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Publication metadata

Title: Typology of e-commerce shoppers: the case of COVID-19

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Journal: Qualitative Market Research: An International Journal

DOI/Link: <https://doi.org/10.1108/QMR-12-2021-0154>

How to cite this post-print from LAUR:

Ramadan, Z., Farah, M., Abosag, I., & Sleiman, A. (2023). Typology of e-commerce shoppers: the case of COVID-19. *Qualitative Market Research: An International Journal.*, DOI, 10.1108/QMR-12-2021-0154, <http://hdl.handle.net/10725/14774>

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Typology of E-commerce Shoppers: The Case of COVID-19

Abstract

Purpose: The spread of COVID-19 has drastically changed the entire market structure and shopping behaviors across the world. While shoppers rushed towards e-commerce platforms during the pandemic, the key debate that rose was on how this behavior will evolve post-COVID-19. The purpose of this study was to explore the different categories of e-commerce platforms' users, and propose a distinctive customer typology in the era of the COVID-19 pandemic.

Methodology: An exploratory qualitative research design was adopted due to the novelty of the subject. 43 participants were interviewed, including 27 consumers and 16 experts in the field of e-commerce.

Findings: Based on the findings, the study distinguishes between two stages of e-commerce usage during the pandemic. Furthermore, it identifies four key typologies of e-commerce shoppers that are expected to form at the end of the coronavirus: *duty-bound*, *e-watcher*, *makeshift*, and *onli-vorous shoppers*. The characteristics and businesses strategies pertaining to each of the identified groups are discussed.

Originality: This research is among the first to identify the different stages, while proposing an innovative typology of e-commerce platform post-COVID-19. It also offers useful recommendations to deal with similar future crises.

Keywords: *COVID-19, pandemic, E-commerce, online shopping, typology*

1. Introduction

Economic crises create strong competitive pressure, which forces companies to alter their marketing strategies (Perrien, Filiatrault and Ricad, 1991). Marketing studies on the influence of economic crises have largely focused on businesses (e.g. Grewal and Tansuhaj, 2001; Ang, 2001; Koksal and Ozgul, 2007; Lythreatis, 2021), yet moderate attention has been paid to consumers. During times of crises, businesses tend to focus on creating greater flexibility and adaptation while trying to stimulate demand. In an apparent contradiction, consumers tend to reduce spending and increase saving (Ang, 2001). The change of buying patterns during economic difficulties is usually

met with changes in business strategies to reduce expenses, maintain profitability, increase promotion, and decrease advertising costs.

Ang (2001) suggests that consumption behavior may require similar adjustments to crises that may have different impacts as crises hit consumers both financially and psychologically (Koksal and Ozgul, 2007). In survival psychology, it is widely agreed upon that human behavior might undergo changes following key events such as natural disasters and disease outbreaks that threaten life (Yuen *et al.*, 2020). A rise of global pandemics has marked the past decades affecting social life and business operations worldwide. In particular, the Covid-19 virus has drastically affected economies (Abosedra *et al.*, 2021; Tran, 2021).

The COVID-19 pandemic has been shaping the marketing world, creating a new normal that companies are striving to adapt to (Islam *et al.*, 2020; Tarhini *et al.*, 2022). It has been changing businesses' go to market strategies and consumers' shopping behavior affecting the retail marketing landscape (Zwanka and Buff, 2021). Hence, the aim of this study was to explore the different categories of e-commerce platforms' users and develop a general typology of shoppers based on the impact of the COVID-19 pandemic. Predictably, shoppers were bound to switch rapidly to e-commerce platforms, forcing businesses to take immediate actions. Subsequently and as our findings show, companies fell into two main categories (1) businesses that have seen COVID-19 as an opportunity to maintain their competitive advantage and maximize profits by shifting towards e-commerce, and (2) traditional retailers that still lagged behind at the threat of vanishing.

As lockdowns across countless global markets were imposed, companies had to focus on the fast-growing information technology to achieve cost efficiency and maintain survival (Laato *et al.*, 2020; Lesame *et al.*, 2021). To maintain their competitive advantage, retailers integrated technology into their physical in-stores through introducing the concept of click and collect (Farah and Ramadan, 2020). In fact, consumers who live through a pandemic might have a long-lasting consumption behavior change (Kim, 2020). Various types of online shoppers emerged with differing perceptions with regards to e-commerce platforms. Accordingly, it became imperative for businesses to understand the change in consumers' usage of these platforms, as well as their engagement level and willingness to purchase online.

Seminal research proposed customer typologies based on motivation (Westbrook and Black, 1985), experience (Gehrt and Shim, 1998), and online channels (Rohm and Swaminathan,

2004). More recently, e-commerce has been gaining a rising interest amongst businesses for it offers consumers economic gains (Zhang *et al.*, 2017) alongside convenient information on needed products (Li *et al.*, 2020). Given the recency and unprecedented conditions that the COVID-19 virus has brought to business markets, research analyzing the impact of market uncertainties on consumer shopping and businesses' e-commerce-related strategies remain scant.

Though the contemporary literature in the field includes various online shopping typologies, they predominantly focused on the e-commerce landscape before and during Covid-19. Accordingly, this research aims to specifically tackle the different categories of e-commerce platforms' users in the post-COVID-19 environment, which would add significantly to the current literature. Given the substantial shift to e-commerce during Covid-19, our study extends current knowledge of consumer typologies within that context. The suggested typology related to e-commerce can assist businesses to identify and target distinct segments of consumers with tailored offerings post-pandemic. Hence, this paper, which is amongst the first in the post-pandemic literature, proposes an adjustment of companies' marketing strategies. This is done in light of the shift in consumers' online behavior across the different identified segments to answer the following research questions:

RQ1: What were the stages and key facilitators of e-commerce platforms' usage during the COVID-19 pandemic?

RQ2: What are the new predominant segments of e-commerce in a post-COVID-19 world?

An exploratory qualitative approach based on semi-structured interviews with both consumers and experts were adopted to address the proposed research questions. Accordingly, this paper first discusses the literature related to consumer typologies, e-commerce characteristics and potentials, and the impact of the COVID-19 pandemic on e-commerce. The literature review is followed by an extensive methodology section and the analysis of the findings. The implications are then presented and discussed alongside possible research venues that can build on this present study.

2. Literature Review

Recent studies on shoppers' typologies were predominantly based on online motivational, relational, and behavioral aspects that take into consideration human cognitive and affective

motives related to individual gratification and satisfaction (Rohm and Swaminathan, 2004; Sparks and Bradley, 2014). There are two key observations that the literature has not yet paid attention to. Firstly, despite the high number of studies on online consumer typology, the literature – with the exception of a few studies that have directly examined consumer online typology in relation to brand relationships (Mrad and Cui, 2020; Waqas *et al.*, 2020) – tends to ignore the other side of the exchange, namely online businesses with whom consumers interact frequently. This partial inclusion of brands does not mean examining businesses' role in the creation of such typology. In sum, the literature lacks a dyadic approach to properly explore and understand online consumer typology and its impact on e-commerce. Secondly, the literature needs a proper understanding about the impact of economic and natural crises on consumers' usage of the internet. Existing studies that have examined the effect of economic and natural crisis on consumer behavior have solely focused on the offline context (Hampson *et al.*, 2018). Given the significant impact that Covid-19 has on consumers worldwide, the literature is in desperate need for a deeper understanding of the bearing that the pandemic has on e-commerce.

2.1 Consumer typologies

A consumer typology groups individuals based on their shopping patterns, attitudes, motives, similarities and differences. It is characterized by a strong heterogeneity between the different available types (Zoll *et al.*, 2018). In order to address this heterogeneity, marketers base their research on market segmentation to better understand their current and potential consumers, and target specific segments by implementing personalized programs and offers (Bressolles *et al.*, 2014). Such a typology thus highlights the classification and categorization of consumers' behaviors. Accordingly, they form the basis for effective marketing strategies (see Table 1) including segmentation, targeting and positioning (Hampson *et al.*, 2018)

In e-commerce related research, studies scrutinize online consumers' behavior based on their attitudes, purchase orientation, shopping intention and experience, as well as psychographic and demographic variables (Ballestar *et al.*, 2018; Ladhari *et al.*, 2019). These segmentation criteria indicate that an online consumer audience cannot be considered as a single segment; it is rather clustered into different online market segments with unique behavioral differentiating characteristics (Huseynov and Yıldırım, 2017). Unlike previous research, Huseynov and Yıldırım (2019) segment online consumers based on psychographic criteria, and identify four different

online consumer segments: *shopping lovers*, *direct purchasers*, *suspicious browsers*, and *incompetent consumers*. *Shopping lovers* enjoy purchasing online as they tend to engage in recurrent online impulsive purchasing. *Direct purchasers* focus on decisive purchases rather than impulsive buying. *Suspicious browsers* use online stores to stay up-to-date on the latest trends and offerings, rather than for online purchases as they are characterized by online-shopping distrust. Characterized by their minor online purchases, *incompetent consumers* do not engage in online shopping as they find it hard to surf e-stores and prefer being physically accompanied for the ease of advice and enjoyable experience.

Updated shopping typologies have also been proposed to analyze consumers' behavior and adaptability during an uncertain situation or a pandemic outbreak (Calvo-Porrall and Lévy-Mangin, 2019; Baker *et al.*, 2020). During the COVID-19 pandemic, shopping behavior has been deeply affected; indeed, Hartono *et al.* (2021) have explored the shopping patterns and adaptability of shoppers during the pandemic based on their attitudes and behaviors, and have suggested a typology based on consumers' adaptive patterns during the outbreak. This revised typology incorporates health- and social-consciousness related needs based on key concerns that emerged during the pandemic, which shaped consumers' overall attitudes vis-à-vis online shopping in specific segments.

On another dimension, Wang *et al.* (2020) have identified a typology of marketing innovation strategies for retailers to be able to cope with the disruptive environment and the changing consumption patterns that emerged during Covid-19. The typology was based on two dimensions, the *motivation for innovations* that translates the level of crisis affecting the firm, and the *level of collaborative innovations* that highlights whether the firm will independently innovate by its own resources or co-innovate with other firms to achieve and complement their strategies (Wang *et al.*, 2020).

While the extant literature has suggested different online shopping typologies pre- and during the Covid-19 pandemic, further research is needed specifically for a post-COVID-19 environment. This shall inform companies on the relevant marketing strategies that would address the changing online behavior of the various customer segments in a post pandemic landscape.

INSERT HERE: Table 1: Review of the online typology literature.

2.2 E-commerce characteristics and potentials

The fast diffusion and constant expansion of technology caused major shifts in commerce (Jindal *et al.*, 2021). E-commerce, which is an electronic means for buying or selling products over the Internet, has surpassed traditional commerce, as it provides accessibility to the smooth flow of information on a practical platform along with a flexible communication process between the buyer and the seller (Tran, 2021). For e-commerce to be effective, firms must highlight the performance efficiency, increased transactions and the cost savings of this platform in contrast to the traditional commerce (Dabbous and Tarhini, 2019). E-commerce has proved to offer many benefits in light of the accelerating pace of globalization, including the ability of firms to compete across several dimensions, reduce costs, access different geographical markets, and create closer relationships between businesses and customers (Lorca *et al.*, 2019). The internet served businesses and retailers to be globally recognized on the web through the optimization of an omnichannel retailing approach (Jindal *et al.*, 2021). In addition, the increased application of “just-in-time” in e-commerce addressed the challenge of inventory surpluses and/or shortages (Islam *et al.*, 2020). Moreover, through analyzing routine purchases, businesses such as Amazon increased revenues by expanding their offerings to include a vast array of products, which helped them reach a larger target audience (Caro *et al.*, 2020).

The rise of e-commerce created the need for last-mile delivery (Joerss *et al.*, 2016; Farah *et al.*, 2020a), which is the final connection, linking the delivery of products from fulfillment centers to the agreed collection locations (Gevaers *et al.*, 2009; Farah *et al.*, 2020b). Last-mile delivery includes investments in autonomous delivery solutions, buy-online-pickup-in-store, and free delivery upon minimum purchase limits (Seghezzi *et al.*, 2020). Compromising between pricing, customers’ expectations, and service levels is a challenge to many businesses since last-mile delivery holds 30 percent of the entire business process (Lim *et al.*, 2018).

Not only is e-commerce beneficial to businesses, but it also enhances consumers’ overall shopping experience (Trofimov, 2018). Indeed, it facilitates engagement on multiple online channels by integrating various activities across them (Ailawadi and Farris, 2017). The need for convenience gave popularity to online shopping, which allowed consumers to save the time required to search for products and complete the purchase transaction (Khan, 2016). Businesses have been urged to put in place an omnichannel strategy to unify consumers’ experience

(McDermott, 2015; Itani et al., 2022), which strengthened consumer-brand relationship and customer loyalty (Cui *et al.*, 2018; Mrad, 2018; Mrad *et al.*, 2020). With time, the development of innovative technologies redefined the whole consumer journey by creating a highly digitized retailing experience (Farah *et al.*, 2019; Farah *et al.*, 2022). To remain competitive, businesses must keep abreast of the continuous technological innovation as consumers always seek enhancements and creativity in places, products, services, and promotions (Nieroda *et al.*, 2018). In fact, e-commerce helps businesses in (1) building awareness for new customers, (2) sales conversion, and 3) customer retention through the personalization of the online shopping experience (Naeem, 2021).

2.3 COVID-19 impact on e-commerce

The Coronavirus disease (COVID-19) emerged in Wuhan in the last quarter of 2019. As of February 13 2021, there have been roughly 108 million confirmed cases of COVID-19, including 2.373 million deaths reported to the World Health Organization (WHO, 2021). Governments worldwide urged their populations to adopt social and physical distancing, which heavily affected retail sales. Accordingly, businesses found themselves obliged to accelerate the integration of e-commerce and last-mile delivery into their core operations to adapt to the new unforeseen reality and customers' swift shift to online shopping (Joerss *et al.*, 2016).

COVID-19 caused consumer panic purchases, which also led to disruption within the supply chains among retailers as governments imposed self-quarantine and self-isolation (Zheng *et al.*, 2021). Employees at retail stores worked at a faster pace and struggled to meet the overwhelming demand for products. Retailers have also suffered from production fulfillment delays due to halt in production, shut down of factories, shortage in raw material, and decrease in cargo movements (Gaikwad and Dhokare, 2020). Undoubtedly, many shopping habits were altered since consumers under lockdown discovered a more convenient, accessible, and affordable alternative (Sheth, 2020). What started as a restrained and compelled online purchase covering basic necessities, developed into bigger basket sizes, that included numerous product categories.

Although consumers desire social environments and will rush towards retailers after the coronavirus, some are likely to permanently shift towards online shopping, which will have a big impact on the e-commerce businesses in the long run. Nonetheless, according to Laato *et al.*, (2020), the decision of adopting e-commerce goes far beyond the technology it delivers, since it is

capable of shaping the shoppers' online experience by engaging them as they practice community containment during the pandemic (Ginzarly and Teller, 2020). During the evaluation of their experience, consumers would seek fairness in exchange for value, service excellence, efficiency, and satisfaction (Jin *et al.*, 2019; Itani *et al.*, 2019). Accordingly, retailers will have to balance between traditional and technological retail to ensure that consumers enjoy a unified experience post the COVID-19 pandemic.

3. Research Methodology

In order to better understand how consumers' shopping behavior and corporate strategies were affected by the spread of COVID-19, a qualitative approach was employed. Semi-structured interviews were designed and conducted with 43 participants, including 27 consumers and 16 experts in the field of e-commerce. Accordingly, an exploratory qualitative research design was adopted due to the novelty of the subject. Due to the spread of the COVID-19, all the in-depth semi-structured interviews were conducted using the Zoom online meeting platforms. Each interview lasted an average of 38 minutes. The data collection was conducted spring 2021.

The sample followed a pre-selection criterion to ensure that each consumer shopped online at least once a week during the COVID-19 period. The consumer interviewees' gender split was quasi equal (52 percent male and 48 percent female), and their age ranged from 21 to 48 years. On the other hand, the expert participants included professionals with a variety of relevant roles, such as store managers, IT managers, financial and system analysts, retail and supply managers, e-commerce merchandise managers, and business owners. All the experts had a minimum of 8 years of experience in e-commerce. Non-probability purposeful (convenience) sampling was utilized in the selection criteria for participants (Eisenhardt and Graebner, 2007). The sample size was defined by the data saturation principle (Guest *et al.*, 2006), which was reached by the 25th consumer and 14th expert interview. Two additional interviews were conducted with each respondent category to ensure that no additional insight was left out (Morse, 1995). Before proceeding with the interview, all interviewees were assured anonymity and confidentiality and were informed that the interview would be audio-recorded. Interviews were only conducted with those who provided their full consent.

The researchers presented the consumer interviewees with a series of open-ended questions concerning the following subject areas: the impact of COVID-19 on their consumption behavior,

online shopping experience, concerns, and features sought on e-commerce platforms when shopping online, as well as their expectation regarding the future developments of e-commerce platforms post COVID-19. As for the expert interviewees, they were presented with a series of questions regarding the impact of COVID-19 on sales and supply chain, businesses practices that were adopted during the pandemic, risks emanating from e-commerce platforms on brands and retailers, techniques implemented to attract new customers and increase loyalty, and last but not least, their vision towards e-commerce platforms post-COVID-19. Probing techniques were used in order to uncover the hidden motivations behind interviewees' various behaviors and actions (Creswell and Miller, 2000).

Interviews were recorded, transcribed, and coded. The data analysis conducted through NVivo 12 was performed on the verbatim transcriptions of all the interviews to extract key themes. An inductive thematic approach was adopted to code, classify, assess, and record themes (Boyatzis 1998). Following key qualitative research approaches and recommendations (Creswell and Miller, 2000), validity was ensured through triangulation: member-checking, exploration of respondents' personal experiences, and close collaboration with them. Indeed, inter-coder reliability reached 96% on the transcribed data which was then reconciled between two researchers.

4. Findings

The research analysis resulted in the identification of the different stages of e-commerce platforms' usage throughout the COVID-19 pandemic. During the virus outbreak, the stages of e-commerce platforms' usage came as follows for both consumers and businesses: (1) *resigned acceptance*, and (2) *adapting for the new e-normal*, which includes two divergent behaviors namely *reluctant usage* and *keen acceptance of the needed change*. The findings also allowed for the identification of a prospective typology of e-commerce users post COVID-19.

4.1 The stages of e-commerce platforms' usage during COVID-19

With the spread of COVID-19, some consumers and businesses kept their traditional behaviors and practices, while countless others have shifted their focus towards online platforms in a way to fight back the consequences of the pandemic. Those online behaviors were categorized into two different stages:

“*Resigned acceptance*” was the first stage of e-commerce usage at the onset of COVID-19. The initial response of both consumers and businesses was an immediate result of enforcement rather than contentment as both entities preferred the traditional methods of shopping. In fact, changing consumers’ behaviors or habits in a short period of time is typically known to be challenging. This held particularly true for consumers who switched their purchases to become online only for necessity goods such as food, water, and hygienic products (Laato *et al.*, 2020).

“I am not an online shopper; however, due to the lockdown, I started purchasing my food and hygiene necessities online since there was no other choice.” (consumer interviewee, female, 41 years)

Purchasing online allowed these shoppers to avoid crowded places and protect themselves from the spread of the virus. Furthermore, the enforced lockdowns as well as the sales limits imposed by supermarkets on the purchase of essential items urged consumers to find alternative shopping methods to survive. This created a barrier for ordinary shopping transactions to take place.

“It was mandatory to find a way to buy the goods you want without going out from home to avoid the spread of the virus.” (consumer interviewee, male, 27 years)

On the other hand, compelled businesses started implementing basic e-commerce services during COVID-19. These companies did not consider developing an online platform for future uses; instead, their focus was to maintain their basic operations in the short-term. Since fines were imposed on those who did not comply with safety regulations, many offered delivery and pick-up services, as well as phone call ordering to meet consumers’ orders.

“We targeted elderly by offering an alternative for e-commerce by placing their orders through a phone call; the call center places the orders online and the next day customers can pick up their order.” (expert interviewee, assistant manager, 13 years of experience)

“To comply with the new regulations, we were obliged to adapt to this pandemic and encourage customers to check our products online although they still preferred to come to our physical stores.” (expert interviewee, business owner, 15 years of experience)

The second stage was “*adapting for the new e-normal*”. In this stage, consumers and businesses alike were convinced that e-commerce platforms are actually useful and vital; accordingly, they

started adjusting their attitudes and strategies towards e-commerce during the pandemic. Although within this stage people started adapting to the concept of online shopping, the level of adaptation differed. Two types of approaches were actually observed: *reluctant usage* and *keen acceptance of the needed change*.

Regarding the *reluctant usage of e-commerce platforms*, rather than making it as a habit, consumers considered e-commerce a temporary method to survive the current pandemic to satisfy their basic needs. Adapting to e-commerce was part of a learning curve, yet was not intended to be developed in the longer-run. Besides, no deep relationship was built between customers and purchased products at that stage, as customers were fixated on product categories rather than specific brands. These consumers are expected to shift back to traditional shopping methods once the pandemic is over.

“During COVID 19 period, using e-commerce platforms was a temporary solution; however, on the long-term, I will shift back to traditional shopping that I enjoy much more.” (consumer interviewee, male, 31 years)

According to the expert interviewees, the adoption of e-commerce platforms by some businesses was a way to have a short-term fix of fast declining sales. They needed to continue catering for their customers’ basic needs, hence, they had to switch their operations online in order to maintain their presence in the market. Accordingly, these companies did not invest heavily in e-commerce platforms, and only used them in their basic form to ensure their survival in the short-term. Indeed, such basic e-commerce presence did not offer features allowing the development of long-term customer loyalty based on consistent engagement and interactions.

“We were so busy salvaging the business that we opted for quick basic solutions to keep operations running. This forced us to focus on basic functionalities such as delivery and pick up organization rather than fostering engagement with our customers.” (expert interviewee, e-commerce merchandise manager, 10 years of experience)

In relation to the *keen acceptance of the needed change*, consumers’ consumption increased as they started shopping for additional categories. Some interviewees even declared that online shopping has become part of their daily life. Due to quarantine and intermittent lockdowns, consumer’s online surfing and shopping became an entertainment. In their home confinement,

shoppers were exposed to new websites and wider ranges of products and services. Their shopping behavior no longer focused solely on necessities, but started including luxuries such as clothing and gadgets.

“The lockdown increased my emotional shopping. I started purchasing things I do not really want because of stress, boredom, and feeling unhappy.” (consumer interviewee, female, 29 years)

Furthermore, and according to experts’ opinion, some businesses started implementing new online practices to enhance their performance in order to survive throughout this economic crisis that has threatened most small to medium-sized businesses. Since companies were incurring costs while their returns remained low due to recurring lockdowns, the latter opted to increase business partnerships to spread costs while ensuring a better experience for customers. Businesses adapted to this particular economic turmoil, preparing themselves for future uncertainties. They extensively developed their e-commerce platforms to engage consumers and build long-term relationships. Besides, increased customers’ screen-time due to home-confinement prompted businesses to launch creative campaigns that encourage consumers to increase their online shopping across various categories.

“We are considering partnership with other businesses to share costs and increase customer retention and satisfaction.” (expert interviewee, financial and system analyst, 23 years of experience)

The spread of COVID-19 affected both consumers and retailers alike. It has changed the rules of engagement since the lockdown limited the traditional shopping method for most of the year 2020. Nonetheless, businesses that took advantage of this period to develop their e-commerce strategies, have secured their business sustainability for the long run while achieving higher revenues.

4.2 Key facilitators of e-commerce usage during COVID-19

The findings revealed that the core factors influencing e-commerce related purchases during the COVID-19 pandemic included: (a) *last-mile delivery*, (b) *new customer recruitment*, and (c) *shopper retention*.

Last mile-delivery is a crucial pillar in the overall e-commerce shopping experience. In fact, the recurrent lockdowns during COVID-19 created demand and supply uncertainty (Zheng *et al.*, 2021) as consumers rushed to heavily order supplies online fearing they would run out of basic necessities. Such uncertainty could have a major effect on last-mile delivery services, which could jeopardize the e-commerce experience since consumers expect immediate gratification from online purchases (Ramadan *et al.*, 2019). In such circumstances, companies that manage to offer convenience, same-day or next day delivery and effective delivery-tracking were able to secure a key competitive advantage vis-à-vis the countless e-commerce platforms available.

“While shopping online, my main concern is the next day delivery [...] Also, other website features I look for while shopping online are easy to use, ability to track my order and the efficiency of the delivery service (consumer interviewee, male, 25 years).”

Moreover, interviews conducted with experts revealed companies’ strategies to attract new customers, build long-term relationships and harness loyalty during COVID-19. Since COVID-19 imposed quarantine and closure of entertainment locations, time spent daily on the internet increased drastically. Therefore, businesses invested heavily in social media platforms considering it essential to attract new customers (Naeem, 2021).

“The presence of business on social media is very important because consumers spend most of their times there. Social media is where businesses can reach their audience through targeted ads.” (expert interviewee, e-commerce manager, 15 years of experience)

With the surge of e-commerce platforms, competition became fierce. To retain customers, businesses started offering loyalty programs, including cashbacks and points programs. Initiatives were introduced to create a sense of familiarity towards newly updated loyalty programs in order to attract and retain customers.

“To encourage customers to ‘click’ more, loyalty programs, discounts, and offers geared toward online shopping will push customers to buy more, creating a self-conscious loyal customer.” (expert interviewee, retail and supply manager, 7 years of experience)

4.3 A proposed typology of e-commerce users post-COVID-19

According to the findings, it is expected that the usage of e-commerce post COVID-19 would defer depending on the type of users. Indeed, during the pandemic, online shopping behavior was already distinct from a consumer to another, which allowed for the development of a typology of e-commerce users, including *duty-bound*, *e-watcher*, *makeshift*, and *onli-vorous shoppers*.

The first type of e-commerce users identified as “*duty-bound shoppers*” includes those who are resistant to change no matter the circumstances. This category prefers traditional methods of shopping, considering it more convenient. Shopping the traditional way has an evident edge over e-commerce, since it allows consumers to physically touch the products and negotiate pricing and payment methods.

“I prefer traditional shopping since physically touching the products helps me make better purchasing decisions. Besides, it is less risky.” (consumer interviewee, male, age, 24 years)

Due to the recurrent lockdowns, this category had no other option but to shift to e-commerce platforms. Duty-bound shoppers fall under the “resigned acceptance” stage of e-commerce platforms usage, which is due to compulsion rather than contentment. The main purpose of these users is to minimize contact with people due to the spread of the virus. They only purchase daily necessities such as food, water, medications, and hygiene-related products.

“COVID-19 obliged me to use e-commerce, but I’m still not very convinced of using online shopping, although it made it easier and made it possible during this period, I prefer using it only for necessary products when I can’t go out.” (consumer interviewee, female, 35 years)

In addition, duty-bound shoppers lack trust in online platforms as they have related concerns regarding privacy, reliability, and transparency (Mahdi *et al.*, 2022). These shoppers do not enjoy online shopping, since they were rather compelled to do it during COVID-19. This group is likely to shift back to traditional shopping at the end of the pandemic.

“I do not trust e-commerce platforms. I am afraid my card would be hacked, that is why I always pick pay cash option. I can’t wait for the pandemic to end to go back to the stores.” (consumer interviewee, female, 24 years)

The second category is “*e-watchers*”. This type of consumers tends to watch the online activities of businesses without avidly engaging and purchasing. This category is interested in online shopping, yet is reluctant to actively act upon it. Indeed, e-watchers are not keen to develop relationships with e-commerce sites. They use various platforms as a way to stay up-to-date with the latest trends and might consider purchasing either online or offline only after tangibly checking the products in a physical store, basically showrooming.

“I use e-commerce sites to catch up with new trends regarding clothes and other products... I am getting used to it but I still prefer to shop in-store because I can touch and sense the product.” (consumer interviewee, female, 35 years)

During COVID-19, businesses have invested in their e-commerce platforms to engage customers and retain them. However, e-watchers remained silent watchers; they did not interact with what the brand offered although they were constantly checking other consumers’ reviews and recommendations.

“I am not easily lured into brands’ messages and ads on e-commerce sites. I go there to check the reports and real feedback posted by other customers. I typically read online reviews before making any buying decision” (consumer interviewee, male, 32 years)

The third group, “*makeshifts*” are consumers who use all means of shopping whether online or in-stores. They only care about convenience and do not care about building any relationship with the retailer. During COVID-19, this category was interested in online shopping since businesses offered same-day and next-day deliveries as well as offers and discounts. Makeshifts do not show commitment to any specific method of shopping.

“For some products, I would find it more convenient to do traditional shopping, while for other products e-commerce would be more convenient.” (consumer interviewee, male, 30 years)

This category searches for the best combination of pricing, offers and discounts, quality, and fast delivery dates. Makeshifts use online shopping when they need international products that are not found in their market. They consider shopping (whether in-store or online) as a mean to fulfil their purchasing need:

“My main goal while I am shopping online is to save time and find new products especially within my expected price range.” (consumer interviewee, male, 38 years)

The final type of e-commerce users is “*onli-vorous*” who are addicted to online shopping. They purchase their desired products on a daily basis from e-commerce platforms. The users in this category have always been avid online shoppers. With the spread of COVID-19, their online purchases increased drastically as they started shopping for new product categories.

“I would consider myself as an online shopper addict. I have taken online shopping as a habit and even an addiction to some extent. It is just easier, more convenient, and time saving.” (consumer interviewee, female, 25 years)

Since people were home-bound for long periods of time, with no place to go to and little activities to do, online shopping became a habit, and more importantly a driver for a new lifestyle. A strong relationship was built between customers and businesses, especially those who offered loyalty programs for online transactions. Online shopping soared as consumers felt bored, stressed, and unsatisfied. Onli-vorous shoppers considered online purchasing not only a relief, but also a hobby, which in some cases developed into an impulsive consumption behavior (Islam *et al.*, 2020). This category will never consider returning to traditional shopping methods. They believe that e-commerce will further develop their virtual reality features (Farah *et al.*, 2019.) to become even more convenient and enjoyable.

“Some platforms are becoming extremely interactive and engaging through the use of virtual reality, which allows me to experiment with the product I want without having to go out of my home. I don’t see myself going back to the crowd of physical stores when the pandemic ends”. (consumer interviewee, male, 33 years)

In sum, the study shows that not all consumers perceive and use e-commerce platforms the same way. Therefore, companies’ approaches must be tailored to the various types of e-commerce users hereby described. During COVID-19, many businesses lost their position in the market because they did not seize the opportunity enough to grow through e-commerce. Nevertheless, companies who have fully integrated e-commerce related technologies into their business have witnessed customer retention, high sales incremental, and stronger market position.

5. Discussion and Implications

Unlike earlier research, this study based the proposed post-COVID typology following a thorough analysis of the stages and key facilitators of e-commerce platforms' usage and customers' online shopping patterns during the COVID-19 pandemic. The typology, which has been derived from both consumers and experts' perspectives, depicted the new predominant segments of e-commerce in a post pandemic world. The findings gathered through this exploratory study indicate how the spread of COVID-19 transformed the entire market and the way various online consumers shop.

From a scholarly perspective, this paper fills a sizeable gap in the literature as it tackles the impact of market uncertainty on consumers' shopping behavior and businesses' operating techniques. In fact, the spread of COVID-19 has changed the market structure and created new lifestyles and shopping habits (Sheth, 2020). The identification of two consecutive stages of e-commerce platforms' utilization, characterized by a *resigned acceptance*, followed by an *adaptation to the new e-normal*, enhance the literature on the development of consumers' and businesses' behaviors within an accelerated e-context that was triggered by the pandemic. Nonetheless, the adaptation propensity diverges between reluctant and ardent usage of e-commerce. These findings expand our understanding on forced consumer behavioral changes as well as critically-needed corporate strategic responses that are made under compelling circumstances. The insights of the study also imply that once the initial shift is made, constituents, i.e. consumers and businesses, would follow different adoption patterns, which shows that online shopping growth and acceptance does not follow a linear progression, but is rather influenced by a combination of behavioral characteristics and corporate capabilities and nimbleness. Furthermore, prior typologies proposed by scholars during Covid-19 had focused on the adaptability of shoppers while noting a surge in health and social-consciousness related needs that pertained to the pandemic (see Hartono *et al.*, 2021). The various lockdowns imposed worldwide have created demand and supply uncertainties, making it challenging to estimate the long term economic or societal consequences of the pandemic outbreak (Donthu and Gustafsson, 2020). In addition, the fear of being infected has created different stages and types of users adopting e-commerce platforms (Baker *et al.*, 2020). While this holds true during the outbreak, such a typology is expected to change post-pandemic which our study specifically tackles. In fact, the post Covid-19 typology of e-commerce users and online shoppers shows that consumers would fall into four distinct segments, namely *duty-bound*, *e-watcher*, *makeshift*, and *onli-vorous*. This

typology embeds shopping behavior – both prior and during the pandemic – to elicit the shifting shopping behavioral patterns of consumers that were affected by the fact that they were compelled to use e-commerce platforms during the outbreak (Hartono *et al.*, 2021). Accordingly, the proposed typology is unique in as much as it takes into account that all shoppers had already used e-commerce in a way or another in the past two years. It is important to note that while typologies developed prior to the pandemic (e.g. Huseynov and Yildirim, 2017) and the proposed one all embed the two key factors of internet usage and shoppers' lifestyle, the typologies proposed during the pandemic prioritize health and social-consciousness related needs. The present paper expands the literature related to this nascent research area, which is still expected to further develop in the coming years (Pantano *et al.*, 2020). It adds a fresh perspective on the forthcoming market structure post COVID-19, and complements the rising interest and research in the field of e-commerce and shifting consumer behavior within the context of a pandemic outbreak.

From a managerial perspective, this paper sheds the light on how the spread of COVID-19 caused the rise and fall of businesses depending on their development of e-commerce platforms. The study guides experts on how to counter market uncertainties in the future; hence its implications are pertinent. The findings related to the different stages of e-commerce adoption show that the spread of the COVID-19 has altered consumer behavior, while at the same time refining companies' strategies. Indeed, the development of technology and its constant innovation have developed convenient methods for people to shop and businesses to operate (Yunis, 2018; Kouatli *et al.*, 2020; Guerreiro *et al.*, 2022). As per the findings, companies are advised to focus disproportionately on key facilitators, namely *last-mile delivery*, *new customer recruitment*, and *shopper retention* in order to achieve incremental online sales. In fact, increasing the online consumer base and retaining it will closely be related to a successful last-mile delivery that responds directly to consumers' need for instant gratification. Accordingly, businesses are encouraged to extensively feature their delivery capabilities especially from a time and effectiveness perspectives on different digital platforms so as to build awareness about their differentiated online services.

E-commerce platforms are developing rapidly, segmenting its users into different groups based on their varying engagement level and willingness to buy. For businesses to be able to counter the negative impact of the spread of the COVID-19, companies must understand where

their customers stand and how to target them. Hence, managers are advised to take the typology hereby proposed into consideration when targeting the different types of e-commerce users.

Duty-bound shoppers are considered to be the hardest type of consumers to work with as their engagement level and willingness to buy are very low. However, managers must first invest in and focus on creating awareness about their online presence to make sure consumers know about its existence and for the business to maintain its existence in the market. With this group, experts must focus on the functional benefits rather than emotional appeal. Businesses must, as a start, implement a user-friendly platform as this type of consumers have never shopped online. In addition, duty-bound shoppers' main concern is trust; hence, businesses must invest in privacy and security features to keep all information confidential alongside multiple payment methods.

The case with e-watchers is slightly different. This group of consumers has a more positive attitude toward e-commerce platforms than duty-bound shoppers. Nonetheless, categorizing this group as potential clients is inaccurate as their purchasing behavior is unlikely to show any change in the short term. Managers must target these users so as to improve their overall engagement level as this is likely to enhance their relationship with the company alongside its long-term revenues. This could be done through continuous interaction and engagement not only on the e-commerce platforms, but also on all other channels as this group of users is easily influenced by various socialization factors.

Makeshifts are considered to be the easiest group of consumers to reach and communicate with. These shoppers show businesses low engagement level on their e-commerce platforms. They show no commitment to any shopping method as they mainly seek convenience. Accordingly, it is very important for companies to maintain close interaction with this segment. Managers must emphasize on the convenience customers can benefit from when shopping online and on the attractiveness of their loyalty programs for online purchases (i.e. higher discounts on next purchases, cashbacks, double redeemable points, etc.). Additionally, companies must invest in their last-mile delivery services (short delivery dates and ability to track the package), offer low to zero delivery charges, provide full details product description of the offered products, and include refund and exchange policies. Furthermore, businesses must unify customer's shopping experience by creating an omnichannel approach to integrate all touchpoints.

Last but not least, onli-vorous consumers are considered to be the most valuable asset of e-commerce platforms. Managers must ensure that this type of shoppers are not only satisfied but

also delighted so as for their purchasing behavior not to be negatively affected. Their strategy must focus on constantly enhancing customers' experience to retain them and ensure their loyalty. Building consumer relationship involves enabling interactions on different platforms including social media sites (Ramadan and Abosag, 2016; Chaker *et al.*, 2022), such as replying to customer's comments and including their reviews and recommendations about offerings (Assaker *et al.*, 2020; Tóth *et al.*, 2022). Companies are advised here to integrate new tech tools such as augmented reality (Ramadan and Farah, 2017) and virtual reality (Itani and Hollebeek, 2021) into their e-commerce solutions in order to retain this particular segment of shoppers.

Table 2 summarizes the developed typology of e-commerce users post-COVID-19 alongside all the relevant suggested marketing strategies hereby discussed.

INSERT HERE: Table 2: A proposed typology of e-commerce users post-COVID-19 and the relevant suggested marketing strategies

6. Conclusion

With the rise of uncertainty and unexpected events, it is essential for organizations to reexamine their emergency business plan to check its effectiveness. The longer the pandemic lasts, the more likely consumers twig to their new habits and businesses battle to adapt. Since early January 2020, consumers have drastically shifted their purchasing behavior online, while adapting e-commerce innovations. In the era where businesses have the advantage of building their online presence to increase customer reach, it is important to know how their target market are segmented. This is critical especially in the case of market uncertainty.

This research paper is among the first to identify the different stages, while proposing an innovative typology of e-commerce platform users post-COVID-19. This study offers useful recommendations to deal with similar future crises on the basis of trending shifts in behavioral online shopping patterns. While typologies of e-commerce users have been extensively conducted in the marketing literature, no study has yet tackled a post-pandemic segmentation that could provide direly needed early-on adaptation of companies' marketing strategies.

7. Limitations and Future Research

This research study is not without limitation due to its exploratory nature and its focus on the specific case of the COVID-19 pandemic albeit it having a worldwide impact. Another limitation is related to the fact that this study tackled online shopping in general without further stressing on various product categories in specific.

Future research can adopt an empirical approach to test the impact of market uncertainty on the various types of shoppers hereby identified. Moreover, future studies could examine the case of different industries alongside a comparison across different regions, cultures and product categories. In addition, potential studies could factor in the different internet penetration and e-commerce platforms' usage across different age groups in specific markets. Future studies could also propose typologies of e-commerce platforms that are mobile-based versus those that can solely be utilized on desktops or tablets. Last but not least, it would be interesting for researchers to tackle e-commerce solutions that embed omnichannel tech-tools such as augmented reality (AR), virtual reality (VR), and self-service replenishing tools, as these can cater for consumer segments of varying demographic profiles and shopping behaviors.

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