
TECHNOLOGY OF AUGMENTED REALITY - THE WEAPON OF MOBILE MARKETING TO REACH GENERATION Z

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Abstract. In the modern conditions of increased competition, marketers face the challenge of engaging the consumer's attention and offering him a high level of personalization. The focus of marketers' attention is increasingly shifting to Generation Z, which is expected to become the most important market segment for consumption of products and services by 2025. This fact indicates the future large market potential of this generation, which makes it an object of interest for marketers.

Generation Z are digital natives and have been used to living with technologies since their youngest days. They could also be considered as being less reluctant to test and use different types of technologies. They accept technology as part of their daily lives and constantly consume online content. "Centennials" demands for the emotions and experiences they want to have in the purchasing decision process are high. This creates a need for marketers to use such means so to be able to reach the consumer in the best possible way. The article examines one of the modern possibilities for achieving this goal, namely digital marketing.

Particular attention is paid to mobile marketing and technology of augmented reality, which can create a high level of experience for the consumer. Mobile marketing creates great opportunities for marketers to build relationships with customers and especially with the technology-oriented Generation Z. The main reasons for this supported by data are discussed.

One of the most promising ways to create consumer experience is the technology of augmented reality. The technology of augmented reality in marketing focuses on creating a consumer experience by superimposing computer-generated images on the real physical environment.

Data on Generation Z's interest in augmented reality shopping experiences are presented in support of the potential this technology provides to reach the technology-oriented Generation Z.

Keywords: generation Z, Augmented reality, mobile marketing

1. INTRODUCTION

Marketers strive to adapt to modern conditions and to consumer expectations and attitudes. These realities have led to a surge in the use of next-generation technologies to meet consumers high demands for experiences at every point in the consumer journey. This is especially relevant for the technology-oriented generation Z, which is the subject of discussion in the article. "Centennials" are the first digital generation to make consuming online content a permanent part of their daily lives. As consumers of digital content, they want to receive an exciting experience in the process of making a decision to purchase a product. At the current level of technological development, there are many possibilities for achieving this goal. One of them is digital marketing, which has the potential to meet the expectations of Generation Z. Among the huge range of possibilities offered by this philosophy is the mobile marketing, which relies on reaching the consumer through a smart device such as a smart phone. In the context of providing an experience in mobile marketing, the technology of augmented reality stands out. The purpose of the article is to outline the opportunity that the technology of augmented reality provides to reach generation Z.

2. ANALYSIS AND DISCUSSION

According to Kotler (2022), Gen Z is the most numerous generation worldwide by 2023. By 2025, its representatives will form the majority of the workforce and will become the most important market segment for consumption of products and services. This fact indicates the future large market potential of this generation, which makes it an object of interest for marketers. In this regard, it is necessary to study their behavior, attitudes and expectations. (Kotler, Ph., Kartajaya, H., Setiawan, I., 2022).

Generation Z are digital natives and have been used to living with technologies since their youngest days. They could also be considered as being less reluctant to test and use different types of technologies. They accept technology as part of their daily lives and constantly consume online content. As consumers of digital content, centennials need a different type of experience in their consumer journey. Expectations for the emotions they want to experience are high throughout the purchase decision process. This creates a big challenge for marketers on the ways to reach them effectively.

The solution can be found in using and applying the capabilities of digital marketing. Therefore, the future of marketing is in digital marketing. Both in traditional and digital marketing, the basis of the concept lies in the

consumer and his needs, which should be satisfied in the best possible way. The main advantages of digital marketing are the opportunities that the Internet and the other digital technologies provide to build long-term relationships with customers and provide a better consumer experience.

As Slavova (2016) points out, digital marketing includes two main types - Internet marketing and marketing in non-Internet digital channels. According to Chaffey (2009) e-marketing is focused on how a company and its brands use the Internet to interact with its audiences in order to meet its marketing goals. The second type are digital channels such as TV, radio, SMS, digital billboards, which are not based on the Internet. Of interest to the article is the first type, because of the huge opportunities it provides for engaging Generation Z.

The scope of Internet marketing includes the following main types:

- Website;
- Search engine marketing;
- Mobile marketing;
- Marketing in social networks;
- Influencer marketing;
- E-mail marketing;
- Content Marketing;
- Advertising tools on the Internet.

All the listed types are widely used in practice tools for consumer interaction and engagement. For the purposes of the article, particular attention will be paid to mobile marketing.

Mobile marketing is a technique for interacting with the consumer through a smart device such as a smartphone or tablet, enabling brand and product promotion and aiming to build relationships with customers by providing experiences and personalization.

The different types of mobile marketing are:

- SMS marketing;
- MMS marketing;
- Push notifications;
- App-based marketing;
- In-game mobile marketing;
- Location-based marketing;
- Mobile search ads;
- QR codes;
- Mobile image.

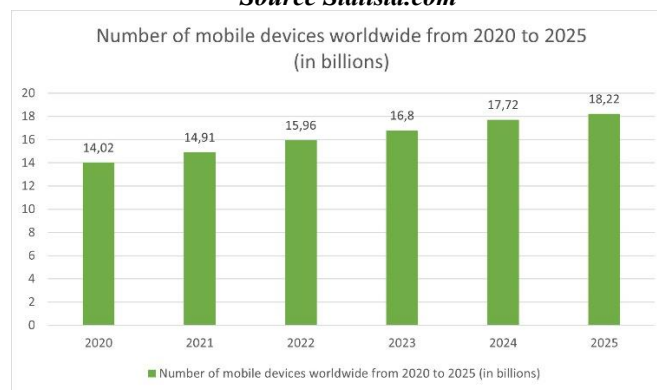
Mobile marketing creates great opportunities for marketers to build relationships with customers and especially with the technology-oriented Generation Z. Among the main reasons for this can be noted:

- the smartphone is a widely used device

The number of mobile devices is expected to reach 18.22 billion by 2025, an increase of 4.2 billion devices compared to 2020 levels, according to Statista.com. The forecast number of mobile devices worldwide from 2020 to 2025 are shown on Fig. 1.

Fig.1. Forecast number of mobile devices worldwide from 2020 to 2025 (in billions) *

***Source Statista.com**



- the mobile device is personal and always with its owner

Roxo and Brito (2020) states that Gen Z are addicted to their smartphones and are always connected through them.

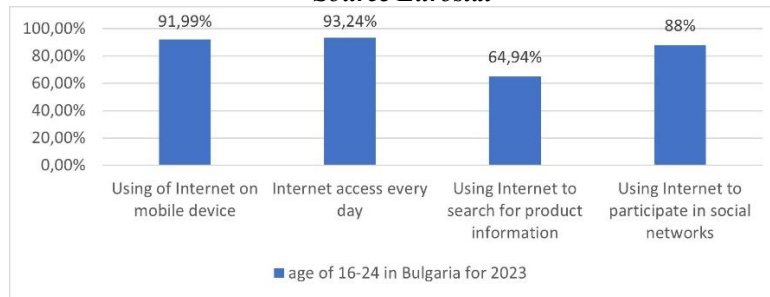
- the modern consumer is multi-screen

Today's generations of consumers are so used to smart devices that they not only move between the many screens of smartphones, tablets, computers or TVs, but also perform a number of activities simultaneously to accomplish certain tasks. This is why today we can talk about a "multi-screen" consumer. Living in a multi-screen society in which consumers are moving between different platforms or using multiple devices at the same time, it is extremely important for marketers to be able to attract their fragmented attention so that they engage and direct it to a particular product.

- Internet access

The data on access and use of the Internet by young people in Bulgaria aged 16-24 for 2023 are graphically presented in Fig. 2.

Fig. 2. Internet use by young people in Bulgaria aged 16-24 for 2023*
*Source Eurostat



According to Eurostat data for 2023 in Bulgaria 91.99% use the Internet on a mobile phone in the age group 16-24, and 93.24% use the Internet every day.

Statistics for 2023 for the same age group indicate that 64.94% of young people in Bulgaria use the Internet to search for product information. In 2023, 88% of 16–24-year-olds use the Internet to participate in social networks.

- the smartphone has a multi-functional use

Modern smartphones allow taking pictures, reading books, listening to podcasts, listening to music, ordering a product, visiting websites, using search engines, logging into social networks, and more.

- the smartphone represents a kind of mobile mall

Modern smartphones give us access to the sites of merchants from all over the world, give us the opportunity to order products from all over the world, which turns them into a kind of mall that has no geographical boundaries and opening hours to visit.

- the smartphone enables the provision of user experience

The findings of Roxo and Brito (2020) for Generation Z indicate that their purchasing power is expressive, with prospects of growth. They expect retailers to engage with them through social media and personalized experiences, and that technology facilitates their relationships with brands.

One of the most promising ways to create consumer experience is the technology of augmented reality.

The technology of augmented reality in marketing focuses on creating a consumer experience by superimposing computer-generated images on the real physical environment.

Chaudhari, Bhole and Patil (2023) determines augmented reality as a tool that uses computer-generated images and sound to create an immersive experience for the actively participating user. It is an interactive digital experience that overlays virtual objects or information onto the real-world environment, enhancing the perception of the user about the world around them. The augmented reality experiences can be delivered through different devices like smartphones, tablets, and smart glasses. By using a device's camera and sensors, augmented reality allows users to interact with virtual objects or information as if it were part of their physical surroundings. Through augmented reality-based applications, customers can interact with virtual objects and get a sense of the product through a 'try before you buy' experience. The adoption of augmented reality in marketing was demonstrated by the Pokémon Go phenomenon in 2016.

Van Krevelen and Poelman (2010) derives the following characteristics of an Augmented Reality system:

- combines real and virtual objects in a real environment;
- registers (aligns) real and virtual objects with each other; and
- runs interactively, in three dimensions, and in real time.

Chylinski et al (2020) point out two ways this technology can be used on the mobile phone:

- from an application

In order to use the application, it is necessary to download and install it on the smart phone.

Among the most popular applications using augmented reality are IKEA Place, Google Lens, Pokémon Go, Snapchat, Google Maps and others.

- from a web browser

Online web-based augmented reality features are implemented in webpages, e.g., online shops of retailers. In this case, the feature can be accessed and activated through the browser and does not require further installations.

In both cases, in order to use this technology, it is necessary to have a smartphone, Internet and camera available.

Schwarz (2022) points out that in online retail there are three types of augmented reality applications being implemented:

- Virtual try on

In this case, the user has the opportunity to virtually try a product. To do this, the smartphone's screen and camera act as a mirror. In this way, the user can try on makeup, glasses, hat, clothes, jewelry and more.

- Virtual try out's

Through virtual try-out's, the user can also try a product, but not on himself. He can check e.g. how a piece of furniture will fit in his home, i.e. in a real physical environment or can look at the interior of a car. Again, the smartphone's screen and camera are used.

- Interactive products

In this type, the consumer can study virtual products with which he specifically interacts with, e.g., electronics or assembly.

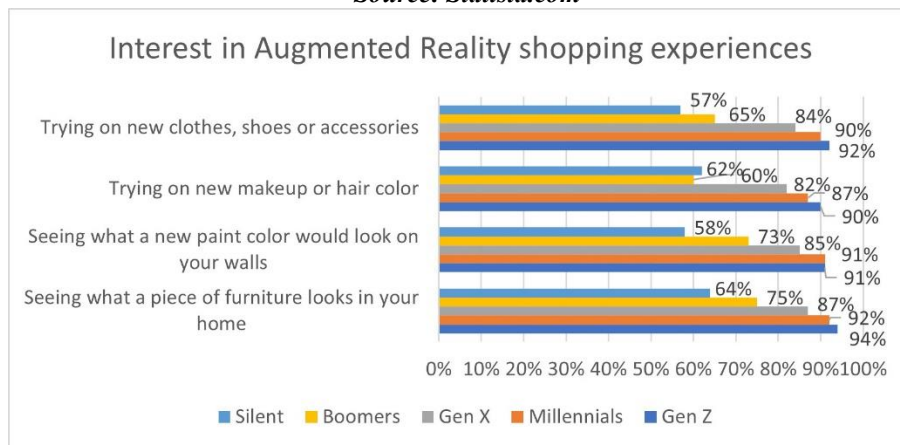
Schwarz (2022) states that the augmented reality market is growing exponentially, with an annual growth rate of 48.6% for 2022. According to Schwarz (2022), the main target group for augmented reality is generation Z.

Shelley (2022) indicates a global study of nearly 5,000 Gen Z carried out in partnership with Crowd DNA, which points out that Gen Z are the driving force behind the shift towards more immersive shopping experiences. Some of the most important findings of this research are:

- 93% of the representatives of Gen Z surveyed in the UK stated they are interested in using AR for shopping;
- 88% are interested in using AR to try on makeup or clothes;
- 60% in the survey think AR experiences feel more personal;
- 63% state that AR will make life easier;
- 51% of Gen Z are more likely to pay attention to an ad that incorporates AR.

Generation Z's interest in augmented reality shopping experiences is greater than that of any other generation. This is confirmed by Statista data for a survey conducted in 2022 among 11,000 respondents, the results of which are shown in Fig.3. As can be seen, for all the indicators studied, the interest of the representatives of generation Z is the greatest.

Fig.3. Interest in Augmented Reality shopping experience among global consumers*
*Source: Statista.com



By nature, Gen Z are digitally oriented. The mentioned studies show their great interest in using augmented reality technology. In summary, this technology can serve as a weapon for marketers because it:

- creates comfort;
- creates an experience;
- creates personalization
- allows the consumer to try a product online before purchasing it;
- helps the consumer to reduce the risk when making a purchase of a product.

3. CONCLUSION

The first children of the digital world have grown up with new technologies and they are used to surf the Internet and to consume online content. The expectations for the emotions and experiences they want to have in their relationships with brands are much different than those of previous generations. This forces marketers to respond in the best possible way to these expectations and to satisfy them better than competitors. The current level of technological development provides a number of opportunities for marketers to achieve this goal. The solution to these challenges can be found in the digital marketing toolkit, which includes the technology of augmented reality. It is this tool that has the potential to provide a high level of consumer experience.

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