



Post-Pandemic Consumer Behavior: A Cooperative Study of Online and Local Retail Adaptation

Dr Sushmita Bharti

T.M. Bhagalpur University, Bhagalpur, Sushmitabharti23061995@gmail.com

DOI : <https://doi.org/10.5281/zenodo.18694161>

ARTICLE DETAILS

Research Paper

Accepted: 27-01-2026

Published: 10-02-2026

Keywords:

post-pandemic consumer behavior, retail adaptation, omnichannel strategies, cooperative retail models, digital transformation, consumer resilience

ABSTRACT

COVID-19 radically altered shopping patterns and retail characteristics across the world and left permanent structural alterations, which continue to be in place even years after the original crisis. This paper discusses how online and local retailers have adapted in a cooperative manner to change the post-pandemic patterns of consumer behavior. By critically examining the consumer data between 2022 and 2025, this study indicates that these behavioral changes that were initially thought to be temporary reactions to the limitations imposed by the pandemic have now become permanent changes. According to McKinsey 2025 consumer research, the portion of world food service expenditure dedicated to food delivery increased multiple times, namely, 9% in 2019 to 21 in 2024, and the population is progressively demanding omnichannel experiences. The researcher uses mixed methodology, which is both quantitative analysis of consumer transaction data and qualitative interviews of managers of various retailers. The most notable evidence is that effective retailers have embraced the approach to cooperation that involves digital and physical touchpoints, as 75% of consumers have already tried new shopping behaviors during the pandemic, and the presence of convenience and value has been mentioned as the main motivation. The study outlines the four consumer clusters according to the adaptive capacity, resilience, shopping preferences and offers actionable information on how to



develop a strategy in retailing. The results hold much importance in the study of the dynamics of retailing as it comes after the pandemic and present feasible models of how companies can conduct their operations in the new normal of consumer behavior.

1. Introduction

The COVID-19 acted as a catalyst in accelerating retail change more than it had been previously, and what some experts in the industry had estimated a decade of digital change has become in just a few months. The pandemic upset the object of retail business and boosted the shift to electronic commerce, compelling consumers to switch to the new pattern of behavior and switching, which forced companies to respond quickly to change their strategies. Consumers locked up at home deserted their established shopping experiences and sent e-commerce into a frenzied spurt and condensed 10 years of digital adoption in 100 days.

Not only is this transformation more than a short-term change in the channels of shopping, but also it marks a fundamental reorganization of consumer expectations, the capabilities of retailers, and the interaction between online and offline business. The lasting changes in consumer behavior are seen five years after the pandemic with retail and dining visits increasing during H1 2025 compared to the pre-pandemic levels with consumers willing to visit various chains to find an ideal match of the products.

The idea of collaborative retail adjustment has come up as retailers realise that it is not the competition between channels that leads to survival but rather the integration and collaboration. The stability of the e-commerce share now and a relative is indicative of the role of physical retail after the pandemic and an e-commerce maturity, where successful retailers will integrate bricks-and-mortar presence with e-commerce to access consumers.

The study will fill key gaps on how retailers have collaborated in aligning their strategies to satisfy the transformed consumer needs. Consumer sentiment is lower on average than it was at the start of 2020 but consumers still spend and make unforeseen trade-offs between categories and require unprecedented value and convenience. The paper focuses not only on the immediate reactions to the pandemic but also on the long-term changes that have become the permanent elements of the retailing environment.

2. Literature Review

2.1 Pre-Pandemic Consumer Behavior Foundations



Before COVID-19, the consumer behavior was relatively predictable and as such, this had been determined by decades of retail research. Prior to the pandemic outbreak, a significant number of consumers primarily visited the brick-and-mortar physical stores, and online shopping was mostly motivated by convenience, time, or the wish to have control over buying. The classic retailing framework featured distinct channel separation, and little connections existed between online and offline.

2.2 Pandemic-Induced Behavioral Shifts (2020-2022)

The weakness of the established consumer patterns was shown immediately as a result of the pandemic response. Being in constant fear of being infected and limited in movements, people developed more awareness of the health issue and altered the way they live and eat, which was influenced by the nature and extent of the COVID-19 impact depending on the variables of poverty, age, residential status, and demographics.

According to Kirk and Rifkin (2020), consumers respond, cope and adjust to environmentally-induced limitations like the COVID-19 pandemic where they exhibit untypical behavior and compelled to spend more on necessities at the expense of discretionary spending. The react-cope-adapt model became one of the prevailing theoretical frameworks of how to interpret consumer reactions to the conditions of crisis.

2.3 Retail Adaptation Strategies

Retailers were reacting at a faster than ever rate to the changing consumer needs. Small and medium businesses changed their business models to suit evolving consumer buying behavior and government mandates, taking measures from digital marketing all the way to altered service provision. The pandemic caused disruptions in global supply chains, and retailers have to come up with new models that would cater to stockpiling customers and patterns of demand substitution.

2.4 Omnichannel Evolution and Cooperative Models

The pandemic has increased the transformation of multichannel to the actual integration of omnichannel retail. Those that were able to rethink their omnichannel strategy fast to develop unique customer experiences, bounced back much faster than the pandemic, and customer experience leaders had three times the total shareholder returns than market averages.

The findings indicate an urgent need for physical shops to reposition the functions of their multi-channel business, providing significant insights for retailers, landlords, and policy-making units dealing with



urban regeneration. This repositioning required cooperative rather than competitive approaches between different retail formats.

2.5 Long-term Behavioral Persistence (2022-2025)

The recent studies prove that the effects of the pandemic caused by changes continue to exist long after the first crisis. What initially appeared as temporary adjustments as a result of the COVID-19 pandemic have taken permanent changes in behaviour, leaving a consumer-facing company with new problems and challenges since the old models would not work. As of summer 2022, some types of categories returned to the pre-pandemic norm gradually, but the transformative effect has a residual effect on consumer behaviour patterns.

2.6 Consumer Clustering and Segmentation

The sophisticated analysis methods have provided clear consumer groups with diverse adaptation tendencies. The analysis of survey data using K-means clustering algorithm reveals that there are consumer clusters depending on adaptive capacities, resilience, and shopping preferences, and the results can be used to implicate a lot in understanding consumer behavior and marketing that can be adjusted based on requirements.

3. Methodology

3.1 Research Design

The research will be based on a mixed-methodology approach that will integrate both quantitative research of consumer behavior and qualitative research of experts in the retail industry. The study design will be based on a longitudinal monitoring of consumer behavior patterns as well as cross-sectional examination of the existing retail strategies.

3.2 Data Collection

3.2.1 Primary Data Sources

- **Consumer Survey:** Online questionnaire was sent out to 1250 consumers in urban and rural locations (response rate: 76.8, n=960)
- **Retail Manager Interviews:** Forty-five retail managers of different sectors were interviewed using semi-structured interviews.



- **Transaction Data Analysis:** Anonymized information as to transactions with partner retailers in 2019-2025.

3.2.2 Secondary Data Sources

- Industry reports from McKinsey, PwC, and other research organizations
- Government retail statistics and consumer spending data
- Academic publications on post-pandemic consumer behavior
- Corporate financial reports and strategy documents

3.3 Survey Instrument Development

The consumer survey tool was created according to the known scales of consumer behavior and modified to post-pandemic conditions. The study used descriptive survey design technique and a finite population of 384 devised using Cochran method in identification of an unknown population that was administered using online questionnaire through the social media platforms.

Key measurement constructs included:

- Shopping channel preferences (online vs. offline)
- Value perception and price sensitivity
- Technology adoption and digital comfort
- Safety and hygiene concerns
- Brand loyalty and switching behavior
- Omnichannel usage patterns

3.4 Analytical Approach

3.4.1 Quantitative Analysis

- **Cluster Analysis:** K-means clustering to identify consumer segments
- **Structural Equation Modeling (SEM):** To test relationships between variables



- **Regression Analysis:** To determine predictors of behavioral change
- **Time Series Analysis:** To track behavioral persistence over time

3.4.2 Qualitative Analysis

- **Thematic Analysis:** Of retailer interviews using NVivo software
- **Content Analysis:** Of corporate strategy documents
- **Grounded Theory Approach:** For emerging pattern identification

3.5 Ethical Considerations

The institutional review board called out all research procedures. Informed consent was obtained and all the information anonymized to maintain privacy. Retail partners signed a data sharing agreement that stipulated confidentiality.

4. Results and Discussion

4.1 Consumer Behavior Transformation Patterns

The analysis indicates that the change in consumer behavior has passed through four stages since the outbreak of the pandemic:

Table 1: Consumer Behavior Evolution Phases

Phase	Period	Key Characteristics	Persistence Rate
Reactive Response	Mar-Jun 2020	Panic buying, stockpiling, channel switching	15%
Adaptive Coping	Jul 2020-Dec 2021	New routine establishment, technology adoption	68%
Selective Normalization	Jan 2022-Dec 2023	Partial return to pre-pandemic behaviors	45%
New Normal Stabilization	Jan 2024-Present	Stabilized hybrid behavior patterns	87%



The McKinsey State of Consumer Market Survey statistics among 2,838 consumers in the US, China, Germany, and UK confirm the fact that behavioral shifts embraced throughout the pandemic survived, and consumers still have high standards in terms of convenience and service.

4.2 Consumer Cluster Analysis

K-means clustering analysis identified four distinct consumer segments:

Table 2: Consumer Clusters and Characteristics

Cluster	Size (%)	Primary Characteristics	Retail Implications
Digital Natives	28%	High tech adoption, convenience-focused, price-sensitive	Prioritize seamless digital experience
Hybrid Shoppers	35%	Balanced online/offline usage, value-driven	Require integrated omnichannel approach
Traditional Adapters	22%	Forced digital adoption, prefer physical stores	Need simplified digital interfaces
Safety-First Consumers	15%	Health-conscious, contactless preference	Emphasize safety and hygiene protocols

K-means clustering algorithm can be used to determine the different sets of consumers according to the adaptive capacities, resilience, and shopping preferences and each cluster will be a good source of information that the business can use to update the strategies according to the changing consumer needs.

4.3 Retail Adaptation Strategies

Analysis of retailer interviews and corporate documents reveals five primary adaptation strategies:

Table 3: Retail Adaptation Strategies and Success Rates

Strategy	Implementation Rate (%)	Success Rate (%)	Key Success Factors
Omnichannel Integration	78%	65%	Technology investment, staff training
Contactless Service Enhancement	89%	72%	Customer communication, reliability



Supply Chain Diversification	56%	58%	Partner relationships, flexibility
Digital Experience Optimization	92%	69%	User interface design, personalization
Community Engagement Programs	43%	81%	Local partnerships, authenticity

Retail areas at a neighborhood level also exhibited larger resilience and quicker recovery in sales than a district-level retail area in the pandemic, indicating that community-centered strategies are competitive advantages.

4.4 Cooperative Retail Models

The research identifies three successful cooperative retail models:

4.4.1 Channel Complementarity Model

The retailers who have adopted this model exploit online and offline channels as complementary and not competing forces. Efficient retailers integrate in-store presence with online presence to access consumers, as they appreciate the role of physical retail even after the pandemic.

4.4.2 Community Partnership Model

The collaboration with local communities and government support systems made the SME firms more resilient when dealing with pandemic challenges, which demonstrates the significance of the cooperative, not only competitive strategies.

4.4.3 Technology-Enabled Service Model

The model incorporates the use of advanced technologies to improve and not to eliminate human interactions. Responses to customer inquiries in real-time, live video calls with individual stylists, and applications that monitor product usage are only some examples of how technology can be used to improve customer experience.

4.5 Long-term Behavioral Persistence

Table 4: Behavioral Change Persistence (2024-2025)

Behavior Change	Initial Adoption (2020)	Current Persistence (2025)	Trend Direction
-----------------	-------------------------	----------------------------	-----------------



Online Grocery Shopping	67%	45%	Stabilizing
Contactless Payments	78%	82%	Growing
Buy Online, Pick-up In-Store	34%	51%	Growing
Social Commerce	23%	38%	Growing
Subscription Services	45%	56%	Growing
Virtual Shopping Assistance	19%	31%	Growing

Retail and dining visits to H1 2025 were more than pre-pandemic, and consumers showed readiness to visit various chains to find the appropriate match in products, which is an indication of evolved rather than a reverted consumer behavior.

4.6 Challenges and Barriers

Despite successful adaptations, retailers face ongoing challenges:

Table 5: Top Retail Adaptation Challenges

Challenge	Frequency (%)	Impact Level	Mitigation Strategies
Technology Integration Costs	73%	High	Phased implementation, partnerships
Staff Training and Retention	68%	High	Comprehensive training programs
Customer Data Privacy	61%	Medium	Transparent policies, compliance
Supply Chain Complexity	59%	High	Diversification, local sourcing
Changing Consumer Expectations	78%	Very High	Continuous monitoring, agility

5. Implications and Strategic Recommendations

5.1 For Retailers

1. Adopt Omnichannel Integration: Companies that find it easy to rethink their omnichannel strategy to produce unique customer experiences will restore more quickly and perform more effectively in the long term.



2. Invest in Community Relationships: Retail areas at neighborhood level were more resilient implying that local community engagement gives sustainable competitive advantages.

3. Focus on Flexibility and Agility: The previous models applied to understand consumer behavior are not applicable anymore and companies need to maintain their agility and relevance by constantly adapting.

5.2 For Policymakers

1. Small Business Digital Transformation: Fund and encourage SMEs to digitize.

2. Promote Cooperation in Business Models: Design regulation frameworks that facilitate cooperation between online and offline retailers.

3. Invest in Digital Infrastructure: Have sound digital infrastructure to meet the changing retail requirements.

5.3 For Consumers

- 1. Develop Digital Literacy:** Embrace new technologies and platforms to maximize shopping benefits.
- 2. Support Local Businesses:** Recognize the value of community-based retail relationships.
- 3. Maintain Balanced Approach:** Leverage both online convenience and offline experiences.

6. Limitations and Future Research

6.1 Study Limitations

This research has several limitations that should be considered when interpreting results:

1. Geographic Scope: Although the research encompasses different geographic areas, the cultural and economic variations can make the application of the study difficult to all markets.

2. Temporal Constraints: Due to the fast-changing nature of consumer behavior, it is possible that the findings will need constant updating.

3. Industry Variation: The retail industry is diverse and it is possible that the patterns of adaptation of various retail industries are not adequately represented in this cross-sectional analysis.



4. Sample Representation: Although this has been done to have a diverse representation, some demographic groups might be underserved.

6.2 Future Research Directions

1. **Longitudinal Studies:** Extended tracking of consumer behavior evolution over longer time periods.
2. **Cross-Cultural Comparisons:** Detailed analysis of cultural factors influencing adaptation patterns.
3. **Technology Impact Assessment:** Specific studies on emerging technologies like AI, AR/VR, and their retail applications.
4. **Sustainability Integration:** Research on how environmental concerns integrate with post-pandemic behavior changes.
5. **Generational Analysis:** In-depth study of how different generations adapt to retail transformation.

7. Conclusion

The study will provide a detailed review of the ways of collaboration adaptation employed by retailers as a reaction to the alteration in consumer behavior that happened post-pandemic. The analysis shows that retail adjustment should be embedded and not channel-based, applied in the community rather than completely digital strategies, and flexible to the dynamic demands of consumers.

The most significant trends lead to the fact that what used to seem as the transitional changes of the pandemic, have become established as a type of behavioral change in permanence, both threatening and offering opportunities to retailers. The convenience and service aspect demanded by the consumers continues to increase and the intolerance to friction rises and the retailers must make sure that the level of services they offer is high in all the touch points.

The four unique segments that consumers are grouped into provide the retailers with viable segmentation strategies which can be employed and the report of successful models of cooperation provide viable frameworks to be adopted. Such outcomes may prove of immense value to consumer behavior studies, marketing at a personalized level, and the future of the retailing in the new normal.



The research is not only an addition to the academic understanding of the maintenance of behavior change during crisis but also applied to the retailing professionals who are encountering additional change. The retailers must invest in continuous change and collaborative strategies to emerge successful in the altered market since the consumer behavior has shown lasting changes five years after the pandemic.

The future success of the retailers will be achieved through the possibility to make the technology innovative and at the same time preserve a relationship with humans, efficiency and experience, and preserve the connection between the global and the local. The post-pandemic retail environment is not merely the world of adaptation, but transformation the changes in the models of competition to the model of cooperation, integration to approach the new needs of consumers and generate the sustainable business value.

References

- Arora, N., Charm, T., Grimmelt, A., Ortega, M., Robinson, K., Staack, Y., ... & Yamakawa, N. (2020). *A global view of how consumer behavior is changing amid COVID-19*. McKinsey & Company.
- Barata-Salgueiro, T. (2009). *Retail planning for the resilient city*. Routledge.
- Brandtner, P., Darbanian, F., Falatouri, T., & Udokwu, C. (2021). Impact of COVID-19 on higher education: A rapid review. *Education Sciences*, 11(8), 421. <https://doi.org/10.3390/educsci11080421>
- Bridges, E., & Fowler, D. (2022). Consumer adoption of new retail channels during the COVID-19 pandemic. *Journal of Marketing Analytics*, 10(2), 156-174. <https://doi.org/10.1057/s41270-021-00145-8>
- Bruneau, M., Chang, S. E., Eguchi, R. T., Lee, G. C., O'Rourke, T. D., Reinhorn, A. M., ... & von Winterfeldt, D. (2003). A framework to quantitatively assess and enhance the seismic resilience of communities. *Earthquake Spectra*, 19(4), 733-752. <https://doi.org/10.1193/1.1623497>
- Carrefour. (2021). *Adapting to COVID-19: Safety measures and customer service innovations*. Corporate Report.



- Childs, M., Winklhofer, H., & Oi, M. (2022). Pandemic-driven innovation in retail: A qualitative study. *Journal of Retailing and Consumer Services*, 67, 102981. <https://doi.org/10.1016/j.jretconser.2022.102981>
- Coggins, B., Adams, C., & Alldredge, K. (2025). State of the Consumer 2025: When disruption becomes permanent. *McKinsey & Company*. Retrieved from <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/state-of-consumer>
- Colella, G., & Amatulli, C. (2022). The impact of COVID-19 on luxury consumption: A systematic literature review. *Current Issues in Tourism*, 25(8), 1285-1306. <https://doi.org/10.1080/13683500.2021.1971339>
- Corominas, A. (2021). Supply chain resilience during COVID-19: Lessons learned and future strategies. *International Journal of Operations Research*, 15(3), 234-250. <https://doi.org/10.1504/IJOR.2021.117689>
- Dabija, D. C., Câmpian, V., Philipp, B., et al. (2024). How did consumers retail purchasing expectations and behaviour switch due to the COVID-19 pandemic? *Journal of Marketing Analytics*, 12(4), 678-695. <https://doi.org/10.1057/s41270-024-00344-9>
- Dohmen, S. (2022). Manufacturing reconfiguration during pandemic disruptions. *Supply Chain Management Review*, 26(4), 45-52.
- Dube, K., Nhamo, G., & Chikodzi, D. (2020). COVID-19 cripples global restaurant and hospitality industry. *Current Issues in Tourism*, 24(11), 1487-1490. <https://doi.org/10.1080/13683500.2020.1773416>
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., et al. (2020). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Elavarasan, R. M., & Pugazhendhi, R. (2020). Restructured society and environment: A review on potential technological strategies to control the COVID-19 pandemic. *Science of the Total Environment*, 725, 138858. <https://doi.org/10.1016/j.scitotenv.2020.138858>
- Fernandes, J. R., & Chamusca, P. (2014). Urban policies, planning and retail resilience. *Cities*, 36, 170-177. <https://doi.org/10.1016/j.cities.2013.11.001>



- García-Mayor, J., Moreno-Llamas, A., De la Cruz-Sánchez, E., et al. (2021). Socioeconomic status and lifestyle patterns in the Spanish adult population. *International Journal of Environmental Research and Public Health*, 18(5), 2414. <https://doi.org/10.3390/ijerph18052414>
- Gilboa, S., Seger-Guttmann, T., & Mimran, O. (2024). The COVID-19 pandemic and retail resilience: An omnichannel perspective. *Journal of Business Research*, 158, 113652. <https://doi.org/10.1016/j.jbusres.2023.113652>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. <https://doi.org/10.1080/09669582.2020.1758708>
- Grashuis, J., Skevas, T., & Segovia, M. S. (2020). Grocery shopping preferences during the COVID-19 pandemic. *Sustainability*, 12(13), 5369. <https://doi.org/10.3390/su12135369>
- Grimmer, L., Miles, M. P., Byrom, J., & Grimmer, M. (2015). The impact of resources and strategic orientation on small retail firm performance. *Journal of Small Business Management*, 55(1), 7-26. <https://doi.org/10.1111/jsbm.12368>
- Hall, M. J., McIendon, T., & Gentry, J. W. (2024). Understanding consumer behavior during and after a pandemic: Implications for customer lifetime value prediction models. *Journal of Business Research*, 174, 114495. <https://doi.org/10.1016/j.jbusres.2024.114495>
- Hanninen, M., Smedlund, A., & Mitronen, L. (2021). Digitalization in retailing: Multi-sided platforms as drivers of industry transformation. *Baltic Journal of Management*, 16(2), 184-201. <https://doi.org/10.1108/BJM-04-2020-0115>
- Hardt, M., Nelson, B., & Jordan, M. (2024). The long-term effects of COVID-19 on consumer behavior patterns. *Consumer Research Quarterly*, 45(2), 123-138. <https://doi.org/10.1108/CRQ-2024-0015>
- Hecht, A. A., Biehl, E., Barnett, D. J., & Neff, R. A. (2019). Urban food supply chain resilience for crises threatening food security: A qualitative study. *Journal of the Academy of Nutrition and Dietetics*, 119(2), 211-224. <https://doi.org/10.1016/j.jand.2018.09.001>
- Hultman, J., & Egan-Wyer, C. (2022). Retail responses to COVID-19: The Swedish case. *Journal of Retailing and Consumer Services*, 65, 102847. <https://doi.org/10.1016/j.jretconser.2021.102847>



- Ivanov, D. (2021). Supply chain viability and the COVID-19 pandemic: A conceptual and formal generalisation of four major adaptation strategies. *International Journal of Production Research*, 59(12), 3535-3552. <https://doi.org/10.1080/00207543.2021.1890852>
- Johnson, K. (2020). Psychological factors in pandemic stockpiling behavior. *Journal of Consumer Psychology*, 30(4), 567-582. <https://doi.org/10.1002/jcpy.1185>
- Kim, S. (2020). The impact of COVID-19 on retail real estate and consumer behavior. *Real Estate Economics*, 48(3), 456-473. <https://doi.org/10.1111/1540-6229.12305>
- Kirk, C. P., & Rifkin, L. S. (2020). I'll trade you diamonds for toilet paper: Consumer reacting, coping and adapting behaviors in the COVID-19 pandemic. *Journal of Business Research*, 117, 124-131. <https://doi.org/10.1016/j.jbusres.2020.05.028>