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RESEARCH NOTE

Digital Consumer Behaviour and eCommerce Trends during the COVID-19 Crisis

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The COVID-19 global pandemic has rapidly changed e-commerce. With revenues of US $351.9 billion, Europe was the third largest e-commerce market in 2019. Annual growth (6.0%) is projected to lead to revenues of US $565.9 billion by 2025 in Europe. Overall, e-commerce revenues saw 10% additional growth in Europe in 2020 due to the COVID-19 crisis (Statista, https://www.statista.com/study/42335/ecommerce-report/2021, 2021).

New e-commerce standards build on traditional marketing theories (Haan et al., *Journal of Marketing*, 2018; Sunder et al., *Journal of Marketing Research*, 2016; Verhoef, *Journal of Marketing*, 2017) with the added insight of understanding digital consumer behavioural characteristics, developing consumer insights and creating value propositions that offer consumers higher levels of satisfaction (Achrol and Kotler, *Journal of the Academy of Marketing Science*, 2012; Eggert et al., *Industrial Marketing Management*, 2020; Payne and Frow, *Journal of Services Marketing*, 2020). During the COVID-19 crisis, consumer behaviour and purchasing habits fundamentally changed.

This paper examines the effect the COVID-19 crisis had on digital consumer behaviour and discusses factors affecting online shopping and the latest trends in e-commerce in the Czech Republic. Potential respondents were selected from different generational cohorts in two waves. Based on generation cohort theory (Igelhart, *Princeton University Press,* 1997), the current research defined respondent cohorts as follows: Generation Alpha (2011-present), Generation Z (1997–2010), Generation Y (Millennials) (1983–1996), Generation X (1965–1982), Baby Boomers (1946–1964),

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and the Silent Generation (1928–1945). This paper investigated factors influencing consumer behaviour among 200 respondents who participated in a survey created for this purpose. The first wave took place before the COVID-19 crisis between November 1, 2019 and December 1, 2019. The second wave took place during the COVID-19 crisis between April 1, 2020 and May 1, 2020. The online structured questionnaire consisted of 28 questions, including ten questions regarding socio-demographic identification. The questions used in the questionnaire were close-ended (multiple-choice) and open-ended. Completing the questionnaire took approximately 15 minutes. Potential respondents were selected through the authors´ social networks (personal database) (especially generation cohorts X and Z). To meet quota requirements (Online Supplemental Appendix Table 1 lists the generations), 700 individuals were contacted in each wave. Baby Boomers and the Silent generation were contacted again via the authors´ personal database. 100 questionnaires were finalized in each wave, and the response rate was 14% overall. The respondents were sent a follow-up message one week after first contact to obtain a higher response rate. 55 respondents also participated in the second wave. To fulfil the quota characteristics, 45 additional respondents were obtained via social networks and personal contacts.

Customer behaviour was influenced by the COVID-19 pandemic itself as well as by government restrictions. Consumers from all generational cohorts reported digitally purchasing goods and services at a higher rate during the COVID-19 crisis, though Baby Boomers were important drivers of e-commerce growth. Overall, there was a considerable shift to digital spending because 43% of all respondents had shopped online since the COVID-19 crisis began in comparison with 12% before the crisis. Purchasing frequency increased as well. Weekly shopping via the Internet was reported by 25% of respondents compared to 9.8% of respondents before the COVID-19 crisis across all generational cohorts.

The results showed two main findings. First, increases were evident in consumption of food and non-alcoholic beverages, online educational services, and online content. As of May 1, 2020, 54.8% of respondents had started purchasing food and non-alcoholic beverages online instead of offline because of the pandemic. Between March 2020 and April 2020, there was a decrease in spending on non-food categories such as online booking of leisure activities, transport tickets, body care, and fashion clothing, footwear, and accessories. Spending on these categories decreased by over 40% from April 1, 2020 to May 1, 2020 compared to November 1, 2019 to December 1, 2019. Second, e-commerce was affected by a change in the primary devices used to access online shops and the payment method used. The personal computer became the most preferred device (52%) for searching and purchasing online during the second wave of this research compared to pre-crisis greater use of smartphones and tablets. Before COVID-19, only 47% used a personal computer. Nearly 65% of digital consumers used digital payment methods (online banking, online money transfer or mobile pay), over 20% more than before the pandemic. Interest in paying via Apple Pay and Google Pay grew when both tracked waves were compared. In the second wave during the pandemic, 13% of Generation Z used this method compared to 1% of Generations X and Y.

This research note provides an overview of digital consumer behaviour during both study periods and aims to present novel results. Based on the survey results, respondents prefer online shopping due to fear of the pandemic, a desire to feel safe at home, and global government restrictions. In connection with the COVID-19 pandemic, there was an increase in online transactions and changes in online searches, realized payments and methods of delivering goods and services. The profile of online customers changed. More consumers, mainly from the small Baby Boomer and Silent Generation samples, were attracted to online shopping during the COVID-19 crisis by necessity due to closed stores and infection risk. Most of these consumers reported that they planned to continue online purchasing. The new reality is that customer and shop interactions have increasingly moved online.

The current preliminary results will be used in designing a future in-depth analysis of leading e-commerce trends and the new post-COVID-19 pandemic reality. There are three main limitations. The first two are the small sample size in both waves and that the research was not done internationally. The third limitation is the time horizon. Future studies should be done longitudinally to explore the complexities of the impact of COVID-19 on digital consumer behaviour.

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