EVALUATING FEMALE CONSUMERS' ONLINE SHOPPING EXPERIENCES THROUGH AUGMENTED REALITY APPLICATIONS

KADIN TÜKETİCİLERİN ÇEVRİMİÇİ ALIŞVERİŞ DENEYİMLERİNİN ARTIRILMIŞ GERÇEKLİK UYGULAMALARIYLA DEĞERLENDİRİLMESİ

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ABSTRACT

Technological developments hold great importance for consumers today. The rapid development of technologies such as the internet, mobile devices, artificial intelligence, big data and the Internet of Things provide consumers with numerous conveniences. For these reasons, adapting to new technologies becomes even more important. Rapid and intensive developments in internet technologies, together with the increase in personalized internet usage, have changed consumers' purchasing attitudes and preferences. The growth of e-commerce, mobile and online shopping markets both in Turkey and around the world has led companies operating in these areas to compete in offering consumers the most convenient and attractive shopping experience through the use of technology. The purpose of this research is to reveal the opinions of people who have shopped with augmented reality (AR) and/or virtual reality (VR) technology regarding their purchasing processes. The research was conducted using a semi-structured in-depth interview method. Data were collected from 20 people who have experienced at least one online purchase using augmented reality (AR) and/or virtual reality (VR) technologies. When the interview results were analyzed, it was determined that the level of experience had a positive effect on customer's purchasing processes.

ÖZ

Günümüzde teknolojik gelişmeler tüketiciler için büyük önem taşımaktadır. İnternet, mobil cihazlar, yapay zekâ, büyük veri ve nesnelerin interneti gibi teknolojilerin hızla gelişmesi, tüketicilere birçok kolaylık sunmaktadır. Bu nedenle, yeni teknolojilere uyum sağlamak her zamankinden daha önemli hale gelmiştir. İnternet teknolojilerindeki hızlı ve yoğun gelişmeler ile kişiselleştirilmiş internet kullanımının artması, tüketicilerin satın alma tutumlarını ve tercihlerini değiştirmiştir. Türkiye'de ve dünyada e-ticaretin, mobil ve çevrim içi alışveriş pazarlarının büyümesi, bu alanlarda faaliyet gösteren şirketlerin, tüketicilere en kolay ve en ilgi çekici alışveriş deneyimini teknoloji kullanarak sunma konusunda rekabet etmelerine yol açmıştır. Bu araştırmanın amacı, artırılmış gerçeklik (AR) ve/veya sanal gerçeklik (VR) teknolojisi ile alışveriş yapmış kişilerin satın alma süreçlerine ilişkin görüşlerini ortaya koymaktır. Araştırma, yarı yapılandırılmış derinlemesine mülakat yöntemi ile gerçekleştirilmiştir. Artırılmış gerçeklik (AR) ve/veya sanal gerçeklik (VR) teknolojilerini kullanarak en az bir kez çevrim içi alışveriş deneyimi yaşamış 20 kişiden veri toplanmıştır. Görüşme sonuçları analiz edildiğinde, deneyim düzeyinin müşteri satın alma süreçleri üzerinde olumlu bir etkisi olduğu belirlenmiştir.

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INTRODUCTION

In today's world, rapidly transformed by digitalization, augmented reality and virtual reality technologies, which enrich consumer experience, are at the center of marketing strategies and radically change shopping habits. Augmented reality (AR) and virtual reality (VR) technologies support experiential marketing by stimulating customers' emotions and enriching the purchasing process. In this study, semi-structured in-depth interviews were used to examine the opinions of individuals who shopped using augmented reality technologies about their purchasing processes. In conclusion, augmented reality and virtual reality technologies reshape consumers' shopping experiences and have significant effects on their purchase intentions. It is predicted that these technologies will be used more effectively in marketing strategies in the future. It is critical for businesses to gain competitive advantage by developing strategies in line with consumers' new experience demands. Analyzing the interactions of female consumers with AR applications contributes to the development of experiential marketing strategies. The findings provide valuable content for both academic literature and marketing practices.

LITERATURE RESEARCH

Augmented Reality and Experiential Marketing

Today, augmented reality technology continues to enrich human life by being applied not only in the retail sector but also in many other areas such as education, health and entertainment. The unique experiences provided by AR will become an indispensable part of future marketing strategies. Especially in recent years, the impact of augmented reality (AR) and virtual reality (VR) technologies on consumer experiences has become one of the most important research topics. Augmented reality, which entered our lives with the rapid development of technology, is a technology that combines the real world with virtual objects and offers simultaneous interaction (Azuma, 1997). In the literature, AR is defined as integrating digital information into the physical world and thus strengthening the perception of the real world (Javornik, 2016; Höllerer & Feiner, 2004). In addition, researchers such as Şişman (2021) and Tülü & Yılmaz (2012) stated that AR offers an enriched experience by displaying virtual elements on the real world.

Since the release of Pokémon Go, augmented reality (AR) has been one of the main research topics in the field of new technologies. The integration of digital elements into the physical world creates extraordinary opportunities for advanced interactions and experiences across various industries (Barta et al, 2025). Carmigniani and Furht (2011) define AR as the real-time enrichment of a physical environment with virtual information. Craig (2013) states that AR has the potential to appeal to different senses such as touch, smell and taste along with visual and auditory experiences. Azuma (1997) stated the three main features that define AR as follows: Combining the real and virtual world, providing real-time interaction and offering a three-dimensional experience. In this context, augmented reality creates a powerful interactive environment where users experience the real and virtual world simultaneously.

The Reality-Virtuality Continuum concept developed by Milgram and Kishino (1994) provides an important framework to explain the concepts of AR, VR and mixed reality. According to this approach, augmented reality is the technology closest to reality, while virtual reality offers a fully digital environment. In his study, Çabri (2019) revealed that augmented reality creates satisfaction and loyalty for corporate participants, and also emphasized that augmented reality provides fun, informative and interactive experience processes. However, it is stated that the use of AR brings cost burden as well as benefits to businesses. Tuncay (2018) drew attention to the difficulty of using augmented reality despite the high technology it offers. He stated that expensive research is required to appeal to customers, but customer loyalty can be achieved when this technology is used correctly. Similarly, Pastırmacı (2019) stated that VR technology is effective in user perception and emphasized that VR is still at an early stage in practice. Yüksel (2017) showed that augmented reality applications have positive effects on consumers' brand attitudes and purchasing behaviors. In particular, it was found that participants who experienced AR for the first time tended to share AR applications with their environment after the experience.

Previous studies on AR and consumer behavior

In recent years, the use of artificial intelligence (AI) supported technologies in daily life has increased, which has attracted the attention of information systems and marketing researchers (Grewal et al., 2018). Augmented reality (AR) applications have become widespread in order to provide consumers with a rich shopping experience and offer retailers a competitive advantage. Augmented reality aims to provide consumers with immersive experiences by integrating the information of the virtual world into the real world (Bonetti et al., 2018). However, the concepts of augmented reality (AR) and virtual reality (VR) are often confused, and it is emphasized that they are different technologies (Avcılar et al., 2018). With technological developments, AR and VR technologies have become more accessible in the lives of individuals (Interrante et al., 2018). AR technology has been developed on top of VR and combines real and virtual objects using computer graphics and perception technologies, offering real-time interaction to the user (Liv et al., 2014). Mishra (2021) defines VR as a simulated experience similar or completely different from the real world, while Craig (2013) defines AR as a technology that enriches the real world with computer-aided information. Tang et al. (2004) explain the main differences between AR and VR in terms of the nature of the environment, data needs and the necessity of user motion information. Augmented reality, is not only a marketing tool, but it has also started to take part in purchasing processes by directly affecting consumers' experiences (Stoyanova et al., 2015). AR-supported marketing applications offer sensory and emotional experiences to consumers; increase consumer interaction and strengthen the likelihood of purchasing products (Flavián, Ibáñez-Sánchez & Orús, 2019). For example, IKEA enhances consumer experience by showing the fit and footprint of products in the home in advance with an augmented reality application. Purchase intention is a critical stage that determines a consumer's commitment to a product purchase behavior (Engel et al., 1991; Howard & Sheth, 1969). Bergeron (2004) defines purchase intention as a consumer's positive attitude towards a particular purchase behavior and the degree of willingness to pay.

With the widespread use of the Internet, online purchase intentions have gained importance, and factors such as consumers' time and effort savings, convenience, security and information access have increased the attractiveness of online shopping (Ghose & Dou, 1998).

AR technologies also affect purchase intention by offering unique experiences to consumers online. Avcılar, Demirgüneş, and Açar (2019) revealed in their study that the positive user experience offered by augmented reality applications directly affects purchase intention. These findings show that AR technology is a powerful tool that not only provides information but also guides consumer behavior. Experience is not merely the passive acceptance of sensory perceptions, but a phenomenon that gains meaning through a combination of psychological and emotional processes (Daugherty et al., 2001). In today's intensely competitive environment, businesses tend to differentiate themselves by offering unforgettable experiences to their customers with the decrease in price and quality differences (Lemon & Verhoef, 2016).

Researches on the use of AR applications in the retail sector are also increasing rapidly. The results of the Negm (2025) research, found that augmented reality technology has a positive impact on consumer behavior, particularly by increasing value perception and strengthening brand engagement and purchase intent. The findings of Ngo et al., (2025), show that augmented reality (AR) features significantly influence consumer perceptions and experiences, with vividness and informativeness emerging as key factors. Fan et al. (2020) found that AR increases consumers' cognitive fluency through embedding and physical control experiences and positively affects attitudes towards the product. Hilken et al. (2017) found that AR strengthens hedonic and utilitarian value perceptions in consumer service experience. Smink et al. (2019) found that virtual trial applications using AR in cosmetics products increased perceived informativeness and shopping enjoyment. Yim and Park (2019) showed that individuals with negative body image evaluated AR-based product presentations more positively. Zhang et al. (2019) found that virtual trial technology influences consumer attitudes through perceived fun and ease of use factors.

METHODOLOGY

Population and Sample of the Study

Today, the rapid development of internet technologies and the increase in personalized internet usage have changed consumer purchasing behaviors. With the expansion of e-commerce and online shopping markets, companies have entered competition to offer consumers the most engaging and easy shopping experience. In this context, online shoppers who utilize augmented reality (AR) and/or virtual reality (VR) technologies constitute the population of the study. In the study, 20 participants who have experienced AR or VR technology in online shopping were selected using the snowball method, one of the non-probability sampling methods.

In the study, phenomenology approach, one of the qualitative research methods, was adopted and it was aimed to reveal common meanings based on the experiences of individuals. Through semi-structured in-depth interviews, the impact of participants' online shopping experiences using augmented and virtual reality technologies on their purchasing processes was examined. This detailed analysis on a small sample allowed for an overall evaluation of individual experience and in-depth information about consumer attitudes.

Conducting the Research

In this study, snowball sampling method was used for participant selection due to the difficulty of reaching complete information about the population. Initially, participants 1, 2 and 3 who had experienced online shopping with augmented reality (AR) and/or virtual reality (VR) technologies were interviewed, and the other 17 participants were reached with the suggestions of these participants. The interview questions were adapted from Nguyen & Nguyen's (2021) study on AR/VR applications in fashion retailing. In order to conduct in-depth interviews, university ethics committee approval (Çağ University permission dated 24/07/2024 and numbered 2400005842) was obtained before the application part of research. Within the scope of the data collection process, interviews were conducted with 20 participants in September 2024 using a semi-structured interview form. Descriptive findings are given in Table 1 and interview durations are given in Table 2. In the data collection phase, online interviews were conducted via the Google Meet platform, and participants were informed about the purpose, method and general framework of the interview before starting the interviews. Through semi-structured interviews, detailed and qualitative data on the participants' online shopping experiences were collected. This method was preferred in order to understand the experiences of individuals in depth and to obtain original findings related to the research topic.

Table 1 Demographic Characteristics of Participants

Participants	Gender	Age	Education Status	Profession
P. 1	Woman	34	Master's Degree	E-commerce/Beauty Expert
P. 2	Woman	32	Bachelor's degree	E-commerce/CRM Specialist
P..3	Woman	18	Bachelor's degree	Student
P. 4	Woman	42	Bachelor's degree	Housewife
P. 5	Woman	29	Bachelor's degree	E-comm./Watsons
P.6	Woman	26	Bachelor's degree	E-comm./Koçtaş
P.7	Woman	27	Bachelor's degree	E-commerce/Casper
P. 8	Woman	31	Bachelor's degree	E-commerce/FLO
P.9	Woman	25	Bachelor's degree	Psychologist
P. 10	Woman	42	Bachelor's degree	E-commerce/ Market Researcher
P.11	Woman	36	Bachelor's degree	Catalog and Content Specialist
P. 12	Woman	36	Master's Degree	Product Manager
P. 13	Woman	27	Bachelor's degree	Retail Development Specialist
P. 14	Woman	36	Master's Degree	Marketing Specialist
P. 15	Woman	25	Bachelor's degree	Sales Support Assistant
P. 16	Woman	29	Bachelor's degree	Retail Development Specialist
P. 17	Woman	36	Bachelor's degree	Catalog Project Manager
P.18	Woman	27	Bachelor's degree	Online Marketing Specialist
P.19	Woman	28	Bachelor's degree	Catalog and On-Site Search Specialist
P.20	Woman	32	Master's Degree	Influencer Marketing Manager

Since the interviews were online, they were recorded with voice recording programs and the participants were informed about this and their permission was obtained. The interviews lasted a total of 1128 minutes and each interview lasted an average of 56.4 minutes (Table 2). The audio recordings created during the interviews with the participants were converted into written documents by the researcher using Microsoft Word program after the interview.

Table 2 *Interview Duration with Participants*	
Participants	**Interview Duration (Minutes)**
Participant 1	54
Participant 2	68
Participant 3	57
Participant 4	57
Participant 5	58
Participant 6	55
Participant 7	51
Participant 8	53
Participant 9	56
Participant 10	60
Participant 11	62
Participant 12	51
Participant 13	60
Participant 14	55
Participant 15	58
Participant 16	52
Participant 17	59
Participant 18	55
Participant 19	52
Participant 20	55
TOTAL	**1128**

In this study, validity and reliability in qualitative studies were achieved through the concepts of credibility, transferability, consistency and verifiability (Krefting, 1991; Arslan, 2022). For internal validity, the interview form was prepared with questions based on the literature and submitted to expert opinion. External validity was ensured by explaining the study process and participant selection in detail. Reliability was supported by the fact that the interviews were conducted one-on-one by the researcher and audio-recorded. The interview form was structured around three sections including demographic information, AR/VR experiences and purchasing behaviors, and a total of 10 basic questions. In this study, the data obtained as a result of the interviews were transcribed and evaluated with the exploratory research method. The researcher established cause-effect connections by explaining the relationships between the findings and detailed the analysis of the importance of the results obtained in the "Findings" section.

RESULTS

This study analyzes the impact of online shopping experiences using augmented reality (AR) and virtual reality (VR) technologies on customer purchase preferences. A three-stage interview form was used to assess the demographic information of the participants, their shopping experiences and the changes in their purchase decisions after the experience.

A.Findings on Participants' Experiences and Approaches to Online Shopping and Their Purchase Behaviors

In this part of the interview, the findings obtained as a result of the questions about how the participants' online shopping experiences started and shaped in general, how long and how often they have been using this purchasing method, their reasons for purchasing in general and what factors affect their purchasing decisions were categorized and explained. In order to determine how their online shopping experiences started and shaped in general, the researcher asked the participants; ***"Could you please give us a brief introduction about yourself and your general online shopping experience?".*** The answers given to these questions;

> **Participant 2:** *I work as a CRM, i.e. campaign creator, on a popular e-commerce platform. I am at the center of online shopping. Since I am a campaign specialist, I can see how much discount is available on which products on the basis of the company I work for. With the introduction of the pandemic into our lives, my understanding of shopping has changed a lot, while I cannot buy without touching, physically seeing the product, since 2020, I have started to go to the store very little, physical shopping has now become a state where I say if I don't go out for me, let me take a look here. From food to cosmetics, I buy every product you can think of online, especially if the product is delivered the next day, you will not find a happier consumer than me. In short, I can say that online shopping has become a big part of my life, I do my grocery shopping online 3-4 times a week, are there still people who go to the market without saying hot and cold for two pieces of products? Honestly, I am not sure, online shopping is the greatest convenience offered, so I prefer it very much.*

Participant 19: *I have been working in the catalog team of one of the major e-commerce platforms in Turkey since 2021. Online shopping is now a necessity. The pandemic period pushed us to this. My preference for buying products with contact is to try the structure of the product I will buy in the market or in the store, to try on the clothes on me, to look at the freshness of the products. Now, with the hustle and bustle of work life and marriage, online shopping comes fast. Going to the market is a waste of time or going to a store and not finding the products you want is both a waste of time and does not give you what you want. Online, you find the product quickly, delivery is fast, and if the seller is known, you find it reliable.*

The foundations of online shopping have been laid out as a result of the widespread use of technology and personalized internet use, especially in the last 10 years, and what accelerated this process was the pandemic (Covid 19) process that started in March 2020, which affected the whole world and therefore our country. Both curfews and the fact that people do not prefer shopping malls and stores in order to avoid contact have led consumers to online shopping for both food and grocery and other retail shopping in this process.

B. Opinions on online shopping experience and frequency

In order to reach the findings about how long and how often the participants have experienced online shopping, the researcher asked the questions "***How long have you been shopping online?***" and ***"How often do you buy products online***?" (Table 3).

While 20% of the participants (4 people) stated that they have been shopping online for 1-2 years, 50% (10 people) have been shopping online for 3-5 years and 30% (6 people) have been shopping online for 6 years or more. While 45% (9 people) of the participants stated that they make online purchases 1-4 times a month, 25% (5 people) stated that they make 5-10 times a month and 30% (6 people) stated that they make 11 or more purchases a month.

Some of the answers to these questions are as follows;

Participant 3: *We can say 2 years. I shop very often, almost 5 times a week.*

Participant 6: *For 5 years. I can say 2-3 times a week. Of course, this number increases during discount periods.*

Participant 20: *For the last 2 years. I shop every week, small and big, and the cargo company knocks on my door once a week.*

According to the responses of the participants, their awareness of online shopping is high, and their experience period is between 2 and 10 years. The pandemic accelerated this process. In addition, the participants stated that they shop at least once a week and showed a tendency towards fast and instant shopping.

Table 3 Findings on Participants' Online Shopping Experiences and Frequency of Purchases

Online Shopping Experience	Frequency (n)	Percentage (%)	Purchase Frequency (Monthly)	Frequency (n)	Percentage (%)
1-2 years	4	20	1-4	9	45
3-5 years	10	50	5-10	5	25
6 years and above	6	30	11 and above	6	30
TOTAL	**20**	**100**	**TOTAL**	**20**	**100**

C. Opinions on factors affecting product purchase decisions

In order to obtain findings on the reasons that led the participants to decide and initiate the purchasing process, the researcher asked the questions ***"What is the reason why you normally buy?"*** (Table 4) and ***"What influences your purchasing decision?"*** (Table 5).

Table 4 Findings on Participants' Reasons for Product Purchase

Reason for Product Purchase	Frequency (n)	Percentage (%)
Shopping Pleasure	5	25
Need Needed	12	60
Shopping Habits	3	15
TOTAL	**20**	**100**

As seen in Table 4, 60% of the participants (12 people) stated that in order to buy a product, a need for that product should arise, 25% (5 people) stated that they make purchases because they enjoy shopping and buying products, and 15% (3 people) stated that shopping has become a habit and they do not need an additional reason for this when is needed.

Table 5 Findings on the Reasons Affecting Participants' Purchase Decisions

Reasons Affecting the Purchase Decision	Frequency (n)	Percentage (%)
Advertising / Promotion	7	35
Discount / Promotion	5	25
Consumer Comments / Social Media Recommendations	7	35
Product Availability / Fast Delivery	1	5
TOTAL	**20**	**100**

35% of the participants (7 people) stated that the most important reason that influenced their purchase decision was advertising and social media promotions, 25% (5 people) stated that discounts and promotional campaigns were the most important reasons, 35% (7 people) stated that consumer comments and comments made by social media influencers were the most important reasons, and finally 5% stated that easy accessibility of products and fast delivery options were the most important reasons.

Some of the answers to these questions are as follows;

> **Participant 17:** - *First of all, I think that in order to buy a product, I need to need it. If I don't need it, I don't tend to buy it. Need, discount rate, lifetime of the product, user-friendliness are among my purchase reasons. Today, with social media, the influencer market has a great impact on my purchases. I have always been a need-oriented shopper, but as the sharing of a product on social media and the sharing rates of "influencers" whose advertisements I love to follow increase, my curiosity for a product increases. Whether it is a cosmetic or an unnecessary kitchen appliance, sometimes a product is shared so much that I look at the product and if it is in the "Most Favorite" or "Best Sellers" section, it is not possible for me to try that product, I buy it thinking that I will need it.*

As can be seen from the answers given by the participants, the purchasing decision process has reached a different dimension in the process of the spread of technology and online shopping. While in the classical decision-making process, the need/problem must first emerge and be determined, today, both social media, campaigns by businesses and the fact that the information gathering phase has become much faster and more comprehensive, as well as the availability of all options together and appealing to all kinds of socio-demographic variables, cause the decision-making phase to take place much faster.

The common opinion of almost all users is that campaigns and discounted sales have a direct impact on the purchasing process.

D. Participants' Approaches to Augmented Reality (AR) and Virtual Reality (VR) Technologies

In this part of the interview, questions were asked to obtain findings on the participants' general perspectives on augmented reality (AR) and virtual reality (VR) technologies. The findings obtained as a result of the answers given to these questions are categorized and explained.

Opinions on AR/VR technology

The researcher asked the question ***"What comes to your mind when you hear about AR/VR technology?"*** in order to obtain findings on the extent to which the participants have general knowledge about augmented reality (AR) and virtual reality (VR) technologies (Table 6).

Table 6 Findings on What AR/VR Technology Means to Participants

Expression	Frequency (n)	Percentage (%)
A New Dimension in Technology	2	10
Limits of Imagination/ Unbelievable Experience	12	60
Diversity/Entertainment	2	10
Convenience/Time Saving	4	20
TOTAL	**20**	**100**

While 60% of the participants (12 people) consider AR/VR technology as incredible experience that pushes the limits of imagination, 20% (4 people) consider it as a time-saving and all kinds of convenience. 10% (2 people) stated that it has a place near the top in the field of technology and 10% (2 people) stated that it is a technological innovation and application with fun and plenty of alternatives.

Some of the answers to this question are given below;

> **Participant 2:** *The things we used to dream of are now applicable in our lives. 5-10 years ago, AR / VR technologies were mentioned on twitter, big glasses to be designed by famous technology circuits, technologies adapted to phones would seem a bit fanciful. In 2024, when I look at it now, there is now a virtual reality in question. My brother even takes a course they call second life at university, he talks about it being like SIMS and that it is very fun, he gets up early and goes to school so as not to miss that class. In the past, we used to make excuses to skip the class on the way to university. These technologies that are included in our lives evoke ease of life, practical and fast consumption, and new discoveries in my mind.*

> **Participant 10:** *AR technology evokes the creation of a semi-real world. VR, on the other hand, is virtual reality, which means that users are completely disconnected from reality. Apple's provision product, virtual product experiences of world-famous cosmetic brands such as Loreal, the possibility of imagining and viewing a product offered by the IKEA brand in your room, the possibility of positioning the product in the house by choosing a product you like, such as IKEA in Houzz, an online architecture and design website in architecture, the possibility of positioning the product in the house, approaching the product, moving around it are among the ones that come to mind*

As can be seen from the answers of the participants; since augmented reality (AR) and virtual reality (VR) are technologies that are increasing in popularity every day and reaching wider masses and are predicted to enter an even faster development process, it has been determined that they are technological tools that internet users and consumers who prefer online shopping have more or less knowledge about, both experientially and sensually, although not scientifically.

Considering both the socio-demographic characteristics of the participants and the sectors in which they work, and when these findings are evaluated in the same framework with the increase in the number of people using the internet on a global scale and the trends of Generation Z towards technology, it is determined that augmented reality (AR) and virtual reality (VR) are technological innovations that consumers are familiar with, especially in gaming technologies, cosmetics sector, furniture decoration and architecture sector and entertainment sector.

E. Opinions on AR technologies and Cosmetics online experiences

In order to obtain findings on the participants' experiential thoughts on whether augmented reality (AR) technology will provide convenience in online shopping, especially in the cosmetics sector, and if so, in what way, the researcher asked the question ***"How do you think AR/VR technology can help cosmetics consumers shop?"*** (Table 7).

Table 7 Findings on the Conveniences Provided by AR/VR Technology to Participants

	Frequency (n)	Percentage (%)
Ease of Product Trial	7	35
Easy Product Accessibility	5	25
Fast Shopping	8	40
TOTAL	**20**	**100**

40% (8 people) of the participants stated that AR/VR technology provides great benefit especially in terms of time and offers a fast shopping opportunity, 35% (7 people) stated that they can experience cosmetic products hygienically and have an idea about how they look as a result of virtual reality applications, and 25% (5 people) stated that thanks to this technology, they can access and obtain the product type (brand, content, color tone) they want more easily.

Some of the answers to this question are given below;

> **Participant 14:** *The opportunity for fast shopping, trial opportunity and cost reduction is as follows: You need to go to the store to try a product, once you need to go to the store to try a product, you get rid of the travel costs with this technology, when you go to the shopping mall, it is not possible to buy a single product and leave, you look at more than one thing while you are there, in fact, you go to look for a single thing and make additional expenses. It is also easy, fast and practical.*

> **Participant 18:** *It personalizes the shopping experience and actually allows you to see how a product will look before you buy it.*

Cosmetics shopping, especially makeup and skin care products, has become a basic need for women like food and drink. It is especially indispensable for working women, who also constitute the sample of this study.

As seen in many answers, the common point is time saving. Especially for people living in metropolitan cities, physically visiting stores, finding alternative products that meet the criteria needed and determining to what extent these products will meet their needs creates a great need for time.

Again, one of the findings obtained as a result of the answers received and the experiences of the participants is that thanks to augmented reality (AR) technology, it offers the convenience of trying the cosmetic product in a more hygienic way. To give an example based on the answers, many famous cosmetic companies (such as Loreal, NYX, Yves Rocher, MAC) use augmented reality (AR) technology to offer consumers the virtual experience of makeup products such as lipstick, eyeshadow, foundation with the help of cameras on devices such as phones and tablets, and thus positively influence consumer purchasing decisions with healthier, hygienic and practical solutions compared to tester (control product) experience.

F. Findings on Participants' Experiences of Buying Cosmetics Online Using Augmented Reality (AR) and Virtual Reality (VR) Technologies

In this part of the interview, questions were asked in order to obtain findings on how the participants' behaviors and thoughts about the online cosmetic product purchases they experienced using augmented reality (AR) and virtual reality (VR) technologies were formed during the purchase phase and after the purchase. The findings obtained as a result of the answers given to these questions are categorized and explained. In order to determine which products the participants prefer to buy online using augmented reality (AR) technology and how many times they have experienced this experience, the researcher asked the questions ***"Which cosmetic products do you buy using AR technology?"*** and ***"How many times have you purchased products using AR technology?"*** (Table 8).

Table 8 Findings on the Products Purchased by Participants Using AR Technology and the Number of Purchasing Experiences

Product	Frequency (n)	Percentage (%)	Purchasing Number of	Frequency (n)	Percentage (%)
Lipstick	9	45	1-2	13	65
Blush	5	25	3-5	6	30
Foundation	3	15	6 and above	1	5
Under Eye Concealer	1	5			
Far	2	10			
TOTAL	**20**	**100**	**TOTAL**	**20**	**100**

While 45% (9 people) of the participants stated that they purchased lipstick using augmented reality (AR) technology, 25% (5 people) purchased blush, 15% (3 people) foundation, 10% (2 people) eyeshadow and 5% (1 person) under-eye concealer.

While 65% of the participants (13 people) stated that they made 1-2 purchases using augmented reality (AR) technology, 30% (6 people) stated that they made 3-5 purchases and 5% (1 person) stated that they made 6 or more purchases.

Some of the answers to these questions are as follows;

Participant 3: - *Foundation, Lipstick, Bronzer*

- I purchased 6 products. 3 lipsticks in different colors, 1 foundation and a bronzer

Participant 19: - *I wonder about lipstick, lipstick can be a more reliable shopping.*

- I bought an under-eye concealer.

As can be seen from the answers of the participants, all the consumers participating in the research have made online cosmetic product purchases by experiencing augmented reality (AR) technology at least once or more. In addition, as seen from the answers, consumers who participated in the research preferred to buy products that they can experience how they look thanks to augmented reality, such as lipstick, blush, foundation, eye shadow and under-eye concealer. In order to obtain the findings on the ways in which the participants' experience of the augmented reality (AR) technology used by the seller company while choosing any cosmetic product brand affects their purchasing behavior, the researcher asked the question ***"What are the factors that push you to buy a makeup product in connection with the AR function of the cosmetics company?"*** (Table 9).

Table 9 Findings on the Factors that Push Participants to Buy Cosmetic Products Using AR/ VR Technology

Factor	Frequency (n)	Percentage (%)
Hygienic Trial Possibility	5	25
Wide Product Scale (Color shade)	3	15
Curiosity	6	30
Time Saving	6	30
TOTAL	**20**	**100**

While 30% (6 people) of the participants stated that they experienced this purchase because shopping with AR/ VR technology aroused their curiosity, 30% (6 people) emphasized the time saving factor as they made fast and practical purchases thanks to this technology. While 25% (5 people) stated that they preferred this experience because they had a more hygienic trial opportunity instead of sample products in stores about how the products would look like, 15% (3 people) stated that they made purchases using this technology because they could find and access the makeup materials in the color and tone they were looking for in a wider variety of products.

Some of the answers to this question are given below;

Participant 1: *In addition to fast and practical, I already use many products of the brand (NYX) and I am satisfied. I did not have time to try the new product in the store, I work at home office, so I am at home on the computer until the end of the working day and I have the opportunity to try the product I want to buy on my face on the PC, just for this, going to the store in Istanbul traffic is nothing but a burden, and there is a possibility that I cannot find the trial size of the product in the store , but with the "Try it on Your Face" opportunity offered by the brand, I was able to determine the color of the product that would suit my face. In summary, it is both very fast and practical and saves time.*

Participant 3: *It is quite different and enjoyable to try it, it gives you the opportunity to try a product you are curious about on your face in seconds. More than one brand has this opportunity (Loreal, NYX, MAC) but not all of them are the same, for example, I can try lipstick on my face with AR technology in two different brands, but if the speed of one is slower than the other, then I will first try on the site of the faster company and it will affect my purchase. The speed of the service is important to me.*

They emphasized that the most important factors affecting their purchasing decisions are time saving, curiosity about the experience, hygienic trial opportunity and also more product variety compared to physical stores. In addition, the common opinion of all participants is that discounts and promotional campaigns are held more frequently in these cosmetics stores compared to physical stores.

In addition, the result that "Try It on Your Face" applications implemented by cosmetic companies and using augmented reality (AR) technology create a separate experiential excitement on consumers is among the remarkable findings obtained. In order to obtain the findings regarding the participants' opinions on the possibility of online purchasing experiences using augmented reality (AR) technology replacing their purchasing experiences using physical stores and shopping malls, the researcher asked the question ***"Do you think this kind of interaction can replace the "real life" experience? Why?"*** (Table 10).

Table 10 Findings on Participants' Thoughts on Whether Augmented Reality (AR) Experience Can Replace Real Life Experience

Can it replace the "Real Life" experience?	Frequency (n)	Percentage (%)
Yes	2	10
No.	18	90
TOTAL	**20**	**100**

90% of respondents (18 respondents) think that the buying experience with augmented reality (AR) technology cannot replace the "real life" experience, while only 10% (2 respondents) said the opposite.

Some of the answers to these questions are as follows;

Participant 4: *I am not sure for everyone. I think it would be more accurate to divide it into age ranges. For the 17-35 age range, it can replace real life experience, and it will be quite difficult for those over 35. On the one hand, we are talking about an age born into technology, and on the other hand, there is a segment that would not even know what online shopping is if it were not for the pandemic, and it is almost impossible to inspect a product with AR technology and encourage them not to buy it, for example, my mother, 44 years old, would not even prefer to shop from the virtual market if it were not for the pandemic, what pushed her to do this was the curfews. Touching a product, trying it on your skin is very important for older generations. On the other hand, there is a new generation, children born with tablets. For them, this technology is already real life.*

Participant 8: *I am not very sure, it is difficult in TR conditions, but it will show in the change between generations. For millennials, real life will definitely take its place. It will be difficult for Generation X, Y to replace real life. Because the millennials were born with tablets in their hands, these children are very open to technological experiences such as AR and VR, they will not be alienated and will enjoy it, but the X and Y generations know what physical shopping is, they grew up on the streets and technology is a development that scares them on the one hand.*

As can be seen from the answers of the participants; although almost all of them stated that they were satisfied with the augmented reality (AR) experience; almost all participants stated that they had similar thoughts that it could not replace the "real life" experience due to the fact that there is a change in technology usage and purchasing habits between generations (especially Generation Z showing much greater differences than Generation X and Y) and the applicability of this technology for all sectors is difficult. These findings show that although the visual experience in augmented reality (AR) technology comes to the forefront, it does not have enough impact on customer purchasing behaviors in sensory (touch, feel) and cognitive terms.

Finally, considering the post-purchase stage process, in order to obtain the findings regarding the participants' opinions on the purchase intentions and preferences of their cosmetic product purchase experience using augmented reality (AR) technology and their recommendation to other consumers as a result of this experience, the researcher asked the following questions***: "If you need to buy a new cosmetic product, would you prefer the company you experienced as your first choice cosmetics retailer based on your AR experience? Why?"*** (Table 11) and ***"Does your AR experience with cosmetics encourage you to recommend the company to other potential customers? Why?"*** (Table 12).

Table 11 Findings on the Participants' Preference for the Company They Shopped with Augmented Reality (AR) Experience

Would You Choose Again?	Frequency (n)	Percentage (%)
Yes	19	95
No.	1	5
TOTAL	**20**	**100**

While 95% of the participants (19 people) stated that they would prefer the company they purchased makeup from again after experiencing augmented reality technology (AR), only 5% (1 person) stated that they would not shop from the same company again.

Table 12 Findings on Participants' Recommendation of Augmented Reality (AR) Experience

Do you recommend it?	Frequency (n)	Percentage (%)
Yes	18	90
No.	2	10
TOTAL	**20**	**100**

While 90% of the participants (18 people) stated that they would recommend their online experiences using augmented reality technology and the brand and company that offered them this experience to other consumers, 10% (2 people) stated that they would definitely not recommend them.

Some of the answers to these questions are as follows;

> **Participant 4: -** *I prefer the brand of my first choice because I tried the product and it did not mislead me, I have always been a consumer with brand loyalty. For this reason, I continue with the brand that I prefer and does not mislead me, I would not want to experience this experience in a different brand as long as I have no complaints. Yes, it does because there is a possibility that a product you try in physical retailing may mislead you with the lighting in the store, so it will be equivalent to the risk of trying the product virtually.*

> **Participant 13: -** *I would because I would like to continue with a brand that I tried once and was satisfied with. A new brand can be risky, I don't have money to throw away in this period.*
>
> *- Yes, the products I tried with AR were the same as the ones I received physically, not much different from the ones I tried online. The brand is very global so I recommend it.*

As determined from the answers of the participants, consumers who participated in the study and experienced augmented reality (AR) technology while buying cosmetic products stated that they were satisfied with this experience and that the companies using this technology were the primary reason for preference. In other words, it was concluded that this experience had a positive impact on their purchasing behavior. In addition, due to the

satisfaction that emerged both during and after the purchase process, both company loyalty and brand recommendation behavior to other potential customers were identified among the positive outcomes of this experience.

DISCUSSION and CONCLUSION

Today, in line with changing consumer needs and rising quality expectations, businesses have turned to experience-oriented marketing strategies. In this approach, which replaces the traditional functional approach, in addition to the basic benefits offered by the product, the experiences provided to the consumer also play a critical role in purchase intentions. In the literature, Genç (2009) emphasized the importance of experiences in creating customer loyalty, while Yüksel (2017) revealed the positive effects of augmented reality (AR) and virtual reality (VR) technologies on brand image and purchase behavior. With technological developments, personalized experiences are offered through online platforms, which increases consumer loyalty. Tuncay (2018) showed how mobile technologies and hedonistic buying behaviors affect consumer trends. AR and VR technologies increase consumer satisfaction and create brand loyalty by offering interactive experiences that appeal to different senses of users (Çapri, 2019).

Especially in the cosmetics industry, augmented reality applications in visually prominent products such as lipstick, foundation and blush have been found to strengthen consumers' visual experiences and positively affect their purchasing decisions. These findings clearly demonstrate the impact of technology-supported experiential marketing on consumer behavior.

This study examines consumers' views on experiential marketing in online purchasing processes. In particular, the experiences offered by augmented reality (AR) and virtual reality (VR) technologies to consumers in the cosmetics sector were analyzed. The fact that all of the participants were women and the search for time saving was an important factor in their preference for online shopping. Brand diversity, ease of payment and delivery options also supported this preference. The findings show that consumers, especially Generation Z, are knowledgeable about AR technologies. AR applications benefited consumers in terms of time saving, product accessibility and hygiene in cosmetics products and positively affected purchase intentions. In addition, AR-supported shopping experiences were found to have positive effects on consumer satisfaction and customer loyalty. However, it has been observed that tactile and emotional experiences other than visual have not yet been sufficiently met. As a result, it has been revealed that augmented reality technology has a high potential in experiential marketing and can offer a significant competitive advantage for businesses. In this study, the fact that the sample consists entirely of female consumers and their experiences is an important limitation. It is recommended that future studies collect data from consumers with different demographic characteristics. Additionally, it would be beneficial for future research to comparatively examine the benefits of augmented reality (AR) technology for businesses.

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a. Yazar Katkı Oranı

Bu çalışmanın hazırlanmasında birinci yazar %50, ikinci yazar %50 oranında katkı sağlamıştır.