

## The Effect of Consumers' Competence in Using Digital Marketing Tools on Digital Product Perceptions

### Tüketicilerin Dijital Pazarlama Araçları Kullanma Yetkinliğinin Dijital Ürün Algıları Üzerine Etkisi

Abdullah BALLI, Millî Savunma Bakanlığı, abduallah.balli@ostimteknik.edu.tr

Orcid No: 0000-0003-2689-6610

*Abstract: With the development of digital technologies, digital marketing tools have developed and diversified. The spread of digital marketing and the development of digital marketing tools have caused consumers to start benefiting from the digital versions of the products they have physically purchased. This situation has shown how important the authority of consumers to use digital marketing tools is for businesses. For this reason, it is necessary for businesses to develop new digital marketing strategies at the point of correctly perceiving the skills of consumers to use digital marketing tools and developing these skills. Within the scope of the study, the assumption that consumers' ability to use digital marketing tools will affect their digital product perceptions and testing this makes the study important. The data used within the scope of the research were obtained with digital questionnaires. The obtained data were analyzed with SPSS 25 package program and hypotheses were tested. The questionnaires were answered by 413 participants, but 33 data were not included in the evaluation because they were not suitable. Consumers' ability to use digital marketing tools (creativity, access to information, transaction skill, willingness to socialize, portability) and digital product perceptions (relative advantage, visibility, ease of use, willingness, trialability, accordance) differ in terms of demographic characteristics. In addition, it has been concluded that the ability of consumers to use digital marketing tools has an effect on their perception of digital products. In the research, the effect of consumers' authorization to use digital marketing tools on digital product perceptions will be measured and what needs to be done in terms of developing new digital marketing strategies for businesses will be explained. The aim of this study is to measure the competencies of digital consumers in using marketing tools and to explain what needs to be done in terms of businesses at the point of improving consumers' digital product perceptions.*

*Keywords: Digital Marketing, Digital Marketing Tools, Digital Consumer*

*JEL Classification: M30, M31, M39*

*Öz: Dijital teknolojilerin gelişmesiyle birlikte dijital pazarlama araçları gelişmiş ve çeşitlenmiştir. Dijital pazarlamanın yaygınlaşması ve dijital pazarlama araçlarının gelişmesi, tüketicilerin fiziksel olarak satın almış oldukları ürünlerden o ürünlerin dijital versiyonlarından faydalanmaya başlamasına doğru evrilmesine neden olmuştur. Bu durum tüketicilerin dijital pazarlama araçları kullanma yetkinliğinin işletmeler bakımından ne denli önemli olmaya başladığını göstermiştir. Bu nedenle tüketicilerin dijital pazarlama araçları kullanma becerilerinin doğru bir şekilde algılanması ve bu becerilerin geliştirilmesi noktasında işletmeler bakımından yeni dijital pazarlama stratejilerinin geliştirmesi gerekliliğini ortaya çıkarmaktadır. Çalışma kapsamında tüketicilerin dijital pazarlama araçlarını kullanma yetkinliğinin dijital ürün algılarını etkileyeceği varsayımı ve bunun sınanması çalışmayı önemli kılmaktadır. Araştırma kapsamında kullanılan veriler dijital anket formları ile elde edilmiştir. Elde edilen veriler SPSS 25 paket programı ile analiz edilerek hipotezler sınanmıştır. Anketler 413 katılımcı tarafından cevaplanmış ancak 33 veri uygun olmadığı için değerlendirmeye alınmamıştır. Tüketicilerin dijital pazarlama araçlarını kullanma becerileri (yaratıcılık, bilgiye erişim, işlem becerisi, sosyalleşme isteği, taşınabilirlik) ve dijital ürün algıları (göreceli avantaj, görünürlük, kullanım kolaylığı, isteklilik, denenebilirlik, uyum) demografik özellikler bakımından farklılıklar göstermektedir. Ayrıca tüketicilerin dijital pazarlama araçları kullanma becerilerinin dijital ürün algıları üzerinde etkileri olduğu sonucuna ulaşılmıştır. Araştırmada tüketicilerin dijital pazarlama araçları kullanma yetkinliğinin dijital ürün algıları üzerine etkisi ölçülerek, işletmeler bakımından yeni dijital pazarlama stratejilerinin geliştirilmesi bakımından yapılması gerekenler anlatılacaktır. Bu çalışmanın amacı dijital tüketicilerin pazarlama araçları kullanım*

#### **Makale Geçmişi / Article History**

Başvuru Tarihi / Date of Application : 9 Nisan / April 2023

Kabul Tarihi / Acceptance Date : 1 Eylül / September 2023

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*yetkinliklerinin ölçülerek, tüketicilerin dijital ürün algılarını geliştirme noktasında işletmeler bakımından yapılması gerekenlerin neler olduğunun anlatılması amaçlanmaktadır.*

*Anahtar Kelimeler: Dijital Pazarlama, Dijital Pazarlama Araçları, Dijital Tüketici*

*JEL Sınıflandırması: M30, M31, M39*

## **1. Introduction**

With the acceleration of digitalization, digital marketing tools and methods have started to develop. Businesses have started to offer products such as newspapers, movies, music, games and books that consumers have physically purchased to consumers through digital media and platforms. This situation provides serious cost advantages for digital products compared to the products they offer physically for businesses, while providing the opportunity to reach much more consumers at a lower price. However, consumers' skills and perceptions of using digital marketing tools have an important place in their preference for digital products.

By the end of 2021, the digital video services market reached a size of US\$ 70.8 billion. With an annual growth of 11.25% between 2021 and 2025, the market size is predicted to reach 108.5 billion USD in 2025. The user penetration, which is expected to be 14.3% by the end of 2021, is expected to increase to 18.2% in 2025 and reach 1.42 billion users (Statista, 2021). In the market where many digital videos service providers such as Netflix, Hulu, Amazon Prime Video, Disney+ compete, Netflix became the digital video streaming platform with the most subscribers with 209 million subscribers in the second quarter of 2021. The rapid growth of the digital video services market has led to the entry of new players into the market. YouTube Premium, which had 30 million subscribers in December 2020, increased the number of subscribers by 20 million to 50 million in a period of 9 months (The Verge, 2021). Especially YouTube is a platform preferred by users from very young age groups. In the United States, 80% of parents with children under the age of 11 stated that their children watch YouTube. This keeps YouTube apart from most social media platforms with a user minimum age of 13 (Hootsuite, 2021). Disney+, which started its services at the end of 2019, reached 116 million subscribers as of the 2021 financial year, the third quarter, with a growth of more than 100% compared to the same period of the previous year. The platform is expected to reach 260 million subscribers in 2024. Hulu and ESPN+ from Disney companies also showed similar growth. ESPN+ grew 75% to reach 14.9 million subscribers, while Hulu grew 21% to 42.8 million subscribers (TechCrunch, 2021). In 2020, Amazon Prime Video reached 117 million subscribers and generated \$25 billion from Amazon subscription services (Statista, 2021).

The same is true for digital music platforms. The downloadable or streaming music services market, which gained 100 million new subscribers in 2020, reached 487 million people, with 19.5 million subscribers added in Q1 2021 globally. In the digital music market, which includes major players such as Spotify, Amazon music, Apple music and Tencent, the streaming music services market reached \$13.4 billion in 2020, accounting for 62% of the revenue in the music industry. (Statista, 2021).

According to the research conducted by Deloitte in the USA, those who use digital video streaming platforms on average have 4 different platforms, those who use digital music streaming services have 2 different platforms, and those who use gaming platforms have paid subscriptions to 3 different platforms. Although the most preferred activity among the generations is to watch television and movies at home, the Z generation primarily prefers to play games. 50% of individuals between the ages of 18-29 listen to music every day. The continued preferences of Generation Z for gaming, music and social media use are likely to threaten the video industry's leading position in the industry (Deloitte Insights, 2021). More than \$240 billion has been invested in the gaming industry since 2019. The game revenues, which were 199 billion dollars in 2022, are expected to reach 307 billion dollars in 2027 with a 50 percent growth in 5 years (Webrazzi, 2022).

The tendency of consumers to purchase digital products with digital marketing tools is increasing day by day. However, the majority of consumers do not already know how to use digital marketing tools or do not use them because of the concern that they will encounter negative situations if they use it. Therefore, the higher the digital marketing skills and perceptions of consumers, the higher their probability of choosing digital products. Therefore, this study is based on determining the relationship between consumers' perceptions of digital product features and their ability to use digital marketing tools. This is very important for businesses that offer digital products to consumers through digital marketing tools. Businesses need to convince consumers that purchasing digital products with digital marketing tools is easy, reliable and useful, and they need to develop new practices and strategies to increase their skills in using digital marketing tools. For this reason, within the scope of the study, it is aimed to determine the ability of consumers to use digital marketing tools in terms of education, gender, income and whether these skills affect their perceptions of digital products. In this context, suggestions are made to contribute to the development of suitable products and designs for businesses that offer products to consumers with digital marketing tools and to determine the appropriate target audience for the designed products.

As a result of the research, the effect of consumers' use of digital marketing tools on their perceptions of digital products and their support with studies in the literature make the study unique. Considering the studies in the literature, it is understood that the ability of consumers to use digital tools affects their online digital product preferences. For this reason, measuring the effect of consumers' ability to use digital tools on digital product perception will contribute to the literature.

## **2. Literature Review**

Digital marketing is a concept that emerged with the developments in the industry, information technologies and the development of the internet. Digital marketing is the activity of fulfilling the functions of marketing by using information technologies, design and software virtual environment where the internet is at the center. Digital marketing is defined as the use of technologies to assist marketing activities to meet the needs of customers through the use of digital channels (Chaffey, 2016). By the word digital is understood all the activities done through an electronic device or the internet. Within the scope of the digital marketing process, businesses use digital channels such as e-mail, social media and search engines to promote and sell their products and services (Desai, 2019, p. 197). Although the term digital marketing first appeared in the 1990s, it takes the 2000s to become widespread and become a vital tool for businesses (Kingsnorth, 2016).

Digital marketing has changed the way businesses manage and communicate with customers and communities around the world. It has become a key and necessary tool to face the challenges that exist in the field of marketing (Diez-Martin et al., 2019, p.1). Digital marketing, physical objects or electronics, software, sensors and means a network of embedded objects with network connectivity and the internet of things that allow these objects to collect and share data. Therefore, digital marketing including digital and network communication technologies, telephones and television is inclusive (Nair, 2016, p. 4). Digital marketing and social media offer opportunities for small businesses to attract new customers and reach existing customers more efficiently. In addition, internet use benefits SMEs by reducing costs and facilitating both internal and external communication (Ivanov, 2019, p. 1; Taiminen and Karjaluoto, 2015, p. 2). According to Lopez Garcia et al., (2019, pp. 3-4), digital marketing is the whole of a business's activities to develop, promote and sell products and services on the internet. Therefore, it should be noted that digital marketing is an advanced concept of internet marketing and allows not only using online technologies, but also interacting with offline customers, personalizing their needs. (Serohina et al., 2019, p. 36). In addition, the use of digital marketing tools also gives a business the opportunity

to increase its market share and increase its competitiveness (Kotane et al., 2019, pp. 29-30; Kannan and Li, 2017, p. 23). Digital marketing campaigns are becoming more common and efficient as digital platforms are increasingly incorporated into marketing plans and daily life, and people prefer to use digital devices rather than visiting physical stores (Desai, 2019, pp. 196-197). For this reason, the competence of consumers to use digital marketing tools is of great importance, especially for businesses.

Recently, with the spread of digital technologies, a new era has been entered in marketing. This new era, called Marketing 4.0, is basically defined as the deepening and expansion of people-oriented marketing (Kotler et al., 2020b). In other words, the focus of digital marketing is actually people rather than technology. At this stage, technologies such as the Internet of Things and the cloud shape marketing activities. Today, there is a “big data”, the amount of which increases with the use of digital technologies and cannot be processed with traditional tools (Şengül, 2018). Through big data management, businesses try to collect and analyze information about consumers and to predict consumer behavior. In line with these predictions, businesses aim to develop the right marketing strategies.

Businesses that want to adapt to market conditions in today's competitive environment need to exist in the digital world today. On the other hand, digital marketing provides various advantages to businesses. First of all, there is no need for large budgets to be able to market in digital environments. In the digital world, businesses being innovative and interesting provide sufficient conditions for them to be successful (Öztürk, 2019). This situation creates a democratic environment for small and large enterprises. It is possible for customers to voluntarily promote and even advocate effectively the brands they are affiliated with in digital environments, even without large advertising expenditures. The fact that brand advocates can reach a wide audience in digital channels saves businesses from a serious promotional cost.

Digital marketing starts with market research on the internet. The presentation, promotion, price and payment policies of products and services are presented on a website. “It covers the functions of marketing, from website distribution activities to after-sales services, in digital and virtual environments” (Özmen, 2009, p. 277). According to Tiago and Verissimo (2014, pp. 703-705), communication plays a key role in digital marketing. Receiving feedback by interacting with customers, conducting relations in a more sincere environment, informing customers,

developing multi-faceted connections, supporting decision-making processes in this context, will increase efficiency.

Technological developments have made marketing a constantly updated discipline. By using the internet and digital devices, the consumer is reached and adaptation to the digitalization process is ensured. Digital marketing is also called internet marketing because it creates an internet platform (Dehkordi et al., 2012; Gilmore and Pine, 2007). Using web-based, online communication channels, digital marketing is not limited to the web and online. The transformation of the daily lives of millions of people by digital marketing (Woodside and Mir, 2019) has also caused the marketing to shift from selling unique goods and services to digital campaigns created to benefit from digital resources. Along with the digital transformation, the transfer of many data to the electronic environment has revealed the necessity for businesses to adopt digital technologies, as consumers' behavioral patterns change and they can expect instant solutions.

Digital marketing takes place through social media, search engine, internet, mobile devices and other digital channels. The most commonly used digital marketing tools; search engine optimization, search engine marketing, content marketing, responsive web design, email marketing, social media marketing, marketing automation. Businesses use these tools for consumers to purchase products or services. Consumers' ability to use these tools and their level of perception have a significant impact on whether they buy digital products. Therefore, in the research, the relationship between consumers' ability to use digital marketing tools and their perception levels has a significant impact on consumers' tendency to purchase digital products. Digital marketing tools allow all kinds of digital products or services to be offered on various digital platforms. It provides consumers with information about digital products and services through various tools and methods such as digital marketing tools, smartphones, social media, artificial intelligence applications, digital advertisements, content servers. The main ones are; blogs, microblogs, social networking sites, wikis, podcasting, media and content sharing sites, virtual games and forums. Users who have sufficient knowledge of using digital tools can easily and quickly access the product or service they want thanks to these digital tools. Consumers who use digital marketing tools to buy digital products have higher perceptions of digital products. In this way, consumer competence emerges. Consumers who do not have the skills to use digital platforms and digital channels can often reach the product or service they want by spending more

time, money and effort. In their study, Van Deursen and Van Dijk (2009a, 2010) classified consumer competence as procedural skills, accessing information skills, social skills, creative skills and portable skills according to the ability of consumers to use digital tools. For example; Open any Website and navigate back and forth using browser buttons, open, send or receive email, use a search engine, manage different file formats, search for information, create profiles, do mobile banking, share content, install apps on mobile devices. In a study, it was revealed that thanks to digital marketing tools, businesses obtain unstructured and structured data that enable them to create consumer behavioral insights (Diamond, 2019). In this way, businesses can develop new approaches and strategies that can be effective on consumers' purchase intention and decision. One of the most important elements in the management of digital technology is people. The key to success is that people can adapt to new technologies, see it as a tool to facilitate their work, and use them fondly (Tapp et al., 2014). For this reason, it is understood that consumers with a high perception of digital products have higher intentions to purchase digital products (Kingsnorth, 2022). In a similar study, Chaffey and Chadwick (2019) stated in their research that digital marketing tools such as search engines positively affect digital product perception and increase digital product preference. Consumers are affected by many factors such as images, content, pricing and convenience when they search. For this reason, the ease of use of digital tools also affects consumers' digital product preferences. In this way, businesses positively affect consumers' online digital product perception (Niininen, 2021). In this context, the correct management of the tools used in digital marketing is of great importance for businesses (Saura, 2021).

New digital products include emerging new products and services in many areas such as e-books, mobile banking, smartwatches, online shopping, social media apps, entertainment and education. Consumers are very interested in such innovations. Because: such products and services revolutionize the lives of individuals (Mani and Chouk, 2019, p.2), offer enormous potential, and bring technological momentum and activity to society. Applications that shorten the life cycle so much also cause confusion in individuals. Researches (Hew et al., 2019, p.12; Talwar et al., 2020, p.295) have focused on e-books, mobile social commerce, smart services, wearable devices, and the near future. They draw attention to the adequate research of the points that determine consumer resistance to innovations, the use of generation-specific findings that will form the basis for the personalization of promotional campaigns through social media platforms, and the measurement of

resistance differences between various generations. For this reason, it is very important to measure consumers' digital product perceptions.

Digital competence is the ability of individuals to receive, understand and use information from different sources in different forms through computers (Lankshear and Knobel, 2008 cited in Larraz and Esteve, 2015, p. 99). This competence is realized at different levels in individuals. Because, considering the use of technological tools and tools, the scope of digital competence is gradually expanding and gaining multidimensionality. Emphasizing taking responsibility for information and communication, establishing an effective communication for solving the problems of digital media, complying with ethical rules, and managing information within the concept of digital competence; cooperation in work, leisure, learning, participation in learning, socialization; It is necessary to address the problems at the point of creating a set of knowledge, skills, attitudes, abilities and awareness in order to consume information, produce knowledge, identify authorities and at the same time realize sharing (Ferrari et al., 2012).

The digital consumer's product perception can be broadly defined as the network perception of the acquired good or service (Zeithaml, 1988; Dodds et al., 1991). Therefore, the evaluation is based on evaluations made on the online purchase value. The product purchased online is evaluated according to its characteristics (Wheatly et al., 1977), quality (Dodds and Monroe, 1985, p. 307) and desired properties (Berkowitz and Flexner, 1980). Jayawardhena (2004), in his study named "The effect of personal values on the attitudes and behaviors of individuals towards online shopping", found that the desire to have fun, self-sufficiency, and the perception of efficacy lead to a positive attitude towards online shopping in individuals with a high level of success. Proper management of the digitalization process and reaching more information about consumers' perception and use of digital products necessitate marketing to be carried out in accordance with the developments. Consumers' need to access information in education, labor and social interactions is growing like an avalanche. Consumers who have become addicted to information have made it necessary to develop sufficient digital skills (Steyaert, 2002) and to use the Internet in a beneficial way. Studies show that consumer choice resulting from digitalization is affected by many factors, from skill differences, socio-economic background and user experience (Hargittai and Hsieh, 2010; Van Deursen and Van Dijk, 2010).

Adoption of a digital product that is perceived and decided to be bought by consumers is influenced by many interrelated variables. The effect is due to both consumers and non-consumers

variables. Determining the factors that affect the decision-making processes of consumers to buy and use digital products in marketing gains importance in terms of making the right decisions in marketing.

In the digitalization process, what digital product consumers look for in digital products, what they will buy, what they perceive as a 'value' is one of the important points that this research focuses on. In the research, features such as digital product perception, product selection, product usage ability and advantages of products over each other, compatibility with the consumer's existing skills and habits, ease of use, seeing the results of the new product in the distribution area and testability of the product reveal how the product is perceived by the product users. It is important to be placed.

### **3. Methodology**

The universe of this research consists of participants who use digital products on the Internet. While determining the participants, their use of digital applications such as internet, mobile phone, WhatsApp, twitter, and Facebook was taken as a basis. Within the scope of the research, data were collected from the participants through a questionnaire, one of the quantitative research methods, and the obtained data were analyzed with the SPSS 25 package program. 413 participants answered the questionnaire, but 33 participants were not included in the study due to inconsistency in their answers. For this reason, data obtained from 380 participants were used in the study. The digital product perception scale used in the research was first created by Moore and Benbasat (1991) and developed by Harrison et al. (1997, p. 180). The scale of skills to use digital tools, developed by Van Deursen and Van Dijk (2016), enabled the measurement of digital product perceptions and preferences of consumers. Data were obtained from 380 participants using the 5-point Likert method on both scales. The scale of skills to use digital tools consists of 25 questions and 5 factors. Data on the skills of using digital tools were obtained with 20 of the 25 questions asked within the scope of the research. The digital product perception scale consists of 30 questions and 6 factors. Digital product perception data were obtained with 22 of the 30 questions asked to the participants within the scope of the research. AVE values of .50 and CR values of .70 for both scales indicate that the scales provide convergent validity and composite reliability. In addition, Cronbach's Alpha values of the factors indicate that the scales are reliable.

Table 1. Factor Load, Cronbach's Alpha, AVE and CR Values of Scales

Scales	Factor Name	Factor Item	Factor Load	Cronbach's Alpha	AVE	CR		
Digital Tools Skills	Creativity	I know how to create something new from online pictures, music and videos.	.708	.896	.648	.880		
		I know how to design a website.	.850	.802				
		I feel confident writing comments on a website, form or blog.	.819	.910				
		I feel confident in writing and commenting online.	.836	.847				
	Access to Information	I know when and when not to share information online.	.751	.851			.612	.886
		I get tired of searching for information online.	.846	.899				
		I know how to track the costs of mobile application usage.	.793	.837				
		Sometimes I have difficulty verifying the information I receive.	.648	.903				
	Transaction Skill	I know how to open a new tab in my browser.	.857	.935			.572	.796
		I know how to set privacy settings.	.599	.907				
	Willingness to Socialize	I know how to connect to a Wi-Fi network.	.747	.855			.565	.864
			I know which software and applications are safe to download.	.894				
		I feel comfortable making decisions about my online followers.	.877	.849				
		I am careful in making comments and behaviors appropriate to the situation on the Internet.	.670	.917				
		I know how to change who I share content with.	.598	.909				
		I make sure to include video content that I create online.	.780	.916				
		I know where to go (what to click on) to a different web page.	.803	.804				
		Portability	I can make fundamental changes to content produced by others.	.792				
I know how to upload files.			.655	.858				
I know how to bookmark a website.			.783	.918				
Digital Product Perception	Relative Advantage	Using a digital product improves my work performance.	.805	.830	.615	.864		
		Generally, I use a digital product to gain an advantage in my business.	.798	.905				
		Using a digital product improves my productivity.	.802	.899				
	Visibility	Using a digital product improves the quality of my work.	.730	.901				
		Using a digital product makes others see me more valuable.	.780	.900			.537	.776

	Owning a digital product is a status symbol in my circle.	.659	.904		
	Using a digital product improves my image.	.755	.920		
Ease of Use	Searching for a product or service on the Internet is easy.	.840	.873	.662	.886
	Overall, I believe using a digital product is easy.	.812	.840		
	It is easy for me to learn by trading with a digital product.	.795	.903		
	I have no difficulty in describing the results of using a digital product.	.807	.894		
Willingness	I see a digital product in others besides me.	.745	.889	.629	.835
	Interaction with a digital product is clear and straightforward.	.782	.908		
	I don't see a digital product being used around me.	.849	.973		
Trialability	I try them properly before deciding whether to use a digital product app.	.782	.901	.612	.825
	I find the opportunity to try a different digital product application.	.741	.948		
	I've had enough opportunities to experiment with a digital product to see what I can do.	.823	.925		
Accordance	Using a digital product is compatible with all aspects of my business.	.771	.947	.666	.908
	My use of a digital product fits my work style.	.804	.931		
	Using a digital product is often frustrating.	.873	.912		
	I believe I can communicate the results of using a digital product to others.	.769	.903		
	I can get a digital product that will adequately test different applications.	.858	.937		

It has been tested that the scales do not have multi-connection problems. Independent samples T test, One-Way Anova test, Post Hoc analyzes and multiple regression analyzes were performed to test the hypotheses. As a result of the findings, hypotheses were tested. Based on the data obtained from the participants, it was tested whether there is a meaningful difference in terms of demographic characteristics between the ability of consumers to use digital tools and their perceptions of digital products. Based on previous studies in the literature, the effects of using digital tools on digital product perception were tested in the research.

#### **4. Analysis and Findings**

According to Beydođan and Kartal (2022), factors such as the product's relative advantage, ease of use, image, accordance, suitability, observability, complexity and trialability are factors that affect consumers' perceptions of digital products. Van Deursen and Van Dijk (2016) grouped consumers' ability to use digital tools under the factors of creativity, access to information, transaction skill, willingness to socialize and portability. Each of these factors has an impact on consumers' perceptions of digital products. In this context, consumers' perceptions of digital products (relative advantage, visibility, ease of use, willingness, trialability, accordance) and digital product usage skills (creativity, access to information, transaction skills, willingness to socialize, portability) are important for the research. The digital product perception scale used in the study was first created by Moore and Benbasat (1991) and was developed by Harrison et al. (1997, p. 180). The scale of skills in using digital tools, developed by Van Deursen and Van Dijk (2016), enabled the measurement of digital product perceptions and preferences of consumers.

In the research, to determine the relationship between consumers' ability to use digital tools (transaction, access to information, socialization, creativity and portability) according to their demographic characteristics and their perceptions of digital product features (trialability, relative advantage, willingness, accordance, visibility and ease of use) model has been proposed. Considering that consumer perceptions are a competency based on demographic characteristics in the model, the model is structured as follows.

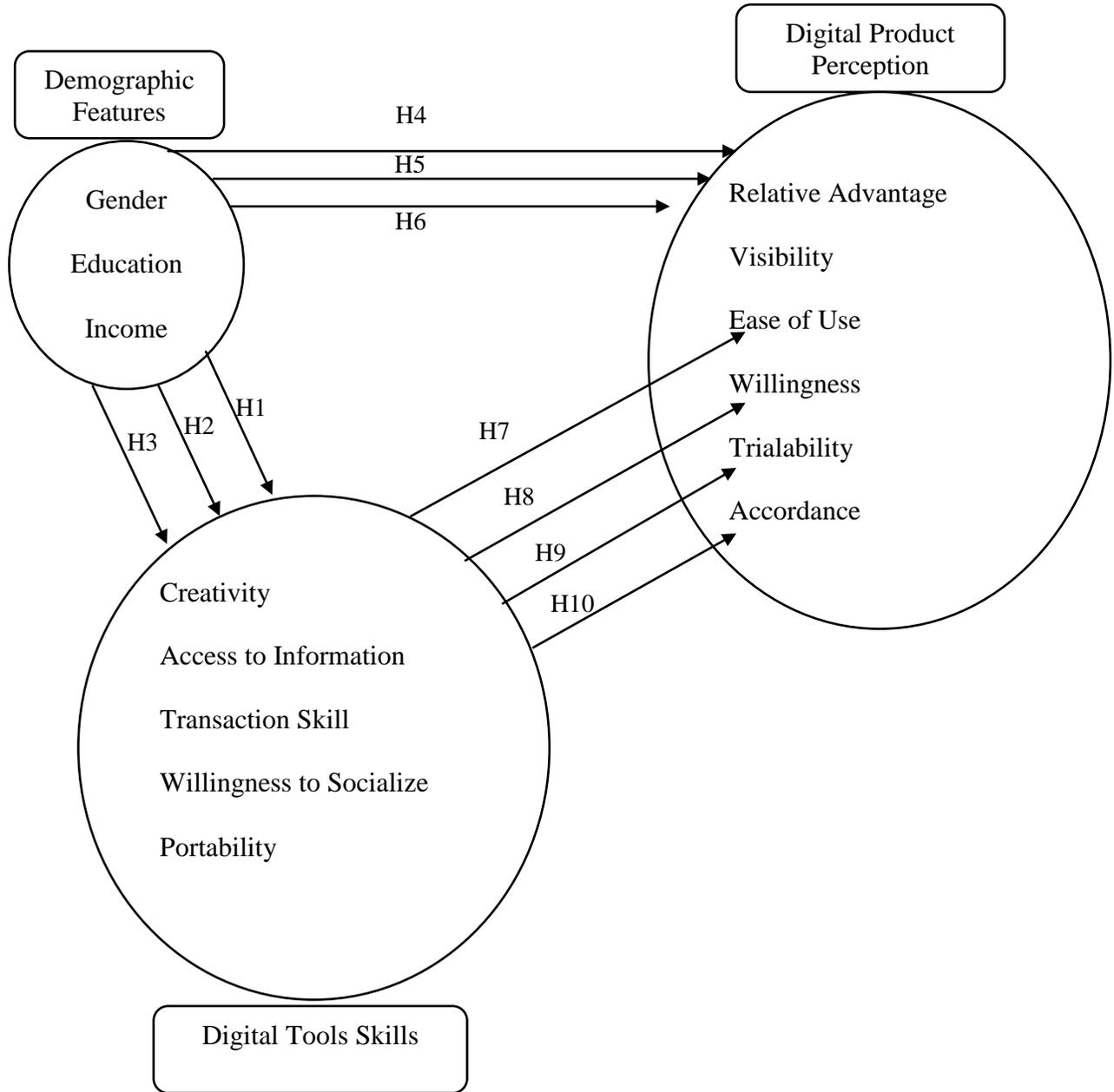


Figure 1. Research model

In the research, an information collection questionnaire including the demographic characteristics of consumers, the Digital Tools Usage Skills Scale (Van Deursen and Van Dijk, 2016) and the Digital Product Characteristics Perception Scale (Moore and Benbasat, 1991) were used. Ethics committee approval of the scales used in obtaining the data within the scope of the research was obtained with the approval of the ethics committee of Ostim Technical University

dated 31.03.2023. In the research, scales created on Google Forms were sent to consumers via e-mail, WhatsApp and social media tools.

Internet usage and consumer behavior have changed significantly with social media. During this period, Facebook has been influential in a large part of the world (Dixon, 2022). Afterwards, with the development of mobile marketing along with smart phones, social media applications (such as youtube, twitter, etc.) reached higher user numbers. For example, while in the past only grocery stores were purchased, a high percentage of online retailers are now shopping. In Turkey, 67.7% of the population over the age of 15 has an account with a financial company and 63.8% of the population makes their payments digitally. In addition, 64% of internet users have purchased products or services online (Recrodigital, 2022). When consumers want to listen to music or watch a movie, they can buy the new CD of the singer or movie they like, as well as access these services through online platforms (such as netflix, youtube, spotify, etc.) (Kingsnorth, 2022). However, according to the age, gender, education and income status of consumers, the ability to use digital marketing tools and accordingly the perception of digital products also change. For this reason, within the scope of the research, the differences between the competencies of consumers in using digital marketing tools and their perceptions of digital products according to demographic factors were examined. At the same time, the following hypotheses were formed in the research, considering that the competence to use digital marketing tools affects the perception of digital products.

H<sub>1</sub>: There is a significant difference in the ability of consumers to use digital tools according to their gender.

H<sub>2</sub>: There is a significant difference between consumers' ability to use digital tools according to their educational status.

H<sub>3</sub>: There is a significant difference between consumers' ability to use digital tools according to their income levels.

H<sub>4</sub>: There is a significant difference between consumers' perceptions of digital products according to their gender.

H<sub>5</sub>: There is a significant difference between consumers' perceptions of digital products according to their educational status.

H<sub>6</sub>: There is a significant difference between consumers' perceptions of digital products according to their income levels.

H<sub>7</sub>: Consumers' ability to use digital tools affects the perception of ease of use of digital products.

H<sub>8</sub>: Consumers' ability to use digital tools affects their perception of digital product willingness.

H<sub>9</sub>: Consumers' ability to use digital tools affects the perception of digital product trialability.

H<sub>10</sub>: Consumers' ability to use digital tools affects their perception of digital product accordance.

The normality test of the digital tool use skill scale ( $p = .000$ , Skewness =  $-.545$  and Kurtosis =  $-.946$ ) and the digital product perception scale ( $p = .000$ , Skewness =  $-.416$  and Kurtosis =  $-.881$ ) used in the research according to the results, it was understood that the scales were normally distributed. For this reason, parametric analyzes were used.

Table 2. Correlations Between Digital Tools Skills Variables

	1	2	3	4	5	Collinearity Statistics VIF
1 Transaction Skill	1					1.313
2 Access to Information	.346**	1				1.196
3 Willingness to Socialize	.427**	.377**	1			1.258
4 Creativity	.286**	.199**	.102**	1		1.147
5 Portability	.388**	.233**	.203**	.188**	1	1.096

\*\*  $p < 0.01$

As can be seen from Table 1, it is understood that the correlation coefficient values (between .102 and .427) between the independent variables of the scale of using digital tools are less than .700 and the VIF coefficients (1.096 and 1.313) are less than 10. This shows that there is no multicollinearity problem among the independent variables in the scale (Tabachnick and Fidell, 2013, p. 88; Field, 2005; Mertler and Vannatta, 2005).

Kaiser Meyer Olkin (KMO) test values and their relations in the correlation matrix were examined in order to determine the suitability of the data collected from 380 participants in the factor analysis of the ability to use digital tools. When the results of Bartlett sphericity test and KMO values are examined, it is seen that it is quite high as .796. Bartlett's Test results on factors are statistically significant ( $p < .000$ ). The results show that the scale of skills in using digital tools is suitable for factor analysis. In the factor sub-dimensions analysis, it was understood that the sub-dimensions in the scale (Transaction Skill, Access to Information, Willingness to Socialize, Creativity and Portability) explained 68.576 of the total variances.

Table 3. Correlations Between Digital Product Perception Variables

	1	2	3	4	5	6	Collinearity Statistics VIF
1 Trialability	1						1.442
2 Ease of Use	.419**	1					1.561
3 Willingness	.538**	.366**	1				1.378
4 Accordance	.321**	.299**	.589**	1			1.270
5 Relative Advantage	.596**	.505**	.453**	.274**	1		1.088
6 Visibility	.374**	.359**	.393**	.441**	.329**	1	1.354

\*\* p<0.01

As indicated in Table 2, it is understood that the correlation coefficient (between .274 and .596) between the independent variables of the digital products perception scale is less than .700 and the VIF coefficients (1.088 and 1.561) are less than 10. This shows that there is no multicollinearity problem among the independent variables in the scale (Tabachnick and Fidell, 2013, p. 88; Field, 2005; Mertler and Vannatta, 2005).

In order to determine the suitability of the data collected from 380 participants in the factor analysis of the digital products perception scale, the Kaiser Meyer Olkin (KMO) test values and their relations in the correlation matrix were examined. When the results of Bartlett sphericity test and KMO values are examined, it is seen that it is quite high as .719. Bartlett's Test results on factors are statistically significant ( $p < .000$ ). The results show that the scale of skills in using digital tools is suitable for factor analysis. In the factor sub-dimensions analysis, it was understood that the sub-dimensions in the scale (trialability, ease of use, willingness, accordance, relative advantage, visibility) explained 62.751 of the total variances.

Within the scope of the research, an independent sample t-test was conducted to test whether there is a significant difference between consumers' ability to use digital tools according to their gender.

Table 4. Ability of Consumers to Use Digital Tools by Gender Independent Sample T Tests

	Gender	N	Mean	Levene's Test for Equality of Variances		t-test for Equality of Means		
				F	Sig.	t	df	Sig. (2-tailed)
Digital Tools Skills	Women	177	38.814					
	Men	203	42.118	6.050	.014	-2.512	378	.012
						-2.483	346.007	.013

Since the variance value shown in Table 3 was .014 ( $p < 0.05$ ), the variances were not homogeneously distributed. Since the obtained  $p = .013$  ( $p = .013 < 0.05$ ), there is a significant difference between consumers' ability to use digital tools according to their gender. Therefore, the  $H_1$  hypothesis was supported.

Within the scope of the research, the One-Way Anova test was conducted to test whether there is a significant difference between consumers' ability to use digital tools according to their educational status.

Table 5. Educational Status of Consumers One-Way Anova Tests

	Sum of Squares	df	Mean Square	F	Sig.	Test of Homogeneity of Variances			
						Levene Statistic	df1	df2	Sig.
Between Groups	36.436	2	18.218	11.596	.000	1.367	2	377	.256
Within Groups	592.29	377	1.571						
Total	628.726	379							

Since  $p = .256 > 0.05$  in the analysis given in Table 4, the variance was homogeneously distributed. In this way, since  $p = .000 < 0.05$ , it was understood that there was a significant difference between consumers' ability to use digital tools according to their educational status. Post Hoc analysis was performed to understand the reason for this difference.

Table 6. Consumers' Educational Post Hoc Analysis Tests

Dependent Variable: Digital Tools Skills					
Tukey HSD					
(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.	
Associate degree	Bachelor degree	-.57424*	.14637	.000	
	Graduate	-.75365*	.17559	.000	
Bachelor degree	Associate degree	.57424*	.14637	.000	
	Graduate	-.17941	.16867	.537	
Graduate	Associate degree	.75365*	.17559	.000	
	Bachelor degree	.17941	.16867	.537	

\* The mean difference is significant at the 0.05 level.

Post Hoc analysis results showing that there is a significant difference between consumers' ability to use digital tools according to their educational status are given in Table 5. According to these results, while a significant difference was observed between associate degree graduates ( $p=.000<0.05$ ) and bachelor degree and graduate, no significant difference was observed between bachelor degree ( $p=.537>0.05$ ) and graduate. Based on these results, the  $H_2$  hypothesis was supported.

Another analysis made within the scope of the research is the One-Way Anova test to test whether there is a significant difference between consumers' ability to use digital tools according to their income levels.

Table 7. Consumers' Income Levels One-Way Anova Tests

	Sum of Squares	df	Mean Square	F	Sig.	Test of Homogeneity of Variances			
						Levene Statistic	df1	df2	Sig.
Between Groups	28.175	3	9.392	5.88	.001	1.618	3	376	.142
Within Groups	600.551	376	1.597						
Total	628.726	379							

Since  $p=.142>0.05$  according to the One-Way Anova test result given in Table 6, the variance was homogeneously distributed. In this way, since  $p=.001<0.05$ , it was understood that there was a significant difference between consumers' ability to use digital tools according to their income levels. Post Hoc analysis was performed to understand the reason for this difference.

Table 8. Income Levels of Consumers Post Hoc Analysis Tests

Dependent Variable: Digital Tools Skills				
Tukey HSD				
(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.
5.000 TL.	5.001-8.500 TL.	.41292	.31274	.551
	8.501-15.000 TL.	.97000*	.30085	.007
	15.001 TL and over	.66736	.30506	.002
5.001-8.500 TL.	5.000 TL.	-.41292	.31274	.551
	8.501-15.000 TL.	.55708*	.1691	.006
	15.001 TL and over	.25443	.17648	.001
8.501-15.000 TL.	5.000 TL.	-.97000*	.30085	.007
	5.001-8.500 TL.	-.55708*	.1691	.006
	15.001 TL and over	-.30264	.15443	.205
15.001 TL and over	5.000 TL.	-.66736	.30506	.002
	5.001-8.500 TL.	-.25443	.17648	.001
	8.501-15.000 TL.	.30264	.15443	.205

\* The mean difference is significant at the 0.05 level.

Post Hoc analysis results showing that there is a significant difference between consumers' ability to use digital tools according to their income levels are given in Table 7. According to these results, those with an income of up to 5.000 TL., 5.001-8500 TL. It was understood that there was no significant difference between those with income ( $p=.551>0.05$ ). However, a significant difference was observed between those with an income of up to 5.000 TL and those with an income of more than 8.500 TL ( $p=.007<0.05$  and  $p=.002<0.05$ ). Likewise, his income is 5.001-8.500 TL. A significant difference was observed between consumers with income of more than 8.500 TL ( $p=.006<0.05$  and  $p=.001<0.05$ ). As a result of the findings obtained, the  $H_3$  hypothesis was supported.

Within the scope of the research, an independent sample t-test was conducted to test whether there is a significant difference between consumers' perceptions of digital products according to their gender.

Table 9. Digital Product Perceptions of Consumers by Gender Independent Sample

T-Tests									
			Levene's Test for Equality of Variances			t-test for Equality of Means			
		Gender	N	Mean	F	Sig.	t	df	Sig. (2-tailed)
Digital Product Perceptions	Women		177	3.5763					
	Men		203	3.3103	30.194	.000	1.986	378	.048
							2.029	366.200	.043

Since the variance value shown in Table 8 was .000 ( $p < 0.05$ ), the variances were not homogeneously distributed. However, since the obtained  $p = .043$  ( $p = .043 < 0.05$ ), there is a significant difference between consumers' ability to use digital tools according to their gender. Therefore, hypothesis  $H_4$  was supported.

One-Way Anova test was conducted to test whether there is a significant difference between consumers' perceptions of digital products according to their educational status.

Table 10. Educational Status of Consumers One-Way Anova Tests

					Test of Homogeneity of Variances					
		Sum of Squares	df	Mean Square	F	Sig.	Levene Statistic	df1	df2	Sig.
Between Groups		153.459	2	76.370	58.56	.00	1.421	2	7	.24
Within Groups		493.896	37	1.310						
Total		647.355	39							

Since  $p = .243 > 0.05$  in the analysis given in Table 9, the variance was homogeneously distributed. In this way, since  $p = .000 < 0.05$ , it has been understood that there is a significant difference between the digital product perceptions of consumers according to their educational status. Post Hoc analysis was performed to understand the reason for this difference.

Table 11. Consumers' Educational Post Hoc Analysis Tests

Dependent Variable: Digital Product Perceptions				
Tukey HSD				
(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.
Associate degree	Bachelor degree	-1.04545*	.13366	.000
	Graduate	-1.64385*	.16034	.000
Bachelor degree	Associate degree	1.04545*	.13366	.000
	Graduate	-.59839*	.15403	.000
Graduate	Associate degree	1.64385*	.16034	.000
	Bachelor degree	.59839*	.15403	.000

\* The mean difference is significant at the 0.05 level.

Post Hoc analysis results showing that there is a significant difference between consumers' perceptions of digital products according to their educational status are given in Table 10. According to these results, it was seen that the associate degree ( $p=.000<0.05$ ) differed in a meaningful way compared to the bachelor degree and graduate. In addition, it was determined that there is a significant difference between bachelor degree ( $p=.000<0.05$ ) and graduate. As a result of the results obtained, the  $H_5$  hypothesis was supported.

Another analysis made within the scope of the research was the One-Way Anova test to test whether there is a significant difference between the digital product perceptions of consumers according to their income levels.

Table 12. Consumers' Income Levels One-Way Anova Tests

	Sum of Squares	df	Mean Square	F	Sig.	Test of Homogeneity of Variances			
						Levene Statistic	df1	df2	Sig.
Between Groups	73.127	3	24.376	15.961	.000	.974	3	376	.405
Within Groups	574.229	376	1.527						
Total	647.355	379							

Since  $p=.405>0.05$  according to the One-Way Anova test result given in Table 11, the variance was homogeneously distributed. In this way, since  $p=.000<0.05$ , it has been understood that there is a significant difference between the digital product perceptions of consumers according to their income levels. Post Hoc analysis was performed to understand the reason for this difference.

Table 13. Income Levels of Consumers Post Hoc Analysis Tests

Dependent Variable: Digital Product Perception				
Tukey HSD				
(I) Income	(J) Income	Mean Difference (I-J)	Std. Error	Sig.
5.000 TL.	5.001-8.500 TL.	-1.80449*	.30581	.000
	8.501-15.000 TL.	-1.96667*	.29418	.000
	15.001 TL and over	-1.99504*	.29830	.000
5.001-8.500 TL.	5.000 TL.	1.80449*	.30581	.000
	8.501-15.000 TL.	-.16217*	.16535	.761
	15.001 TL and over	-.19055	.17257	.687
8.501-15.000 TL.	5.000 TL.	1.96667*	.29418	.000
	5.001-8.500 TL.	.16217	.16535	.761
	15.001 TL and over	-.02837	.15101	.998
15.001 TL and over	5.000 TL.	1.99504*	.29830	.000
	5.001-8.500 TL.	.19055	.17257	.687
	8.501-15.000 TL.	.02837	.15101	.998

\* The mean difference is significant at the 0.05 level.

Post Hoc analysis results showing that there is a significant difference between consumers' perceptions of digital products according to their income levels are given in Table 12. According to these results, a significant difference ( $p=.000<0.05$ ) was found between those whose income is less than 5.000 TL and those whose income is 5.001-8500 TL., 8.501-15.000 TL., and 15.001. However, consumer income is 5.001-8.500 TL. no significant difference was observed between those with an income of more than 8.500 TL ( $p=.761>0.05$ ,  $p=.687>0.05$ ). According to these results, the  $H_6$  hypothesis was supported.

As a result of the correlation made to determine whether there is a multicollinearity problem between the sub-dimensions of consumers' ability to use digital tools (Transaction Skill, Access to Information, Willingness to Socialize, Creativity, Portability) and ease of use, one of the sub-dimensions of consumers' digital product perception (the highest .468 the lowest .144), it was understood that there was no multicollinearity problem between the variables. Then, the results of the multiple regression analysis conducted to see whether the ability of consumers to use digital tools affect the perception of ease of use of digital products are given below.

Table 14. Multiple Regression Analysis of Consumers' Perceptions of Digital Product Ease of Use by their Ability to Use Digital Tools

	Beta	t	Sig.	VIF
(Constant)		-5.418	.000	
Transaction Skill	.202	4.029	.000	1.879
Access to Information	.426	9.038	.000	1.661
Willingness to Socialize	.028	0.621	.535	1.475
Creativity	.302	6.136	.000	1.820
Portability	.062	1.526	.128	1.225

*Predictors: (Constant), Portability, Creativity, Willingness to Socialize, Access to Information, Transaction Skill*

*Dependent Variable: Ease of Use*

*F=75.089 p=.000 R<sup>2</sup>=.501 Adjusted R<sup>2</sup>=.494*

Transaction Skill (Beta=.202, p=.000<0.05), Access to Information (Beta=.426, p=.000<0.05) and Creativity (Beta=.028, p=.000<0.05) positively affect consumers' perception of digital product ease of use. However, Socialization Willingness (p=.535>0.05) and Portability (p=.128>0.05) variables did not have a significant effect on consumers' perception of digital product ease of use. Multiple regression analysis corrected R<sup>2</sup> value of .494 shows that our model is suitable. According to these results, the H<sub>7</sub> hypothesis was supported.

The results of the multiple regression analysis conducted to look at whether consumers' ability to use digital tools affect their perception of digital product willingness are given below.

Table 15. Multiple Regression Analysis of Consumers' Skills in Using Digital Tools on Digital Product Willingness Perceptions

	Beta	t	Sig.	VIF
(Constant)		-1.841	.066	
Transaction Skill	.352	8.768	.000	1.879
Access to Information	.103	2.736	.007	1.661
Willingness to Socialize	.035	.987	.324	1.475
Creativity	.504	12.744	.000	1.820
Portability	.079	2.429	.016	1.225

*Predictors: (Constant), Portability, Creativity, Willingness to Socialize, Access to Information, Transaction Skill*

*Dependent Variable: Willingness*

*F= 157.670 p=.000 R<sup>2</sup>=.678 Adjusted R<sup>2</sup>=.674*

Transaction Skill (Beta: .352,  $p=.000<0.05$ ), Access to Information (Beta: .103,  $p=.007<0.05$ ), Creativity (Beta: .504,  $p=.000<0.05$ ) and Portability (Beta: .079,  $p=.016<0.05$ ) positively affect consumers' perception of digital product willingness. However, Socialization Willingness ( $p=.324>0.05$ ) variable does not have a significant effect on consumers' perception of digital product willingness. Multiple regression analysis corrected  $R^2$  value of .674 shows that our model is suitable. According to these results, the  $H_8$  hypothesis was supported.

The results of the multiple regression analysis conducted to understand whether the ability of consumers to use digital tools affect the perception of digital product trialability are given below.

Table 16. Multiple Regression Analysis of Digital Product Trialability Perceptions of Consumers' Skills in Using Digital Tools

	Beta	t	Sig.	VIF
(Constant)		.473	.637	
Transaction Skill	.450	10.503	.000	1.879
Access to Information	.055	1.354	.177	1.661
Willingness to Socialize	.061	1.602	.110	1.475
Creativity	.389	9.211	.000	1.820
Portability	.054	1.571	.117	1.225

*Predictors: (Constant), Portability, Creativity, Willingness to Socialize, Access to Information, Transaction Skill*

*Dependent Variable: Trialability*

*F= 129.449 p=.000 R<sup>2</sup>=.634 Adjusted R<sup>2</sup>=.629*

Transaction Skill (Beta: .450,  $p=.000<0.05$ ), and Creativity (Beta: .389,  $p=.000<0.05$ ), which are independent variables of consumers' ability to use digital tools, positively affect consumers' perception of digital product testability. However, Access to Information ( $p=.177>0.05$ ), Socialization Willingness ( $p=.110>0.05$ ) and Portability ( $p=.117>0.05$ ) variables do not have a significant effect on consumers' perception of digital product trialability. Multiple regression analysis corrected  $R^2$  value of .629 shows that our model is suitable. According to these results, the  $H_9$  hypothesis was supported.

The results of the multiple regression analysis conducted to understand whether the ability of consumers to use digital tools affect the perception of digital product accordance are given below.

Table 17. Multiple Regression Analysis of Digital Product Accordance Perception of Consumers' Skills in Using Digital Tools

	Beta	t	Sig.	VIF
(Constant)		.847	.397	
Transaction Skill	.221	4.617	.000	1.879
Access to Information	.124	2.758	.006	1.661
Willingness to Socialize	.021	.505	.614	1.475
Creativity	.527	11.205	.000	1.820
Portability	.087	2.251	.025	1.225

*Predictors: (Constant), Portability, Creativity, Willingness to Socialize, Access to Information, Transaction Skill*

*Dependent Variable: Accordance*

*F= 89.526 p=.000 R<sup>2</sup>=.545 Adjusted R<sup>2</sup>=.539*

Transaction Skill (Beta: .221,  $p=.000<0.05$ ), Access to Information (Beta: .124,  $p=.006<0.05$ ), Creativity (Beta: .527,  $p=.000<0.05$ ) and Portability (Beta: .087,  $p=.025<0.05$ ) variables positively affect consumers' perception of digital product accordance. However, the Socialization Willingness ( $p=.614>0.05$ ) variable does not have a significant effect on consumers' perception of digital product accordance. Multiple regression analysis corrected  $R^2$  value of .539 shows that our model is suitable. According to these results, the  $H_{10}$  hypothesis was supported.

## 5. Discussion

The findings obtained in the research show that there is a difference in the digital tool usage skills of the consumers. The difference makes a significant difference in favor of the relatively well-educated and economically well-educated consumers. Wasserman and Richmond-Abbott (2005) stated in their study that the level of digital tool usage is higher in men than in women, who are associated with internet knowledge. One of the important factors in having the skills to use digital tools is socio-economic income status. As the economic level of consumers increases, their ability to use digital tools also increases. In a study by Huang et al. (2020), it was revealed that the factors affecting compliance with open learning resources are perceived attitude, perceived usefulness, trialability, acceptance of innovations, observability, ease of use, and relative advantage, and these features are highly correlated with diffusion. These findings support the findings we obtained in the study. It is stated that as the education level of consumers increases, their internet usage skills and quality increase, there is a positive relationship between education and internet use, more awareness, better education, and accordingly, they are more skilled in evaluating content (Rice et al., 2001).

The findings obtained in the research show that there is a difference in the ability of consumers to use digital tools. The difference creates a significant difference in favor of the relatively well-educated and economically well-educated younger generations. Wasserman and Richmond-Abbott, (2005) stated in their study that the level of internet use is higher in men than in women, who are associated with web knowledge. One of the important factors in having the skills to use digital marketing tools is socio-economic income status. These people have more opportunities to use the internet and digital platforms, and there are limitations in the internet use skills of unemployed individuals (Van Deursen and Van Dijk, 2010; Venkatesh et al., 2003; Kuiper et al., 2005). In a study conducted by Rice et al., (2001), it was stated that as individuals' education level increases, their internet usage skills increase and there is a positive relationship between education level and internet use. In addition, it is stated that these individuals are more talented in evaluating the content with more awareness, better education and accordingly.

As suggested in the research model, the hypotheses that the ability of consumers to use digital tools affect their perceptions of digital product features were supported. The skills of the consumer are reflected in his behavior of perceiving and controlling the outside world. The findings obtained as a result of the research are hypotheses accepted that the ability of consumers to use digital tools has an effect on ease of use, willingness, trialability and accordance, especially digital product perceptions Mossberger et al., (2003); Norris (2001); Solomon et al., (2003); Warschauer (2003); Van Dijk (2005) is similar to research results. However, it is considered that the revision of the scales used in many similar studies in the literature according to today's conditions will make important contributions to the studies to be done.

The findings obtained as a result of the study are compatible with previous studies. However, the findings obtained were compatible with previous studies, which led to similar results in studies. It is understood that the existing scales are insufficient in the face of the scales used in the studies according to the conditions of the day and the development and differentiation of digital marketing tools over time. At the same time, the inability to fully measure the competence of consumers to use digital tools has caused the study to not fully measure the perception of digital products. Therefore, it will be beneficial to consider this situation in future studies. Otherwise, the skills of using digital marketing tools, which are of vital importance for both businesses and consumers, will not be read correctly and appropriate strategies and approaches will not be developed. In this context, it is necessary to re-determine the skill factors and make confirmatory analyzes. The fact

that the weights of the factors that are assumed to have an effect on the digital product perception cannot be determined correctly will leave the researches incomplete.

## **6. Conclusion and Recommendations**

Within the scope of the research, it is aimed to determine the effect of consumers' ability to use digital tools on the perception of digital product features, considering that people's orientation to digital technologies, their skills of using the internet and digital tools develop in coordination with the perception of digital product features. Digital tool usage skills play an important role in the realization of digitally produced products and are at the center of digitalization. As a result of the research, it has been determined that there are significant differences in terms of the ability of consumers to use digital tools and their perceptions of digital products in terms of demographic characteristics such as gender, education and income. In this study, in which the effect of consumers' digital tool usage skills on new digital product features was determined, the findings reveal that there is a high-level relationship between consumers' digital tool use skills and their adoption of new digital products.

Shaping the study by accepting the answers given by the participants to the scale questions and generalizing the results are the limitations of the research. Another limitation is the inability to reach more participants in terms of time and cost, and different demographic characteristics. The findings and hypotheses obtained as a result of the study are compatible with previous studies. However, more current and appropriate scales should be developed and new studies should be carried out to measure consumers' ability to use digital tools and, accordingly, to determine consumers' perceptions of digital products and their tendencies towards digital products. Otherwise, consumers' inability to understand their ability to use digital tools according to today's conditions will deprive business managers and decision makers of making sound decisions. Therefore, developing new scales for future studies and making measurements accordingly will provide more insights to businesses and scientific circles. Especially the widespread use of digital media tools and social media platforms and the fact that the user base is from certain age groups necessitated the monitoring of digital marketing tools by businesses through artificial intelligence-based applications. For this reason, it would be appropriate to develop new approaches by taking these issues into account in future research. Otherwise, consumers will not be able to go beyond buying certain physical products with digital marketing. In the future, studies that will

enable us to understand how social media and digital marketing tools affect digital product perception will be beneficial.

In the light of the results obtained from the research, in order to increase the digital literacy knowledge level of individuals, educational institutions, universities, businesses, social media platforms should pay more attention to supporting digital tool usage skills, which are the basis for the adoption and dissemination of digital technologies. In particular, businesses should develop comfortable, convenient, easy and reliable approaches by using digital media tools and offer new digital tools that will allow consumers to prefer digital products. Considering that many variables affect the perception of digital product features, research that considers psychological, social, cultural, economic, legal and intercultural interactions should be encouraged. In the digitalization process, short-term visions for the future should be put forward, rapid steps should be taken, the difference between the skills of using digital tools between men and women should be eliminated, and new opportunities should be created for their development. Considering the development process of a digital product, it includes the processes of generating ideas about the product, coming up with new ideas, designing and configuring the product, developing the product, testing and evaluating the product, fixing the problems that arise in the application, launching it as a launch product and receiving feedback. In these processes, it is necessary to produce digital products in accordance with the characteristics and expectations of consumers, taking into account the perception of new digital technology features.

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