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A STUDY ON METAVERSE USERS' VIRTUAL PRODUCTS PURCHASE INTENTION: SECOND LIFE EXAMPLE

THESIS WRITTEN BY
Beste DEMİRCİ

Univ. Inside / Supervisor: Assoc. Prof. Dr. Eda YAŞA ÖZELTÜRKAY
Univ. Inside / Member of Examining Committee: Assoc. Prof. Dr. Murat GÜLMEZ
Univ. Outside / Member of Examining Committee: Prof. Dr. Deniz ZEREN
(Çukurova University)

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APPROVAL

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(The original document is available at the Institute Directorate)
Univ. Inside - permanent member-Supervisor-Head of Examining Committee:
Assoc. Prof. Dr. Eda YAŞA ÖZELTÜRKAY

(The original document is available at the Institute Directorate)
Univ. Inside - permanent member: Assoc. Prof. Dr. Murat GÜLMEZ

(The original document is available at the Institute Directorate)
Univ. Outside - permanent member: Prof. Dr. Deniz ZEREN
(Çukurova University)

I confirm that the signatures above belong to the academics mentioned.

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Prof. Dr. Murat KOÇ
Director of Institute of Social Sciences

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DEDICATION

This thesis is dedicated to my beloved family, that has never ceased to support me.

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Student's

Name& Surname: Beste DEMİRCİ
Number: 2020001002
Department: Business Administration
Program: Master Thesis (x) Ph.D. Thesis ( )
Thesis Title: A Study on Metaverse Users' Virtual Products Purchase Intention: Second Life Example

I hereby declare that;

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I prepared this thesis within the framework of academic and ethics rules,
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ABSTRACT

A STUDY ON METAVERSE USERS' VIRTUAL GOODS/SERVICES PURCHASE INTENTION: SECOND LIFE EXAMPLE

Beste DEMİRCİ

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Metaverse is seen as the 'internet of the future'. It attracts the attention of both the business community and academia with the developments that have caused its name to be mentioned frequently in recent times. In order to understand this concept, the foundation of which has been laid long ago, and to understand the purchasing intentions of its users, the Second Life, which is one of the first examples, has been examined. In the thesis, which aims to determine the intention of Metaverse users to purchase virtual products within the framework of the Second Life virtual world, an online survey was applied to consumers in Second Life. In the conducted study, 267 valid data were collected through convenience and judgement sampling method. Analyzes were made with the SPSS program. Validity and reliability analyze of the extended Technology Acceptance Model with attitude scale in the literature regarding the virtual product purchase intentions of Metaverse users were made. As a result of the factor analysis carried out in this direction, seven dimensions were determined. These sub-dimensions are perceived social presence, perceived ease of use, attitude, enjoyment, trust, telepresence and perceived usefulness, and their relationships are examined. Various descriptive statistics, reliability and validity analyzes, multiple regression analyzes were used in the analysis of the data. According to the results of the hypothesis tests, it was not determined that perceived social presence had a positive effect on perceived usefulness in SL. Other hypotheses put forward were supported.

Key words: metaverse, second life, virtual worlds, technology acceptance model.

ÖZ

METAVERSE KULLANICILARININ SANAL ÜRÜN/HİZMET SATIN ALMA NİYETİ ÜZERİNE BİR ÇALIŞMA: SECOND LIFE ÖRNEĞİ

Beste DEMİRCİ

Yüksek Lisans Tezi, İşletme Yönetimi Ana Bilim Dalı
Danışman: Doç. Dr. Eda YAŞA ÖZELTÜRKAY
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Metaverse ‘geleceğin interneti’ olarak görülmektedir. Son zamanlarda adının sıklıkla anılmasına yol açan gelişmelerle birlikte hem iş çevresinin hem akademinin ilgisini çekmektedir. Temeli çok önceden atılan bu kavramı anlayabilmek ve kullanıcılarının satın alma niyetlerini anlayabilmek adına ilk örneklerinden olan Second Life incelenmiştir. Second Life sanal dünyası çerçevesinde Metaverse kullanıcılarının sanal ürün satın alma niyetlerini belirlemeyi amaçlayan tez çalışmasında, Second Life'taki tüketicilere çevrimiçi anket uygulanmıştır. Yürütülen çalışmada kolayda ve yargısal örnekleme yöntemi ile 267 geçerli veri toplanmıştır. Analizler SPSS programı ile yapılmıştır. Metaverse kullanıcılarının sanal ürün satın alma niyetlerine ilişkin literatürde yer alan genişletilmiş tutum ile Teknoloji Kabul Modelinin geçerlilik ve güvenilirlik analizleri yapılmıştır. Bu doğrultuda yapılan faktör analizi sonucunda yedi boyut belirlenmiştir. Bu alt boyutlar, algılanan sosyal bulunuşluk, algılanan kullanım kolaylığı, tutum, keyif, güven, telebulunma ve algılanan kullanışlılık olup ilişkileri incelenmiştir. Verilerin analizinde çeşitli betimsel istatistikler, güvenirlik ve geçerlilik analizleri, çoklu regresyon analizlerinden faydalanılmıştır. Hipotez testlerinin sonuçlarına göre, SL'de algılanan sosyal bulunuşluğun algılanan kullanışlılık üzerinde olumlu bir etkisinin olmadığı tespit edilmiştir. Ortaya atılan diğer hipotezler desteklenmiştir.

Anahtar kelimeler: metaverse, second life, sanal dünyalar, teknoloji kabul modeli.

PREFACE

Metaverse, a groundbreaking technology that can change people's perceptions of reality, is not a new phenomenon. On the other hand, it is aimed to contribute to the literature by conducting a study on an emerging field with the recent developments. In this thesis study, it is aimed to determine the intention of metaverse users to purchase virtual products within the framework of the Second Life virtual world. In this context, the concepts of metaverse and virtual world have been tried to be explained and the subject has been examined within the framework of Technology Acceptance Model.

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ABBREVIATIONS

ATT	**:** Attitude
C-TAM-TPB	**:** Combination form of TAM and TPB
ENJ	**:** Enjoyment
IDT	**:** Innovation Diffusion Theory
MM	**:** Motivational Model
MMORPGs	**:** Massively Multiplayer Online Role-Playing Games
MPCU	**:** Model of PC Utilization
MUDs	**:** Multi-User Dungeons
MUVEs	**:** Multi-User Virtual Environments
PEOU	**:** Perceived Ease of Use
PEOU	**:** Perceived Ease of Use
PSP	**:** Perceived Social Presence
PU	**:** Perceived Usefulness
PU	**:** Perceived Usefulness
SCT	**:** Social Cognitive Theory
SL	**:** Second Life
TAM	**:** Technology Acceptance Model
TAM2	**:** Technology Acceptance Model 2
TAM3	**:** Technology Acceptance Model 3
TEL	**:** Telepresence
TPB	**:** Theory of Planned Behavior
TRA	**:** Theory of Reasoned Action
TRST	**:** Trust
UTAUT	**:** The Unified Theory of Acceptance and Use of Technology
WoW	**:** World of Warcraft

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1. INTRODUCTION

Digitalization significantly affects business processes, organizational boundaries, daily life, education, in short, all areas of life. Through internet gaming and big tech's bet on virtual reality, an old idea is finding new traction (Sparkes, 2021). The idea metaverse was first characterized in the novel "Snow Crash," released in 1992, and has since evolved into a term used to describe three-dimensional virtual worlds in which users communicate and their surroundings without being constrained by the physical constraints of the physical world (Narin, 2021). The word, which gained ground after Mark Zuckerberg announced that Facebook would rename to Meta, is not new, as previously stated. Promises in this context have existed for many years. For many people who are aware of the situation, Second Life is the very first thing that springs to mind. It is included in categories such as Virtual world, social virtual worlds, Multi-User Virtual Environments (MUVEs) (Kuznetcova & Glassman, 2020).

3D virtual worlds, which have a long history and are growing in popularity as technology advances, are seen as a significant instrument in today's educational applications, along with opportunities for sociability, enjoyment, and group projects (Demirbağ, 2020). Developing communication and information technologies offer new opportunities to today's society that could not be considered before. It has taken its place in the virtual world by using information technologies intensively in parallel with the current technological development from education to entertainment, from architectural design to medicine (Gül, 2011; Bayraktar & Kaleli, 2007; Demirbağ, 2020)

Users have begun to interact, shop, flirt, work, and conduct their education through virtual platforms in these surroundings, due to technological advancements that allow more and more people to be included. Metaverses are virtual environments that mirror the actual world yet have no physical boundaries (Tuten, 2009). The number of online gamers and hours spent in virtual worlds is constantly growing. The pandemic has considerably boosted the number of users of the Second Life world, which has reached millions of users since its entry to the market (Çetinkaya, 2021). It has a significant market share including thousands of users available at any time. Such platforms occur when a vast number of people are online at one time. As the number of users increases, selling virtual items on such platforms could become the primary stream of revenue for people. Users purchase products (clothes, shoes, hair design, home, workplace, food and

beverage, and so on) in order to customize and socialize their avatars. Determining the variables that impact user purchasing intentions is critical for the long-term sustainability of consumption in this ever-expanding sector.

The aim of the study is to determine the intention of metaverse users to purchase virtual products in the framework of the Second Life virtual world. Metaverse, which has an important place within the scope of sustainable marketing strategies, is not a new concept. Many of the opportunities offered today have been available to Second Life users since 2003. Philip Rosedale (the father of SL) expresses this situation with these words, SL remains the closest platform to the metaverse with an annual transaction volume of 650 million US dollars. (Gent, 2022).

The metaverse -immersive 3D virtual environments- seen as the next phase of the internet, attracts excitement and investment in equal measure. It supports a multi-billion-dollar industry and internal economy by reaching virtual live events and workplaces (Oxford Analytica, 2022). Examining the behavior of users who will purchase virtual products is important in order to ensure the continuity of the sector. It is thought that conducting research on SL users, one of the largest platforms and pioneers of the Metaverse industry, will contribute to the industry and the literature.

The study covers SL users who make purchases within the platform. Users who do not make purchases are not included in the research, which is the biggest limitation of the study. In addition, since it is research on SL users, the study is limited to users of only one platform. Within the scope of the research, it is assumed that the participants gave sincere and correct answers to the survey and interview questions prepared on Google Forms in order to be statistically transferred to the study after observing the purchasing behaviors of SL users and examining the relevant literature.

Accordingly, the concepts of metaverse and virtual worlds are explained first in the research, and information about Second Life is given. Afterwards, the Technology Acceptance Model is given, and the consumer purchase intention is mentioned. The next part contains the methodology of the study, the findings, discussion and conclusion.

Related Literature

When the literature is reviewed, it is seen that there are studies that examine the intentions of users to purchase virtual products. In addition to focusing on the purchase of virtual products in virtual worlds, studies on games have also been examined. When

the studies are examined, different methods are preferred as well as the studies where the data is collected by the survey application. Within the scope of recent developments, it is thought that studies specific to emerging area -metaverse- users will increase. Some studies on the subject;

In the study of White Baker et al. (2019), which is frequently used in the study, they aimed to investigate and compare the shopping made on the internet and the shopping in the virtual world in terms of attitude and acceptance of shopping in these environments. In this context, a total of 474 questionnaires were obtained from 237 online shoppers. Participants were asked to fill out the questionnaire both after shopping in the online store and after shopping in SL. The results of the study emphasize that the structures between both platforms are similar, but the main difference is the telepresence variable.

Hamari and Keronen (2017) examined why people buy virtual goods in games and virtual worlds. In the study conducted by conducting a meta-analysis of 24 quantitative studies, it was stated that while the importance of enjoyment for purchases in virtual worlds was mentioned, factors such as flow and ease of use, which are seen as predictors of purchasing, are directly related to the platform.

Hassouneh and Brengman (2018) focused on the effect of users' 'gender' on purchasing virtual goods in virtual worlds. In the empirical study, it was emphasized that these environments are not goal-oriented, unlike game-oriented virtual worlds. In the study, it was concluded that the real-life gender of the user, not the gender of the avatar, is effective in shaping the shopping behaviors in the virtual worlds. In addition, it has been stated that shopping behaviors in these environments are a reflection of real life.

In the study named “Oyun içi satın alımını etkileyen faktörler: Türkiye pazarına yönelik keşifsel bir çalışma”, it is aimed to determine the factors affecting the in-game purchasing of players in Turkey. For this purpose, 161 participants were reached from various platforms, and due to the incomplete filling of four of them, the study continued with 157 questionnaires. As a result of the analyzes carried out, four factors emerged as functionality, protectionism, vanity and personalization (Ayvaz, 2020).

In the study titled "Factors influencing players to purchase in-game content", the factors affecting players' in-game content purchase were examined. The most common mentions that the purchases for the game are made to pass new levels, increase the currency, send gifts or improve the characteristics of the characters. In addition to providing information based on the relevant literature, despite the popularity of virtual

games, the scarcity of studies based on in-game purchases is also mentioned. In order to examine the factors affecting in-game purchases, data was collected from 150 people who had purchased in-game content before, via forum sites of various games and social media. As a result of the findings, finding the game character more remarkable was determined as the main factor motivating the purchase (Sharma, 2020).

In their study, Hamari et al. (2017) named “Why do players buy in-game content? An empirical study on concrete purchase motivations”, they aimed to investigate the reasons for in-game purchasing with a different perspective based on data and observations to address the lack of studies to measure purchasing motivations arising from game design. In this context, 1159 online surveys were obtained through the websites of the three major Finnish gaming magazines and social media. From the data obtained, only the data of the participants who purchased 519 in-game content for the purpose of the study were kept in the final data set. The results of the study highlight that in games that use the in-game selling business model, the demand for these goods is, to some extent, determined by the rules governing how the game is designed and how items work. At the same time, economic rationale was generally rated as the most important reason for in-game purchases.

An Overview of the Concept of Metaverse

The development of digital technology and its increasing place in human life naturally reveal macro systems such as metaverse, and it is not possible to be indifferent to such innovations. The global companies that pioneered the establishment of the Metaverse universe expect that their expenses will return to them as large incomes. In order to get a share from the ever-growing market, it is necessary to first understand the marketing in the metaverse universe, then be among the important initiatives and always show up in the market with original ideas (Anıl & Alankuş, 2022). In support of this, it is mentioned in the Council of the European Union (2022) report that Metaverse may have a market share of $800 billion by 2024. Likewise, it was indicated in the report of the European Parliament (2022) that studies on the subject of economics estimated that the market share would be €597.3 billion by the year 2030.

Metaverse, the foundation of which was laid long ago, is a growing fast notion. The term Metaverse, which started to attract attention in 2020, became one of the most talked about terms in 2021, when Roblox went public and declared that the company's following move is to establish a metaverse, in addition, Mark Zuckerberg, the CEO of

Facebook, gave a speech in which he revealed his plan to rebrand as Meta (Kim, 2021). The Metaverse is derived from technologies which enables users to interact in multidimensional manner with virtual environments, digital objects, items, and other individuals (Mystakidis, 2022). Metaverse, seen as the next step in progression, provides users with a simulated digital environment that may be experienced as an immersive virtual world (Gadekallu et al., 2022). The term, which was first used in the US writer Neal Stephenson's novel “Snow Crash” (Lee et al., 2021; Dionisio et al., 2013; Mystakidis,2022), refers to the Metaverse environment, a three-dimensional virtual world in which users can exist as in real life, where they are represented by their avatars through their computers (Arı, 2018).

In the novel, Hiroaki, the protagonist of the story, lives in Los Angeles at the dawn of the twenty-first century, while mentally inhabiting a three-dimensional virtual world known as the Metaverse. He and others use their own computers to visit the Metaverse, which shows images of a simulated urban setting on a virtual world via glasses. Everyone in the Metaverse had customized avatars and do everything they can in reality, such as going to parties and meeting people. Some readers assumed that the Metaverse expressed in the novel could truly exist after it was released. Thus, many companies have started to work in this field (Kaplan & Haenlein, 2009).

According to the Cambridge Dictionary (2022), the metaverse is the internet is viewed as a limitless fictional space where people may meet others in virtual reality (computer-generated pictures and audio that appear to resemble an actual area or condition). The word metaverse is produced by combining the words ‘meta’, which means "beyond the universe," with the ‘verse’ addition, which means "universe." It has begun to establish itself as a notion, with phrases like "beyond normal" and "backward from the cosmos” (Çetinkaya & Atsan, 2022). While there is no clarity on how to define the term, which is referred to as the "next generation internet" (Ng et al., 2021; Choi, 2022), its common characteristics include a 3D virtual world, avatars, interconnection, asset continuity, and synchronism (Kim, 2021; Choi, 2022). Metaverse is a popular term gaining attention in the tech industry, with developments such as Blockchain, internet of things (IoT), virtual worlds (VW), artificial intelligence (AI) and more (Damar, 2021; Çetinkaya & Atsan, 2022).

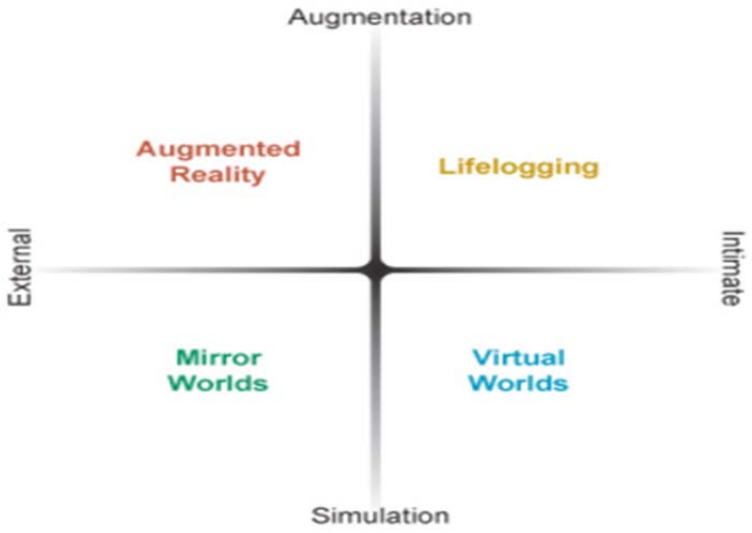
The term, which started to become even more popular after Mark Zuckerberg's speech, is not a new concept (Lee et al., 2021; S. M. Park & Kim, 2022). J. P. Morgan (2022) mentions in the published metaverse report that worlds such as The Sims,

Second Life, Minecraft, World of Warcraft (WoW) have existed for many years, and that millions of users are already online for long hours and the size of their economy. Second Life's chief architect, Philip Rosedale, states that Second Life is the largest and closest platform to the metaverse available, and it is known that it still processes $650 million in annual transactions (Gent, 2022). Those support the aforementioned situation. Metaverse, which is also the expression of the transition from Web 2.0 to Web 3.0, is not physical or factual, but completely artificial, that is, synthetic. This fictional universe of fundamental building blocks of pixels is a photorealistic version of the real world. Companies such as Microsoft, Roblox, Decentraland, Meta (formerly Facebook) are some of the companies that have made large investments in this field (Aşkan, 2022).

The Acceleration Studies Foundation (ASF), which produced a metaverse roadmap in 2007 with four categorization criteria (see Figure 1) emphasizing diverse roles, kinds, or sets of metaverse technologies, lists these as crucial components of the Metaverse future (Smart et al., 2007; S. Park & Kim, 2022). While S. Park and Kim (2022) states that the x-axis in Figure 1 shows the metaverse's technological orientation during implementation, they also state that the y-axis shows whether technology enhances people's lives by introducing new abilities to their real-world lives or by implementing actually impossible things in an entirely new virtualized environment.

Figure 1.

Components of the Metaverse Future



Note. Adapted from “Metaverse Road Map Pathways to the 3D Web” published by J. M. Smart, J. Cascio and J. Paffendorf, 2007, Acceleration Studies Foundation, pp. 5.

It has been stated that there are 4 components of the Metaverse, which is defined as the area where the physical reality is created virtually, that is, simulated, and where the physical world is permanent in the virtual world; "Virtual Worlds ", "Mirror World", "Augmented Reality", "Lifelogging " (Smart et al., 2007). Concept definitions in their studies are explained as follows;

Virtual World: Worlds that further expand the economic and social lives of communities existing in the real world.

Mirror World: Mirror Worlds such as Google Earth, that capture, store, analyze and manage reflections with the help of virtual mapping and sensors, are virtual representations or "reflections" of the actual environment that have been supplemented with information.

Augmented Reality: It can be described as a physical world developer with a set of networked technologies and location-aware systems with Metaverse Technologies.

Lifelogging: The act of catching, collecting, and disseminating daily events and information for things and people is known as lifelogging.

Due to the Covid-19 pandemic, people have had to experience rapid changes in their education and business lives. In this period, online activities increased and a rapid period was entered in the path of virtualization. At the present time, there are many metaverse platforms built to consolidate multiple online spaces into a 3D platform. These platforms are developed in a way that allows users to communicate in 3D, participate in artistic activities such as concerts and movies, play games together, organize meetings and trainings (Arvas, 2022). It provides facilities in fields such as education, health, marketing and psychology.

World-known brands have started to take place in these worlds in order not to stay away from the growing market due to the increasing interest in the metaverse. Initiatives such as Nike's entry into Roblox (Hollensen et al., 2022) and Balenciaga's virtual store in Fortnite (Lucatch, 2022) are on the rise. They are trying to strengthen their reach to the target audience by entering the Metaverse. Many brands (as mentioned later in the study) previously existed in Second Life, one of the pioneers of the metaverse. For various reasons, they did not continue their existence there. The fact that traditional methods are not sufficient in practice in such platforms creates the need for different studies.

Virtual Worlds

Virtual worlds are rapidly becoming a preferred atmosphere for millions of people- and a huge market (Wyld, 2009). Three-dimensional virtual worlds, which have a long history and become popular day by day with developing technology, offer environments where people can socialize, have fun, and provide various job opportunities. Apart from these, it is seen as an important tool in modern education practices. The word "virtual" is frequently encountered in today's world. The concept of “virtual world” emerges with the combination of the word “world” which the area where we feel and perceive the existence of objects in the physical world (Çetinkaya, 2021), and the word "virtual", which according to the Cambridge Dictionary (2022), is described as "created by computer technology and appearing to exist but not existing in the physical world".

By mentioning the lack of a common definition for virtual worlds, Bell (2008) has put forward a new definition which is "a synchronous, persistent network of people, represented as avatars, facilitated by networked computers” by combining the elements of the definitions used by Bartle (2003), Koster (2004) and Castronova (2004).

Development and Features of Virtual Worlds

Furber (2009) has broadly categorized virtual worlds into metaverse (e.g., SL), online games (e.g., WoW), and video games (e.g., Grand Theft Auto). Virtual worlds were originally text-based and known as Multi-User Dungeons (MUDs). New games were dubbed persistent worlds as visuals were added, but this evolved into MMORPGs (Massively Multiplayer Online Role-Playing Games) when the enormous number of simultaneous players that drew them became their distinguishing characteristic (Bartle, 2003).

Bartle (2003) gives as exemplifying the absence of physics, the fact that the players do not have a single representative in war games, and that there is no sense of time parallel to real life in other unreal environments, and he mentions that for these reasons, they are not a virtual world.

Users trade virtual goods in virtual worlds, which offer a unique commercial world compared to real life. These virtual product transactions have gradually increased and it has become important to examine the purchasing behavior of users (Guo & Barnes, 2009).

Virtual Products

In 1999, player-to-player trade in "MMORPGs" introduced the concept of buying and selling virtual products for real money. Virtual goods are items found in many online environments, including characters, items, and currencies (Lehdonvirta, 2009). Users purchase products (clothing, shoes, hairstyles, furniture for the home and business, food and drink, etc.) to personalize and interact with their avatars. According to Animesh et al. (2011), customizing virtual items (such as avatars) can considerably alter how virtual world users rate their experiences there. This can affect how likely users are to keep buying virtual goods and taking part in virtual world events.

In virtual worlds, there is a sizable market for a wide range of virtual goods and services, particularly goods that improve the features and appearance of avatars (Hassouneh & Brengman, 2018). Virtual products are becoming just as popular as tangible items as e-commerce and other online social networks expand. People's desires for bettering their virtual experiences grow as more human activities are conducted online.

Definition and Development of Second Life

Second Life, which founded in 2003 by San Francisco-based Linden Research, Inc., is an internet-based, synchronizing with real life 3D virtual platform that has reached large audiences all over the world. Second Life, following the path opened by "There" and "Active Worlds", set out with the goal of creating a completely user-created world, therefore it is the world most associated with the Metaverse dream and the most famous of its kind (Dadakoğlu and Aksoy, 2020). Philip Rosedale was inspired by Neil Stephenson's book Snow Crash when forming SL, the most distinctive of virtual worlds (Tuten, 2009; Boss, 2007; Morgan, 2013). Linden Lab, founded by Rosedale, started their work on "Linden World", which has not yet been offered to the public, in 2001, and different names were considered for this more weapons-oriented platform at the beginning, and it was decided as "Second Life" in order to reflect the breadth of the platform (Arı, 2018).

The founders stated that what is desired to be done in this artificial world created for its users is limited only to their dreams and that whatever is desired to be done can be done (Sağtaş, 2013). SL users can visit places they want, participate in events, produce and sell content, go to concerts and museums. In the 'SL events' section, the desired event can be selected, and the events are advertised in different ways. In SL, as there are times when the participation is high, it is always possible to reach someone due to the

fact that there are users from all over the world. In SL, which has its own time zone, time runs according to Linden Time (same as Pacific Time Zone), referred to as 'SLT'.

Due to the Covid-19 pandemic, which affected the whole world in a short time, there was an increase in the number of users during the period when people had to stay at home (Çetinkaya, 2021). Having reached 1,000,000 users on October 18, 2006 (Second Life Wiki, 2022), SL users now number over 73 million according to information obtained from Strawberry Linden, one of the Linden Lab staff members (see Figure 2). In addition to the growing number of residents, it is also stated that there are close to one million monthly active users. According to Messinger et al. (2009), among the reasons for users to join Second Life are discovering the world, sharing experiences with others, getting to know people, developing friendships, and participating in business activities.

Figure 2.

Second Life Data Provided by Strawberry Linden

To explain from the very beginning of the process, in order to enter the SL world, it is required to open an account and download the necessary interface. No membership fee is required when opening the account, but there is a "Premium Membership" option in SL and choosing this comes with some advantages over free membership. If "Premium Membership" is selected, which offers three different billing options (Billed Monthly-11.99/ Billed Quarterly-$32.97/ Billed Annually-$99.00), L$1000 bonus for

first members, L$300 weekly, 1024m² house or land, virtual gifts, priority entry if areas are full, etc. privileges are granted (Second Life, 2022a). After this process, the user chooses an avatar that will represent themselves. Users, who are free to choose these avatars according to their own preferences, can choose avatars in both human and other appearances. The avatars selected from among the options provided by SL can then be changed by purchasing optional Mesh (more human-like) avatars.

Situations such as being a long-term SL user, having a Mesh avatar, following the fashion, having a home may be important and effective for some when interacting with others as in real life (Karadağ, 2019). After the avatar selection, the avatars of the users who enter the world for the first time are appeared on the "Orientation Island", where they will get information about how to move around and how to communicate. 'Teleport' allows users to be in the area they want whenever they want. After learning these, users are left to their own choices, and they can explore as they wish, join groups, and communicate with whomever they want.

Figure 3.

Early Avatars of Second Life

Source: (Second Life Wiki, 2022)

Steller Sunshine, the first resident in SL, where users are referred to as "Resident", involved in SL on March 13, 2002, and the public testing began in October of the same year (Second Life Wiki, 2022). While early avatars looked like in Figure 3, they look much more advanced and realistic today (see Figure 4). There are many options, just like in real life, such as tattoos, piercings, different clothes, where the people can customize their avatar according to their wishes. As it can be understood from the obtained data that mentioned in the following parts of the study, almost everything needed in real life can be obtained in line with requests.

Figure 4.

An Example of Today's Avatar Appearance (TabithaSL-flickr account, 2022)

Source: (TabithaSL-flickr account, 2022)

Features of Second Life

Many people think of SL as a game, but it is expressed as a virtual world application, a social life platform that develops among users, with its structure far from goals, determined themes, criteria such as winning-losing, leveling up/forwarding, collecting points (Yurttaş, 2011). In his study, Kedzior (2014) mentions that what distinguishes SL from other virtual worlds is that it does not impose any obligations, demands or limitations on users. He explains this with the example of the 'Entropia Universe', where you have to hunt and trade virtual goods in order to survive virtually.

While Furber (2009) gives SL as an example to the metaverse in the virtual worlds he categorizes, he lists its general features as that it is a dynamic platform that always continues without being dependent on a single user, it has a growing economy where they can buy and sell virtual products within the world and even apply it to real-life products, it has no specific tasks, the scale and complexity is higher than other environments, and it is a platform where users can be owners. Second Life users can engage in activities similar to real life in the environments they are in, unlike a game; they can start a business, buy land, go to a concert or nightclub, continue their education and meet others (Sağtaş, 2013). In SL, people can get a second life, as can be understood from its name.

In SL, which consists of approximately half a million acres of virtual land, the majority of these lands belong to the users. What to do with these lands, which can be taken on the mainland or in special regions, is entirely up to the users. Houses can be built on these lands, or they can be converted into an area for work (Second Life,

2022b). Linden Lab merely supplies the tools and platform, and all content is contributed by its users. Skilled users can make more complicated creations using the "Linden Scripting Language", and they can trade the virtual contents they produce (Tikkanen et al., 2009). Examples of this are frequently encountered in SL. Sağtaş (2013), in her study, which aims to understand how and why entrepreneurs in SL prefer to be entrepreneurs in here, has determined that some people do not have a full-time job and that they earn their all income from businesses they own in SL, and stated that their profitability share is at a high level.

Some people use this place as an escape from the stresses and problems in their real lives, while others use it for educational purposes and socialization without hiding their real identities. While it is stated that there are no certain criteria, it does not mean that there are no rules. Although SL has some unwritten rules in itself (e.g., not staying on the teleported place for newcomers after teleporting), avatars learn such rules as they gain experience or from the community.

There is a general chat where avatars can communicate, and other avatars within a certain distance can also see correspondence. Apart from this, there is a private chat (IM) option, as well as verbal communication. It is also possible to communicate with body language in SL. As Second Life's content is nearly entirely user-generated, people can build their own body language. For people who lack technological abilities, producers can distribute or sell their services, and there is a vast range of body language opportunities that exist (Martin, 2014). There are movements such as hugging, kissing, waving etc. that users have option to purchase.

Usage Areas of Second Life and Its Reflections on Real Life

Consumers have a considerable opportunity to contribute to beneficial ventures through SL allowing them to be active in corporate activities. The creation of social entrepreneurial forms and societal activities is facilitated by sociocultural factors in SL (Bonsu & Darmody, 2008). Virtual enterprises, such as shopping malls, nightclubs, and pubs, recruit virtual labor to do a variety of tasks. Some individuals offer their expertise or professional advisory services to newcomers to Second Life. There are successful entrepreneurs who own a virtual business (Zhang & Shrestha, 2010). Some entrepreneurs earn additional income from here, while others make a living with what they earn only from here. One of the most well-known examples is Anshe Chung, who became the first SL millionaire with an initial investment of $9.95 (Page, 2011).

In the past years, many world-renowned real-life brands such as "Adidas, BMW, Cisco Systems, Dell Computer, Mercedes Benz, IBM, Nissan, Toyota, Vodafone, Colgate, Philips, American Apparel, Vestel" and media organizations such as "BBC, MTV, NTV, Reuters, Star Newspaper" were involved in SL (Barnes & Mattsson, 2011; Yurttaş, 2011; Doğan, 2020). These brands have not maintained their presence in SL over time. In her thesis, Doğan (2020), within the scope of the research process, discovered that Hello Kitty is the only real-life brand that exists in the SL environment. She also claims that the SL environment is a more effective platform for virtual brands developed by SL users rather than genuine ones. The reasons for this may be traced back to Hemp (2006)'s remarks that each virtual world has a unique culture, that individuals visit these worlds different purposes, and that a common marketing strategy would not succeed. He also emphasizes the apparent issues posed by privacy issues over thorough surveillance of users' avatar data.

In addition to its business potential, many non-profit communities such as "American Cancer Society", "Whole Brain Health", "Live and Learn in Kenya", and "Virtual Ability" continue to exist in SL. To explain one of them, for example Whole Brain Health, the organization located on Inspiration Island in the SL, offers activities with information and content that allow especially participants with Alzheimer's disease and other participants to stay fit, have fun, and stretch their body and soul (Çetinkaya, 2021). WBH activities provide several opportunities to improve concentration, speed of processing, memory, positivity, purpose in life, creativity, socialization, and personal care, all of which contribute to brain health (Virtual Inspiration Island, 2022). In addition to such contributions, groups frequently hold charity events in Second Life, such as concerts, art exhibitions, or solo performances by some singers (e.g., Live and Learn Kenya is holding events for Feed a Smile at a venue called Lavender Field) (Arı, 2018).

Within the offered advanced graphics, SL allows users to establish an equivalent and optimal other world, maintain friendships as they would in real life, and adopt attitudes and behaviors that are comparable to those in the real world (Uzun & Aydın, 2012). SL is also used in the field of education. Many universities such as Open University, Harvard, Texas State and Stanford establish virtual campuses and teach their courses here. Courses are offered in various fields such as business administration (Çetin, 2019), tourism (Karacıl & Çınar, 2021) and foreign language learning (Kim et al., 2018). Çağ University is also among the universities with campuses in SL. Within the scope of

virtual worlds course conducted by Assoc Prof. Dr. Murat GÜLMEZ, virtual courses were conducted jointly with Technology University of Dublin, of which Whole Brain Health is a partner, under the name of "International Student Project" in the 2021/2022 academic year. Groups from three different countries (Turkey, Ireland and USA) were able to be in a virtual campus together in the course (see Figure 5), which was developed to help students understand how online virtual environments work and to find the potential to develop and use content in the business world (Çağ University Virtual Worlds, 2022).

Figure 5.

International Student Project

Source: (Çağ University Virtual Worlds, 2022)

Apart from all these, social relations also have an important place in SL and from time to time these relations affect real life. In their study, Uzun and Aydın (2012) found that users get a virtual partner in SL, enter into emotional relations with them, get married and have children, and in case the relationship ends, they may be heartbroken in a way that affects their real lives. They stated that this situation is also felt in users who are married in real life, that in the virtual world, the nature of personal relationships is comparable to that of real-life relationships, and envy, manipulation, and pressure attitudes persist as they do in real life. Virtual marriages in particular are made to create the impression that they have their partner. When cybersex, which was shown in their

study as one of the reasons for being in SL, was questioned, found that all of the users in their study had cybersex in SL.

The Economy of Second Life

Linden Dollar (L$) is a virtual currency used in Second Life. In SL, which has its own economy, residents can trade with each other using the virtual token L$. Linden Lab receives commissions from trade in-world (Page, 2011). It is possible to buy Linden dollars in SL in-world as well as through LindeX (the legal trading place of SL which Linden Lab operates), but in-world cannot be used for selling, and transactions must be carried out on the website (M. Linden, 2021). A floating exchange rate system is used in Second Life (Messinger et al., 2009; Sağtaş, 2013) and $1 is equivalent to an average of 241 Linden dollars.

The Second Life world is composed of numerous related, locally labeled simulators known as “sims or regions” (Dos Santos, 2009). Selling these areas is among the sources of income. Moreover, SL's income sources consist of the payments made by credit cards of the companies and members that open branches for reasons such as advertising, product promotion, accessibility, feasibility study, and shaping customer opinions. Companies are located in the fashion, decoration, sex, real estate, automotive, yacht and aircraft sectors (Uzun, 2011).

Technology Acceptance Model

The Technology Acceptance Model (TAM) was developed by Davis in his thesis to explain and predict attitudes towards computer use, use of information technology, and user behaviors (Çabuk et al., 2017), and it was created on the foundation of the Theory of Reasoned Action (TRA) studies (Davis, 1986; Tiryaki & Gödekmerdan Önder, 2022; Marangunić and Granić, 2015). Over time, TAM has shown to be a reliable and powerful model (Yılmaz & Tümtürk, 2015), and it is the most cited and empirically tested model in the field (Zeren, 2010; Kalyoncuoğlu, 2018) to predict user acceptance/usage (Davis, 1986; Mathieson, 1991; Davis et al., 1989; Çelik, 2021). TAM aims to define the people's acceptance of IT, the intention of people to use IT, tendencies, perceptions, the relationships between behaviors, with the main goal of determining the factors that influence people’s intention to shop online (Türker & Özaltın Türker, 2013).

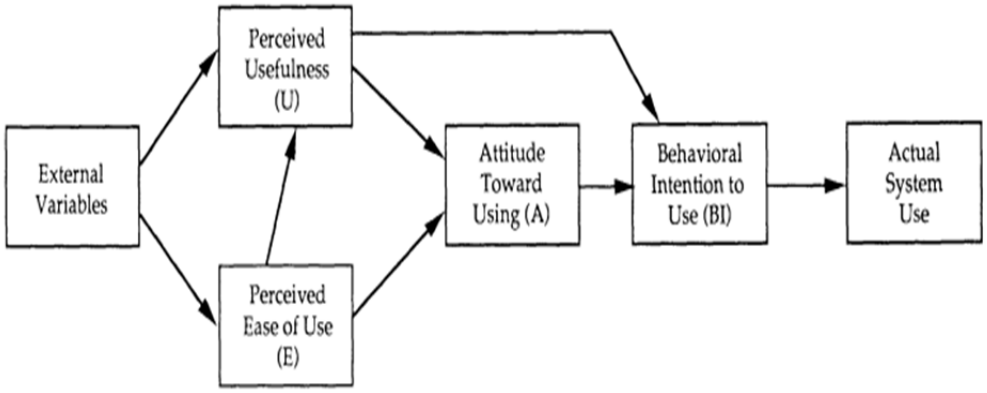
It claims that in order for a person to use a technology, the person should first understand how to use the technology in issue, and that its use should be simple. In

addition, the individual should perceive how the technology will benefit him/her. The perceived ease of use (PEOU) of the technology and the perceived usefulness (PU) of the technology determines the attitude (ATT) of the user towards that technology. Attitudes that a person has towards technology reveal his/her intention towards technology (Okşar,2021). According to this model, which tries to predict the behavior of people that does not have an idea about system, PEOU and PU affect the behaviors developed by users towards an information system. The mentioned behavior influences people's desire to use their system, ultimately leading to acceptance (Özer et al., 2010). While attitudes can be determined by the variables of PU and PEOU, PU can be affected by PEOU, user characteristics, political factors and other external variables. Accordingly, the prospective user's subjective probability of improving their job performance with a particular information system is known as PU. PEOU, on the other hand, evaluates how well a user can use a system with the least amount of effort. (Zeren, 2010; Çabuk et al., 2017).

TAM which is an accepted method in the explanation of why people utilize new systems and how they adapt to new information technologies. (King and He, 2006) is shown in Figure 6. According to TAM, technology adoption behaviors are mainly dominated by PU, PEOU. TAM treats PEOU and PU as two separate basic structures and differs from TRA in this respect (Davis et al., 1989). Both of these variables contribute to a desire to utilize the technology, which predicts actual utilization. Acceptance is regarded and characterized as active use in the TAM (Abrams et al., 2021).

Figure 6.

Technology Acceptance Model (TAM)



Note. Taken from the study "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models" published by F. D. Davis, R. P. Bagozzi and P. R. Warshaw, 1989, Management Science, 35(8), pp. 985.

In the literature, one of the most commonly utilized approaches in the adaption of technologies including cloud computing (Alharbi, 2012), big data and big data analytics (Verma et al., 2018), and artificial intelligence (Okçu et al., 2019) is TAM (Yavuz, 2021). To comprehend TAM, it would be better to first analyze the theories that preceded TAM. These theories are summarized below (Karagöz, 2022).

Theory of Reasoned Action (TRA) is a social psychology-based notion put forward by Fishbein and Ajzen (1975), which states that people's attitudes towards something affect their intentions and their intentions affect their behavior. It is frequently utilized in the consumer behavior discipline, as in many other disciplines, to understand customer purchasing intentions and actions (Semiz, 2021). TRA, which seeks to foresee an individual's behavior, argues that a person's intention to do or refrain from performing an action is a direct predictor of that conduct. This behavioral intention is decided by two aspects: person's attitude versus conduct and normative beliefs, which are one's impressions of societal pressure to participate in or refrain from participating in the action. Ajzen and Fishbein (1975) argue that these two factors are interrelated (Vincent et al., 1998). All other elements are thought to impact intention and, as a result, future conduct via attitude and social norm.

Theory of Planned Behavior (TPB), which is an expansion of the TRA (Ajzen, 1991), was developed by Ajzen in 1985 to explain and predict the behavior of

individuals (Demirağ, 2020). It has been developed due to the TRA was insufficient in predicting, exhibiting or determining the intention of an individual's behavior (Yay and Çalışkan, 2016). Ajzen and Madden (1986) mention that as a means to make predictions about the behaviors that individuals do not have full control of, it is not sufficient to evaluate only the intention, it is also necessary to make an estimate about the degree of control the individual can have over the mentioned behaviors. Individuals' social behaviors, according to the TBP, are under the influence of particular circumstances and occur for specific purposes and in an arranged manner. In order for the individual to act, the Behavioral Intention must first emerge. Factors affecting Behavioral Intention are Perceived Behavioral Control, Subjective Norms, and Attitudes Towards Behavior. While the common point of TBP and TRA is "predicting the behavior of people according to their intentions", the most important difference between them is the Perceived Behavioral Control (ADK) variable (Kırıkcı & Göktaş Kulualp, 2021). TPB is shown to be effective in describing and predicting behavior in a variety of areas, namely physical activity, drug usage, recycling, and consumer behavior (Ajzen, 2020).

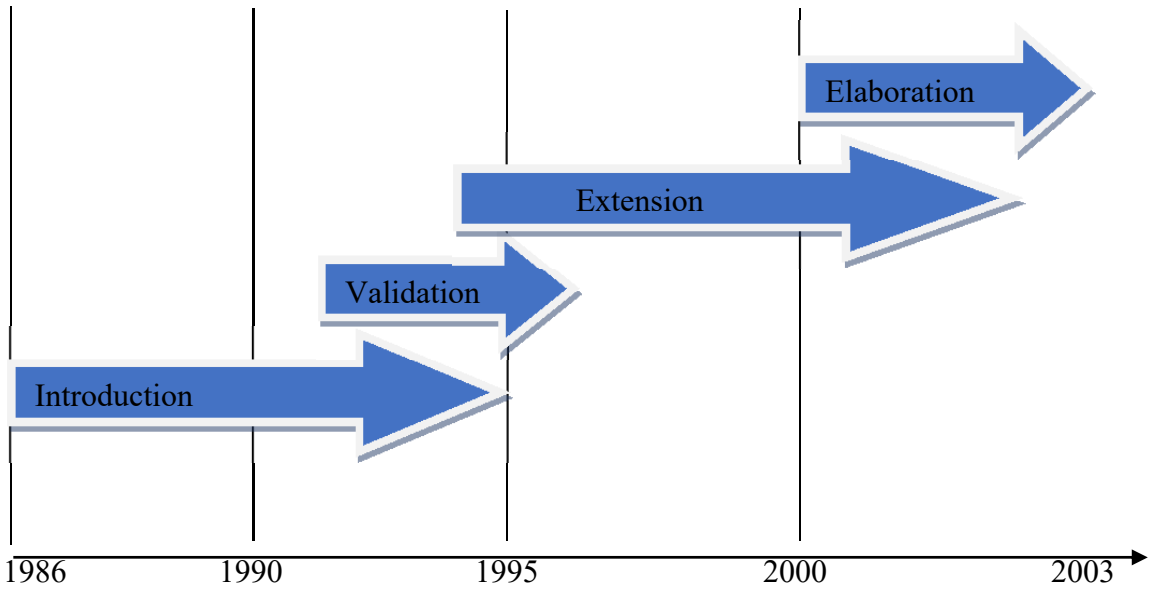
The Origin and Versions of the TAM

The majority of theories examining individual behavior patterns and causes have been produced by the field of psychology and utilised by other disciplines (Türker & Özaltın Türker, 2013), and one of these theories, TAM is an altered version of TRA presented by Davis (1986) in order to simulate user acceptability of IS (Davis et al., 1989). It was presented in 1980s as part of a contract with IBM Canada, Ltd. to invest in innovative product development. (Davis & Venkatesh, 1996). For the first time, Davis (1986) used his PhD thesis to address the Technology Acceptance Model in three versions/modeling in order to construct and test a theory of the impact of system features upon acceptance of computer systems (Çelik, 2021).

TAM has been used to many breakthroughs under various situations with varied control elements and diverse subjects, according to Lee et al. (2003), prompting defenders to rely in its reliability. TAM did not retain its initial shape and, like any living entity, has expanded indefinitely. In their study, these expansions were examined in periods as "introduction, validation, extension, and elaboration" (see Figure 7).

Figure 7.

TAM Research's Periodic Progress



Note. Adapted from the study "The Technology Acceptance Model: Past, Present, and Future" published by Y. Lee, K. A. Kozar and K. R. T. Larsen, 2003, Communications of the Association for Information Systems, 12(50), pp. 755.

Model Introduction Period: In this period which began with Davis (1986) developing the model, researchers conducted several TAM studies focusing on two flows. One of them has been to test TAM against other technologies and areas of investigation to see if it is a no-compromise paradigm. Another, evaluated TAM against TRA for examining if TAM can be differentiated from TRA and if TAM is more useful than TRA. Based on studies carried out during this time, it has been determined that TAM favorably predicts IS adoption behaviors across various innovations, circumstances, and that TAM's indicator of computer technology user acceptance is a relatively simple, adaptable and in intensity model (Igbaria et al., 1997) than TRA (Lee et al., 2003).

Model Validation Period: It, according to Başgöze (2010), comprises studies that looked at the Technology Acceptance Model's reliability and validity. The model's validity and reliability were examined, and it was determined that the PU and PEOU measures were both valid and reliable (Adams et al., 1992). The association between utility and adoption, as well as the relationship between utility and ease of use, was found to be quite strong in a study that measured the strength of the relationship between the variables of TAM (Tanya & Liu, 2004). The dimensions of PU and PEOU

in the model considered to be valid and reliable using confirmatory factor analysis. Also, instead of a dual model consisting only of PU and PEOU, a triple modelling in which effectiveness was added as a new variable would be more meaningful (Segars & Grover, 1993).

Model Extension Period: Different variables were added to the model during this period in order to diversify the structure of the model when it was proven that it was valid and reliable. Over time, a number of antecedent variables (which influence PU or PEOU) were introduced to the TAM, and their impacts on PU and PEOU were investigated. Studies dealing with these factors are included in this period (Başgöze, 2010). Identifying and researching TAM's bounding lines was one of the initiatives made throughout the extension period (Lee et al., 2003).

Model Elaboration Period: Different versions of the model were created; the model was criticized and studies were carried out to reduce the constraints. First, Technology Acceptance Model 2 (TAM2- explained in the next stage of the study), a new variant of TAM, was established. Owing to the studies carried out during this period, the undisclosed determinants of PEOU and PU were identified and formed the basis for further studies (Lee et al., 2003). In another study that continues to develop the TAM (Venkatesh & Bala, 2008), a number of variables that affect PEOU as well as variables that affect PU were emphasized, and Technology Acceptance Model 3 (TAM 3- explained in the next stage of the study) was created by incorporating these factors into the model (Başgöze, 2010). In addition to these models, there are models that are created by adding different variables to the original TAM for the examined technology, but that are not theorized such as TAM2 or TAM3 and are described as "Extended Technology Acceptance Model" (Seyhun & Kurtuldu, 2020).

Technology Acceptance Model 2

TAM, which emerged for technology acceptance, began to develop and experience different expansions as it was researched for long periods of time. Venkatesh and Davis tried to identify the variables affecting PU with the extended model named TAM2, since it has been established that PU is a major driver of use intention, along with criticisms of the model's inadequacy in explaining user behaviors (Marangunić and Granić, 2015). The TAM2 model includes additional theoretical features such as social influence mechanisms and cognitive instrumental mechanisms (see Figure 8). The

determining factors on the "perceived usefulness" variable in the TAM are stated more clearly (Venkatesh and Davis, 2000).

Although it is based on the TRA, subjective norm, which is a component of the TRA, is not included in the original TAM. The subjective norm has been added to TAM2, and besides the subjective norm, variables such as image, job relevance, quality of output, voluntariness, experience and demonstrability of results have also been added (Işık, 2019).

Subjective Norm: In line with Ajzen (1991), subjective norm could be seen as a perceived collective pressure for people to perform or not. The rationale for subjective norm immediate contributor of behavior intent in TRA along with TPB, according to Venkatesh and Davis (2000), is that individuals could behave in a certain way, granted that people do not individually preferable onto the behavior or its implications, unless they assume relevant factors pursue them to do, and they are well enough keen to pursue the recommendations.

Image: It is the degree to which an individual believes that employing a system will elevate his or her position within the social system to which he or she belongs. (Bağlıbel et al., 2010).

Voluntariness: This variable is defined as "the degree whereby potential prospective adopters believe the adopting choice is voluntary" in the model. (Venkatesh and Davis, 2000).

Experience: This could be described as a person’s view of the system whether the experiences can be applied to the new system or not (Işık, 2019).

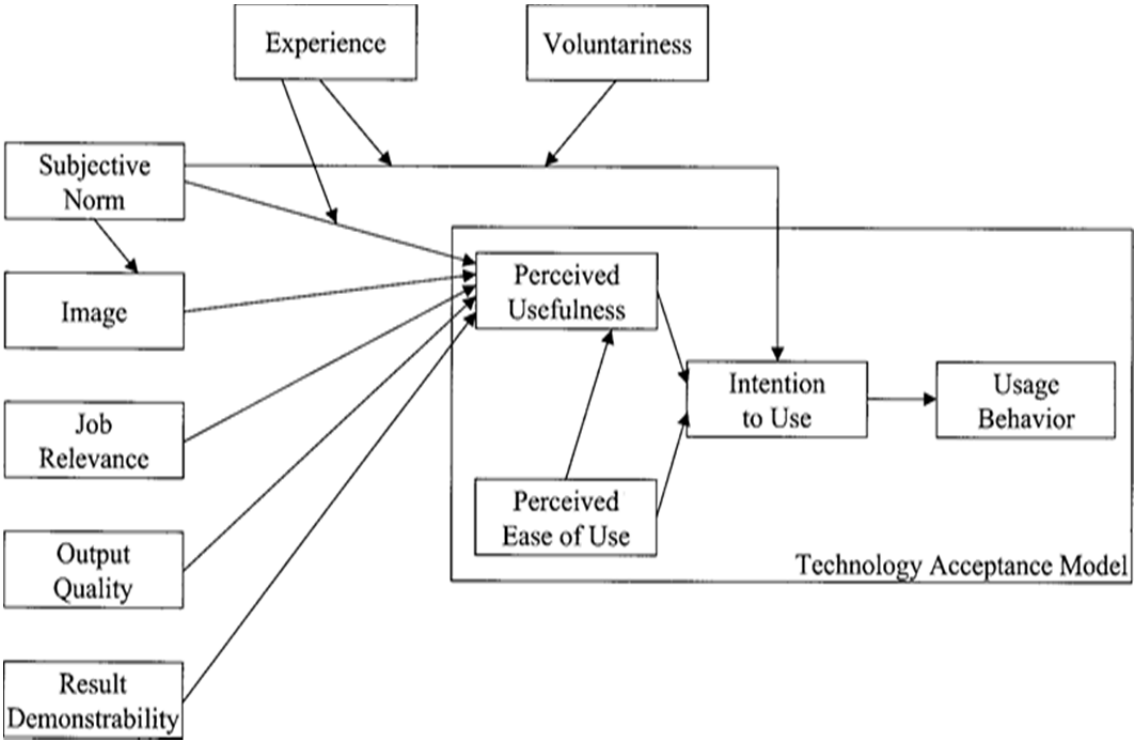
Job Relevance: It is defined by Venkatesh and Davis (2000) as a person's reliance that the objective system is suitable for his or her profession.

Output Quality: It can be described as the degree of performance achieved through the application of systems (Lee et al., 2018).

Result Demonstrability: It emphasizes the outcomes and transmissibility of using technology (Yuen et al., 2021).

Figure 8.

Technology Acceptance Model 2



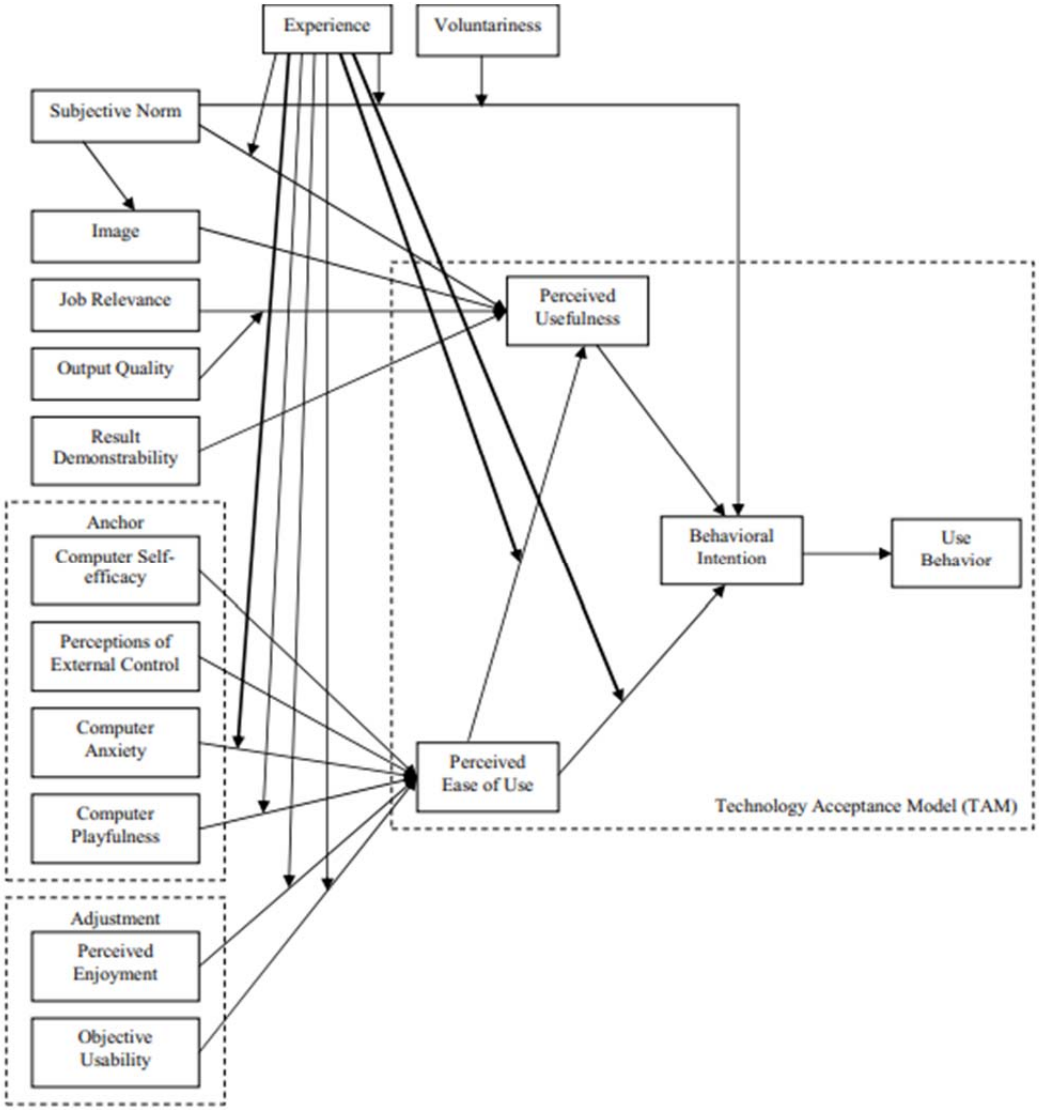
Note. Taken from the study "A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies" published by V. Venkatesh and F. D. Davis, 2000, Management Science, 46(2), pp. 188.

Technology Acceptance Model 3

Venkatesh and Bala (2008), who argue that there are variables that affect PEOU as well as variables that affect PU, put forward TAM3 (see Figure 9) which is a model consisting of a combination of variables affecting PEOU and TKM2 (Turan, 2011). Personal variations, system features, societal impact, and enabling factors are shown as predictors of PU and PEOU in the TAM3 (Venkatesh & Bala, 2008).

Figure 9.

Technology Acceptance Model 3



Note. Adapted from the study "Technology Acceptance Model 3 and a Research Agenda on Interventions" published by V. Venkatesh and H. Bala, 2008, Decision Sciences, 39(2), pp. 280.

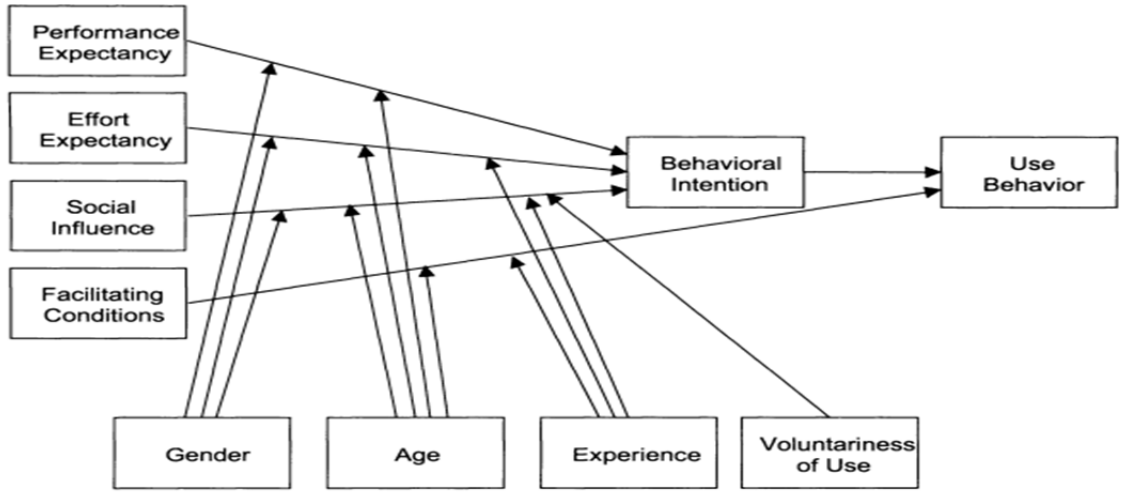
The Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkatesh et al. (2003) created a combined model that pulls along with various viewpoints on consumer and innovation adoption to be harmonized the literature on new technology adoption (Williams et al., 2015). The model, which is shown in Figure 10, put forward by examining eight technology acceptance theories, including TRA, TPB, TAM, Innovation Diffusion Theory (IDT), Motivational Model (MM), Model of

PC Utilization (MPCU), and the combination form of TAM and TPB (C-TAM-TPB), the Social Cognitive Theory (SCT) (Momani, 2020; Williams et al., 2015; Alatepeli, 2022). In this theory, four factors that determine behavior intent and technology usage have been identified: “social influence,”, “facilitating conditions”, “performance expectancy”, and “effort expectancy”. These four elements, explained according to the theory, affect the behavioral intentions of consumers towards technology use, and in case of positive results, technology use occurs (Atik, 2015).

Figure 10.

The Unified Theory of Acceptance and Use of Technology Model



Note. Adapted from the study “User Acceptance of Information Technology: Toward a Unified View” published by V. Venkatesh, M. G. Morris, G. B. Davis and F. D. Davis, 2003, MIS Quarterly, 27(3), pp. 447.

Components of the Technology Acceptance Model

White Baker et al. (2019) went on to develop the model which Ingham et al. (2015) found in their study, called "TAM with attitude", which is used to define e-commerce success, and added the antecedents of PSP and TEL to the factors of PEOU, PU, TRST and ENJ. In order to explain the variables in the model used in the study, PEOU, PU, ATT, ENJ, TRST, PSP and TEL variables in the TAM are included.

Perceived Ease of Use (PEOU): This variable, according to Davis (1989), is "the way a person believes that adopting a specific system would be effort-free". He indicates that the likelihood of utilizing an application that the person perceives as easy

to use increases. It is a crucial concept since it has a direct or indirect effect on consumers' purchase intention through PU and is among the primary obstacles for the adoption and using a recent innovation (Choi & Chung, 2013).

Perceived Usefulness (PU): Another important component of TAM is the “PU”. In the same study, Davis (1989) defines it as "the way in which an individual thinks that employing a certain system would improve his or her productivity". Shih (2004) states that perceived usefulness in online shopping is perceived benefits due to reduced costs and reduced time required to obtain the product.

Attitude (ATT): Attitude, defined by Fishbein and Ajzen (1975) as "positive or negative feelings about performing the behavior", is influenced by PU and PEOU, and influences behavioral intention (Kürüm, 2021). By using statistically estimated linear regression, PU and PEOU jointly determine ATT in TAM (Davis et al., 1989).

Enjoyment (ENJ): According to Cheema et al. (2013), enjoyment is a hedonic element that affecting online purchasing intention. It relates to the customer's belief that purchasing online would be enjoyable. Pointing out that Venkatesh et al. (2012) defined hedonic motivation as "the joy or pleasure obtained from utilizing a technology" and incorporated it in UTAUT2, Lewis et al. (2015) suggested that PEOU and PU can both be influenced by ENJ.

Trust (TRST): Trust is a person's credence in his or her aspirations about what other will do, which are often based on prior experiences (Gefen, 2000). PU is one of the factors connected with the TRST variable (Seyhun & Kurtuldu, 2020), which is a vital part of e-commerce (Gefen et al., 2003). There are different studies in the literature that have found that the TRST variable has an effect on consumers' attitudes towards technology use (Pavlou, 2003; Ha & Stoel, 2009; Guo et al., 2010).

Perceived Social Presence (PSP): Short et al. (1976) initially proposed the notion of social presence (Oh et al., 2018; Chang et al., 2022). The related sense that one experiences while utilizing the technology is referred to as PSP (Salimon et al., 2021). It is projected that PSP would be favorably connected to PU when a website functions as a transceiver between an online merchant and a client (Hassanein & Head, 2007).

Telepresence (TEL): According to Steuer (1992), telepresence is the sensation of being present in a location through the mediated environment. When the telepresence state is perceived and focused on this environment, the physical environment is ignored. This feeling is higher in virtual worlds than in two-dimensional environments (Nah et al., 2011). In their study, Samira and Rosyihan (2021) concluded that telepresence has a

significant effect on purchase intention and stated that being able to act in the environment and do what they want can encourage the creation of purchase intention.

Consumer Purchase Intention

Purchase intention is a prediction of which business the consumer will choose to purchase. Purchasing intention refers to consumers' evaluations or attitudes about a product. It shows the willingness of the consumer to purchase with the effects of external factors. The transformation of an idea into a behavior is possible with its expression in the mind. This concept, called intention, explains a situation in which beliefs and attitudes, attitude and behavior affect each other (Külter Demirgüreş, 2015).

In the study, purchase intention is considered within the scope of consumer behavior. Consumer behavior, in general, links to act of purchasing a certain product (Ajzen, 2008). The purchasing process is generally divided into five as being aware of the necessity or existence of a new good or service, collecting and evaluating information about alternatives, selecting the action plan and implementing the decision, and finally post-purchase evaluations (Ajzen, 2008; Guo & Barnes, 2011; Yıldırım, 2022). The consumer decision-making process varies depending on the content of the product decided to purchase and the frequency of purchase (Doğan Südaş & Yaşa Özeltürkay, 2016).

The rapid development of computers and information technologies differentiates the communication between sellers and buyers. It has often been emphasized in the literature that consumer attitudes are an important determinant of purchase intention and behavior (Fishbein &Ajzen, 1975, Ajzen, 1991; Telli et al., 2021). The consumer attitude determined by the variables discussed in the research is also reflected in the attitudes of the consumers towards purchasing.

2. METHODOLOGY

In the literature part of the study, technology acceptance model, consumer purchase intention, metaverse and Second Life subjects are included. In order to determine the purchasing intentions of Metaverse users, a survey was applied to the consumers. This part contains information about the research sample, the research procedure, the materials utilized in the research, the research model, and the analysis of the research data.

2.1. The Sample of the Study

Second Life users, which is a virtual world, constitute the research universe. Data were collected from users accessible through convenience and judgement sampling. The sample group of the research consisted of 267 SL users who frequently make purchases in Second Life, who were accessible online and volunteer. In the survey study, which resulted in a total of 281 participants, 14 participants answered 'no' to the first question of the questionnaire. The answers of these participants who stated that they do not purchase products/services in SL were not included in the analysis. As a general rule, the sample size should be at least 5 times the number of items, or even around 10 times the number of items (Tavşancıl, 2002; Karagöz & Köstereliođlu, 2008). There are 26 items in the questionnaire and when the sufficient number is obtained, the data analysis phase was started. Research data were collected between 16.03.2022 and 17.05.2022.

2.2. Procedure

The main data in the research were collected from the general consumer group by means of a survey method, on a voluntary basis, through Google.docs, an online application. In the questionnaire consisting of four parts in total, a questionnaire form consisting of a total of 44 items was created, the third part of which was 26 items that are scored on a 5-point Likert scale, and the others were demographic characteristics and descriptive questions. In the online survey study, it was obligatory to answer all questions. Thus, it was ensured that the questionnaire was filled out completely and sent. Between 16.03.2022 and 17.05.2022, the researcher distributed the online survey link. In the questionnaire distribution stage, firstly, the pre-test was carried out with 62 answers were obtained by getting help from SL users that the researcher knew before. At this stage, the respondents gave feedback via both email and 'chat' available in-

world, and some additions were made to the study -mentioned in the analysis section- by taking these into account.

The researcher asked randomly to the avatars in SL whether they could participate in the study voluntarily, and the link was shared with those who accepted. Distribution was also made through sites such as 'SL Community Forums', 'virtualverse.one' and 'reddit'. Likewise, some SL bloggers have written about survey work on their page (see Figure 11). Despite the various channels of sharing structures, 281 people participated in the study. It has been observed that the reason for this is the reluctance of SL users to click on a link from a stranger. In order to gain their trust, the researcher provided information to prove that she was a real student, but some avatars were still reluctant (they stated that it was because of their past difficulties). 267 of the 281 respondents said 'yes' to the first question ("Do you purchase products/services in SL?") of the online survey. Analysis was carried out with the data obtained from 267 participants and these data were analyzed using the SPSS program.

Figure 11.

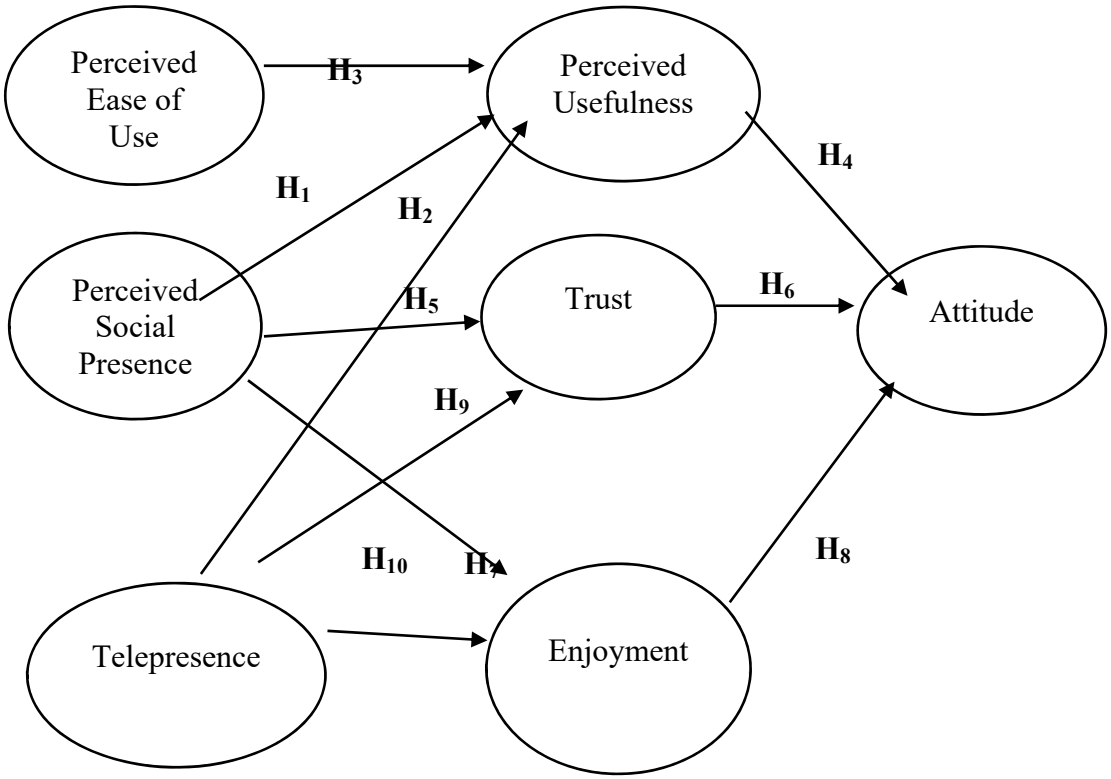
Survey Invitation Written by SL Bloggers

2.3. Data Collection Tools

The scale of the research was taken from White Baker et al. (2019)'s study and 26 items were adapted to the thesis study. White Baker, moreover, took the scales consisting of "PEOU" (Van der Heijden, 2003; Van der Heijden et al., 2003), "PU"

(Chen et al., 2002; Moon and Kim, 2001), “ENJ” (Agarwal and Karahanna, 2002; Koufaris, 2002), “TRST” (Gefen et al., 2003), “PSP” (Gefen and Straub, 2003), “TEL” (Kim and Biocca, 1997), “ATT” (Van der Heijden, 2003; Van der Heijden et al., 2001) from the cited studies. The online questionnaire sent to the participants in this study includes four sections. The first question was added to exclude non-purchasers from the study. In the second part, it has been tried to obtain information about the channel through which consumers frequently make purchases. In the third part, items to measure the purchase intention of SL users were prepared using a five-point Likert Type scale in the form of Strongly disagree (1) – Disagree (2) – Neither agree nor disagree (3) – Agree (4) – Strongly Agree (5). In addition to these, the participants were asked what products they frequently purchase in SL and how often they make purchases, and they were allowed to mark more than one answer. Questions about the demographic characteristics of the participants in the online survey form were included in the last part of the questionnaire.

2.4. Research Model



In the SL virtual world;

H_1: Perceived social presence has a positive impact on the perceived usefulness in Second Life.

H_2: Telepresence has a positive impact on the perceived usefulness in Second Life.

H_3: Perceived ease of use has a positive impact on the perceived usefulness in Second Life.

H_4: Perceived usefulness has a positive impact on attitudes in Second Life.

H_5: Perceived social presence has a positive impact on trust in Second Life.

H_6: Trust has a positive impact on attitudes in Second Life.

H_7: Perceived social presence has a positive impact on the enjoyment in Second Life.

H_8: Enjoyment has a positive impact on attitudes in Second Life.

H_9: Telepresence has a positive impact on trust in Second Life.

H_{10}: Telepresence has a positive impact on enjoyment in Second Life.

2.5. Data Analysis

SPSS program was used for the analysis of the data obtained in the research. First of all, the normality distributions (kurtosis and skewness values) were examined in order to make various analyzes of the data within the descriptive statistical analysis, and it was seen that the data were suitable for the normality distribution. Various analysis methods were applied to the data exhibiting normal distribution. The overall reliability analysis of the scale was performed, and the internal consistency of the data was measured and reported with the Cronbach Alpha coefficient. Reliability (Cronbach's alpha coefficient) and validity (factor analysis) analyzes of the scales in the questionnaire were performed. After the validity of the scales was determined, regression analysis was applied for the hypotheses of the study.

Ethics Committee Approval

Ethics committee approval dated 10.03.2022 and numbered E-81570533-050.01.04-2200001887 was obtained by Çağ University Institute of Social Sciences Business Administration Department Ethics Committee.

3. FINDINGS

In this part of the study, according to the data obtained from 281 participants, the demographic information of the respondents and the analysis results of the data of the applied scales are included. From 281 participants, 14 answered as "no" to the first question (whether the purchase was made or not) and were not included in the analysis.

Demographic Characteristics

In this section, the demographic characteristics of the participants who voluntarily participated in the study are included. The demographic characteristics of the participants such as gender, age, marital status, education level, employment status and income status are included.

Table 1.

Demographic Characteristics

	N (=267)	**%**
Gender (Real Life-RL)		
Female	168	62,9
Male	91	34,1
Other	8	3,0
Gender (Second Life-SL)		
Female	177	66,3
Male	73	27,3
Other	17	6,4
Age (RL)		
18 or under	4	1,5
19-25	38	14,2
26-35	48	18,0
36-45	55	20,6
46-55	45	16,9
56-65	46	17,2
66 or older	31	11,6

Age (SL)		
Less than one year	34	12,7
2-3 years	35	13,1
4-6 years	28	10,5
7-9 years	26	9,7
10-11 years	23	8,6
12 years or older	121	45,3
Marital Status (RL)		
Single	123	46,1
Married	86	32,2
Divorced	41	15,4
Other	17	6,4
Education Level		
High school	47	17,6
College degree	61	22,8
Bachelor's degree	71	26,6
Master's degree or above	79	29,6
Other	9	3,4
Employment Status		
Full-time employment	99	37,1
Part-time employment	26	9,7
Unemployed	31	11,6
Self-employed	36	13,5
Home-maker	16	6,0
Student	15	5,6
Retired	44	16,5
Income Status		
Less than $20,000	65	24,3
$21,000 – $30,000	33	12,4
$31,000 to $40,000	22	8,2
$41,000 to $50,000	26	9,7
$51,000 to $60,000	27	10,1
Above $60,000	94	35,2

In Table 1, percentage and frequency values are given and interpreted according to the demographic characteristics of the participants. Hereunder, 168 (62.9%) of the participants were female, 91 (34.1%) were male, and 8 (3%) chose not to answer by clicking 'other' option. In addition to their real-life gender, participants were also asked to indicate the gender of their avatar, which is their representative in Second Life. According to the data obtained, 177 (66.3%) of the participants preferred female avatar, while 73 (27.3%) preferred male avatar. As when stating their real-life gender, 17 participants (6.4%) chose the 'other' option. While some of them stated that they do not prefer human form avatars (e.g., non-human, so I do not have to deal with gender and others' biases/agendas), some stated that they prefer avatars in both genders.

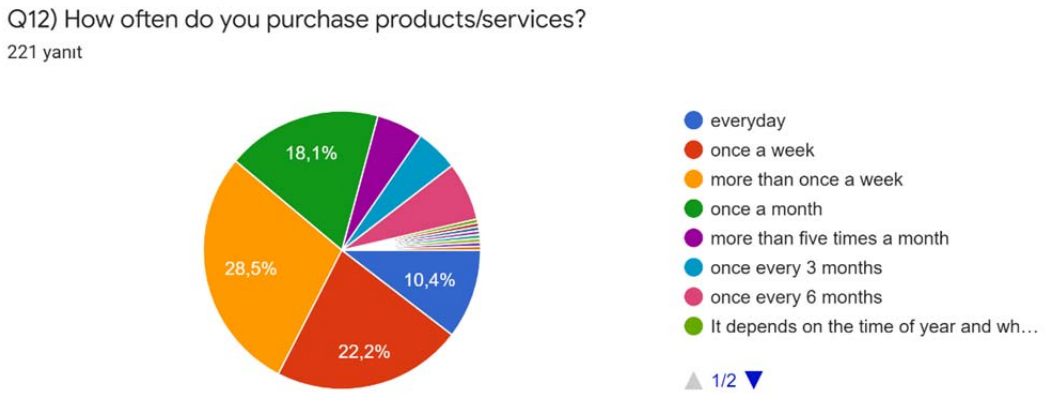
While 55 (20.6%) of the participants were in the 36-45 age group, 48 (18%) were 26-35, 46 (17.2%) were 56-65, 45 (16.9%) were 46-55, 38 (14.2%) were 19-25, 31 (11.6%) were 66 or older, and 4 (1.5%) were 18 or under age group. When their ages of SL (how long they have been in SL - their avatar age) are examined, it is observed that while '12 years or older' group with 121 participants (45.3%) constitute the majority, it had been followed by '2-3 years' group with 35 participants (13.1%) and by 'less than one year' group with 34 participants (12.7%). Considering the marital status of the participants, 123 (39.8%) were single and 86 (32.2%) were married. When the education level is examined, it is seen that 79 (26.6%) of the participants have Master's degree or above, while 71 (26.6%) have Bachelor's degree. When the employment and income status of the participants are examined, it is seen that 99 (37.1%) of the participants are full-time employed and 94 (35.2%) have an income of above $60,000.

Findings Regarding the Purchasing Habits of the Participants

In this part of the study, the findings of SL users regarding their purchasing habits are given. There has been a change in the number of respondents due to some additional descriptive questions added as the online survey distribution continues. While adding questions, the feedback of the participants was used.

Figure 12.

Frequency of Product Purchases



In the questionnaire study, in which 267 responses were obtained in total, some statements were added while the survey was being distributed. In Figure 12, one of the aforementioned questions, question 12, and the data obtained from 221 participants, on how often they make purchases. While 63 (28.5%) of the respondents make purchases more than once a week, 49 (22.2%) purchase once a week and 23 (10.4%) purchase every day.

Table 2.

Purposes of Products Purchase

For	***N***	**%**
an event	120	17,5
group theme	83	12,1
special days	96	14,0
getting a good deal or price	130	19,0
feeling happy	118	17,2
keeping up with the fashion	96	14,0
other	43	6,3
Total	686	**100**

The results of another descriptive question created with the feedback of the participants mentioned earlier are shown in Table 2. When the table is examined, participants mostly purchase products for getting a good deal or price, an event, and feeling happy.

Table 3.

Frequently Purchased Products/Services

Product/Service	***N***	**%**
Clothes	225	19
Shoes	171	14,4
Hair	168	14,2
Accessories	158	13,3
Vehicles	64	5,4
Home and Garden	151	12,8
Real Estate	65	5,5
Art	65	5,5
Scripts	54	4,6
Weapons	23	1,9
Other	40	3,4
Total	1184	**100**

Participants were asked what they often purchase in SL, and as can be seen in Table 3, some categories were directed, and they were allowed to choose more than one option. The data obtained from 267 participants can be observed in the table. According to the data obtained, SL users purchase mostly clothes, followed by shoes, hair, and accessories.

Table 4.

Second Life Store Names

	N	**%**
Blueberry	23	4,8
Addams	17	3,6
Marketplace	14	2,9
Truth	13	2,7
Many/ too many	54	11,3
Hilly Haalan	10	2,1
Varies/ depends	13	2,7
Different/any/particular in-world stores	27	5,6
Events	10	2,1
Doux	8	1,7
Ison	6	1,3
Lunar	6	1,3
Left blank	5	1
Freebies	4	,8
Other	268	56,1
Total	478	**100**

Participants were asked where they make their purchases. As a result, some participants stated one or more names, while others answered, "too much to mention here" (11,3%). The answers were tried to be divided into categories and the store names mentioned less than 5 times were included in the 'other' category. "Blueberry" and "Addams" stores were the most prominent stores among the responses.

Table 5.

Virtual World Experience Preference other than Second Life

	N	**%**
Yes	48	18
No	139	52,1
Have already	29	10,9
Had experienced and did not like it	24	9
Possibly but do not know any	19	7,1
Left blank	8	3
Total	267	**100**

Respondents were asked whether they want to experience other virtual worlds beyond SL, and if so which one they would most. This open-ended question has been answered in different ways. The responses were combined into six categories, as can be seen in Table 5. Although they were asked about the virtual world, they would like to experience the most, general answers were given and the names "Meta, Sansar, OpenSim, Kitely, Decentraland" were frequently encountered in the answers in the 'yes' category. In the 'have already' category, the names "OpenSim, Kitely, Sansar" are in the majority. In the 'had experienced and did not like it' category, participants mentioned that they had experienced other virtual worlds before but were not satisfied and preferred SL (e.g., " I've attended individual events in Kitely and Virbela. I haven't found any other place with the richness of SL. I've bought a Quest 2 VR headset but the virtual worlds there are flat and anemic). The answers of the 'Possibly but do not know any' group often mention that they are open to experiencing a new virtual world, but do not know which ones are good. It was observed that 139 participants were in the 'no' category and they constituted more than half of the answers. They stated that there is no other virtual world they prefer and they do not think about it (e.g., "No other virtual worlds are as advanced and complete as SL currently. Current metaverse products are comical in design and use.").

Table 6.

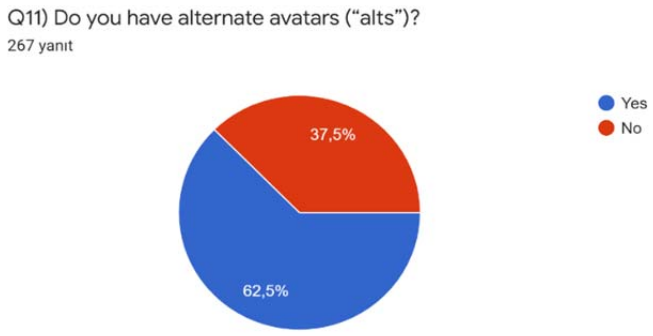
Reason for Joining to Second Life

Product/Service	***N***	**%**
Customizing and content creation	32	8,5
Education	17	4,5
Curiosity	42	11,1
Business	23	6,1
Recommendation from someone	57	15,1
Socialization	78	20,7
For role-playing and things that cannot be done in RL	44	11,7
Escaping from RL	26	6,9
Covid-19	7	1,9
Left blank	9	2,4
Exploring	42	11,1
Total	337	**100**

In the questionnaire form, the participants were asked "Q17) What attracted you to Second Life?" as open-ended question and different answers were obtained. The answers obtained were divided into some categories as can be seen in Table 6. Each answer was not included in only one category, but it was placed in more than one category according to the answers. As it is understood from the answers, many people prefer SL for socialization purposes (according to the answers of 78 participants), and after the answer given by 57 participants, those who joined SL on the recommendation of someone (from family or friends) also draw attention. There are 44 participants who stated that they participated in SL for role playing and doing things that cannot be done in real life. Responses such as "Philip Rosedale's Ted talk" were also included in the 'curiosity' group, which included participants who stated that they came out of curiosity. In other answers, the reasons for joining SL are due to purposes such as ability to customize and content creation, education, business, escaping from RL exploring and Covid-19.

Figure 13.

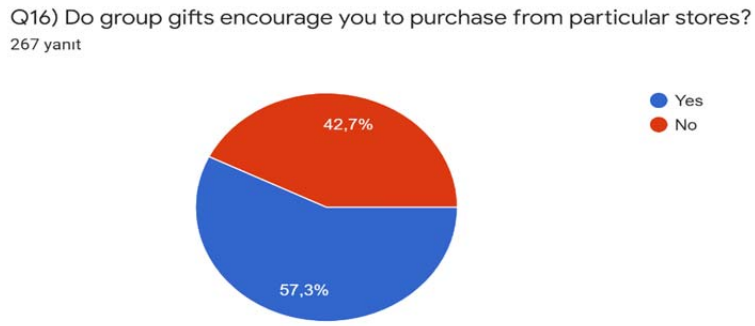
Information about Alternate Avatars



During the research period, it was observed that some of the Second Life users also had other avatars called "alts". These "alts", which are owned for different reasons, are sometimes used by users while shopping. Group membership is possible up to a certain number of groups in SL, and merchants often provide their members with products for free or for a modest fee. Therefore, sometimes users have other avatars. With these avatars, they can become members of other groups and receive gift items. The question in Figure 13 was directed to the participants and it was aimed to determine whether the users who often purchase have "alts" or not. 167 (62.5%) of the respondents stated that they have alternate avatars, while 100 (37.5%) of them stated that they do not have it.

Figure 14.

Determining the Effect of Group Gifts



As stated, when explaining the figure about "Alternate avatars", merchants offer gifts to those who are members of their store's groups. With this question, it is aimed to determine whether group gifts have an effect on the choice of store to purchase. As can be seen in Figure 14, 153 (57.3%) of the participants stated that group gifts encourage them to purchase from certain stores, while 114 (42.7%) stated the opposite.

Descriptive Statistical Analysis

In Table 7, the mean (MV), standard deviation (S.D.), skewness (S) and kurtosis (K) values obtained during the analysis are given. The mentioned values were examined in order to determine whether the data were normally distributed. Gürbüz and Şahin (2018) mention that skewness is used to understand the direction in which the values are skewed, and that the kurtosis value expresses the pointed appearance if the value is in a positive direction, or it expresses a flattened appearance in the negative direction. The values of kurtosis and skewness between ±2.5 indicate the conformity of the data to the normal distribution (Kılıçaslan, 2019; Yıldız et al., 2021).

Table 7.

Descriptive Statistical Analysis

Descriptive Statistical Analysis					
	N	***MV***	***S.D.***	***S***	***K***
Perceived Ease of Use (PEOU)					
PEOU1. SL was easy to use for product assessment.	267	3,81	,911	-,703	,219
PEOU2. I could quickly find the information I needed in SL.	267	3,60	1,040	-,499	-,689
PEOU3. SL was a user-friendly site.	267	3,81	,994	-,752	,131
PEOU4. My interaction with SL was clear and understandable.	267	3,97	,903	-,984	,985
Perceived Usefulness (PU)					
PU1. SL provided good quality information.	267	3,61	,924	-,368	-,190
PU2. SL improved my performance in assessing product features.	267	3,51	,975	-,418	-,142
PU3. SL increased my effectiveness in assessing product features.	267	3,55	,922	-,335	-,243

PU4. SL was useful for assessing product.	267	3,65	,967	-,600	,070
Enjoyment (ENJ)					
ENJ1. I found my visit to SL to be interesting.	267	4,29	,783	-1,322	2,445
ENJ2. I found my visit to SL to be entertaining.	267	4,20	,920	-1,172	1,171
ENJ3. I found my visit to SL to be enjoyable.	267	4,23	,871	-1,193	1,431
ENJ4. I found my visit to SL to be pleasant.	267	4,18	,900	-1,392	2,470
Trust (TRST)					
TRST1. I felt that SL was honest.	267	3,67	,879	-,367	,109
TRST2. I felt that SL was trustworthy.	267	3,66	,900	-,372	,118
TRST3. I felt that SL cared for customers.	267	3,56	,981	-,476	-,093
TRST4.I felt that SL provided me with good service.	267	3,81	,938	-,760	,615
Perceived Social Presence (PSP)					
PSP1. There was a sense of human contact in SL.	267	3,48	1,236	-,341	-,966
PSP2. There was a sense of sociability in SL.	267	3,61	1,246	-,527	-,857
PSP3. There was a sense of human warmth in SL.	267	3,43	1,216	-,305	-,979
Telepresence (TEL)					
TEL1. I forget about my immediate surroundings when I am in SL.	267	3,48	1,171	-,490	-,622
TEL2. Browsing SL often makes me forget where I am.	267	3,27	1,211	-,280	-,872
TEL3. After browsing SL, I feel like I come back to the “real world” after a journey.	267	3,34	1,170	-,335	-,851
TEL4. Using a virtual world creates a new world for me, and this world suddenly disappears when I stop using it.	267	3,28	1,177	-,276	-,828
Attitude (ATT)					
ATT1. I had positive feelings about buying a product from SL.	267	4,01	,738	-,752	1,218
ATT2. The thought of buying a product from SL was appealing to me.	267	3,98	,858	-1,072	1,897
ATT3. It was a good idea to buy a product from SL.	267	3,98	,813	-,720	,751

The intention to purchase virtual products/services of 297 participants participating in the study was measured with 26 items. The mean, standard deviation, skewness and kurtosis values of each factor are given in Table 7. When all item ranges are examined in general according to the five-point Likert scale, it is seen that they are graded between 3.27 and 4.29. Regarding the items of the PEOU scale, which consists of four items, it is in the range of 3.60-3.97 and exhibits a normal distribution with the skewness- kurtosis values of -,984 and +,985. Another scale consisting of four items (PU) is in the range of 3.51-3.65, and the skewness and kurtosis values are +,070 and -.600, and it is seen that it is normally distributed. Regarding the items of the ENJ scale, it is in the range of 4.18-4.29, skewness and kurtosis values are -1.392 and +2,470, and it is seen that it is normally distributed. In TRST, on the other hand, item values are between 3.56 and 3.81, and the values of skewness and kurtosis are -,760 and +,615, which is seen to be normally distributed. PSP items, which consist of three items, are in the range of 3.43-3.48, and the skewness-kurtosis values are -.305 and -.979, and it is observed that there is a normal distribution. While the items of the TEL scale are between 3.27 and 3.48, the skewness and kurtosis values are between -.276 and -.872. ATT, the last scale used in the study, consists of three items, two of which were determined as 3.98 and the other as 4.01. The skewness and kurtosis values range from -1.072 to +1.897. With the results obtained, it is observed that the last two scales are also normally distributed.

Reliability and Validity Analysis

In this section, the reliability and validity analysis of the study are given. Validity and reliability can be achieved more easily in quantitative research than in qualitative research (Yaşa Özeltürkay et al., 2017). In social science research, it is necessary to determine whether the scales measure consistently or whether there is constancy between the scale items. The most common analysis used in this context is the reliability analysis. It shows whether a measurement tool consistently measures the conceptual structure in question with a single measurement (Gürbüz & Şahin, 2018). The Cronbach Alpha (α) number is being used to test the measurement reliability. When the literature is reviewed, it is observed that various classifications are made. Kılıç (2016) mentions that $\alpha<0.5$ is unacceptable, $0.5\leq\alpha<0.6$ weak, $0.6\leq\alpha<0.7$ is acceptable, $0.7\leq\alpha<0.9$ is good, and $\alpha \geq 0.9$ is excellent as a classification that can be described as common. The reliability coefficient of 26 items in the questionnaire was achieved 0.945 (see Table 8). The result shows that the reliability of the scale is high.

Table 8.

Reliability Analysis

Cronbach's Alpha	***N***
,945	26

Validity, on the other hand, is checking whether the measurement tool complies with the rules and whether the data obtained as a result of the measurement really conveys the property to be measured (Gürbüz & Şahin, 2018). The sample size is important for factor analysis, which is frequently used by the marketing field (Yaşa, 2012), and one of the criteria used for sample adequacy is the KMO criterion (Gürbüz & Şahin, 2018). Kaiser-Meyer-Olkin (KMO) and Barlett Test of Sphericity measure the strength of the relationship between variables. Whether the data obtained is suitable for factor analysis is understood through these tests. Gürbüz and Şahin (2018) state that the KMO value indicates whether the data obtained from the sample is sufficient to perform factor analysis. Çokluk et al. (2014) mention that 0.50 is the lower limit and in cases where KMO≤0.50 is reached, the data are not suitable for factor analysis and cannot be interpreted. The fact that the Bartlett Sphericity test is significant ($p<0.05$) shows that the factor analysis of the relationship between the data is meaningful and can be applied (Gürbüz & Şahin, 2018).

Table 9.

Validity Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin of Sampling Adequacy		,919
Bartlett's Test of Sphericity	Approx. Chi-Square	6438,609
	df	325
	Sig.	,000

The results of the Kaiser-Meyer-Olkin (KMO) test (measure of sampling adequacy-KMO:0.919) and Barlett's Test of Sphericity (Approx. Chi-Square: 6438,609 and p:0.000), the relevance of factor analysis for this data has been proven. After providing the relevant prerequisites for factor analysis, varimax rotation principal component

factor analysis based on maximization of variance was applied to 26 variables (see Table 9). As a result of this analysis, seven factors were obtained, in which values with factor loadings above 0.50 were taken into account (see Table 10). These seven factors explain 82,143% of the total variance. In addition, Table 10 shows the relative importance of each sub-factor in explaining the total variance.

Table 10.

Factor Analysis Results

Factors	**Factor Loading**	**Eigenvalue**	**% of Variance**	**Cumulative %**	**Cronbach's Alpha**
Factor 1: Perceived Ease of Use		3,445	13,250	13,250	,880
PEOU1. *SL was easy to use for product assessment.*	,707				
PEOU2. *I could quickly find the information I needed in SL.*	,752				
PEOU3. *SL was a user-friendly site.*	,821				
PEOU4. *My interaction with SL was clear and understandable.*	,754				
Factor 2: Enjoyment		3,442	13,240	26,490	,947
ENJ1. *I found my visit to SL to be interesting.*	,810				
ENJ2. *I found my visit to Second Life to be entertaining.*	,831				
ENJ3. *I found my visit to Second Life to be enjoyable.*	,796				
ENJ4. *I found my visit to Second Life to be pleasant.*	,780				
Factor 3: Telepresence		3,246	12,484	38,973	,891
TEL1. *I forget about my immediate surroundings when I am in Second Life.*	,857				
TEL2. *Browsing Second Life often makes me forget where I am.*	,864				
TEL3. *After browsing Second Life, I feel like I come back to the "real world" after a journey.*	,806				
TEL4. *Using a virtual world creates a new world for me, and this world suddenly disappears when I stop using it.*	,767				

Factor 4: Trust		3,086	11,870	50,843	,898
TRST1. *I felt that Second Life was honest.*	,843				
TRST2. *I felt that Second Life was trustworthy.*	,865				
TRST3. *I felt that Second Life cared for customers.*	,648				
TRST4. *I felt that Second Life provided me with good service.*	,633				
Factor 5: Perceived Social Presence		2,903	11,164	62,007	,952
PSP1. *There was a sense of human contact in Second Life.*	,903				
PSP2. *There was a sense of sociability in Second Life.*	,875				
PSP3. *There was a sense of human warmth in Second Life.*	,889				
Factor 6: Perceived Usefulness		2,837	10,913	72,920	,921
PU1. *Second Life provided good quality information.*	,507				
PU2. *Second Life improved my performance in assessing product features.*	,818				
PU3. *Second Life increased my effectiveness in assessing product features.*	,855				
PU4. *Second Life was useful for assessing product.*	,702				
Factor 7: Attitude		2,398	9,223	82,143	,902
ATT1. *I had positive feelings about buying a product from Second Life.*	,785				
ATT2. *The thought of buying a product from Second Life was appealing to me.*	,761				
ATT3. *It was a good idea to buy a product from Second Life.*	,742				

In Table 10, the factor analysis results of 26 items regarding the metaverse users' opinions about their intention to purchase virtual products/services in the questionnaire form are presented.

Factor 1: PEOU: The items determining the PEOU were subjected to factor analysis and the result of this analysis emerged as the first factor explaining 13,250% of the total variances. The highest contribution to explaining the first factor was with "Second Life

was a user-friendly site" and the lowest contribution was explained by "Second Life was easy to use for product assessment". In addition, the reliability coefficient value was found to be 0.880. If the result of the reliability analysis is above 0.60, it indicates that the test is meaningful and reliable.

Factor 2: Enjoyment: In the second factor, which explained 13.240% of the total variance, factor loads were found to be between 0.780 and 0.831, and the Cronbach's alpha coefficient was 0.947. Of the four items explaining this factor, the highest contribution was "ENJ2" (,831), and the lowest contribution was " ENJ4" (,780).

Factor 3: Telepresence: The telepresence factor, which includes four items, explains 12,484% of the total variance and was defined as the third factor. According to this result, the item that contributed the most in explaining this factor was "TEL2" (.864), while the least contribution was "TEL4" (.767). The Cronbach's Alpha coefficient, which was used to test the reliability of the scale utilized in the study, is =, 891. It shows that the internal consistency between the items is at an acceptable level and the scale is reliable.

Factor 4: Trust: The trust factor, which includes four items, explains 11,870% of the total variance and was defined as the fourth factor. Factor loadings were found between 0.633 and 0.865 and Cronbach's alpha coefficient was 0.898. According to this result, the item that contributed the most in explaining this factor was related to the trustworthiness of the place of purchase (,865), while the lowest contribution was related to receiving good service (,633).

Factor 5: Perceived Social Presence: The Perceived Social Presence factor, which includes three items, explains 11,164% of the total variance and was defined as the fifth factor. The Cronbach's Alpha coefficient, which was used to test the reliability of the scale utilized in the study, is =,952. The item that contributed the most in explaining this factor was "PSP1" (,903), while the lowest contribution was "PSP2" (,875). The middle item is "PSP3" (,889).

Factor 6: Perceived Usefulness: The perceived usefulness factor, which includes four items, explains 10,913% of the total variance and was defined as the sixth factor. Factor loadings were found between 0.507 and 0.855 and Cronbach's alpha coefficient was 0.921. According to this result, the item that contributed the most in explaining this factor was related to the providing quality information (,855), while the lowest contribution was related to effectiveness in assessing product features (,507).

Factor 7: Attitude: Three items in the attitude factor explained 9.223% of the total variance. Of the three items explaining this factor, the highest contribution was "ATT1" (,785), and the lowest contribution was "ATT3" (,742). The other item that helps explain this factor is as follows; "ATT2"(,761). In addition, the reliability coefficient value was found to be 0.902.

Testing the Research Model

In the study, a total of 7 variables, including perceived ease of use, enjoyment, telepresence, trust, perceived social presence, perceived usefulness and attitude, were used, and the mean and standard deviation values of these variables are given in Table 11.

Table 11.

Descriptive Statistics

	Mean	**Std. Deviation**	**N**
PEOU	3,7987	,82658	267
ENJ	4,2266	,80859	267
TEL	3,3436	1,02604	267
TRST	3,6742	,80972	267
PSP	3,5069	1,17809	267
PU	3,5824	,85139	267
ATT	3,9888	,73596	267

When the variables were examined, it was concluded that the enjoyment variable (4.22) had the highest average and the telepresence variable (3.34) had the lowest average.

Multiple Regression Analysis

Regression analysis refers to the explanation of the relationship between a dependent variable and the independent variable or variables that are thought to have an impact on this dependent variable, with a model. It investigates the cause-effect relationship between the variables. If the impact of an independent variable on a simple dependent variable is investigated, simple regression analysis is applied, and if the impact of two

or more variables on the dependent variable is investigated, multiple regression analysis is applied (Gürbüz & Şahin, 2018).

Multiple regression analysis was used in this study. The "enter" method was used in the regression analysis. Through this analysis, it was determined what percentage of the dependent variable was explained by the independent variables included in the model. The existence of first-order autocorrelation was tested with Durbin-Watson statistics. Variance Inflationary Factor (VIF) was used in the diagnosis of multiple correlations. The fact that the VIF value is greater than 10, which indicates multicollinearity between the independent variables, indicates that there may be a multicollinearity problem between the variables (Gürbüz & Şahin, 2018). According to the results of the regression analysis, since it was seen that the VIF value did not exceed 10 for any independent variable, it was concluded that there was no problem of multicollinearity between the independent variables.

Another method used to determine the multicollinearity problem is the tolerance value of the variables. The multi-connection problem arises when the VIF values are greater than 10 and the tolerance values are less than 0.10 (Büyüköztürk, 2002). VIF values of independent variables (all VIF values of independent variables are less than 10) and tolerance values (all tolerance values of independent variables are greater than 0.10) do not create a multicollinearity problem (Serim & Cihangir Çankaya, 2015; Bilgin, 2018).

Table 12.

Regression Analysis Results for H_1, H_2, H_3 Hypotheses

Independent Variables	***Unstandardized β***	***Std. Error***	***Standardized β***	***t***	***Sig.***	***Tolerance***	***VIF***
(Constant)	,337	,183		1,843	,067		
PSP	,053	,033	,074	1,633	,104	,789	1,267
TEL	,101	,038	,121	2,668	,008	,782	1,278
PEOU	,717	,043	,696	16,659	,000	,927	1,079
Dependent Variable: *Perceived Usefulness* ***Independent Variables:*** *Perceived Social Presence (PSP), Telepresence (TEL), Perceived Ease of Use (PEOU)* ***R**=0,758**, R²**=0,575**, R²(adjusted)**=0,570**, F**=118,558**, p**=0,000* ***Durbin-Watson** = 1,905*							

In the specified regression model (see Table 12), PU was defined as dependent variable, and PSP, TEL and PEOU were defined as independent variables. The R^2 value, which is expressed as the explanatory power of the model, was calculated as 0.575. This value indicates that 57.5% of the change (variance) in the perceived usefulness, which is the dependent variable, is explained by the independent variables in the model. TEL and PEOU variables are statistically significant independent variables that predict the intrinsic PU dependent variable (t=2.668, p=0.008; t=16.659, p=0.000). However, the fact that the t value of PEOU of 16,659 is greater than the t value of TEL, 2.668, proves that PEOU better explains the changes in PU formation compared to TEL (Atılgan, 2012). According to the findings, there was no statistically significant relationship since p=0.104>0.05 was found in the relationship of the "Perceived Social Presence" variable with the Perceived Usefulness. Therefore, H_1 is not supported. Another point to be evaluated in the model is; Durbin-Watson value. The Durbin-Watson value (1.905) is significant for this model. Durbin-Watson values less than 1.5 and greater than 2.5 indicate an associated error value (Boymul and Yaşa Özeltürkay, 2017; Biztatar et al., 2019). VIF values (all VIF values less than 10) and tolerance values (all tolerance values greater than 0.10) of the independent variables indicate that there is no multicollinearity problem.

Table 13.

Regression Analysis Results for H_4, H_6, H_8 Hypotheses

Independent Variables	***Unstandardized β***	***Std. Error***	***Standardized β***	***t***	***Sig.***	***Tolerance***	***VIF***
(Constant)	1,047	,183		5,709	,000		
PU	,123	,051	,142	2,404	,017	,539	1,854
TRST	,230	,057	,253	4,043	,000	,482	2,073
ENJ	,392	,049	,430	7,965	,000	,647	1,544
Dependent Variable: Attitude ***Independent Variables:*** *Perceived Usefulness (PU), Trust (TRST), Enjoyment (ENJ)* **R**=0,709**, R²**=0,503**, R²(*adjusted*)**=0,497**, F**= 88,685**, p**=0,000 **Durbin-Watson** = 2,137							

According to Table 13, the established regression model is statistically significant (F=88,685, p=0.000). This model explains 50.3% (R^2=0.503) of the variation in the Attitude variable. It is significant to have a constant term in the model (t=5.709, p=0.000) and its coefficient in the model is 1.047. The fact that the independent variables do not show VIF values greater than 10 and the tolerance values are greater than 0.10 indicate that there is no multicollinearity problem. The presence of Perceived Usefulness, Trust, Enjoyment variables in the regression model was found to be statistically significant (t=2.404, p=0.017<0.05; t=4.043, p=0.000<0.05; t=7.965, p=0.000<0.05). Therefore, while three independent variables in the model contributed to the model, H_4, H_6, H_8 were supported. The Durbin-Watson value in the model was 2.137. This demonstrates that the error terms have a strong positive correlation.

Table 14.

Regression Analysis Results for H_7, H_{10} Hypotheses

Independent Variables	***Unstandardized β***	***Std. Error***	***Standardized β***	***t***	***Sig.***	***Tolerance***	***VIF***
(Constant)	2,526	,154		16,419	,000		
PSP	,288	,038	,420	7,540	,000	,803	1,245
TEL	,206	,044	,262	4,702	,000	,803	1,245
Dependent Variable: Enjoyment ***Independent Variables:*** *Perceived Social Presence (PSP), Telepresence (TEL)* **R**=0,585**, R²**=0,342**, R²(*adjusted*)**=0,337**, F=** 68,739**, p**=0,000 **Durbin-Watson** = 1,746							

In the regression analysis performed (see Table 14), the R^2 value was calculated as 0.342. This shows that 34% of Enjoyment is explained by perceived social presence and telepresence. The Durbin-Watson value of 1.746 shows a strong positive correlation between the error terms. When the VIF values and tolerance values were examined, it was observed that the variables did not show VIF values greater than 10 and the tolerance values were greater than 0.10. When t values are analyzed, perceived social presence with a high t value explains the changes in enjoyment better than telepresence. As a result of the regression analysis, the relationship between perceived social presence and telepresence with enjoyment was obtained as p=0.000 (p=0.00<0.05). Therefore, the coefficient obtained was statistically significant, and the H_7 and H_{10} hypotheses were supported.

Table 15.

Regression Analysis Results for H_5, H_9 Hypotheses

Independent Variables	***Unstandardized β***	***Std. Error***	***Standardized β***	***t***	***Sig.***	***Tolerance***	***VIF***
(Constant)	2,514	,175		14,391	,000		
PSP	,175	,043	,254	4,024	,000	,803	1,245
TEL	,164	,050	,207	3,285	,001	,803	1,245
Dependent Variable: Trust ***Independent Variables:*** *Perceived Social Presence (PSP), Telepresence (TEL)* **R**=0,393**, R²**=0,154**, R²(*adjusted*)**=0,148**, F**=24,108**, p**=0,000 **Durbin-Watson** = 1,943							

In the regression model in Table 15, Perceived Social Presence and Telepresence were defined as independent variables, while Trust was defined as dependent variable. The R^2 value, which is expressed as the explanatory power of the model, was calculated as 0.154. This value indicates that 15.4% of the change (variance) in the trust, which is the dependent variable, is explained by the independent variables in the model. The purpose of regression analysis, which purpose is not to obtain a high R^2 value, is to obtain reliable estimates of the regression coefficients and to make statistical inferences, and it is stated that it is not unusual to obtain a low R^2 value in social sciences (Wooldridge, 2009; Gujarati, 2004, as cited in Atılgan, 2012). Perceived Social Presence and Telepresence variables are statistically significant independent variables that predict the intrinsic Trust dependent variable (t=4.024, p=0.000; t=3.285, p=0.001). Additionally, the Durbin-Watson value (1,943) is significant for this model. The tolerance value of both independent variables was >0.10 (0.803 >0.10), and their VIF values remained below 10. This shows that there is no multi-connection problem.

In order to see the results of all hypotheses more clearly, the Summary of Hypothesis Testing (Table 16) table has been prepared.

Table 16.

Summary of Hypothesis Testing

Hypotheses	Significance Levels	Result
H_1: Perceived social presence has a positive impact on the perceived usefulness in Second Life.	,104	*not supported*
H_2: Telepresence has a positive impact on the perceived usefulness in Second Life.	,008	supported
H_3: Perceived ease of use has a positive impact on the perceived usefulness in Second Life.	,000	supported
H_4: Perceived usefulness has a positive impact on attitudes in Second Life.	,017	supported
H_5: Perceived social presence has a positive impact on trust in Second Life.	,000	supported
H_6: Trust has a positive impact on attitudes in Second Life.	,000	supported
H_7: Perceived social presence has a positive impact on the enjoyment in Second Life.	,000	supported
H_8: Enjoyment has a positive impact on attitudes in Second Life.	,000	supported
H_9: Telepresence has a positive impact on trust in Second Life.	,001	supported
H_{10}: Telepresence has a positive impact on enjoyment in Second Life.	,000	supported

In Table 16, the effect levels of the dimensions with a P value less than 0.05 were found to be statistically significant and the relevant hypotheses were supported. Accordingly, as a result of the analyzes made, it was concluded that the H_2, H_3, H_4, H_5, H_6, H_7, H_8, H_9 and H_{10} hypotheses were statistically significant, while the H_1 hypothesis was not supported.

4. DISCUSSION AND CONCLUSION

Businesses act very interactively in order to keep up with the rapid steps of the age. In particular, they have to respond to the competition and meet the competitive struggle with optimum cost. In recent years, competition has become more challenging in virtual markets, apart from physical ones. While the change in the world reveals that the tendency towards virtual markets has increased, it also shows that an explanatory feature of consumer trends. Along with the importance of digitalization, businesses are also developing their virtual market strategies. Dominating the virtual markets necessitates changing the known and conventional methods (Çelikkol, 2022).

World brands such as Gucci's collaboration with Roblox and Zepeto, Ralph Lauren's collaboration with Roblox and Zepeto, Louis Vuitton's collection for League of Legends, Vans' entry into Roblox, Nike's virtual apparel sales through Zepeto, Balenciaga, Samsung, Hyundai, Pepsi and Coca Cola are interested in and invest in metaverse platforms (Averbek & Türkyılmaz, 2022; Çetinkaya & Atsan, 2022). This interest of world brands is not a new phenomenon. In the past, many brands (e.g., Adidas, BMW, Mercedes Benz, Philips, American Apparel) have existed within Second Life as mentioned earlier. However, they did not continue their existence.

According to Barnes et al. (2015), the failure of businesses is due to their inability to create powerful brand interactions and relationships with customers. Hemp (2007), on the other hand, mentions that the brand building initiatives of real-life businesses in virtual environments are not enough just by their existence in the virtual world, and there ought to be activities that will increase the visibility of the brand, such as taking part in events with charities. In this sense, it was appropriate to examine the consumer behavior of SL, which is the closest and largest platform to the metaverse (Gent, 2022), in order for companies to get lessons for their past mistakes.

In this context, some tendencies of Second Life users (residents) have been tried to be revealed. In the study, the effects of perceived social presence, perceived ease of use, telepresence, attitude, enjoyment, trust, and perceived usefulness were tried to be measured. The question in the first part of the study was about whether they make purchases, and 14 participants stated that they do not purchase virtual products/services and they were not included in the analysis. In the questions to obtain general information about the participants, it was understood that 168 of the participants were female in real life, 177 of them have female avatar, 123 were single, 71 of them have Bachelor's degree, 99 were working full time, 94 had an income of over $60,000. While 63 of these respondents make purchase more than once a week, they mostly do it for

getting a good deal or price,an event and feeling happy, and clothes, shoes, hair and jewelry are the most frequently purchased ones, respectively.

The participants were asked to specify the store name, and the names of the stores named "Blueberry" and "Addams" came to the fore. When asked if they would like to experience another virtual world, 139 (52.1%) of 267 respondents answered "no" and supported by answers such as, "No, I have friends in Second Life, so cannot imagine spending time in another one". In addition, when the reasons for coming to SL are asked, participation for socialization comes to the fore, although there are many reasons.

In this study, it is intended to investigate the effects of PEOU, PU, ATT, ENJ, TRST, PSP and TEL on consumers' purchasing intention. In this context, 26 items in White Baker et al. (2019)'s study were adapted to the study. From the hypotheses created for the research, it was concluded that “PSP has a positive impact on the PU in SL" there was no effect ($p=0.104>0.05$). Other hypotheses "$p < 0.05$" were supported, only H_1 was not supported. White Baker et al. (2009) mention that Animesh et al. (2011) describes effects of external stressors on user's computer-generated involvement in addition demonstrate that PU, TRST, and ENJ are virtual involvement arbitrators on attitudes that are recognized to have a significant effect on the purchase intention. While White Baker et al. (2019) found that PSP has a positive effect on PU, the positive effect of TEL on PU is not supported in their study. While other results were parallel in this study, this result was the opposite.

The aim of the research was to find out the factors that affect the purchasing intentions of SL users, so it is thought that the information about the purchase intentions of the users of the most known metaverse platform will be useful for future studies and for companies considering entering such platforms. It is thought that SL should use this situation to its advantage, especially with the Metaverse coming to the agenda again recently. With an already committed audience, SL is always thought to be expanding but not in the position it deserves. As in the past, advertising can be focused on in order to attract world brands to its own structure. Companies can experience different strategies suggested by academics instead of repeating the mistakes they have made in the past and not only maintaining their presence on the platforms. For future research, it is possible to make comparisons between different platforms by diversifying the use of a single platform, which is the limitation of the study. By increasing the sample size, the reliability of the research can be further increased. In addition, future studies can perform interviews with suppliers who have a brand in SL.

REFERENCES

Abrams, A. M. H., Dautzenberg P. S. C., Jakobowsky, C., Ladwig, S., & Pütten, A. M. R. (2021). A theoretical and empirical reflection on Technology Acceptance Models for autonomous delivery robots. Proceedings of the 2021 ACM/IEEE International Conference on Human-Robot Interaction. https://doi.org/10.1145/3434073.3444662

Adams, D. A., Nelson, R. R., & Todd, P. A. (1992). Perceived usefulness, ease of use, and usage of information technology: A replication. MIS Quarterly, 16(2), 227-247.

Agarwal, R., & Karahanna, E. (2002). Time Flies when You're Having Fun: Cognitive Absorption and Beliefs about Information Technology Usage, MIS Quarterly, 24(4), 665–694. doi: 10.2307/3250951

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), Action-control: From cognition to behavior (pp. 11–39). Springer.

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Progress, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-t

Ajzen, I. (2008). Consumer attitudes and behavior. In C. P. Haugtvedt, P. M. Herr, & F. R. Kardes (Eds.), Marketing and consumer psychology series (pp. 525–548). Lawrence Erlbaum Associates.

Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. Human Behavior and EmergingTechnologies, 2020, 1-11. doi: 10.1002/hbe2.195

Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: attitudes, intentions, and perceived behavioral control. Journal of Experimental Social Psychology, 22(5),453-474. doi: 10.1016/0022-1031(86)90045-4

Alatepeli, B. (2022). Türkiye'de tek pencere sistemi kullanımını etkileyen faktörler için yapısal eşitlik modeli kullanarak bir kabul modeli geliştirilmesi [Doctoral dissertation, Çukurova University]

Alharbi, S. T. (2012). Users' acceptance of cloud computing in Saudi Arabia: an extension of technology acceptance model. International Journal of Cloud Applications and Computing (IJCAC), 2(2), 1-11.

Anıl, F., Alankuş, Z. (2022). Metaverse evreninde pazarlama: 7p pazarlama karması üzerinden bir değerlendirme. Uluslararası Halkla İlişkiler ve Reklam Çalışmaları Dergisi, 5(1), 133-167.

Animesh, A., Pinsonneault, A., Yang, S.-B., & Oh, W. (2011). An odyssey into virtual worlds: exploring the impacts of technological and spatial environments on intention to purchase virtual products. MIS Quarterly, 35(3), 789–810. https://doi.org/10.2307/23042809

Arı, G. (2018). A case study on marketing activities of nonprofit organizations in virtual world: second life-live and learn in Kenya “feed a smile example” [Master's thesis, Çağ University]

Arvas, İ. S. (2022). Gutenberg galaksisinden meta evrenine: üçüncü kuşak internet,web 3.0. Academic Journal of Information Technology, 13(48), 53-71. doi: 10.5824/ajite.2022.01.003.x

Aşkan, H. (2022). Katı olan her şey pikselleşiyor, dünyevi olan her şey sanallaşıyor: Metaverse, yeni çağın sinemadaki ruhu ve Ready Player One. In E. Eroğlu, H. Ayaz (Eds.) Disiplinlerarası bir alan olarak dijitalleşme (pp. 27-46). Eğitim Yayınevi.

Atik, E. (2015). Turizmde akıllı telefon kullanımının teknoloji kabul modeli kapsamında değerlendirilmesi [Master's thesis, Anadolu University]

Atılgan, K. Ö. (2012). Marka denkliğini oluşturan boyutların referans fiyat oluşumuna etkisinin hafif ticari araç markaları üzerinde incelenmesi [Doctoral dissertation, Çukurova University]

Averbek, G. S., Türkyılmaz, C. A. (2022). Sanal evrende markaların geleceği: yeni internet dünyası metaverse ve marka uygulamaları. In M. Baş, İ. Erdoğan Tarakçı (Eds.). Sosyal bilimlerde multidisipliner çalışmalar teori, uygulama ve analizler (pp. 99-139). Efe Akademi Yayınları.

Ayvaz, İ. (2020). Oyun içi satın alımını etkileyen faktörler: Türkiye pazarına yönelik keşifsel bir çalışma. Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi (ASEAD), 7(1), 162-172.

Bağlıbel, M., Samancıoğlu, M., & Summak, M. S. (2010). Okul yöneticileri tarafından e-okul uygulamasının genişletilmiş teknoloji kabul modeline göre değerlendirilmesi. Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 7(13), 331-348.

Barnes, S. J., & Mattsson, J. (2011). Exploring the fit of real brands in the Second Life virtual world, Journal of Marketing Management, 27(9), 934-958. doi: 10.1080/0267257X.2011.565686

Barnes, S. J., Mattsson, J., & Hartley, N. (2015). Assessing the value of real-life brands in Virtual Worlds. Technological Forecasting and Social Change, 92, 12–24. doi:10.1016/j.techfore.2014.10.017

Bartle, R. A. (2003). Designing virtual worlds. New Riders Games

Başgöze, P. (2010). Teknoloji kabul modelinin teknolojik yatkınlık ve marka kredibilitesi değişkenleri eklenerek genişletilmesi: satın alma eğilimine uyarlanması [Doctoral dissertation, Hacettepe University]

Bayraktar, E., & Kaleli, F. (2007). Sanal gerçeklik uygulama alanları. Akademik Bilişim, 2007, 1-6.

Bell, M. W. (2008). Toward a definition of "virtual worlds". Journal of Virtual Worlds Research: Past, Present & Future, 1(1), 1-5.

Bilgin, M. (2018). Ergenlerde sosyal medya bağımlılığı ve psikolojik bozukluklar arasındaki ilişki. The Journal of International Scientific Researches, 3(3), 237-247.

Biztatar, H., Yaşa Özeltürkay, E., & Yalçıntaş, D. (2019). Olumsuz Elektronik Ağızdan Ağıza Pazarlama İletişimine Etki Eden Faktörlerin Belirlenmesi: Z kuşağı Örneklemi. Journal of Yasar University, 2019, 14 (Special Issue), 115-123.

Bonsu, S. K.; Darmody, A. (2008). Co-creating Second Life: market-consumer cooperation in contemporary cconomy. Journal of Macromarketing, 28(4), 355–368. doi:10.1177/0276146708325396

Boss, S. (2007, September 09). Even in a virtual world, 'stuff' matters. The New York Times Online Version. Retrieved April 03, 2022, from https://www.nytimes.com/2007/09/09/business/yourmoney/09second.html

Boymul, E., Yaşa Özeltürkay, E. (2017). İş tatmini ve örgütsel bağlılığın tükenmişlik sendromu üzerindeki etkisi: bir sanayi kuruluşunda uygulama. Journal of Yasar University, 12(46), 93-102.

Büyüköztürk, Ş. (2002). Sosyal Bilimler İçin Veri Analizi El Kitabı. Pegem Akademi Yayıncılık.

Castronova, E. (2004) Synthetic worlds. The University of Chicago Press.

Chang, C. J., Hsu, B. C. Y., & Chen, M. Y. (2022). Viewing sports online during the covid-19 pandemic: the antecedent effects of social presence on the technology acceptance model. Sustainability, 14(1), 341. doi: 10.3390/su14010341

Cheema, U., Rizwan, M., Jalal, R., Durrani, F., & Sohail., N. (2013). The trend of online shopping in 21st century: impact of enjoyment in tam model. Asian Journal of Empirical Research, 3(2), 131–141.

Chen, L., Gillenson, M.L., & Sherrell, D.L. (2002). Enticing online consumers: an extended technology acceptance perspective, Information & Management 39(8), 705–719. https://doi.org/10.1016/S0378-7206(01)00127-6

Choi, G., & Chung, H. (2013). Applying the technology acceptance model to social networking sites (sns): impact of subjective norm and social capital on the acceptance of sns. International Journal of Human-Computer Interaction, 29(10), 619–628. doi:10.1080/10447318.2012.756333

Choi, H. Y. (2022). Working in the metaverse: does telework in a metaverse office have the potential to reduce population pressure in megacities? Evidence from young adults in Seoul, South Korea. Sustainability, 14(6), 1-17. doi: 10.3390/su14063629

Council of the European Union. (2022, March). Metaverse – virtual world, real challenges. Analysis and Research Team. Retrieved June 20, 2022, from https://www.consilium.europa.eu/media/54987/metaverse-paper-9-march-2022.pdf

Çabuk, S., Zeren, D., & Gökdağlı, N. (2017). E-devlet sistemine adaptasyonun teknoloji kabul modeliyle araştırılması. Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 26(3), 140-154.

Çağ University Virtual Worlds. (2022). ITL 314-Virtual worlds. Retrieved May 06, 2022, from https://www.virtualworldscaguniversity.com/itl-314-virtual-worlds-1

Çelik, Z. (2021). Tüketicilerin çevrimiçi bilgi arama sürecinde, bilgi edinme araçlarının satın alma niyetine etkisi ve bir araştırma [Doctoral dissertation, Marmara University]

Çetin, Ö. (2019). İşletme eğitiminde sanal dünya uygulamalarının öğrenci motivasyonu üzerine etkisi; ‘‘Second Life’’ örneği [Master's thesis, Çağ University]

Çetinkaya, S. (2021). Covid-19 döneminde sanal dünyalarin kâr amaci gütmeyen organizasyonlar üzerindeki etkisi: Second Life örneği [Master's thesis, Çağ University]

Çetinkaya, S., & Atsan, M. (2022). Dijital kimlik: Metaverse. In S. Karsu (Ed.). Pazarlamanın blok zincir deneyimi blockchain (pp. 109-130). Nobel.

Çokluk, Ö., Şekercioğlu, G., & Büyüköztürk, Ş. (2014). Sosyal Bilimler için çok değişkenli istatistik SPSS ve LISREL uygulamaları. Pegem Akademi.

Dadakoğlu, S. C., & Aksoy, Ş. (2020). Second Life sanal ortamının özellikleri ve sanat eğitimi kapsamında değerlendirilmesi. Intenational Journal of Human Sciences, 17(2), 485-512.

Damar, M. (2021). Metaverse ve eğitim teknolojisi. In T. Talan (Ed.) Eğitimde dijitalleşme ve yeni yaklaşımlar (pp. 169-192). Efe Akademi.

Davis, F. D. (1986) A technology acceptance model for empirically testing new end-user information systems: theory and results [Doctoral dissertation, Massachusetts Institute of Technology]

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340.

Davis, F. D., & Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model: three experiments. International Journal of Human-Computer Studies, 45(1), 19-45. https://doi.org/10.1006/ijhc.1996.0040

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. management science. 35(8), 982-1003.

Demirağ, F. (2020). Planlı davranış teorisi çerçevesinde elektronik ağızdan ağıza iletişimin satın almaya etkisi. İzmir Journal of Economics, 35(2), 241-253. doi: 10.24988/ije.202035203

Demirbağ, İ. (2020). Üç boyutlu sanal dünyalar. Açıköğretim Uygulamaları ve Araştırmaları Dergisi, 6(4), 97-112.

Dionisio, J. D. N., Burns, W. G., Richard, G. (2013). 3D Virtual worlds and the metaverse. ACM Computing Surveys, 45(3), 1–38. doi:10.1145/2480741.2480751

Doğan Südaş, H., & Yaşa Özeltürkay, E. (2016). Tüketicilerin konut satın alım sürecine etki eden faktörlerin belirlenmesi: Adana ilinde pilot bir uygulama. Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 25(3), 31-40.

Doğan, E. (2020). Simülasyon kuramı bağlamında oyun içi reklam: "İkinci Hayat" oyunu örneği [Master's thesis, Marmara University]

Dos Santos, R. P. (2009). Second Life physics: virtual, real or surreal? Journal fro Virtual Worlds Research, 2(1), 1-21. doi: 10.4101/jvwr.v2i1.383

European Parliament. (2022, June). Metaverse-opportunities, risks and policy implications. Retrieved June 20, 2022, from https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/733557/EPRS_BRI(2022)733557_EN.pdf

Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior: an introduction to theory and research. Reading, MA: Addison-Wesley.

Furber, M. (2009). Ethics & virtual worlds. Tabah Analytic Brief, Tabah Foundation.

Gadekallu, T. R., Huynh-The, T., Wang, W., Yenduri, G., Ranaweera, P., Pham, Q., Costa, D. B., & Liyanage, M. (2022). Blockchain for the metaverse: a review. arXiv, Cornell University. doi: 10.48550/ARXIV.2203.09738

Gefen, D. (2000). E-commerce: the role of familiarity and trust. Omega, 28(6), 725-737. https://doi.org/10.1016/S0305-0483(00)00021-9

Gefen, D., & Straub, D. (2003). Managing User Trust in B2C e-Services. E-service Journal, 2(2), 7-24. doi: 10.2979/ESJ.2003.2.2.7

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and tam in online shopping: an integrated model. MIS Quarterly, 27(1), 51-90. https://doi.org/10.2307/30036519

Gent, E. (2022). Lessons from a Second Life > before meta, Philip Rosedale created an online universe, IEEE Spectrum, 59(1), 19-19. doi: 10.1109/MSPEC.2022.9676346

Gujarati, D. N. (2004). Basic econometrics. (4th Edition), New York: McGraw-Hill.

Gül, L. M. (2011). İşbirlikçi mimari tasarım eğitiminde sanal dünya kullanımı. METU JFA, 25(2), 255-267. doi: 10.4305/METU.JFA.2011.2.14

Guo, C., Shim, J. P., & Otondo, R. (2010). Social network services in China: an integrated model of centrality, trust, and technology acceptance. Journal of Global Information Technology Management, 13(2), 76-99. doi: 10.1080/1097198X.2010.10856515

Guo, Y., & Barnes, S. (2009). Virtual item purchase behavior in virtual worlds: an exploratory investigation. Electron Commer Research, 9, 77-96. doi: 10.1007/s10660-009-9032-6

Guo, Y., & Barnes, S. (2011). Purchase behavior in virtual worlds: An empirical investigation in Second Life. Information & Management, 48(7), 303-312. doi: 10.1016/j.im.2011.07.004

Gürbüz, S., & Şahin, F. (2018). Sosyal bilimlerde araştırma yöntemleri. Seçkin Yayıncılık.

Ha, S., & Stoel, L. (2009). Consumer e-shopping acceptance: antecedents in a technology acceptance model. Journal of Business Research, 62(5), 565-571. https://doi.org/10.1016/j.jbusres.2008.06.016

Hamari, J., & Keronen, L. (2017). Why do people buy virtual goods: a meta-analysis. Computers in Human Behavior, 59-69. http://dx.doi.org/10.1016/j.chb.2017.01.042

Hamari, J., Alha, K., Järvelä, S., Kivikangas, J. M., Koivisto, J., & Paavilainen, J. (2017). Why do players buy in-game content? An empirical study on concrete purchase motivations. Computers in Human Behavior, 68, 538–546. doi:10.1016/j.chb.2016.11.045

Hassanein, K., & Head, M. (2007). Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. International Journal of Human-Computer Studies, 65(5), 689-708. https://doi.org/10.1016/j.ijhcs.2006.11.018

Hassouneh, D., & Brengman, M. (2018, May). Shopping for virtual products in social virtual worlds: does user gender matter? 11th International conference on business, education, humanities and social sciences studies, İstanbul, Turkey. https://doi.org/10.17758/EARES1.EAP0518414

Hemp, P. (2006, June). Avatar-based marketing. Harvard Business Review Online Version. Retrieved May 05, 2022, from https://hbr.org/2006/06/avatar-based-marketing

Hemp, P. (2007, July). The demise of Second Life? Harvard Business Review Online Version. Retrieved May28, 2022, from https://hbr.org/2007/07/the-demise-of-second-life

Hollensen, S., Kotler, P., & Opresnik, M. O. (2022), Metaverse – the new marketing universe. Journal of Business Strategy. https://doi.org/10.1108/JBS-01-2022-0014

Igbaria, M., Zinatelli, N., Cragg, P., & Cavaye, A. L. M. (1997). Personal Computing Acceptance Factors in Small Firms: A structural equation model. MIS Quarterly, 21(3), 279-305.

Ingham, J., Cadieux, J., & Berrada, A. M. (2015). E-shopping acceptance: a qualitative and meta-analytic review. Information & Management, 52(1), 44-60. doi: 10.1016/j.im.2014.10.002

Işık, P. (2019). Online alışveriş yapan süpermarket tüketicilerinin tüketim tercihlerinin teknoloji kabul modeliyle açıklanması [Master's thesis, Karamanoğlu Mehmetbey University]

J. P. Morgan. (2022). Opportunities in the metaverse. Retrieved April 15, 2022, from https://www.jpmorgan.com/content/dam/jpm/treasury-services/documents/opportunities-in-the-metaverse.pdf

Kalyoncuoğlu, S. (2018). Tüketicilerin online alışverişlerindeki sanal kart kullanımlarının teknoloji kabul modeli ile incelenmesi. Afyon Kocatepe Üniversitesi Sosyal Bilimler Dergisi, 20(2), 193-213.

Kaplan, A. M., & Haenlein, M. (2009). The fairyland of Second Life: About virtual social worlds and how to use them, Business Horizons, 52(6), 563-564. doi:10.1016/j.bushor.2009.07.002

Karacıl, G. & Çınar, K. (2021). Turizm eğitiminde inovasyon. Turkish Studies - Education, 16(2), 895- 920. doi: 10.47423/TurkishStudies.49185

Karadağ, G. M. (2019). The democratization of luxury: profiling fashion consumers [Master's thesis, Marmara University]

Karagöz, C. (2022). Analyzing teachers' views toward the use of EBA during covid-19 pandemic based on the technology acceptance model [Master's thesis, Middle East Technical University]

Karagöz, Y., & Köstereliođlu, İ. (2008). İletişim becerileri değerlendirme ölçeğinin faktör analizi metodu ile geliştirilmesi. Dumlupınar Üniversitesi Sosyal Bilimler Dergisi, 21, 81-98.

Kedzior, R. (2014). How digital worlds become material: an ethnographic and netnographic investigation in Second Life.

Kılıç, S. (2016). Cronbach'ın Alfa güvenirlik katsayısı. Journal of Mood Disorders (JMOOD), 6(1), 47-48.

Kılıçaslan, H. (2019). Yaratıcı drama eğitim alan katılımcıların yaratıcılık düzeylerinin incelenmesi. H. Babacan, H. Şahin (Eds.). In ERASMUS International Academic Research Symposium in Educational and Social Sciences (pp.11-22). Asos Yayınevi.

Kim, D., Vorobel, O., & Kim, B. (2018). Students' Use of Second Life in Learning Spanish as a Foreign Language. Journal of Second Language Teaching and Research, 6(1), 109-142.

Kim, J. (2021). Advertising in the metaverse: research agenda. Journal of Interactive Advertising, 21(3), 141-144. doi: 10.1080/15252019.2021.2001273

Kim, T., & Biocca, F. (1997). Telepresence via television: two dimensions of telepresence may have different connections to memory and persuasion.Journal of Computer-Mediated Communication, 3(2), https://doi.org/10.1111/j.1083-6101.1997.tb00073.x

King, W. R., & He, J. (2006). A meta-analysis of the technology acceptance model. Information & Management, 43(6), 740–755. doi: 10.1016/j.im.2006.05.003

Kırıkcı, S., & Göktaş Kulualp, H. (2021). Planlı davranış teorisi çerçevesinde akademisyenlerin kongre turizmine katılma niyetlerinin belirlenmesi. Kocaeli Üniversitesi Sosyal Bilimler Dergisi, 2021(41), 79-95. doi: 10.35343/kosbed.903190

Koster, R. (2004) A virtual world by any other name? Retrieved from http://terranova.blogs.com/terra_nova/2004/06/a_virtual_world.html

Koufaris, M. (2002). Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior. Inf. Syst. Res., 13, 205-223. doi: 10.1287/isre.13.2.205.83

Külter Demirgüreş, B. (2015). Sosyal Sorumluluk projelerine yönelik tutumun, satın alma davranışı ve satın alma niyeti üzerindeki etkisi. Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 33(3), 47-74. doi: 0.17065/huiibf.89064

Kürüm, A. A. (2021). Pandemi döneminde mobil uygulamalar üzerinden yapılan alişverişin teknoloji kabul modeli ile incelenmesi [Master's thesis, Bahçeşehir University]

Kuznetcova, I., & Glassman, M. (2020). Rethinking the use of Multi-User Virtual Environments in education, Technology, Pedagogy and Education, 1-17. doi: 10.1080/1475939X.2020.1768141

Lee, L. H., Braud, T., Zhou, P., Wang, L., Xu, D., Lin, Z., Kumar, A., Bermejo, C., & Hui, P. (2021). All one needs to know about metaverse: a complete survey on technological singularity, Virtual Ecosystem, and Research Agenda. Journal of Latex Class Files, 14(8), 1-66.

Lee, W. H., Lin, C. W., & Shih, K. H. (2018). A technology acceptance model for the perception of restaurant service robots for trust, interactivity, and output quality, International Journal of Mobile Communications, 16(4), 361-376. doi: 10.1504/ijmc.2018.092666

Lee, Y., Kozar, K. A., & Larsen, K. R. T. (2003). The technology acceptance model: past, present, and future. Communications of the Association for Information Systems, 12(50), 752-780. doi: 10.17705/1CAIS.01250

Lehdonvirta, V. (2009). Virtual item sales as a revenue model: identifying attributes that drive purchase decisions. Electron Commer Res, 9, 97-113. doi: 10.1007/s10660-009-9028-2

Lewis, N. K., Marquet, M., Palmer, A., & Zhao, A. L. (2015). Enjoyment and social influence: predicting mobile payment adoption. The Service Industries Journal, 35(10), 537-554. doi: 10.1080/02642069.2015.1043278

Linden, M. (2021). Buying & selling Linden Dollars. Retrieved May 15, 2022 from https://lindenlab.freshdesk.com/support/solutions/articles/31000138105-buying-selling-linden-dollars

Lucatch, D. (2022). The future of brand opportunities in the metaverse. Forbes Business Council. Retrieved May 01, 2022, from https://www.forbes.com/sites/forbesbusinesscouncil/2022/04/13/the-future-of-brand-opportunities-in-the-metaverse/?sh=10e1efef709e

Marangunić, N., & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. Universal Access in the Information Society, 14(1), 81–95. doi:10.1007/s10209-014-0348-1

Martin, J. (2014). A few choice animations: nonverbal communication through production and consumption in Second Life. In J. Tanenbaum, M. S. El-Nasr, M. Nixon, (Eds.). Nonverbal Communication in virtual worlds: understanding and designing expressive characters (pp. 291-305). ETC Press.

Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. Information Systems Research. 2(3), 173-191. doi: 10.1287/isre.2.3.173

Messinger, P. R., Stroulia, E., Lyons, K., Bone, M., Niu, R. H., Smirnov, K., & Perelgut, S. (2009). Virtual worlds — past, present, and future: new directions in social computing. Decision Support Systems, 47(3), 204-228. doi: 10.1016/j.dss.2009.02.014

Momani, A. M. (2020). The Unified Theory of Acceptance and Use of Technology. International Journal of Sociotechnology and Knowledge Development, 12(3), 79–98. doi:10.4018/IJSKD.2020070105

Moon, J.-W., & Kim, Y.-G. (2001). Extending the TAM for a World-Wide-Web context, Information & Management, 38(4), 217–230. https://doi.org/10.1016/S0378- 7206(00)00061-6

Morgan, E. J. (2013). Virtual worlds: integrating "Second Life" into the history classroom. The History Teacher, 46(4), 547-559. http://www.jstor.org/stable/43264156

Mystakidis, S. (2022). Metaverse. Encyclopedia, 2(1), 486-497. doi: 10.3390/encyclopedia2010031

Nah, F. F. H., Eschenbrenner, B., & DeWester, D. (2011). Enhancing brand equity through flow and telepresence: a comparison of 2d and 3d virtual worlds. MIS Quarterly, 35(3), 731-747.

Narin, N. G. (2021). A content analysis of the metaverse articles. Journal of Metaverse, 1(1), 17-24.

Ng, W.C., Lim, W.Y.B., Ng, J.S., Xiong, Z., Niyato, D., & Miao, C. (2021). Unified resource allocation framework for the edge intelligence-enabled metaverse. arXiv, Cornell University. doi: 10.48550/arXiv.2110.14325

Oh, C. S., Bailenson, J. N., & Welch, G. F. (2018). A systematic review of social presence: definition, antecedents, and implications. Frontiers in Robotics and AI, 5(Article 114), 1-35. doi: 10.3389/frobt.2018.00114

Okçu, S., Köksalmış, G. H., Başak, E., & Calışır, F. (2019). Factors affecting intention to use big data tools: An extended technology acceptance model. In Industrial Engineering in the Big Data Era (pp. 401-416). Springer.

Okşar, G. (2021). Sürdürülebilir tüketim davranışı ve teknoloji kabul modeli: Letgo ve Dolap uygulamaları örneği [Master's thesis, Kocaeli University]

Oxford Analytica. (2022). Metaverse holds unknowable societal risks. Emerald Expert Briefings. https://doi.org/10.1108/OXAN-DB267012

Özer, G., Özcan, M., & Aktaş, S. (2010). Muhasebecilerin bilgi teknolojisi kullanımının Teknoloji Kabul Modeli (TKM) ile incelenmesi. Journal of Yasar University, 5(19), 3278 - 3293.

Page, T. (2011). Prospects for the design of electronic products in Second Life. Studies in Informatics and Control, 20(3), 293-303.

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. International Journal of Electronic Commerce, 7(3), 101-134. doi: 10.1080/10864415.2003.11044275

S. M. Park, & Kim, Y. G. (2022). A metaverse: taxonomy, components, applications, and open challenges. IEEE Access, 10, 4209-4251. doi: 10.1109/ACCESS.2021.3140175

S. Park, & Kim, S. (2022). Identifying world types to deliver gameful experiences for sustainable learning in the metaverse. Sustainability, 14(3), 1-14. doi: 10.3390/su14031361

Sağtaş, S. (2013). “Second Life” sanal yaşam dünyasında girişimcilik: avapreneurship (avatar girişimcilik) [Master's thesis, Çağ University]

Salimon, M. G., Sanuri, S. M. M., Aliyu, O. A., Perumal, S., & Yusr, M. M. (2021). E-learning satisfaction and retention: a concurrent perspective of cognitive absorption, perceived social presence and technology acceptance model. Journal of Systems and Information Technology, 23(1), 109-129. https://doi.org/10.1108/JSIT-02-2020-0029

Samira, B. A., & Rosyihan, H. M. (2021). What drives Indonesian adolescent gamers buying virtual product within leisure during pandemic? immersion versus telepresence. Eurasia: Economics & Business, 2(44), 31-41.

Second Life Wiki. (2022). History of Second Life. Retrieved April 07, 2022, from https://wiki.secondlife.com/wiki/History_of_Second_Life#:~:text=Second%20Life%20(SL)%20evolved%20as,went%20on%20to%20build%20it.

Second Life. (2022a). Premium member benefits. Retrieved May, 10, 2022, from https://secondlife.com/premium

Second Life. (2022b). About land. Retrieved May, 10, 2022, from https://secondlife.com/land

Segars, A. H., & Grover, V. (1993). Re-examining perceived ease of use and usefulness: a confirmatory factor analysis. MIS Quarterly 17(4), 517-525.

Semiz, B. B. (2021). Investigation of the effect of perceived risk and e-distrust, webrooming intention and webrooming behavior in the framework of theory of reasoned action. Journal of Management, Marketing and Logistics (JMML), 8(1), 53-63. http://doi.org/10.17261/Pressacademia.2021.1386

Serim, F., & Cihangir Çankaya, Z. (2015). Yetişkinlerin psikolojik yardım arama tutumlarının yordanması. Ege Eğitim Dergisi, 16(1), 177-198.

Seyhun, s., & Kurtuldu, G. (2020). Genişletilmiş teknoloji kabul modeli bağlamında mobil alışveriş uygulamalarının benimsenmesini etkileyen faktörler. Trakya Üniversitesi Sosyal Bilimler Dergisi, 22(1), 599-627. doi: 10.26468/trakyasobed.617630

Sharma, G. (2020). Factors influencing players to purchase in-game content. International Journal of Advanced Science and Technology, 29(7), 4004-4011.

Shih, H. P. (2004). An empirical study on predicting user acceptance of e-shopping on the Web. Information & Management, 41(3), 351-368. https://doi.org/10.1016/S0378-7206(03)00079-X

Short, J., Williams, E., & Christie, B. (1976). The social psychology of telecommunications. New York, NY: John Wiley.

Smart, J. M., Cascio, J., & Paffendorf, J. (2007). Metaverse road map pathways to the 3D web. Acceleration Studies Foundation.

Sparkes, M. (2021). What is a metaverse. New Scientist, 251(3348), 18. doi: 10.1016/S0262-4079(21)01450-0

Steuer, J. (1992). Defining virtual reality: dimensions determining telepresence. Journal of Communication, 42(4), 73–93. doi:10.1111/j.1460-2466.1992.tb00812.x

TabithaSL-flickr account. (2022). Retrieved April 07, 2022, from https://www.flickr.com/photos/190508739@N08/51704395780/in/dateposted/

Tanya, Q. M., & Liu, L. (2004). The technology acceptance model: a meta-analysis of empirical findings. Journal of Organizational & End User Computing, 16(1), 59-72.

Tavşancıl, E. (2002). Tutumların ölçülmesi ve SPSS ile veri analizi. Nobel Yayıncılık.

Telli, G., Aydın, S., & Gezmişoğlu Şen, D. (2021). Covid-19 sürecinde çevrimiçi ikinci el ürün alışverişine yönelik tutum ve satın alma niyeti üzerine bir araştırma. Aksaray Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi, 13(2), 11-22.

Tikkanen, H., Hietanen, J., Henttonen, T., & Rokka, J. (2009). Exploring virtual worlds: success factors in virtual world marketing. Management Decision, 47(8), 1357-1381. doi:10.1108/00251740910984596

Tiryaki, İ., & Gödekmerdan Önder, L. (2022). Tüketicilerin akıllı giyilebilir nesnelerin kullanımına yönelik davranış niyetlerinin genişletilmiş teknoloji kabul modeli aracılığıyla incelenmesi. İşletme Araştırmaları Dergisi, 14(1), 182-202. https://doi.org/10.20491/isarder.2022.1374

Turan, B. (2011). Bilgi ve iletişim teknolojileri kullanımının teknoloji kabul modeli ile incelenmesi ve sınıf öğretmenleri üzerinde bir uygulama [Master's thesis, Bilecik University]

Türker, A., & Özaltın Türker, G. (2013). Turistik ürün satın alma davranışının teknoloji kabul modeli ile incelenmesi. Sosyal Bilimler Enstitüsü Dergisi, 15(2), 281-312. Retrieved from https://dergipark.org.tr/tr/pub/deusosbil/issue/4633/63156

Tuten, T. (2009). Real world experience, virtual world environment: the design and execution of marketing plans in Second Life, Marketing Education Review, 19(1), 1-5. doi: 10.1080/10528008.2009.11489053

Uzun, K. (2011). Second Life sanal yaşam dünyasında kendini sunum davranışlarının belirlenmesinde etnografik bir yaklaşım [Doctoral dissertation, Anadolu University]

Uzun, K., Aydın, C. H. (2012). Kullanıcı profilinin ve bireylerarası ilişkilerin gerçek yaşamla karşılaştırılması: Second Life örneği, Eskişehir Osmangazi Üniversitesi İİBF Dergisi, 7(2), 263-290.

Van der Heijden, H. (2003). Factors influencing the usage of websites: the case of a generic portal in The Netherlands, Information & Management, 40(6), 541–549. https://doi.org/10.1016/S0378-7206(02)00079-4

Van der Heijden, H., Verhagen, T., & Creemers, M. (2001). Predicting online purchase behavior: replications and tests of competing models. Proceedings of the 34th Annual Hawaii International Conference on System Sciences. doi:10.1109/hicss.2001.927100

Van der Heijden, H., Verhagen, T., & Creemers, M. (2003). Understanding online purchase intentions: contributions from technology and trust perspectives European Journal of Information Systems, 12(1), 41–48. https://doi.org/10.1057/palgrave.ejis.3000445

Venkatesh, V. (2000). Determinants of perceived ease of use integrating control, intrinsic motivation, and emotion into the technology acceptance model. Information Systems Research, 11(4), 342-365.

Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. Decision Sciences, 39(2), 273-315. doi: 10.1111/j.1540-5915.2008.00192.x

Venkatesh, V., & Davis F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 46(2), 186-204.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425-478.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. MIS Quarterly, 36(1), 157-178.

Verma, S., Bhattacharyya, S., & Kumar, S. (2018). An extension of the technology acceptance model in the big data analytics system implementation environment. Information Processing & Management, 54(5), 791-806.

Vincent, P. C., Peplau, L. A., & Hill, C. T. (1998). A longitudinal application of the theory of reasoned action to women's career behavior. Journal of Applied Social Psychology, 28(9), 761–778. doi:10.1111/j.1559-1816.1998.tb01730.x

Virtual Inspiration Island. (2022). About us. Retrieved May 06, 2022, from https://virtualinspirationisland.org/about-us/

White Baker, E., Hubona, G. S., & Srite, M. (2019). Does “being there” matter? the impact of web-based and virtual world’s shopping experiences on consumer purchase attitudes. Information & Management, 59(7), 1-14. doi: 10.1016/j.im.2019.02.008

Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): a literature review. Journal of Enterprise Information Management, 28(3), 443-488. https://doi.org/10.1108/JEIM-09-2014-0088

Wooldridge, J. M. (2009). Introductory econometrics: A modern approach, 4E., Mason, Ohio: South-Western Cengage Learning.

Wyld, D. C. (2009). Managing in the virtual world: how Second Life is rewriting the rules of “real life” business. Advanced Techniques in Computing Sciences and Software Engineering, 123–128. doi:10.1007/978-90-481-3660-5_21

Yaşa Özeltürkay, E., Bozyiğit, S., & Gülmez, M. (2017). Instagram’dan alışveriş yapan tüketicilerin satın alma davranışları: keşifsel bir çalışma. Marmara Üniversitesi Öneri Dergisi, 12(48), 175-198. doi: 10.14783/maruoneri.vi.331668

Yaşa, E. (2012). Sağlık sektöründe hizmet kalitesi, müşteri memnuniyeti ve bağlılık ilişkisi: devlet, özel ve üniversite hastaneleri karşılaştırması [Doctoral dissertation, Çukurova University]

Yavuz, O. (2021). Covid 19 pandemisi sürecinde çalışanların dijital teknolojilere adaptasyonu: teknoloji kabul modeli. In A. Aksoy, A. Karapınar, F. Zaif, & B. Aydıntan (Eds.). Covid 19 pandemisinin işletme ve ekonomi alanında etkileri (pp. 77-92). Gazi Kitabevi.

Yay, Ö., & Çalışkan, O. (2016). Planlı Davranış Teorisi Bağlamında Çevreci Otel Restoranında Yemek Yeme Niyeti. Journal of Travel and Hospitality Management, 13(2), 103-122.

Yıldırım, İ. (2022). Mağaza markalı ürünleri satın alma niyetinin marka ismine verilen önem, algılanan marka benzerleği ve algılanan kalite çerçevesinde incelenmesi [Master's thesis, Hacettepe University]

Yıldız, M. S., Yıldırım, Y., & Kesici, B. (2021). Düzce bölgesindeki firmaların endüstri 4.0 yaklaşımı. Elektronik Sosyal Bilimler Dergisi, 20(80), 1773-1797. doi: 10.17755/esosder.900853

Yılmaz, C., & Tümtürk, A. (2015) İnternet üzerinden alışveriş niyetini etkileyen faktörlerin genişletilmiş teknoloji kabul modeli kullanarak incelenmesi ve bir model önerisi. Yönetim ve Ekonomi Celal Bayar Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 22(2), 355-384. doi: 10.18657/yecbu.76242

Yuen, K. F., Cai, L., Qi, G., & Wang, X. (2021). Factors influencing autonomous vehicle adoption: an application of the technology acceptance model and innovation diffusion theory. Technology Analysis & Strategic Management, 33(5), 505-519. doi: 10.1080/09537325.2020.1826423

Yurttaş, Ö. U. (2011). Sosyal medya ortamı olarak Second Life'da yayınlanan reklamların marka bilinirliğindeki rolü [Doctoral dissertation, Marmara University]

Zeren, D. (2010). Mobil hizmet innovasyonlarının kabulü: Türkiye örneği [Doctoral dissertation, Çukurova University]

Zhang, D., & Shrestha, P. (2010). Doing business in Second Life: e-commerce in 3D online environment. International Journal of Electronic Business, 8(2), 148-169. doi:10.1504/IJEB.2010.032092

(n.d.) Metaverse: meaning in the Cambridge English Dictionary. Retrieved from https://dictionary.cambridge.org/tr/s%C3%B6zl%C3%BCk/ingilizce/metaverse

(n.d.) Virtual: meaning in the Cambridge English Dictionary. Retrieved from https://dictionary.cambridge.org/dictionary/english/virtual

APPENDIX

Appendix A. Ethics Committee Permission Request Form and Approval Report Form

T.C	
ÇAĞ ÜNİVERSİTESİ	
SOSYAL BİLİMLER ENSTİTÜSÜ	
TEZ / ARAŞTIRMA / ANKET / ÇALIŞMA İZNİ / ETİK KURULU İZİNİ TALEP FORMU VE ONAY TUTANAK FORMU	
ÖĞRENCİ BİLGİLERİ	
T.C. NOSU	
ADI VE SOYADI	Beste DEMİRCİ
ÖĞRENCİ NO	2020001002
TEL. NO.	
E - MAİL ADRESLERİ	
ANA BİLİM DALI	İşletme Yönetimi
HANGİ AŞAMADA OLDUĞU (DERS / TEZ)	Tez
İSTEKDE BULUNDUĞU DÖNEME AİT DÖNEMLİK KAYDININ YAPILIP-YAPILMADIĞI	2022 BAHAR DÖNEMİ KAYDINI YENİLEDİM.
ARAŞTIRMA/ANKET/ÇALIŞMA TALEBİ İLE İLGİLİ BİLGİLER	
TEZİN KONUSU	Metaverse Kullanıcılarının Sanal Ürün/Hizmet Satın Alma Niyeti
TEZİN AMACI	Bu çalışmanın amacı, metaverse kullanıcılarının sanal ürün/hizmet satın alma niyetlerinin Second Life sanal dünyası çerçevesinde belirlenmesidir.
TEZİN TÜRKÇE ÖZETİ	Gün geçtikçe daha fazla insanın sanal ortamlara dahil edilmesini sağlayan teknolojik gelişmelerle beraber insanlar bu ortamlarda sosyalleşmeye, alışveriş yapmaya, flört etmeye, çalışmaya ve derslerini sanal platformlar aracılığıyla yürütmeye başlamışlardır. Metaverse olarak bilinen sanal dünyalar fiziksel sınırlar olmaksızın gerçek dünyayı taklit etmektedirler. İnsanlar farklı nedenlerden ve motivasyonlardan kaynaklı satın alım gerçekleştirmektedirler. Çalışmanın evrenini Second Life kullanıcıları oluşturmaktadır. Örneklemini ise, Second Life platformunda sanal ürün satın alımı gerçekleştiren kullanıcılar oluşturacaktır. Veri toplama yöntemi olarak, nitel ve nicel araştırma desenlerinin birlikte kullanıldığı karma araştırma yönteminin kullanılması düşünülmektedir. SL kullanıcılarına yönelik yarı yapılandırılmış görüşme ve anket uygulaması gerçekleştirilmesi planlanmaktadır. Anket formu aracılığıyla toplanması planlanan verilerin SPSS paket programı ile analiz edilmesi düşünülmektedir. Anahtar kelimeler: metaverse, kullanıcı davranışı, satın alma davranışı, second life.

ARAŞTIRMA YAPILACAK OLAN SEKTÖRLER/ KURUMLARIN ADLARI	Second Life Kullanıcıları
İZİN ALINACAK OLAN KURUMA AİT BİLGİLER (KURUMUN ADI- ŞUBESİ/ MÜDÜRLÜĞÜ - İLİ - İLÇESİ)	Kurum bulunmamaktadır.
YAPILMAK İSTENEN ÇALIŞMANIN İZİN ALINMAK İSTENEN KURUMUN HANGİ İLÇELERİNE/ HANGİ KURUMUNA/ HANGİ BÖLÜMÜNDE/ HANGİ ALANINA/ HANGİ KONULARDA/ HANGİ GRUBA/ KİMLERE/ NE UYGULANACAĞI GİBİ AYRINTILI BİLGİLER	
UYGULANACAK OLAN ÇALIŞMAYA AİT ANKETLERİN/ ÖLÇEKLERİN BAŞLIKLARI/ HANGİ ANKETLERİN - ÖLÇELERİN UYGULANACAĞI	Perceived Ease of Use, Perceived Usefulness, Enjoyment, Trust, Perceived Social Presence, Telepresence and Attitude
EKLER (ANKETLER, ÖLÇEKLER, FORMLAR, ... V.B. GİBİ EVRAKLARIN İSİMLERİYLE BİRLİKTE KAÇ ADET/SAYFA OLDUKLARINA AİT BİLGİLER İLE AYRINTILI YAZILACAKTIR)	1) Perceived Ease of Use (PEOU)- Algılanan Kullanım Kolaylığı (Van der Heijden, 2003; Van der Heijden et al., 2003) (4 ifade) 2) Perceived Usefulness (PU)- Algılanan Fayda (Chen et al., 2002; Moon and Kim, 2001) (4 ifade) 3) Enjoyment (ENJ)- Zevk/Haz (Agarwal and Karahanna, 2002; Koufaris, 2002) (4 ifade) 4) Trust (TRST)- Güven (Gefen et al., 2003) (4 ifade) 5) Perceived Social Presence (PSP)- Algılanan Sosyal Varlık (Gefen and Straub, 2003) (3 ifade) 6) Telepresence (TEL)- Telebulunma (Kim and Biocca, 1997) (4 ifade) 7) Attitude (ATT)- Tutum (Van der Heijden, 2003; Van der Heijden et al., 2001) (3 ifade)
ÖĞRENCİNİN ADI - SOYADI: Beste DEMİRCİ	**ÖĞRENCİNİN İMZASI: Enstitü Müdürlüğünde evrak aslı imzalıdır.** **TARİH: 08/03/2022**

TEZ/ ARAŞTIRMA/ANKET/ÇALIŞMA TALEBİ İLE İLGİLİ DEĞERLENDİRME SONUCU						
1. Seçilen konu Bilim ve İş Dünyasına katkı sağlayabilecektir.						
2. Anılan konu ..... faaliyet alanı içerisine girmektedir.						
1.TEZ DANIŞMANININ ONAYI	2.TEZ DANIŞMANININ ONAYI (VARSA)		ANA BİLİM DALI BAŞKANININ ONAYI		SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRÜNÜN ONAYI	
Adı - Soyadı: **Eda Yaşa ÖZELTÜRKAY**	Adı - Soyadı:		Adı - Soyadı: Ünal AY		Adı - Soyadı: **Murat KOÇ**	
Unvanı: Doç. Dr.	Unvanı:		Unvanı: Prof.Dr.		Unvanı: Doç. Dr.	
İmzası:Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası		İmzası:Enstitü Müdürlüğünde evrak aslı imzalıdır.		İmzası:Enstitü Müdürlüğünde evrak aslı imzalıdır.	
8.03.2022	.... / .... / 20....		..... / ..... / 2022		.... / .... / 2022	
ETİK KURULU ASIL ÜYELERİNE AİT BİLGİLER						
Adı - Soyadı: **Şehnaz ŞAHİNKARAKAŞ**	Adı - Soyadı: **Yücel ERTEKİN**	Adı - Soyadı: **Deniz Aynur GÜLER**	Adı - Soyadı: **Mustafa BAŞARAN**	Adı - Soyadı: **Mustafa Tevfik ODMAN**	Adı - Soyadı: **Hüseyin Mahir FİSUNOĞLU**	Adı - Soyadı: **Jülide İNÖZÜ**
Unvanı : Prof. Dr.	Unvanı : Prof. Dr.	Unvanı: Prof. Dr.	Unvanı : Prof. Dr.	Unvanı: Prof. Dr.	Unvanı : Prof. Dr.	Unvanı : Prof. Dr.
İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası :Enstitü Müdürlüğünde evrak aslı imzalıdır.
..... / ..... / 20.....	..... / ..... / 20.....	... / ..... / 20.....	..... / ..... / 20.....	... / ..... / 20.....	..... / ..... / 20.....	..... / ..... / 20.....
Etik Kurulu Jüri Başkanı - Asıl Üye	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**

OY BİRLİĞİ İLE	X	Çalışma yapılacak olan tez için uygulayacak olduğu Anketleri/Formları/Ölçekleri Çağ Üniversitesi Etik Kurulu Asıl Jüri Üyelerince İncelenmiş olup, 15/ 03 / 2022 - 17 / 05 / 2022 tarihleri arasında uygulanmak üzere gerekli iznin verilmesi taraflarımızca uygundur.
OY ÇOKLUĞU İLE		
AÇIKLAMA: BU FORM ÖĞRENCİLER TARAFINDAN HAZIRLANDIKTAN SONRA ENSTİTÜ MÜDÜRLÜĞÜ SEKRETERLİĞİNE ONAYLAR ALINMAK ÜZERE TESLİM EDİLECEKTİR. AYRICA FORMDAKİ YAZI ON İKİ PUNTO OLACAK ŞEKİLDE YAZILACAKTIR.		

Appendix B. Informed Consent Form

Tarih: 15.03.2022

ÇAĞ ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
ETİK KURULU

BİLGİLENDİRİLMİŞ ONAM FORMU

Bu formun amacı araştırma ile ilgili olarak sizi bilgilendirmek ve katılmanız ile ilgili izin almaktır.

Bu kapsamda "A STUDY ON METAVERSE USERS' VIRTUAL PRODUCTS PURCHASE INTENTION: SECOND LIFE EXAMPLE" başlıklı araştırma "Beste DEMİRCİ" tarafından **gönüllü katılımcılarla** yürütülmektedir. Araştırma sırasında sizden alınacak bilgiler gizli tutulacak ve sadece araştırma amaçlı kullanılacaktır. Araştırma sürecinde konu ile ilgili her türlü soru ve görüşleriniz için aşağıda iletişim bilgisi bulunan araştırmacıyla görüşebilirsiniz. Bu araştırmaya **katılmama** hakkınız bulunmaktadır. Aynı zamanda çalışmaya katıldıktan sonra çalışmadan **çıkabilirsiniz.** Bu formu onaylamanız**, araştırmaya katılım için onam verdiğiniz** anlamına gelecektir.

Araştırmayla İlgili Bilgiler:

Araştırmanın Amacı: Çalışmanın amacı, Metaverse kullanıcılarının Second Life sanal dünyası çerçevesinde sanal ürünler satın alma niyetlerini belirlemektir.

Araştırmanın Nedeni: Kullanıcıların satın alma niyetlerini etkileyen değişkenlerin belirlenmesi, sürekli genişleyen bu sektörde tüketimin sürdürülebilirliği adına kritik öneme sahiptir.

Araştırmanın Yürütüleceği Yer: Online

Çalışmaya Katılım Onayı:

Araştırmanın amacını, nedenini, yürütüleceği yer ile ilgili bilgileri okudum ve gönüllü olarak üzerime düşen sorumlulukları anladım. Araştırma ile ilgili ayrıntılı açıklamalar yazılı ve sözlü olarak tarafıma sunuldu. Bu araştıma ile ilgili faydalar ve riskler ile ilgili bilgilendirildim.

Bu araştırmaya kendi isteğimle, hiçbir baskı ve zorlama olmaksızın katılmayı kabul ediyorum.

Katılımcının (Islak imzası ile***)

Adı-Soyadı:
İmzası***:

Araştırmacının

Adı-Soyadı: Beste DEMİRCİ
e-posta:

İmzası:

*Enstitü Müdürlüğünde evrak aslı imzalıdır.

***Online yapılacak uygulamalarda, ıslak imza yerine, bilgilendirilmiş onam formunun anketin ilk sayfasındaki en üst bölümüne yerleştirilerek katılımcıların kabul ediyorum onay kutusunu işaretlemesinin istenilmesi gerekmektedir.

Appendix C. Questionnaire Form

Q1) Do you purchase product/service in Second Life?

( ) Yes ( ) No

In-world store vs. Marketplace

In line with your answer, you are expected to answer the next sections.

Q2) Which of the following do you use more often?

( ) Stores in Second Life

( ) Second Life Marketplace

*"Second Life" refers to both Second Life physical store and marketplace according to your answer for second question(Q2).

Please evaluate the following statements as they best suit you. Your choices for the statements are as follows: Strongly disagree (1) – Disagree (2) – Neither agree nor disagree (3) – Agree (4) – Strongly Agree (5)

Perceived Ease of Use (PEOU)						
(Van der Heijden, 2003; Van der Heijden et al., 2003)	**PEOU1** Second Life was easy to use for product assessment.					
	PEOU2 I could quickly find the information I needed in Second Life.					
	PEOU3 Second Life was a user-friendly site.					
	PEOU4 My interaction with Second Life was clear and understandable.					
Perceived Usefulness (PU)						
(Chen et al., 2002; Moon and Kim, 2001)	**PU1** Second Life provided good quality information.					
	PU2 Second Life improved my performance in assessing product features.					
	PU3 Second Life increased my effectiveness in assessing product features.					
	PU4 Second Life was useful for assessing product.					
Enjoyment (ENJ)						
(Agarwal and Karahanna, 2002;Koufaris, 2002)	**ENJ1** I found my visit to Second Life to be interesting.					
	ENJ2 I found my visit to Second Life to be entertaining.					
	ENJ3 I found my visit to Second Life to be enjoyable..					
	ENJ4 I found my visit to Second Life to be pleasant.					
Trust (TRST)						
(Gefen et al., 2003)	**TRST1** I felt that Second Life was honest.					
	TRST2 I felt that Second Life was trustworthy.					
	TRST3 I felt that Second Life cared for customers.					
	TRST4 I felt that Second Life provided me with good service.					

Perceived Social Presence (PSP)						
(Gefen and Straub, 2003)	**PSP1** There was a sense of human contact in Second Life.					
	PSP2 There was a sense of sociability in Second Life.	.				
	PSP3 There was a sense of human warmth in Second Life.					
Telepresence (TEL)						
(Kim and Biocca, 1997)	**TEL1** I forget about my immediate surroundings when I am in Second Life.					
	TEL2 Browsing Second Life often makes me forget where I am.	.				
	TEL3 After browsing Second Life, I feel like I come back to the "real world" after a journey..					
	TEL4 Using a virtual world creates a new world for me, and this world suddenly disappears when I stop using it.					
	Attitude (ATT)					
(Van der Heijden, 2003; Van der Heijden et al., 2001)	**ATT1** I had positive feelings about buying a product from Second Life.					
	ATT2 The thought of buying a product from Second Life was appealing to me.					
	ATT3 It was a good idea to buy a product from Second Life.					

Socio-Demographic Information Form

Q3) What age group are you in (About you in Real Life)?

( ) 18 or under ( ) 19 – 25 ( ) 26 – 35 ( ) 36 – 45 ( ) 46 – 55 ( ) 56 – 65 ( ) 66 or older

Q4) What age group are you in (About you in Second Life)?

( ) Less than one year ( ) 2-3 years ( ) 4-6 years ( ) 7-9 years

( ) 10-11 years ( ) 12 years or older

Q5) Your Real Life gender is:

*(If you select other, type something on the line)

( ) Male ( ) Female ( ) Other

Q6) Your Second Life gender is:

*(If you select other, type something on the line)

( ) Male ( ) Female ( ) Other

Q7) What is your marital status? (About you in Real Life)

*(If you select other, type something on the line)

( ) Single ( ) Married ( ) Divorced ( ) Other

Q8) Educational Level: (About you in Real Life)

*(If you select other, type something on the line)

( ) Master's degree or above ( ) Bachelor's degree ( ) College degree ( ) High school ( ) Other

Q9) What is your current employment status?

( ) Full-time employment ( ) Part-time employment ( ) Unemployed ( ) Self-employed

( ) Home-maker ( ) Student ( ) Retired

Q10) Which income group does your household fall under?

( ) Less than $20,000 ( ) $21,000 – $30,000 ( ) $31,000 to $40,000 ( ) $41,000 to $50,000

( ) $51,000 to $60,000 ( ) Above $60,000

Q11) Do you have alternate avatars ("alts")?

( ) Yes ( ) No

Q12) How often do you purchase products/services?

- o everyday
- o once a week
- o more than once a week
- o once a month
- o more than five times a month
- o once every 3 months
- o once every 6 months
- o other

Q13) For what purpose do you purchase products/services?

*You can mark more than one.

- an event
- group theme
- special days
- getting a good deal or price
- feeling happy
- keeping up with the fashion
- other

Q14) Which product/service do you often purchase in SL?

*You can mark more than one.

- Clothes
- Shoes
- Hair
- Accessories
- Vehicles
- Home and Garden
- Real Estate
- Art
- Scripts
- Weapons
- Other

Q15) Where do you buy this product or service? (Please specify store name/s)

Q16) Do group gifts encourage you to purchase from particular stores?

( ) Yes ( ) No

Q17) What attracted you to Second Life?

*Please explain briefly.

Q18) Would you like to experience other Virtual Worlds beyond Second Life? If so, which one are you most interested in experiencing?

*Please explain briefly.

Appendix D. About the Scientific Research and Publication Ethics Committee Decision

T.C.
ÇAĞ ÜNİVERSİTESİ
Sosyal Bilimler Enstitüsü

Sayı : E-23867972-050.01.04-2200001847 09.03.2022
Konu : Bilimsel Araştırma ve Yayın Etiği Kurulu Kararı Alınması Hk.

REKTÖRLÜK MAKAMINA

İlgi: 09.03.2021 tarih ve E-81570533-050.01.01-2100001828 sayılı Bilimsel Araştırma ve Yayın Etiği Kurulu konulu yazınız.
İlgi tarihli yazınız kapsamında Üniversitemiz Sosyal Bilimler Enstitüsü bünyesindeki Lisansüstü Programlarda halen tez aşamasında kayıtlı olan **Beste Demirci** isimli öğrencimize ait tez evraklarının "Üniversitemiz Bilimsel Araştırma ve Yayın Etiği Kurulu Onayları" alınmak üzere Ek'te sunulmuş olduğunu arz ederim.

Doç. Dr. Murat KOÇ
Sosyal Bilimler Enstitüsü Müdürü

Ek : 1 Adet öğrenciye ait tez evrakları listesi.

Appendix E. About Scientific Research and Publication Ethics Committee Permission

T.C.
ÇAĞ ÜNİVERSİTESİ
Rektörlük

Sayı : E-81570533-044-2200002094 16.03.2022
Konu : Bilimsel Araştırma ve Yayın Etiği
Kurul İzni Hk.

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi : Sosyal Bilimler Enstitüsü Müdürlüğünün 10.03.2022 tarih ve E-81570533-050.01.04-2200001887 sayılı yazısı.

İlgi yazıda söz konusu edilen Beste Demirci isimli öğrencimizin tez evrakları Bilimsel Araştırma ve Yayın Etiği Kurulunda incelenerek uygun görülmüştür.

Bilgilerinizi ve gereğini rica ederim.

Prof. Dr. Ünal AY
Rektör

Appendix F. Coordinatorship of Scientific Research Projects (BAP) Acceptance Certificate

T.C.
ÇAĞ ÜNİVERSİTESİ
Rektörlük

Sayı : E-81570533-604.02.01-2200001202 15.02.2022
Konu : BAP Projesi Hk.

DAĞITIM YERLERİNE

2022-1-1 Proje numaralı "Metaverse Kullanıcılarının Sanal Ürün/Hizmet Satın Alma Niyeti Üzerine Bir Çalışma: Second Life Örneği" adlı projeniz BAP Komisyonunun 09.02.2022 tarihli toplantısında görüşülmüş ve Komisyonun 2022/1 sayılı kararıyla kabul edilmiştir.

Bilgilerinizi rica ederim.

Prof. Dr. Ünal AY
Rektör

Dağıtım:
Gereği:
Sayın Doç. Dr. Eda YAŞA ÖZELTÜRKAY
Sayın Beste DEMİRCİ

Bilgi:
Bilimsel Araştırma Projeleri Koordinasyon Birimine
İktisadi ve İdari Bilimler Fakültesi Dekanlığına