



## *Determining Avatar Consumers Shopping Behavior in Second Life\**

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### Abstract

Virtual shopping allows users to build economic relationships, leading to the development of virtual businesses and the appreciation of virtual currencies. It also allows users to express their creativity, which adds a new dimension to the design and marketing of virtual products. Second Life is a platform where individuals create their digital identities with the unlimited possibilities offered by the virtual world. In this environment, the virtual shopping experience is an important element that enriches users' social interactions, offers economic opportunities, and allows them to express their creativity. Users have access to a wide range of products from clothes to jewelry, from household goods to artworks through virtual stores. Research was conducted with researcher avatars in the Second Life universe, one of the most popular virtual world platforms. The snowball sampling method was used to reach 26 consumers with purchasing experience in the virtual world. Summarizing the results of the research, it is seen that the participants have been in SL for a long time and the majority of them belong to Generation X and Y. It was revealed that they mostly shopped from the Second Life virtual market, and clothes ranked first among the products they frequently purchased. They also expressed their opinions on the need for more varieties and types of this frequently purchased product type.

**Keywords:** virtual worlds, metaverse, second life, consumer behavior

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## *Second Life'ta Avatar Tüketicilerin Alışveriş Davranışlarının Belirlenmesi*

### **Öz**

Sanal alışveriş, kullanıcıların ekonomik ilişki kurmalarına olanak sağlamakta ve bu da sanal ticaretin gelişmesine, sanal para birimlerinin ise değerlendirilmesine yol açmaktadır. Ayrıca, kullanıcıların kendi yaratıcılıklarını ifade etmelerine yardımcı olmakla birlikte sanal ürünlerin tasarlanmasında ve pazarlanmasında yeni bir boyut açmaktadır. Second Life, kullanıcılarının sanal dünya içinde kendilerine sunduğu sınırsız olanaklar ile dijital kişiliklerini yarattıkları bir platformdur. Bu platformda sanal alışveriş deneyimi, kullanıcıların sosyal etkileşimlerini geliştiren, ekonomik imkanlar sağlayan ve kendi yaratıcılıklarını ortaya çıkarttıkları önemli bir unsurdur. Kullanıcıların sanal mağazalar aracılığı ile kıyafetlerden mücevherlere, ev eşyalarından sanat eserlerine kadar geniş bir yelpazeye erişimleri bulunmaktadır. Bu araştırma en popüler sanal dünyalardan biri olan Second Life'ta araştırmacı avatarlar tarafından yürütülmüştür. Satın alma deneyimine sahip 26 tüketiciye ulaşmak için kartopu örnekleme yöntemi kullanılmıştır. Araştırmanın sonucunu özetlemek gerekirse, katılımcıların uzun zamandır Second Life'ta oldukları ve çoğunluğunun X ve Y jenerasyonlarından oldukları gözlemlenmiştir. Çoğunlukla Second Life sanal marketten alışveriş yaptıkları ve diğer ürünlere kıyasla kıyafetin en çok satın alınan ürün olduğu tespit edilmiştir. Aynı zamanda, bu tür sıkça satın alınan ürünler için daha fazla çeşit ve seçenek olması gerektiğine dair fikirlerini ifade etmişlerdir.

**Anahtar Kelimeler:** sanal dünyalar, metaverse, second life, tüketici davranışı



## 1. INTRODUCTION

Humans, by nature, have been in constant communication from past to present. This communication has started to take place through different channels with the development of technology. Especially in the 21st century, it is seen that the technology-oriented global networks with web technologies are the networks at the center of society that have made great progress in using technology, and it is considered quite normal for web generations and stages to develop in this direction (Ersöz, 2020). With these technologies that have been constantly advancing since its emergence, the web started with web 1.0 (connecting and accessing information on the internet), continued with web 2.0 (connecting people to each other), and today it is intensively used with web 3.0 (information network) infrastructure (Nath et al., 2014). Web 3.0 encompasses various emerging technologies, including blockchain, open-source software, the Internet of Things, and virtual reality. It integrates these innovations into daily life, offering highly interactive experiences through virtual and augmented reality Technologies (Okul, 2022). Web 3.0 is defined as an application that collects worldwide data on a single platform as a Semantic Web network and enables computers to automatically manage related processes over the Web. In addition, this web technology aims to intertwine content (data) and keywords (meta-data) and is called smart web by many authors (Ersöz, 2020). In the field of virtual worlds, Metaverse is designed as 3D internet or Web 3.0 (Mystakidis, 2022). Even though it is considered new as a technology, the Metaverse as a concept was coined in Neal Stephenson's novel "Snow Crash" published in 1992 (Stephenson, 2003). In this novel, Stephenson (2003) described a digital universe in which users interact through their avatars in a virtual world. He mentioned that the Metaverse will be shaped by the combination of virtual and augmented reality technologies over time and will become a multidimensional environment where social interactions, trade and various experiences take place. New and immersive platforms such as Second Life, World of Warcraft and Habbo Hotel have emerged with people's desire to establish more social connections and take part in these parallel universes (Ari and Gülmez, 2020). Metaverse is designed as a virtual world in which avatars can travel seamlessly between each other and is realized in Opensim's Hypergrid. Based on the open-source software Opensimulator, different social and independent virtual worlds were and still are accessible through the Hypergrid network, which allows digital agents and their inventories to move between different platforms through bridges. While the Hypergrid network is still not interactive with many networks, it is compatible with private virtual networks similar to this structure, notably Second life (Mystakidis, 2022). In October 2021, when the famous social media company Facebook changed the name of its social virtual reality application, which it announced in 2019 under the name "Facebook Horizon", to "Meta Platforms" and announced that the company would henceforth take place in the Metaverse universe under the name "Meta". VR/AR technologies started to be expressed and utilized with "metaverse" (Soysal, 2023). The Metaverse is defined as a vast and immersive virtual world that millions of people can access simultaneously through customized avatars and powerful



experience creation tools, and functions in an integrated manner with the offline world through its virtual economy and external technology (Au, 2023).

In the light of this information, the aim of this study is to reveal the demographic characteristics and understand the shopping experiences of people who have an identity with their avatars as customers in the Second Life universe. Second Life is considered to be one of the most popular Metaverse- virtual worlds. In this context, in the first part of the study, information will be provided regarding the second life as a virtual World which will be followed by studies conducted especially in the field of consumer behavior. The second part includes methodology, findings and evaluation.

## 2. SECOND LIFE AND CONSUMER BEHAVIOR

Second life, launched by Philip Rosedale in 2003 by San Francisco-based Linden Lab, is considered to be the pioneer of virtual platforms and was inspired by Neal Stephenson's novel Snow Crash (Boss, 2007; Page, 2011). Second Life (SL) is an online multi-media platform where players design a life in a virtual world through their avatars (Santos, 2014). Second Life gives players the freedom to create their own virtual homes, businesses, design new products, buy and sell products (Soysal, 2023). With the effect of the pandemic, the number of users of the Second Life world, which has reached millions of users since its launch, increased by 133% between March 8 and March 15, 2020 (Çetinkaya, 2021). Linden Lab (2022) states that tens of thousands of creators around the world are constantly developing new content in Second Life, which they define as the largest and most successful 3D virtual world created by users. Virtual worlds offer a wide range of opportunities to increase social interaction, play games, develop creative projects, and engage in virtual commerce (Girvan, 2018). According to Park and Kim (2022), recent industry trends show that virtual consumption behaviors can be directly linked to real-world behaviors. Marketing activities with virtual worlds offer the opportunity to establish a more personal and direct relationship with target audiences. Park and Kim (2023) tested the effect of appearance similarity with an avatar on the intention to purchase virtual products in ZEPETO, a popular South Korean metaverse, where self-congruence and flow mediated the effect. White Baker et al. (2019) designed to measure the similarities between online and virtual worlds shopping and asked participants' attitudes and opinions after shopping from both platforms. While it was stated that the structures after shopping from both platforms were similar, it was seen that the main difference was the telepresence variable. Hamari and Keronen (2017) conducted a meta-analysis of 24 studies examining the reasons why people buy virtual products in games and virtual worlds and found that factors such as the importance of entertainment, flow, and ease of use in virtual world purchases are directly related to the platform.

With millions of users since 2003, Second Life (SL) has become a place for users to socialize, a marketplace, an advertising tool for entrepreneurs, and an educational environment for students (Shelton, 2010). Linden Lab owns and controls the mainland, a continent within SL.



Those with a premium membership can buy or rent land from Linden Lab or other characters. SL has its own economy, and its currency is called the Linden Dollar. This money, which can only be used within SL, can be transferred to the user's account via PayPal. SL connects with real life through its virtual economy based on real money. SL users, also called "residents", can do many things that can be done in real life, such as buying land, shopping and meeting friends, as well as actions that are impossible in real life, such as flying and teleportation (Linden, n.d.).

The virtual environment of Second Life, with its real-life representation, provides space for the development of marketing strategies (Tuten, 2009). In an article from Harvard Business Review, Hemp (2006) not only describes avatars as a "shadow" customer population but also describes SL as a space where customers can be analyzed, and marketers can interact with customers.

Many companies are involved in virtual worlds to promote their products, services, and institutions and carry out their activities in these areas. Not only companies but also many universities of the world (such as Harvard, Stanford, METU, Çağ University) have established a virtual campus/space in SL and organize various trainings (Gottschalk, 2010). There are also many non-profit communities that continue their activities (Demirci et al., 2024). In the past, many world-famous real-life brands such as "Adidas, BMW, Cisco Systems, Dell Computer, Mercedes Benz, IBM, Nissan, Toyota, Coca Cola, Vodafone, Colgate, Philips, Vestel" have taken part in Second Life. Apart from these, branded media organizations such as "BBC Radio, CNET, MTV, NTV, Reuters, Marketing Turkey magazine from Turkey and Star Newspaper" are among the media organizations that have taken place in SL (Yurttaş, 2011).

Aiming to explore marketing opportunities in SL, Sharma et al. (2012) conducted a case study by interviewing real-world companies in SL. The study included well-known companies such as IBM, Intel, Coca-Cola, Nissan and Cisco, and two or three people from each company were interviewed. As a result of the interviews, it was determined that there are marketing opportunities such as allowing people from all over the world to attend their conferences, reducing real-life expenses and showing the first demos of products here. Doğan (2020) argues that the SL environment is more suitable for virtual brands created by its residents rather than real-world brands. Up until 2020, Hello Kitty was the only real-life brand present in SL. However, in recent years, well-known brands like Ralph Lauren (Debter, 2021) have also entered the Metaverse. Although creating a brand in virtual worlds provides many benefits to businesses, some brands have withdrawn from these environments despite being successful on a global scale. Most of the brands, such as Adidas and Reebok were not successful in SL and ended their operations (Barnes et al., 2015). Philip Rosedale, the founder of Second Life, thinks that Second Life, which he sees as the closest platform to the metaverse, is a logical platform for companies in sustainable marketing efforts, as it is still the largest platform with an annual transaction volume of 650 million US dollars (Gent, 2022).

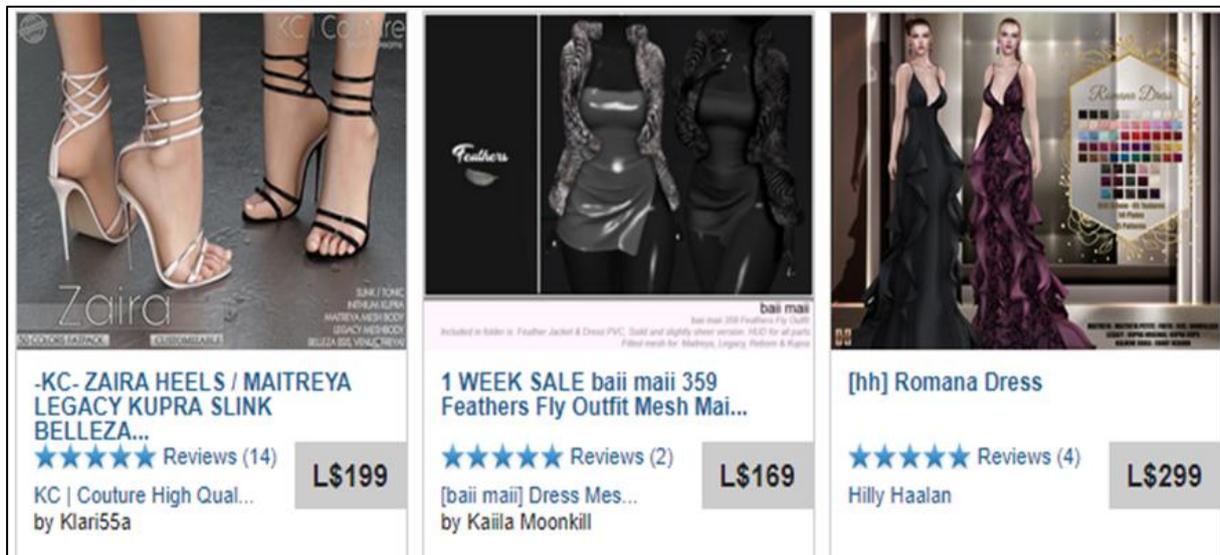
Hemp (2007) stated that American Apparel was the first real brand to open a store in Second Life but later closed it. Similarly, Starwood Hotels also shut down its virtual hotel. This



highlights that merely having a presence in such environments is not sufficient. Instead, it supports the idea that companies should offer interactive activities, such as exciting games, to enhance the user experience. On the other hand, Tikkanen et al. (2009) explain that apart from the successful marketing strategy of a few companies, the reason why others fail to attract users to their virtual spaces is based on the view that companies exist on corporate islands with “some flashy virtual buildings” without making any effort for the community. In addition to this view, it is also stated that SL users are interested in entertainment and socializing, and companies do not make additional investments in this area. Still, they should take action to attract people to their islands.

Although there are not many brand-known shops in Second Life, there are many products and stores to be used in the shops created within it. One of these is shown in Figure 1 as an example.

**Figure 1.** Second Life Marketplace bestsellers page (apparel)



For example, selecting “best seller” from the “clothing” options in the search section of the SL Marketplace returns two names derived from the data. Businesses in SL use advertising to market their products; advertising takes place both on and offline. All popular venues in SL (clubs, etc.) have boards/posters promoting products and services, and all stores have groups. Users are encouraged by stores to join groups by offering free products; once in a group, they can receive messages with targeted advertising. Bloggers also receive free products and can write about them in return. Websites like Seraphim and TeleportHub offer insights into SL products with new release announcements.

Shelton (2010) examined the virtual shopping habits of SL users. In this preliminary study to better understand virtual consumption in Second Life, it was found that the motivation to create a virtual identity in Second Life was equivalent to the frequency of purchase in this virtual world. Animesh et al. (2011) emphasized the importance of understanding the dynamics governing the purchase of virtual goods and investigated how environments in virtual worlds



affect participants' virtual experiences (“telepresence, social presentation and flow”) and purchase intentions within the framework of the stimulus-organism-response (S-O-R) model. In this study of 384 SL users, they found that interactivity had a significant positive effect on telepresence and flow, sociability was significantly related to social presentation, and both intensity and stability significantly affected participants' virtual experiences.

Koles and Nagy (2012), attempted to identify patterns based on SL users' interactions between their own avatars and others' avatars. They conducted a research to investigate the relationship between virtual identity and virtual consumption by examining four related forum threads and comments on Second Life blogs over three months. The study identified 197 users and found that users had positive views of their virtual selves, that certain virtual goods were popular because they helped them to differentiate themselves, and that some other goods were necessary for them to join a community.

Guo and Barnes (2007), in their study aiming to identify, model and test the virtual product purchase decision determinants in virtual gaming communities. Guo and Barnes presented a model by examining the following models: Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Web Trust Model, and Unified Theory of Acceptance and Use of Technology (UTAUT). In their study, which is an exploratory study to understand the factors affecting purchasing behavior in virtual worlds, four focus groups were formed with 24 participants, each consisting of six people. As a result of the analysis, twelve factors that have an impact on virtual product purchase behavior in virtual worlds were identified, and it was stated that perceived pleasure, character competence and task system requirements increase users' interest in virtual products (Guo and Barnes, 2009). Users' purchasing patterns in this virtual environment are influenced by the emotional bonds they develop with their avatars, resulting in the consumption of digital goods and services. This may affect the success of companies operating in the Metaverse (Kalyvaki et al., 2023). According to Demirci et al. (2024), SL users mainly purchase clothing, followed by shoes, hair, and accessories. Second Life offers an experimental environment in fashion where users create avatars and express their identities through clothing and accessories. This virtual world shows more clearly than physical life how effective clothing is as a technology for identity management (Andò, 2024). In Kuntze et al.'s (2013) study, participants were asked for information about 11 different products related to virtual consumption. Among these products, 80 percent of the participants stated that they shop for clothing, while 40 percent stated that they shop for hair, shoes, and land. These findings support Demirci et al.'s (2024) study. Guo and Barnes (2011), “Buying behavior in virtual worlds: An empirical study in Second Life”, mentioned that there are very few studies on the importance of trade and virtual worlds, virtual worlds and consumer/user opinions. In their study, data was They collected data from 250 SL users through a survey method and it was supported that the literature is insufficient to explain the factors affecting the purchase because the buyer decision processes in virtual worlds are more complex. In this context, the importance of increasing studies on consumer opinions in these virtual worlds is obvious.



### 3. RESEARCH METHOD

This study was prepared in accordance with the qualitative research type. While there is no common method put forward by researchers when analyzing data in qualitative research, five steps are mentioned based on the common features of the methods put forward by different researchers (Gürbüz and Şahin, 2016). These steps are the data collection process and recording, classification or categorization of data into various concepts or categories, establishing connections between concepts or categories, making explanations and interpretations, and reporting the research. These five steps were followed in order, and interviews were conducted to obtain the data for the study. In addition to the quantitative reporting of the views, the participants' views were also reported. In this study, online (in-world virtual) interviews were conducted with the avatars of the researchers, and voluntary consent was provided by all participants. The sample of the study consisted of people who have shopped at least once in the virtual world of Second Life (SL), which is accepted as one of the parallel universes. According to Yıldırım and Şimşek (2016), it is defined as a type of research that states that there are specific sub-layers in society and that some sampling techniques identified with quantitative research can be used within traditional qualitative research designs. Since all participants who volunteered in the research are looking for experience of shopping at least once in the SL world and based on the difficulty of reaching this sample in the research, the sample was determined by snowball sampling method.

Snowball sampling is considered one of the most popular methods of sampling in qualitative research, with networking and referral characteristics at its core. Researchers usually start with a small number of initial contacts (seeds) who meet the research criteria and are invited to become participants in the research. The confirmed participants are then asked to suggest other contacts who meet the research criteria and could potentially be willing participants, who in turn suggest other potential participants, and so on. Researchers, therefore, use their social networks to make initial contacts and capture an increasing chain of participants, from which the sampling momentum builds. The researchers employed the snowball sampling method in this study and as experienced residents in Second life virtual platform (The researchers own avatars with more than a total of 20 years experience in Second life) they reached over to experienced residents most likely to be a good fit for this study to kickstart the snowball sampling process. Sampling usually ends when the target sample size or saturation point is reached (Parker et al., 2019). Since the exact number of consumers shopping on Second Life (SL), one of the Metaverse platforms, is unknown, the decision of how many consumers to interview in semi-structured interviews was finalized during the process rather than at the beginning.

The main purpose of this study is to explore in depth the demographic characteristics of consumers in Second Life, which is considered to be the most popular of the metaverse universes, and their views on their purchasing processes (what and where they buy). In this context, semi-structured interviews were applied in the study. In semi-structured interviews,



participants are asked standardized and open-ended questions (Britten, 1995). Yıldırım and Şimşek (2016) stated that the focus of the research, the amount of data, and theoretical sampling are important in sample selection rather than the number, that a qualitative study can be conducted even with one person depending on these elements and the subject of the research, and that sometimes the data of a research conducted with one person can be much more than the data collected from 20 individuals in another research. For these reasons, 26 interviews were deemed sufficient in the study, taking into account the focus of the research, the amount of data, and their saturation.

Validity is divided into two parts: internal and external. Yıldırım and Şimşek (2016) state that internal validity depends on the consistency of the researchers in both data collection and data analysis. The interpretation processes and explaining how they achieve this consistency, while external validity is related to generalizability, and the researcher informs the reader in detail about all stages of the research. In this study, the researcher provided summary information about the data at the end of the interview and provided member checking (Erlandson et al., 1993) by receiving comments from the participants about the accuracy of the information. In order to ensure transferability, the participant statements were richly and densely described (Merriam and Tisdell, 2015). Confirmability refers to the researcher's ability to confirm the raw data with the results and explain them logically to the readers. In terms of reliability, the researcher's detailed and clear reporting of the stages, it is a clear indication that the results depend on the data collected and that the researcher's prejudices do not affect the results (Yıldırım and Şimşek, 2016). It is emphasized that the use of strategies such as repetitive questions, random sample selection, detailed quotations, focusing on connections, analysis form, revealing the limits of the research, self-evaluation, finding distorted situations, comparison with negative and alternative results, triangulation, peer review, detailed description, and participant confirmation will increase the quality of the study (Yıldırım, 2010). In addition, in order to make the research more valid and reliable, strategies such as interrelated questions, making detailed quotations, focusing on connections, analysis form, revealing the boundaries of the research, peer review, and detailed description were used. It is thought that the validity and reliability of the research were ensured due to all these strategies applied.

In these parallel universes, users can easily make changes that they cannot make or perceive as difficult to make in real life through their avatars (Schultze and Leahy, 2009). For example, an individual who is overweight, short, has less hair, and wears glasses in real life makes purchases by paying attention to these characteristics while shopping in the real world. However, he/she can create his/her avatar in the virtual world as he/she wishes and shop according to these characteristics. In this world, he can create a tall, thick-haired, colorful-eyed, and fit avatar and decorate it as he wishes. While most of the studies in the field of consumer behavior have been conducted on the purchase intentions of real-life people in metaverse universes, a very limited number of studies (Swilley, 2015; Shen et al., 2021; Demirci, 2022) have been conducted to determine purchasing experiences. In order to ask about the purchasing experience in these worlds, it is important that you are in these worlds with your avatar and that you give confidence



to the people who will interview you. The fact that the three researchers who contributed to this study have been in this world with their avatars for a long time is an important detail in terms of reaching the interviewees. The aim of this study is to reveal the profiles and purchasing behaviors of avatar consumers who shop at stores in parallel universes, which have an increasing value. In this context, two research questions were developed:

**Research Question 1:** What are the demographic characteristics of avatars/consumers in the virtual world of Second Life, which is defined as a parallel universe?

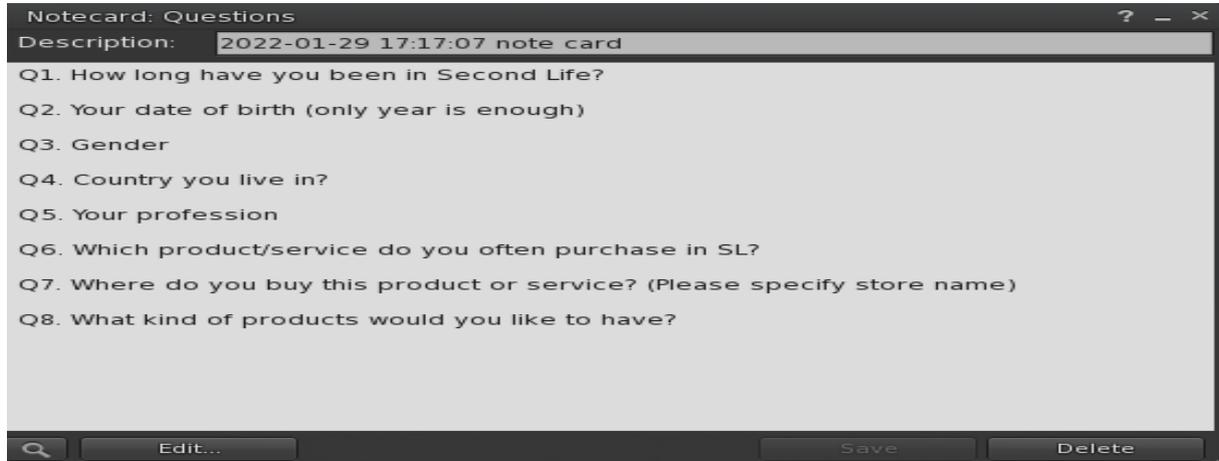
**Research Question 2:** What kind of products do avatars/consumers in the virtual world of Second Life buy and from where?

In this study, which was designed as an exploratory research model, data were collected online in the form of semi-structured interviews after obtaining ethics committee permission (Çağ University Scientific Research and Publication Ethics Committee's decision dated 06.06.2022 and numbered 2022/3). The interviews were completed between June 07 and December 2022.

There are eight questions in the interview form and these questions were created by the researchers based on previous studies (Yılmaz Ünlü, 2022; Israel, 2022; Demirci, 2022 etc.). The first five questions were aimed at determining the demographic and descriptive characteristics of the participants, while the other three questions were asked to determine the participants' views on the purchasing process for their avatars. In addition to these five questions, respondents were asked about the products/services they frequently purchase, the stores from which they make these purchases, and the types of products they would like to purchase from stores in SL. Initially, 10 interviews were conducted, and the interviews with participants referrals were also conducted in SL. Some of these interviews were conducted via Instant Message (IM) and some via SL voice feature. Since there is a common time zone in the SL world, and this time zone varies from country to country, and in some cases due to interruptions, some questions of the interviews that started with audio were continued with a written notecard. Figure 1 shows an example of a notecard with questions. In such cases, the interviewer answered the questions on the notecard and returned the notecard with the answers to the researcher (even if the researcher was not online). In this study, interviews with a total of 26 avatars/consumers were completed due to saturation of responses. An explanation of consent was made in the interview form, and their voluntariness was confirmed.



**Figure 2.** Notecards with interview questions



When the questions on the notecard are analyzed, Question 1 is about how long they have been in the Second Life world, while Questions 2, 3, 4, and 5 are designed to reveal the participant's demographic information. Question 6 was asked to determine what kind of products/services they purchased in SL, and Question 7 was asked to inquire about the specific store name and the products and services they purchased. Question 8 was asked to determine what kind of products and services they are willing to buy in the SL world. Figure 2 shows the interview process that took place between a participant and the researcher at the virtual campus of Çag University with the consent of both parties.

**Figure 3.** A photo taken during the interview (Çag University Virtual campus)



The demographic characteristics of the 26 interviewees are shown in Table 1 below.

**Table 1.** Demographic characteristics of the participants

Avatar No.	SL duration Y_years; m-Months	Birth Year (2022)	Gender	Country	Occupation in real life/ Virtual life
A.1	6 y. 6 m.	1972	Female	Turkey	Music teacher/ Musician (giving concerts in SL)
A.2	12 Y.2m.	1989	Male	Turkey	The biologist / designs and sells yachts at SL.
A.3	14 Y 6m.	1981	Female	Serbia	Artist / painter
A.4	13 m.	1980	Female	USA	Office worker
A.5	14 Y.3m.	1949	Male	USA	None / none
A.6	15 Y.4m.	1972	Male	Canada	Auto Service Technician / Performing concert in SL
A.7	15 Y.5m.	1977	Female	USA	Housewife / none
A.8	14 Y.7m.	1965	Female	USA	Trainer, researcher / none
A.9	4Y. 10m.	1985	Female	United Kingdom	IT Project manager /none
A.10	10 Y.1m.	1938	Female	USA	Formerly a psychotherapist / now coaching
A.11	2 Y. 2 m.	1990	Male	India	Software developer / none
A.12	14 Y.	1987	Female	USA	Manager / none
A.13	16 Y.	1979	Male	Germany	IT Engineer / none
A.14	13 Y.	1978	Female	Italy	Working in SL company / same
A.15	5 Y.	1992	Male	Italy	Warehouse worker in the pharmaceutical industry / none
A.16	14 y. 9 m.	1961	Female	New Zealand	Housewife / Domestic Goddess
A.17	10 Y.	1953	Male	United Kingdom	Retired engineer / none
A.18	13 Y.2m.	1973	Male	Norway	Public worker / none
A.19	17 Y.	1979	Female	Spain	not want to specify / none
A.20	3 Y. 3 m.	1970	Female	Germany	Graphic Designer / none
A.21	8 Y.	1953	Female	USA	Retired / computer programming & system analyzer
A.22	14 Y.6m.	None	Female	Italy	Secretary / none
A.23	1 Y 1 m.	1994	Female	Argentina	Accountant / none
A.24	7 Y.	1985	Female	USA	Editor / none
A.25	13Y.10m.	None	Female	USA	Trainer (Teaching College, 3d Building) / none
A.26	7 Y.	2000	Female	USA	Not working now / none

When the table is summarized, it is seen that avatars have been in the SL world for at least one year and at most 17 years. When asked about the real-life gender of the participants, eight people stated that they were male, and 18 people stated that they were female. Looking at the years of birth as generations, it was revealed in this sample that Generation X and Generation Y are predominant. Three people did not want to specify their date of birth. While 10 participants stated that they were from the USA, it is seen that there were participants from countries such as Italy, Germany, Argentina, United Kingdom, Spain, Norway, and New Zealand. The last demographic question asked them to provide information about their work (in real life). The majority gave detailed answers to this question. It was reported that the majority of the respondents were retirees and that they had professions such as editors,



computer engineers, and music teachers. One of the respondents' supportive comments on this question is given below.

*Avatar 2 "I finished the biology department, I like it very much, but since we were employed as a laboratory assistant, I worked for a short time. The SL payoff was much better and when I realized that I gave all my strength here. I am also an occupational health and safety specialist. But the most logical business, Second Life production for me. I'm living here except for 6 months of military service :) At least, I'm here every day for my clients."*

When the demographic characteristics of Avatar consumers are analyzed, it is also noticeable that there are more retired people who exist in this world. It is also seen that there are those who do similar jobs with their own work.

## 4. RESULTS

### 4.1. Distribution of Participants' Opinions about Their Shopping Experiences in Second Life Stores

#### 4.1.1. Frequently Purchased Products

Table 2. Most Frequently Purchased Products in SL

Product Category	n
Clothes	25
Accessories	7
Shoes	6
Hair	4
House	4
Games	4
Furniture	4
Leather	2
Others (Toys, huds, linden, tips, dance animations, etc.)	15
Total	71

Questions 6 (frequently purchased products), 7 (frequently visited stores) and 8 (what kind of products they would like to see more of) in the interview form were aimed at determining the shopping experiences of the participants and the answers were listed under sub-headings and supported with opinions. Question 6 is presented in Table 2, Question 7 in Table 3, and Question 8 in Table 4.

When Table 2 is examined, it is seen that clothes are the most common products purchased by the participants, and their answers are listed below.

*Avatar 2 supported the answer with this sentence "In SL, I pay for land (for my store) every month. Apart from that, I make business-related payments for commercial purposes (payments to scripters-software for some work). Still, I make the biggest payment for land (around 26k*



*per month). Since I am only here for trading purposes, I only make the necessary expenses for my production. However, there were times when I bought a lot of clothes and accessories for a while. Specifically, the things I bought the most were: Outfit- Suits- Shirts- Trousers- Shoes- Hair”*

Avatar 6: *“I’m buying clothes. I mostly do live music in SL, so I usually buy clothes or new items for holidays and special occasions.”*

Avatar 9: *“Clothing (Honestly, I don’t buy much in SL anymore. I do stuff for the Whole Brain Health project, yes. Otherwise, I have a lot of virtual junk from years. I don’t need more. My L\$ goes to supporting artists, and musicians and goes to support philanthropists).”*

When Table 2 and participant opinions are examined, it becomes clear that metaverse users mostly buy clothes. Clothes are followed by accessories and shoes.

#### **4.1.2. Frequently Shopped Stores**

The seventh question in the interview form was asked to determine from which stores they purchased the products. The answers of the participants are grouped in Table 3.

**Table 3.** Store names

Store Name	n
SL Marketplace	7
KC couture	4
N-core	2
Mikki Myles	2
Woodland Park	2
Doux	2
Phedore	2
Cog & Fleur	2
Cold Ash	2
None in particular	3
Multiple stores	15
Total	43

When Table 3 is examined, there are many store names, and the respondents stated that they mostly shop from stores such as Marketplace, KC Couture, etc.

Avatar 9: *“I usually buy my products through Seraphim <https://www.seraphimsl.com/> or marketplace.”*

Avatar 10: *“SL Marketplace...Sometimes I go to the store to see-feel how I look, how it looks.”*

The opinions of the participants supporting their answers are listed above.



#### 4.1.3. Which Products to Have in Stores Are Desired

The last question in the interview form was asked to indicate what kind of products they would like to see in these stores. Many answers were received to this question, and these answers are quantitatively presented in Table 4 below.

Table 4. Desired products

Desired Products	n
Clothes	25
Accessories	7
Shoes	6
Hair	4
House	4
Furniture	4
Make-up	3
Other	17
Total	70

Avatar 2 provided this statement to support the response: *“In my opinion, there are two answers to this at the moment. First of all, in general terms, I would like to have products with quality textures that only licensed creators can make. What I mean is, rather than everyone being a creator, I would like people/companies that have passed some levels, have a license, or have been better inspected by LL to produce products. There is a very bad level of product production, and this makes the SL look poor quality. Users have to search for good products and waste time. In other words, what kind of products would I personally like to have -> Items with more realistic animations, clothes with a curvier structure (Actually, since I am a manufacturer, I would like to build more yachts myself).”*

Avatar 7: *“I like things that make my avatar look more realistic. For example, heads, bodies, clothes, etc. mesh items such as. The more realistic the better for me. Since I was in SL before the invention of mesh elements, I think mesh is more preferred than it was before. Whatever it is, I’m looking forward to something better than mesh. Maybe over time something will become available. There’s something I want to see. It would be really nice if Linden Labs could configure their viewer to use it with a Virtual Reality headset. It is not currently configured for VR.”*

Avatar 24: *“More modest, ethnic-inspired clothing that blends my culture with modern style.”*

Avatar 26: *“Does the word knickknack sound familiar to you? The word pseudo means “a small, worthless object commonly used as an accessory or ornament.” Whether it’s in RL or SL, I don’t care if there’s junk lying around because, in my opinion, some of these objects aren’t worthless at all. I have a plastic cube in RL that I use as a paperweight! So, I think it would be interesting to see more knickknacks in SL, especially me, as I could probably find a use for them*



*and maybe show others how useful these knickknacks are. There is a saying: “One man’s trash is another man’s treasure.”*

When Table 4 and the related comments are analyzed, it is seen what kind of products they would like to see in the stores, and it is seen that clothes are in the first place (25 people). They buy clothes the most and they would like to see more clothes.

## **5. DISCUSSION and CONCLUSION**

The Metaverse is a fictional concept defined nearly 20 years ago as a virtual universe where people interact with augmented virtual reality devices entirely mentally (Narin, 2021). The popularity of the virtual platform peaked during the pandemic and continues to grow as Metaverse is trending in the media. SL has a large market share with millions of users. Linden Lab is constantly developing new content on SL, which tens of thousands of creators worldwide describe as the largest and most successful 3D virtual world created by its users. Mainland-owned by Linden Lab, SL is connected to the real world through its virtual economy powered by real money. Since 2003, Second Life has reached millions of users and has become a popular platform where users socialize, shop, and have fun, while students and educators use the platform for educational purposes. This virtual environment provides a space for businesses, organizations, and entrepreneurs worldwide to market their virtual products and services.

This study aims to determine the views and experiences of people who have shopping experiences in the virtual world of Second Life. The views of 26 avatar consumers are summarized in the findings, and similar to previous studies (Swilley, 2015; Shen et al., 2021; Demirci, 2022), it is supported that most clothing products are purchased. These results are important both for researchers who want to conduct similar academic studies for individuals and organizations that will utilize virtual platforms for product sales. Future research could be more comprehensive than SL stores. For example, the atmosphere of the environment, factors affecting purchases. Furthermore, a broader perspective on the virtual economy and shopping behavior can be gained by comparing shopping experiences on other virtual platforms. Understanding user demand is critical to the success of virtual stores and studies in this area will contribute to the development of the virtual economy and shopping experiences. In this context, it is thought that the results of this research will not only contribute to the field of marketing but will also be an enlightening study for individuals who intend to shop from these channels by determining what kind of products customers prefer and from where while shopping on a parallel universe platform such as Second Life.

The research findings reveal that shopping in virtual worlds like SL is not just an economic activity, but it also provides an environment where users can express their creativity, enrich social interactions, and exist digitally. In this context, the virtual shopping experience constitutes not only the design and marketing of virtual products but also one of the fundamental building blocks of the virtual economy. In conclusion, this research shows that virtual shopping not only creates economic opportunities but also plays an important role in digital identity



construction and social interaction. Future research should continue to examine the deeper effects of virtual shopping on user experience and how these environments interact with the broader dynamics of digital society.

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