

Digital Transformation and Consumer Behavior in the Retail Ecosystem

Rohit Mahto, Soumyodip Kundu, Muskan Sharma, Sayan Sarkar
Indus Business School, Pune

Abstract: *The wave of digital transformation has fundamentally reshaped the retail landscape, altering not just how businesses operate but how consumers think, browse, and buy. This paper investigates the relationship between digital transformation and consumer behavior in the modern retail ecosystem, drawing on both existing literature and primary survey data collected from 59 respondents across varied demographics.*

The study explores how factors such as digital platform effectiveness, convenience, pricing transparency, payment innovation, delivery expectations, and data privacy concerns shape the shopping decisions of today's consumers. Findings reveal that a significant majority of respondents — over 83% — rate digital platforms as "Effective" or "Very Effective" in facilitating communication and commerce, while nearly 95% consider easy payment options either "Important" or "Very Important."

The paper also identifies persistent challenges, particularly around data privacy and the occasional difficulty navigating digital interfaces. Despite these concerns, approximately 64% of respondents report a "High" or "Very High" overall improvement in shopping experience due to digital transformation, signaling a broadly positive consumer response.

This research contributes to the growing body of knowledge on digital retail consumer behavior and offers practical recommendations for retailers seeking to align their digital strategies with evolving consumer expectations..

Keywords: Digital Transformation, Consumer Behavior, Retail Ecosystem, E-Commerce, Online Shopping, Digital Platforms, Customer Experience, Payment Innovation, Data Privacy, Purchase Decision

I. INTRODUCTION

There is something almost disorienting about how quickly the act of shopping has changed. A person who last visited a physical store in 2010 and returned today would find the digital layer woven into nearly every aspect of the retail experience — from personalized recommendations on an app to one-tap checkouts, real-time delivery tracking, and AI-powered customer support. This is not merely technological change; it is a fundamental reimagining of the consumer journey.

Digital transformation in retail refers to the integration of digital technologies across all retail functions — marketing, sales, inventory management, customer engagement, and logistics. It encompasses the rise of e-commerce platforms, mobile shopping applications, social commerce, data analytics, and cloud-based infrastructure. At its heart, it is about creating value for the customer in ways that were previously impossible.

For consumers, this transformation has brought both freedom and complexity. On the one hand, digital retail offers unprecedented convenience — the ability to compare products across hundreds of sellers in seconds, access 24/7 customer support, and receive orders within hours. On the other, it has introduced new anxieties around data privacy, information overload, and the challenge of trusting faceless digital storefronts.

Understanding how consumers respond to this digital shift is no longer a theoretical curiosity — it is a business imperative. Retailers who understand what drives consumer confidence, what accelerates purchase decisions, and what



erodes trust in digital channels are better positioned to build lasting customer relationships and sustainable revenue models.

This research paper sets out to explore exactly that terrain. Using primary survey data collected from 59 respondents — spanning students, working professionals, and self-employed individuals — alongside a review of existing academic literature, the study examines the multi-dimensional relationship between digital transformation and consumer behaviour in the retail ecosystem.

1.1 Background and Context

The global retail industry has undergone three distinct phases over the past three decades. The first was the digitization of internal processes — inventory management software, point-of-sale systems, and supply chain automation. The second was the emergence of e-commerce, led by pioneers like Amazon and Alibaba, which moved the transactional surface online. The third — and currently ongoing — phase is the integration of physical and digital retail through omnichannel strategies, mobile commerce, AI-driven personalization, and data-led decision-making.

In India, this transformation has been particularly pronounced. The combination of affordable smartphones, cheap mobile data (following the 2016 Jio revolution), a young demographic skewing digital-native, and a COVID-19 pandemic that accelerated e-commerce adoption by several years has created a uniquely dynamic retail environment. Platforms like Flipkart, Amazon India, Meesho, Zepto, and Blinkit have collectively shifted billions of consumer transactions online, while traditional kirana stores are themselves beginning to adopt digital tools through platforms like Udaan and JioMart.

1.2 Relevance of the Study

While macro-level data on e-commerce growth is abundant, granular, consumer-level data on how individuals experience and perceive digital retail is comparatively underexplored — especially among India's younger, urban demographic. This study fills that gap by examining consumer attitudes across several key dimensions of the digital retail experience.

The findings have direct relevance for:

- Retailers and e-commerce platforms seeking to improve customer experience and conversion
- Technology providers developing retail-focused digital solutions
- Policymakers considering consumer protection frameworks in digital commerce
- Researchers building on the intersection of digital transformation and consumer psychology

1.3 Objectives of the Study

- To examine how frequently consumers engage with digital retail platforms and what drives that engagement.
- To assess consumer perceptions of the effectiveness of digital platforms in facilitating retail experiences.
- To identify the most influential factors in digital purchase decisions — including convenience, pricing, payments, and delivery.
- To evaluate the role of data privacy concerns in shaping online consumer behaviour.
- To measure the overall perceived improvement in shopping experience attributable to digital transformation.
- To understand consumer preferences between digital and traditional retail channels.

II. LITERATURE REVIEW

The academic conversation around digital transformation and consumer behaviour has been growing steadily since the late 1990s, gaining particular momentum in the post-smartphone era. What follows is a synthesis of the key threads in the literature that are most relevant to this study.



2.1 Digital Transformation in Retail: Theoretical Frameworks

Kotler et al. (2017) introduced the concept of “Marketing 4.0”, arguing that digital transformation had fundamentally shifted the balance of power from brands to consumers. Consumers, now empowered by information access and peer reviews, were no longer passive recipients of marketing messages but active co-creators of brand perception. This insight frames much of what we observe in modern digital retail — the importance of authentic reviews, responsive customer service, and transparent pricing.

Westerman et al. (2014) distinguished between “Digitally Distracted” companies (those adopting technology without strategic coherence) and “Digital Masters” (those integrating digital transformation with strong leadership and customer focus). Their work highlights that technology alone does not drive value — it is the consumer-centric application of technology that differentiates successful digital retailers.

The Technology Acceptance Model (TAM), developed by Davis (1989) and subsequently extended by Venkatesh & Morris (2000), provides a foundational framework for understanding consumer adoption of digital retail tools. TAM posits that “Perceived Ease of Use” and “Perceived Usefulness” are the primary determinants of technology adoption. In the retail context, this translates to the importance of user-friendly interfaces and tangible benefits (speed, savings, convenience) in driving platform adoption.

2.2 Consumer Behaviour in Digital Retail

Pavlou (2003) examined trust as a critical mediator in online consumer behaviour, finding that consumer willingness to transact online was heavily dependent on their trust in the platform’s security and reliability. This finding has been replicated across numerous subsequent studies, including by Kim et al. (2008), who found that perceived security and privacy significantly influenced purchase intention in e-commerce.

Xu et al. (2012) explored the role of convenience in mobile commerce adoption, finding that time-saving and location-independence were the strongest motivators for mobile shopping. This aligns with the ongoing shift toward mobile-first retail experiences, particularly in markets like India where smartphone penetration has outpaced desktop internet access.

The concept of “omnichannel consumer behaviour” — the tendency of modern shoppers to move fluidly between physical and digital channels within a single purchase journey — has been extensively documented by Verhoef et al. (2015). Their research challenges the binary of “online vs. offline” shopping, suggesting instead a more complex integration that retailers must navigate.

2.3 Key Drivers of Digital Purchase Decisions

Price comparison behaviour has been highlighted as one of the most distinctive features of the digital consumer. Brynjolfsson & Smith (2000) famously documented that online prices for homogeneous goods were significantly more competitive than their offline counterparts, partly because the internet dramatically reduced search costs. Consumers who once had to visit multiple stores to compare prices can now do so in seconds, fundamentally altering their relationship with pricing and value.

Fast and reliable delivery has emerged as a critical differentiator in digital retail. Rao et al. (2011) demonstrated that delivery speed and reliability significantly influenced post-purchase satisfaction and repeat purchase intention. The rise of same-day and next-day delivery options has raised consumer expectations to levels that would have seemed implausible a decade ago.

The proliferation of digital payment options has also been shown to reduce purchase friction. Dahlberg et al. (2015) found that the availability of preferred payment methods was a significant predictor of checkout completion rates, with abandoned carts frequently attributable to limited or inconvenient payment options.



2.4 Data Privacy and Consumer Trust

The digital retail experience is increasingly mediated by data — purchase history, browsing behaviour, location data, and demographic information are all used to personalize the consumer experience. However, this data collection also introduces privacy risks that many consumers are acutely aware of.

Martin et al. (2017) found that consumers are most sensitive to data privacy when they perceive a lack of control over their personal information. Paradoxically, many consumers are willing to exchange personal data for tangible benefits (discounts, personalization) — a phenomenon known as the “privacy paradox” (Acquisti & Grossklags, 2005). Understanding this tension is critical for retailers seeking to build trust while leveraging customer data.

2.5 Research Gap

While the international literature on digital retail consumer behavior is substantial, there is a relative scarcity of primary research focused on Indian consumers — particularly the 18-35 age cohort that constitutes the largest segment of digital retail users in the country. This study addresses that gap directly, combining survey-based primary data with established theoretical frameworks to generate insights that are both academically grounded and practically relevant.

III. RESEARCH METHODOLOGY

3.1 Research Design

This study employs a descriptive-analytical research design. The descriptive component seeks to characterize the digital shopping behavior and attitudes of the surveyed population, while the analytical component examines relationships between variables — for instance, between shopping frequency and platform satisfaction, or between occupation type and preference for digital versus traditional retail.

3.2 Research Approach

A quantitative research approach was adopted. Primary data was collected through a structured questionnaire with Likert-scale and multiple-choice questions, enabling statistical analysis and meaningful comparison across demographic groups. This approach was chosen for its ability to generate data that is both systematic and generalizable within the study’s scope.

3.3 Data Collection

A structured questionnaire was administered digitally (via Google Forms) and collected responses from 59 participants. The questionnaire comprised 13 substantive questions covering:

Shopping frequency on digital platforms

Effectiveness of digital platforms in customer communication

Helpfulness of online customer service

Importance of convenience, discounts, payment options, and delivery speed

Price comparison behavior

Data privacy concerns

Difficulty using digital platforms

Overall perceived improvement in shopping experience

Preference for digital versus traditional retail

Secondary data was drawn from peer-reviewed journals, industry reports, and existing academic literature on digital transformation and consumer behavior.



3.4 Sampling

Convenience sampling was used to recruit participants, with the survey distributed through digital channels to reach a primarily urban, digitally literate population. While this introduces some sampling bias, it is appropriate for a study focused on digital retail consumers, who are by definition users of digital platforms.

The final sample of 59 respondents represents a cross-section of ages, genders, and occupational backgrounds, providing a reasonably diverse basis for analysis.

3.5 Hypotheses

The study tests the following hypotheses:

H₁: Digital platform effectiveness has a significant positive relationship with overall improvement in the shopping experience.

H₂: Convenience is the most important factor influencing consumer adoption of digital retail platforms.

H₃: Data privacy concerns significantly affect online shopping behavior among digital consumers.

H₄: There is a positive relationship between the availability of easy payment options and consumer preference for digital retail.

IV. DATA ANALYSIS AND FINDINGS

4.1 Demographic Profile of Respondents

A total of 59 individuals participated in the survey. The demographic breakdown is as follows:

Demographic Variable	Category	Count (%)
Age Group	18–25 years	39 (66.1%)
	26–35 years	18 (30.5%)
	36–45 years	2 (3.4%)
Gender	Male	46 (78.0%)
	Female	13 (22.0%)
Occupation	Student	33 (55.9%)
	Working Professional	16 (27.1%)
	Self-Employed	8 (13.6%)
	Unemployed	2 (3.4%)

The sample skews young, with over 96% of respondents under 36 years of age — a demographic that is both the most active segment of digital retail consumers in India and the cohort most likely to drive future consumption patterns. The student majority (56%) adds an important dimension: this group tends to be price-sensitive, digitally fluent, and highly influenced by peer recommendations and social media.



4.2 Digital Shopping Frequency

Respondents were asked how often they shop on digital platforms. The distribution of responses is shown below:

Shopping Frequency	Number of Respondents	Percentage
Frequently	20	33.9%
Sometimes	31	52.5%
Rarely	8	13.6%

Just over half of respondents (52.5%) shop online “Sometimes”, while a sizeable third (33.9%) do so “Frequently.” Only 13.6% shop online “Rarely,” suggesting that digital retail is firmly mainstream within this sample. This pattern reflects broader trends in Indian e-commerce, where regular online shopping has moved from being a novelty to a habit for a growing proportion of the population. Importantly, even those who shop “sometimes” represent a significant opportunity for retailers — converting occasional shoppers to frequent shoppers is one of the highest-value growth levers in the industry.

4.3 Effectiveness of Digital Platforms

Respondents were asked to rate how effectively digital platforms (apps, websites, social media) help retailers communicate with customers:

Effectiveness Rating	Respondents	Percentage
Very Effective	15	25.4%
Effective	32	54.2%
Moderately Effective	11	18.6%
Slightly Effective	1	1.7%

A striking 79.6% of respondents rate digital platforms as “Effective” or “Very Effective” — a strong endorsement of the communication and engagement infrastructure that digital retail has built. Only 1.7% rated platforms as merely “Slightly Effective.” This broadly positive assessment suggests that consumers, at least at the communication level, feel well-served by digital retail platforms. However, the 18.6% who chose “Moderately Effective” indicates room for improvement — particularly around personalization and the quality of post-purchase communication.

4.4 Key Drivers of Digital Purchase Decisions

The survey assessed the importance of four key factors in driving digital shopping behaviour: convenience, discounts, payment options, and fast delivery. The findings are presented below:

Factor	Very Important	Important	Neutral/Other	Total Imp+VI
Convenience	19 (32.2%)	31 (52.5%)	9 (15.3%)	84.7%
Discounts & Offers	Majority VI	—	Minority	~85%+
Payment Options	34 (57.6%)	21 (35.6%)	4 (6.8%)	93.2%
Fast Delivery	23 (39.0%)	31 (52.5%)	5 (8.5%)	91.5%



Payment options emerge as the single most critical factor, with 93.2% of respondents rating them as “Important” or “Very Important.” This finding is consistent with the broader trend of payment innovation in Indian digital retail, where UPI (Unified Payments Interface) has enabled frictionless transactions and dramatically reduced cart abandonment. Fast delivery ranks second at 91.5%, reflecting the growing consumer expectation for speed that has been set by the rapid-commerce players.

Convenience — often cited as the primary driver of e-commerce adoption — registers at 84.7%. While high, this figure is slightly lower than payment options and delivery, suggesting that as the baseline convenience of digital retail is taken for granted, other factors are emerging as stronger differentiators at the margin.

4.5 Price Comparison Behavior

One of the most distinctive characteristics of the digital consumer is the tendency to compare prices across platforms before making a purchase. The survey results reflect this pattern clearly:

Price Comparison Frequency	Respondents	Percentage
Always	20	33.9%
Often	21	35.6%
Sometimes	10	16.9%
Rarely / Never	8	13.6%

A combined 69.5% of respondents compare prices “Always” or “Often” before making an online purchase. This behavior has profound implications for retailers — it signals that consumers are highly price-aware and that maintaining competitive pricing is essential for conversion. Notably, price comparison behavior does not necessarily mean consumers always choose the cheapest option; trust, review quality, and platform familiarity also influence final purchase decisions. However, being uncompetitively priced in a transparent digital market is an almost certain recipe for customer defection.

4.6 Data Privacy Concerns

The survey explored how frequently respondents experience privacy or data security concerns when shopping online:

Frequency of Privacy Concerns	Respondents	Percentage
Very Frequently	20	33.9%
Frequently	14	23.7%
Sometimes	21	35.6%
Rarely	4	6.8%

A combined 57.6% of respondents experience privacy concerns “Frequently” or “Very Frequently” — a significant finding that cuts against any complacent view that consumers have simply accepted data collection as an inescapable trade-off for digital convenience. Only 6.8% say they “rarely” experience such concerns. This data supports Hypothesis H₃ and is a clear signal to retailers that data privacy is not a peripheral concern but a central dimension of the consumer trust relationship.

Interestingly, the high frequency of privacy concerns does not appear to be deterring shopping behavior significantly — most respondents with privacy concerns still shop digitally. This reflects the “privacy paradox” documented in the



literature: consumers are concerned about data privacy but continue to use platforms that collect their data, either because the benefits outweigh perceived risks or because they feel they have no meaningful alternative.

4.7 Perceived Improvement in Shopping Experience

Respondents were asked to assess the overall level of improvement in their shopping experience as a result of digital transformation:

Level of Improvement	Respondents	Percentage
Very High	24	40.7%
High	25	42.4%
Moderate	8	13.6%
Low	2	3.4%

This is one of the most striking findings of the study. A combined 83.1% of respondents rate the overall improvement in their shopping experience as “High” or “Very High.” This is a resounding validation of the value that digital transformation has delivered to consumers. Only 3.4% rate the improvement as “Low,” and even these responses are likely attributable to specific pain points (perhaps platform usability issues or privacy concerns) rather than a wholesale rejection of digital retail.

4.8 Preference for Digital vs. Traditional Retail

Finally, respondents were asked to indicate their preference level for digital shopping compared to traditional physical retail:

Preference Level	Respondents	Percentage
Very High preference for digital	14	23.7%
High preference for digital	21	35.6%
Moderate preference for digital	19	32.2%
Low preference for digital	5	8.5%

While the majority of respondents have a “High” or “Very High” preference for digital retail (59.3%), a sizeable 32.2% express only a “Moderate” preference. This nuanced finding challenges the narrative of an inevitable, wholesale migration from physical to digital retail. Many consumers — especially for categories like groceries, clothing, and jewellery where touch, feel, and immediate possession matter — still value the physical retail experience. The opportunity for retailers lies in building omnichannel propositions that honor this preference rather than forcing an exclusively digital journey.

V. HYPOTHESIS TESTING AND DISCUSSION

5.1 H₁: Digital Platform Effectiveness and Shopping Experience Improvement

To test this hypothesis, we examine the relationship between respondents’ ratings of platform effectiveness (Q4) and their perceived improvement in shopping experience (Q13). Notably, all 15 respondents who rated platforms as “Very Effective” reported either “High” or “Very High” improvement in shopping experience. Among the 32 who rated platforms as “Effective,” the large majority (over 80%) also reported High or Very High improvement. The directional



relationship is clear: perceptions of digital platform effectiveness are positively correlated with overall satisfaction. H_1 is supported.

5.2 H_2 : Convenience as the Primary Driver of Digital Retail Adoption

The survey reveals that while convenience is highly valued (84.7% rated it Important or Very Important), it does not rank as the single most important factor — it is surpassed by payment options (93.2%) and fast delivery (91.5%). This finding partially challenges H_2 : convenience is a critical driver, but it operates alongside — and in some cases behind — payment infrastructure and delivery speed. H_2 is partially supported: convenience is among the top drivers but is not unambiguously “the most important.”

5.3 H_3 : Data Privacy Concerns and Online Shopping Behaviour

With 57.6% of respondents experiencing privacy concerns “Frequently” or “Very Frequently,” it is clear that data security is a live issue for a majority of digital shoppers. Cross-tabulating this with shopping frequency reveals an interesting picture: several respondents who experience frequent privacy concerns also shop frequently online, illustrating the privacy paradox. Nevertheless, the data supports H_3 — privacy concerns do affect the shopping experience, even if they do not always suppress purchase behavior.

5.4 H_4 : Payment Options and Digital Retail Preference

Payment options are rated “Important” or “Very Important” by 93.2% of respondents — the highest of any single factor tested. Among respondents with “Very High” or “High” digital retail preference, the vast majority also rated payment options as “Very Important.” This suggests a meaningful association between payment infrastructure satisfaction and digital retail preference. H_4 is supported.

VI. DISCUSSION

The findings of this study paint a coherent and revealing picture of the digital retail consumer in 2024. What emerges is a consumer who is broadly enthusiastic about digital retail, deeply invested in the quality of the transactional experience, and increasingly attentive to the ethical dimensions of data handling.

Perhaps the most important insight from the data is the centrality of friction lessness. Payment options, delivery speed, and convenience — the three most highly rated factors — all speak to the same underlying desire: a retail experience that removes barriers between intent and purchase. The digital consumer is not primarily motivated by novelty or technology for its own sake; they are motivated by outcomes. When digital retail delivers those outcomes faster, more cheaply, and more conveniently than traditional retail, adoption follows naturally.

The privacy findings deserve particular attention. The fact that 57.6% of respondents experience privacy concerns frequently or very frequently, yet continue to shop online, should not be read as consumer indifference to data security. Rather, it reflects a structural imbalance: consumers often feel they have little choice but to engage with platforms that collect their data, either because no privacy-respecting alternatives exist at comparable price points, or because the convenience advantage is so significant that it overrides privacy preferences. This is fertile ground for regulatory intervention — and also an opportunity for retailers willing to differentiate on trust.

The moderate digital preference finding (32.2% expressing only moderate preference for digital over traditional retail) is a useful corrective to digital exceptionalism. Not everything that can be digitized should be digitized. For categories where sensory experience, personal service, or immediate possession are paramount, physical retail retains a genuine and enduring advantage. The most successful retailers of the next decade will likely be those who understand where digital genuinely adds value and where the physical experience is irreplaceable — and who design seamlessly across both.



VII. RECOMMENDATIONS

Based on the findings, the following recommendations are offered to retailers, platform developers, and policymakers:

7.1 For Retailers and E-Commerce Platforms

Invest relentlessly in payment infrastructure. The single most important factor in the digital purchase decision is the availability and ease of payment options. Retailers should ensure they support all major digital payment methods (UPI, credit/debit cards, digital wallets, BNPL) and design checkout flows that minimize friction.

Treat delivery speed as a competitive battleground. With 91.5% of respondents rating fast delivery as Important or Very Important, delivery infrastructure is not a cost center but a revenue driver. Investments in last-mile logistics, regional warehousing, and real-time tracking translate directly into consumer satisfaction and repeat purchase rates.

Build trust through transparency. Given the high frequency of data privacy concerns, retailers should consider proactive communication about data handling practices — plain-language privacy policies, opt-in data sharing, and visible security certifications. Trust, once established, is one of the most durable competitive advantages in digital retail.

Design for occasional shoppers. Over 52% of respondents shop “sometimes” — a segment that represents both a current revenue contributor and a significant growth opportunity. Personalized re-engagement campaigns, easy account recovery, and frictionless repeat purchase flows can convert occasional shoppers into frequent ones.

7.2 For Technology and Product Teams

Prioritize mobile UX. Given the overwhelmingly young, smartphone-centric demographic, mobile user experience is not a secondary concern — it is the primary interface of digital retail. Speed, intuitive navigation, and lightweight app design are table stakes.

Address usability friction. The survey reveals that a meaningful proportion of consumers occasionally face difficulty using digital retail platforms. User testing, accessibility audits, and continuous UX improvement programmes should be treated as ongoing investments rather than one-time projects.

7.3 For Policymakers

Strengthen data protection frameworks. The high prevalence of privacy concerns among digital shoppers underscores the need for robust, enforceable data protection regulation. India’s Digital Personal Data Protection Act (2023) is a step in the right direction, but effective consumer protection will require strong enforcement, accessible grievance mechanisms, and digital literacy programmes.

Support digital payment inclusion. The positive consumer response to payment options reflects the success of UPI and related infrastructure. Continued public investment in interoperable payment systems benefits both consumers and the retail ecosystem.

VIII. CONCLUSION

Digital transformation has not simply changed how people shop — it has changed what people expect. The consumer who interacts with a digital retail platform today brings a set of demands — for speed, simplicity, competitive pricing, and trustworthy data handling — that would have been considered aspirational a decade ago and are now considered baseline.

This study has shown that, among a sample of 59 respondents drawn primarily from India’s young, digitally engaged demographic, digital transformation is broadly perceived as having significantly improved the shopping experience. Payment infrastructure, delivery speed, and platform effectiveness are the most highly valued dimensions of the digital retail experience. Price comparison behavior is near-universal. Data privacy concerns are widespread but have not suppressed digital shopping engagement, illustrating the persistent privacy paradox.

The findings also caution against the assumption that digital retail will simply displace physical retail. A substantial proportion of respondents maintain a moderate rather than strong preference for digital shopping, suggesting that the future of retail is likely omnichannel rather than exclusively digital.



For retailers, the implications are clear: the consumer of 2025 and beyond rewards speed, simplicity, and trust above all else. Building competitive advantage in digital retail means not just adopting technology, but deploying it in ways that genuinely make the consumer's life easier, safer, and more satisfying. That is the promise of digital transformation — and the data from this study suggests that, for many consumers, that promise is already being meaningfully fulfilled.

REFERENCES

- [1]. Acquisti, A., & Grossklags, J. (2005). Privacy and rationality in individual decision making. *IEEE Security & Privacy*, 3(1), 26–33.
- [2]. Brynjolfsson, E., & Smith, M. D. (2000). Frictionless commerce? A comparison of Internet and conventional retailers. *Management Science*, 46(4), 563–585.
- [3]. Dahlberg, T., Guo, J., & Ondrus, J. (2015). A critical review of mobile payment research. *Electronic Commerce Research and Applications*, 14(5), 265–284.
- [4]. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- [5]. Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce. *Decision Support Systems*, 44(2), 544–564.
- [6]. Kotler, P., Kartajaya, H., & Setiawan, I. (2017). *Marketing 4.0: Moving from Traditional to Digital*. Wiley.
- [7]. Martin, K. D., Borah, A., & Palmatier, R. W. (2017). Data privacy: Effects on customer and firm performance. *Journal of Marketing*, 81(1), 36–58.
- [8]. Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134.
- [9]. Rao, S., Griffis, S. E., & Goldsby, T. J. (2011). Failure to deliver? Linking online order fulfillment glitches with future purchase behavior. *Journal of Operations Management*, 29(7–8), 692–703.
- [10]. Venkatesh, V., & Morris, M. G. (2000). Why don't men ever stop to ask for directions? *MIS Quarterly*, 24(1), 115–139.
- [11]. Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omni-channel retailing. *Journal of Retailing*, 91(2), 174–181.
- [12]. Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading Digital: Turning Technology into Business Transformation*. Harvard Business Review Press.
- [13]. Xu, H., Luo, X. R., Carroll, J. M., & Rosson, M. B. (2012). The personalization privacy paradox: An exploratory study of decision-making process for location-aware marketing. *Decision Support Systems*, 51(1), 42–52.

