

CAUGHT IN THE WEB OF GENERATIONS: SOCIAL MEDIA AND ONLINE SHOPPING HABITS IN THE DIGITAL AGE

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Abstract

Trade has undergone significant change since the 2000s. Digitalisation has led to people doing more and more of their shopping online, making e-commerce a booming industry. In recent years, e-commerce has also evolved, thanks to changes in content consumption habits of all generations, and consequently in the use and amount of time spent on different devices. With the proliferation of smart devices and the availability of broadband internet, the fastest growing channel for the sale of goods and services has become m-commerce (mobile commerce), which refers to the online purchase of goods and services by consumers via their smart devices. For consumers, it is an easy and convenient way to shop, because our mobile phones are at their fingertips, they can be used anywhere, anytime, and can be used at every stage of the shopping process. The aim of this research is to explore the role of generational affiliation in the use of mobile phones in social media usage and online shopping habits on mobile phones.

1 Introduction

Part of the relevance of the topic stems from the growth of online commerce, which has undergone a major transformation since the early 2000s, accelerated by digitalisation and the spread of online shopping habits. As a result, the global online commerce market has grown dramatically in recent years, with global e-commerce reaching \$29.3 trillion in 2017 and reaching over \$33,000 billion in 2024, according to UNCTAD [2] [3]. Online retailing has also seen significant growth in recent years, with the global market size increasing from \$3.8 trillion in 2017 to \$4.2 trillion in 2021 [4]. Similar changes to global trends have occurred in Hungary. Online retail sales were estimated at HUF 461 billion in 2017, rising to over HUF 1,900 billion in 2024 [5]. These figures show that online retailing has become a significant player in the retail sector not only globally, but also in Hungary.

Like online shopping, social media platforms such as Facebook and Instagram, as well as content-sharing websites such as YouTube, have become an integral part of our daily lives [6], as confirmed by a survey conducted by the NMHH [7], which estimates that the number of active Facebook users in Hungary in 2024 will be nearly 5.2 million, and globally 3.07 billion people will use the social media site [8].

But what is social media? In everyday life, it is typically misunderstood to mean platforms such as Facebook, Instagram or TikTok. The concept of social media has been defined in various ways in international literature. Kaplan and Haenlein [9] define social media as platforms that allow users to share information, build relationships or share their opinions with others. Rhee et al [10] define

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social media as interactive communication tools in which users actively participate in sharing content, forming opinions and connecting with others. Based on a broad definition of social media, Gáti [11] categorizes the different types (Figure 1), which includes commercial communities (e.g. eBay, iStock), content shares (e.g. YouTube, Instagram), social networks (e.g. Facebook, LinkedIn), Forums, Blogs (e.g. X, Tumblr), Social news sites (e.g. Reddit), Collaborative projects (e.g. Wikipedia), Virtual worlds (e.g. World of Warcraft).

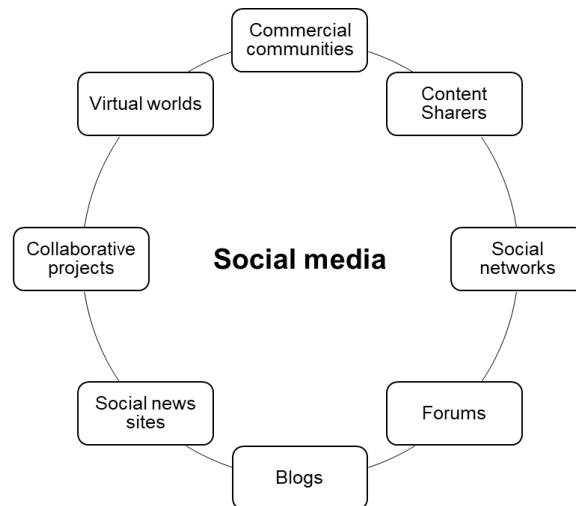


Figure 1: Types of social media

Source: based on Gáti (11) own editing

It is difficult or impossible to consider society as a single entity, since society is made up of heterogeneous groups [12]. We can group our society according to different criteria, one of which is generational affiliation, which can be determined from birth years. It is not the date of birth per se that is decisive and influential, but the fact that childhood experiences are the strongest, typically defining the basic personality. Even if we experience all the experiences of later life, the dominant ones remain those of childhood, the others are viewed, interpreted and used through the generational lenses we have acquired at that time [13]. In Western societies, including Hungary, we distinguish between five generations [14]. The Baby Boomers, born after the economic boom after World War II [15]. The Generation Xers, born between 1965 and 1979 into a world of hardship, unlike the Baby Boomers. Generation Y, also known as the Millennial generation [16], which includes those born between 1980 and 1994, who are now considered children of the digital age. Generation Z (born between 1995 and 2009) are often referred to as digital natives, who have been and continue to be influenced by social media from a very young age [17].

Over the last decade, social media have increasingly had an impact on different economic and social areas, with the emergence of innovative new services. One of these areas is changing content consumption patterns, where generational differences are becoming apparent. According to several surveys, while traditional media are in steady decline, online content consumption - in particular social media and streaming services - is gaining ground in people's lives [18, 19]. The majority of the younger generation is increasingly looking for fast, easy-to-consume content, which has led to the eclipse of traditional media (linear television or print media). Instead of static, passive processing of information, active, interactive and entertaining content is becoming more popular [20]. In addition, social media are not only for entertainment and information but also require active participation of the audience. People are increasingly choosing platforms where they can create their own content and participate in the creative process. This change is not only reshaping user behaviour but is also encouraging industry players to adapt their marketing strategies to consumers' needs [21]. The advertising market is also being transformed, as consumers can no longer be reached by traditional marketing communication tools on this new platform.

In recent years, e-commerce has continued to grow and evolve, partly due to the changes in content consumption patterns mentioned above, which have led to a significant shift in the way

different devices are used and the amount of time spent on them [22]. With the proliferation of smart devices and the availability of broadband internet, the fastest growing channel for the sale of goods and services has become m-commerce, which refers to the online purchase of goods and services by consumers via smart devices [23]. With the growth in mobile phone usage, the consumption of digital content is also shifting towards smartphones, and consequently online purchases are also being made on these devices.

Following the secondary research, I would like to find the answers to two research questions:

- Q1: Are there significant differences between generations in mobile usage habits, especially with regard to social media activity?
- Q2: Are there significant differences between generations in mobile shopping habits?

2 Method

In order to answer my research questions, I conducted a questionnaire survey. The survey was convenience sampled and shared from 12.03.2025 to 21.03.2025 on social media sites. The questionnaire consisted of three groups of questions: 1) questions about mobile phone and social media usage habits, 2) questions about online shopping habits via mobile phone, and 3) demographic questions. The questionnaire was shared online on closed social networking sites using convenience sampling, so the survey sample cannot be considered representative. Data were processed using IBM SPSS Statistics 26. Cross-tabulation analyses were conducted to examine differences between generations, and a Chi-square test and adjusted residual were used to detect significant differences.

A total of 367 people completed the questionnaire, the sample after data cleaning was 343. The demographic composition of the sample is summarised in Table 1.

Table 1. Demographic characteristics of the sample

<i>Variable</i>	<i>Category</i>	<i>Frequency</i>	<i>Percent (%)</i>
<i>Gender</i>	Male	113	23,9
	Female	230	67,1
<i>Generation</i>	X	83	24,2
	Y	121	35,3
	Z	139	40,5
<i>Place of residence</i>	Capital city	32	9,3
	City with county status	177	51,6
	City	73	21,3
	Village	61	17,8
<i>Education</i>	Primary degree	9	2,6
	Secondary degree	164	47,8
	Higher degree	170	49,6
<i>Income situation</i>	Below average	82	23,9
	Average	128	37,3
	Above average	107	31,2
	No active income	26	7,6

3 Results

There are significant differences between generations in terms of daily phone screen time (Chi-Square: 32.99; $p < 0.01$). Moderate phone use dominates among Generation X. Most spend 3-4

hours (31.3%) or 2-3 hours (27.7%) per day on the phone. The share of use exceeding 5 hours is only 18.1%, while the 4-5 hour category is even lower at 7.2%. The lowest level of phone use is 0-2 hours per day (15.7%), suggesting that device use among older people is more moderate. Generation Y has a higher level of phone use. They spend the highest proportion of 5 hours or more on the phone per day (26.4%), followed by 2-3 hours (19.8%) and 3-4 hours (20.7%). The 0-2 hour usage rate is only 3.6%, the lowest of all the rates. Generation Z shows the highest level of phone use. More than a third of respondents (33.1%) use their phone for more than 5 hours a day, and a further 27.3% use it for 4-5 hours a day. In contrast, the proportion of 0-2 hours is only 3.6% - the same as Generation Y and by far the lowest compared to Generation X (Figure 1). Based on adjusted residual values, significant differences are found for 0-2 hours (less common for Generation Z), 3-4 hours (more common for Generation X), 4-5 hours and 5 hours or more (more common for Generation Z).

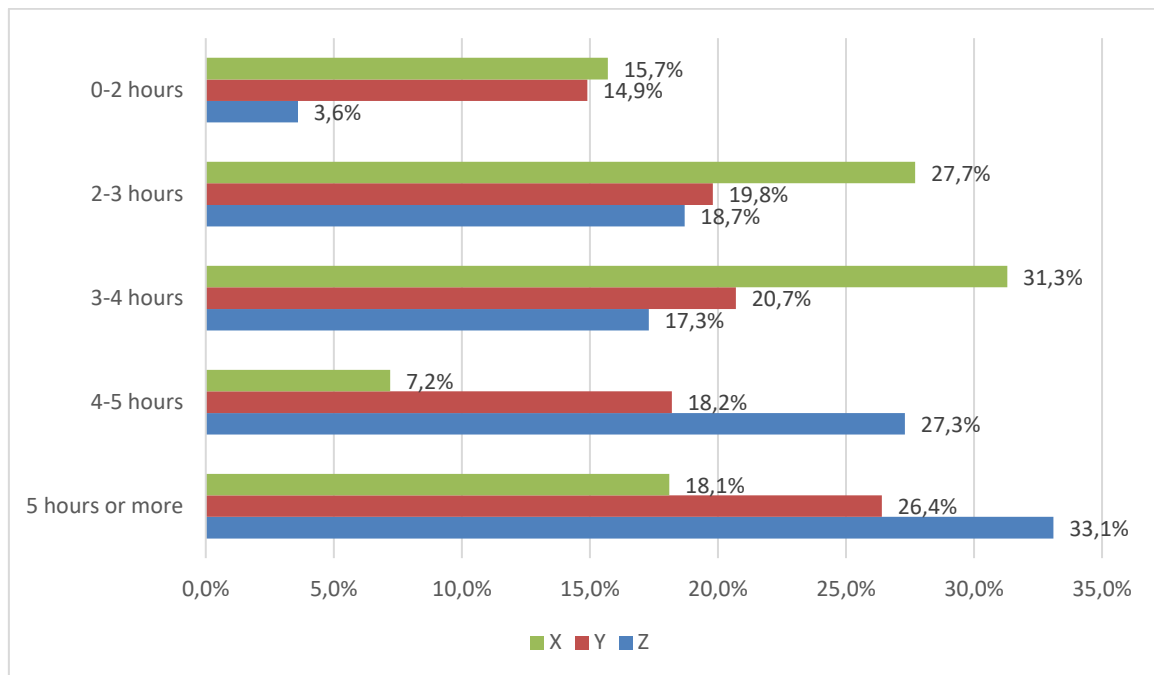


Figure 2. Daily phone screen time by generation 2023

From the data on usage patterns, it is clear that respondents use their smartphone primarily as a communication and social space. The vast majority of the sample regularly use their device for social media, messaging and information seeking, confirming the theory that the smartphone is a central part of users' digital identity and network of connections [24]. In contrast, practical, functional uses (e.g. payment, news) are secondary but also have a significant presence. Two thirds of the respondents regularly use their mobile phones to make online purchases (Figure 3).

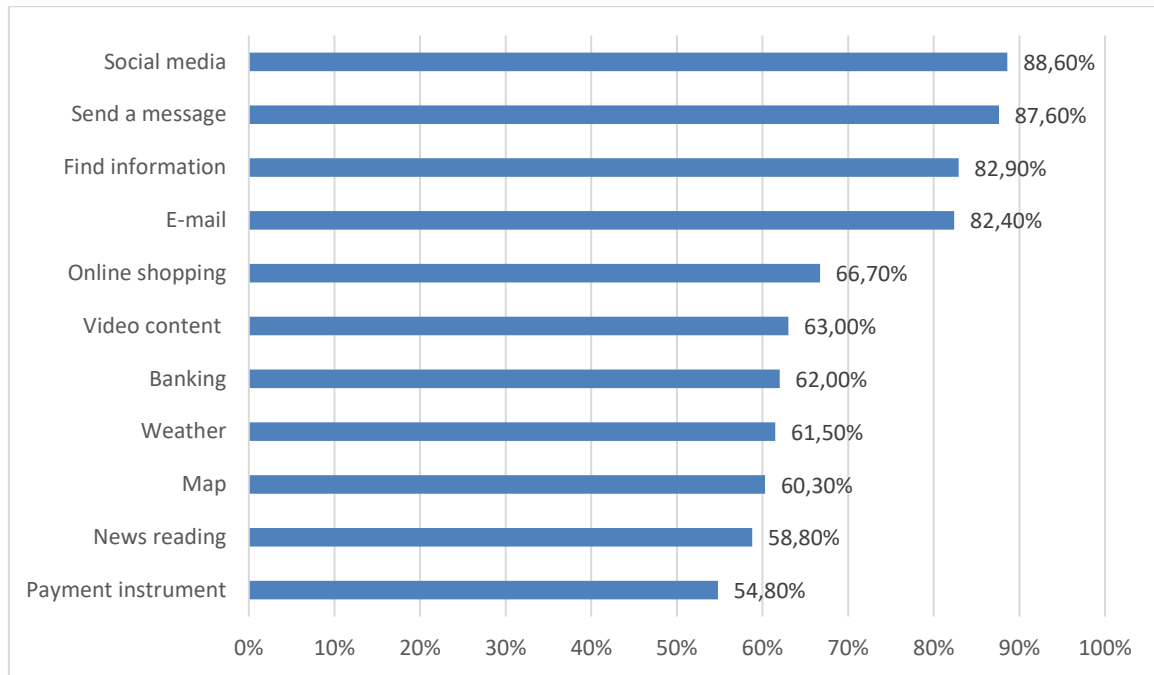


Figure 3. Regular mobile phone usage patterns

There are significant differences in social media use between generations not only in terms of frequency but also in terms of platform diversity (Chi-Square: 77.06; $p < 0.01$). Figure 4 shows that younger generations (especially Generation Z) use significantly more social media platforms simultaneously than Generation X. A large proportion of Generation Z respondents actively use 4 or more social media sites, mostly Facebook, Instagram, TikTok and YouTube. In contrast, the majority of Generation X users use 1-2 platforms at most. Generation Y occupies an intermediate position, which fits well with generational technological socialisation patterns: while Generation X adapted digital communication tools as adults, Generation Z has grown into it and is more naturally exposed to multiple platforms (Figure 4).

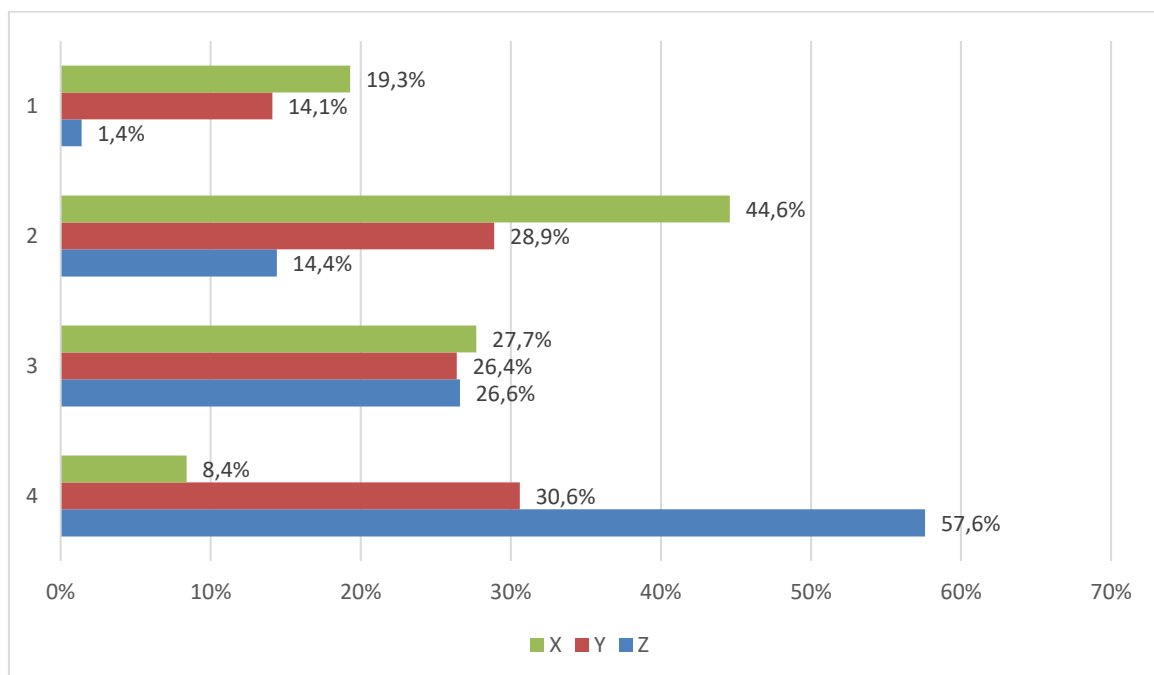


Figure 4. Number of social media platforms actively used by generation

The results also show a significant difference in platform preferences (Chi-Square: 100.892; $p < 0.01$). The dominance of Facebook is high among Generation X (85%), while its use is significantly lower among Generation Z (8.4%). In contrast, among Generation Z, the use of TikTok (44.6%) and Instagram (27.7%) stands out, which is due to stronger visual content consumption preferences and the popularity of fast, short-format videos. Generation Y is a transition between the other two groups, as while Facebook is still used to a large extent (61.5%), it is now also present in significant proportions on TikTok (14.6%) and Instagram (11.1%). This generation is therefore sharing its attention between several platforms, reflecting a gradual adaptation to the changes in the digital world. YouTube use is more evenly spread across the three generations, although Generation Z shows the highest rate (19.3%), which may indicate a general preference for video-based content consumption in this age group (Figure 4).

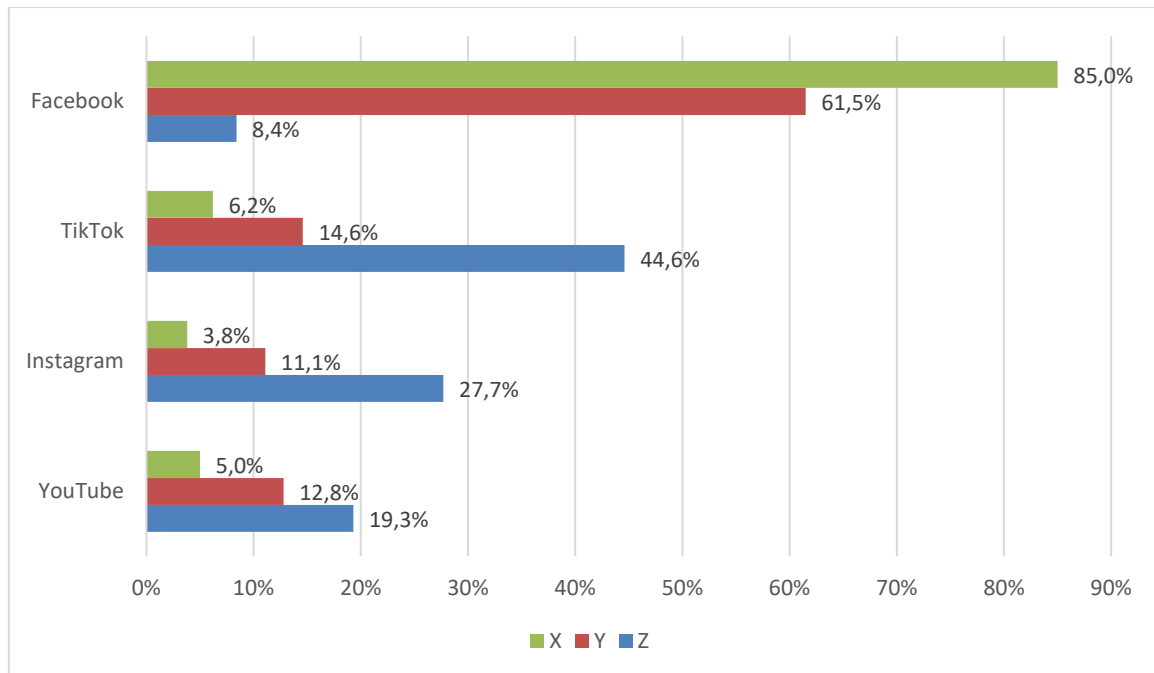


Figure 4. The most used social media platform by generation

Although there are differences between generations in the frequency of shopping, these are not found to be significantly different (Chi-Square: 10.64; $p > 0.05$). Weekly shopping is most common in Generation Y (20.6%), compared to 8.5% in Generation X. This difference suggests that members of younger generations, especially Generation Z, prefer more frequent purchases, presumably due to online shopping, mobile apps and quick accessibility. Generation X, on the other hand, tend to make planned purchases less frequently.

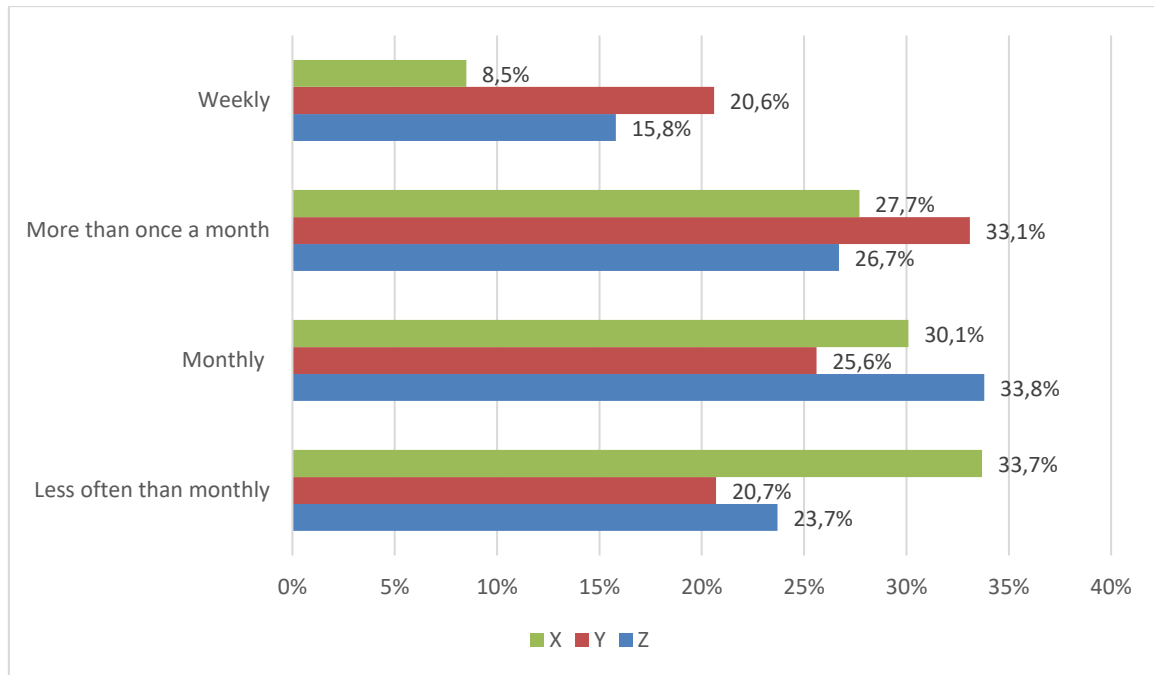


Figure 5. Frequency of mobile shopping by generation

In terms of product types, the most common products purchased by the sample were apparel products via their mobile phones (37.3%), followed by food preparation (19.5%) and entertainment products (14.0%). Entertainment products include books, films, music and video games. Drugstore products are next in order (9.9%), followed by electronic devices (9.0%) and finally food (5.0%) and interior design products (3.8%). Based on the adjusted residual, there is a significant difference between two product types. The purchase of ready meals on mobile phones is more typical of Generation Z, while entertainment products are more typical of Generation X (Chi-Square: 34.75; $p < 0.05$).

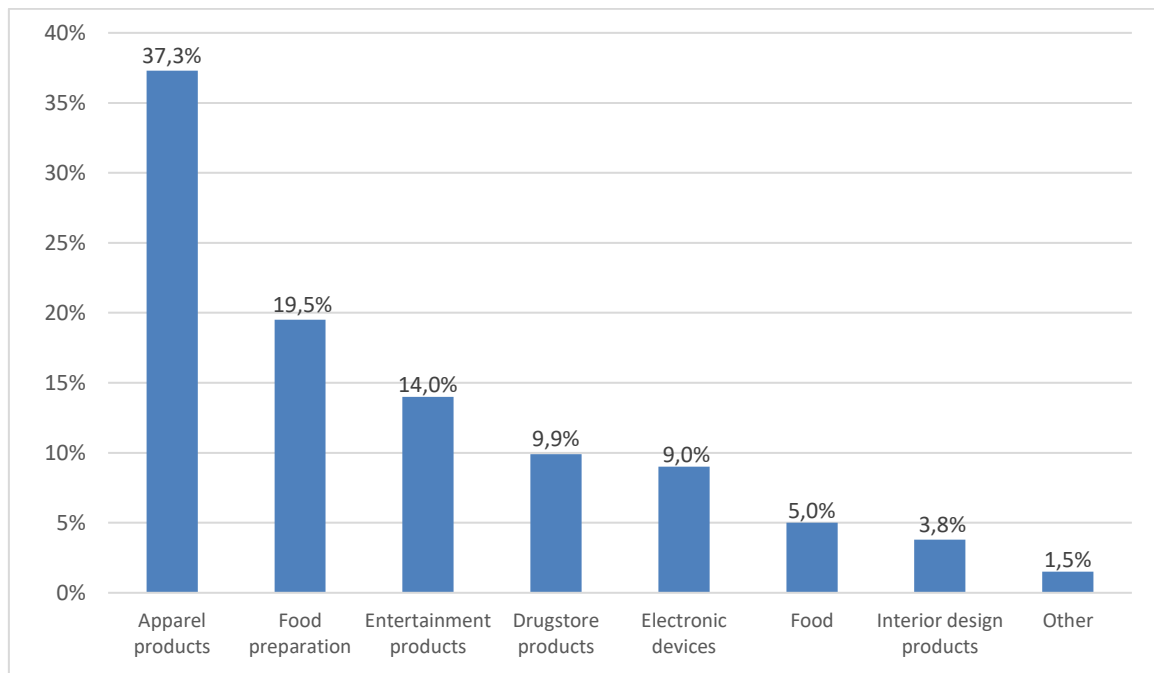


Figure 6. Ranking of product types for mobile purchases

The generational differences observed in Figure 7 reflect the differences in their adaptation to technological advances and their confidence in digital financial tools, which influence which payment

method they prefer when shopping online via mobile (Chi-Square: 31.44; $p < 0.01$). Generation X is dominated by cash on delivery (42.2%), which may indicate a lack of confidence in online shopping and a preference for traditional shopping habits. The proportion is lower for Generation Y (31.4%) and significantly lower for Generation Z (20.9%), which may reflect both a shift away from cash and a shift towards convenience. Credit card payments are widespread across all generations, but remain more prevalent among older generations X (37.3%) and Y (33.9%), while Generation Z uses it only 22.3% of the time. The most striking difference is in the case of mobile wallets (e.g. Apple Pay, Google Pay, Simpe, PayPal, etc.): more than half of Generation Z (56.8%) prefer this payment method, compared to 34.7% of Generation Y and only 20.5% of Generation X. This difference clearly reflects the technological openness and mobile lifestyle of the digitally socialised generations. For Generation Z, mobile payments are not only convenient but a natural part of everyday life, while for older generations, technological insecurity and a lack of device skills can be a barrier.

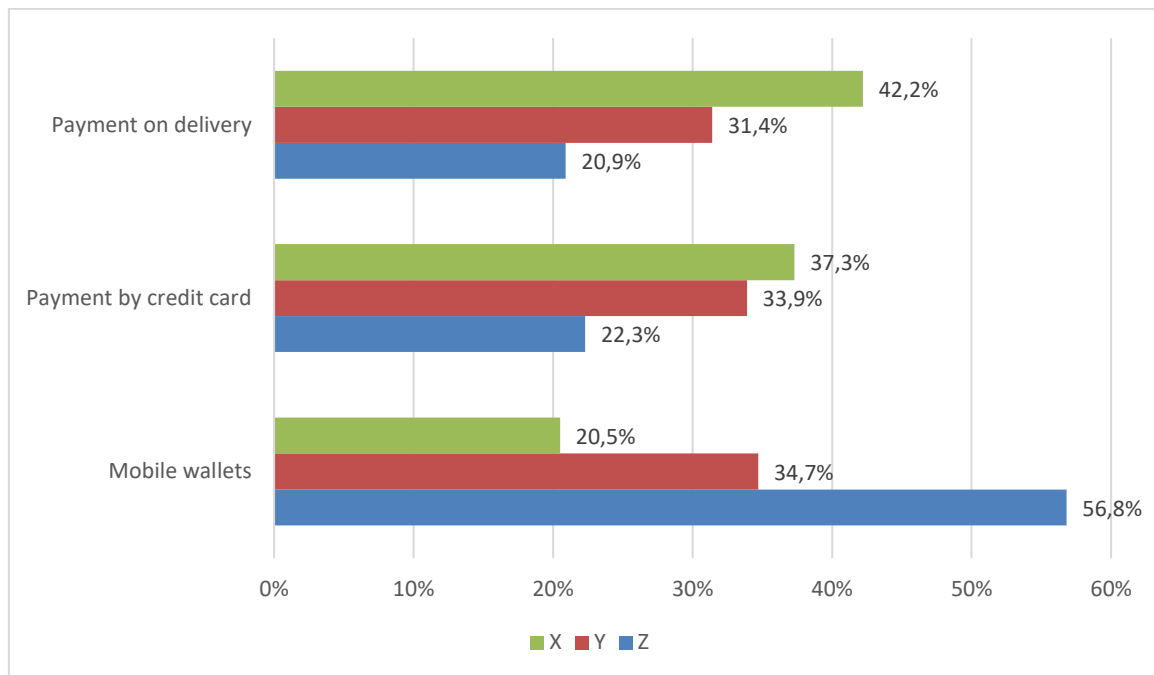


Figure 7. Payment method preferences by generation

For mode preferences, the cross-tabulation analysis does not reveal any significant difference (Chi-Square: 8.34; $p > 0.05$), however, Figure 8 clearly shows the differences between the different generations. Generation X still clearly prefers home delivery (53.0%), while parcel locker is the most popular option for Generation Y (47.10%). For the youngest generation in the research sample (Z), home delivery and parcel locker are equally popular (42.4%). Although the differences between the generations were not found to be significant, the finding that parcel locker is at least as much or even more preferred than home delivery among the younger generations is of particular importance for the future, as it suggests that logistics companies should continue to improve the number of parcel lockers and the quality of their service in the future.

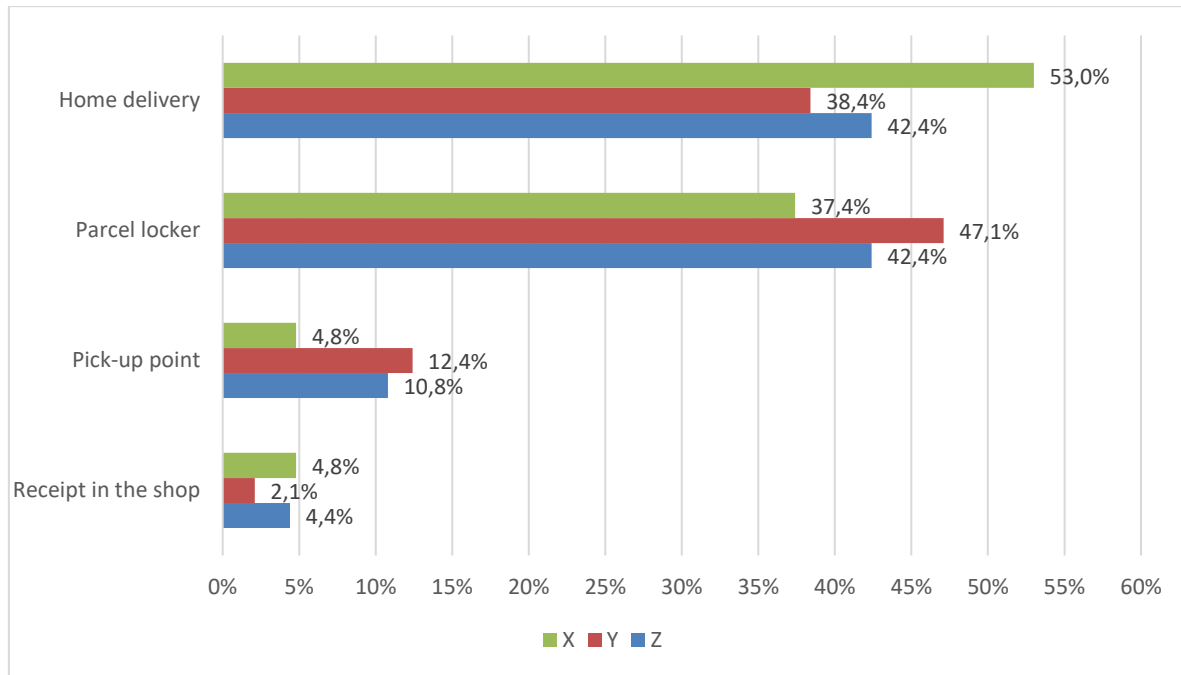


Figure 8. Delivery mode preferences by generation

4 Discussion

The aim of the research was to explore the generational differences in mobile phone use, social media use and online shopping habits on mobile phones. The questionnaire survey and the statistical methods used allowed to answer the two main research questions.

Q1: Are there significant differences between generations in mobile phone use habits, especially in social media activities?

Based on the results, the answer is clearly yes. There were significant differences in both daily screen time and the number and type of social media platforms used. Generation Z members spend significantly more time on their mobile phones and are active on several social media platforms at the same time (TikTok, Instagram, YouTube), while Generation X members are characterised by more moderate use and platform concentration (mainly Facebook). Generation Y represents an intermediate position, a kind of transition between the two generations. Our results are supported by the findings of O'Day-Heimberg [25] and Dixon [26].

Q2: Can significant differences in mobile shopping habits between generations be identified?

The second research question clearly cannot be answered. Differences in frequency of purchase were not significant, but there were significant differences in payment methods and product categories purchased. Generation Z prefers mobile wallets (e.g. Apple Pay, PayPal), while Generation X still prefers payment delivery. In terms of product types, younger people prefer convenience foods, while older people are more likely to buy entertainment products. This difference may be due to different lifestyle needs and consumer attitudes in addition to technological socialisation [27].

The findings are in consistency with previous international research that has shown that digital natives (Generation Z) adapt more quickly to new technologies, have higher digital self-efficacy and rely more on mobile-based services than older generations [28]. In addition, platform diversity and a preference for short, visual content are also a characteristic of younger generations [21], while Generation X prefers reliability and simplicity [29].

Although no significant difference was found in terms of delivery mode, there is a trend towards a steady increase in the popularity of parcel locker delivery among younger generations [30]. This may indicate the importance of mobility and time management for younger consumers and reminds logistics service providers that they need to adapt their services to these preferences in the future.

Overall, generational differences are not only reflected in the use of technology, but also in the whole digital shopping process (content consumption, platform choice, purchase, payment, delivery) in a complex way, which highlights the importance of differentiated marketing strategies.

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