

# THE ROLE OF AUGMENTED REALITY IN DIGITAL MARKETING STRATEGY

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**Abstract:** *The online business environment is constantly changing and the companies have to adapt and find new ways in which they can reach and understand their customers. The increased penetration of Internet, extensive use of social media and the development of new technologies can present both opportunities and threats. This paper aims at presenting how the current status of digital business environment impacts the marketing strategy and how the implementation of Augmented Reality (AR) can help companies overcome the current challenges and gain competitive advantage.*

**Key words:** *Augmented reality, Online marketing, Marketing strategy*

## 1. Introduction

The development of online marketing during the last decades has generated a shift in the way companies use new technologies in their efforts to reach potential buyers. Online marketing campaigns are growing more and more common and successful as a result of the inclusion of digital platforms in marketing efforts and in end-user's day-to-day activities as well as the fact that consumers use digital shopping more frequently than they use traditional methods of purchasing. (Desai, 2019).

Nowadays, the business environment is competitive and dynamic and companies have to put in their best efforts to come up with new and customer-appealing ways to market their products and services. Traditional marketing, with all its effective ways of bringing a product to the client, has increasingly fallen short of what is needed in today's markets. Constant increase of the internet penetration rate and connected devices usage has determined a shift in marketers view of the digital field, favouring the move from traditional media to digital media. Digital advertising is necessary for efficient brand recognition and promotion in today's competitive business climate, which adds costs. Many marketing initiatives now put the customer first rather than the features and advantages of the product. Moreover, online customers have unique characteristics; they have distinct statistical profiles, income levels, business needs, and decision-making

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patterns. These days, companies must develop useful and specialised information for their clients while moving beyond a single kind of communication channel. The development of new technologies like Augmented Reality can help companies overcome these challenges and efficiently address the customers' needs.

Therefore, in the context of continuous development of the online business environment, the research question is: "How can Augmented Reality enhance the companies' digital marketing strategy?". To address the research question the authors used secondary data from public statistics, literature (academic articles and books) and the activity of well-known companies.

## **2. Digital Marketing**

### **2.1. Online marketing strategy**

Online commerce is revolutionizing many of the ways in which individuals and companies engage in the sales and purchase process, both online and offline. Aspects such as consumer behaviour, distribution channels, economic models, competitive strategies and performance measurement are experiencing important changes (Hoffman, 2000).

The Internet has transformed the way in which companies do business by facilitating access to instant and inexpensive ways of communicating between sellers, customers, investors and advertisers around the world (Oudan, 2010). In this context, the opinion of the researchers is that traditional marketing is losing its effectiveness (Ngai, 2003). They research how the Internet impacts marketing, more precisely if it will change it or if it will only create new and evolved marketing channels (Schibrowsky, et al., 2007).

The need to adopt a clear marketing strategy in the online environment is clear for companies who want to adapt to the new business environment and who want to attract and retain new customers. Formulating a digital marketing strategy helps the company to carry out its online activity in an organized and informed way, having well-established and measurable goals (SMART), focusing on what is important and relevant to the business.

The decision to formulate an online marketing strategy depends on the nature of the business, its current status and future plans (Ryan and Jones, 2009). In practice, the applicability of an online strategy is beneficial for most companies, and there are very few that could not adopt such a strategy. Regardless of whether we are referring to a multinational company or a micro-firm, any of these businesses can take advantage of the online environment to get closer to their customers and deliver products close to their needs.

Today's marketing has become more customer-centric. Two-way communication empowers companies to build close relationships with customers to understand their needs, creating products and services that mould them. The entire model to create, communicate and deliver extra value is built around the customer, around their expectations and around their relationship with the brand. The consumer relationship scale, as presented by Agarwal (2004), shows that firms try to transform their customers from mere buyers to brand ambassadors to ultimately form a partnership with them.

Kannan and Hangshuang (2016) identify two marketing elements that are considered vital for obtaining and maintaining a competitive advantage in the market: brand and customers. Thus, the online marketing strategy must keep these two elements in balance in a dynamic environment such as that of the online environment.

In the online environment, this balance can be broken very easily, by a simple review of an unsatisfied customer or by a post on social media. In this context, where the customer is very critical of the company and potential customers tend to trust the reviews of other users more than the official information received from the brand, earned media tends to become the key in online marketing, at the expense of paid media or owned. Online marketing strategy planning must take into account the three types of media (earned, paid or owned) in order to maximize the effectiveness of the strategy and fulfil the goal of having a meaningful relationship with users, turning them into customers.

Potential customers in the online environment are more informed and active than those in the traditional environment. For them, the experience they have weighs a lot and how this experience can help them make informed decisions, fast and at the lowest cost (of money or time) can contribute to obtaining competitive advantage.

In the online environment, the customer filters the information and accesses only what is of interest to him at that moment, so the personalisation of the online experience is constantly increasing. We can therefore conclude that the traditional practices of propagating information and advertising to the masses no longer fully meet the needs of the market, today's market needs methods that are specifically directed to niches. Digital marketing offers companies the opportunity to search, identify and contact potential customers according to their preferences and interests.

The online marketing strategy must consider the customer as the strategic core and direct marketing efforts towards understanding them, generating a lasting relationship and fulfilling their needs.

## **2.2. Digital business environment**

The worldwide countries development, easier access to personal computers and extensive use of smartphones have led to the rise in the number of global internet users to 5.3 billion as the end of 2022, acting as 66% of the global population (Statista, 2023). Over the last 17 years this number has grown more than five times, making it clear that internet is an integrating part of our new reality.

In Romania, the beginning of 2023 brings an internet penetration rate of roughly 89%, 17.82 million people going online (Kemp, 2023). It can be observed that the penetration rate of this technology in Romania is clearly higher than the global rate, this rate being in Romania 23 percentage points higher than the global rate.

Over thirteen million Romanians are active users of social networks, representing 67% of the population, compared to the global percentage of 59.9%. The use of mobile phones has a very high penetration, this percentage reaching 145%, being due to the fact that a person can own more than one mobile device. This figure has seen a growth of 6.8 percent between 2022 and 2023.

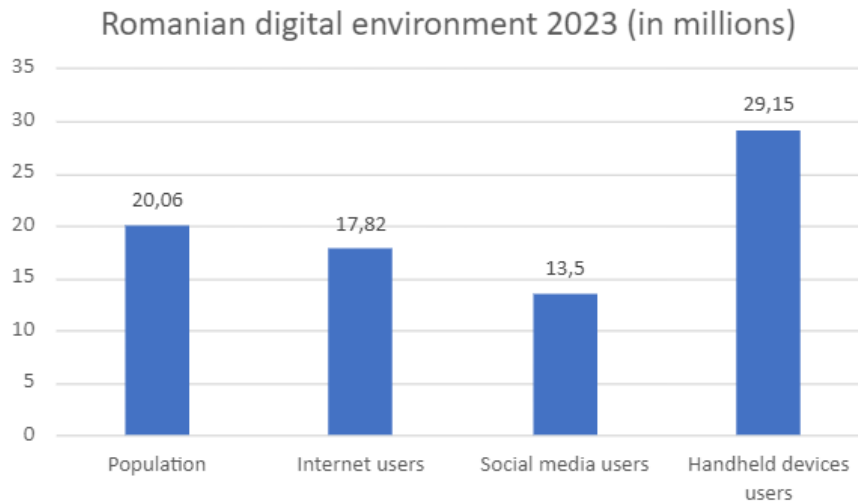


Fig. 1. *Statistics regarding digital environment of Romania (Kemp, 2023)*

This being said, we can conclude that the development of the online environment is a process that is on an upward trend, more than half of the world's population being actively present in this environment. The acceptance of this technology in Romania is above the global average, these figures demonstrating the importance of research in the field and the attention that local companies must pay to the digital environment and digital marketing strategies.

### **3. Augmented Reality - characteristics and impact on online marketing strategy**

#### **3.1. Augmented Reality technology overview**

Technology development is creating new opportunities, restructuring the market and leading to the automatization of business processes in significant ways (Thorpe et al., 2014). Utilizing technology increases businesses' productivity by enhancing their capabilities and efficiency. In today's business environment, choosing and using the best technical platform at the right time can give you the best benefits in mature or developing markets (Hax, 2010).

According to Azuma (1997), augmented reality (AR) is the first stage on the way to virtual reality, where users can interact with the real world using visuals and appropriate software and hardware. Augmented reality gives users or customers more freedom while looking at, choosing and buying goods or services.

Digital marketing efforts led to the development of augmented reality as an interactive tool. With the capacity to overlay virtual layers over the actual world, such as images and data that can be interacted with in real time, augmented reality generates new channels for the distribution of information to users. Therefore, through the facilitation of product and information searches, augmented reality can generate changes in customer purchasing behavior (Javornik, 2009). A greater understanding of augmented reality's potential applications in consumer psychology is necessary given

the rise in its use in recent years. Kim and Peterson (2017) argue that technology advance is regarded as a crucial source of development, as it has positively changed consumer online shopping habits and companies' marketing efforts.

### **3.2. Augmented reality opportunities for marketing strategy**

Augmented reality is a new technology that modifies the real world by adding virtual elements on top. Pictures, animations, data and other virtual elements can be included in the layer that is positioned between the user and the real environment.

In recent years, brands have experimented with different Augmented Reality applications in a variety of settings to determine the most effective methods to reach the customers. From virtually bringing products into customers environment, to enhancing the user in-store experience with virtual mirrors, augmented reality is seen a technology that brings a large set of benefits and opportunities for both customers and companies.

Embedding of Augmented Reality applications within a brands' marketing efforts can target different strategical objectives. The wide spectrum of augmented reality applications usage include customer guidance within stores, personalisation of advertising messages tailored to the target market, generation of memorable experiences for the customer, customer retention through offers and promotions (coupons) and so on.

The implementation of augmented reality technology can present benefits in companies' attempt to develop the involvement of potential customers in the relationship with the brand. With a correct implementation, augmented reality can generate brand awareness within users and captivate their attention effectively. Augmented reality can generate a superior experience and therefore deliver tangible results for the company in different scenarios.

In the pre-purchase step, the focus is on attracting and engaging potential customers. As shown before, the internet penetration rate is on the rise worldwide as so it is the number of handheld devices and downloaded mobile applications. It may be that as long as the users are informed that a brand has developed a new Augmented Reality application, they will be eager to find more about it. At this stage, augmented reality can help by offering the users the opportunity to find more information about a product or service by scanning the box or a QR code, empowering the client to virtually try a product and provide an immersive user experience.

Augmented reality can facilitate the decision to purchase a product or a service. Uncertainty is a major influencer of online buyer behaviour tending to make the customers abandon the purchasing process before completing it (Horvath et al., 2021). Uncertainty mainly affects the acquisition process for high-involvement products that have long usage life or for products that have to blend in given environments (for example a piece of furniture that has to match the design, colours and specs of a given room within customers' house). Augmented reality can help to mitigate the uncertainty level by giving the user an ownership feeling, bringing the product closer to him and giving him the ability to virtually test the product in line with his needs. This way, the

user can find more details about a product or service in an engaging and interactive manner.

Active communication and support is even more important after the actual sale has been closed. The secret of a happy and returning client is the building of a long-term bond between him and the brand and augmented reality can enhance this relationship by offering an interactive environment which facilitates communication and collaboration. By implementing augmented reality, the companies can prepare interactive user manuals, troubleshooting guides, accessories offer and more, which can be accessed by the client from their handheld devices in different ways (NFC tags, QR codes, websites).

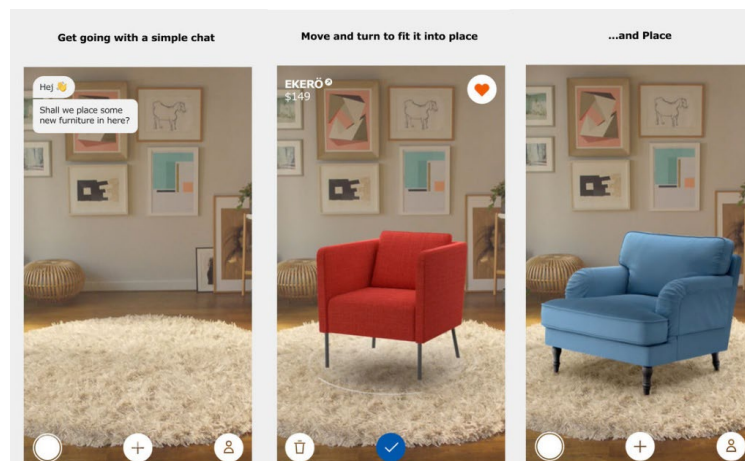


Fig. 2. *IKEA Place* (MobileNews, 2017)

One of the best examples of implementing augmented reality within the marketing strategy is the Ikea's mobile application called "Ikea Place". The retail giant created this application in order to address customer's concerns that arise during the acquisition of furniture (how the furniture piece will fit in their living space in terms of size, colour, model, specifications). Ikea Place allows the users to virtually bring the piece of furniture in the house, through the use of a mobile device. Using the smartphone camera and a QR code supplied by IKEA, the user can place multiple objects in the destination room. This allows the customer to make an informed decision from the comfort of their home, without going to an IKEA store. The user can add the products to cart and finalise the acquisition directly from the application. On the other hand, this application can also enhance the in-store experience, as the prospective buyer can go to the store with a shortlist of products, in order to choose the ones that best fits the requirements.

#### 4. Conclusions

Numerous studies have discussed how new technologies will affect many facets of our lives (Slater and Sanchez, 2016). According to academics, most aspects of consumer

behaviour characteristics will be impacted by these new technologies. Bailenson (2018) expects a shift from today's smartphone-led communication to a MR (mixed reality) environments moderated by artificial intelligence to better understand patterns, customer buying behaviour, habits and needs (Grewal et al., 2017)

The companies which implement augmented reality within their marketing strategy have to design an unique experience for their clients. This experience will allow the customers to explore a product or service in a way that will create a bond between them and the brand. Augmented reality empowers the businesses to deliver a tailored experience with unique messages that can enhance the physical feeling and the brand awareness.

Therefore, the answer to the research question is that embedding Augmented Reality within a companies' marketing strategy has the role of differentiating the brand by surprising the customers, making it easier for them to understand and remember the message, bringing the business closer to competitive advantage. Augmented reality offers benefits for the users, having the ability to make the purchasing process more efficient and time/cost effective. The technology acceptance model can be used further to research the impact of AR on the hedonic / utilitarian benefits and further on the rate of use and consumers purchasing process.

Future research can focus further on understanding how the integration of augmented reality into the marketing strategy can impact the online and offline consumer experience, how these technologies have to be deployed in order to deliver the best possible outcome for the involved parties. On the other hand, future research should identify which industries, products and services are more likely to benefit from the implementation of augmented reality at marketing strategy level.

It is also beneficial to research how these technologies can present benefits and limitations to the process of data collection in market research, both for companies in the online world and for those in the traditional business environment.

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