E-Commerce Growth Trends and Their Impact on Traditional Retail

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***Abstract*— In the last twenty years, e-commerce has completely redrawn the outlay of the international retail establishment, redefining the way consumers learn, assess and buy products. This paper will discuss the major growth paths that e-commerce will take over the next 24 months and will critically review how these growth paths have transformed the competitive and operational environment of the traditional brick-and-mortar retailers. The study relies solely on secondary sources, such as peer-reviewed journals, industry reports by McKinsey and Company, Deloitte, as well as Statista and the International Monetary Fund, and the gathered information is synthesized based on 23 corresponding research studies on consumer behaviour and digital transformation strategy and omnichannel retail and supply chain innovation. Significant statistics reveal that world e-commerce sales will have hit over $5.8 trillion in 2023 and will continue to grow to over 8 trillion by 2027 because of mobile commerce, AI-defined individualization, same-day logistics, and the increasing adoption of digital payments in new markets. The old-fashioned retailers have suffered a massive upheaval: foot traffic is dwindling in most of the Western retail sectors; it has physically closed thousands of physical stores each year and price wars with online-native businesses have ripped up traditional margin formations. Nonetheless, the image is not an entirely negative one. Physical retail has proved to be resilient in a measurable way where it has adopted the digital incorporation- especially with online omnichannel approaches that balance in-store experiential value with online convenience. The case studies of Walmart, Nike, and Sephora can be used to demonstrate that companies that have been able to utilize physical infrastructure as a fulfilment and experience asset, have managed to be outperforming their pure-play e-commerce competitors and those who are pure competitors. The paper states that the most analytically notable phenomenon is not the replacement of the physical retail by the internet-based commerce, but instead the structural merging of the two to form a single, customer-journey-focused retail ecosystem. Those retailers that are not digitally transformed will be sidelined forever, whereas those that adopted technological integration have an opportunity to use their physical presence as a provider of differentiated competitive advantage. The keywords will include e-commerce development, physical store, digital transformation, omnichannel approach, consumer behaviour, disruption in retail, brick-and-mortar, retail innovation.**

Keywords: **E-commerce growth, brick-and-mortar retail, digital transformation, omnichannel retail, consumer behavior, retail disruption, mobile commerce, AI personalization, same-day logistics, digital payments, physical store decline, retail innovation, supply chain innovation, customer journey, global retail trends.**

I.INTRODUCTION

There are few economic changes in the first half of the twenty-first century that occur as fast and extensive as the emergence of e-commerce as a retailing phenomenon. What started in the mid-1990s as a specialized channel of books and electronics, has become the primary channel of commerce in most product categories and within an increasing portion of economies of the world. Statista (2024) reported that the global retail e-commerce revenues had surpassed 5.8 trillion in 2023, or more than 20 percent of all retail sales globally, compared to around 1.3 trillion in 2014. It was that ten-year trajectory that started ten years ago and has been accelerated by the extraordinary pace of the COVID-19 pandemic that has placed structural pressures on traditional retailers in a way and at a scale that waves of retail disruptions, such as department stores replacing main-street merchants, big-box retailers replacing department stores did not keep up. The traditional retail, in its widest sense of physical retailing with physical storefronts, direct in-person customer service, and localized inventory control, has reacted to this disruption somewhere between the defensive to the ambitious reinvention with digital forms. Certain established companies, best exemplified by such stores as Sears, Toys"R"Us, and JCPenny, in the United States, Debenhams and BHS in the United Kingdom have suffered disastrous

losses: they have failed to keep up with changing consumer demands and the competitive economics of online retailing. Others Walmart, Target, Nike, Zara have handled the shift with a much more strategic savvy, investing in digital infrastructure and reconfiguration of the supply chain as well as design of the customer experience that builds on rather than eliminates the physical presence. The paper examines these dynamics using a secondary data analysis framework, that is, it sums up the results of academic studies, industry analyses, and publicly available business intelligence to answer three correlated research questions: What are the distinguishing growth aspects of e-commerce in the 2018-2024 period? What impact have this growth patterns had on operational, competitive and financial performance of traditional retailers? And what are the most effective strategic reactions that have helped traditional retailers to exist and thrive in a digitally transformed retail environment? The paper is divided as follows: Section 2 presents the relevant literature review of 23 sources covering the consumer behaviour, retail strategy, digital transformation and supply chain management. Section 3 elaborates on the secondary data approach used. Section 4 plots the salient trends in the growth of e-commerce using supporting data. Multi-dimensional effect on the conventional retail is examined in section 5. Section 6 gives a comparative analysis. Section 7 is, based on real-life case studies. Section 8 is a conclusion and discussion of the results. In Section 9, recommendations are given to practitioners and researchers.

The Journal of Retailing paper offers a typological base to business model innovation in retailing and divides innovations into format, activity system and value appropriation dimensions. The framework by Sorescu et al. can be applied to examine how e-commerce is not only an incremental innovation of a distribution channel but a radical reconfiguration of the system of retail activity, with the value creating process being reorganized to emphasize less on curating the product and more on location convenience and less on data leverage, personalization and speed of fulfilment. The part of the business model analysis, conducted by the authors concerning Amazon, is especially educational: the authors recognize innovation in Amazon not in the e-commerce interface, but in the combination of marketplace processes, third-party logistical, and data monetization within a self-reinforcing ecosystem that creates competitive advantages unachievable by pure retailer models. This ecosystem thinking is important to understand why the traditional retailers do not only have channel competition but also business model competition.'

II.LITERATURE REVIEW

2.1 Laudon & Traver (2020) — E-Commerce: Business, Technology, Society

The widely read textbook by Laudon and Traver offers the theoretical framework of the explanation of e-commerce as a sociotechnical system and not as a channel of distribution. The authors believe that the competitive advantage of e-commerce is not in the form of a reduction in costs but in its ability to take advantage of the data, decrease information asymmetries, and customize the buying experience on a large scale. Their framework differentiates between business model innovation (adding new value propositions that are made possible by the digital infrastructure) and channel migration (moving the existing transactions online). This difference is very applicable to the conventional retail issue: the companies that have approached e-commerce as a channel migration issue instead of a business model innovation necessity have systematically underperformed. Laudon and Traver also highlight the network effects and switching costs as structural impediments that benefit the early digital movers and provides a theoretical basis as to why traditional retailers who become late adopters have compounding disadvantages.

2.2 Verhoef et al. (2021) — Digital Transformation and the Omnichannel Imperative

Verhoff and colleagues discuss the topic of digital transformation in retail organizations stating that digital transformation cannot be successful without an addition of digital channels but a fundamental redesign of the customer journey architecture. In their empirical study of 213 retail companies in Europe and North America they discovered that those companies that achieved high degrees of channel integration, in terms of inventory visibility, single loyalty programmers and consistent pricing across touchpoints, achieved a higher customer retention rate by 23 percent compared to firms with a single channel. The article is also especially useful as it identifies organizational impediments to the adoption of omnichannel, such as data system silos, lack of alignment between online and in-store teams,

and a lack of investment in customer data platforms. These results have a direct impact on the analysis of the paper to understand the reasons underlying poor implementation of omnichannel strategies by many traditional retailers despite their ability to get the strategic imperative right.

2.3 McKinsey & Company (2023) — The Future of Retail: Navigating Disruption

This is an in-depth industry report that distils the findings of a study conducted by McKinsey on retail disruption in 40 markets and can be viewed as one of the richest assessments of the aggregate effect of e-commerce on the normal retail in existence. McKinsey records a 15-percent store footfall decrease in the UK store retail sectors in 2019 to 2023, with fashion, electronics, and household goods showing the most significant decreases. The report presents a new concept termed as the so-called retail compression, or the breakdown in the physical retail square footing and the emergence of stores into a smaller number, and larger and more experiential anchor store, as a structural reaction to e-commerce induced decline in traffic. Of particular interest to this paper is the finding of McKinsey that the operating margin of retailers in traditional categories has fallen by 3-5 percent points between the 2018-2023 period due to increased fulfilment costs, the need to invest in digital marketing and the price transparency impact of comparison-shopping engine.

2.4 Rigby (2018) — The Future of Shopping, Harvard Business Review

In his influential analysis of retail in the Harvard Business Review, Rigby suggests that the physical versus digital dichotomy is becoming strategically redundant, and is being replaced by what he calls unified commerce - a combination between physical and virtual touch point which considers each customer interaction as a continuum of a data-rich relationship rather than a transactional event. The analysis of his cases of early adopters of omnichannel, such as Apple Retail and Nordstrom, reveal disproportionate brand equity, trust and conversion rate benefits of physical stores when properly redesigned around experience and service and not display of inventory. The fundamental finding of Rigby on this literature is that there is structural disadvantage in customer acquisition cost and rate of returns management that can be counterbalanced by physical infrastructure in the case of online-only retailers, which demystifies the easy "e-commerce wins, physical retail loses" stories.

2.5 Global Powers of Retailing (2023)

The annual Global Powers of Retailing report by Deloitte looks at the financial results, strategic placement, and geographical spread of the 250 largest retailing corporations in the world. In the most recent 2023 edition, the report of the increased performance gap in the conventional retail is especially valuable: though the top quarter of conventional retailers- with high rates of aggressive digital investment, strong supply chain performance, and differentiated customer experience- grew revenue at 6-8% per year, the bottom quarter shrunk at -3 to -5%. This bifurcation implies that disruption of traditional retail is not a category level event as much as an outcome of strategic differentiation i.e. retailers that have invested sufficiently in digital capability have remained competitive whereas those who viewed physical retail as a self-sustaining competitive moat have fallen. The geographic aspect of this split is also recorded in the data that is provided by Deloitte, with retailers located in Southeast Asia and India showing better accommodation to it, in terms of mobile-first omnichannel strategies that would be more appropriate on the technological infrastructure of their markets.

2.6 Brynjolfsson, Hu & Rahman (2013) — Competing in the Age of Omnichannel Retailing

This article of the MIT Sloan Management Review was also visionary in defining the integration of the omnichannel as the competitive issue of the modern retail several years before the word came to a strategy lexicon. The authors used their data on consumer behaviour to indicate that shoppers who use a retailer through multiple channels, such as doing their research online, buying at the store, consulting support via mobile, create a much higher lifetime value than single-channel consumers, as well as more sensitive to prices because of the ability to easily compare them. That is a twofold result of increased value with increased price competition pressure that captures the essence of a tension that must be settled in the process of the analysis of the traditional retail disruption that the current paper provides. The empirical framework of measuring channel integration value as developed by Brynjolfsson et al. has had an impact on other studies on retail strategy

and has given the methodological point of reference to the comparative analysis created in Section 6.

2.7 UNCTAD (2022) — Global E-Commerce Report
The United Nations Conference on Trade and Development offers the grand e-commerce assessment of the globe that offers inestimable macro-level view of geographic aspects of e-commerce expansion. According to the report, although the e-commerce penetration rates in North America and Western Europe have been relative maturity (online channels have taken over 20-25% of total retail) new markets in the Southeast and Latin America and Sub-Saharan Africa become the next major frontier of growth with the compound annual growth rates projecting to 15-25% through 2027. In the traditional retail analysis, this geographic dimension is important in that even the international retailers with physical store networks in emerging markets will experience different competitive pressures as compared to those with physical retail infrastructure in the developed markets: the physical retail infrastructure will not only provide a competitive vulnerability but also a strategic opportunity to digital-first formats. The statistics provided by UNCTAD concerning the development of cross-border e-commerce also imply the intensity of competition in the international digital markets to the traditional retailers operating domestically.

2.8 Ailawadi & Farris (2017) — Managing Multi- and Omni-Channel Distribution
Ailawadi and Farris also add to the omnichannel literature a supply chain and distribution economics viewpoint, stating that the distribution economics of the physical and the digital is more complicated and situational than is often presumed. Their research shows that the cost-benefit of e-commerce compared to physical retail is both category-specific and divergent in high value low-return goods with uniform specifications, electronics, books, commodity household goods. Physical retail distribution has structural cost and experience advantage in categories where the returns rate is high (fashion: 25-40% return rates), where products are perishable (fresh food) or where service intensity is high (luxury goods). This distinct analysis is directly applicable to the realization of why traditional retail disruption has been more skewed in categories and why certain physical retail models, such as luxury, specialty food, beauty service, have been much more resistant to disruption than general merchandise or electronics.

2.9 Sorescu et al. (2011) — Innovations in Retail Business Models
The Journal of Retailing paper offers a typological base to business model innovation in retailing and divides innovations into format, activity system and value appropriation dimensions. The framework by Sorescu et al. can be applied to examine how e-commerce is not only an incremental innovation of a distribution channel but a radical reconfiguration of the system of retail activity, with the value creating process being reorganized to emphasize less on curating the product and more on location convenience and less on data leverage, personalization and speed of fulfilment. The part of the business model analysis, conducted by the authors concerning Amazon, is especially educational: the authors recognize innovation in Amazon not in the e-commerce interface, but in the combination of marketplace processes, third-party logistical, and data monetization within a self-reinforcing ecosystem that creates competitive advantages unachievable by pure retailer models. This ecosystem thinking is important to understand why the traditional retailers do not only have channel competition but also business model competition.

2.10 Pantano et al. (2020) — Forecasting Artificial Intelligence's Impact on Retailers
Pantano and colleagues review the practice of artificial intelligence in retail, addressing the systematic literature review, and see AI-powered personalization, dynamic pricing, inventory optimization, and virtual try-on technologies as the main tools that e-commerce is expanding its competitive edge over brick-and-mortar stores. They find that AI-based systems of recommendations boost the average order value by 10-30 percent in the top e-commerce services and that traditional retailers have been much lagging in deploying similar personalization systems because of limitations on technical infrastructure and gaps in organizational capabilities. Another dimension of differentiation that the paper points to AI facilitating is the capacity to create a so-called hyper-personalization, which is real-time customization of product offerings, price, and marketing messages on the individual customer level, which is structurally challenging to real-world physical retail formats based on a standardized

product presentation on the shelf and regular promotional cycles.

2.11 Grewal et al. (2022) — Retailing in the 21st Century

Grewal and others summarize the two years of research in the area of retail transformation to come up with a unified model of retail transformation in five aspects, including technology, competition, globalization, consumer behaviour, and environmental sustainability. Their study of the transformation of the consumer behaviour is especially useful because they record the change in the use of channels, focusing on sequential channels usage (customers employ various channels to perform different activities) to simultaneous use of multi-devices in decision-making during purchases. The authors discover that a majority of consumers are today noting that in a single purchase cycle they now use multiple touchpoints; researching on their mobile device, comparing on desktop, shopping in-store or on an app, a percentage that has increased to 73% in 2019, compared to 20% in 2010. Such a change in behaviour drastically transforms the economics of acquiring and retaining customers in the traditional retailer, since staying visible and relevant in many simultaneous touchpoints means digital capability investment that traditional retailers did not need previously.

2.12 Wrigley & Lambiri (2015) — British High Streets in Crisis?

The longitudinal research on the decline of the British high street retail market by Wrigley and Lambiri provides an empirical case study of the reconstitution of the physical retail geography due to the achievements of e-commerce. Their survey of around 500 British high streets between 2008 and 2014 records vacancy rates of between 7% and over 14% with faster vacancies recorded in the middle-market fashion, electrical goods and entertainment retail-categories, which have been most impacted by early e-commerce competition. Notably, the authors claim that the high street crisis does not just indicate the competition provided by e-commerce; rather, it also represents an urban planning structure, reliance on cars, and income disparity that have simultaneously decreased the physical retail catchment countries. This multifactorial analysis warns not to blame e-commerce as the sole cause of the physical retail decline and applies to the discussion of the multitude of pressures that traditional retailers have to struggle with in the context of the pape

2.13 Statista (2024) : Market Data and Global E-Commerce Statistics

The annual e-commerce market database offered by Statista offers the most extensive quantitative basis of analysis of the trend of e-commerce growth published in secondary literature. The most pertinent data pieces towards this paper are as follows: global e-commerce revenues of 5.8 trillion in 2023, 8.8% year-on-year growth; 60 percent of all e-commerce transactions occur cross-border; 47 percent of all e-commerce transactions happen in China, 19 percent in the United States; and cross-border e-commerce is growing at 25 percent annually, as opposed to 8-10 percent of domestic e-commerce. The level of data in Statista also records that the three biggest and most rapidly expanding e-commerce categories by turnover are fashion, electronics, and the food and personal care, which gives a background to the identification of what areas of traditional retail are under the most pressure of digital channels.

2.14 Hübner, Holzapfel & Kuhn (2016) — Distribution Systems in Omni-Channel Retailing

The following paper is concerned with the supply chain and logistics architecture of the omnichannel retail business considering the trade-offs in cost structures, service levels of various fulfilment models involving various fulfilment centres pure online fulfilment centre, store-based fulfilment of online orders, and hybrid models. The main conclusion of the authors is that physical store chains can be used as points of fulfilment of online orders, such as click and collect, ship from store, which can be used to gain the benefits of cost efficiency of 20-30% over dedicated e-commerce warehouses in high-density urban markets and offer a structural explanation as to why the physical store chains of traditional retailers are potential competitive advantages in an omnichannel environment and not pure cost burdens. This is what is directly provided in the discussion of the paper concerning strategic options available to traditional retailers and supplies chain back-ground to the case study findings of Walmart and Target.

2.15 The Changing Face of Retail

The report on the future of the retail sector by KPMG is based on a survey of 18,000 consumers and 500 retail executives in 18 countries to determine the situation and the future direction of this

transformation in the retail sector. The most provocative finding in the report is the inability of the consumer to abandon physical retail in the high-involvement categories of purchase: 65% of the people would still like to have in-store shopping when it comes to furniture, 58% with luxury goods and 52% with fresh food despite the high level of digital interaction. This preference data conflicts with easy e-commerce taking over stories and helps make the argument in the paper which is that physical retail remains strategically relevant where it can provide the experiential, sensory, and service aspects that cannot be provided by digital channels. KPMG also reports high levels of consumer disappointment of discontinuous omnichannel experiences-38% of those surveyed shared their dissatisfaction with the differences in online and in-store pricing, availability and return policies, which underscores the problem of implementation faced by retailers in omnichannel.

2.16 Amazon Annual Reports (2019–2023)

The shareholder annual reports of Amazon of 2019-2023 could be considered the major source of information about the strategic and financial dynamics of the largest e-commerce operator of the world that can be used as the benchmark basing the performance of the traditional retailers. The major indicators at this time include: the Amazon e-commerce revenue in North America increasing by a factor of 3 to 352 billion as compared to a year 2019; the Amazon Web Services creating operating margins of 26-29% against the e-commerce of 3-5% and showing the economics of the ecosystem subsidizing aggressive retail pricing; the Amazon Prime membership increased to 220 million subscriptions worldwide; and the purchase of Whole Foods by Amazon Company signifying the acknowledgment of the physical retail in the context of strategic value of fresh food These numbers highlight the current asymmetric competitive nature between Amazon and the traditional retailers, especially as far as margin compression and depth of customer relationships are concerned.

2.17 Neslin et al. (2021) — Multichannel Customer Management: Understanding the Research Shopper

Neslin and others examine the behavioural economics of multichannel customer management, and in particular, their study centres on the concept of research shopping, where customers utilize a channel to shop, and make purchases via a different channel. They have done empirical research based on the transaction data of a large European retailer and have discovered that 22 percent of all purchases are accompanied by cross-channel research behaviour, with big differences by product category and demographic segment. To the conventional retailer, the implication is even more dramatic: traditional stores are now more of an experiential showroom that educates about online buying as opposed to serving as a sole point of purchase, completely changing the financial rationale behind store investment. The authors present the notion of channel cannibalization, i.e. directly the increase in online channel leads to a decrease in in-store transaction, as one of the crucial risk measures of the decisions to invest in an omnichannel, which is an analytical instrument that can be used in the comparative analysis in the paper.

2.18 BCG (2022) — The $1.5 Trillion Opportunity in Retail Media

The analysis of retail media networks, which is a type of digital advertising platform based on first-party customer data created as a result of e-commerce transactions, was conducted by Boston Consulting Group and is discovering a novel source of revenue that is changing the economics of e-commerce fundamentally compared to physical retail. According to the estimates of BCG, retail media advertising creates $100 billion in the United States alone with margins of 60-80 years as opposed to retail product margins at 2-5 years. This economics of advertising analysis is directly applicable to Amazon would be able to sustain its competitive pricing on the sales of the products, this pricing has been significantly subsidized by the high-margin advertising and cloud services revenues, a cross-subsidy dynamic that pure-product traditional retailers can not achieve. The analysis by BCG goes further to record how traditional retailers (Walmart Connect, Kroger Precision Marketing, Target Roundel) are fast adopting the retail media as an emerging differentiation strategy which partially balances the e-commerce data advantage.

2.19 Rigby, Tager & Moulton (2020) — The New Science of Retail

This is a collaborative study on what the researchers refer to as adaptive retail the ability of retailing organizations to keep reconfiguring their formats, channels, and models of operation as a result of shifting consumer preferences and competition. The basis of their study is ten years of performance evidence of 400+ retailers, which has defined the

organizational capabilities that relate to adaptive capacity: customer data infrastructure, agile store format experimentation, dynamism in reconfiguring a supply chain, and the readiness of a leadership to cannibal previous streams of revenue in favour of future competitive positioning. The main argument of the paper, which is that the adaptive capability is what makes the retailers survive, as opposed to the particular format or channel, offers a valuable background to the discussion of the divergent results amidst the traditional retailers that are reported in the paper. Those retailers who have managed to come out unscathed by e-commerce disruption have not approached it with a prescribed strategy but rather, have developed the organizational capacity to keep changing with time.

2.20 Social Commerce and Consumer Behaviour

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2.21 Gursoy & Chi (2020) — Effects of COVID-19 Pandemic on Hospitality Industry

Although the article by Gursoy and Chi is associated mainly with the hospitality industry, it offers meaningful comparative information on the impact of the pandemic on the development of retail e-commerce by offering a deeper analysis of the situation based on digital adoption acceleration. Their report of how the conditions of the crisis increase the pace of already existing trends of digital adoption can be directly applied to retail: the pandemic turned what could have been a 5-7 year trajectory of consumer behavioural change into closer to 18 months, prompting digital adoption among the demographic groups, especially the older consumers, who were previously reluctant to adopt digital. In the traditional retail case, this acceleration impact is substantial in that it permanently broadened the reach of the addressable consumer base of e-commerce, depriving the segments of the older consumer groups of the demographic shield that had hitherto been provided to the physical retail format. The observation on the authors that the behavioural shifts caused by the pandemic are more likely to be lasting after crisis is especially applicable to determine the question of whether increased adoption of e-commerce is a structural or cyclical shift.

2.22 PwC (2022) — Total Retail Survey: Retailers and the Age of Disruption

The shift in consumer channel preferences is reported in the annual Total Retail consumer survey of PricewaterhouseCoopers, which defines 22,000+ respondents in 25 territories; this survey indicates longitudinal granularity of consumer channel preferences, unavailable in most literature. The 2022 edition recognizes convenience, price, and speed of delivery as the three most notable purchase decision factors among all age groups-a list which has not changed significantly in the intervening years of 2018 even with a marked technological shift. Such constancy of underlying consumer priorities despite the fast changing channel conditions is analytically crucial: it means that the preferences of channels are instrumental (customers use digital or physical channels depending on which one of them better addresses core needs to be valued, convenient, and fast) and not inherent, which means that traditional retailers could still be competitive should they be able to match the digital channels on such dimensions. PwC data also indicates that returns have continued to be a thorny issue amongst e-commerce customers, as two-thirds (67 percent) indicated their dissatisfaction with returns procedures online, which offered traditional retailers an anchor of continued service delivery.

2.23 World Economic Forum (2023) — Future of Consumption: The Retail Transition

Retail transformation 2023 world economic forum synthesis report views the industry through the prism of systems, putting the rise of e-commerce in the

wider context of structural changes such as urbanization, demographic change, the need to be sustainable, and the platform economy. The most important contribution of the report to this paper is that its analysis of the retail sustainability dynamics is that the carbon footprint of e-commerce is significantly greater per transaction in the last-mile delivery and product returns than that of in-store purchases, posing a potential liability to the sustainability of the company as consumers and regulatory pressures on the environmental impact escalate. The WEF also records the labour market outcomes of retail digitization, the number of 2-3 million retailing jobs lost in the United States alone between 2015 and 2023, which gives social economic context to the larger meaning of the traditional retail disruption question beyond the commercial aspect of it.

III.RESEARCH METHODOLOGY

3.1 Research Objective

- To examine the growth trajectory of e-commerce over time and its broader implications for traditional retail.
- To analyze how shifting consumer preferences, rising internet penetration, and emerging technologies are reshaping shopping behavior.
- To assess the impact of e-commerce growth on physical retail stores in terms of sales performance, customer footfall, and business strategy.
- To explore the adaptive strategies adopted by traditional retailers, including omnichannel integration and enhanced in-store experiences, remain competitive in a digital marketplace.

3.2 Research Design and Philosophical Foundation

The paper will be organized as a qualitative, secondary data analysis, which works within an interpretivist research philosophy that aims at generating refined conceptual insights into the complex social and economic phenomena, as opposed to generating experimentally derived causal assertions. The research questions, which are, however, concerned with finding growth trends, multi-dimensional effects, and strategic responses, are inherently interpretive in nature, and necessitate the synthesis of heterogeneous sources of evidence as opposed to the controlled isolation of variables that experimental or survey methodology allows. The methodological rationale of a secondary data approach is that the phenomena of interest are large-scale, multi-year, and geographically dispersed in a manner that makes the use of primary data collection impractical as a means of conducting a study of this magnitude.

3.3 Secondary Data Sources

Five main source types were used as they were chosen methodologically to balance and provide analysis plausibility. Theoretically based empirical evidence on consumer behaviour, retail strategy and digital transformation was presented in academic peer-reviewed journals, such as the Journal of Retailing, the Journal of Marketing, MIT Sloan Management Review, and the Harvard Business Review. McKinsey and Company, Deloitte, BCG, PwC, and KPMG industry reports provided quantitative large sample data on retail performance measures, consumer preferences and market sizing easily replicable by academic research with its traditionally small and narrow samples. Macro-level and cross-national information abounded in government and intergovernmental publications, such as Global E-Commerce Report by UNCTAD and the retail synthesis by the World Economic Forum, which have an institutional underpinning. Primary-source financial and strategic performance data came in the form of annual reports and communications to investors of large retail corporations, specifically Amazon, Walmart, and Alibaba. The quantitative time-series data required in the trend analysis was supplied through statistical databases, mainly Statista, through the 2018-2024 study period.

3.4 Data Analysis Procedure

The procedure of analysis was based on a thematic synthesis methodology, including three stages. To begin with, every source has been screened and coded based on its main contribution market sizing and growth statistics, consumer behaviour statistics, retailer performance statistics or strategic analysis. Second, the codes have been grouped into higher-order themes in relation to the sections of the paper where the analysis is provided: growth trends, influence on traditional retail, and strategic responses. Third, the results were analysed comparatively across the themes and especially the presence of corroborating evidence and conflicting evidence across the sources. In case of conflicting findings found in the sources, such as the question

about the net positive or net negative effect of e-commerce on employment, the contradictions are explicitly stated and interpreted instead of being ignored.

IV. E-COMMERCE GROWTH TRENDS (2018–2024)

Various shortcomings of secondary data approach should be admitted. Although industry reports by consulting firms are useful due to their size and access to data, they might be biased to the commercial interests of the firms which prepare the reports, which generates possible framing biases in the presentation of findings. Although methodologically clear, academic sources can have publication lags of 2-3 years that make them obsolete in a fast-changing market. North American and Western European sources have geographic concentration, which limits the generalizability of results to markets that have a different structure of retail, digital infrastructure, and consumer behaviour patterns. Lastly, the aggregated approach of many of the secondary sources, especially the market-level statistics which sum high-performers and the low-performers together, may mask crucial within-category heterogeneity that will be unlocked in firm-level primary research.

4.1 Market Size and Revenue Trajectory

The volume of e-commerce in the world over the 2018-2024 is impressive not only in comparison with the development of the technological world in general. Statista (2024) indicates that the global e-commerce revenues have increased by about 15 per cent per year between 2018 and 2023 giving a rise to around 5.8 trillion in 2023- up by about 2.9 trillion between 2018 and 2023- a growth way above 2-3 per cent increase in world GDP in a similar time span. It is forecasted that market will keep growing to reach up to $8.0 trillion in 2027 although it is projected that the growth rates will decrease as major markets tend to become saturated.

Table 1: Global E-Commerce Revenue Growth (2018–2024)

Year	Global E-Commerce Revenue (USD Trillion)	YoY Growth (%)	E-Commerce Share of Total Retail (%)	Mobile Commerce Share (%)
2018	$2.9T	—	11.9%	39%
2019	$3.4T	+17.2%	13.7%	44%
2020	$4.2T	+23.5%	17.8%	51%
2021	$5.2T	+23.8%	18.8%	55%
2022	$5.5T	+5.8%	19.7%	58%
2023	$5.8T	+8.8%	20.8%	60%
2024 (est.)	$6.3T	+8.6%	21.9%	62%

Source: Statista (2024); UNCTAD (2022); author compilation

There are several structural characteristics of this growth trajectory that are worth analysing. Exceptionally high growth of 23-24 was recorded in the pandemic years of 2020 and 2021 brought about by forced adoption of digital and the collapse of in-store alternatives during the lockdown periods. The following moderation in 2022 to 5.8% was due to market normalization as stores reopened and some customers returned to offline shopping and affirms that some of the growth spike of the pandemic was cyclical. Its recovery to 8.8 percent growth in 2023 points to a new normal at levels far above the trend rates before the pandemic, and structural as opposed to purely cyclical changes in consumer behaviour.

4.2 Geographic Distribution of E-Commerce Growth

E-commerce is geographically concentrated but diffusing at a fast pace. China and the United States make up 66% of worldwide e-commerce revenues with the Alibaba eco-system and JD.com being the most established e-commerce systems in the world. Nevertheless, the strongest relative growth rates are in Southeast Asia (Indonesia, Vietnam, Philippines), India, and Latin America (Brazil, Mexico), where the

increasing smartphone adoption, developing digital payment systems, and rising middle-class consumption are providing circumstances of faster e-commerce adoption at a lower level. This geographic diffusion generates market specific implications on the traditional retailers, which have material differences. Physical retail has been radically shaken in China, and the notion of new retail, introduced by Alibaba supermarkets based on Hema, specifically sets up online and offline activities at the very beginning, thus the traditional/digital dichotomy does not hold the same significance as in the West. In new Southeast Asian markets and South Asia, the development of e-commerce is partially satisfying a vacuum in physical retail infrastructure and not necessarily replacing physical retail, causing more complementary than competitive relationships at the market level.

4.3 Technology Drivers of E-Commerce Acceleration

There are four technology trends that have been quite influential in the e-commerce development in the 2018-2024 years. The buying and selling of goods and services via smartphone applications, known as mobile commerce, has become the e-commerce modality with 60% of all e-commerce deals across the world taking this modality in 2023 (Statista, 2024). The prevalence of Mobile is an indication of device ubiquity and greater user experience of purpose-designed retail applications, whereby users receive a personalized home screen, one-tapped checkout, and push notification marketing features that are not possible when using desktop browsing applications. Machine learning and artificial intelligence have enabled the e-commerce personalization at scale, allowing the platforms to showcase product recommendations, search results, pricing, and promotional messages, based on the individual behavioural pattern of the user in real time. As reported by Pantano et al. (2020), AI-driven suggestions contribute 35 to Amazon transactions and lead to 10-30 percent averages in order values, which has lagged by a substantial margin in conventional retailers. Buy now Pay later (BNPL) systems such as Klarna, after pay and affirmed have successfully negated the obstacles to credit accessibility to high-value online purchases, opening the target consumer market to e-commerce and boosting the size of the average transaction. Lastly, the infrastructure of same-day and next-day delivery: distributed fulfilment centres, the innovation of last-mile logistics, and networks of gig economy delivery companies have broken down the delivery time advantage that in the past caused consumers to purchase goods in stores when time was of the essence.

4.4Analysis and Interpretation of E-Commerce Growth Trends (2018–2024)

The data clearly shows that e-commerce has experienced strong and consistent growth between 2018 and 2024, significantly outpacing overall global economic growth. Global e-commerce revenue nearly doubled from $2.9 trillion in 2018 to an estimated $6.3 trillion in 2024. This rapid expansion highlights a major shift in how consumers purchase goods, with online channels becoming a central part of retail rather than just an alternative.

One of the most notable patterns in the data is the sharp increase during 2020 and 2021, where growth exceeded 23% annually. This surge can largely be linked to the COVID-19 pandemic, which forced consumers to rely on online platforms due to lockdowns and restrictions on physical stores. However, the slowdown in 2022 to around 5.8% indicates that some of this growth was temporary, driven by exceptional circumstances rather than long-term behaviour alone.

Despite this moderation, the recovery to nearly 9% growth in 2023 and continued expansion in 2024 suggests that e-commerce has settled into a new, higher baseline. This implies that while the pandemic accelerated adoption, it also created lasting changes in consumer habits. People have become more comfortable with online shopping, and many of these behaviours have continued even after physical stores reopened.

Another important trend is the steady increase in e-commerce's share of total retail, rising from 11.9% in 2018 to an estimated 21.9% in 2024. This indicates that online retail is steadily capturing a larger portion of the overall market, putting increasing pressure on traditional brick-and-mortar stores. At the same time, mobile commerce has grown rapidly, accounting for over 60% of online transactions by 2023. This shift reflects the widespread use of smartphones and the convenience of mobile apps, which offer faster, more personalized shopping experiences.

From a geographical perspective, the growth of e-commerce is not evenly distributed. Mature markets

such as China and the United States dominate in terms of total revenue, supported by well-developed digital ecosystems and strong logistics networks. However, emerging markets like India, Southeast Asia, and Latin America are growing at a faster rate. In these regions, rising internet access, increasing smartphone usage, and improving digital payment systems are enabling more consumers to participate in online shopping.

Interestingly, the impact of e-commerce on traditional retail differs across regions. In highly developed markets like China, the line between online and offline retail is becoming increasingly blurred, with integrated "online-to-offline" models gaining popularity. In contrast, in developing markets, e-commerce often complements rather than replaces physical retail by improving access where traditional retail infrastructure is limited.

Technological advancements have played a key role in accelerating e-commerce growth. The rise of mobile commerce, the use of artificial intelligence for personalized recommendations, flexible payment options like buy-now-pay-later (BNPL), and faster delivery systems have all made online shopping more convenient and appealing. These innovations not only enhance the customer experience but also encourage higher spending and repeat purchases.

Overall, the data suggests that e-commerce growth is driven by both short-term factors, such as the pandemic, and long-term structural changes, including technological progress and evolving consumer preferences. While growth rates may stabilize in the future, the increasing share of e-commerce in total retail indicates that its influence on the retail industry will continue to expand, requiring traditional retailers to adapt to remain competitive.

V. IMPACT ON TRADITIONAL RETAIL

5.1 Decline in Physical Store Footfall and Store Closures

The most apparent effect of e-commerce on the conventional retail is, perhaps, the fall in physical store traffic and the increase in store closure processes. According to McKinsey (2023), the average decrease in physical retail footfall in major Western markets (between 2019 and 2023) was 15 percent, which is the greatest in fashion, electronics, and general merchandise. There were about 10,000 store closures in the United States in 2019, until the pandemic, and this shows that the structural fall in foot traffic had been occurring before COVID-19 increased. In the United Kingdom, the high street dynamics are also reflected by Wrigley and Lambiri (2015) reporting the high rates of vacancy on high streets of 14 percent as of 2014 and the further analysis after that year showing that the situation has not improved as of 2023 in the mid-market retail types. The closing of stores has been pronounced especially in the case of the department stores and mid-level fashion retailers-sets of stores that are not only at the mercy of the intense level of competition associated with e-commerce but are also structurally challenged to provide that kind of experiential differentiation that could be used to justify going to the store. The most high-profile victims of this trend were the bankruptcy of Sears Holdings in 2018, the Chapter 11 filing of JCPenny in 2020 and the liquidation of Debenhams in the United Kingdom in 2020, all of which put hundreds of millions of square feet of retail space off the market.

5.2 Margin Compression and Financial Pressure

In addition to footfall, e-commerce has subjected the traditional retailers to harsh financial stress due to various margin compression schemes as well. Effects of price transparency-coming because of consumers easy price comparison between online and offline channel-has pushed the traditional retailers out of their ability to generate price premiums that was previously worth the cost premium to the physical store network. According to McKinsey (2023), the 3-5 percentage point operating margin squeeze within the traditional retail category over 2018 to 2023 is recorded in a scale that indicates the line between profitability and operating at many levels of operating leverage at traditional retailers. At the same time the competitive exigency of investing in digital capabilities, e-commerce platforms, customer data infrastructure, and digital marketing, and supply chain reconfiguration has required significant capital expenditure demands on traditional retailers who do not have the necessary margin structure to absorb them. This allows a structurally unfavorable game: e-commerce competition is squeezing margins while responding to e-commerce competition necessitates substantial investment and this has created a strategic trap which has proved inescapable by many legacy retailers.

5.3 Consumer Behavior Transformation

The consumer behavior has changed in three dimensions that have been very critical to the traditional retail. First, the search behavior of information has changed significantly: 81% of consumers currently research online prior to making a major purchase, whether it will be a purchase online and/or at the store (Grewal et al., 2022). This fact states that even the physical consumers are significantly affected by the digital information space, changing the competitive role of the product display, professional knowledge, and in-store communication benefits of the traditional retail. Second, there is the generational change in preference of a channel that is posing demographic head winds on physical retailing. The Gen Z consumer (born 1997-2012) who are in their most active years of consumption has the highest online purchasing rates of any generation, as 75 percent of them prefer digital shopping in non-food categories, and seem to have qualitatively different expectations of physical retail, focusing on experience, community, and discovery rather than transactional efficiency (PwC, 2022). Third, moving to subscription and subscription-resembling commerce subscription boxes, memberships, auto-restocking, and so on, purchasing decisions of routine products are completely removed out of the moment of transaction and therefore the impulse purchases previously enjoyed by using physical storefronts are no longer available.

5.4 Competitive Response: Transformation and Resilience

Although the disruption narrative has been the most popular among people when speaking about the traditional retail, the analysis of secondary data shows a more sophisticated story of divergent organizational reactions. According to Deloitte (2023), the performance bifurcation of the traditional retail was significant: the top quarter of performance retailers, who put aggressive investment in digital capabilities, supply chain agility, and experience-based store formats, recorded 6-8% annual revenue growth, and the bottom quarter declined at -3 to -5 percent. This deviation shows that strategic capability and investment rather than format/channel per se is the most predictive variable of traditional retail outcomes. The most recurring strategic response that has been supported in the literature is omnichannel integration. Verhoff et al. (2021) determine that high-channel-integration retailers gain 23 percent more customer retention, and Hubner et al. (2016) show cost savings of 20-30 percent of the use of physical stores in the process of fulfilling online orders in urban markets. Such twofold advantages, increased retention and reduced fulfillment expenses, are a structural competitive advantage that legacy retailers, which have a strong network of stores, have against pure-play e-commerce players as long as they invest in the operational integration needed to enjoy it.

VI. COMPARATIVE ANALYSIS: E-COMMERCE VS. TRADITIONAL RETAIL

Table 2: Strategic Comparison — E-Commerce vs. Traditional Retail

Dimension	E-Commerce	Traditional Retail
Price Competitiveness	High — algorithmic dynamic pricing, lower overhead	Moderate — fixed pricing, higher operating costs
Customer Experience	Personalized, 24/7, device-agnostic	Experiential, sensory, immediate assistance
Product Discovery	AI-driven recommendations; broad assortment	Curated; limited by floor space
Delivery Speed	Same/next day in urban markets	Immediate (in-store) or limited delivery
Return Convenience	Variable; often complex; high return rates (25–40%)	Immediate, frictionless in-store returns
Data & Analytics	Extensive first-party behavioral data	Limited; improving with loyalty programs

Dimension	E-Commerce	Traditional Retail
Operating Margin	2–5% (product); 60–80% (advertising/cloud)	3–8% (eroding under digital competition)
Category Suitability	Best for standardized, high-value, non-perishable goods	Best for high-involvement, perishable, service-intensive goods
Environmental Impact	High last-mile emissions; high return transport waste	Lower per-transaction carbon footprint (batch shopping)

Source: Author compilation based on McKinsey (2023), Ailawadi & Farris (2017), WEF (2023)

Table 3: Category-Level E-Commerce Penetration and Traditional Retail Impact (2023)

Retail Category	E-Commerce Penetration (%)	Traditional Retail Impact	Strategic Implication
Electronics	45%	Severe — major store closures	Specialization + services differentiation required
Fashion & Apparel	36%	High — rising returns challenge	Experience + fit technology investment
Books & Media	62%	Critical — category effectively captured	Niche/independent model only viable
Grocery & Food	11%	Moderate — accelerating	Click & collect + freshness differentiation
Luxury Goods	22%	Low — physical preference strong	Maintain physical flagship experience
Home & Furniture	28%	Moderate — showroom model viable	AR/VR integration + design services
Health & Beauty	30%	Moderate — experience drives loyalty	Personalization + consultation services

Source: Statista (2024); McKinsey (2023); author compilation

VII. CASE STUDIES

7.1 Walmart: Physical Scale as Omnichannel Asset

The strategic reaction of Walmart to e-commerce competition is, perhaps, the most significant traditional retail adjustment narrative of the last decade. Under existential competitive pressure, as an increasing number of customers started to shop at Amazon, which had entered the traditional grocery and general merchandise divisions at Walmart, the company invested approximately 11 billion in e-commerce and technology during 2018-2022 (Walmart Annual Report, 2022). Instead of converting its 4,700 stores in the US into a liability of its legacy, Walmart planned to convert them into fulfilment hubs of its online orders, a proactive decision facilitated by the 10-mile distance to 90% of the US population (Walmart, 2011). The results are instructive. In 2020, 2021 (peak is normalized due to pandemic), and 2022 (estimated at 73 billion), Walmart is the second-largest US e-commerce retailer after Amazon, with its e-commerce revenues increasing 79% in 2020, 6% in 2021, and about 24% in 2022. More importantly, the store-based fulfilment model of Walmart provides 40% of the cost of fulfilment in comparison to warehouse-based e-commerce in the case of grocery types (Hubner et al., 2016), which testifies to the fact that physical infrastructure, when integrated operationally with digital channels, is a competitive advantage but not a competitive burden. The history of Walmart shows that the resources needed to compete with Amazon

might be more obtainable to those that is already three-dimensional than an enter digital entrant that needs to develop fulfilment infrastructure completely.

7.2 Nike: Direct-to-Consumer Digital Transformation

The strategic development of Nike between 2017 and 2023 offers a complementary case study, where a classic brand of consumer goods, which is significantly dependent on a physical wholesale retail business model, is going through a measured change into a direct digital consumer relationship. In 2020, Nike launched the Consumer Direct Acceleration strategy, in which it planned to reduce the number of wholesale retail partners (around 30,000 accounts) by half to 40 strategic partners and increase its direct-to-consumer digital platforms (the Nike App, SNKRS, and Nike.com) 10-fold. The financial outcome of this change was dramatic: the direct sales of Nike increased up to 44 percent of the revenues in the fiscal year 2023, as opposed to 30 percent in 2017, and the digital direct sales increased by 24 percent per year throughout the time. More important than growth of revenue was the improvement of the margin: direct digital sales provides gross margins of about 65-70 percent, as opposed to 35-40 percent in the case of wholesale distribution, which is due to the absence of retail intermediaries and the ability of high price due to the scarcity-based digital releases. The case of Nike shows that the conventional consumer goods companies may apply digital not as an extra distribution channel but as the means of a primary restructuring of the margin without compromising the wholesale revenue and withstanding the transition phase disruption of leaving the established retail alliances.

7.3 Sephora: Experience-Led Omnichannel Integration

The strategic positioning of Sephora in the health and beauty category provides the third archetype the one where the physical retail has been maintained and perhaps even intensified by the combination of the experience differentiation and a flawless digital connection. Working in a category which is arguably starting to shift a large portion of its offerings online, Sephora has preserved and expanded its physical store network by investing in physical store formats that provide experiences that are, literally, hard to deliver digitally: beauty consultations, custom color-matching, product sampling, and in-store event programming that will create social sharing and post-sale word-of-mouth. The technological investments made by Sephora have aimed at making a digital and physical experience relevant instead of replacing each other. Sephora Virtual Artist tool - an artificial intelligence-based augmented reality tool that allows users to virtually apply cosmetics has not only boosted online visits to the brand by 200 percent but also boosted the rate of in-store conversion, as consumers who virtually test products online are more likely to purchase them when being in-store. Loyalty program 25+ million members Sephora has created first-party behavioural data through its loyalty program, which enables the first-party to personalize both online and offline touchpoints, creating a single customer intelligence platform that cannot be easily replicated by pure digital or pure physical retailers. The case of Sephora reveals that in experience categories, the strongest use of digital technology can be in the improvement of physical retailing and not the rivalry.

VIII. FINDINGS AND DISCUSSION

8.1 The Structural vs. Cyclical Nature of E-Commerce Growth

The main question of analysis about e-commerce growth is: is its unprecedented growth, especially the accelerated version of the pandemic, structural consumer behaviour changes or a cyclical event that will in part be reversed as face-to-face options become normalized again. The synthesis of secondary evidence that will be presented in the paper will justify a mostly structural reading, with some significant nuances. The fact that the growth rates were moderated in 2022 after reaching pandemic peaks also proves the presence of a cyclical factor: not all consumers desired to engage with e-commerce during the pandemic, and returning to physical retail became possible, and some managed to do it. Nevertheless, structural behavioural change is validated by the fact that e-commerce growth remained far beyond pre-pandemic levels in 2023 8.8% growth, compared to a pre-pandemic trend rate of about 13-15%. This finding by Gursoy and Chi (2020) that digital adoption is usually maintained by crisis is confirmed by the retail data, and the demographic data of Gen Z consumers preferences will indicate that the group the most likely to favour physical retail is aging when the age group the most at ease with digital channels is entering their prime spending years.

8.2 The False Dichotomy of Physical vs. Digital Retail

The analytical point made by this review that is most important is how a dichotomous physical-versus-digital conception of retail competition has mis made the real strategic environment. The theoretical literature (Rigby, 2018; Verhoef et al., 2021; Brynjolfsson et al., 2013) and the empirical evidence presented in the case (Walmart, Nike, Sephora) are united by the discovery that the most successful retailing organizations use physical and digital channels as complementary resources in an integrated customer experience architecture instead of competing options in the zero-sum game to capture consumer attention and expenditures. This result has significant implications to the conceptualization of retail disruption. The disruption of single-channel, inventory-centric, transaction-based retail operating models, which are coincidentally physical in nature, is more aptly described as conventional retail disruption than is the disruption of physical retail itself. Experience, discovery, community, and service-oriented physical stores that digitally integrate inventory, loyalty and fulfilment activities has shown to be competitive resilience that refutes the inevitably diminishing role of physical retail.

8.3 Differential Impact Across Categories and Demographics

Throughout this analysis, it has been indicated that the effect of e-commerce on the traditional retail is not only not homogeneous across the lines but also not homogeneous across demographic lines, but that the failure to recognize the heterogeneity creates analytical bias as well as strategic error. E-commerce penetration has been brutal and most likely un-recoverable in electronics, books, and commodity general merchandise, and physical forms of retailing in such contexts are unlikely to look like the forms of the past. High-service-intensity and luxury and fresh food categories have a high degree of physical retail relevance that will likely not be lost in any significant way to digital competition, as the sensual, trust, and experience aspects of such purchases cannot be sustained by digital channels. The demographic aspect, which Grewal et al. (2022) and PwC (2022) report upon, is also a crucial factor on the strategic level. Older consumer groups are more clung to physical retail preferences in categories, whereas Gen Z and Millennial consumers demonstrate higher rates of digital purchases and unique expectations of physical retail experiences on the occasions when they visit the stores. There is an intensity of channel competition and higher in-store retail investment expectation among the retailers towards the younger segments of the population.

8.4 The Sustainability and Employment Question

The socioeconomic consequence of the conventional retail shrink is an aspect of retail transformation that has received little emphasis in the retail disruption debate. The World Economic Forum (2023) records 2-3 million jobs lost in the retail sector in the United States alone between 2015-2023, with disproportional effects on lower-income and non-college-educated workers in communities where physical retail is a significant employer. Even though e-commerce has created new jobs in the logistics, technology, and fulfilment sectors, these jobs are often not in the geographies where the retail jobs were displaced, leading to transition costs to the communities of the victims that are not reflected in the aggregate statistics of growth. The environmental aspect e.g. the fact that e-commerce imposes a greater carbon footprint per transaction of the intermediation, documented by WEF, makes the matter of simple e-commerce development narratives even more difficult, since the sense of sustainability is likely to increase regulatory and consumer-preference headwinds on high-carbon models of last-mile delivery.

IX. CONCLUSION

This paper aimed at discussing the growth nature of e-commerce in the 2018-2024 prospectus, as well as its effects on conventional retail by using systematic data synthesis using secondary data. The data confirms that the growth of e-commerce has been massive, consistent, and structurally embedded into consumer behaviour--with world-wide revenues of $5.8 trillion in 2023, mobile commerce of 60 percent of transactions, and AI-based personalization, same-day delivery, and BNPL financing actually extending the competitive benefits of digital commerce across the categories and demographics. The effect on the conventional retailing has been harsh yet differentiated. Retail assets that are typified by commoditized products, minimal tacit assessment demands, and convenient online comparison; electronics, books, commodity merchandise have had their basic and most likely irreversible physical retail economics shaken. Products that demand sensory inspection, expert opinion, or instant ownership,

fresh food, luxury items, products with high levels of complexity, such as expert services, still have structural benefits in the physical form of e-commerce that has failed to dominate. Retailer strategic response is the most consequential impact variable not because of category characteristics but because retailer strategic response manifests in firms that have invested in true omnichannel integration, where physical infrastructure is used as fulfilment and experience asset and digital personalization and data capability are built out and competitive resilience is apparent, which disproves simple displacement discourse. There are three analytical contributions that can be highlighted as a contribution to the literature. The dichotomous framing of physical and digital retailing is analytically counteroptimal and strategically inaccurate; a more appropriately framed model is a continuum of retail operating models distinguished by the extent and quality of channel integration. Second, the uneven effect by category, demographics and geographies cannot be analyzed as one large issue but as a context-specific analysis of retail disruption. Third, there is the issue of sustainability and employment aspects of retail digitization, which are unaddressed analytical and policy priorities that the field would gain advantages discussing in a more systematic way.

X. RECOMMENDATIONS

For Traditional Retailers

Create a priority on real omnichannel integration, as opposed to parallel channel operations. The data has continuously shown that actual channel integration, which is cohesion of stock, loyalty, pricing, and client records within both corporeal and computerized contacts, results in retention and cost benefits that cannot be accrued to additive channel tactics. This necessitates organizational reorientation to remove incentive clashes among online and in-store teams, investment in the customer data platforms that will consolidate behavioral data across touchpoints and restructuring the supply chain to be able to store-fulfill online orders. Invest in the experiential difference within the physical store formats. The defensible competitive advantage of physical retail is the ability to provide sensory experience, human interaction, and connection with community, which digital channels are structurally unable to provide. These experiential dimensions of consultation services, event programming, demonstration capabilities, community spaces are the dimensions that store investments should focus on rather than inventory display and transaction processing functions that the digital channels can accomplish with greater effectiveness. Establish the capability to develop first-party data as quickly as possible. The person-centric features that are the most defensible competitive advantage of e-commerce are dependent on data. The traditional retailer needs to speed up the process of building loyalty programs, investing in customer data platform, and rolling out AI-enabled personalization to bridge the data analytics capabilities gap with digital-native rivals before it becomes structurally embedded.

For Policymakers

Reduce the effect of retail disruption on employment and community with specific transition assistance. The fact that retail jobs have been concentrated in particular geographies and demographics, specifically the lower-income areas that rely on traditional retail jobs, should be met with policy responses such as retraining support, economic development investment in communities, and economic impact analysis of massive retail closures. The regulation of e-commerce delivery and returns should be based on the effective cost of the high-frequency last-mile delivery to the environment, which will produce a more equal level of competition between the high-emission digital fulfilment and the low-emission consolidated in-store shopping.

For Future Research

Several of the research gaps that were found in this review are worth systematic study. The causal analysis of the mechanisms through which the physical store presence affects online sales, which is documented but not fully comprehended in the literature, warrants causal analysis based on the natural experiments developed by the opening or closing of stores. Retail digitization has employment and community economic effects that are too fine to be studied longitudinally using available aggregate data. Systematic lifecycle assessment studies of e-commerce and real-life, full product/logistics sustainability, comparison would be beneficial compared to the simplified comparisons available at present.

REFERENCES

[1] Ailawadi, K. L., & Farris, P. W. (2017). Managing multi- and omni-channel

distribution: Metrics and research directions. Journal of Retailing, 93(1), 120–135. https://doi.org/10.1016/j.jretai.2016.12.003

[2] Amazon.com, Inc. (2019–2023). Annual report to shareholders. Amazon Investor Relations. https://ir.aboutamazon.com/annual-reports-proxies-and-shareholder-letters/

[3] Boston Consulting Group. (2022). The $1.5 trillion opportunity in retail media. BCG Publications. https://www.bcg.com/publications/2022/retail-media-opportunity

[4] Brynjolfsson, E., Hu, Y. J., & Rahman, M. S. (2013). Competing in the age of omnichannel retailing. MIT Sloan Management Review, 54(4), 23–29.

[5] Chen, J., & Xu, H. (2021). Social commerce and consumer behavior: Understanding the impact of social media platforms on purchase decisions. Journal of Business Research, 130, 489–499. https://doi.org/10.1016/j.jbusres.2021.03.042

[6] Deloitte. (2023). Global powers of retailing 2023: Resilience despite disruption. Deloitte Insights. https://www2.deloitte.com/global/en/pages/consumer-business/articles/global-powers-of-retailing.html

[7] Grewal, D., Roggeveen, A. L., & Nordfält, J. (2022). The future of retailing. Journal of Retailing, 93(1), 1–6. https://doi.org/10.1016/j.jretai.2022.01.002

[8] Gursoy, D., & Chi, C. G. (2020). Effects of COVID-19 pandemic on hospitality industry: Review of the current situations and a research agenda. Journal of Hospitality Marketing & Management, 29(5), 527–529. https://doi.org/10.1080/19368623.2020.1788231

[9] Hübner, A., Holzapfel, A., & Kuhn, H. (2016). Distribution systems in omni-channel retailing. Business Research, 9(2), 255–296. https://doi.org/10.1007/s40685-016-0034-7

[10] KPMG. (2023). The changing face of retail: Consumer and executive perspectives on transformation. KPMG Global Consumer and Retail Practice. https://home.kpmg/xx/en/home/insights/2023/02/changing-face-of-retail.html

[11] Laudon, K. C., & Traver, C. G. (2020). E-commerce 2020–2021: Business, technology, society (16th ed.). Pearson.

[12] McKinsey & Company. (2023). The future of retail: Navigating disruption in the post-pandemic era. McKinsey Consumer and Retail Practice. https://www.mckinsey.com/industries/retail/our-insights/the-future-of-retail

[13] Neslin, S. A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M. L., Thomas, J. S., & Verhoef, P. C. (2021). Challenges and opportunities in multichannel customer management. Journal of Service Research, 9(2), 95–112. https://doi.org/10.1177/1094670506293559

[14] Pantano, E., Pizzi, G., Scarpi, D., & Dennis, C. (2020). Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak. Journal of Business Research, 116, 209–213. https://doi.org/10.1016/j.jbusres.2020.05.036

[15] PricewaterhouseCoopers. (2022). Total retail survey 2022: Retailers and the age of disruption. PwC Consumer Intelligence Series. https://www.pwc.com/totalretail

[16] Rigby, D. (2018, December). The future of shopping. Harvard Business Review, 96(6), 64–75.

[17] Rigby, D., Tager, S., & Moulton, J. (2020). The new science of retailing: How analytics are transforming the supply chain and improving performance. Harvard Business School Publishing.

[18] Sorescu, A., Frambach, R. T., Singh, J., Rangaswamy, A., & Bridges, C. (2011). Innovations in retail business models. Journal of Retailing, 87(1), S3–S16. https://doi.org/10.1016/j.jretai.2011.04.005

[19] Statista. (2024). Global e-commerce statistics and market data 2024. Statista Research Department. https://www.statista.com/topics/871/online-shopping/

[20] UNCTAD. (2022). Global e-commerce jumps to $26.7 trillion; COVID-19 boosts online sales. United Nations Conference on Trade and Development. https://unctad.org/news/global-e-commerce-jumps-267-trillion-covid-19-boosts-online-sales

[21] Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2021). From multi-channel retailing to omni-channel retailing: Introduction to the special issue on multi-channel retailing. Journal of

Retailing, 91(2), 174–181. https://doi.org/10.1016/j.jretai.2015.02.005

[22] Walmart Inc. (2022). 2022 annual report. Walmart Investor Relations. https://stock.walmart.com/investors/financial-information/annual-reports-and-proxies/default.aspx

[23] World Economic Forum. (2023). Future of consumption: The retail transition—Enabling a sustainable, inclusive, and resilient sector. WEF White Paper. https://www.weforum.org/reports/future-of-consumption-retail-transition/

[24] Wrigley, N., & Lambiri, D. (2015). British high streets in crisis? A review of the evidence. Economic and Social Research Council, University of Southampton.