNAME: <u>MAAKE</u>	INITIALS & TITLE: <u>C.M.</u>
STUDENT NO: <u>225326183</u>	
SIGNATURE: <u>C.M.</u>	
Date: 2025/08/05	

ANNEXURE D

Match Overview			
16%			
<			>
1	busman.mandela.ac.za Internet Source	1%	>
2	Gallant, Naledi Desiree ... Publication	1%	>
3	Submitted to Interactiv... Student Paper	1%	>
4	core.ac.uk Internet Source	1%	>
5	Submitted to Nelson M... Student Paper	1%	>
6	Jonas Eduardsen. "Cha...	<1%	>