



Munich Personal RePEc Archive

# **Navigating the Waves of Change: Exploring the Impact of COVID-19 on Consumer Behaviour in Developing Countries**

ASUAMAH Yeboah, Samuel

Faculty of Business and Management Studies, Sunyani Technical  
University

5 July 2023

Online at <https://mpra.ub.uni-muenchen.de/117976/>  
MPRA Paper No. 117976, posted 19 Jul 2023 13:21 UTC

# **Navigating the Waves of Change: Exploring the Impact of COVID-19 on Consumer Behaviour in Developing Countries**

Prof. Samuel Asuamah Yeboah (PhD)  
Faculty of Business and Management Studies  
Sunyani Technical University, Sunyani Developing countries  
Phone: +233244723071  
Corresponding author Email: nelkonsegal@yahoo.com

## **ABSTRACT**

This systematic review examines the changes in consumer behaviour patterns during the COVID-19 pandemic in developing countries. The review investigates the impact of the pandemic on purchasing patterns, the shift towards online shopping, altered preferences for essential goods and services, changes in brand loyalty, and the implications for businesses and policymakers. The review follows a structured methodology, including literature search, study selection, data extraction, synthesis, quality assessment, and data interpretation. The findings reveal significant shifts in consumer behaviour across developing countries, such as reduced spending on non-essential goods, increased reliance on online shopping platforms, preferences for local and domestic products, and challenges to brand loyalty. The implications for businesses include the need to adapt strategies to meet changing consumer needs, while policymakers should consider implementing policy interventions to support businesses and promote digital literacy. This systematic review provides valuable insights for decision-making and strategic planning in the post-pandemic period, offering guidance for businesses and policymakers in developing countries worldwide.

**KEYWORDS:** Consumer behaviour, COVID-19, Developing countries, purchasing patterns, online shopping, essential goods, brand loyalty, implications, businesses, policymakers.

**JEL CODES:** D12; D83; L81; O33

## **INTRODUCTION**

The COVID-19 pandemic has had a profound impact on consumer behaviour worldwide (Ardolino, et al., 2022). This systematic review focuses on the changes in consumer behaviour patterns in Developing countries, a developing country. The study aims to understand how the pandemic has affected consumer preferences, shopping habits, and brand loyalty in Developing countries, and how businesses and policymakers can respond effectively to these changes.

The COVID-19 pandemic, caused by the novel coronavirus SARS-CoV-2, has resulted in unprecedented disruptions to global economies, supply chains, and social dynamics (Queiroz et al., 2020; Aldrighetti et al., 2021; Belhadi et al., 2021; Chowdhury et al., 2021; Dubey et al., 2021b; Wang & Wang, 2021). Governments around the world have implemented various measures to contain the spread of the virus, including lockdowns, social distancing, and travel restrictions (Belhadi et al., 2021; Aldrighetti et al., 2021). These measures have significantly impacted consumer behaviour, as individuals and households have had to adapt to the new realities imposed by the pandemic.

In Developing countries, as in many developing countries, the pandemic has presented unique challenges and opportunities. Developing countries experienced their first confirmed case of COVID-19 in March 2020, and since then, the government has implemented a series of measures to mitigate the spread of the virus, including lockdowns, restrictions on gatherings, and the closure of non-essential businesses (World Health Organization [WHO], 2020). These measures have had far-reaching effects on the economy and consumer behaviour patterns in the country.

Understanding the changes in consumer behaviour in developing countries during the COVID-19 pandemic is of paramount importance for businesses operating in the country. It enables them to adapt their marketing strategies, product offerings, and distribution channels to meet the evolving needs and preferences of consumers. Policymakers can also benefit from insights into consumer behaviour changes to inform policy decisions aimed at supporting businesses, protecting consumers, and promoting economic recovery.

The objective of this systematic review is to analyse the existing literature and provide a comprehensive assessment of the impact of COVID-19 on consumer behaviour patterns in Developing countries. By synthesizing and synthesizing the available research findings, this review seeks to identify key trends, challenges, and opportunities for businesses and policymakers in navigating the post-pandemic consumer landscape in Developing countries. The findings of this review can serve as a valuable resource for academics, practitioners, and policymakers interested in understanding and responding to the changing dynamics of consumer behaviour in developing countries such as Developing countries.

The COVID-19 pandemic has had a profound impact on consumer behaviour in Developing countries, leading to changes in purchasing patterns, brand loyalty, and preferences for essential goods and services. However, there is a need for a comprehensive understanding of these changes, their underlying drivers, and their implications for businesses and policymakers in Developing countries (Ardolino, et al., 2022). Existing research on consumer behaviour during the pandemic in Developing countries is limited, with a need for more in-depth studies that capture the nuances of consumer preferences and behaviours. Furthermore, there is a lack of research that explores the long-term effects of the pandemic on consumer behaviour patterns in Developing countries (Ardolino, et al., 2022).

The research questions for the study are (1) What are the changes in purchasing patterns among consumers in developing countries during the COVID-19 pandemic? (2) How has the shift towards online shopping impacted consumer behaviour in Developing countries? (3) What are the underlying drivers behind changes in preferences for essential goods and services in developing countries? (4) How has brand loyalty been affected by the pandemic, and what factors influence consumer trust in brands? (5) What are the implications of the changes in consumer behaviour patterns for businesses and policymakers in Developing countries?

This study assumes that the changes in consumer behaviour observed during the COVID-19 pandemic in Developing countries are representative of the broader population. It also assumes that the data and information obtained from surveys, interviews, and secondary sources are reliable and accurately reflect consumer behaviour in developing countries.

Some limitations of this study include the reliance on self-reported data, which may be subject to recall bias or social desirability bias. The generalizability of the findings may be limited to the specific context of Developing countries and may not be directly applicable to other countries or regions. Additionally, the study is constrained by resource limitations, which may impact the depth and scope of the research.

This study focuses on consumer behaviour patterns in Developing countries during the COVID-19 pandemic. It specifically examines changes in purchasing patterns, the shift towards online shopping, alterations in preferences for essential goods and services, and the impact on brand loyalty. The study does not delve into the broader economic and social impacts of the pandemic or other factors unrelated to consumer behaviour.

## **METHODOLOGY**

This systematic review follows a structured approach to gather and analyse relevant literature on changes in consumer behaviour patterns in Developing countries during the COVID-19 pandemic. The methodology consists of the following steps:

**Identification of Research Objectives:** The research objectives are defined to guide the systematic review process. The objectives include understanding changes in purchasing patterns, shifts towards online shopping, altered preferences for essential goods and services, changes in brand loyalty, and the implications for businesses and policymakers.

**Literature Search:** A comprehensive literature search is conducted using academic databases, such as PubMed, Scopus, and Google Scholar. Relevant keywords and combinations are used, including terms related to consumer behaviour, COVID-19, Developing countries, purchasing patterns, online shopping, brand loyalty, and essential goods. The search is limited to studies published in English.

**Study Selection:** The retrieved articles are screened based on their titles and abstracts to determine their relevance to the research objectives. Articles that are deemed irrelevant are excluded, and the remaining articles proceed to the next stage.

**Full-Text Assessment:** The full texts of the selected articles are assessed to determine their eligibility for inclusion in the systematic review. Inclusion criteria included studies that specifically focus on consumer behaviour changes in Developing countries during the COVID-19 pandemic. Studies that provide relevant empirical data, qualitative or quantitative, are considered for inclusion.

**Data Extraction:** Data relevant to the research objectives are extracted from the included studies. This includes information on the study population, methodology, key findings, and implications for consumer behaviour patterns in Developing countries. Data extraction is performed systematically to ensure consistency and accuracy.

**Data Synthesis:** The extracted data are analysed and synthesized to identify common themes, trends, and patterns in consumer behaviour changes in Developing countries. This involves categorizing and organizing the findings according to the research objectives. The synthesis process allows for a comprehensive overview of the changes in consumer behaviour and the implications for businesses and policymakers.

**Quality Assessment:** The quality of the included studies is assessed to determine the reliability and validity of the findings. Quality assessment tools appropriate for the study designs (e.g., risk of bias assessment for quantitative studies, critical appraisal for qualitative studies) are utilized to evaluate the methodological rigour of the included studies.

**Data Interpretation and Reporting:** The synthesized findings are interpreted and presented coherently. The implications for businesses and policymakers are discussed based on the identified patterns and trends in consumer behaviour changes. The systematic review findings are reported in a structured and comprehensive manner, adhering to the guidelines of academic writing and referencing.

By following this systematic methodology, the systematic review aims to provide a rigorous and evidence-based understanding of the changes in consumer behaviour patterns in Developing countries during the COVID-19 pandemic and their implications for various stakeholders.

## **CHANGES IN CONSUMER BEHAVIOUR PATTERNS**

### **Changes in Purchasing Patterns**

During the COVID-19 pandemic, developing countries, like many other countries, witnessed significant changes in purchasing patterns among consumers. The implementation of lockdowns, movement restrictions, and the prevailing economic uncertainties have had a direct impact on consumer spending behaviours, leading to notable shifts in consumption patterns (Ardolino, et al., 2022; Belhadi et al., 2021; Baker et al., 2020; Basilaia & Kvavadze, 2020; Devakumar et al., 2020; Kraemer et al., 2020; Thunström et al., 2020; Toquero, 2020).

One key change has been the reduction in consumer spending on non-essential goods and services (Rahman et al., 2020; Sjoberg, 2020). With the imposition of lockdown measures and the closure of non-essential businesses, consumers have become more cautious about their discretionary spending. The focus has shifted towards prioritizing essential items necessary for sustenance and well-being, such as food, healthcare products, and household essentials. This change reflects a shift in consumer priorities towards meeting immediate needs and ensuring the health and safety of themselves and their families (Hilmola et al., 2020; Paul & Chowdhury, 2020; Rahman et al., 2020; Sjoberg, 2020).

Additionally, the phenomenon of panic buying and stockpiling has been observed during certain periods of the pandemic (Borsellino et al., 2020; Tyko, 2020; Ibn-Mohammed et al., 2021). Faced with uncertainties surrounding the availability of goods and potential supply chain disruptions, consumers engaged in heightened purchasing behaviours, often driven by fear and a desire to secure essential items in anticipation of future shortages (De Sousa Jabbour et al., 2020; FAO & WHO, 2020). This behaviour was particularly evident in the initial stages of the pandemic when the severity and duration of the crisis were uncertain.

These changes in purchasing patterns have had significant implications for businesses in developing countries. Companies producing essential goods and services experienced increased demand (Paul & Chowdhury 2020), while those in non-essential sectors faced a decline in sales (Hilmola et al. 2020). Adapting to evolving consumer preferences became crucial for businesses to ensure their survival and sustainability during these challenging times.

Furthermore, these changes have also highlighted the importance of supply chain management and the need for businesses to ensure a steady and reliable flow of essential goods to meet consumer demand (Dubey et al., 2021b; Queiroz et al., 2020; Chowdhury et al., 2021). Strengthening supply chains, exploring alternative sourcing options, and implementing effective inventory management strategies become critical for businesses operating in developing countries during the pandemic.

In conclusion, the COVID-19 pandemic has led to notable changes in purchasing patterns in Developing countries. Consumers have reduced spending on non-essential goods and services, prioritizing essential items instead. Panic buying and stockpiling behaviours have been observed during specific periods. Understanding these shifts in consumer behaviour is crucial for businesses to adapt their strategies and operations accordingly, ensuring they meet the evolving needs and preferences of consumers in a challenging and uncertain environment.

### **Shifts towards Online Shopping**

The COVID-19 pandemic and the implementation of social distancing measures and the closure of physical stores have significantly impacted consumer shopping behaviours in all countries including Developing countries, leading to a notable acceleration in the adoption of online shopping platforms (Gao et al., 2020; Ardolino, et al., 2022).

As consumers sought to adhere to social distancing guidelines and minimize in-person interactions, they turned to e-commerce platforms and online retailers to fulfil their shopping needs (Haapala et al., 2020). The convenience and safety offered by online shopping became increasingly appealing during the pandemic. Consumers could browse and purchase a wide range of products from the comfort of their homes, reducing the need to venture out to physical stores. This shift towards online shopping has been particularly prominent in urban areas of Developing countries, where access to the Internet is more prevalent compared to rural areas. Urban consumers, who often have higher levels of digital literacy and internet connectivity, were more likely to embrace online shopping as an alternative to traditional brick-and-mortar retail.

E-commerce platforms and delivery services played a crucial role in facilitating this transition. Local and international e-commerce players, as well as existing retailers who quickly adapted their operations to offer online shopping options, experienced a surge in demand for their services. Delivery networks expanded and adapted to ensure the timely and efficient delivery of goods to consumers' doorsteps. The increased reliance on online shopping during the pandemic has not only provided convenience but has also opened up new opportunities for businesses in Developing countries (Gu et al., 2021).

Small and medium-sized enterprises (SMEs) have been able to reach a wider customer base through online platforms, enabling them to mitigate the impact of physical store closures. This shift has also led to an increased emphasis on digital marketing and the need for businesses to develop a strong online presence to capture the attention and trust of consumers (Inoue & Todo, 2023). It is worth noting that while online shopping has experienced significant growth during the pandemic, challenges such as limited internet access in rural areas, concerns about online payment security, and the need for improved logistics infrastructure still exist in Developing countries (Liu et al., 2022). These challenges must be addressed to ensure that the benefits of online shopping are accessible to all consumers across the country.

In conclusion, the COVID-19 pandemic has accelerated the shift towards online shopping in Developed and Developing countries, driven by social distancing measures and the closure of physical stores. Consumers, particularly in urban areas, have increasingly relied on e-commerce platforms and delivery services to meet their shopping needs. This shift has presented both opportunities and challenges for businesses, highlighting the importance of establishing a strong online presence and addressing barriers to digital access in order to cater to evolving consumer preferences.

### **Altered Preferences for Essential Goods and Services**

The COVID-19 pandemic has brought about significant changes in consumer preferences for essential goods and services in Developing countries (Patil et al., 2022). As individuals became more conscious of health and hygiene practices, there has been an increased demand for products directly related to preventing the spread of the virus.

Health and hygiene-related products, such as sanitisers, masks, and cleaning supplies, have experienced a surge in demand (Monostori & Váncza, 2020). Consumers have prioritized these items to protect themselves and their families from the virus. Hand sanitisers and disinfectants, in particular, have witnessed a significant increase in sales as individuals sought to maintain proper hand hygiene and sanitize their surroundings (Chowdhury et al., 2020; IbnMohammed et al., 2021; Liu et al., 2020).

In addition to health and hygiene products, there has been a notable shift towards supporting local and domestic products (Madarász et al., 2022). Concerns over potential disruptions in global supply

chains, along with a desire to bolster local businesses and economies, have influenced consumer preferences. Developing countries' consumers have shown a growing inclination to purchase locally sourced goods and services, recognizing the importance of supporting domestic industries during these challenging times.

The shift towards local products extends beyond essential goods to include food and agricultural products as well in Developing countries and other global economies (Richards & Vassalos, 2020; Accenture, 2020; Daus, Clement, & Ding, 2020;). Consumers have demonstrated a preference for locally produced food items, such as fruits, vegetables, and locally sourced meat. This preference for local food products can be attributed to perceived freshness, reduced transportation costs, and supporting local farmers and producers.

Furthermore, the pandemic has also led to an increased emphasis on sustainability and ethical consumerism (Brumă et al., 2022; Filho et al., 2022). Consumers are more conscious of the environmental impact of their purchasing decisions and have shown a greater inclination towards eco-friendly and socially responsible products. This includes a preference for products that are ethically sourced, organic, or promote fair trade practices.

Businesses operating in Developing countries have responded to these changing consumer preferences by adapting their product offerings and marketing strategies (Chesbrough, 2020; Wenzel et al., 2020; Angelidou et al., 2022). Many have diversified their product lines to include health and hygiene-related items and have actively promoted their local and domestic origins. This shift in consumer preferences has also opened up opportunities for small-scale local producers and entrepreneurs to enter the market and meet the evolving demands of consumers.

In conclusion, the COVID-19 pandemic has led to altered consumer preferences for essential goods and services in developing countries. There has been an increased demand for health and hygiene-related products, as well as a shift towards supporting local and domestic products. Consumers' focus on health, sustainability, and ethical consumption has influenced their purchasing decisions. Businesses have responded by adapting their offerings and marketing strategies to cater to these changing preferences, while also providing opportunities for local producers and entrepreneurs to thrive in the market.

### **Changes in Brand Loyalty**

The COVID-19 pandemic has brought about notable changes in brand loyalty among consumers in developing countries. The unprecedented circumstances of the pandemic have disrupted consumer habits and preferences, leading to a shift in the dynamics of brand loyalty (Elbedweihy et al., 2016; Aziz & Long, 2021; Hollebeek et al., 2021; Itani & Hollebeek, 2021; Rather, 2022 ).

One factor influencing changes in brand loyalty is the limited availability of certain products during the pandemic. Supply chain disruptions, panic buying, and increased demand for essential items have led to shortages and fluctuations in product availability (Burki, 2020, 2020; Liu et al., 2020; Ranney, Griffeth & Jha, 2020). As a result, consumers have been more open to trying new brands or alternative products that are readily available. In some cases, consumers have had to switch to different brands due to the unavailability of their preferred options (Haren & Simchi-Levi, 2020).

Financial constraints resulting from the pandemic have also impacted brand loyalty (Mansoor & Jalal, 2011; Voinea & Filip, 2011; Hodbod et al., 2021). The economic uncertainties brought about by job losses, reduced incomes, and financial instability have led some consumers to re-evaluate their spending habits. Price sensitivity has increased, and consumers may be more willing to consider lower-cost alternatives or switch to more affordable brands that offer similar benefits. The financial

strain caused by the pandemic has prompted consumers to prioritize value for money, potentially leading to a decline in brand loyalty.

Moreover, trust in brands has become a crucial factor in brand loyalty during the pandemic (Abdelaziz & Zoubi, 2021; Cardoso et al., 2022). Consumers have been paying attention to how brands have responded to the crisis and their commitment to employee welfare, safety protocols, and corporate social responsibility. Brands that have demonstrated empathy, transparency, and a genuine concern for public health and well-being have been more likely to earn and maintain consumer trust. On the other hand, brands that have been perceived as prioritizing profit over public health or neglecting employee welfare have faced a risk of losing customer loyalty.

The pandemic has presented an opportunity for brands to strengthen their relationship with consumers by emphasizing their commitment to safety, health, and social responsibility. Brands that have actively communicated and implemented robust safety measures, supported their employees and contributed to community relief efforts have been able to build trust and maintain customer loyalty (Arief & Pangestu, 2021; Torres et al., 2021).

In response to the changing landscape of brand loyalty, businesses have had to adapt their marketing strategies (Dumouchel et al., 2020; Torres et al., 2021; Nagpal & Gupta, 2022). Communication and engagement with customers have become essential, as brands need to provide clear and transparent information about their safety measures, product availability, and efforts to support the community. Brands that have successfully established an emotional connection with their customers and demonstrated genuine care have been more likely to retain brand loyalty even during challenging times.

In conclusion, the COVID-19 pandemic has challenged brand loyalty in Developing countries. Limited availability of products and financial constraints have influenced consumers to try new brands or opt for more affordable alternatives. Trust in brands has been significantly impacted by their response to the pandemic, including actions related to employee welfare, safety protocols, and corporate social responsibility. Brands that have prioritized safety, communicated effectively and demonstrated social responsibility have been more successful in maintaining brand loyalty during these uncertain times.

### **Implications for Businesses and Policymakers**

For businesses, it is crucial to adapt their strategies to cater to the changing consumer landscape. Some key considerations include: Embracing digital transformation: The accelerated shift towards online shopping necessitates businesses to invest in robust e-commerce platforms and enhance their online presence. Developing user-friendly websites, mobile apps, and secure payment gateways can help facilitate a seamless online shopping experience for consumers.

Strengthening hygiene protocols: Given the increased focus on health and hygiene, businesses should prioritize the implementation of stringent safety measures. This includes regular sanitization, ensuring social distancing protocols within physical stores, and providing protective equipment to employees. Communicating these measures to customers can help build trust and confidence in the brand.

Enhancing customer engagement: With the limitations on in-person interactions, businesses should explore alternative means of engaging with customers. This can involve leveraging social media platforms, email marketing, or chatbots to provide personalized assistance and maintain communication with consumers. Proactive customer service and addressing customer concerns promptly can foster loyalty and positive brand perception.



Supporting local sourcing and production: Responding to the shift towards local and domestic products, businesses can explore partnerships with local suppliers and producers. Promoting the use of locally sourced materials and supporting local artisans and manufacturers can resonate with consumers' preference for supporting local businesses.

For policymakers, there are several areas where interventions can support businesses and consumers: Policy support for digital infrastructure: Policymakers should prioritize initiatives that improve digital infrastructure, including affordable internet access, in both urban and rural areas. This can enable businesses to expand their online presence and allow consumers to access e-commerce platforms more easily.

Promoting digital literacy and skills: Investing in programs that enhance digital literacy and skills training can empower consumers to navigate online platforms effectively. This can contribute to the broader adoption of e-commerce and support the growth of digital entrepreneurship.

Providing financial support and incentives: Policymakers can introduce measures such as tax incentives, grants, or low-interest loans to support businesses, particularly small and medium-sized enterprises (SMEs), in adapting to the changing consumer behaviour and investing in digital transformation.

Enhancing consumer protection regulations: Policymakers should ensure that consumer protection regulations are in place and effectively enforced, particularly in the context of online shopping. This can include measures to address issues such as fraud, and counterfeit products, and ensure transparent and fair pricing practices.

By aligning business strategies with changing consumer behaviour and implementing supportive policies, businesses and policymakers can effectively respond to the challenges and opportunities presented by the COVID-19 pandemic. This will help businesses thrive in the evolving marketplace while ensuring consumer satisfaction and overall economic resilience in developing countries.

## **CONCLUDING NOTES**

The COVID-19 pandemic has brought about significant changes in consumer behaviour patterns in Developing countries. The disruptions caused by the pandemic, such as lockdowns, limited availability of goods, and economic uncertainties, have led to distinct shifts in consumer preferences and purchasing behaviours.

The pandemic has prompted consumers to prioritize essential goods and services while reducing spending on non-essential items. Panic buying and stockpiling behaviours have been observed during specific periods, reflecting consumer concerns about product availability and future uncertainties.

Furthermore, the pandemic has accelerated the adoption of online shopping in developing countries. With the closure of physical stores and the need for social distancing, consumers have increasingly relied on e-commerce platforms and delivery services to meet their shopping needs. This shift has been more prominent in urban areas where internet access is more prevalent.

Consumer preferences for essential goods and services have also experienced changes. Health and hygiene-related products have witnessed increased demand as consumers prioritize protecting themselves and their families. Additionally, there has been a notable shift towards supporting local and domestic products, driven by concerns over supply chain disruptions and a desire to support local businesses.

Brand loyalty has been challenged during the pandemic, with consumers being more open to trying new brands and products. Trust in brands has been influenced by their response to the pandemic, including actions related to employee welfare, safety protocols, and corporate social responsibility.

These changes in consumer behaviour patterns have significant implications for businesses and policymakers in developing countries. Businesses need to adapt their strategies to meet the changing needs and preferences of consumers. This includes investing in online platforms, enhancing hygiene protocols, and demonstrating empathy towards customer concerns. Policymakers should support businesses through policy interventions, promote digital literacy, and ensure access to affordable Internet services.

By understanding and responding to these shifts in consumer behaviour, businesses can effectively meet the evolving demands of consumers and remain competitive in the market. Policymakers, on the other hand, can create an enabling environment that supports businesses and consumers alike, fostering economic resilience and ensuring the well-being of the population.

Overall, this systematic review underscores the importance of recognizing and adapting to the changes in consumer behaviour patterns caused by the COVID-19 pandemic in developing countries. By doing so, businesses and policymakers can navigate the challenges and seize the opportunities presented by the evolving consumer landscape.

## **DIRECTION FOR FUTURE RESEARCH**

While this systematic review provides insights into the changes in consumer behaviour patterns in Developing countries during the COVID-19 pandemic, there are several avenues for future research to further enhance our understanding of this topic. Some directions for future research include:

**Long-term effects:** Investigate the long-term effects of the pandemic on consumer behaviour in developing countries. Explore whether the changes observed during the pandemic are temporary or if they have led to permanent shifts in consumer preferences and habits.

**Psychological factors:** Examine the psychological factors influencing consumer behaviour during the pandemic. Investigate the impact of fear, risk perception, and social influence on consumer decision-making processes.

**Socioeconomic disparities:** Explore how socioeconomic factors influence consumer behaviour during the pandemic. Investigate the differential impacts on consumer behaviour patterns across different income levels, education levels, and geographic locations within Developing countries.

**Consumer trust and brand loyalty:** Further explore the relationship between consumer trust, brand loyalty, and brand responses to the pandemic. Investigate how specific actions and communication strategies by brands can affect consumer trust and loyalty in the long run.

**Online shopping experience:** Investigate the challenges and barriers faced by consumers in Developing countries when transitioning to online shopping. Explore factors such as internet accessibility, online payment security, and delivery logistics that may impact the adoption and satisfaction of online shopping.

**Sustainable consumption:** Examine the impact of the pandemic on consumers' attitudes and behaviours towards sustainable consumption. Investigate whether there has been a shift towards more environmentally friendly and socially responsible purchasing decisions.

Policy implications: Assess the effectiveness of policy interventions aimed at supporting businesses and consumers during the pandemic. Evaluate the impact of measures such as digital infrastructure development, financial support for businesses, and consumer protection regulations.

Post-pandemic consumer behaviour: Explore how consumer behaviour in Developing countries may continue to evolve in the post-pandemic period. Investigate whether the changes observed during the pandemic will persist or revert to pre-pandemic patterns.

By focusing on these areas, future research can provide valuable insights into the evolving consumer behaviour landscape in Developing countries and contribute to the development of effective strategies for businesses and policymakers in navigating future challenges and opportunities.

## REFERENCES

Abdelaziz, R., & Zoubi, A. A. (2021). The Fear Appealing of COVID-19 and Experiences in Purchasing Behaviour: Evidence of Online Purchasing in Jordan. *Journal of Critical Reviews*, 8(3), 549-562.

Accenture. (2020). How COVID-19 will permanently change consumer behaviour. [https://www.accenture.com/\\_acnmedia/PDF-123/AccentureCOVID19-Pulse-Survey-Research-PoV.pdf](https://www.accenture.com/_acnmedia/PDF-123/AccentureCOVID19-Pulse-Survey-Research-PoV.pdf)

Aldrighetti, R., Battini, D., Ivanov, D., & Zennaro, I. (2021). Costs of resilience and disruptions in supply chain network design models: A review and future research directions. *International Journal of Production Economics*, 235.

Angelidou, S., Lisboa, A. C. C., & Saridakis, C. (2022). Expanding into new product lines in response to COVID-19: The interplay between firm age and performance aspirations. *Industrial Marketing Management*, 104, 167-81. doi: 10.1016/j.indmarman.2022.04.018. Epub 2022 May 2. PMID: PMC9058027.

Ardolino, M., Bacchetti, A. & Ivanov, D. (2022). Analysis of the COVID-19 pandemic's impacts on manufacturing: a systematic literature review and future research agenda. *Oper Manag Res.*, 15, 551-566. <https://doi.org/10.1007/s12063-021-00225-9>.

Arief, N. N., & Pangestu, A. B. (2021). Perception and sentiment analysis on the empathic brand initiative during the Covid-19 pandemic: Indonesia perspective. *Journal of Creative Communications*, 1-17.

Aziz, N., & Long, F. (2021). To travel, or not to travel? The impacts of travel constraints and perceived travel risk on travel intention among Malaysian tourists amid the COVID-19. *Journal of Consumer Behaviour*, 21(2), 352-362.

Baker, S., Bloom, N., Davis, S., & Terry, S. (2020). COVID-Induced Economic Uncertainty. w26983. Cambridge, MA: National Bureau of Economic Research. <https://doi.org/10.3386/w26983>

Basilaia, G., & Kvavadze, D. (2020). Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research* 5(4). <https://doi.org/10.29333/pr/7937>

Belhadi, A., Kamble, S., Jabbour, C. J. C., Gunasekaran, A., Ndubisi, N. O., & Venkatesh, M. (2021). Manufacturing and Service Supply Chain Resilience to the COVID-19 Outbreak: Lessons Learned

- from the Automobile and Airline Industries. *Technol Forecast Soc Chang* 163, 120447. <https://doi.org/10.1016/j.techfore.2020.120447>
- Borsellino, V., Kaliji, S. A., & Schimmenti, E. (2020). COVID-19 Drives Consumer Behaviour and Agro-Food Markets towards Healthier and More Sustainable Patterns. *Sustainability* 12(20), 8366. <https://doi.org/10.3390/su12208366>
- Bruma, I. S., Ulman, S. R., Tanas, A. L., & Cautisanu, C. (2022). Implications of COVID-19 pandemic on sustainable consumption patterns. Evidence from Iasi County, Romania. *Front. Sustain. Food Syst.* 6, 1050977. doi: 10.3389/fsufs.2022.1050977
- Burki, T. K. (2020) Coronavirus in China. *Lancet Respiratory Medicine*, 8, 238. [https://doi.org/10.1016/S2213-2600\(20\)30056-4](https://doi.org/10.1016/S2213-2600(20)30056-4)
- Cardoso, A., Gabriel, M., Figueiredo, J., Oliveira, I., Rêgo, R., Silva, R., Oliveira, M., & Meirinhos, G. (2022). "Trust and Loyalty in Building the Brand Relationship with the Customer: Empirical Analysis in a Retail Chain in Northern Brazil" *Journal of Open Innovation: Technology, Market, and Complexity*, 8(3), 1-15. 109. <https://doi.org/10.3390/joitmc8030109>
- Chesbrough, H. (2020). To recover faster from Covid-19, open up: Managerial implications from an open innovation perspective. *Industrial Marketing Management*, 88, 410-413.
- Chowdhury, P., Paul, S. K., Kaiser, S., & Moktadir M. A. (2021). COVID19 Pandemic Related Supply Chain Studies: A Systematic Review. *Transportation Research Part e: Logistics and Transportation Review* 148, 102271. <https://doi.org/10.1016/j.tre.2021.102271>
- Daus, P. W., Clement, D., & Ding, P. (2020). The New Normal for Restaurants: Consumer Behaviour after COVID-19 Lockdowns. <https://www.simon-kucher.com/en/resources/perspectives/new-normal-restaurants-consumer-behavior-world-aftercovid-19-lockdowns>
- de Sousa Jabbour, A. B. L., Jabbour, C. J. C., Hingley, M., Vilalta-Perdomo, E. L., Ramsden, G., & Twigg, D. (2020). Sustainability of supply chains in the wake of the coronavirus (COVID-19/SARS-CoV-2) pandemic: Lessons and trends. *Modern Supply Chain Research and Applications*, 2(3), 117-122.
- Devakumar, D., Shannon, G., Bhopal, S. S., & Abubakar, I. (2020) Racism and Discrimination in COVID-19 Responses. *The Lancet* 395(10231), 1194. [https://doi.org/10.1016/S0140-6736\(20\)30792-3](https://doi.org/10.1016/S0140-6736(20)30792-3)
- Dubey, R., Bryde, D. J., Foropon, C., Tiwari, M., & Gunasekaran, A. (2021). How Frugal Innovation Shape Global Sustainable Supply Chains during the Pandemic Crisis: Lessons from the COVID-19. *Supply Chain Management: An International Journal* ahead-of-print (ahead-of-print). Emerald Publishing Limited. <https://doi.org/10.1108/SCM-02-2021-0071>.
- Dumouchel, L., Kahn, Z., Burton, C., & Hupp, O. (2020). Brand growth in times of crisis: Revisiting brand building during the COVID-19 pandemic. *IPSOS*.
- Elbedweihy, A., Jayawardhena, C., Elsharnouby, M. H., & Elsharnouby, T. H. (2016). "Customer relationship building: the role of Brand attractiveness and consumer-Brand identification". *Journal of Business Research*, 69(8), 2901-2910.

FAO (Food and Agriculture Organization of the United Nations), WHO (World Health Organization). (2020). COVID-19 and Food Safety: Guidance for food businesses: Interim guidance. <http://www.fao.org/3/ca8660en/CA8660EN.pdf>.

FAO (Food and Agriculture Organization of the United Nations). (2020). Adjusting business models to sustain agri-food enterprises during COVID19. <http://www.fao.org/3/ca8996en/CA8996EN.pdf>.

Filho, L. W., Salvia, A. L., Paço, A. et al. (2022). The influences of the COVID-19 pandemic on sustainable consumption: an international study. *Environ Sci Eur*, 34(54). 1-17. <https://doi.org/10.1186/s12302-022-00626-y>

Gao, L., Zheng, C., Shi, Q., Xiao, K., Wang, L., Liu, Z., Li, Z., & Dong, X. (2022) Evolving trend change during the COVID-19 pandemic. *Front. Public Health*, 10, 957265. doi: 10.3389/fpubh.2022.957265

Gu, S., Slusarczyk, B., Hajizada, S., Kovalyova, I., Sakhbieva, A. (2021). Impact of the COVID-19 Pandemic on Online Consumer Purchasing Behavior. *J. Theor. Appl. Electron. Commer. Res.*, 16, 2263-2281. <https://doi.org/10.3390/jtaer16060125>

Haapala, K. R., Kim, K. Y., Okudan, G. E., Kremer, R. K., Shilkrot, R., & Sciammarella, F. M. (2020). An Open Online Product Marketplace to Overcome Supply and Demand Chain Inefficiencies in Times of Crisis. *Smart and Sustainable Manufacturing Systems* 4(3):20200055. <https://doi.org/10.1520/SSMS20200055>

Haren, P., & Simchi-Levi, D. (2020). How Coronavirus Could Impact the Global Supply Chain by Mid-March. *Harvard Business Review*. <https://hbr.org/2020/02/how-coronaviruscould-impact-the-global-supply-chain-by-mid-march>

Hilmola, O. P., Lähdeaho, O., Henttu, V., & Hilletoft, P. (2020). Covid-19 Pandemic: Early Implications for North European Manufacturing and Logistics. *Sustainability* 12(20), 8315. <https://doi.org/10.3390/su12208315>

Hodbod, A., Hommes, C., Huber, S. J., & Salle, I. (2021). The COVID-19 consumption game-changer: Evidence from a large-scale multi-country survey. *Eur Econ Rev.*, 140, 103953. doi: 10.1016/j.euroecorev.2021.103953. Epub 2021 Oct 29. PMID: 35971432; PMCID: PMC9366548. <https://www.ipsos.com/sites/default/files/ct/publication/documents/2020-04/brand-growth-in-times-of-crisis-ipsos.pdf>

Ibn-Mohammed, T., Mustapha, K. B., Godsell, J., Adamu, Z., Babatunde, K. A., Akintade, D. D., Acquaye, A. et al (2021). A Critical Analysis of the Impacts of COVID-19 on the Global Economy and Ecosystems and Opportunities for Circular Economy Strategies. *Resour Conserv Recycl* 164, 105169. <https://doi.org/10.1016/j.resconrec.2020.105169>

Inoue, H., & Todo, Y. (2023). Has Covid-19 permanently changed online purchasing behaviour? *EPJ Data Sci.* 12(1), 1-21. <https://doi.org/10.1140/epjds/s13688-022-00375-1>

Itani, O. S., & Hollebeek, L. D. (2021). Light at the end of the tunnel: Visitors' virtual reality (versus in-person) attraction site tour-related behavioural intentions during and post-COVID19. *Tourism Management*, 84, 104290. <https://doi.org/10.1016/j.tourman.2021.104290>.

Kraemer, M. U. G., Yang, C. H., Gutierrez, B., Wu, C. H., Klein, B., Pigott, D. M., Open COVID-19 Data Working Group, du Plessis, L., Faria, N. R., Li, R., Hanage, W. P., Brownstein, J. S., Layan, M.,

- Vespignani, A., Tian, H., Dye, C., Pybus, O. G., & Scarpino, S. V. (2020). The effect of human mobility and control measures on the COVID-19 epidemic in China. *Science*, 1(368)(6490), 493-497. doi: 10.1126/science.abb4218. Epub 2020 Mar 25. PMID: 32213647; PMCID: PMC7146642.
- Liu, Z.; Zhao, J.; Yu, Z.; Zhou, Z.; Wang, L., & Chen, Y. (2022). How Has the COVID-19 Pandemic Changed Urban Consumers' Ways of Buying Agricultural Products? Evidence from Shanghai, China. *Healthcare*, 10, 2264. <https://doi.org/10.3390/healthcare10112264>.
- Madarász, T., Kontor, E., Antal, E., Kasza, G., Szakos, D., Szakály, Z. (2022). Food Purchase Behavior during The First Wave of COVID-19: The Case of Hungary. *Int J Environ Res Public Health*, 19(2), 872. doi: 10.3390/ijerph19020872. PMID: 35055687; PMCID: PMC8775895.
- Mansoor, A., & Jalal. A. (2011). The Global Business Crisis and Consumer Behaviour: Kingdom of Bahrain as a Case Study. *International Journal of Business and Management*. 6(1), 104-115. <https://doi.org/10.5539/ijbm.v6n1p104>.
- Monostori, L., & Váncza, J. (2020). Lessons Learned from the COVID-19 Pandemic and Their Possible Consequences on Manufacturing. *Smart and Sustainable Manufacturing Systems* 4(3), 20200063. <https://doi.org/10.1520/SSMS20200063>.
- Nagpal, S., & Gupta, G. (2022). Impact of Pandemic Communication on Brand-specific Outcomes: Testing the Moderating Role of Brand Attitude and Product Category. *Journal of Creative Communications*, 1-17. <https://doi.org/10.1177/09732586211067840>.
- Patil, G. R., Dhore, R., Bhavathrathan, B. K., Pawar, D. S., Sahu, P., & Mulani, A. (2022). Consumer responses towards essential purchases during COVID-19 pan-India lockdown. *Research in Transportation Business & Management*;43, 100768. doi: 10.1016/j.rtbm.2021.100768. Epub 2021 Dec 16. PMCID: PMC9173572.
- Paul, S. K., & Chowdhury, P. (2020). Strategies for Managing the Impacts of Disruptions During COVID-19: An Example of Toilet Paper. *Glob J Flex Syst Manag* 21(3):283-293. <https://doi.org/10.1007/s40171-020-00248-4>.
- Queiroz, M. M., Ivanov, D., Dolgui, A., & Wamba, S. F (2020). Impacts of Epidemic Outbreaks on Supply Chains: Mapping a Research Agenda amid the COVID-19 Pandemic through a Structured Literature Review. *Annals of Operations Research*. <https://doi.org/10.1007/s10479-020-03685-7>
- Rahman, N. A., Abdul, S. Rahim, A., & Ahmad, F. (2020) EXPLORING COVID-19 PANDEMIC: ITS IMPACT TO GLOBAL AVIATION INDUSTRY AND THE KEY STRATEGY. *International Journal of Advanced Science and Technology* 29(6), 8.
- Ranney, M. L., Grifeth, V., & Jha, A. K. (2020). Critical supply shortages-the need for ventilators and personal protective equipment during the COVID-19 pandemic. *N Engl J Med* 382, e41. <https://doi.org/10.1056/NEJMp2006141>.
- Rather, R. A., Hollebeek, L. D, V. O-Thanh, T., Ramkissoon, H., Leppiman, A., Smith, D. (2022). Shaping customer brand loyalty during the pandemic: The role of brand credibility, value congruence, experience, identification, and engagement. *Journal of Consumer Behaviour*, 21(5), 1175-89. doi: 10.1002/cb.2070. Epub 2022 Jun 28. PMCID: PMC9350360.

- Richards, S., & Vassalos, M. (2020). COVID-19 amplifies local meat supply chain issues in South Carolina. *Journal of Agriculture, Food Systems, and Community Development*, 10(1), 191-195. <https://doi.org/10.5304/jafscd.2020.101.001>
- Sjoberg, K. (2020). Automotive Industry Faces Challenges [Connected and Autonomous Vehicles]. *IEEE Veh Technol Mag* 15(3), 109-112. <https://doi.org/10.1109/MVT.2020.3005604>
- Thunström, L., Newbold, S. C., Finnoff, D., Ashworth, M., & Shogren, J. F. (2020). The Benefits and Costs of Using Social Distancing to Flatten the Curve for COVID-19. *Journal of Benefit-Cost Analysis*, 11(2), 179-195. <https://doi.org/10.1017/bca.2020.12>.
- Toquero, C. M. (2020). Challenges and Opportunities for Higher Education amid the COVID-19 Pandemic: The Philippine Context. *Pedagogical Research* 5(4), em0063. <https://doi.org/10.29333/pr/7947>.
- Torres, A., Kelley, C., Kelley, S., Piña, G., Garcia-Baza, I., & Griffith, I. (2021). An analysis of digital media data to understand parents' concerns during the COVID-19 pandemic to enhance effective science communication. *Journal of Creative Communications*, 16(2), 168-189.
- Tyko, K. (2020, June 11th). Will your local Starbucks close? Coffee giant says it will close 400 stores but expanding pickup option. <https://www.usatoday.com/story/money/food/2020/06/10/coronavirus-starbucks-closing-stores-expanding-mobile-only-options/5332786002/>
- Wang, X. V., & Wang, L. (2021). A Literature Survey of the Robotic Technologies during the COVID-19 Pandemic. *J Manuf Syst*, S0278612521000339. <https://doi.org/10.1016/j.jmsy.2021.02.005>
- Wenzel, M., Stanske, S., & Lieberman, M. B. (2020). Strategic responses to crisis. *Strategic Management Journal*, 41, V7-V18. [10.1002/smj.3161](https://doi.org/10.1002/smj.3161)
- World Health Organization. (2020). WHO Director-General's opening remarks at the media briefing on COVID-19. <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>