

FACTORS AFFECTING THE FREQUENCY OF ONLINE SHOPPING OF YOUNG CONSUMERS IN THE POST-COVID-19 ERA

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ABSTRACT

Background: Understanding of drivers of online shopping is crucial in today's digitized world. The COVID-19 pandemic highly influenced young consumers shopping behavior and rapidly raised their preference for online shopping. **Aims:** The aim of this paper was to investigate which factors affect the frequency of young consumers' online shopping in the post-pandemic era. **Methods:** The data were evaluated by application of the Generalized linear model. **Sample:** The primary data were collected through a self-administered questionnaire with 635 respondents. **Results:** The results showed that the perceived e-trust and the usage of social media (expressed through factors such as frequency of use and promotion on social media) influence the frequency of online shopping of these consumers. The research also revealed that males tend to shop online more than females. **Conclusions:** Social media usage, e-trust and promotion on social media proved as significant factors affecting the frequency of online shopping of young consumers. The factor of gender showed up significant too. **Implications:** It is important to differentiate the contents of the messages on social media based on gender and the customer segments to whom the communication and promotions on social media are addressed.

Keywords: online shopping; e-commerce; frequency of online shopping; young consumers; consumer behavior

JEL Classification: M31; M37; M39

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Introduction

The development of Web 2.0 and the technical innovations in the field of communication have increasingly focused on the social aspect of online users in recent years. This change of perspective has transformed the Internet user from a passive recipient of information to an active co-creator of web content (Verhoef et al., 2019). This type of interactivity gives users numerous opportunities to participate in social media. Writing, distributing and commenting on information is now part of our everyday life. This progress in communication technologies, digital networking through social media and the resulting interactive communication between market participants have brought about significant changes in online retail. The covid-19 pandemic has posed a threat to several human lives as well as numerous global developments. However, it turned into the biggest chance for e-commerce. People were left in public spaces, and every country went into lockdown. Daily essentials remained constant in the interim. Due to this hazard, online shopping has allowed everyone to conveniently buy their essentials while also saving their lives. In order to bring the terms social media and online purchasing behavior together (Bai et al., 2015). It was necessary to address the changes in online trade caused by the development of social media, which can be used to mediate or reinforce change in customer online shopping behaviour. Overall, longer-term and higher-quality studies should be conducted. According to Al-Adwan (2018), the supplier's encouragement of customers' positive attitudes towards online shopping has increased their intent to make purchases. Therefore, in order to do this, it is essential to increase consumer confidence and sense of security and reduce perceived risks during purchase and sale transactions by guaranteeing information confidentiality and individual privacy when users use the website and the provider's reputation. Social commerce stands for a form of e-commerce in which consumers are involved in the marketing process. While the relationships between companies and customers are unidirectional in classic e-commerce, social commerce redefines this type of interaction and the classic allocation of roles.

In the issue of shopping online, trust is a ubiquitous, complex and multifaceted phenomenon, and for this reason, trust plays an important role in consumer purchasing behaviour. The goal is to understand and explain the purchasing behavior of consumers in order to derive recommendations for action to influence consumption specifically. (Alzaidi et al., 2020). E-trust was a key aspect, according to many earlier academics, in the impact of consumer purchase intent. It is specifically classified into a number of categories that correlate to the various parts of the online goods sale industry (Tran et al., 2022).

According to Jain et al. (2021) various digital payment methods are used both at the point of sale and for online shopping on commercial trading platforms or as part of C2C goods trading. What the different technologies have in common is that payment processes are drastically accelerated and simplified, which on the one hand, means that goods are available to the consumer more quickly, and on the other hand, the transaction costs for the consumer are reduced. Digital payment has long been widespread using, e.g. giro cards, credit cards or electronic transfers. In addition, however, other forms of digitized payment are constantly being developed, in particular those of mobile payment. In this context, the issue of security and awareness of risks in online payments comes into play.

Sago (2015) stated that the payment process for online purchases is increasingly being handled by payment service providers, which close the time gap between sending and receiving an amount of money that occurs when transferring money through traditional financial institutions. In rare cases, the service providers themselves have a banking license (e.g. PayPal). Convenience is often more important than caution. Organizations should remain vigilant and ensure that cybersecurity strategy is aligned with new consumer behaviors for the year ahead.

Whether the covid-19 pandemic, environmental awareness or the desire to support local trade - a wide variety of factors are influencing the frequency of online shopping in the post-pandemic era. Facebook and Instagram have been steadily expanding their shopping functions for several years, and WhatsApp and Twitter have recently followed suit. For a long time, users have been buying not only from online shops but also where they spend a lot of time anyway: on social networks. Whether individual products or entire collections, due to the advanced algorithm, buyers become aware of such products. People have different perspectives on how the internet is used for buying and selling. Some people consider it to be a better choice than in-person shopping because of its practicality. Brick and mortar shops have difficulty having an impact since they cannot reach the entire country. On the other hand, internet shopping and merchants make their product portfolio available to a variety of people throughout the world, making goods that would otherwise be difficult to obtain accessible (Aseri, 2021). As stated above, many factors have an impact on online shopping, but the question is if all these factors should have an impact also on the frequency of online shopping of young consumers in the post-pandemic era.

Methods

The aim of this paper was to investigate which factors influence the frequency of young consumers' online shopping in the post-pandemic era. The research was focused on the investigation of two socio-demographic factors (gender and age) and five selected factors which were named according to the context of the questions: 1) Social media usage (SMU) – 6 variables; 2) Feelings (FEE) -5 variables; 3) E-commerce trust (ECT)- 10 variables; 4) Attitudes (ATT) – 9 variables and 5) Promotion on social media (PSM) – 8 variables. The variables and factors were derived from the studies of Pencarelli et al. (2018), Pencarelli et al. (2020) and Ali Taha et al. (2021). The data were obtained by a self-administered questionnaire by the online platform Google Forms, and 635 respondents participated in this survey conducted in April 2022 in the territory of the Slovak Republic. The research sample consisted of young consumers who are considered to be the representatives of the Millennial and Post-Millennial generations. Methods of descriptive statistics were applied in order to construct the latent factors from manifest variables. Subsequently, the generalized linear model (GLM) was constructed in order to explain the frequency and intensity of online shopping on the basis of behavioural (five factors) and demographic characteristics of respondents (generation and gender). Data were processed by Microsoft Excel. Modelling and creation of plots were conducted in R 3.4.4 environment for statistical computing (R Core Team 2021).

Results

The demographic characteristics of the respondents showed that 635 respondents took part in this research, where 274 were representatives of Millennials and 361 respondents belonged to the Post-Millennials generation. Regarding the gender representation of respondents, 237 men (87 Millennials and 150 Post-Millennials) and 398 women (187 Millennials and 211 Post-Millennials) participated in this research.

As the first part of this analysis, the total score points for each respondent were calculated and converted from the responses on the Likert scale (1-5) to a scale of 0 to 100%. Higher percentages always indicate a higher rate/intensity of the domain, which corresponds to the degree of agreement with statements in the questionnaire (1 - disagreement; 5 - agreement).

Table 1. Descriptive statistics of latent factors

	Mean	Std.Dev	Median	Skew.	Kurtosis	SE
Social media usage (SMU)	60.79	12.71	63.33	-0.29	0.26	0.51
Feelings (FEE)	39.64	26.61	40	0.44	-0.51	1.07
E-commerce trust (ET)	60.48	7.51	60	-0.01	0.07	0.3
Attitudes (ATT)	61.27	14	62.22	-0.8	0.98	0.56
Promotion on social media (PSM)	58.68	16.24	60	-0.45	0.15	0.65
Frequency of online shopping (FOS)	43.95	13.95	41.67	0.59	-0.31	0.56

Source: *processed by the authors (2022)*

As it is evident from these results, the factors with the highest rate are Social Media Usage (SMU), E-commerce Trust (ECT) and Attitudes (FEE). The factor with the lowest rate represents factor Feelings, where the respondents evaluated their concerns about in-person shopping in re-opening the physical stores. However, the concerns of respondents were lower than we expected. The highest rate recorded factor Attitudes, where the attitudes of respondents in shopping online were evaluated. The social media usage factor showed the frequency of use by our respondents. Factor “frequency of online shopping” was constructed by 6 variables and entered into the model as a dependent variable.

The initial model was compiled as the most complex possible (i.e. full models), and their terms were subsequently tested by analysis of deviance. In the next step, we simplified them by step-by-step removal

of their insignificant terms while respecting the rule of marginality (i.e. it is not possible to remove an insignificant term which is part of a significant higher-order interaction) - this further irreducible (minimal adequate) model is presented in the form of a diagnostic table (Table 1.) Based on values of null and residual deviance, we calculated pseudo-R², which captures the proportion of the variation in the dependent variable that is predictable from a set of independent variables. The model was visualized by lines with 95% confidence intervals derived from fitted values $\pm 1.96 \times SE$ on the link scale, whereas the link function was used to map the fitted values and the upper and lower limits of the interval back onto the response scale.

Table 2. Minimal adequate GLM model

	Estimate	Std. Error	t-value	p-value
(Intercept)	6.432	5.121	1.256	0.209
Gender [male]	4.908	1.297	3.782	< 0.001 ***
SMU	0.103	0.047	2.176	0.029 **
E-trust	0.227	0.085	2.663	0.007 **
PSM	0.276	0.038	7.197	< 0.001 ***

Null deviance=171481; Residual deviance=138280; pseudo-R² = 19.36%

Source: processed by the authors (2022)

The resulting model indicates four significant factors influencing online shopping frequency among Millennials and Post-Millennials. The results of the model showed that age does not play a significant role in understanding what influences the frequency of online shopping. Based on the tests applied to our dataset, we can conclude that no statistically significant differences in the frequency of online shopping were detected between the analysed generations of Millennials and Post-Millennials. On the other hand, results underlined the importance of gender in this issue. The testing revealed statistically significant differences between the genders, while men shop online more often than women. From Figure 1, we can observe that social media usage positively influences the frequency of online shopping of males. From this figure is also evident that in the case of males, the frequency of online shopping is also positively connected with promotion on social media as with e-commerce trust.

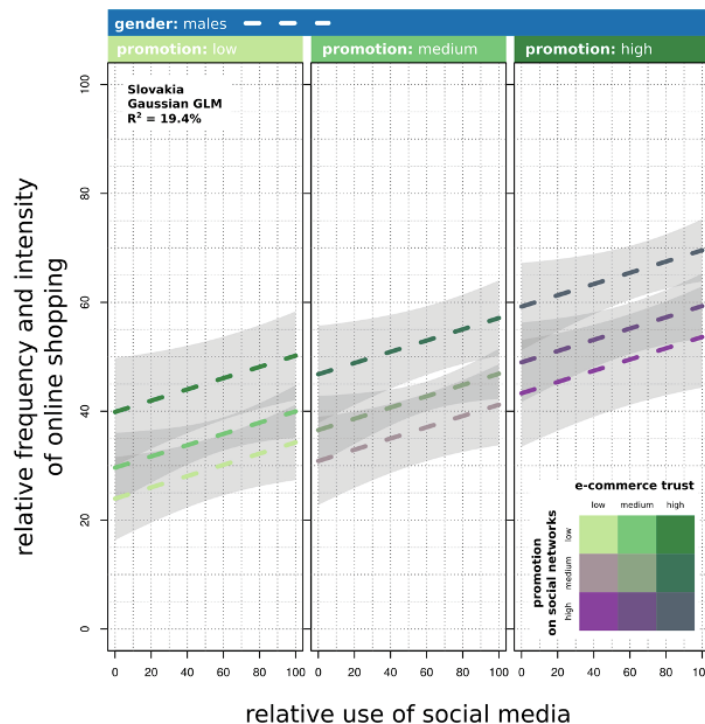


Figure 1. Visualization of generalized linear model separately for males.

Source: processed by the authors (2022)

In addition to gender, three of the five domains (SMU, ECT and PSS) were confirmed as significant. However, it is a consistent pattern that all significant domains positively affect the frequency of online shopping. The results of the GLM model confirmed that consumers are more likely to buy online products which have bigger promotions on social media (the bigger the campaign, the better the sales). Based on our results, we can also conclude that consumers who are active on social media do online shopping significantly more often, what means that the more time these consumers spend on Facebook or Instagram, the more they tend to buy online. It is probably caused by social media advertising campaigns. Another result of our analysis showed that the consumers who do online shopping most often are those who have a high level of trust in digital security, which they probably gained through repeated purchases. The descriptive GLM model is quite strong - we can explain about 20% of the variability of respondents' online shopping based on the factors mentioned above. Factors Attitude, Feelings and "generation" did not contribute to explaining the frequency of online shopping behavior.

Discussion and conclusion

Stefko et al. (2015) highlighted the importance of web pages, which, according to their research, are considered the main tool of e-marketing in terms of communication. According to the results of our research, we can conclude that communication with loyal and potential young consumers on social media is also important because of two factors – their time spent on social media and their perception of the promotion of the product on social media. The reason for this is the new forms of communication between merchants and their target customers and also the fact that only one customer review can influence a broad mass of potential customers (Stefko et al., 2016). It is very difficult to succeed in the field of brands and merchants battles on social media because of overwhelming amount of their content and competition (Nastisin et al., 2019).

The results of Sulastini's et al. (2018) and Bacik et al. (2020) researches indicate that gender doesn't play a significant role in terms of online shopping but our results proved the opposite. Also, the study of Boustani et al. (2022) aimed on the attitudes towards online shopping during the pandemic times proved that important aspect of consumers' attitudes toward online shopping is gender, which represents a major parameter in purchasing products online and that the types of goods differ according to whether the customer is male or female. The study of Shukla et al. (2021), highlights that perceived benefit, website aesthetics, and Internet self-efficacy positively and significantly impact working women's purchase intention and confirms there are differences between genders in the issue of online shopping. The Birknerova et al. (2018) research even proved there are significant differences in advertising perception between men and women. According to the results of the same research, there is a significant relationship between the credibility of the merchants' website and its presentation on social media what was confirmed also by our results (Sulastini et al., 2018). We can conclude that the factor of a gender plays significant role in the frequency of online shopping within young consumers. According to our results, the statistical significant differences between generation Y and Z wasn't proved.

Online store managers must also differentiate marketing actions based on the type of products on sale (convenience, shopping or specialty goods) for which the perceived risk in purchases is different. It is probable that the perception of risk in purchases differs between men and women. Further managerial challenges are linked to the channel strategies adopted by the sellers: if omnichannel strategies are adopted, it is necessary to take into account the fact that women love to spend their time shopping at physical points of sale to better and more accurately observe the quality of the products and to enter into personal relationships with the sales staff. It is also important to take into consideration the fact that young women prefer the social e-shopping site to traditional e-shopping (Dennis et al. 2010).

From the perspective of the results of this study, there are some managerial implications for managers. The e-merchants should pay attention to the quality of online communication on social media, as this factor proved to be significant in the issue of frequency of online shopping. It is also important to transfer the young consumers to the e-merchant's profile on social media because it could help to engage the consumers through targeted communication. They should try to differentiate the contents of the messages on the basis of the gender of the customer segments to which the value propositions are addressed. The content on social media is overwhelming so the promotion on social media is directly

linked to the previous implications. Without promotion of the e-merchant's content should, their communication to the consumer disappears in a large amount of other content on social media.

As with every research, also this has its limitations like the origin of the respondents only from the Slovak Republic or affiliation of the respondents only to young generations (Millennials and Post-Millennials). The future orientation in the field of this problematics should focus on investigating the factors affecting the frequency of online shopping of older generations like Generation X. Due to the lack of knowledge in the field of this problematics, it is also important to investigate which factors influence women and men in online shopping in order to find content marketing solutions and suitable communication and social channels.

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