

UNIVERSITY OF WALES TRINITY SAINT DAVID

A Report On

**Advancements in technology in E-Commerce and E-Business:
Organizational structures and classical management theories
evolving nature of 21st-century corporations.**

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Abstract

This study examines the impact of e-commerce and e-business on traditional organisational structures and management roles within the retail sector. As digital transformation reshapes modern corporations, the research evaluates whether conventional, hierarchical models and classical management theories remain adequate in meeting the demands of 21st-century business environments. The study investigates how digital technologies, ranging from online transaction systems to smart logistics, have redefined operational efficiency, organisational design, and leadership approaches. While brick-and-mortar retail once dominated with centralized structures, the rise of e-commerce has emphasized agility and technological literacy. Findings indicate that smart logistics ecosystems, powered by technological innovations and modern communication technologies, are essential for e-commerce platforms. The rise of e-commerce has driven the adoption of advanced technologies in traditional businesses, and managers must now leverage these technologies and analytics to streamline operations and make well-informed decisions, while emphasizing the security of their digital infrastructure. The research concludes that a blend of strategic innovation and adaptation is crucial for businesses aiming to thrive amidst this digital revolution, as e-commerce evolves into the retail model.

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1. Introduction

The retail sector has undergone a seismic shift in recent decades, primarily due to rapid advances in technology. In recent years, the COVID-19 pandemic has significantly accelerated the digital transformation of the retail sector. Online shopping has become a standard method for purchasing goods and services. By 2022, 75% of internet users in the European Union had engaged in e-commerce, up from 55% in 2012. On a global scale, online sales reached around 4.9 trillion US dollars in 2021, with projections indicating a 50% increase over the following four years, potentially reaching 7.4 trillion dollars by 2025 (Sulova, 2023). As e-Commerce and e-Business redefine how companies interact with customers and manage operations, the foundational principles of organisational structure and traditional management roles are being questioned. Based on the findings of a study, several managerial recommendations can be offered to leaders of e-commerce platforms. These platforms should prioritise enhancing their technological innovation capabilities when developing smart logistics ecosystems. The smooth functioning of the entire logistics chain relies heavily on robust technological support—particularly critical for e-commerce businesses, which are inherently rooted in the Internet. Key components such as intelligent storage and transportation systems, real-time operational visibility, and seamless coordination between supply chain partners all depend on advancements in modern communication technologies. As such, it is recommended that e-commerce enterprises increase their investment in technological innovation to significantly boost the organisational efficiency of their smart logistics ecosystems (Liu et al., 2021). This report evaluates whether such changes have rendered conventional business models obsolete in the 21st-century retail landscape.

1.1 Background

Historically, retail businesses operated within a well-defined structure—centralised, hierarchical, and physically rooted in brick-and-mortar operations. Brick-and-mortar operations refer to businesses that have a physical presence—such as retail stores, offices, or warehouses—where customers can visit, interact with products or services, and make purchases in person. Simple electronic transactions that emerged in the mid-20th century have since evolved into a sophisticated, technology-driven ecosystem encompassing online shopping, integrated supply chain management, and digital customer interaction.

E-commerce (electronic commerce) refers to the buying and selling of goods and services over the internet or other electronic networks. It involves online transactions between businesses, consumers, or both, and includes activities such as online shopping, electronic payments, internet banking, and online ticketing. According to Laudon & Traver (2021), e-commerce is the process of conducting commercial transactions electronically on the Internet, including activities such as marketing, selling, delivering, and servicing products or services. E-commerce, short for electronic commerce, involves conducting the buying and selling of goods and services through electronic media and the internet. It encompasses a business's use of online platforms and information technologies such as Electronic Data Interchange (EDI) to facilitate transactions. E-commerce typically involves a vendor offering products or services through a website, allowing customers to make purchases directly from the platform. Transactions are processed using tools like virtual shopping carts, with payments made via credit card, debit card, or Electronic Funds Transfer (EFT). More broadly, e-commerce refers to the use of digital communication and information systems in business activities to establish, modify, and enhance value-creating relationships between individuals and organisations (Jain et al., 2021).

On the other hand, E-business (electronic business) is a broader concept that encompasses all aspects of operating a business online. It includes not only e-commerce transactions but also internal processes such as supply chain

management, inventory control, customer relationship management (CRM), and digital communication between departments. According to some authors, e-business refers to the use of internet technologies to conduct and support business processes, both internal and external, improving productivity, efficiency, and customer engagement (Turban et al., 2017). Managers controlled resources, dictated workflow, and coordinated through top-down communication. However, with the emergence of online marketplaces, omnichannel strategies, and digital platforms, these models are being challenged at every level.

Aspect	E-Commerce	E-Business
Definition	Buying and selling of goods/services over the internet	Conducting all business activities using internet technologies
Scope	Narrow — focuses mainly on online transactions	Broad — includes e-commerce and internal business processes
Activities Involved	Online sales, payment processing, order tracking	Supply chain management, CRM, HR, finance, internal communication
Interaction Type	Mainly external (business to customer/supplier)	Both external and internal operations
Technology Used	Websites, shopping carts, online payment systems	ERP systems, CRM software, intranets, extranets
Examples	Amazon selling products online	Amazon's use of digital tools for managing inventory, HR, etc.
Objective	Generate revenue through online sales	Improve overall business efficiency and customer experience

Table-1: Distinguish between E-commerce & E-business

The transformation from traditional retail models to digitally enabled operations mark a significant shift in the way businesses function in the modern era. While brick-and-mortar establishments once dominated the retail landscape through centralized, hierarchical structures, the rise of e-commerce and e-business has introduced a more dynamic, interconnected, and customer-centric approach. E-commerce, with its focus on online transactions, has revolutionized how goods and services are bought and sold, offering convenience and speed to both businesses and consumers. E-business, encompassing a broader range of digital activities, goes beyond just sales to integrate internal processes such as supply chain management, customer relationship management, and enterprise communication. Together, these digital advancements have challenged traditional business models, pushing organizations to rethink their strategies, structures, and operations to stay competitive in a rapidly evolving digital marketplace. Understanding the distinction and interplay between e-commerce and e-business is essential for businesses aiming to thrive in the 21st century.

1.2 Purpose of the Study

The purpose of this study is to critically examine how advancements in e-Commerce and e-Business have impacted the traditional organisational structures and managerial roles within the retail sector. As digital transformation reshapes the landscape of modern corporations, this study aims to evaluate the extent to which conventional, hierarchical models and classical management theories have become outdated or inadequate in meeting the demands of 21st-century business environments. Focusing specifically on the retail industry, the study seeks to explore how digital technologies—ranging from online transaction systems to smart logistics and integrated internal platforms—are redefining operational efficiency, organisational design, and leadership approaches. The ultimate goal is to determine whether the shift towards technology-driven models has rendered traditional practices obsolete and to identify what new strategies managers must adopt to remain competitive in an increasingly digital marketplace.

2. Literature Review

This section reviews the existing literature to provide a foundational understanding of how technological advancements—particularly in the areas of e-Commerce and e-Business—have influenced organisational structures and management roles.

2.1 Evolution of Technology in Business

Technological innovation has always been a catalyst for change. E-business technology can enhance a firm's operations management by enabling real-time information sharing across the entire supply chain. Although such technology has become widely accessible and affordable for most large organizations—potentially reducing its ability to offer long-term competitive advantages—it still plays a vital role in building operational capabilities. It supports improvements in gross margins, boosts employee productivity, enhances talent management, and drives overall operational excellence. Specifically, e-business tools help firms manage product margins more effectively. Through web-based systems, companies can exchange accurate, up-to-date information about product costs and customer demand with both suppliers and customers. This enables better-informed decisions and tighter margin control. Additionally, e-business platforms contribute to higher employee productivity by allowing access to diverse sources of knowledge through internal communication systems like email and intranets. This access helps employees gain insights into various operational processes and collaborate more efficiently, often enabling them to handle a broader range of tasks (Benitez et al., 2018). In recent years, retail technology has advanced from simple point-of-sale systems to sophisticated AI-driven recommendation engines, virtual try-ons, and mobile wallet integrations. Technological advancements have transformed the way businesses operate, requiring managers to skillfully navigate areas like data analytics, artificial intelligence, and automation. Their role now involves leveraging these technologies to streamline operations, enhance decision-making, and maintain a competitive edge in the digital landscape. Additionally, the rise of

remote work—accelerated by the COVID-19 pandemic—has reshaped how teams collaborate. Managers must now effectively lead teams spread across various locations, cultivate a sense of connection among remote staff, and sustain productivity across multiple time zones. In today’s tech-driven world, embracing technology and data analytics is no longer a choice but a necessity for informed decision-making and efficient resource management (Porath, 2023). Therefore, it can be said that the evolution of technology has significantly enhanced and modernized business operations. Today, it is nearly unimaginable for a business to function effectively without the integration of advanced technological tools and systems.

2.2 The Rise of e-Commerce

The rise of e-commerce has been a transformative force in global business, reshaping how goods and services are marketed, sold, and delivered. Amazon, founded by Jeff Bezos in 1994 as an online bookstore, emerged as a pioneer in the early days of e-commerce. Bezos had a broader vision—to build an all-encompassing online marketplace beyond just books. Amazon’s success demonstrated the potential of e-commerce and paved the way for the expansion of online retail. Around the same time, eBay was launched in 1995, bringing the idea of online auctions to life. It offered a platform for individuals to buy and sell a diverse range of products, revolutionizing commerce by making virtual bidding and transactions accessible to the general public (Ntumba et al., 2023). A co-word analysis of e-commerce research from 2001 to 2020 demonstrates a dynamic evolution in the field, with early studies focusing on the adoption and acceptance of e-commerce platforms, and more recent research delving into logistics, consumer experience, and technological innovation. In the late 1990s, the rise of the internet laid the foundation for e-commerce, and advancements in information technology over the following years have fueled its rapid growth over the past two decades (Bai & Li, 2022). For instance, the advent of Web 2.0 played a key role in the rise and evolution of platform-based e-commerce models (Yu, 2019). In addition, emerging technologies like social media,

cloud computing, big data, and artificial intelligence (AI) have significantly accelerated the growth of e-commerce (Ilmudeen, 2021).

The economics of digital platforms is largely shaped by two interconnected factors: economies of scale and network effects. Economies of scale arise when the costs involved in developing, maintaining, and updating a website or software suite grow at a much slower rate than the increase in users and revenue. This results in higher returns on investment and improved operating profits. Google and Facebook are prime examples—both dominate their respective markets outside China and generate most of their income through targeted advertising powered by consumer data analytics. As their user bases expand, ad reach grows significantly, boosting platform revenues accordingly. Network effects further amplify this dynamic. As the user base grows, the overall value of the network increases for each individual user due to the greater potential for relevant discoveries, interactions, and a larger audience for shared content. At the same time, companies like Google and Facebook gain access to more valuable data from user activities, enabling them to offer more precise targeted advertising and command higher prices from advertisers.

These scale economies and network effects have been so powerful that, by the end of 2017, Google and Facebook had effectively formed a duopoly, controlling over 60% of the U.S. online advertising market. A similar pattern is seen in e-commerce: as Amazon and Alibaba expand their product offerings, they attract more online visitors and shoppers. This accelerates inventory turnover and draws more independent sellers to their platforms, further enhancing the platforms' appeal in a reinforcing cycle (Moriset, 2018). E-commerce encompasses more than just online retail; it also involves transactions between businesses (B2B), businesses and consumers (B2C), and consumers themselves (C2C), involving the exchange of products, services, money, or data. While e-commerce systems were still developing in the early 2000s, the past decade has seen substantial growth and transformation. As a result, the foundational aspects of e-commerce in 2022 differ significantly from those that existed in 2012 (Prachir & Nigam, 2023).

The exponential growth of e-Commerce, particularly platforms like Amazon, Alibaba, and Shopify, has revolutionised the way customers shop. Consumers now expect 24/7 access, fast delivery, and seamless digital experiences, forcing retailers to adopt agile and tech-enabled operating models.

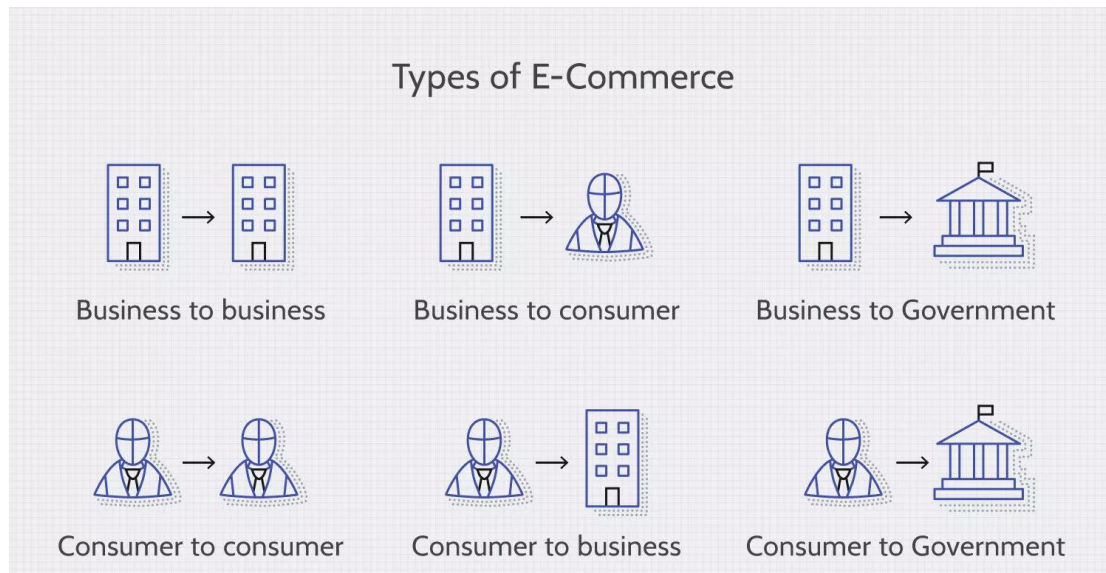


Figure-1: Types of E-commerce

2.3 The Emergence of e-Business

The emergence of e-business marks a significant transformation in the way organizations operate, interact, and create value in the digital age. While e-commerce focuses on online buying and selling, e-business encompasses a broader spectrum, including servicing customers, collaborating with partners, and conducting internal transactions electronically. Unlike e-Commerce, which focuses on transactions, e-Business encompasses all digital interactions within an organisation—from supply chain management to customer service. Retail giants have adopted ERP systems, CRM platforms, and cloud-based collaboration tools to enhance efficiency. Over the past 15 years, the ICT revolution has significantly boosted global economic development. Rapid technological advancements, particularly in the Internet and its related services, have paved the way for the emergence of new markets. For context, while the global population reached 7.2 billion in May

2015, the number of internet users was only around 400 million in 2006, highlighting the massive growth in internet adoption during that period (Sharma, et al., 2023).

The roots of e-business trace back to the 1960s with the development of Electronic Data Interchange (EDI), which enabled businesses to exchange documents electronically. The 1980s saw the creation of the first e-commerce platforms, such as the Boston Computer Exchange. However, it was the advent of the World Wide Web in the 1990s that catalyzed the rapid expansion of e-business. Companies like Amazon (founded in 1994) and eBay (1995) pioneered online marketplaces, leveraging secure payment gateways and user-friendly web browsers to reach a global audience. The late 1990s witnessed the dot-com boom, characterized by a surge in internet-based businesses. While many early ventures failed during the subsequent bust, the survivors—most notably Amazon—solidified their dominance and set new standards for e-business operations. The 2000s and beyond saw exponential growth, driven by increased internet accessibility, improved logistics, and the proliferation of smartphones, which gave rise to mobile commerce (Prachir & Nigam, 2023). E-commerce experienced a significant surge in popularity due to the COVID-19 pandemic. As lockdowns and movement restrictions limited physical shopping, consumers increasingly turned to online platforms for both essential and non-essential purchases. This shift affected both consumer-retailer and business-to-business interactions. In Japan, major platforms like Rakuten, Amazon, and Yahoo saw sales growth of 7%–14% in early 2020. Globally, the pandemic accelerated the move toward a digital economy, disrupting traditional business models and contributing to a sharp rise in e-commerce sales, with growth rates far exceeding pre-pandemic expectations (Alwan et al., 2023).

The evolution of e-business reflects a profound shift in how organizations function in the digital era, extending beyond mere transactions to encompass all aspects of electronic operations and interactions. From its roots in EDI during the 1960s to the explosive growth of online marketplaces and mobile commerce, e-business has continually adapted alongside technological

advancements. The COVID-19 pandemic further accelerated this transformation, highlighting the resilience and adaptability of digital platforms. As technology continues to evolve, e-business will remain central to global commerce, innovation, and economic growth.

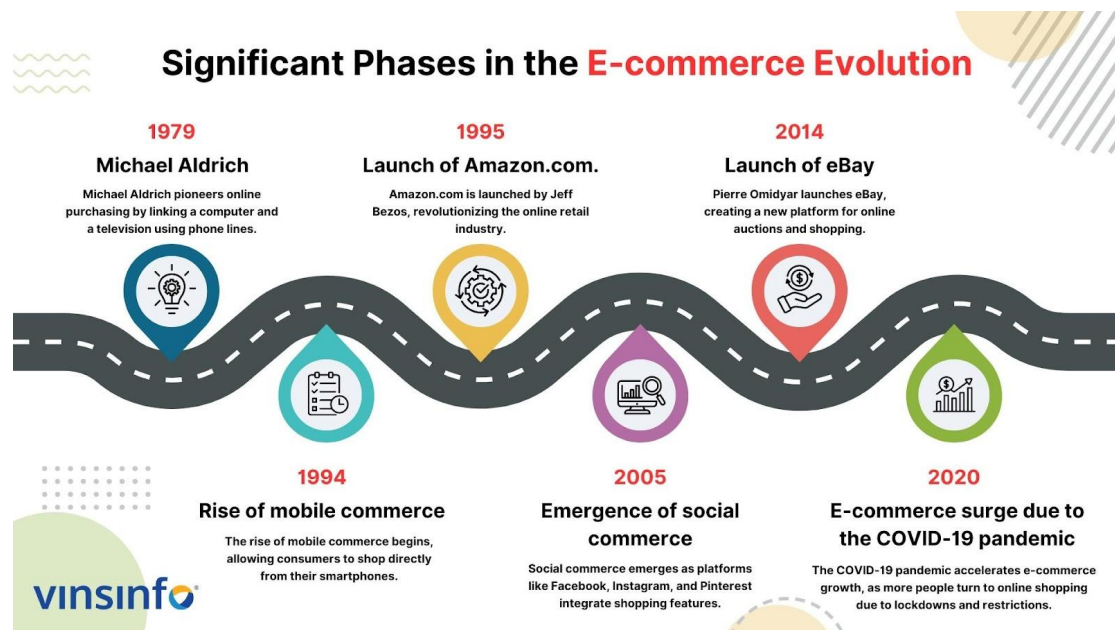


Figure-2: E-commerce Evolution

2.4 Definition and Explanation of Organisational Structure

Organisational structure refers to the formal framework within which tasks are divided, coordinated, and supervised to achieve the goals of an organization. According to a chapter of a book, the phrase "organisational structure" describes the formal arrangement of roles, duties, and responsibilities assigned to individuals and teams within an organization. It defines who does what and ensures that tasks are properly distributed and coordinated to support overall objectives (Gillam & Cosford, 2021). It outlines how roles, responsibilities, and authority are assigned and how information flows between different levels of management. Structures can be hierarchical, flat, matrixed, or network-based, depending on the organization's size, strategy, and goals. A study concluded by offering the following three recommendations for an effective and functional organisation:

- In a competitive business environment, strong leadership is essential for success. The ability to continuously implement innovative strategies enhances the efficiency and effectiveness of business operations and promotes ethical practices. Visionary leaders play a key role by setting clear goals, building trust, empowering teams within defined limits, driving change, aligning internal processes, and serving as inspiring role models.
- An effective structure enables optimal use of human resources, enhances coordination, ensures a clear division of responsibilities and authority, and contributes to employee satisfaction. It also strengthens internal controls, ensures fair systems of rewards and discipline, organizes workflows, and avoids duplication of tasks.
- Maintaining a healthy organisational culture is crucial for sustained performance. Managers should focus on nurturing this culture by providing supportive work environments, ensuring employee safety, fostering discipline, encouraging participation, and cultivating a productive and positive workplace atmosphere (Karunia, 2020).

So, a well-defined organisational structure is vital for ensuring clarity, efficiency, and strategic alignment within any organisation. It provides a blueprint for assigning roles and coordinating efforts, which is fundamental to achieving business objectives. Effective leadership, streamlined structures, and a strong organisational culture are key elements that contribute to a company's long-term success. By fostering innovation, optimising human resources, and nurturing a positive workplace environment, organisations can enhance performance, adaptability, and sustainability in an increasingly competitive and dynamic business landscape.

2.5 Theories of Management Roles

Management role theories provide frameworks for understanding the specific behaviors, responsibilities, and functions that managers perform within organizations. Classical theories, such as Henri Fayol's management functions—planning, organising, leading, and controlling—form the bedrock

of traditional management thinking. However, in fast-paced digital environments, these linear models often prove too rigid. The scientific management theory, developed primarily by Frederick W. Taylor, focuses on task efficiency and the systematic organization of work. Taylor introduced concepts such as time and motion studies, incentive-based pay, precise job instructions, and scientific methods for selecting personnel, all aimed at improving productivity.

Meanwhile, Henri Fayol revived classical administrative theory through his 1916 work *General and Industrial Administration*. He proposed five key management functions—planning, organizing, commanding, coordinating, and controlling—and outlined 14 principles of management to guide both public and private organizations in effective administration.

Another influential Western theory is Max Weber's concept of bureaucracy, which is widely recognized for its structured and formalized approach to organizational management. Weber, influenced by the work of Frederick W. Taylor, explored the impact of bureaucratic systems on efficiency and control within organizations. His model emphasized clearly defined hierarchies, impersonal rules, division of labor, and merit-based advancement, aiming to establish order, predictability, and rationality in administrative functions (Poazi & Timi, 2024).

Elton Mayo's Human Relations Theory emerged as a response to the limitations of classical management theories, such as scientific management. Developed through the Hawthorne Studies (1924–1932), Mayo's theory emphasized the social and psychological needs of workers. He discovered that employee productivity improved when workers felt valued, listened to, and socially connected (Muldoon et al., 2020).

General Management Theories

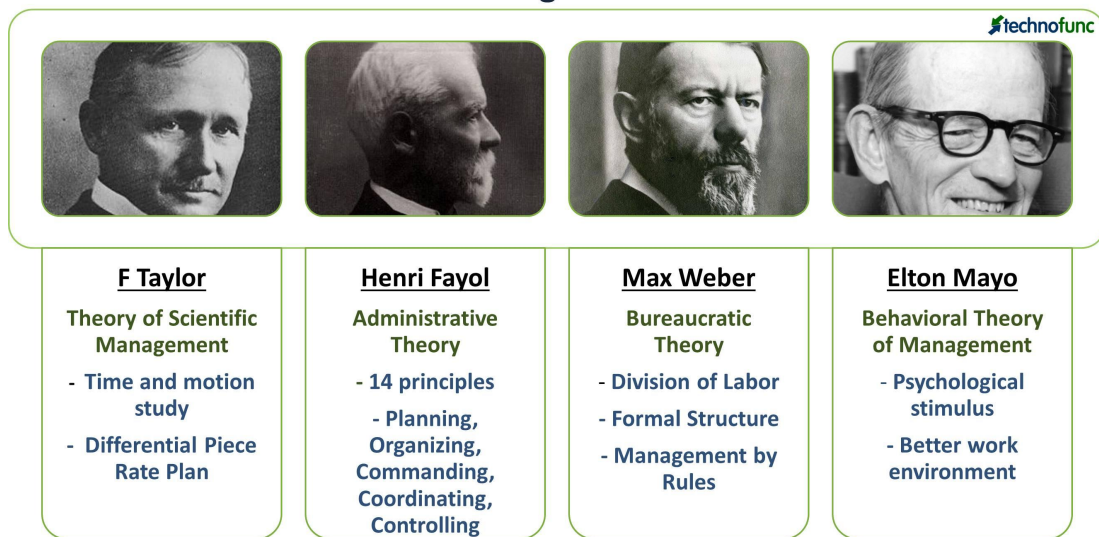


Figure-3: Management Theories

Since organizational culture plays a critical role in the efficient functioning of a business, Henry Mintzberg's management theory offers a fitting framework for understanding organizational management. His theory highlights the different managerial roles and organizational structures that influence how culture shapes operations. By examining leadership styles, decision-making patterns, and communication flows, Mintzberg's approach helps explain how cultural elements are integrated into daily business practices, ultimately affecting performance, cohesion, and adaptability within the organization. Henry Mintzberg challenged Henri Fayol's five-function model, arguing that it oversimplified the unpredictable and dynamic nature of managerial work. Instead, Mintzberg proposed a framework of ten managerial roles, grouped into three categories: interpersonal (e.g., leader, liaison), informational (e.g., monitor, spokesperson), and decisional (e.g., entrepreneur, negotiator). These roles reflect the diverse and often simultaneous responsibilities managers handle. Additionally, scholars have emphasized the importance of distinguishing between functional managers—who oversee specific departments—and general managers, who manage broader organizational functions, each requiring different skills and approaches (Gutterman, 2023).

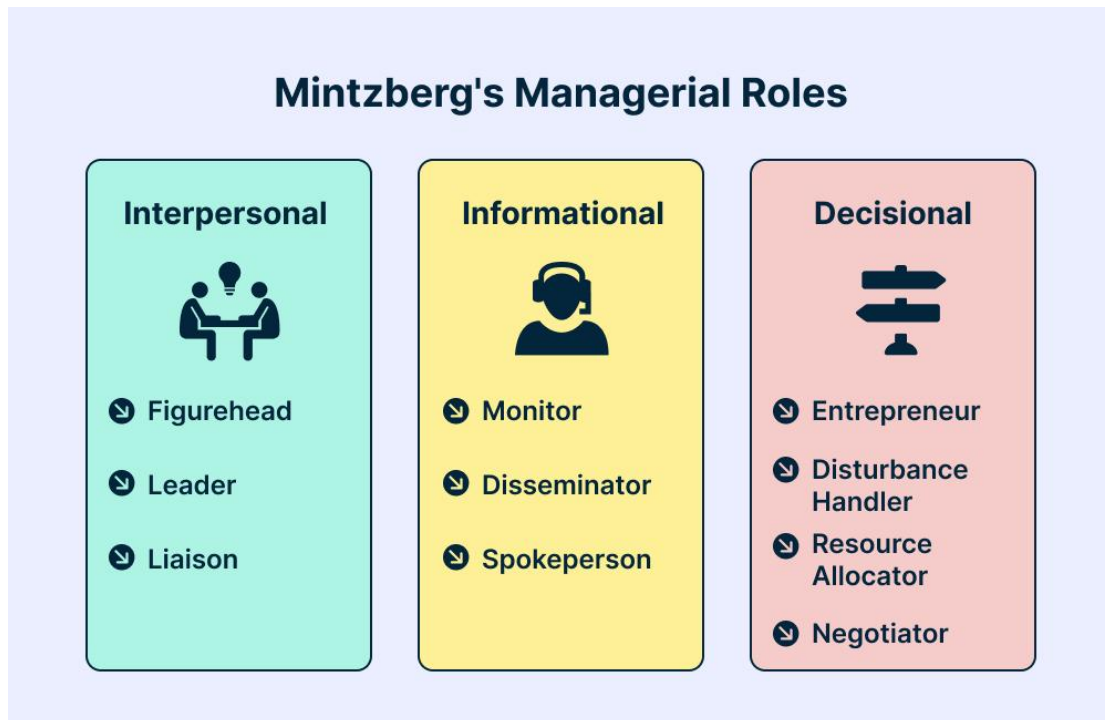


Figure-4: Henry Mintzberg's Management Theory

Theories of management roles, particularly Mintzberg's framework, provide a practical lens for understanding what managers do and how they contribute to organizational effectiveness. By recognizing and mastering these roles, managers can better navigate the complexities of modern organizations and adapt to changing business needs.

2.6 Implications for Traditional Models

The rise of e-commerce has fundamentally disrupted traditional business models, particularly those rooted in brick-and-mortar operations. This disruption brings both challenges and opportunities, requiring established businesses to rethink their strategies and adapt to a rapidly evolving digital landscape. The key implications for traditional models are discussed below:

Shift in Consumer Behavior: E-commerce has transformed how consumers shop, prioritizing convenience, accessibility, and a wider range of choices. This shift has forced traditional retailers to reassess their value propositions and find new ways to engage customers, such as enhancing in-store experiences or offering unique services. According to a study, e-commerce provides unmatched convenience, allowing consumers to make purchases

anytime and from almost any location with just a few clicks. This high level of accessibility has created both advantages and obstacles for traditional physical retail stores, pushing them to reevaluate and adapt their business strategies to stay competitive in a fast-changing market landscape (Airen, 2024).

Increased Competition and Price Transparency: Online platforms make it easy for consumers to compare prices, intensifying competition and pressuring traditional businesses to adjust pricing strategies and improve efficiency. The growth of online retail prompts the question of whether the improved efficiency in updating and sharing information outweighs the advantages of personalized pricing strategies. Current research offers mixed results regarding price levels in online markets, largely because these markets continuously evolve and are influenced by the distribution model used. In many industries, studies show only slight variations between online and offline pricing. For instance, a comparison of product prices from multi-channel retailers across ten countries found that, on average, 72% of the prices were the same, with identical pricing ranging from 42% in Brazil to 91% in both Canada and the United Kingdom (Strasseret al., 2023). A major challenge in the development of e-commerce lies in the contrast between the high efficiency of digital platforms in quickly updating and distributing information, and the added complications that come with the ability to implement personalized pricing strategies.

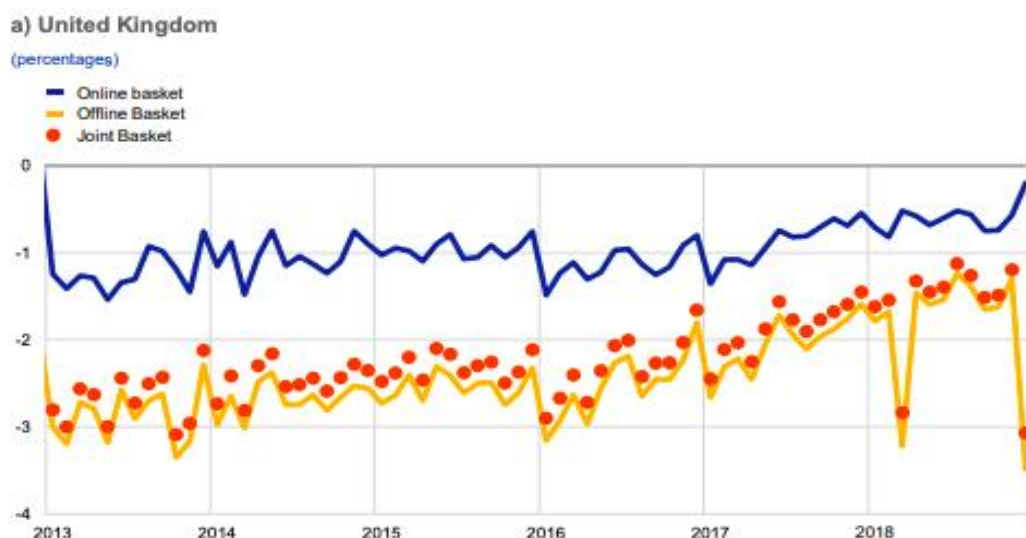


Figure-5: Online & Offline Pricing Graph of UK (Strasseret al., 2023)

Customer Engagement and Personalization: E-commerce's data-driven nature enables highly personalized marketing and customer experiences. Traditional businesses are now leveraging analytics and digital tools like artificial intelligence (AI) to better understand customer preferences and deliver tailored experiences, both online and in-store. Artificial intelligence has revolutionized the retail and e-commerce industries, reshaping business operations and customer interactions. Retailers are racing to adopt cutting-edge technologies that enhance the customer experience and build brand loyalty. AI's capacity to process vast amounts of data, predict consumer behavior, and facilitate real-time interactions plays a crucial role in achieving these objectives. The integration of AI tools such as machine learning, natural language processing (NLP), and computer vision is driving significant changes in retail by delivering exceptional personalization, boosting operational efficiency, and increasing customer satisfaction (Patil, 2024).

Pressure to Innovate: Traditional models, known for their stability and established reputations, now face pressure to innovate and adopt digital technologies. Those slow to embrace digital transformation risk losing relevance and market share to more agile competitors.

Hybrid and Evolving Models: With the growing accessibility of the internet, fueled by the widespread use of home computers and the introduction of broadband, e-commerce saw rapid and significant expansion. Businesses began broadening their product ranges, while many traditional retailers moved into the digital space to keep up with shifting consumer expectations and preferences (Ntumba et al., 2023). While digital models are expected to dominate, traditional models will not disappear entirely. Instead, hybrid models that combine digital and physical elements are emerging, allowing businesses to capitalize on the strengths of both approaches.

Supply Chain and Real Estate: E-commerce is reshaping supply chain management and reducing the need for large physical retail spaces, impacting commercial real estate and logistics sectors.

Employment: Shifts in retail models are changing employment patterns, with increased demand for roles in logistics, technology, and customer service, and a decline in traditional retail positions.

Traditional business models must evolve to survive in the e-commerce era. Embracing digital transformation, investing in technology, and prioritizing customer experience are essential strategies. The future likely belongs to businesses that can successfully integrate the best aspects of both traditional and digital models, remaining agile, innovative, and customer-centric in a rapidly changing marketplace.

In summary, technological advancements—particularly in e-Commerce and e-Business—have catalysed fundamental changes in organisational structures and management functions. As organisations continue to integrate new technologies, the role of managers is likely to evolve further, demanding continuous learning and strategic foresight to navigate an increasingly digital business environment.

3. Changing Nature of 21st Century Corporations

The 21st century has brought profound changes to the nature, structure, and purpose of corporations. These changes are driven by technological advances, globalization, shifting societal expectations, and evolving business models. Below is a synthesis of the key trends and characteristics shaping corporations in this era.

3.1 Increased Connectivity and Globalization

The 21st-century corporate landscape is increasingly shaped by global interconnectivity. The widespread adoption of internet technologies has made it possible for businesses to operate and interact across borders in real-time. The internet provides not only limitless opportunities for consumer transactions (B2C) but also opens up new possibilities for business-to-business (B2B) interactions. B2B services allow companies around the world to connect with each other, regardless of their location, thanks to advanced global transportation and logistics systems. Furthermore, e-commerce revenue has experienced significant growth, making it a prime opportunity for businesses to collaborate across borders, a development made possible by the expansion of the internet (Sadeeq et al., 2020). E-business and e-commerce platforms enable seamless transactions and communication with international partners, suppliers, and customers. This has led to:

- The formation of global supply chains.
- Access to international markets for even small- and medium-sized enterprises.
- Accelerated economic development due to the widespread diffusion of information and communication technologies (ICTs).

Companies like Amazon and Alibaba exemplify this globalization by operating massive digital marketplaces that serve global audiences and sellers.

3.2 Shift towards Digital Transformation

Digital transformation is a defining characteristic of modern corporations. It involves integrating digital technologies into all areas of a business to enhance efficiency, responsiveness, and customer engagement. With the rapid growth of the Internet of Things (IoT), the rising number of internet users engaging with digital services, and the increasing digitalization of value chains, the importance of digital data and technology will keep growing. Having access to data and the capability to analyze it with artificial intelligence is essential for maintaining the competitiveness of both companies and entire countries in the modern era (Volkova et al., 2021).

Key elements include:

- AI-driven recommendation engines.
- Smart logistics and real-time operational visibility.
- Cloud-based collaboration tools and ERP systems.
- Mobile commerce and digital payment systems.

For instance, Tesco has undertaken a comprehensive digital transformation strategy, investing heavily in technologies such as artificial intelligence, big data, cloud computing, robotics, and alternative reality to enhance both operational efficiency and customer engagement. The company's leadership, particularly under CEO Ken Murphy, has prioritized innovation, launching initiatives like the Clubcard Pay+ mobile wallet, same-day delivery, and advanced click-and-collect services (GlobalData, 2024). Again, Sainsbury is also accelerating its digital transformation, focusing on AI, cloud technology, and machine learning to modernize operations and improve both customer and staff experiences. The table below is given a comparison between the digital transformation of Tesco and Sainsbury.

Aspect	Tesco	Sainsbury
Technology Focus	AI, big data, cloud, robotics, alternative reality	AI, cloud, machine learning, contactless retail, big data
Omnichannel Strategy	Advanced e-commerce, click-and-collect, loyalty programs	Unified cloud platform, AI-driven customer experience
Supply Chain	Data-driven logistics, sustainability, efficiency	ML-based order planning and forecasting, supply chain agility
Employee Development	Upskilling for digital readiness	AI education and upskilling programs
Partnerships	Trigo, Skill cast, various tech vendors	Microsoft, SAP, AWS, TCS, Blue Yonder
Customer Experience	Personalization, frictionless stores, virtual stores	Generative AI for personalization, enhanced online/offline

Table-2: Digital Transformation Comparison Between Tesco & Sainsbury

Furthermore, COVID-19 accelerated this shift, forcing traditional businesses to digitize rapidly. Retailers had to rethink their models, embracing omnichannel strategies and investing in technology to remain competitive.

3.3 Importance of Adaptability and Agility

Corporations today must be adaptable and agile to survive. The rise of innovative technologies presents significant challenges for organizations, particularly in transforming traditional business models and enhancing strategic capabilities to navigate unexpected opportunities and threats in the environment. Additionally, the internet and advanced digital technologies are reshaping lifestyles, integrating daily activities into the virtual realm and

giving rise to a digital society. The rapid growth of this digital society and ongoing technological advancements are driving businesses to adopt digital technologies as a core component of their operations, leading to increased digitization and the expansion of electronic commerce (e-Commerce). This evolution marks the emergence of a digital economy in the business world, where the potential of e-Commerce has not only empowered numerous companies but also contributed positively to national economic growth (Boonlua et al., 2024). Traditional hierarchical models—rigid and centralized—are being replaced by dynamic, flexible structures. Reasons for this shift include:

- Rapidly evolving consumer expectations.
- Fast-changing technological landscapes.
- Competitive pressures from digital-first companies.

Agile companies can quickly pivot operations, customize consumer experiences using data analytics, and manage decentralized teams—especially in remote or hybrid work environments. This ability to adapt is no longer optional but essential for long-term success.



Figure-6: Diagram of 21st Century Corporations' Changing Nature

The 21st century has ushered in a transformative era for corporations, reshaping their structure, strategies, and operations in response to technological innovation, globalization, and evolving societal expectations. To remain relevant and competitive, corporations must embrace continuous innovation, invest in digital capabilities, and foster flexible organizational models that can swiftly respond to new challenges and opportunities. Ultimately, success in the 21st-century business world will depend on a company's ability to seamlessly integrate technology, strategy, and human capital into a cohesive and future-ready enterprise.

4. Obsolescence of Traditional Organisational Structures

The traditional, centralized, and hierarchical business models once dominant in brick-and-mortar retail are rapidly becoming outdated due to the rise of e-commerce and e-business. Digital transformation has disrupted the fixed nature of traditional workflows, where authority and decision-making were concentrated at the top. Digitally transformed companies are expected to remain resilient in the face of environmental uncertainty by continuously enhancing their adaptive capabilities and modifying their processes to counter the impact of becoming outdated. Although obsolescence is widely acknowledged as a significant organizational issue and risk, many businesses still face difficulties in fully understanding the concept and figuring out how to prevent it. A major contributing factor to obsolescence is an organization's lack of responsiveness to environmental changes. However, identifying when obsolescence begins, uncovering its underlying causes, and creating effective strategies to maintain business relevance pose substantial challenges (Ates & Acur, 2022).

In today's digital economy, the need for speed, flexibility, and innovation has rendered many classical models too rigid to meet contemporary demands. Businesses must now shift toward structures that support collaboration, agility, and technological integration to survive in an evolving digital marketplace. Below discussed are some aspects of obsolescence of traditional organisational structures:

4.1 Hierarchical Structures vs. Flat Organisations

Hierarchical structures, characterized by multiple layers of authority and clear top-down communication, are increasingly seen as inefficient in fast-paced digital environments. Flat organizations—those with fewer levels of management and more decentralized decision-making—are gaining traction. Traditional top-down models are being challenged by online platforms and omnichannel strategies that demand responsiveness and cross-functional coordination. Flat structures allow for faster communication, quicker

decision-making, and greater innovation, aligning well with the expectations of modern digital consumers. Conversely, a prominent study has challenged the perceived benefits of the 'Flat Organisation,' suggesting that these advantages are largely a myth. For many years, scholars, business experts, and mainstream media have claimed that traditional "authoritarian" and tall hierarchical structures are outdated and should be replaced by more "egalitarian" and flat organizational models. This belief has gained traction recently, especially due to the visibility of a few high-profile flat start-ups like Valve, Zappos, GitHub, Medium, and Buffer. These companies have received significant attention for promoting non-hierarchical structures, which, due to their rarity, has helped fuel the growing perception that all start-ups should adopt a flat model—often referred to as a “flat organization,” “holacracy,” or “boss-less company.” As one start-up founder put it succinctly: “Being flat feels innovative and cool, while structure feels like something from a boring corporate giant” (Lee, 2022). Another study argued about the effectiveness and impact of the both structures depends on the necessity or type of the organisation. Hierarchical structures, often utilized by major companies such as Apple and Amazon, provide a well-defined chain of command that facilitates effective control and coordination. In contrast, flat structures emphasize decentralization and cross-functional collaboration, promoting flexibility and swift decision-making—traits that are particularly beneficial for startups and smaller firms. The success of any organizational structure depends on how well it adapts to changing business conditions while managing its own limitations (Matriano, 2024). For example, strict hierarchies can limit innovation and slow responsiveness in fast-moving markets, whereas flat models may face challenges like unclear roles and difficulties in resolving conflicts (Bhatt & Garge, 2023).

The debate between hierarchical and flat organizational structures remains a central theme in modern management discourse. The success stories of a few well-known start-ups have contributed to the popularization of flat structures, yet critics argue that these advantages may be overstated or context-dependent. As businesses navigate increasingly complex

environments, the choice of structure should be guided by strategic needs, organizational culture, and long-term sustainability rather than trends alone. Ultimately, no single model fits all, and a balanced, adaptable approach may offer the most effective path forward.

4.2 Matrix Organisations and Cross-Functional Teams

The matrix structure, combining different functions and project-based roles, fosters flexibility and innovation. Retail companies like Zara and Amazon use this model to enhance responsiveness and speed to market. Besides, the adoption of ERP and CRM systems in retail giants like Amazon and Tesco enables departments to work cohesively, sharing data across functions. This integration fosters efficiency, responsiveness, and adaptability—traits essential in the current retail landscape.

Again, many organizations have increasingly adopted Cross-Functional Teams (CFTs) because of the significant advantages they offer, such as their agile approach to problem-solving, fostering innovation, creating new products, and enhancing overall business performance. CFTs typically consist of individuals from various departments—such as marketing, engineering, sales, research and development, and production. These teams can function as temporary project groups, with members maintaining their roles in their original departments, or they may form part of a company's core or matrix organizational structure.

While CFTs have been particularly prevalent in the manufacturing sector, their widespread application has sparked some debate. Overreliance on these teams has led to questions about their long-term effectiveness in this industry, especially given the challenges they face during implementation. To ensure successful integration, CFTs must meet certain requirements—such as having the right team composition, carefully selecting participants, and aligning effectively with the company's existing functional structure (Gutiérrez-Broncano & Rubio-Andrés, 2024).

Modern organizations are increasingly embracing matrix structures and cross-functional teams to enhance innovation, agility, and collaboration.

While these models offer significant benefits, their success depends on thoughtful implementation, technological integration, and alignment with existing structures to effectively navigate today's fast-paced and competitive business landscape.

4.3 Decentralisation and Empowerment

The shift to e-business has encouraged a more decentralized approach to management. With digital platforms facilitating real-time communication and decision-making across locations, authority is increasingly distributed throughout the organization.

Blockchain technology and smart contracts are transforming traditional centralized systems through the emergence of Decentralized Autonomous Organizations (DAOs) in multiple economic sectors. DAOs function collectively while remaining decentralized, using blockchain and smart contracts to govern operations. Members participate in decision-making through voting, promoting transparency and a democratic structure (Bernovskis, 2024). Empowered employees are able to access internal communication systems, gain insights, and take on a broader range of responsibilities, improving productivity and innovation. Leadership now focuses on enabling teams rather than controlling them, nurturing a culture of trust and adaptability.

So, the obsolescence of traditional organizational structures reflects the urgent need for flexibility, innovation, and responsiveness in today's digital economy. Hierarchical models, while still relevant in certain contexts, are increasingly challenged by flatter, more agile alternatives. Matrix structures and cross-functional teams offer collaborative advantages, but their success depends on strategic alignment and careful implementation. Decentralization, supported by digital tools and emerging technologies like blockchain, empowers employees and fosters transparency. As organizations evolve, no single structure guarantees success; rather, a hybrid and adaptive approach tailored to organizational goals and market demands will be essential for long-term sustainability and competitiveness.

5. Redefining Management Roles

In recent decades, societal changes have been occurring at an increasingly rapid pace. This acceleration also impacts the business environment, requiring companies to be agile and adaptable. As global markets become more competitive, businesses must develop the capability to respond effectively to ongoing changes in order to succeed and distinguish themselves. For this reason, managers play a pivotal role within their organizations. They are responsible for setting the strategic direction and must possess a clear vision of the company's future, along with a plan to achieve it (Bellon-Álvarez, 2020).

As digital transformation continues to reshape the retail and business landscape, the role of managers is undergoing significant change. Traditional top-down leadership models are being challenged by the need for adaptability, innovation, and collaboration. Managers are no longer just task supervisors but must now act as strategic enablers, digital innovators, and change agents. Their responsibilities now include driving transformation, fostering cross-functional collaboration, and aligning technological tools with business goals.

5.1 Transformational Leadership

The digital era calls for transformational leadership, where managers inspire, guide, and empower their teams to embrace change and innovation. Effective leaders set clear visions, foster trust, and enable teams to adapt in fast-paced environments.

In today's business environment, one of the key factors enhancing organizational effectiveness is the manager's ability to make decisions that support the organization's overall well-being—particularly in the context of digital transformation. This requires more than just mutual trust and collaboration between leaders and employees in decision-making processes. It also involves the leader demonstrating strong digital competencies, applying modern management techniques, and effectively operating within the digital space. Crucially, leaders must engage employees, foster their

commitment, and actively involve them in driving the organization forward (Siudikiene, 2023).

As outlined previously, visionary leaders are essential for navigating digital complexity—they must implement innovative strategies, encourage ethical practices, and promote a strong organizational culture. Leaders now serve as role models who align internal processes, manage change proactively, and cultivate high-performing, agile teams capable of thriving in a digitally driven marketplace.

5.2 Embracing Technological Literacy

With the rise of e-commerce, artificial intelligence, and digital platforms, technological literacy has become a critical competency for modern managers. They must be proficient in using and integrating technologies such as ERP, CRM, data analytics, and cloud systems to enhance decision-making and operational efficiency.

In e-commerce and e-business, embracing technological literacy is not optional for managers—it is a core competency that underpins strategic decision-making, operational excellence, and sustained business growth. Organizations that invest in developing these skills at the managerial level position themselves to thrive in the digital marketplace. Research shows that higher digital literacy among managers directly improves SME performance and productivity, as it enables better adoption of e-commerce platforms, more efficient operations, and timely, data-driven decision-making (Suryani et al., 2022).

Managers need to leverage these tools to improve productivity, drive customer insights, and maintain competitiveness. As technology continues to evolve, managers must commit to continuous learning to stay relevant, lead remote or hybrid teams effectively, and foster innovation through data-driven strategies.

In a nutshell, the evolving business landscape demands a redefinition of managerial roles, with a strong emphasis on adaptability, strategic thinking, and digital competence. Transformational leadership has become essential,

as managers must inspire innovation, guide change, and actively engage their teams. Equally important is technological literacy, which enables managers to harness digital tools for informed decision-making, improved productivity, and enhanced competitiveness. As digital transformation accelerates, organizations must invest in developing these leadership capabilities to ensure long-term success.

6. Challenges and Opportunities

The 21st century has witnessed unprecedented technological advancements that are reshaping the corporate landscape. As highlighted in the provided document, e-commerce and e-business have transformed how companies interact with customers and manage operations. Traditional organizational structures and management roles are being questioned, and digital literacy has become essential for competitive success. The challenges and opportunities of these technological advances in e-commerce and e-business are briefly discussed below:

6.1 Challenges

Adapting Organizational Structures: Traditional hierarchical structures struggle to keep pace with the dynamic nature of e-commerce. As the document emphasizes, agile methodologies and flatter organizations are becoming necessary to enable rapid decision-making and innovation (Kotter, 2012).

Evolving Management Roles: The document underscores the need for managers to be proficient in data analytics, AI, and automation. Managers must effectively lead remote teams, foster collaboration across multiple time zones, and cultivate a culture of continuous learning (Porath, 2023). This requires a shift from traditional command-and-control leadership to more collaborative and digitally savvy approaches.

Maintaining Security and Trust: As emphasized in the provided document, ensuring data security and building customer trust are paramount.

Technological Innovation Capabilities: The document highlights the criticality of a robust technological support structure for businesses operating in smart logistics ecosystems that are inherently tied to the Internet and modern communication technologies.

Digital Skills Gap: A significant challenge is the shortage of employees with the necessary skills to implement digital transformation initiatives.

Data Privacy and Ethical Concerns: As businesses gather more data, they face increasing pressure to protect customer privacy and use data ethically.

Constant Technological Change: With technology evolving rapidly, businesses face the challenge of continually adapting their strategies, processes, and infrastructure to remain competitive.

6.2 Opportunities

Enhanced Operational Efficiency: The document points out that e-business technologies can improve operational efficiency through real-time information sharing across the supply chain (Benitez et al., 2018). E-business tools facilitate product margin management and improve employee productivity.

Global Reach and Market Access: Improved Customer Experience: E-commerce offers 24/7 accessibility, fast delivery, and seamless digital experiences, enhancing customer satisfaction.

Data-Driven Decision Making: E-commerce platforms generate extensive data that businesses can leverage to understand customer behavior and make informed strategic decisions, supporting more targeted advertising.

New Business Models: E-commerce fosters innovation in business models, such as subscription services, personalized product offerings, and direct-to-consumer sales channels.

So, from the above discussion it can be said that organizations that embrace digital transformation, invest in talent development, and prioritize security and ethics will be best positioned to navigate the challenges and leverage the opportunities that technological advancements offer.

7. Conclusion

The retail sector has undergone a major transformation due to the rise of e-commerce and e-business. The shift from traditional brick-and-mortar establishments to digital platforms has reshaped organizational structures and management roles.

The term e-business is increasingly used due to its broader and more complex meaning, and it has become widely recognized. In the e-business sector, a company's website serves as the central platform for delivering services, making it a crucial factor in determining the success of online operations—particularly in the realm of online shopping. Compared to traditional shopping, online shopping offers greater convenience and numerous advantages, primarily due to its faster transaction process. This concept extends to sales channels as well, where products are offered entirely online. Consumers are no longer limited to shopping in physical stores like malls or department stores. Instead, technology enables them to make purchases effortlessly using just their fingers—from the comfort of their home or even their bed—through internet-based platforms (Asbari , 2023). E-commerce has revolutionized how goods and services are bought and sold, emphasizing convenience and speed, while e-business has integrated a broad range of internal processes such as supply chain management, CRM, and enterprise communication. To stay competitive in this rapidly evolving landscape, businesses must embrace technological advancements, invest in smart logistics ecosystems, and adopt agile, customer-centric strategies.

7.1 Summary of Findings

The retail sector is undergoing a seismic shift driven by technological advancements and accelerated by the COVID-19 pandemic, resulting in the rise of e-commerce and e-business. This transformation challenges traditional organizational structures and management roles, emphasizing the need for agility, technological literacy, and customer-centric strategies. E-business technology enhances operations management, product margins, and employee productivity by enabling real-time information sharing and

integration of sophisticated AI-driven systems and smart logistics. It enables data-driven management and customer-centered business, but increased automation leads to issues that require management. Companies must invest in talent management to use these new technologies.

7.2 Implications for Future Research

Here are several key considerations for future research:

Organizational Restructuring: Future studies should explore the effectiveness of different organizational structures in supporting e-commerce operations. Investigating the impact of agile methodologies, self-managing teams, and decentralized decision-making on organizational performance could offer valuable insights.

Management Skill Development: Further research is needed to identify the specific skills and competencies that managers require to succeed in e-commerce. Studies could focus on the effectiveness of training programs, mentoring initiatives, and experiential learning opportunities in enhancing managerial capabilities.

Customer Experience: Investigating the role of personalization, convenience, and responsiveness in shaping customer satisfaction and loyalty in e-commerce settings. Research could explore innovative approaches to enhance the customer journey, such as AI-powered recommendations, virtual assistants, and augmented reality experiences.

Smart Logistics Ecosystems: Investigating the impact of technological innovation on logistics ecosystems, with a focus on operational efficiency, cost reduction, and environmental sustainability. Studies could explore the role of emerging technologies such as blockchain, autonomous vehicles, and predictive analytics in optimizing logistics processes.

E-Business Security and Trust: Investigating the strategies that companies can use to protect customer data and enhance digital trust. Studies could explore the effectiveness of various security measures, such as encryption, multi-factor authentication, and fraud detection systems, in mitigating cyber threats.

Sustainable E-Commerce Practices: Exploring the environmental and social implications of e-commerce, focusing on strategies to promote sustainability, reduce waste, and minimize carbon emissions. Research could investigate the effectiveness of circular economy models, eco-friendly packaging solutions, and sustainable supply chain practices in promoting responsible e-commerce operations.

Impact of Emerging Technologies: How quantum computing, blockchain, and other future technologies will shape e-commerce is unknown and can be studied with both a qualitative and quantitative approach.

Cross-Cultural Studies: Comparative analyses of e-commerce adoption, challenges, and best practices across different countries and cultures can provide valuable insights. Such research could explore the influence of cultural values, regulatory frameworks, and technological infrastructures on e-commerce success.

Integration of AI with Digital Commerce: The transformative effect of integrating artificial intelligence (AI) into e-commerce platforms to refine consumer experiences, streamline operations, and drive strategic planning should also be closely examined.

Ethical Considerations: Investigate the ethical implications of e-commerce and e-business practices.

By addressing these research questions, future studies can provide valuable insights to help businesses navigate the complexities of e-commerce and e-business, promote sustainable growth, and create value for stakeholders.

References

- Airen, V. (2024). THE IMPACT OF E-COMMERCE ON TRADITIONAL RETAIL BUSINESSES. *UNIFIED VISIONS*, 205. Available at: https://www.researchgate.net/profile/Sanjay-Prasad-12/publication/386157268_UNIFIED_VISIONS/links/6746d750a7fbc259f191cb71/UNIFIED-VISIONS.pdf#page=214.
- Alwan, S. Y., Hu, Y., Al Asbahi, A. A. M. H., Al Harazi, Y. K., & Al Harazi, A. K. (2023). Sustainable and resilient e-commerce under COVID-19 pandemic: a hybrid grey decision-making approach. *Environmental Science and Pollution Research*, 30(16), 47328-47348. Available at: <https://link.springer.com/content/pdf/10.1007/s11356-023-25456-0.pdf>.
- Asbari, M. (2023). Scope of e-business & e-commerce to business and modern life. *Journal of Information Systems and Management (JISMA)*, 2(1), 33-38. Available at: <https://jisma.org/index.php/jisma/article/download/261/58>.
- Ates, A., & Acur, N. (2022). Making obsolescence obsolete: Execution of digital transformation in a high-tech manufacturing SME. *Journal of Business Research*, 152, 336-348. Available at: <https://www.sciencedirect.com/science/article/pii/S014829632200666X>.
- Bai, Y., & Li, H. (2022). Mapping the evolution of e-commerce research through co-word analysis: 2001–2020. *Electronic Commerce Research and Applications*, 55, 101190. Available at: <https://www.sciencedirect.com/science/article/pii/S1567422322000746>.
- Bellon-Álvarez, L. A. (2020). Adaptability of Small and Medium-Sized Businesses and E-Commerce. *THE FUTURE OF WORK*, 149. Available at: https://www.researchgate.net/profile/Tania-Gonzalez-Alvarado-2/publication/342184444_Social_Inclusion_and_the_Future_of_Work/link/s/623ccda50f805847d7f1d536/Social-Inclusion-and-the-Future-of-Work.pdf#page=169.
- Benitez, J., Chen, Y., Teo, T. S., & Ajamieh, A. (2018). Evolution of the impact of e-business technology on operational competence and firm profitability: A panel data investigation. *Information & management*, 55(1), 120-130. Available at: <https://www.academia.edu/download/103994617/82574.pdf>.
- Bernovskis, A., Sceulovs, D., & Stibe, A. (2024). Society 5.0: Shaping the future of e-commerce. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(4), 100391. Available at: <https://www.sciencedirect.com/science/article/pii/S2199853124001859>.

- Bhatt, R. M., & Gargeb, D. Efficiency in Emergency: A perception study of Hierarchical vs Flat Organizational Structures for Joint Disaster Response in the Bay of Bengal Region. Available at: https://www.researchgate.net/profile/Rajat_Bhatt5/publication/369036633_Efficiency_in_Emergency_A_perception_study_of_Hierarchical_vs_Flat_Organizational_Structures_for_Joint_Disaster_Response_in_the_Bay_of_Bengal_Region/links/6406b7170cf1030a567cfbcb/Efficiency-in-Emergency-A-perception-study-of-Hierarchical-vs-Flat-Organizational-Structures-for-Joint-Disaster-Response-in-the-Bay-of-Bengal-Region.pdf.
- Boonlua, S., Gan, C., Palasak, S., & Chuwiruch, N. (2022). Strategic Agility Determinants: Achieving Organisational Goals in the E-Commerce Business, Thailand. *Journal Of Algebraic Statistics*, 13(3), 4747-4761. Available at: <https://www.publishoa.com/index.php/journal/article/download/1317/1125>.
- Gillam, S., & Cosford, P. (2021). Organisational structure. *In Leadership and Management for Doctors in Training* (pp. 26-31). CRC Press.
- GlobalData. (2024, December 5). *Tesco Plc – Digital Transformation Strategies*. GlobalData. Available at: [https://www.globaldata.com/store/report/tesco-plc-enterprise-tech-analysis/​;contentReference\[oaicite:1\]{index=1}](https://www.globaldata.com/store/report/tesco-plc-enterprise-tech-analysis/​;contentReference[oaicite:1]{index=1}).
- Gutiérrez-Broncano, S., Rubio-Andrés, M., Jiménez-Estévez, P., & Opute, J. (2024). Cross-Functional Teams. In *Lean Manufacturing in Latin America: Concepts, Methodologies and Applications* (pp. 515-538). Cham: Springer Nature Switzerland. Available at: https://www.researchgate.net/profile/Jose-Jimenez-Garcia-3/publication/386077002_Heijunka/links/67b23e45207c0c20fa8bb738/Heijunka.pdf#page=537.
- Gutterman, A. S. (2023). Management Roles and Activities. Available at SSRN 4393213. Available at: https://www.researchgate.net/profile/Alan-Gutterman/publication/369366959_Management_Roles_and_Activities/links/64177321315dfb4cce92be93/Management-Roles-and-Activities.pdf.
- Ilmudeen, A. (2021). Big data, artificial intelligence, and the internet of things in cross-border E-commerce. *Cross-border E-commerce marketing and management*, 257-272. Available at: <https://www.igi-global.com/chapter/big-data-artificial-intelligence-and-the-internet-of-things-in-cross-border-e-commerce/263279>.
- Jain, V., Malviya, B. I. N. D. O. O., & Arya, S. A. T. Y. E. N. D. R. A. (2021). An overview of electronic commerce (e-Commerce). *Journal of Contemporary Issues in Business and Government*, 27(3), 666. Available at: <https://www.researchgate.net/profile/Vipin-Jain->

[13/publication/351775073_An_Overview_of_Electronic_Commerce_e-Commerce/links/60a8d9af45851522bc0aed79/An-Overview-of-Electronic-Commerce-e-Commerce.pdf](https://www.researchgate.net/publication/351775073_An_Overview_of_Electronic_Commerce_e-Commerce/links/60a8d9af45851522bc0aed79/An-Overview-of-Electronic-Commerce-e-Commerce.pdf).

- Karunia, R. L. (2020). The influence of leadership, organisational structure, and organisational culture on the company performance of PT NK TBK. *International Journal of Innovation*, 11(2), 164-178. Available at: https://www.ijicc.net/images/vol11iss2/11210_Karunia_2020_E_R.pdf.
- Kotter, J. P. (2012). *Leading change*. Harvard business press. Available at: <http://edl.emi.gov.et/jspui/bitstream/123456789/516/1/Leading%20Change%20%28Kotter%2C%20John%20P.Wyman%2C%20Oliver%29.pdf>.
- Laudon, K. C., & Traver, C. G. (2021). *E-commerce 2020-2021: business, technology, society*. Pearson.
- Lee, S. (2022). The myth of the flat start-up: Reconsidering the organizational structure of start-ups. *Strategic Management Journal*, 43(1), 58-92. Available at: <https://onlinelibrary.wiley.com/doi/am-pdf/10.1002/smj.3333>.
- Liu, W., Zhang, J., Wei, S., & Wang, D. (2021). Factors influencing organisational efficiency in a smart-logistics ecological chain under e-commerce platform leadership. *International Journal of Logistics Research and Applications*, 24(4), 364-391. Available at: https://www.researchgate.net/profile/Weihua-Liu/publication/341028202_Factors_influencing_organisational_efficiency_in_a_smart-logistics_ecological_chain_under_e-commerce_platform_leadership/links/626404ec8cb84a40ac8454d1/Factors-influencing-organisational-efficiency-in-a-smart-logistics-ecological-chain-under-e-commerce-platform-leadership.pdf.
- Matriano, M. T. (2024). Organizational Structure, Its Drawbacks and Shortcomings and Overall Impact to Organizational Behavior. *GSJ*, 12(11). Available at: https://www.researchgate.net/profile/Maria-Teresa-Matriano/publication/387746014_Organizational_Structure_Its_Drawbacks_and_Shortcomings_and_Overall_Impact_to_Organizational_Behavior/links/677b59ea117f340ec3f66066/Organizational-Structure-Its-Drawbacks-and-Shortcomings-and-Overall-Impact-to-Organizational-Behavior.pdf.
- Moriset, B. (2018). e-Business and e-Commerce. Available at: https://shs.hal.science/halshs-01764594/file/Moriset-B_E-Business_12-04-2018_HAL-SHS.pdf.
- Muldoon, J., Bendickson, J., Bauman, A., & Liguori, E. W. (2020). Reassessing Elton Mayo: clarifying contradictions and context. *Journal of Management History*, 26(2), 165-185. Available at:

<https://www.academia.edu/download/110327699/jmh-05-2019-003320240111-1-7uywkn.pdf>.

- Ntumba, C., Aguayo, S., & Maina, K. (2023). Revolutionizing retail: a mini review of e-commerce evolution. *Journal of Digital Marketing and Communication*, 3(2), 100-110. Available at: <https://tecnoscientifica.com/journal/jdmc/article/download/365/184>.
- Patil, D. (2024). Artificial Intelligence In Retail And E-Commerce: Enhancing Customer Experience Through Personalization, Predictive Analytics, And Real-Time Engagement. *Predictive Analytics, And Real-Time Engagement* (November 26, 2024). Available at: <https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5057420>.
- Poazi, F. D. W., & Timi, E. M. (2024). A REVIEW AND PRACTICE OF CLASSICAL AND CONTEMPORARY MANAGEMENT THEORIES: THE ACCEPTABILITY, RELEVANCE AND CHALLENGES OF AFRICAN ORGANISATIONS. *BW Academic Journal*. Available at: <https://mail.bwjjournal.org/index.php/bsjournal/article/download/2500/2128>.
- Porath, U. (2023). Advancing managerial evolution and resource management in contemporary business landscapes. *Modern Economy*, 14(10), 1404-1420. Available at: https://www.scirp.org/pdf/me_2023101615144940.pdf.
- Prachi, K. M., & Nigam, V. K. (2023). Evolution of E-commerce Industry; A Brief History of Evolution of E-commerce. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 10(4), 1873-1877. Available at: <https://www.jetir.org/papers/JETIR2304588.pdf>.
- Sadeeq, M., Abdulla, A. I., Abdulraheem, A. S., & Ageed, Z. S. (2020). Impact of electronic commerce on enterprise business. *Technol. Rep. Kansai Univ*, 62(5), 2365-2378. Available at: https://www.researchgate.net/profile/Zainab-Ageed/publication/342550767_Impact_of_Electronic_Commerce_on_Enterprise_Business/links/5efb0591a6fdcc4ca43da268/Impact-of-Electronic-Commerce-on-Enterprise-Business.pdf.
- Sharma, A., Mishra, S. K., & Srivastav, V. K. (2023). The Evolution And Impact Of E-Commerce. *Journal of Namibian Studies*, 33. Available at: https://www.researchgate.net/profile/Satish-Kumar-Mishra/publication/373235014_The_Evolution_And_Impact_Of_E-Commerce/links/64f9a1b505a98c1b63fa24ed/The-Evolution-And-Impact-Of-E-Commerce.pdf.
- Strasser, G., Wieland, E., Macias, P., Bączejowska, A., Szafranek, K., Wittekopf, D., ... & Osbat, C. (2023). *E-commerce and price setting*:

evidence from Europe (No. 320). ECB Occasional Paper. Available at: <https://www.econstor.eu/bitstream/10419/278586/1/1853910597.pdf>.

- Sulova, S. (2023). A conceptual framework for the technological advancement of e-commerce applications. *Businesses*, 3(1), 220-230. Available at: <https://www.mdpi.com/2673-7116/3/1/15/pdf>.
- Suryani, U., Arief, M., Bramantoro, S., & Hamsal, M. (2022). The impact of digital literacy and e-commerce adoption with O2O business adoption on the performance of small and medium enterprises. *International Journal of eBusiness and eGovernment Studies*, 14(2), 199–223. Available at: <https://sobiad.org/menuscript/index.php/ijebe/article/download/1176/198>.
- Turban, E., Outland, J., King, D., Lee, J. K., Liang, T. P., & Turban, D. C. (2017). *Electronic commerce 2018: a managerial and social networks perspective*. Springer.
- Volkova, N., Kuzmuk, I., Oliinyk, N., Klymenko, I., & Dankanych, A. (2021). Development trends of the digital economy: E-business, e-commerce. Available at: http://dspace-s.msu.edu.ua:8080/bitstream/123456789/9311/1/Development_%20trends_%20of_%20the_%20digital%20_economy_%20e-business_%20e-commerce.pdf.
- Yu, L. (2019). E-Commerce Models, Players, and Its Future. In M. Khosrow-Pour, D.B.A. (Ed.), *Advanced Methodologies and Technologies in Digital Marketing and Entrepreneurship* (pp. 193-204). IGI Global Scientific Publishing. Available at: <https://doi.org/10.4018/978-1-5225-7766-9.ch015>.