

A Work Project, presented as part of the requirements for the Award of a Master's degree in
Management from the Nova School of Business and Economics.

LUXURY BRANDS IN THE NEW DIGITAL ERA:
METAVERSE, NFT AND GAMING

GAIA GIOBBI

Work project carried out under the supervision of:

Luis Martinez, Alberto Festa,

Francesca di Pietro

12/09/2022

Abstract

Disrupting technological innovations made companies increasingly focused on enhancing existing digital solutions and establishing new ones. The aim of this study is to investigate the current scenario and potential opportunities arising from the encounter of the luxury sector and the new digital trends, i.e., Metaverse, NFTs and Gaming. As it will be shown, luxury brands are already exploring collaborations with gaming and Metaverse platforms, with Gucci leading the way. This work shall serve as a basis for further research to understand how luxury firms' business models are changing, considering the intersection of Generation Z new needs and the available technologies.

Keywords: Luxury Management, Digital Strategy, Metaverse, Gaming

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

TABLE OF CONTENTS:

Introduction

1. The Luxury World

1.1 Definition

1.2 Key Characteristics

1.3 The Luxury Sector: Outlook and Trends

2. The New Digital Era

2.1 The Evolution of the Internet: From Web 1.0 to Web 3.0

2.2 The Metaverse

2.3 Gaming as the First Driver of the Metaverse

2.4 NFTs and Crypto-Art

3. Luxury in the New Digital Era

3.1 The Link between Luxury and Digital

3.2 Opportunity for Luxury Brands in the Metaverse

3.3 NFT in the Luxury Industry: Dolce&Gabbana Case

3.4 Gaming in the Luxury Industry: Balenciaga Case

3.5 Metaverse Fashion Week on Decentraland

3.6 Data and Generation Z

4. Gucci: The Tech-Savvy Luxury House

4.1 Background of the Brand

4.2 Digital Innovation and E-commerce

4.3 Vault and Gucci's Path into the Metaverse

Conclusion

INTRODUCTION

We are living in such a fast-changing world that sometimes it feels like nothing will last long without changing. Brand strategies have been greatly impacted by the pandemic caused by Covid19 and, with digitalization and technology innovation, the world is undergoing a constant and radical change.

In particular, the luxury sector has seen numerous drastic changes in the last 40 years, and it has evolved from strength to strength to become a worldwide and societal phenomenon that is increasingly ingrained in culture and society. Luxury has had several waves of expansion: in the 1980s, the focus was on the United States and Japan; in the 1990s, it was the shift from wholesale to retail models, as well as the development of Hong Kong and travel retail; in the 2000s, brands expanded their offerings into new product categories such as eyewear and beauty, and China's demand for luxury goods began to emerge; and, in the last decade, China has been at full speed, with the rapid transformation of digital and the beginning of brand extensions into experience, as well as the importance of concerns such as sustainability and social responsibility. All the subsequent waves have something in common; the time it took to effect alterations decreased with each wave, and, as a result, despite their frequently rigorous approach to change (to maintain their brand equity), luxury companies became less hesitant about embracing new opportunities. This leads us to the current decade. Not only will sustainability and social responsibility continue to drive industrial development, but the Metaverse and everything that it entails will also impact the upcoming years.

Luxury businesses must remain relevant to their customers in the aftermath of a pandemic and adapt to new methods of connecting. In the renewed digital disruption, as the latest AltagammaBain report states, digital is seen “*as strategic channel and opportunity, yet*

under new forms: Data strategy, NFT, Metaverse...". Metaverse, Gaming and NFTs can indeed represent an opportunity for the luxury market in the following decades. As it will be shown, luxury brands are already exploring collaborations with gaming and Metaverse platforms.

The aim of this study is to investigate the current scenario and potential opportunities arising from the encounter of the luxury sector and the new digital trends, i.e., the Metaverse, the NFTs and Gaming. I've been particularly interested in developing this topic for the significant impact it will likely have on brands, customers, and society in the following years, and with curiosity to explore the result of combining tradition and innovation. The contribution of this work is to collect the literature elaborated on the topic, give a framework of the latest digital trends for luxury brands, explore the potential opportunities and strategic impact, and illustrate the steps taken by pioneers brands so far. This study shall serve as a basis for further research to understand how luxury firms' business models are changing, considering the intersection of Generation Z new needs and newly available technologies.

This thesis is structured as follows: in the first Chapter, a review of the literature related to the luxury definition, characteristics and trends is highlighted. In Chapter 2 an analysis of the current landscape of the new digital era is provided, focusing on the technicalities, and illustrating the meaning behind the words "*Metaverse*", "*NFTs*" and "*Gaming*". Then, in Chapter 3 the intersection between the luxury sector and each illustrated digital tool is discussed, while investigating the effects on the classical pillars of the luxury concept, and highlighting the opportunities arising from this trend, the targeted Generation Z, and data collected at the time of writing. Finally, the fourth Chapter proposes Gucci as business case, due to its digital leadership as an international brand and its commitment on implementing extraordinary initiatives in this setting. Lastly, conclusions and discussion of this work are presented.

1. THE LUXURY WORLD

1.1 Definition

The word "*luxury*", per se, is part of everyday common language, and everyone can associate a multitude of meanings around it. However, when it comes to "*luxury*" goods, it is difficult to come up with a strict definition of the term; as it has been given a multitude of interpretations over the years. Drawing inspiration from the literature on the subject, it is possible to immediately find a certain heterogeneity between the various definitions, due to the different approaches with which we have tried to trace the meaning of the term. To try to arrive at a definition or, at least, to identify the essential features of the concept of "*luxury*", it is useful to analyze the different contributions that have been given by the literature in this sense, to identify what are the characteristics that are universally attributed to this concept.

A first approach that is worth presenting here is what we could define "*etymological*", in that it aims to investigate the origins of the term "*luxury*" and to derive its original meaning. From this perspective, the term seems to have two possible origins, both deriving from the Latin language. The first, which derives from the word "*lux*", which literally means "*light*", but which, in a wider sense, can be used to indicate the brilliance of precious objects or even, in a metaphorical sense, the honour, the luster and the achievement of a high social position (Dizionario Olivetti). On the other hand, we have the term "*luxus*", which in Latin takes on the meaning of "*excess*", "*intemperance*", "*debauchery*", but also "*pomp*" or "*magnificence*" (Dizionario Olivetti). Already observing this variety of meanings one can understand how strong is the ambiguity that accompanies the concept of luxury, which seems to be somewhere between a negative connotation, to be understood as an excessive and superfluous sumptuousness, and a positive connotation, understood as magnificence, gratification. Based

on this approach, therefore, we can identify two opposing interpretations of the concept of luxury: on the one hand, we have the reference to a personal and psychological dimension, which sees luxury as a kind of gratification and a tool through which an individual is able to satisfy needs that are different from the basic ones. On the other hand, we see this term used to signify an attitude toward what is superfluous and an absence of measure in the ostentation of things that goes beyond the real need of an individual. In this regard, it is useful to mention the famous definition of Sombart, which identifies luxury as "*an expense that goes beyond what is necessary*". It would find its origin in spending that exceeds the real needs of an individual, obviously in relation to a given socio-cultural context. He also states that "*luxury is something that costs a lot in proportion to utility or economic possibilities*" (Sombart, 1967).

Another approach is looking at the definition given to luxury goods in the economic sphere. With respect to economists, are considered "*luxury*" those goods whose demand increases more than proportionally with respect to income. If a good exhibit a stable Engel income-consumption curve (a condition that makes it possible to calculate its elasticity of demand) then it can be defined as luxury if it manifests an elasticity of demand, with respect to income, greater than one. From this definition, it can be grasped that luxury is a concept that can take on different connotations based on a single person. In fact, different goods are considered to belong to the luxury category depending on an individual's starting income: an individual who already has a high income, according to the above definition, will consider as normal some goods which are considered luxury ones by those with a lower income instead.

From the standpoint of a sociological-managerial perspective, the focus is more on the characteristics of the "*marketing mix*" created for such goods, which is on all the elements through which we try to achieve a status of prestige that remains impressed in the minds of

consumers. In this sense are identified as luxury goods all those items with a limited distribution, controlled directly or indirectly by the manufacturer, with a premium price relative to the market average, and which, in most cases, benefit from some level of support and service at the point of sale. The brand is seen as desirable or aspirational, and the product's quality is typically thought to be of the highest caliber (Datamonitor, 1998). This view is clearly more operational and more suitable for use in managerial practice. Moreover, it helps to highlight other aspects in addition to the marketing mix, such as the ones related to distribution, the perceived quality of the product, etc.

To give a clearer explanation of this concept, it is advisable to use some elements of psychology, such as, for example, the theories of needs. They are a set of theories that aim to investigate motivation, meaning the impulse that drives individuals to act in a certain way; according to them, one of the most important motivating factors is the need, to be understood as "*the total or partial absence of one or more elements constituting the well-being of a person*" (Seward et Al., 1937). In this context, one of the most famous theoretical elaborations regarding the mechanism by which needs are transformed into motivating factors and influence the behavior of individuals, is the "*Hierarchy of needs*" elaborated by Maslow (1943), which has provided a categorization of the main human needs, placing them within a hierarchical structure that starts from the most basic primitive needs, up to the highest and most mature. Based on this theory, people meet their needs in the ascending sense, starting with those at the lower level and the needs of each level must be met (at least partially) so that the needs of a higher level can be manifested and become motivating.



FIGURE 1: [HTTPS://WWW.WIKIWAND.COM/SIMPLE/MASLOW%27S_HIERARCHY_OF_NEEDS](https://www.wikiwand.com/simple/Maslow%27s_hierarchy_of_needs)

Maslow, in his theory, identifies five levels of needs that can be, in turn, grouped into three macro-categories: basic needs, psychological needs and those of self-fulfillment. As you can see by taking reference to the figure, at the base of the pyramid are placed the basic needs, divided into physiological and safety: this is what is needed to survive and, at a higher level, of everything that makes you safe and secure. On the upper step is placed the psychological plane. The need for partnership is inherent in human nature and is articulated in all the social relationships of his life, also the need to feel appreciated by those who belong to the same group, family or community is part of this. The next step is that of estimation, or the need to gain recognition for one's actions, and it is from this level that one begins to talk about status and social stratification. Finally, at the top of the pyramid is the level of self-actualization, the most subjective, linked to happiness, creativity, and desires most relevant to the personal sphere.

Considering this theory, although it is quite dated and, in some respects, overly simplistic, we can get a clearer view of what luxury represents subjectively: the goods and luxury services can be among the esteem needs which do not respond to physiological needs, but rather to desires usually linked to a status or a social aspiration. From what has just been said, it is possible to deduce that the concept of luxury has a strong psychological derivation component that is directly linked to the theory of symbolic consumption, according to which people, in the modern context of consumption, acquire objects that have the function of helping them to express their personality. According to the interpretative perspective that conceives consumption as an act of communication, material goods are carriers of meaning and can be used for symbolic purposes for the expression of one's own identity (Barrera et Al., 2021).

In contemporary society, the symbolic meanings associated with objects are amplified by the work conducted through brand communication strategies. Brands become, therefore, symbolic expressions of values and meanings that, associated with the objects, justify their use, and explain their popularity (Lee et Al., 2019). With this perspective, it is possible to fully include the consumption of luxury goods, given the content of quality, exclusivity, prestige, etc. of which they become bearers.

After all, giving a unique definition of "*luxury*" is not easy, precisely because this concept is, by its nature, susceptible to different interpretations. In addition to this, we must consider the fact that the competitive scenario has profoundly changed and that with the proliferation of brands and technological development are always more companies that can offer high-quality products. To have a more complete vision of the world of luxury and try to derive a definition that is better suited to identify, even in an operational way, which brands

can be defined as "*luxury*" ones, it is necessary to try to identify the attributes that are commonly attributed to luxury products in the first place.

1.2 Key Characteristics

Even if luxury can be described in many ways, it is possible to identify the recurrence of some elements that are constantly being proposed and that, therefore, can be indicated as the key characteristics of the concept of luxury. Indeed, even if it might be difficult to define what makes a product a "*luxury*" one, there are still a few essential traits that can help give a brand or product a luxury label.

1.2.1 High Quality

The first feature to point out is that of the superior quality of luxury products. It, in fact, necessarily represents a choice of quality: the very etymology of the word suggests that these are goods characterized by high quality. It can result from the use of carefully selected or rare raw materials, the extreme professionalism and expertise of the staff who drive the purchase of the consumer and other factors that help make these products sophisticated, inimitable, and valuable. Luxury products traditionally, by virtue of their high quality, are also considered to be exclusive, in the sense of being reserved for those who can recognize and appreciate the level of quality they present. In this way, those who possess such goods have a psychological and social benefit that can sometimes be even more important than real economic value (Becker, 2018). In the luxury sector, in fact, the semiotic and psychological dimension, as we have seen, is predominant with respect to the functional utility of the product. The attention

to detail and the refinement of the design are a feature that must necessarily be present, are the intangible attributes to give luxury products their true essence. Thus, functional benefits are overshadowed by symbolic benefits, particularly those that are related to the psychological and social significance the product envisages.

1.2.2 High Price

Another feature that is easy to trace back to luxury products is the high price. It can be seen as a direct consequence of the concepts that were previously discussed: high quality and sophisticated design, from which a higher price is expected. In the past, this characteristic was considered so predominant that high price and luxury goods were considered synonyms, regardless of the presence of other features. Today, however, as we have already seen, other elements have become important, and attention is also paid to other aspects. In the past, the high price represented the sacrifice needed to buy an object or a luxury service and was the vehicle through which the individual was able to rise socially, while today "*Luxury is a complex of meanings that largely transcends economic value*" (Cabigiosu, 2020). So, price, while continuing to represent a necessary element to delineate the concept of luxury, alone is not a sufficient condition. The price of luxury goods, at present, not only reflects the value of materials and the care with which products are made, must also reflect other emotional aspects. The more a product will be able to provoke an emotional reaction in the consumer, the more its price will have to be high, to reflect this value (Bilge, 2015).

1.2.3 Hedonistic Aspects

As we have seen, consumers tend to associate luxury goods with a set of attributes that find their foundation in the psychological dimension of consumers themselves. Luxury goods, traditionally, are considered a means of satisfying the status needs of consumers, since the consumption of expensive and high-quality items allows people to use them to draw themselves closer to those belonging to the highest strata of society or in any case to identify with a group of people who can appreciate sophistication, the style or high quality of certain products. In recent years, however, luxury goods are increasingly associated with certain elements that have to do with pleasure, emotion, and hedonism. Luxury goods, in fact, are no longer considered a mere indicator of social status, but have become a tool that consumers can use to increase their pleasure and wellbeing (Dubois et Al., 1995). In the case of luxury goods, therefore, buying, and consumer behavior is driven by not strictly functional reasons, such as sensory pleasure, aesthetic beauty, excitement, and experiential consumption. In the modern context of consumption, we see a constant search for pleasure in every situation. The achievement of pleasure is indicated as one of the reasons that most often justify a purchase (Alba et Al., 2013).

Moreover, consumers have expanded and modified the spectrum of their needs: secondary needs and the pursuit of the predominant pleasure have become indispensable. In this context, therefore, brands and products must contribute to arouse emotions in the consumer, driving him towards new experiences of psychological gratification that go beyond mere material consumption. The hedonistic component of the products exceeds the utilitarian one and, consequently, consumers activate evaluation processes very different from those described in the traditional perspective. This has led companies to try to reach an emotional rather than cognitive positioning (Hirschmann et Al.,1985). The literature also talks about

“*emotional positioning*”, understood as the association of a product and/or brand to some emotions that its purchase or consumption can arouse in the consumer (Richins., 1994). Finally, the development of an emotional positioning aims to develop effective relations between the client and the company. The provision of benefits and sensory experiences can be one of the most powerful tools for generating emotions and building an emotional relationship with the consumer (Gobè, 2001).

1.2.4 The Value of Experience

Reconnecting with the above, it should be stressed that the concept of luxury products is very strongly linked, and could be said to be inseparable, from an experiential component that has preponderant importance in the eyes of the consumer. The consumption of luxury products, in fact, can create experiences strictly subjective and linked to the individuality of each, which cannot be replicated either by other products or by other consumers. The search for personal pleasure passes more and more often through experiences and emotions, and, consequently, we also see, in the practice of many companies, the attempt to offer their customers an added value through the presentation of positive and memorable experiences (Iglesias et Al., 2019).

The change in consumer habits that we have just seen has proved to be of great importance for the luxury sector, which has immediately tried to “*ride*” the new paradigm, appropriately changing their strategy and their offer. Since the early years of the new millennium, there has been an increasing number of businesses seeking to offer experiences with added value, such as reserved shopping areas, the possibility to book in advance items

produced in limited series or to order a highly customized product, according to the client's different needs (Chevalier, 2008). The experiential component, in fact, proves particularly important in the luxury sector, since customers are particularly demanding at all stages of the purchase process: when a person goes in search of a luxury product, he expects high standards of service at all times and expects the experience to reflect the quality of the purchased products and the identity of the brand. What has been said so far, translates, from a practical point of view, into the fact that customers expect to find the sales points of luxury brands in a context that suits their image (Kumagai et Al, 2019) and that, once entering to the store, to receive an efficient and attentive service to their needs (Chandon, 2021). Finally, special attention should also be paid to after-sales activities (Guo, 2019).

1.2.5 The Bond with the Past

Another characteristic that is often associated with luxury goods is their bond with the past, that being cultural or geographical. In many luxury products you can find, in different forms, cultural or geographical references that are linked to the history of the brand or that of its country of origin. These elements positively define the identity of the brand and the development of national identity in a global context. As for, then, the fashion sector, it is easy to see how most high fashion "*Maison*" bears the name of the designer-founder. Such patronymic names, besides indicating the name of the founder of the company, also help to create a clear reference to the brand's country of origin, thus allowing consumers to associate their products with some typical elements of the history of that country. This phenomenon takes the name of "*Country of Origin effect*" and it is able to strengthen a brand when this is associated with a country that enjoys a good reputation with respect to certain elements that are also emphasized in its brand identity (Godey et Al., 2012). In addition to the history of the country of origin, the history of the brand itself plays a predominant role. Some brands, in

fact, enjoy a prestigious history and some of their products have become, over time, real icons and part of the collective culture. Emphasizing such elements, allows luxury brands to strengthen the positioning of their products (Dion, 2015).

1.2.6 The Global Dimension

When it comes to luxury products and brands, the global dimension is an important component. At first, this may seem at odds with what has been discussed about the bond with the past, as many luxury brands try to maintain a strong link with their country of origin. Nevertheless, these two concepts manage to coexist, strengthening each other. In particular, the term "*international dimension*" refers to a complex phenomenon, which can be declined in several respects. A first point, in this regard, concerns a conceptual perspective: the concept of luxury, in the current context of a globalized world, is something that is not rooted exclusively in one culture, but it is recognized by everyone as such (Chevalier, 2008). To better clarify this aspect, it is enough to think of some concrete examples: the purchase of a Ferrari, a Mega Yacht, a Rolex watch, a Chanel bag, or a bottle of Dom Pérignon have the same meaning almost everywhere in the civilized world. Each of the named products corresponds to a precise representation of a lifestyle and, by virtue of their notoriety, almost all can recognize and appreciate their meaning.

This phenomenon is reinforced by the fact that luxury brands try to be omnipresent: many of them have adopted the strategy of being present in the main cities of the world and, of course, be present in the so-called "*luxury capitals*", such as Paris, London, Milan, New York, Rome, Dubai etc. Consumers have become accustomed to the international presence of these brands and expect their presence in these places. In relation to this, it is also important

for luxury brands to maintain their consistency in every part of the world: they must present the same identity at a global level, so that consumers from every part of the world can recognize themselves in the brand (Pini, 2017).

1.3 The Luxury Sector: Outlook and Trends

The global luxury market encompasses nine segments: personal luxury goods, luxury cars, Hôtellerie, fine wines and spirits, gourmet food and dining, fine art, high-end furniture and household items, private jets and yachts, and luxury cruises (Bain & Company 2020). Despite the black year of the pandemic, the personal luxury goods market has risen sharply hitting 283 billion in 2021. Importantly, this represents a +1% gain compared to 2019 and, for the future, Bain & Company estimates that the personal luxury goods market could reach EUR 360-380 billion by 2025 with a sustained growth of 6-8% annually. However, as expected, the overall industry (with all the above-mentioned segments) did not fully recover to the level of 2019 (1.269 billion), registering a value of 1.140 billion in 2021. For personal luxury goods, this one, is considered the new phase of “*Rebound*” after the covid crisis, which has fast-forwarded some of the key changes of the global luxury market for the next 20 years.

After its worst dip in history, the **personal luxury goods market** experienced a **V-shaped rebound in 2021**

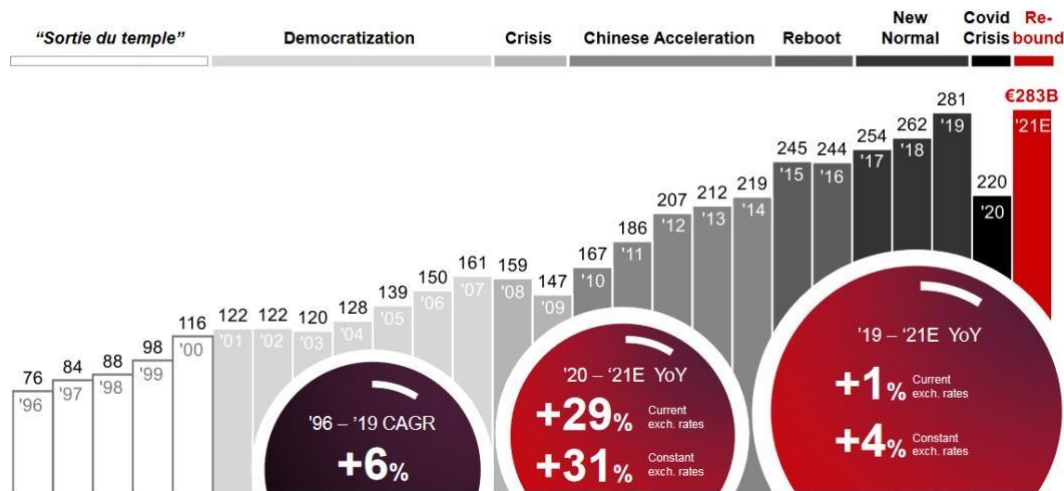


FIGURE 2: BAIN-ALTAGAMMA: LUXURY GOODS WORLDWIDE MARKET STUDY

In the following paragraphs the main takeaways from the Altgamma-Bain report on the personal luxury goods market are reported to grasp the current moment experienced by the sector and the main trends for the future.

1.3.1 Outlook

Geography: The driving force of the “rebounding” came primarily from U.S. consumers, whose attitudes were reactivated faster than expected thanks also to strong government support, and Chinese consumers, which began during the COVID-19 pandemic, Mainland China experienced what Bain described as “*remarkable momentum*”, with the size of the market almost doubling since 2019, due to the repatriation of Chinese overseas purchases during the pandemic. According to the research, the Americas had “*solid growth*”, with a “*new map of luxury*” rapidly forming in the United States as the prominence of secondary cities and suburban areas grows. Annual sales in the Americas are €89 billion (31%

of the world market), while sales in Mainland China amount to €60 billion (21% of the global market), yet China is expected to overtake the United States by 2025. Dubai and Saudi Arabia led growth in the Middle East. Europe, Japan, and the rest of Asia only made a partial recovery in 2021 and have yet to return to pre-Covid levels.

Channels and Category: According to Bain & Company, luxury goods sales through the online channel nearly quadrupled in the last two years, and the second-hand market boomed. Overall, in 2021, online and monobrand stores were the most important channels for recovery, and they should continue to lead development in the foreseeable future. Nevertheless, human contact in the luxury sector remains necessary, both in stores and remotely, these interactions will continue to play a key role in customer loyalty. Moreover, according to the experts, the second-hand luxury market reached €33 billion in 2021, due to rising demand and a more competitive offer. Concerning the categories, all personal luxury goods, apart from apparel, have returned to their 2019 levels. Moreover, during the pandemic, shoes, accessories, and jewelry were the "*star performers*" on a category level.

1.3.2 Trends

Among the great trends in consolidation, there are: the increasing virtualization of the highend (new digital tools of engagement of the consumer), the polarization of values between Westernstyle and Eastern-style, an increasingly omnichannel distribution system and a growing awareness of the value of brands, in terms of environmental sustainability and inclusivity (BCG, 2021).

The expectations are that Chinese consumers are on track to become the largest nationality in the luxury market, accounting for 40% to 45% of worldwide sales. Then, that

mainland China is on track to surpass the Americas and Europe as the world's largest luxury market. Finally, younger clients (Generations Y and Z) keep driving the growth and are expected to account for more than 60% of the luxury market in 2025.

Among the several trends, there is one that will particularly drive the focus of this elaborate, which is the one of virtualization. Luxury's virtualization is indeed growing, with the ability to generate new sources of revenue, in particular with gaming: 39% of consumers are aware that brands also interact through videogames and, of these, 55% bought a virtual item within the game. Among those who made the purchase, 86% said they then bought the corresponding "*non-virtual*" version (Altagamma, 2021). According to Matteo Lunelli, President of Altagamma the sector has shown solidity and is responding quickly to new socio-cultural trends. Sustainability is certainly one of them, but the remarkable virtualization of the luxury experience is also striking, as witnessed by the success of live streaming sales and the entry of brands into gaming, an area that in 2020 reached the value of \$178 billion.

Finally, throughout the new cycle of desire, digital becomes a strategic channel and opportunity, yet under new forms: data strategy, NFT, Metaverse, network and connection economies. Keeping this in mind, this elaborate has the purpose to analyze the concepts of Gaming, Metaverse and NFTs, and how they may represent a new opportunity in the luxury sector.

2. THE NEW DIGITAL ERA

2.1 The Evolution of the Internet: from Web 1.0 to Web 3.0

Since its creation, the nature of the Internet has changed dramatically: from simple e-mailing to current social media, which has become an inextricable component of human connection. The earliest Web Technology was the 1.0. Today, we live in the Web 2.0 age, which will be phased out in favor of its wiser brother, Web 3.0.

The traditional version of the web, Web 1.0, began as a read-only medium. It was mainly used for information sharing, to connect information rather than people. Given that it wasn't an interactive technology, only the users could view the data stored, and most of the contents stored were owned by the individuals. The primary language used was HTML. Examples that envisage this version of the web are Britannica Online, which keeps static material of over 120,000 articles, or the TED's conferences, which contain videos made by famous speakers, etc. (Gurunath et Al., 2022).

The next version, Web 2.0, established itself as a read/write medium. It is known as the Social Web, it's interactive and brought corporations into the mix. Apps replaced browsers, advertising is interactive, and it is possible to download or upload the data. In this version, social networking, blogging, and messaging apps allow people to connect with one another. Users on Web 2.0 can read, comment, upload content to the website, in contrast to Web 1.0 where users could only read the content posted by the site owner, thus being mere spectators. As a result, we were able to witness the rise of social media alongside e-commerce. To deal with the technology, web applications such as XML, RSS, scripting languages, and others are

used. A few examples that belong to this version are Wikipedia, Facebook, and Twitter (Krishnamurthy, 2008).

Finally, Web 3.0 refers to the next generation of Internet technology, which largely depends on machine learning and artificial intelligence (AI). Especially, since 2020, the focus has shifted towards the creation of a decentralized web. Its goal is to make more open, connected, and intelligent websites and online apps that rely on machine learning to analyze data. Instead of insecure databases and opaque data sharing procedures, Web 3.0 will give consumers authority over their data, allowing them to access it from anywhere. Thus, it ensures that all content on the Internet is machine-readable. This will mostly be driven by cloud apps and smartphones (Singha, 2022). Web 3.0 is said to be a technologically advanced medium that allows users to read/write/execute and allows the machines to do some of the thinking so far only performed by a human (Kumara et Al., 2014). This new version represents the evolution of the approaches through which users can control digital assets and online identities, create the content they chose, control and monetize it. Simply put, Web 3.0 is a concept for the next generation of the Internet where users can exercise ownership over their creations. Regarding the underlying technology, Web 3.0 focused on creating a decentralized web-based solely on blockchain and cryptocurrency. Users can connect with Internet services using blockchain technology, which is controlled by a decentralized network of computers. Furthermore, Web 3.0 can make use of public blockchain functionality to allow anyone with an Internet connection to have open and permissionless access (Ragnedda, 2019). Nevertheless, Web 3.0 actually is a standard for the new generation of the Internet: should be considered as a set of rules applicable that apply to everyone who uses the Internet. As a result, Web 3.0 would likely be applicable throughout the web rather than for specific applications (Weston, 2022). In conclusion, Web 3.0 is shaping up perfectly with the formidable growth of NFTs, which will be discussed in the following sections.

2.2 The Metaverse

The technological world is in a perpetual state of transformation. For some, the Metaverse represents the next step in the evolution of how we interact, work, and play online. The word "*Metaverse*" has been circulating in the video game market as more and more platforms adopt virtual reality environments that allow many users to participate simultaneously. In some respects, this is the next step in the evolution of how we engage across platforms.

The end users have historically experienced three major technological innovation waves: the introduction of personal computers, the Internet, and mobile devices. The fourth wave which is currently emerging is represented by immersive technologies such as Virtual Reality (VR) and Augmented Reality (AR) and it has the peculiarity to transform many fields of society, such as education, business, work, and entertainment, all under the umbrella of the new paradigm: the Metaverse (Kamenov, 2017). The word Metaverse is composed of two words: the Greek prefix "*meta*", which stands for "*post, after, beyond*" and "*verse*", an abbreviation for "*universe*". It can be defined as the "*post-reality universe, a perpetual and persistent multiuser environment merging physical reality with digital virtuality... is an interconnected web of social, networked immersive environments in persistent multiuser platforms*" (Mystakidis, 2022).

There are already several Metaverses, for example gaming platforms like The Sandbox and Virtual worlds like Decentraland. However, if we might identify a moment where a huge audience started to explore what the Metaverse really is, it can be when Mark Zuckerberg announced to change its company name to Meta (Chayka, 2021). That has been shown by the large increase of searches in the Google search engine, in October 2021, on topics related to

the Metaverse. Facebook's unprecedented announcement to change the company's name to Meta, in what is expected to be a major rebranding that will turn the company's focus towards the Metaverse, is one of the most recent breakthroughs in Metaverse discussions indeed. "*The existing brand could not possibly represent everything that we're doing today, let alone in the future*" Mark Zuckerberg said during the announcement of the company's new name, adding that the company aims to continue to be seen as a "*Metaverse company*" (Meta, 2021). It has already planned to hire 10,000 people working on developing a Metaverse for Facebook. As of now, Facebook is not the only company diving into the concept of the Metaverse. Several big corporations from the various sectors are pursuing to become significant players in this growing market with continuous improvements on VR platforms. Given the importance of social media, particularly among the Z generation, investments in the Metaverse are influencing future technologies.

2.2.1 The Origins

Despite the growing interest in the Metaverse from major tech companies, such as Facebook, the term's origins go back far deeper. To better understand how we arrived to discuss the Metaverse, it is interesting and important to go through the path which brought this innovative concept to the floor nowadays. The first author to describe the concept of the Metaverse has been Neal Stephenson in his novel "*Snow Crash*" in 1992, at that time, it was used to describe threedimensional virtual worlds in which, indeed, there was no physical limitation for the people to interact with each other. The techno-thriller novel introduced this idea of a Metaverse, intended as a virtual reality web where people from around the world can access and connect through goggles and earphones and materialize in the Metaverse in configurable digital bodies called avatars (Stephenson, 2003). The very first Metaverse was City Space, which was active from 1993 to 1996 (Benedikt, 2008), afterwards, many other

Metaverses emerged, such as “*Active Worlds*” and “*There*” (Schroeder, 2001). A pivotal shift has been represented by Second Life (SL, www.secondlife.com) which stimulated the creation of web-based virtual worlds and made gamers very enthusiastic. In fact, this website allowed them to create their own avatars and enrich them with plenty of features, with the gamer’s imagination being the only constraint. In this second world created for the users, you could perform many activities, such as buying real estate, designing, etc. Furthermore, Second Life also introduced the “*Linden Dollar*” currency, therefore creating its own economy. Interesting to note that the Swedish Government established an embassy in Second Life, where numerous cities, colleges, artists, and individuals created virtual assets (Bengtsson, 2011). Additionally, the OASIS, depicted in Ernest Cline's 2011 science fiction novel *Ready Player One*, is a modern literary reincarnation of the Metaverse. OASIS indeed is a massively multiplayer online virtual reality game that has evolved into the most popular online hub for employment, education, and leisure (Mystakidis et Al., 2021).

2.2.2 Technicalities

The Metaverse has been referred to as the 3D Internet or Web 3.0 in the world of virtual reality (Kapp et Al., 2013). Its earliest form was envisioned as a web of virtual worlds through which avatars might travel seamlessly among them: Opensim's Hypergrid brought this concept to life (Dionisio et Al., 2013).

The Metaverse's components, such as AR/VR technology, online multi-player games, digital virtual twins, and blockchain applications, have been in use for some time. Furthermore, recent technology advancements that allow the purchase and trade of non-fungible Token (NFT)-based artworks, souvenirs, and lands prove that the promised universe is one step closer. However, for this fictitious universe to be completely realized, 5G

technology must be implemented, AR/VR hardware and content must become more widely available, and the utilization of peer-to-peer technologies must rise. The Metaverse's Mixed Reality version is now under construction, and it will include social, immersive VR platforms that will work with enormous multiplayer online video games, open game worlds, and AR interactive spaces.

Although currently users can meet, socialize, and interact with each other in an embodied form, as 3D holograms, or avatars in physical or virtual spaces, they can do it with the limit of interacting within the same platform. The vision is to let it occur without any restrictions. The next frontier is indeed represented by cross-platform and cross-technology meetings and interactions, with some users in VR and others in AR environments. Software interconnection and user teleport between worlds are two of the Metaverse's common principles. To let that happen, it necessitates the interoperability of avatar personalization and the portability of accessories, props and inventory based on common standards (Mystakidis, 2022). As we are right now in the Web 2.0 era of the Internet, the Metaverse is considered an upgrade to a Web 3.0 Internet experience, in which users can jump from one platform to the other using digitally universal identities in decentralized yet interoperable applications. Furthermore, the Metaverse is meant to provide users with actual ownership of the digital items, reputations, and tools they gather online with ownership recorded via immutable decentralized ledger technologies (Lim et Al., 2022). If we want to summarize the main assumptions of the Metaverse that can be the following: there should be only one Metaverse (rule #1), should be for everyone (rule #2), controlled collectively (rule #3), open (rule #4), hardware-agnostic (rule #5), networked (rule #6) and it is an iteration of the Internet (rule #7) (Parisi, 2021).

Some critics argue that the Metaverse is a foggy notion or simply a means of promising an exciting future that lacks to provide useful applications of it for the users or also just a

dream world constructed by the powerful to push us to the “*black hole of consumption*” (Bogost, 2021). Many others, instead, believe that the Metaverse is not just a fad but a real evolutionary process that is currently underway (Lee, 2021). As we saw, was an already existing concept actively considered. In fact, the Metaverse Roadmap was published in 2007.

When the Metaverse will envisage all the features as it was intended when designed, it will be possible to undertake many daily activities (working, having fun, traveling, shopping etc.) by building a 3D avatar in the digital universe. Furthermore, the users can perform changes that will be visible to everyone, and this provides them with a greater identity and continuity of experience. This will have huge implications from different points of view. Not only it will be an all-new market that is ready to be filled up by buyers and suppliers, but also will be reflected in the sociocultural and psychological effects. Not to mention the impact on data science and big data. With all the development of technological infrastructures and the interests of the researchers in this field, at the time of writing, is still an open debate and the literature is far from being complete. Finally, is right to mention that, although being a promising scenario, the Metaverse faces several challenges related to the underlying AR and VR technologies, which, among others, may influence users’ emotions, cognitions, and behaviors (Slater et Al., 2020). Physical wellbeing, health and safety, psychology, morality, ethics, and data privacy are as well risks related to AR (Christopoulos, 2021).

To conclude, the Metaverse can cover all the areas related to humans and society as it is designed as a simulation of the natural world. The emphasis on this topic has been accelerated by the Covid-19 pandemic, which speeded up the digitalization process, as many people have been forced to stay home, and to perform many activities in the virtual world. The investments made by media giants and several significant corporations on the Metaverse demonstrates how the Internet is on the road to take a new dimension, in which millions of

people can act simultaneously and switch between different platform, and this will be designed and developed into a perpetual digital world. A potential problem related to the energy resources and equipment to sustain the essential infrastructure remains open.

2.3 Gaming as the First Driver of the Metaverse

In recent years, marketers have become much more conscious of the gaming audience's possibilities. Old assumptions about gamers being almost entirely young, male, and obsessed with gaming to the exclusion of all else are being demolished by the evidence. According to several surveys, the gaming audience is broad and sophisticated, with the average gamer being well educated, wealthy, and in charge of big family purchases. Furthermore, different types of individuals like different types of games due to the huge diversity of game genres available. Brands in a variety of industries, including entertainment, sports, food and beverage, and retail, have taken advantage of the fact that games can reach almost any audience (De Hesselle, 2021). In this framework, is interesting how the Metaverse has a lot more in common with gaming communication than it does with social networking. In most situations, Metaverse social spaces are set up as multiplayer lobbies or in instanced spaces like VR Chat. Gaming is going to be a big component of the Metaverse, and it could even be a route in for younger people. Older audiences and people who don't consider themselves gamers will be impacted by the Metaverse's gaming antecedents, even if they don't consider themselves players (Sutcliffe, 2022).

The visual language and social rules of Metaverse interaction have been indeed defined by gaming. Elements of the Metaverse-such as 3D avatars or world-building- have been already incorporated even in early immersive Games in 2D like Minecraft and Second Life. Gaming, in fact, has always been a prime candidate for Virtual Reality (VR). So far, VR

gameplay is available as a standalone application. As the Metaverse can be considered a unified VR space, it will create a single interoperable environment for users, by connecting multiple VR games. Gamers will be able to interact with the same players in multiple spaces (XRToday, 2021).

Furthermore, the Metaverse has garnered major investments from game firms, tech giants, and venture capitalists alike, even though it is still in its early phases. It certainly is the game industry's future. Some of the main early movers to keep an eye on are Decentraland, Sandbox, Epic Games, and Meta. *Decentraland* is one of the first firms to attempt to create a Metaverse. It has a quantifiable 3D VR platform, an Ethereum-based cryptocurrency, and distinct locations for multiplayer games. Decentraland has also invested in Decentral Games, a business that will help it expand its games capabilities (Raza, 2022). *Sandbox* is a Metaverse-native video game that lets you play, build, own, and rule a virtual world. Sandbox's economy is based on user-generated crypto and NFT assets, and it collaborates with worldwide brands to provide one-of-a-kind and enriching experiences. You may buy and incorporate NFTs into your VR environment on the Sandbox marketplace (Takahashi, 2021). *Fortnite*, a VR game and event location rolled into one, is Epic Games' most well-known product. Artists from all around the world have performed performances using Fortnite's Metaverse-like features as the game's popularity has grown. Epic Games just announced a \$1 billion investment to create its own game Metaverse (Hayden, 2021).

While consumer gaming is now driving the majority of Metaverse adoption, gaming is only the first use case for the Metaverse. Ultimately, the Metaverse will evolve to resemble a digital twin of the real world — across all facets of life and across most existing and some not-yet-existing industries — finance, healthcare, sports, gaming, music, real estate, etc. (Mitselmakher, 2021).

2.4 NFTs and Crypto-Art

During the last year, Non-Fungible Tokens (NFTs) raised the attention of plenty of people. The raise of the market was impressive: overall, in the first four months of 2021, the NFT volume has exceeded 2 billion USD, ten times more than the entire NFT trading volume in 2020. How can an NFT be defined? *“An NFT is a unit of data stored on a blockchain that certifies a digital asset to be unique and therefore not interchangeable, while offering a unique digital certificate of ownership for the NFT”* (Nadini et Al., 2021).

In the virtual world, transactions generally occur through cryptocurrency. Other than that, NFTs are the primary method for monetizing within the Metaverse. The main difference with a cryptocurrency is that NFT cannot be exchanged for another as each one is unique (i.e., nonfungible), and, for this reason, NFTs enable to authenticate ownership of digital assets. Moreover, as they use smart contract technology, they can be set up so that the original artist can earn a percentage of all subsequent sales. OpenSea, Axie Marketplace, and Rarible are specialized marketplaces where NFTs are sold. Initially, NFTs were only available on the Ethereum blockchain, but more and more blockchains are implementing their own versions of the technology (Lounge, 2021).

The public's interest in NFTs skyrocketed in 2021 when their market saw record sales, but little is known about the industry's overall structure and evolution. The first popular example of NFT is CryptoKitties, which congested the Ethereum network in December 2017. Those were a collection of images of virtual cats that are used in a game on Ethereum, and that episode has been considered by many a representation of the irrationality that drives the cryptocurrency market in that year. Then, the market started to grow and reached another peak

of attention in March 2021, when Beeple, a famous artist, sold an NFT of his work for \$69.3 million at Christie's (Riegelhaupt, 2021), which resulted in the third-highest auction price achieved by a living artist (Reyburn, 2021), and other records followed thereafter.

2.4.1 Crypto-Art:

Crypto Art is a digital artwork recorded cryptographically on a Blockchain, as a NonFungible Token (NFT). The main Blockchain that makes possible the coinage of these works is Ethereum, particularly its application ERC-721 (Anta, 2021). Conventionally, you can fix the date of birth of Crypto Art on January 13, 2018, to coincide with the first Rare Digital Art Festival. This is reinforced by the dates of two events following the festival in a few weeks: the issuance of the ERC-721 standard on 27 January 2018 and the launch of the SuperRare gallery, to date the most important, on 2 April 2018 (Franceschet, 2021). In the following three years, Crypto Art has asserted itself strongly. It gave space and visibility to many young artists, determining the emancipation of their figures. With Crypto Art the artist regains a role beyond the primary market, copyrights are recorded on the Blockchain and managed with it in all possible subsequent exchanges of the work that are punctually tracked (Jing et Al. 2021). The ability to reproduce without permission the digital work can in fact be blocked through the Blockchain guarantee of authenticity, uniqueness and not reproducibility. Crypto Art, therefore, increases the importance and nobility of digital art. Moreover, the reservations expressed against Crypto Art, motivated by the excessive consumption of electricity of Blockchain technology, have a valid foundation if referred to the current level of development (Ghorbanian et Al., 2021). However, negative judgments will have no reason to exist if it will be successful ongoing testing in the Ethereum environment, which has among its objectives the modification of the consensus mechanism that according to the forecasts will

allow an energy saving of 99.95% (Beekhuizen, 2021). Anyways, currently NFTs are not limited just to pieces of art, and, in the following chapter, we'll see how luxury brands came into play in this landscape.

Overall, NFT research is still limited, focusing primarily on technical aspects such as copyright regulations (Evans, 2019); components, protocols, standards, and desired properties (Wang, 2021); new blockchain-based protocols to track physical goods (Westerkamp, 2018); and the implications of NFTs on the art world (Whitaker, 2019) particularly because they allow for the sharing of secondary sale royalties with the artist.

3. LUXURY IN THE NEW DIGITAL ERA

The fashion and luxury goods industries are undergoing significant transformations. To keep up with customer demand, luxury goods firms are increasingly adjusting their strategy and thinking, including digitization in their long-term goals. They're putting a greater emphasis on sustainability in the design and manufacture of luxury items, while also speeding up the use of digital technologies to connect with customers and create premium shopping experiences. Companies indeed are increasingly focusing on refining existing digital solutions and developing new ones, as the transition to the digital world has been faster than planned. Moreover, luxury goods firms are forming strategic alliances with both established digital players and up-and-coming startups to develop new products and find new methods to improve services while lowering their environmental effects. In the fashion and luxury industries, innovation is the driving force behind development. Indeed, the industry's major corporations are supporting innovation challenges between startups and incubators, with the goal of encouraging creative practices and fostering the spread of new luxury and fashion concepts (Faccioli et Al., 2021).

After having illustrated the key features of the Metaverse, NFTs and Gaming world, in this section we'll address how luxury brands are starting to play in this field, their opportunities and threats, starting from the relationship between luxury and the traditional concept of digital as understood so far. We'll also discuss how classic pillars of luxury fits this new digital era. The different real business cases that will be mentioned demonstrate how there is not a unique strategy to approach this new world, and there are many differences in terms of mode, purpose and, consequently, financial profit.

3.1 The Link between Luxury and Digital:

The historical relationship that luxury brands have with the digital world is a love-and-hate one: brands wonder how to use it without harming their brand identity and their luxury essence. Maintaining exclusivity and an aura of uniqueness can indeed be difficult for luxury brands in the digital era, which explains why some brands such as Chanel did not sell luxury fashion online by 2020. As Chanel's Fashion President put it, "*nothing can replace the experience in the boutique*"; these businesses indeed seek to maintain exclusivity while preserving distinct experiences in their stores (Baker et Al., 2018),

3.1.1 Brief History of the Love/Hate Relationship Luxury Brands have with the Internet:

Before discussing the latest developments regarding the engagement of luxury brands into new (virtual) realities, such as the ones shown in the previous chapter, it is appropriate to provide some context on the main milestones that luxury brands experienced in relation to the digital world. "*The field of luxury has been slow to adopt both digitization and a multi-actor view*" (Holmqvist et Al., 2020) and to participate in co-creation activities with stakeholders via social media (Arrigo, 2018). This resistance stems from the fact that the luxury industry has culturally been hierarchical, closed, and controlled (Kapferer et Al., 2012), which is not easily matchable with market realities in which stakeholders actively co-create brand value in online environments (Wider et Al., 2018). As a matter of fact, at the beginning of the current century (2000-2005), the Internet was considered something alien by luxury brands, believing that the Internet and luxury were based on fundamentally distinct cultural roots as shown in the following table:

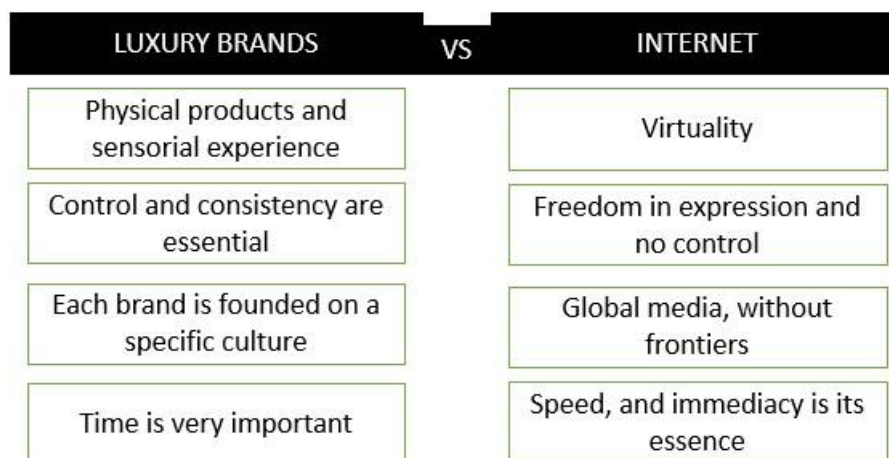


FIGURE 3: REFORMATTED FROM CULTURAL COMPARISON OF THE INTERNET AND LUXURY BRANDS (CHAVALIER, 2020)

In particular, the love/hate relationship between luxury brands and the web is centered on the question of virtuality and of control. Let us first address the issue of virtuality: if the essence of a luxury product is the ability to 'feel' and 'touch' it, sales and marketing executives may be led to believe that luxury can only be purchased in a store, that a customer must touch and feel the product, and that the presence of a vendor is required (Harkison, 2017). These factors are crucial, but they are not necessary: consumer studies have revealed that luxury customers are extremely eclectic and prepared to purchase any luxury goods through the Internet if the site is appealing and functional. The second fear for the brand executives was the one of control: that is, that a strong virtual presence outside of their control would jeopardize their brand – because control would be in the hands of Internet users, which is correct. So, in the period from 2000 to 2005, the Internet was ignored, and many luxury brands were running their business without a website. For instance, Prada's website was renowned

for having solely a home page that said, 'Opening Soon.' for a long time. It didn't build a perfume site until the end of 2005, and the main site didn't launch until 2007 (Chevalier et Al., 2020).

Subsequently, between 2005 to 2015, the Internet site was used to present the brand DNA, history and collection, and an e-commerce site coherent with the recognition of the online channel as a full-fledged distribution channel. Overall, Internet assumed a network role, combining commerce, communication, and presence on social media while always maintaining something to be desired, as the brand did not interact with the users (Chevalier et Al., 2020).

Then, starting from 2015, the awareness of the rise of Chinese clients and the recognition of the weight of the millennial generation has made the brands think in a completely new way. Brands, indeed, had to deal with 'digital natives' who are used moving without effort from virtual to real, combining many sources of information and points of sales. In this phase, brands have realized the importance of the Internet in the consumer's journey, therefore they started to design and sell an omnichannel experience, to build a relationship with the customer across all possible channels of distribution and communication, with the focus on delivering a unique brand experience. For instance, the single customer database and single CRM envisaged this strategy. Therefore, the Internet and social network became consolidated as tools at the service of a client relationship strategy (Chevalier et Al., 2020).

Therefore, after neglecting the Internet for a long time, luxury companies have finally made it an integral element of their distribution and communication strategy. Large luxury conglomerates have established themselves on online sales platforms and made them a key component. Now, there is a whole new chapter to be written...

3.1.2 Luxury Brands in the New Digital Era: Continuity vs Disruption

At first glance, many contradictions between the digital world and luxury codes may be pointed out, that explain why luxury executives were hesitant to go online (Muller et Al., 2007).

First, digital communication is closer to mass communication than selective communication because of the intermediary positioning resulting from informal information interchange and a sense of community (Geerts et Al., 2011). As a result, there appears to be a danger of image control loss, which might lead to a loss of prestige: the more information luxury companies give online, the greater the chance of distorted repetition of their narrative (de Chernatony, 2001).

Some academics, on the other hand, argue for luxury methods that are digitally focused. For example, using social media to establish a discourse with clients and prospects might be beneficial (Kim, 2012). Such two-way communication may also enable firms to gain a better understanding of their customers and, as a result, anticipate their needs through creative services or goods. Furthermore, a strong social media presence means active and continuous brand presence in clients' minds, allowing organic viral marketing to take place (Murphy, 2011). Finally, brands may use digital technologies to express their values and identity in new ways, as well as to expand their retail potential through e-commerce (Geerts et Al., 2011).

3.1.3 Exclusiveness, Democratization and Heritage:

The integration of luxury branding within the Internet is not an easy task, and it requires intricate strategies to work out (Okonkwo, 2009). Customers' emerging needs for online experiences have been answered partly due to the COVID pandemic, as it has forced even the more reluctant luxury brands to adopt online retail (Klaus et Al., 2020). Retaining the perceived exclusivity dimension of luxury brands is especially difficult online, as the Internet is available to the masses (Okonkwo, 2009). Overexposure to the brand, indeed, is a risk to consider, as it is challenging to maintain a perception of limited supply when most products are always available online, while exclusiveness is commonly regarded as a crucial characteristic of luxury goods (Okonkwo, 2009). In fact, their price premium is justified by the pillars of limited accessibility and rarity that characterize the industry; skilled sales personnel, excellent product presentation and specific locations, are needed to maintain a sense of exclusivity (Kapferer et Al., 2009). Given that the Internet was established on democratic and accessible ideals, the question is of how luxury businesses may integrate a sense of exclusivity with the Internet's customers. The digital world in this context is the ideal setting for the brand to cultivate a sense of desirability with the distribution of content that appeals to both existing and potential customers, spread the brand's dream, and attract new consumers while offering to its traditional customers selective online content and services (Hennings et Al., 2012).

Another empirical characteristic of the match between digital and luxury is democratization: if we look closely at the world of video games, for instance, when luxury fashion enters the gaming world, most of the things in the games are either inexpensive or free. Many goods in the Gucci Garden in Roblox, for example, cost less than \$5, which is far cheaper than buying them at a store. Another narrative is what happened after the original

price was set when a player resold the bag for a greater price (which will be discussed in the following Chapter). Also, when Moschino teamed up with The Sims, gamers were able to customize their avatars with designer products from the Italian house. It democratized luxury fashion by allowing millions of people to participate in the Moschino Bubble. Brands can also benefit from collaborating with video games, for instance going beyond traditional advertising and social media to increase and promote customer loyalty among gamers. And, as we have seen, is also a highly effective approach to reach out to Generation Z and Millennials (Salinas, 2021).

Moreover, for what it concerns heritage, which is another pillar of the luxury understanding, is well known that referring to the past is the best way to create prestige and distance. Digital tools allow brands to promote their DNA and teach consumers their values. Luxury brands use the past, from the organizational level of the company to all customer connections. There is no denying that luxury brands must adapt to the changing times but losing the traits of exclusivity and prestige could mean losing the brand's ultimate identity. By reframing heritage into simple brand values and experimenting with data-backed strategies, brands can have the best of both worlds: a rich, meaningful past with a strong sales future. The challenge, then, is optimizing tools such as social media without compromising heritage (Bui et Al., 2019).

3.1.4 Engagement and communities:

It is critical for companies to comprehend the scope of the Internet world to succeed in developing an online luxury experience (Okonkwo, 2009). Through digital platforms, the ordinary consumer may easily connect with thousands of others who have the same interests.

Instead of just receiving and comprehending information, consumers have the capacity to determine a brand's validity, endorsing (or not endorsing), sharing this endorsement (or criticism), and sparking brand dialogues while influencing millions around the world (Okonkwo, 2009). Furthermore, the luxury business has realized that its long-term viability is dependent on its engagement with youthful, techsavvy consumers (Deloitte, 2020). While most non-luxury brand communications are focused on increasing revenue, luxury firms communicate with the goal of inspiring visions and reinforcing their brand identities (Kapferer et Al., 2012). The purpose of luxury content marketing is to create experiences that show the brand's depth and substance to consumers while also making intangible revenues visible.

One of the key roles of a brand community, is to make customers loyal to the brand. These communities reflect an aggregate of collective expertise on specific companies and luxury shoppers are very interested in looking through designer archives and actively increasing their brand awareness (McAlexander et Al., 2002). This enables luxury businesses to disseminate information through earned publicity without incurring additional communication costs. Moreover, the social component of luxury focuses on online social networks and tackles the cognition of an individual's social group(s). Hence, luxury brands are used by consumers as status symbols, and they promote the brand at the same time as they broaden their affiliation within their social networks for personal brand development activities. In fact, brands may become a part of a customer's online identity, and vice versa, by employing the right approach. This is an interesting point to tackle: if the Metaverse will implement all the functions it was designed for, and we'll spend part of our lives in that digital environment, the avatars will be the online representation of ourselves, and the extent to which we want to introduce us in this digital world, the depth of the convergence/divergence between our online and physical identity, will for sure be a significant subject for future studies on the topic.

Equally important, luxury is shifting away from offering exclusive products for status-driven consumers toward an approach encompassing a broader understanding of several facets, including individual, human, environmental, and technological (e.g., Kreuzer et Al., 2020, Thomsen et Al., 2020), comparable to the involvement of multiple actors in brand-building processes (Holmqvist et Al., 2020). As a result of this (digital) multi-actor view of luxury brands, stakeholders are increasingly engaging in co-creational interactions through digital platforms (Holmqvist et Al., 2020).

3.1.5 Multi-sensory Luxury Experience Online:

Many luxury managers who have embraced the requirement of being online as crucial to their brand are faced with the challenge of how to generate a multi-sensory experience of luxury on the Internet (Kapferer et Al., 2009). The high aesthetics of luxury items may be exhibited in a physical store in an exclusive shopping ambiance full of multi-sensory experiences that appeal to people's emotions (Caru et Al., 2007). However, the Internet does not fully express the feel and elegance of premium fabrics, sophisticated tailoring, and remarkable attention to detail seen in luxury design. Combining the conventional luxury brand image with the use of contemporary technology is, indeed, a major task. Nonetheless, unlike conventional one-way marketing communication, an awareness of the Internet as a 360-degree experience may be used to build the magic and mystique of a premium brand. In the digital age, visual tools like images, films, or 3D product displays, music that evokes certain emotions, and interactive media that promotes discussion with brand advocates and evangelists may be used to communicate a luxury brand's heritage and essential values, without mentioning the fact that the digital realities we focused on throughout this elaborate (NFT, Gaming, Metaverse) have plenty potentials to unlock and will continue to surprise the

world with their visual innovation offering. Finally, the functional value of luxury in an online environment refers to the usefulness, quality, and uniqueness of the online look when utilizing the website and other apps, in addition to product-related functions. Even if the senses of touch and smell are absent, the Internet may successfully reproduce a brand's essence online by utilizing the advanced technological online engaging tools. In this changing environment, it is most than ever important that DNA and codes of luxury brands are clear and recognizable (Derval, 2018), since luxury goods are primarily brought for what they symbolize (Choo et Al., 2012).

In conclusion, control and brand equity preservation are at the heart of luxury. As with the introduction of e-commerce, luxury businesses have taken a cautious approach thus far with the new digital era, just testing the waters. Successfully combining online and physical experiences is a huge competitive advantage for any luxury business, and it will only become more important in the future as digitization progresses.

3.2 Opportunities for Luxury brands in the Metaverse

We have now highlighted the key elements of contradiction and continuity with the classic pillars of the luxury concept when merging with the digital world. In this section, we'll deepen the analysis by illustrating the opportunities for luxury brands as they enter the new digital era.

First, virtual goods can solve the problem of oversupply. Most of the brand, for whatever reason (see Covid-19), end up collecting overstock and end-of-season stock, and, depending on their promotion policy, ends up offering discounts in outlets with the risk of depreciating the value of the brand. With virtual goods, brands won't have to run sales with deep discounts

to get rid of their overstock. Moreover, the creation of these goods will not require any raw material, and it limits the amount of labor, so that in the selling of virtual items correspond to almost all profit for the brands. Thus, big margins. In addition, designers also have a lot of creative freedom when it comes to designing virtual items considering the constraints imposed by commercial realities (market practicalities don't apply). Another advantage for luxury brands can be a new revenue stream with minimal investment given by bringing back old designs. As heritage is a pillar of luxury (Dion et Al., 2016), brands have huge archival of designs that they can convert in virtual assets, surely driving up the interest of consumers which is not driven just by new collections.

Furthermore, another opportunity is represented by the fact that royalty fees or revenue shares on future transactions are included in the smart certificates or NFTs, which translates into ongoing revenue for the original designer and fewer problems of duplication (Marr, 2022). Sustainability factors should be also considered and NFTs provides a simple method for companies to show their costumer they are committed to sustainable aims and practices. Consumers will be able to check the legitimacy and origin of the NFT on the blockchain to determine or not a product is sustainable (Rao, 2021).

Moreover, the opportunity to offer a personalized touch is also a valuable one: in a Web 3.0 era, fashion businesses and independent designers will be able to better engage with their clients by providing a more customized and immersive experience. Customers that are digital natives, such as millennials and Gen Z, desire to associate themselves with brands that provide distinctive, one-of-a-kind experiences. Brands and designers will be able to provide personalized experiences and limited/special editions in a virtual environment powered by NFT (Rao, 2021). Established fashion labels will be able to offer personalized clothing to their consumers, while smaller labels and independent designers will be able to differentiate themselves by producing limited-edition designs. The Metaverse, via NFTs, will continue to

drive the luxury fashion industry towards what is known as "*the experience economy*", in which the primary value proposition is to provide clients with experiences rather than physical goods. Luxury fashion businesses may sell their items more cheaply and creatively via NFTs and the Web 3.0 Metaverse environment since they won't have to worry about delivering actual inventory or putting up real shops or showrooms and customers will be able to enjoy unique shopping and entertainment experiences (Rao, 2021). Undoubtedly, integration and user experience fluidity are a crucial component for the Metaverse — something that syncs well with the aspirations of the luxury industry (Alexis, 2022).

As a side note, it is remarkable how real estate is another interesting area to look at in the Metaverse. As revealed by the Metaverse Group which purchased a virtual land in Decentraland, with the purpose of being used to host fashion events and sell virtual clothing for avatars (Howcroft, 2021).

3.3 NFT in the Luxury Industry: Dolce&Gabbana case

After Art and Music, NFTs are starting to touch the fashion luxury world. For luxury brands, NFT represents a slew of possibilities. To begin with, as it has been discussed in Chapter 2, they are a tool to authenticate an item's authenticity and ownership: counterfeit products are indeed a problem for the industry, and blockchain aids in tracking an item's origin, history, and prior owners, allowing ownership to be readily transferred and products to be traced and resold (de Boissieu et Al., 2021). This function is especially beneficial in the secondhand market because it allows customers to certify their purchases (Chang, 2017).

NFTs can also be used to sell digital collectibles, such as limited-edition or one-of-a-kind works/pieces of art rather than actual utilities. Many businesses are producing short films

or paintings, some of which include partnerships with artists, and auctioning them off through reputable auction houses. Collectors or wealthy consumers hunting for digital collectibles make up the market for these types of NFT products. As in the case of a digital watch that was auctioned by Jacob & Co., a luxury goods firm, that was sold to the highest bidder for US\$100,000 (DeMarco, 2022). Likewise, RTFKT, a virtual fashion label, sold a jacket for more than US\$125,000 (Tong, 2021). The high valuation of fashion based NFTs indicates the presence of demand for virtual clothing articles. Furthermore, NFT can also be used to create digital skins for avatars in video games. The relationship is so strong that in March 2021, a seven-minute auction of 600 NFT sneakers produced US\$3 million in revenue (Gallagher, 2021).

Because the fashion industry is based on the selling of physical things, NFTs are unlikely to fully replace them, but they do provide a profitable potential for luxury fashion brands to use them as an extension (Rehman et Al., 2021).

3.3.1 Dolce & Gabbana in the digital age: the first NFT collection

A concrete first brand's step in the NFTs universe which turned out as a success is the one of Dolce&Gabbana (D&G). The fashion and luxury Milan icon sold a nice-piece NFT collection, on October 2021, called "*Genesi*" for 1.885,75 ETH (Ethereum) which corresponded to around \$5.7 million at the exchange rate of the time. The collection, inspired by Venice's history and tradition, has been the first NFT couture collection in the world, combining digital and physical pieces, and was available exclusively on the digital luxury marketplace, managed by UNXD Polygon (Muret, 2021).

The founder and chief executive of UNXD, Shashi Menon, approached D&G with the idea. The collection included five pieces that were de facto physical designs developed by D&G and from that, the virtual iterations were created by UNXD, including two versions of The Dress from a Dream in gold (see the figure below), and in silver featuring shiny, crystal beading. The collection also included an emerald, green men's suit (see the figure below) and two crown accessories, one in gold and the other in gem-studded silver. The other four pieces were exclusive digital pieces based on sketches from the brand's designers. The Doge Crown (see the figure below) received the highest price, featuring seven blue sapphires and 142 diamonds, selling for an equivalent of \$1.25 million USD at the time of the auction (The New York Times, 2021).

By and large, the NFT collection was extremely scarce, boosting its exclusivity, consistent with its branding and the result of this scarcity is a multi-million-dollar sale. What's more it highlighted D&G understanding of the current technological landscape and the attempt to integrate to the luxury fashion industry, which, as discussed, is becoming more digital by the minute (Ledger Insights, 2021). Mr. Dolce stated in an interview for Luxury London: *"Tradition and innovation have been two essential topics for us since the very beginning – when we first started, we were transported by innovation; then we discovered that we still needed our roots. We wanted to understand, in an era like this, where there is a new digital generation, how we might be able to talk and have a better dialogue with our experiences, traditions and the handmade, and combine all of this with innovation. Also, tradition has no meaning if there's no innovation, and vice-versa. Just as there's no Dolce without Gabbana!"* (Anderson, 2021).



FIGURE 4: THE DOGE CROWN (UNXD, 2021); FIGURE 8: DRESS FROM A DREAM: GOLD; THE GLASS SUIT (UNXD, 2021)

3.4 Gaming in the Luxury Industry: Balenciaga Case

As we have seen in Chapter 2, gaming is both the genesis and the current center of the next generation of the Internet, i.e., the Metaverse. Brands of all kinds are taking this new world seriously, with fashion and luxury brands leading the way. Gaming indeed is not a niche anymore. In the last decade, we have seen a growth in new gamers across all demographics. The number of players increased with the pandemic, when many people had to stay at home for almost a year in many places around the globe. In 2021, there were 3.24 billion gamers worldwide, with Asia being the largest market, and that number is only expected to grow (DFC Intelligence, 2021).

Investing in the gaming industry allows luxury brands to reach out to younger generations, who will be their most important customers in the next decades (D'Arpizio et Al., 2021), as well as update their businesses. While gamers used to be about 16-24 years old in the past, the average age of today's players is 35 (Game Sparks, 2021). As gamers get older,

so does their financial ability, along with luxury brands' desire to be a part of this new Metaverse. Individuals who wish to define options in a way that reflects their perspective of value, and their own expressions of personalization are increasingly turning to networked interactions that create value. In fact, customers interact in the way that suits them most across different channels (Leavy, 2019). Therefore, the race to deliver individualized experiences to and for consumers and stakeholders has shifted the focus of business value generation, innovation, strategy, and executive leadership (Ramaswamy, 2020).

Additionally, gaming might be viewed as a new touchpoint for luxury companies outside of the shop, as well as a new context for reaching out to a target audience and generating brand engagement. Luxury and gaming have a lot in common in terms of providing aspirational experiences, escape, and a sense of community. Importantly, virtual clothing is a crucial component of gaming culture (Praetorius, 2020)—a method to 'dress up' avatars in the virtual world—so fashion and luxury are relevant to gaming in general, considering that gamers update their avatars very frequently (Green, 2021).

Moreover, collaborations between luxury goods companies and gaming ones allow for the creation of parallel revenue streams through capsule collections that are first found in a game and then sold in real life. Gaming can assist firms in being more sustainable by providing several opportunities for people to try on and wear garments—like a 'virtual try on'. Furthermore, rather than producing whole lines of seasonal collections, businesses may concentrate on making limited edition pieces and goods that they already know will be popular, thanks to player feedback and the popularity of digital items (Faccioli et Al., 2021).

One of the strong features of gaming itself is that it is a more versatile and entertaining approach (Klimmt, 2009), compared to podcasts, print ads or TV, and as such, it can be useful for brands to let the consumer dive into the inspiration behind the launch of a new collection

or providing hands-on instructions about new materials in an interactive and immersive way. Users, indeed, when playing games are very focused and engaged (Bean et Al., 2016), and, therefore, it can be an opportunity for the brands who want to reach consumers in a dreaming mindset, looking for inspiration, play, learn and explore. On the top of it, video games are a massively profitable industry and sales channels, especially because consumers are spending real money to express themselves virtually, and with the emerging Metaverse, this attitude is expected to grow (Coutinho, 2022).

In conclusion, gaming is the world's most lucrative entertainment industry and it's a key channel for brands that want to connect with hard-to-reach younger consumers (18-34). Even if the marriage of luxury-fashion and gaming appears to some of us to be bizarre at first glance, the fact is that they both explore fantasy in their domains, where creativity is at the heart of everything. Not to mention the fact that digitally made products have less of an environmental impact: this might be a whole new way to enjoy luxury goods while remaining environmentally conscious. Effectively, we are witnessing the start of a long-term partnership between gaming and luxury fashion (Salinas, 2021).

3.4.1 Balenciaga for Fortnite:

As real illustration, Kering-owned brand Balenciaga has a strong digital strategy and has taken several initiatives in the gaming world. In this sense, the creative director Demma Gvasalia unveiled its collection for Fall/Winter 2021/22 via a video game, surprising the industry and increasing the searches on the brand. The game was named "*Afterworld: The Age of Tomorrow*" where players could walk through a wonderland-style future, structured in five

different areas, starting from the Balenciaga retail store. The player then is transported to a secret rave in a forest, winding caves, where an avatar pulls a sword from a stone, and the player is finally directed to walk over until reaching a sunset, where the game closes (Hitti, 2020). Initially, the game was accessible only to a selected group of people via VR headset instead of attending an in-person runway show. Avatars, as shown in the figure, dress Balenciaga's latest collection, aimed to represent the future of clothing, where “*nature and youth co-exist*”, says Balenciaga’s creative director (Mower, 2020).

As we have discussed, as e-sports and virtual environments continue to establish their financial viability, these unusual and surprising brand alliances are becoming more frequent.

Another initiative in this context took place in September 2021, when Balenciaga brought its brand DNA into the world of Fortnite, the famous online game that hosts 10 million players each day (Driver, 2021). In particular, the Demna Gvsalia's Kering brand is the first luxury brand to join up with an online video game that symbolizes a true giant in the gaming industry (and beyond), with 400 million worldwide users and strong ties to the worlds of music and sport (Muret, 2021). The brand debuted with the new collection with clothes and accessories in the form of skins and decorative backs, but also tools such as hang gliders and pickaxes to use during the challenges in battle royale. Some items could be unlocked by players through challenges, while others purchased using the V-Bucks (Fortnite’s gaming currency): the more expensive was 1,500 V-Bucks, equivalent to about 12 dollars. At the same time, the popular Spanish brand launched a line for the real world dedicated to Fortnite, available on the Balenciaga website where prices vary between 300 and 1000 euros (D’Asaro, 2021). The prices for the real collection were indeed significantly higher than the virtual ones. The hoodie in the below picture, could be purchased in the game, but fans could also buy a physical version of the same sweatshirt from the Balenciaga store for \$725 (Zibbo, 2021).

Both Balenciaga and Fortnite gained from the expanding partnership: Balenciaga reached a new audience of engaged gamers, while Fortnite joined the high-fashion language. The main takeaway from this is that, since his debut collection at Balenciaga, Gvasalia has been pushing fashion into new dimensions, and with a fully developed virtual environment within Fortnite, he's doing something few other designers have ever done: exploring the Metaverse in a more democratic way. What it has been illustrated is not a high-priced NFT, a top-secret Bitcoin item or a limited-edition augmented reality experience. The relationship between Balenciaga and Fortnite puts the brand in the hands of millions of passionate players with a relatively low barrier to entry (Yotka, 2021). Finally, in December 2021, the brand announced that it is creating a department completely focused on the virtual world to reinforce its presence in this continuously evolving 3D world, and explore its marketing and commercial opportunities (Driver, 2021).



FIGURE 5: BALENCIAGA FIT SET FROM (EPIC GAMES, 2021)

3.5 Metaverse Fashion Week on Decentraland

One milestone event in the global fashion industry took place from 24 to 27 March 2022, with the first Metaverse Fashion Week (MVFW) in the history of fashion in the virtual world. The Metaverse chosen for the occasion was Decentraland (MANA), the decentralized platform based on Ethereum, which has been hosting fashion houses and exhibitions in its LAND for some time. The intent of Metaverse Fashion Week was to experiment with fashion from different points of view and to make haute couture accessible to everyone, not only to professionals. To participate in the events of the Fashion Week it was enough to connect your Metamask or visit the Metaverse in "*guest*" mode. Decentraland provided the coordinates of all the areas affected by the events and with a simple click ("*jump in*") it was possible to reach afterparties, digital stores, fashion shows and conferences organized by many brands. Dolce & Gabbana, Tommy Hilfiger, Cavalli and Etro, were some of the top-level luxury brands who joined the show. The brands that parade on the catwalk had at their disposal the futuristic Luxury District to show their creations to visitors, who, for free and without a particular invitation, could try different sensory and interactive experiences, participate in events and talks and buy digital and real outfits (Abad, 2022). Etro, for instance, has opened its first pop-up virtual store to allow users to buy the brand's clothes and accessories by landing directly on etro.com or to customize their avatars with the collection items.

On such occasion two different approaches have been showed when deciding whether to adapt the real codes to the virtual environment. Etro conformed to the spirit present in the physical collections while D&G adapted to the creative tools allowed by the virtual. Overall, given the diversity of the looks worn by visitors, the brands had the confirmation that potential customers are there. What it remains to be assessed is the real size of this market and the investments it can justify within the activities of brands (Bolelli, 2022).

3.6 Data and Generation Z:

3.6.1 Estimation of the market

That the Metaverse will be the next big bet, not only in the tech world, is clear now. But is still complicated to attribute a concrete meaning to this virtual space, depending on the percentage of the digital economy that moves to the Metaverse and market expansion, the potential Metaverse market opportunity ranges from 2 trillion to 12 trillion dollars (Goldman Sachs, 2022).

Even if the revenues from Metaverse gaming and NFTs are negligible now, according to Morgan Stanley's "*blue-sky analysis*", they could represent a revenue opportunity of 50 billion euros for the luxury market by 2030, that would be 10% of the total addressable market. In addition, the report says that gaming collaborators represent 40% of the Metaverse revenue but only 20% of profits by 2030, while the NFTs are seen as more profit-generating. Finally, social gaming may add up to 20\$ billion to the luxury sector's total addressable market, while NFTs in the form of luxury collectible might grow to be a 25\$ billion business (Socha, 2021). Of course, Morgan Stanley also agreed that the Metaverse model will take many years to develop. However, particularly NFT and social gaming, have all the cards to become greedy opportunities for the luxury segment (Forbes, 2021).

3.6.2 The target audience: Generation Z

In general, marketers and businesses attempt to map customers according to distinct generational cohorts. Because of their age and technological improvements, the demographic cohorts have different wants and desires. That is, they have opposing traits, such as consistent variances in values, preferences, and behavior across time (as opposed to maturational or other differences). Hence, the way today's generations act differs from the way past generations acted. People born between 1965 and 1979 are known as Gen X. Likewise, millennials, often known as Generation Y, are those born between 1980 and 1994. The post-millennial generation (those born between 1995 and 2015), often known as Gen Z, is the newest and trendiest. Because of their technological dependency, Gen Z is also known as the iGen, Gen Tech, and Gen Wii. Specifically, when it comes to acquiring items and services, people behave in a totally different way than in the past. Buyers, indeed, may now purchase and sell things with a single click on their Internet-connected devices (mostly smartphones) from anywhere and at any time. In a short period of time, buyers may obtain evaluations and comments on any product or service (Karim, 2019).

Consequently, if the goal is reaching younger consumers- Generation Z and Generation Alpha-the one born after 2010- gaming is the ideal spot to look for fresh audience for the brands (Herbach, 2021). This is relevant especially in markets such as India and China, hubs of gaming activity (Jain, 2022) with souring populations of high net worth and high earning, not rich yet (HENRY). In this context, the target audience is Generation Z, for whom gaming is a very popular pastime. This can be seen from the fact that for them gaming entails participating in esports-an industry with worldwide revenues topping one billion dollars in 2021 (Statista, 2021) and forming communities of players who engage in a virtual world in the same manner they would in real life. Furthermore, people have spent even more time

exploring, socializing, and buying in virtual worlds in the last two years due to COVID-related quarantines and lockdowns (Sheth, 2020). Moreover, Gen Z's gaming identity includes their day-to-day interactions with peers. Three out of four Gen Z guys say that playing video games helps them stay close with their peers, considerably more than Millennials. Although some have labeled Gen Z as anti-social, it appears that socializing has changed and communication has shifted to digital platforms such as text messaging, social networking, and even gaming. This involvement in digital communication, particularly around gaming, opens up a plethora of chances for brands and marketers to participate in Gen Z's gaming conversation. By being present where the gaming discussion is taking place, a business has significant potential to build true contact with the Gen Z (Straus, 2019).

For the luxury sector, Altagamma reports that Gen Z and Gen Y will contribute to about 180% of the total growth from 2019 to 2025, for the personal luxury market (D'Arpizio et Al., 2021). The industry has historically focused its efforts on generations with high spending power and expectation, such as Baby Boomers and Generation X, but now they realized that younger consumers will be the engine of growth of the sector, due to their long-term buying and its enormous influence. By connecting with coworkers, family members, and friends, these young consumers potentially impact everyday purchasing behavior. They are early adopters in the field and, as such, are not hesitant to try things out and give recommendations based on their findings, as well as contribute to the creation of buzz. Moreover, they are the first generation without the limit of time and space, are informed and give importance to the community, which resulted in a multidirectional and more equal relationship between brand and customer, and no more unidirectional (Cabigiosu, 2020).

To amplify the challenge many brands face, Gen Zers – young and digitally native – access brands differently. They have completely different preferences and expectations; they

love and use entirely new products and categories as their “*luxury*”. Self-satisfaction and willingness of feeling good is the primary reason to purchase a luxury good for a high-spending Millennials. Second, they attach importance to the brand’s website and to the quality. A multichannel approach is the preferred one during the purchasing decision, and another important challenge is the lack of regular and constant purchase by this generation (Cabigiosu, 2020). Hence, Generation Z requires a whole strategy built around it to really access its influence. As we saw, due to the fact that it is extremely digitalized and well informed, its expectations are high and its loyalty is low. Brands that are relevant to Generation Z are those that reach out to them early in life, providing entertaining and appealing content while also communicating their views and values (Zhang, 2021).

In conclusion, as the blue-analysis report of Morgan Stanley states: “*Digital avatars, NFTs and gaming partnerships offer fertile ground to build relationships with these demographics and recruit new/future customers. Brands are in a proof-of-concept stage for both NFTs and Metaverse gaming, and the evidence to date is that each concept works. Next comes monetization.*” (Socha, 2021).

3.6.3 Attitude and Enthusiasm toward the Metaverse: Data Review

After having described the new digital era and investigated on its relationship with the luxury world, we now report the data collected so far about the perception among consumers and some general future projections. The most interesting insights have been selected and reported:

- According to a study performed in January 2022 in the United States, 33% of respondents claimed they were fascinated about the Metaverse, while 27% said they

were disinterested. Nearly a quarter of those interviewed said they were suspicious of the Metaverse, while 12% said they were perplexed (Ipsos, 2022).

- According to a study of Internet users in the United Kingdom and the United States conducted in August 2021, 15% of UK respondents and 22% of US respondents believe businesses should advertise in the Metaverse, as shown in the below graph. Additionally, according to 13 percent of UK respondents and 19 percent of US respondents, brands should leverage the Metaverse to generate more branded experiences (e-Market, 2021).
- By 2026, it is expected that 25% of people throughout the world would spend at least one hour every day in the Metaverse for digital activities such as work, commerce, education, social contact, and entertainment. Furthermore, roughly a third of worldwide enterprises are expected to have Metaverse-ready products and services by then (Gartner, 2022).
- As shown in the graph below, according to a March 2022 poll of corporations that have already invested in the Metaverse, over 22% of companies considered the Metaverse to be "*the future*" from a commercial standpoint. Almost as many people said the Metaverse was "*full of opportunities*" from a commercial standpoint (Sortlist, 2022).
- Over four out of ten answering firms believed that all sorts of enterprises must be present in the Metaverse, according to a March 2022 study of corporations that had already invested in the Metaverse. Only 17.4% of those polled said that only IT corporations needed to be present in the Metaverse (Sortlist, 2022).
- For different sorts of users, the Metaverse has a variety of attractions. According to a study of Internet users conducted in late 2021, more than half of those polled said they

would join the Metaverse for work opportunities such as virtual offices and networking. Art and live entertainment were cited as the key reasons for joining the Metaverse by 48 percent, while investment in cryptocurrency and non-fungible tokens were cited by 44 percent as shown in the graph below:

4. GUCCI: THE TECH-SAVVY LUXURY HOUSE

In this chapter, we'll analyze the digital strategy of Gucci as it is regarded as a web marketing pioneer, active in the e-commerce field since 2002, when it began to allow US customers to purchase from its online store. As a matter of fact, the historic Italian firm is credited with being one of the first to launch an e-commerce site. Besides being the most popular luxury brand online in 2021 (Luxe Digital, 2021), its interest in Metaverse has not had equal in luxury fashion, both physical and digital. Gucci continues to be one of the best-in-class digital performers in the business, thanks to its use of digital storytelling, enhanced e-commerce, and a persistent desire to experiment and innovate online. The company indeed is continuously experimenting online, from digital gifts with split payments to AR-powered try-on capabilities on Snapchat, the Gucci App, and the latest initiatives in videogames, NFT and the Metaverse. In this Chapter, after briefly exploring Gucci's heritage, we'll go through the main disruptive digital initiatives it has taken part in and fully understand the latest steps in what we have called "*the new digital era*".

4.1 Background of the Brand:

The creation of the Gucci brand originates from the private life of its founder: Guccio Gucci. At the age of 17 he decided to emigrate abroad to the most illustrious capitals of the time, including Paris and London, where he was hired as a lift-man, in one of the most exclusive hotels of the time, the Savoy Hotel in London. The people who frequented that environment was of high rank, so that the young Guccio Gucci unconsciously laid the foundations for the realization of the homonymous brand, in fact he began to interface with luxury and wealth acquiring a strong sense of taste, fashion and style, without neglecting the interest in quality; all this was learned by the young Guccio not only through the study of the environment and the surrounding people, but especially through their luggage and bags, which were the main form of interaction that the little seventeen-year-old could have with the world of luxury. After four years he started working at the international des WagonsLits, the company based in Paris was responsible for managing class rail services in the transport sector, here is a further imprint aimed at determining the future of the young entrepreneur; finally, a further learning note has manifested itself following the First World War when Guccio returned from military service in Milan, where he worked at a well-known Italian leather shop, Franzi, where he became the director.

All these experiences were the basis that led the well-known entrepreneur to create the Gucci brand in 1921, the first headquarters was in Florence, his hometown, there he opened a small shop specializing in the manufacture of leather products, such as gloves, travel items and saddlery for riding, all made by local craftsmen. The experience at the Savoy Hotel allowed Mr. Gucci to bring to Italy the refined taste of the English nobility; it is no coincidence that the Gucci Heritage is mainly made up of references to the world of horse racing, as you

can see by analyzing the various logos adopted over the years by the fashion house (Girelli, 2021; Cabigiosu, 2021).

The brand reached high levels of fame and appreciation to the point that Mr. Guccio saw the possibility of opening his first store in Rome, in Via dei Condotti, however, he did not live so long as to witness the global expansion that overwhelmed his brand following the opening of the boutiques in Milan and New York, these events meant that the brand at a global level was recognized as a true symbol of contemporary luxury; in the Big Apple everyone fell in love with the Italian brand to the point that all the influential personalities of the time sported Gucci products, including Audrey Hepburn, Liz Taylor, Peter Sellers. Such success among Hollywood stars owes its debut to the creation of the famous Flora scarf, designed specifically for the princess of Monaco, Grace Kelly. All this success that the Florentine brand enjoyed in the United States allowed it to enter the Asian market, where the right insights of Aldo Gucci, who praised that quality would be long remembered while the price would be forgotten, made possible the expansion in the East where Gucci opened new boutiques in Tokyo and Hong Kong. The brand of the Gucci family has always placed itself as a precursor of its time, in fact, it was one of the first brands to implement real collaborations with dominant brands in sectors totally different from that of clothing, such as, for example, the partnership with Rolls-Royce in the 1970s, one of the largest giants in the automotive sector (Gucci, 2016).

The proactivity and the propensity to innovation of Gucci lead the brand to be noticed by the historic group LVMH, French multinational that holds more than seventy brands in the luxury industry, the French giant managed to hold 34% of the shares of Gucci, the creative director of the time, Tom Ford, and the CEO of the time, Domenico de Sole, sought a way to free themselves from the large multinational, for this reason they turned to the competitors of

LVMH, namely to the French entrepreneur François Pinault at the head of the future Kering group, which came to own 40% of the shares of Gucci in 1999 (McBride, 1999; Kering, 2021). The brand really plays an influencing role in the Kering group, especially since 2015, when Marco Bizzarri became President and CEO, and Alessandro Michele the new creative director. By the end of 2019, the team had tripled Gucci's revenues and quadrupled its earnings. By being avant-garde and adopting new paradigms such as purpose-driven, gender-neutral, cross-generational, and digital-oriented initiatives, they redefined 'luxury', changed the high-end fashion business, and contemporized the Gucci brand (Kumar et Al., 2021).

Gucci has been recognized as the Luxury marketer of 2021 (Luxury Daily, 2021). This award is based on the marketing efforts that luxury brands have adopted, it considers strategies, tactics, creativity and of course the results that follow. The success of Gucci is due not only to the creative force that has always been the hallmark of the brand, but also to its adaptability, the key element that has allowed a considerable momentum both in terms of product and digital resources. The latter owe their attention to the well-known CEO Marco Bizzarri, he, in fact, had intuited that the way of perceiving fashion needed a change and that it was no longer possible to reason in the same terms in which one had always reasoned, with regard to this prediction, in collaboration with its team, Mr. Bizzarri turned his attention to technology, particularly the benefits it could bring to luxury brands. The strategy adopted by the visionary CEO and his team has allowed the illustrious fashion house to play ahead, in fact because of the pandemic situation that the world is facing in recent years, a strong consequence was the closure of countless stores throughout Europe and the need to move a good part of their business on the web (Sannino, 2020).

4.1.2 Alessandro Michele: Gucci's Creative Director

Gucci adopted a new fashion idea with Alessandro Michele, one that was futuristic and romantic while being anchored in the great quality and attention to detail that is synonymous with Italian workmanship. The new Gucci reality employs the current generation's vocabulary not just in technology and digital terms, but also through a composite, gender-fluid, and inclusive image. Bizzarri and Michele's strategy is clear, as reported in Kering's Reference Document 2017: innovation, continuous experimentation, and creativity have identified the need for a new image and positioning for Gucci that is more in tune with the current context and more appealing to long-term and emerging luxury customers. The persistent and consistent application of Michele's creative story at all points of interaction with the brand, with special attention to digital platforms, has helped to make this value proposition a success. Furthermore, the brand's ability to disrupt the status quo and defy the customary norms of the fashion system has bolstered its leadership position in the industry. Unified fashion presentations, narrative advertising, and groundbreaking partnerships are all important considerations. Michele has thus moved away from Tom Ford and Frida Giannini's elegant and sensual image of Gucci to propose a joyful, romantic, and ironic one that draws on a variety of vintage and historical inspirations presented in a single fashion show for men and women and then replicated across all the brand's communication channels. The message's coherence is critical. Some business models, according to Bizzarri in an interview with *Rivista Studio* (Sarica, 2018), feature two distinct creative directors, one for men's and one for women's collections, as well as the hiring of an external communication agency and a marketing department. Michele's goal, as Bizzarri points out, was not to define a certain category or age group of customers, but to transmit the brand's values directly to a bigger audience through a flexible framework, such as social networks, that allows for flexibility and innovation. Another important component in the brand's recent success has been the use of

smart artistic partnerships in conjunction with alternative marketing platforms like as Instagram, which accounts for 92 percent of social interactions connected to luxury products (Napoli, 2017). Gucci was one of the first brands to utilize memes and hashtags to promote products, promotions, and overall brand image communication. *"I think the actual issue is communication"* Bizzarri himself (Sarica, 2018) says. Allowing them to share their vision of Gucci on social media and receive rapid and direct feedback from customers has proven to be a unique and distinctive Gucci strategy.

4.2 Digital Innovation and E-commerce

Digital is an increasingly dominant theme in the world of fashion and Italian brands seem to have learned the lesson, in fact, as illustrated by the Digital Competitive Map 2021, they dominate the scene, especially Gucci, which has become the first international brand for digital leadership related to personal luxury goods. The methodology in building the map has been broadened considering the latest trends, such as NFT and Gamification (Contactlab, 2021).

The following section will provide some examples aimed at concretely explaining the digital innovation of the Florentine Maison. After understanding the importance of digital resources, Gucci has committed itself to implement them more and more, especially for the period after Covid; for this reason, the fashion house has undertaken countless extraordinary initiatives. Analyzing them individually one can identify the creative, original, and revolutionary approach of Mr. Michele and his team, and understand the progressive path toward the latest innovation they made.

4.2.1 Application of Augmented Reality

The augmented reality began to develop within the fashion world mainly through the so-called "*smart showcases*", which allow the consumer to try on some clothing without even having to change in the dressing room. In this field, Gucci has stood out particularly. In 2019, the company started using its smartphone application as a platform to virtually wear certain products and, as of June 2019, Gucci in partnership with Wannaby, a leading startup in the field of Augmented Reality specializing in virtual Try-On technology, officially launched this feature within the smartphone application. The Try-On software allows the consumer to choose and find virtually and directly on himself watches, sneakers, lipsticks, glasses, hats, enamels and other accessories on himself. The partnership consisted of the virtual try-on ace sneakers, a pillar of the brand's collection. Thanks to the direct link on the Gucci.com e-commerce site, the consumer could buy with a simple click the object tried virtually moments before. To make it even more satisfying and share the experience by the customer and exponentially increase the word of mouth, there was also the possibility to take photos with the accessories worn and post them in real-time within their social platforms. This functionality became available also on Snapchat (Williams, 2019).

Gucci and Wanna collaborated in mid-March 2021 with a new collaboration based on a pair of limited-edition shoes, called "*Gucci Virtual 25*", designed by creative director Alessandro Michele, and customizable by the shoppers. Priced at under \$12, that could only be "*worn*" in the Wanna try-on, in the Gucci Sneaker Garage apps, on socials or gaming platform such as Roblox. Therefore, since didn't exist outside of the apps, it required a real payment for a totally digital purchase. The effort began at the same time as NFT fever, signaling a rise in interest in projects that were only available online. The price is so low for anything with Gucci's name on it, but it has been addressed to Gen Z customers who can't

afford real-life Gucci sneakers and may prefer a digital version; hence, these AR shoes are a form of introduction product, allowing younger fans who already spend a lot of time online to experience the pleasure of purchasing Gucci items (The Popular Times, 2021).

Moreover, Gucci is one among numerous businesses that used augmented reality to allow customers to try on their clothes during the pandemic, when stores were closed, and people couldn't get to them. AR bridged the gap, allowing customers to test products digitally – and safely.

4.2.2 Smartphone Games

As can be deducted, mobile platforms are touch-oriented and tactile, and fashion is a natural fit for cool, stylish activations and Gucci has fully embraced this idea, on several fronts. In 2020 Gucci collaborated with Tennis Clash, a videogame for mobile devices created by Wildlife. It did so by revisiting some heads of the Florentine Maison in digital version to recreate the skin and the game's setting. In Tennis Clash, users can use digital pieces of Gucci clothing and accessories to express their style, with a focus on sports luxe, therefore Tennis Clash players were able to discover Gucci's exclusive outfits and participate in a special tournament. Gucci and Tennis Clash entered an in-game tournament with a dedicated arena, named the Gucci Open, its integration with the Tennis Clash mobile game featured the Gucci logo on and around the courts, rackets, and players' headbands. Moreover, the gaming experience joins the retail and gamers can buy the items that appear on the screen directly from the Gucci website, a perfect link between the real world and the virtual world (Gadeschi, 2020).

4.2.3 Epilogue Collection

As mentioned, Gucci's digital development has been extraordinary; it has successfully merged e-commerce, social media, digital marketing, and mobile applications. Gucci has shown how a strong digital presence based on a well-defined brand identity and backed by a strategic framework can have a substantial influence on a company's future performance (Cabigisou, 2020).

The launch of the collection *Epilogue* brought to light on the catwalks of Milan Fashion Week the final act of a three-part narrative, which began with the Fall Winter 2020 fashion show #GucciTheReturn time to celebrate the magic of fashion, revealing what lies behind the scenes. Here is that the creative director has drawn the attention of those present to the dressing rooms, symbol of all the effort and passion that are hidden behind every single initiative; in doing so Alessandro Michele has managed, as always, to challenge the rules of fashion, transcending and surpassing them, in classic Gucci style. The peculiarity of this event is not only based on the message that the brand wanted to convey, but also to be found in the *digital approach* used, in fact, for 12 hours, by connecting on the official website of the fashion house, it was possible to watch live behind the scenes of a production for an advertising campaign in detail, observing the preparation of the location, models and all the organizational processes needed for a campaign (Nguyen, 2020).

4.2.4 Gucci Arcade

One of the Gucci's audacious moves was the debut of Gucci Arcade in 2019. Instead of integrating the brand into an existing game, Gucci designed games around the brand for this exercise, the first two games were Gucci Bee and Gucci Ace. Gucci's decision to go with this

approach gave them more creative flexibility and control, while also allowing them to tap into an existing fanbase and engage them in a new and entertaining way. Certainly, having fun is part of the 360-degree journey that the Maison wants for its customers, that's why Gucci wants its customer to play in its app. From August 2019, Gucci Arcade became available in the app's functions: a new area dedicated to games inspired by arcades from the 1970s and 1980s, whose protagonists are the brand's most iconic symbols, intending to tell the house's narrative and codes (Denman, 2019). Gucci Ace, one of the two games, is inspired by the notion of "*revisiting the past, living in the present, and looking to the future*" as a tool for investigating the Gucci Ace sneaker's history; it retraces three stages of video game history, from retro to console to mobile devices. Both games are available through the Gucci App's map where each step of the journey leads to a new game. This path narrates the company's history through its codes, which appear as badges hidden throughout the games and are organized by subject.

4.2.5 Targeting Generation Z

Gucci has demonstrated how a strong digital presence built on clear brand identity and supported by a strategic framework can have a significant impact on a brand's future success. Gucci also uses digital channels to make its creative partnerships more visible, resulting in a selfreinforcing loop in which artistic collaborations add value to collections and develop creative capsules. They also create fresh material for Internet platforms that enhance sales and raise the visibility of Gucci's creativity significantly. Therefore, Gucci appears to have grasped the aspects that define success in a market where it is vital to keep an increasingly knowledgeable customer and attract the Millennial generation's attention (Monteleone, 2017). If the Millennial generation is referred to as the "*Always On*" generation, it is evident that a successful digital strategy is required. At a time when the public is inundated with pictures

and information, Gucci has succeeded in capturing the attention of the public, particularly the youth (Sarica, 2018). It achieved so by adopting a marketing plan focused on Generation Z, i.e., the generation of customers with supposedly limited purchasing power but tremendous influence and also responsible for up to 15% of the country's luxury purchases in places like China. Gucci is reinventing itself to appeal to these young consumers who have yet to be fully considered by other luxury brands, by actively adopting emerging technologies and digital marketing tools to create digital content, such as Augmented Reality, Virtual Reality, AI chatbots, and applications, as well as collaborating with partners to deliver digital products, such as virtual versions of its collections and products. Moreover, Gucci business reports and results have shown that young consumers are a power in the luxury sector.

Again, essential for this is Alessandro Michele's digital strategy, which prioritizes reaching out to young people, understanding their needs, and responding to them. Gucci's digital approach includes not just attracting customers to shops and other sales channels, but also creating digital buzz, whether in gaming groups or on social media. The firm is attempting to achieve its aim without offering its items to influencers and companies. The company wants to be the most talked about brand online because they believe that by creating a buzz online, they can reproduce the effect in real life. Gucci demonstrates its intention to turn every fan into a consumer by working with esports and gaming platforms and providing digital versions of their things for sale, regardless of money, social status, or geography. If luxury businesses used random products like belts, wallets, and tiny leather goods to entice less wealthy customers before introducing them to the brands' standards and experiences decades ago, Gucci is doing the same thing digitally now (Zhang, 2021).

4.3 Vault and Gucci's path into the Metaverse

Gucci is experimenting with a variety of experiences to stake out its territory, exploring firsthand the Metaverse's potential. In this context, Gucci Vault, is the new experimental platform designed by Alessandro Michele, a space of expressive and aesthetic contaminations, a laboratory, a revolution in the way of thinking about fashion, all made possible thanks to the network. It was launched in Milan, during the Milan Fashion Week in September 2021, the concept store 2.0 of Gucci, defined as *“a place in constant evolution where you can make possible conversations “impossible” between objects of origin, authors and different eras (...) a space where the past, present and future co-exist through the power of the imagination”* (Vault Gucci, 2022). This online space is continuously evolving, as a concept store that becomes a place of perennial experiments: starting from the presence of precious items of the Maison up to incursions into the Metaverse. Gucci Vault can therefore be described as the umbrella term for the brand's Metaverse-related projects as well as the line of business Gucci is using to sell vintage pieces from its collection and from other emerging designers. One of its sections is indeed called *“the Metaverse”* described as *“A multi-directional exploration spanning digital realms has begun. Within this expanse of experimental creativity, NFTs and other Web3-based wonders will arise in surprising forms.”* (Vault Gucci, 2022). In this section more insights and information about these kind of projects are presented and discussed.

4.3.1 Gucci on Roblox

In occasion of its 100th anniversary, Gucci launched the “*Gucci Garden Experience*” on Roblox, the online gaming platform which offers more than 24 million virtual experiences with an emphasis on immersive content, and it currently is the closest online entertainment platform to the concept of Metaverse. It essentially is a video game with 43.2 million active users (Dean, 2022), its own digital currency, and a broad range of unique virtual experiences, such as digital concerts or fashion events like the one organized by Gucci. The “*Gucci Garden Experience*” event, a kind of brilliant marketing campaign that allowed players to try on various Gucci items, was a marketing project that featured a French garden where players could walk through it, try on and buy Gucci virtual fashion items to dress up their blank avatars.

The Marmont bag, guitar covers, sunglasses, jewelry are just some of the iconic accessories provided users in Roblox on this occasion. One of these items, more precisely the Queen Bee Dionysus bag, was sold at a price of 475 Robux (about \$6). However, because it was accessible for a short period, its price quickly increased: the most successful listing sold the bag for \$4,115 (350,000 Robux). The price of the virtual price was significantly higher than the one of its real counterpart: a Dionysus is in fact sold for around \$3,400. In the same one-hour timeframe, several other digital Gucci items were sold, among which a spiked basketball bag, diamond sunglasses and a guitar case, but none of them achieved the same resell impetus as the Dionysus Bag with Bee did following the sale (Kelly, 2021). Being the Gucci Dionysus bag only available for use on Roblox, it’s more comparable to an avatar accessory than an NFT, which can be accessed at any time online or resold. The purse indeed has “*no value, use, [or] transferability outside of the Roblox world*” as stated by Alexis Ohanian (Reddit funder) on Twitter, to share the eye-opening sales numbers, reminding

people that the in-game accessory holds no monetary value outside Roblox's virtual domain. Besides, more likely to an NFT, the Roblox Gucci purse was introduced in an exclusive capacity, which has demonstrated that people are prepared to pay a premium for extremely limited things, even if they can't use them in real life. Gucci's Queen Bee is a perfect illustration of this behavior not just because it sold for more than its physical counterpart, but also because the Roblox-exclusive bag initially cost was 475 Robux, or roughly \$5.50. After Roblox players found the bag would only be available for one hour on May 17 and one hour on May 18, the price skyrocketed (Ernest, 2021).

In May 2022, the Kering group fashion house has decided to secure a permanent presence on Roblox by launching the "*Gucci Town*", and, thus, confirming itself as one of the most active realities in the metaverse. The small virtual city is intended to be used as if it were a kind of 3D social channel, around which to build a community that can interact for an extended period. Shaped according to the creative taste of Alessandro Michele and developed to provide a unique adventure for all users who decide to visit it, this digital space represents a direct and effective means for the brand to communicate with its customers around the world. Users will be able to try their hand at mini-games in the Mini-Game Heights arena, or visit one of the exhibitions and artistic displays in the Creative Corner, or even go to Vault Plaza, the nerve center of the city, where the ever-present Gucci Shop stands, an exclusive boutique within which users will have the opportunity to purchase digital collectibles or clothing items for their avatars to wear. Finally, the Power-up Place will also be present, an open-air café that serves as a meeting and socializing place for all visitors. Gucci Town is not just a virtual space, it is an immersive experience that brings visitors closer to brand values, and a space "*to express one's own individuality and connect with like-minded individuals from all over the world*" (Gucci.com).

4.3.2 First NFT Sale:

Gucci entered the world of crypto art by selling its first NFT, inspired by *Aria*, a four-minute film produced by Flavia Sigismondi alongside Gucci's creative director Alessandro Michele in celebration of the Italian fashion house's 100-year anniversary. The film was created to accompany the official runway show and was released as an NFT after the fact in June of 2021, through an online auction as part of "*Proof of Sovereignty*": a Christie's-curated NFT sale launched on May 25, 2021. The auction closed Thursday, June 3, with a final sale price of \$25,000 (the starting price was \$20,000), with the buyer collecting a born-digital, looped video of 1152 x 1152 pixels, representing a unique work that can in no way be altered, replaced, duplicated. Gucci marks Christie's first luxury brand collaboration in the NFT space, thus opening a brand new crypto-art space at auction (Brooks, 2021).

4.3.3 SuperGucci:

Taking another step towards the digital revolution, Gucci collaborated with Superplastic, the global player in the production of well-known animated figures, vinyl toys in a limited edition and digital collectibles. SuperGucci was an ultra-limited series of Cryptojanky NFT and handmade ceramic sculptures that was on sale from February 2021.

The first of the three drops offered a limited selection of ten different, exclusive non-fungible tokens, each with its own 8-inch handmade ceramic sculpture from Italy, created jointly by the two brands. The offering of double works consisting of an NFT and its ceramic counterpart (physical), was a sign of its commitment to the tradition. Each of them was inspired by Gucci patterns, images and symbols reinterpreted by Janky & Guggimon, core characters of Superplastic (Miele, 2022). It was a limited series and only 500 ceramics were made, with the

first set of 10 NFT available from the 1st of February 2021. On this occasion, the two animated characters visited Gucci Vault and find themselves in a virtual environment that marked the expansion of both realities into the technological universe. The initial drop was open to the public, allowing anybody to acquire the NFT. The SuperGucci NFTs' blockchain was based on Ethereum and the first drop was sold for 1.5 ETH (3.066 USD at the time of writing), excluding transaction costs. The drop mechanism could be found in the Discord channel Gucci Vault (that will be discussed later in this Chapter).

This initiative represented an ideal follow-up to Gucci's visionary virtual experiences, from the Gucci Aria NFT collection auctioned at Christie's through the launch of digital sneakers and then back to 2010, the launch year of the brand's official app with make-up filters and arcade games. SuperGucci indeed represented the union of fashion and art dear to Alessandro Michele, investing in a parallel reality that has undoubtedly just begun to surprise us, testing the potential of what is established as the fashion market 3.0. The partnership was important for both companies on their way to the Metaverse, research and experiments: this embraced how Gucci is transforming Vault from an e-concept store initially focused on selling second-hand vintage items, into a digital experience venue.



FIGURE 6: SUPERGUCCI SUPERJANKY SCULPTURE (GUCCI VAULT, 2022)

4.3.4 10 KTF Gucci Grail

One of the Gucci's latest Metaverse partnership is with 10KTF, which is a digital NFT company that creates virtual accessories. The NFT, called "*Gucci Grail*" has been released on March 23, 2022, and minted on the Ethereum network. This is an NFT project that comprises a virtual floating "*New Tokyo*" world, fashion accessories for purchase by profile picture NFT owners, and a fictional character named Wagmi-San, a renowned digital artisan on Web 3.0 (Mcdowell, 2022).

More precisely, Gucci has created ad hoc digital garments designed to dress those who already own a PFP. The latter stands for "*Picture for Proof*", a sort of profile photo in the NFT

version, used by collectors both as their portrait and as extreme customization of artistic technological talents. The encounter between the digital artisan and Alessandro Michele results in two customized Gucci styles, one inspired by the Aria collection and the other at Love Parade, to complement the mutual know-how. These styles, created for collectors and their profile pictures, usher in a new era of personal expression that transcends dimensions.

Gucci has stated that individuals must first register to be eligible for one of the 5000 "*mint pass*" which allows them to purchase Gucci Grails. One must also possess an NFT from one of a range of included previous NFT projects¹ and pay 1 ETH (\$2,700) to Gucci (Mcdowell, 2022). Those who have demonstrated community commitment, such as members of the Gucci Discord community who have earned the title of "*Explorer*", are allowed to access the list. This isn't a full list of prerequisites, and it's intentionally complicated, the objective is to reward brand affinity, participation in communities like Discord, and the creation of hype surrounding access. 10KTF is a story meant to be a Metaverse-style treasure hunt that rewards individuals for early adoption and engagement. Therefore, not everyone will be able to redeem their crystal ball and customize their digital avatars by choosing from a

¹ The NFT projects include World of Women, Cool Cats, Bored Ape Yatch Club, Wolf Game etc.

variety of Gucci appearances. In the Metaverse, only a select few people will be cladding Gucci, by doing so, the brand maintained its exclusivity (Li, 2022).

4.3.5 The Sandbox

Gucci and The Sandbox, a Metaverse and gaming platform based on virtual real estate sales (competitor to Decentraland), whose economy is based on NFT, have announced the start of their collaboration to bring the Gucci Vault project into the Metaverse.

The Sandbox is a virtual world with 30,000 monthly active users where they can buy digital "*plots of land*" to develop at their leisure, create gaming experiences, and exchange virtual currencies to sell, create, and exchange equipment. The Sandbox is therefore an open-world game and community-driven platform built on Ethereum that allows people to create, control, and monetize their virtual worlds. Since the beginning of the year, it has been attracting large businesses to the Metaverse, and transactions are done using the game's native SAND coin. To make a comparison, Gucci Garden is not a product of the Metaverse because it is a separate virtual system while, in contrast, Gucci's land purchase on Sandbox is a direct marketing move into the Metaverse. The Sandbox does employ a cryptocurrency that is extremely relevant to the real-world economic system, and users must purchase virtual products using the Ethereum network's SAND token (Sandbox, 2022).

In this framework, Gucci Vault will build an immersive digital store where NFT can be purchased, live immersive experiences (there should also be a maze of some kind), but also give visibility to a variety of brands. Moreover, players on The Sandbox can expect to buy Gucci merchandise for their digital avatars such as unique digital clothing. The “*amount*” of land purchased remains undisclosed. The announcement regarding Sandbox was made through the brand’s Twitter account and Discord server on February 9, 2022 (Mcdowell, 2022).

In conclusion, virtual real estate platforms like The Sandbox and competitor Decentraland, which are primed for development, have become a new focus for brands and designers, as the Metaverse platforms allow people to buy, rent out, and develop virtual real estates, such as stores and event venues, as well as sell virtual goods. The news of this initiative also confirms how ecosystems gaming platforms like The Sandbox and Decentraland are becoming increasingly important spaces for brands and designers because they allow to create immersive experiences in retail spaces and digital events (imagine a Gucci boutique that doesn’t have to obey the laws of physics or the limitations of space) as well as sell products ranging from Secondhand bags to works of art to NFTs of all kinds (Salamone, 2022). As it has been discussed, Gucci has a history of being an early user of digital fashion, NFTs, and the Metaverse, so their digital land grab in The Sandbox makes sense as the brand develops its strategy for engaging with Gen Z and staying at the vanguard of this culture.

4.3.6 Discord

As an integration and to give a complete framework of Gucci digital strategy, is interesting to discuss how Gucci communicates and updates its fan about the new digital initiatives, i.e., by using Discord, an American platform born in 2015, and very popular

nowadays. If on one hand, brands through social media gains followers, on the other hand, on Discord the idea is to have friends and to find a community. A platform in Discord is indeed a place where people can join a community space pre- or post-purchase and interact, representing a unique solution for community building. The platform can be thought of as a city and the brand becomes the architect, where it can decide what type of building or space will be in the city. It is a way to show up as an interest-based topic to fuel relevant conversations around a brand, host pop-up, playful events relevant to the business needs and get insights and feedback from the consumers on the product and the brand. To sum up, it is a tool to get closer to the brand's fans every day and to centralize the brand community. Brands create servers, which are the technical name by which chat groups are defined on the app, to which users register and receive communications from the brand. The same users can then interact by writing, commenting, and creating other subgroups of communication.

Discord, which began as a gaming community site, is now gaining traction among fashion firms. Discord had an estimated 300 million registered users and 150 million monthly active users as of September last year (Wise, 2022). Gucci opened its Discord channel, called "*GucciVault*" on 21st of January 2022 and invested a lot of effort in building a safe community. The brand has been using it to outline the Vault project's roadmap and digital engagement approach, for instance by announcing the latest initiatives, like joining Sandbox or embracing the trustiest members of the community by reserving some initiatives exclusively to them, like the 10KTF (Bolelli, 2022). In January, the iconic fashion label opened a new position for a Discord Community Coordinator with the goal of extending its presence on Discord as part of its move into an immersive experience in the virtual worlds.

To sum up, Gucci was a digital innovation pioneer in the fashion business, launching the Gucci Arcade vintage gaming lounge part on its official app, building the online concept

store of experiment through Gucci Vault, as well as selling NFTs and buying land on Sandbox. Moreover, François-Henri Pinault, the president and CEO of Kering, announced in February 2022 that the parent company of Gucci, Kering, has developed a team dedicated only to Web 3.0 and the Metaverse, as well as separate teams for Gucci and Balenciaga, and is looking into accepting crypto currencies in the future. Mr. Pinault recently told Vogue Business that he sees three Metaverse opportunities for luxury: NFTs linked to real things, virtual products, and smart contracts that generate revenue from secondary sales. *“We are in an extremely early stage of what could happen. Nothing is certain; it might fizzle out,”* Pinault remarked. *“But, the philosophy of the group when it comes to innovation — rather than wait and see, which is often the posture of luxury houses — is to test and learn.”* (Guibault, 2022).

All in all, in this chapter it is demonstrated how Gucci has never ceased experimenting with virtual reality. Gucci's innovations go beyond uncovering fashion aesthetics; they have a complete understanding of global digital trends and dare to challenge cross-border trials and discoveries. Notably, the brand may not see those experiments as directly pursuing profitability, but it is an important aspect of a long-term marketing plan. The Metaverse has tremendous promise, even though it has not yet reached maturity. Especially, it is not a profit-generating strategy, but rather one that contributes to the creation of an intangible brand culture and an emotional bond with consumers or potential customers.

CONCLUSIONS

Over the last three decades, significant progress has been achieved in the transition from text based multiuser virtual environments to the technical implementation of advanced virtual worlds that previously existed only in the literary imagination. The fashion and luxury goods sectors are going through major changes: as the move to the digital world has been faster than expected, companies are increasingly concentrating on enhancing existing digital solutions and establishing new ones. If the Metaverse fulfills all of the functions it was designed for, and people will spend a portion of their life in it, avatars will be a successful industry and sales channel, especially because customers are willing to pay real money to express themselves digitally. The Metaverse will not explode somehow, but it will come one way or another as we are now immersed in a digital world, where presumably digital reality prevails over physical reality. Just think that our phone is an extension of ourselves, that some stores (such as Gucci ones) are already accepting cryptos as payment method, or how NFTs, being digital works that are worth a lot of money, give value to the digital, which will be part of our identity. However, it will take some time before the metaverse soundly consolidates. What needs to be determined is the true scale of this market, since younger customers will be the sector's development engine due to their long-term purchasing power and significant influence as "*digital natives*" who are accustomed to transferring seamlessly from virtual to real life.

In this elaborate, after providing the basic framework of the luxury concept and knowledge about the Metaverse, NFT and Gaming needed for the discussion, we analyzed the result of the merging of the two, and the existing opportunities. As with the introduction of e-commerce, luxury businesses have taken a cautious approach thus far with the new digital era, just testing the waters. Recently buying land on Sandbox, the case of Gucci is surely effective to illustrate what is meant by experimenting the innovative world, developing a strategy to consolidate a new image and appealing to long-term and emerging luxury customers.

Nevertheless, today we see only the tip of the iceberg, primarily in the form of gaming, but as technology advances, NFTs, digital assets, and the Metaverse will become much more. Overall, combining well online and offline experiences is a big competitive advantage for any luxury brand, and it will only become more crucial as digitalization advances. In the approaching decade, the Metaverse promises an increasing chance to embrace. Luxury businesses' digital presence and interactions today may define their future success in the years ahead, so they should begin interacting and gaining experience with it. Hence, all luxury brands, in my opinion, should begin familiarizing themselves with the Metaverse, since the digital revolution will accelerate and have a greater influence than many now assume. As with any shift, there is the possibility of an early bubble, and many business ideas related to the Metaverse may fail. However, as we've seen with digital, organizations must consider how to make it a part of people's life before focusing on sales and profits. Ultimately, in luxury it is not enough to just play the game by offering an NFT; luxury brands must keep pushing the boundaries of imagination, otherwise, consumers won't dream, feel desirability, or would willingly pay premiums.

REFERENCES

Abad, B. (2022). What to Know about the First Metaverse Week. Paper Magazine. Available at: <https://www.papermag.com/Metaverse-fashion-week-2657003736.html>

Alba, J. W., & Williams, E. F. (2013). Pleasure principles: A review of research on hedonic consumption. *Journal of Consumer Psychology*, 23(1), 2–18. doi:10.1016/j.jcps.2012.07.003

Alexis P.A. (2022). Luxury Brands are Attempting to Participate in the Metaverse. *Entrepreneur*.

<https://www.entrepreneur.com/article/416779>

Altagamma (2021). The Post Pandemic High-End Consumer. <https://altagamma.it/media/source/press%20release%20consumer%20insight%202021.pdf>

Anderson C. (2021). *Dolce & Gabbana: Epiphanies, NFTs and High Fashion in the Digital Age*. Luxuy London.

Ante, L. (2021). Non-fungible token (NFT) markets on the Ethereum blockchain: Temporal development, cointegration and interrelations. Available at SSRN 3904683.

Arrigo, E. (2018). Social media marketing in luxury brands: A systematic literature review and implications for management research. *Management Research Review*.

Baker J., Ashill N., Amer N., Diab E. (2018) The Internet dilemma: An exploratory study of luxury firms' usage of Internet-based technologies. *Journal of Retailing and Consumer Services*, Volume 41,2018, Pages 37-47. ISSN 0969-6989. <https://doi.org/10.1016/j.jretconser.2017.11.007>.

Barrera, G. A., & Ponce, H. R. (2021). Personality traits influencing young adults' conspicuous consumption. *International Journal of Consumer Studies*, 45(3), 335-349.

BCG for Altagamma (2021), *True-Luxury Global Consumer Insights*. 8th edition. Available at: <https://web-assets.bcg.com/f2/f1/002816bc4aca91276243c72ee57d/bcgxaltagamma-true-luxuryglobal-consumer-insight-2021.pdf>

Bean, A., & Groth-Marnat, G. (2016). Video gamers and personality: A five-factor model to understand game playing style. *Psychology of Popular Media Culture*, 5(1), 27.

Becker, K., Lee, J., Nobre, H. (2018). The Concept of Luxury Brands and the Relationship between Consumer and Luxury Brands. *The Journal of Asian Finance, Economics and Business*. 5. 51-63. 10.13106/jafeb.2018.vol5.no3.51.

Beekhuizen C., (2021). Ethereum's energy usage will soon decrease by -99.5%. *Ethereum Foundation Blog*. <https://blog.ethereum.org/2021/05/18/country-power-no-more/>

Benedikt, M. L. (2008). Cityspace, cyberspace, and the spatiology of information. *Journal For Virtual Worlds Research*,1(1).

Bengtsson, S. (2011). Virtual nation branding: The Swedish embassy in second life. *Journal of Virtual Worlds Research*, 4(2).

Bilge, H. (2015). Luxury Consumption: Literature Review. *Khazar Journal of Humanities and Social Sciences*. 18. 35-55. 10.5782/2223-2621.2014.18.1.35.

Bogost, Ian. 2021. The Metaverse Is Bad. *The Atlantic*, October 22, <https://www.theatlantic.com/technology/archive/2021/10/>

Boelli G. (2022). Gucci offre personalizzazioni di NFT dal fantastico negozio virtuale 10KTF. *Fashion Network*. Available at: <https://it.fashionnetwork.com/news/Gucci-offre-personalizzazionidi-nft-dal-fantastico-negozio-virtuale-10ktf,1391307.html>

Boelli G. (2022). Metaverse fashion Week: la moda di fronte agli sgargianti abitanti di Decentraland. *Fashion Network*. Available at: <https://it.fashionnetwork.com/news/Metaversefashion-week-la-moda-di-fronte-agli-sgargianti-abitanti-di-decentraland,1391630.html>

Brooks C. (2021). Gucci Closes First NFT Sale Via Christie's Auction. *Gotham*. Available at: <https://gothammag.com/gucci-nft-aria-christies-auction>

Bua, I., & Quacquarelli, B. (2019). Digitalising Heritage: organizational challenges in bringing luxury into the digital world. *ItAIS & MCIS 2019 - Digital transformation and social innovation: organizing, managing and controlling in the information age*, Napoli, Italy.

Cabigiosu, A. (2020). An overview of the luxury fashion industry. *Digitalization in the Luxury Fashion Industry*, 9-31.

Cabigiosu, A. (2020). *Digitalization in the luxury fashion industry*. Springer International Publishing.

Canny W. (2021). Luxury NFT Market Could Hit \$56B by 2030: Morgan Stanley. *Yahoo Finance*.

Available at: <https://finance.yahoo.com/news/Metaverse-gaming-nft-could-account125706792.html>

Caru, A. and Cova, B. (2007) *Consuming Experiences: An Introduction*. *Consuming Experiences*, Routledge, London, 3-16

Chandon, J. L., El Euch, M., & Poujol, F. (2021). Experts' Viewpoints on Luxury Frontline Employees: What competencies to deliver service quality?. *Journal of Marketing Trends* (19617798), 7(1).

Chang, P. Y., Hwang, M. S., & Yang, C. C. (2017). A blockchain-based traceable certification system. In *International Conference on Security with Intelligent Computing and Big-data Services* (pp. 363-369). Springer, Cham.

Chayka, K. (2021). Facebook Wants Us to Live in the Metaverse. What does that even mean? Access date: 11/03/2022, <https://www.newyorker.com/culture/infinite-scroll/facebook-wantsus-tolive-in-the-Metaverse>

Chevalier, M., & Gutsatz, M. (2020). *Luxury retail and digital management: Developing customer experience in a digital world*. John Wiley & Sons.

Chevalier, M., & Mazzalovo, G. (2008). *Luxury brand management*. Franco Angeli, Milano.

Choo, H. J., Moon, H., Kim, H., & Yoon, N. (2012). Luxury customer value. *Journal of Fashion Marketing and Management: An International Journal*.

Christopoulos, A.; Mystakidis, S.; Pellas, N.; Laakso, M.-J. ARLEAN (2021): An Augmented Reality Learning Analytics EthicalFramework.Computers,10, 92.

Christies's (2021). Proof of Sovereignty: A curated NFT sale by Lady PheOnix. Available at: <https://onlineonly.christies.com/s/proof-sovereignty-curated-nft-sale-lady-pheonix/gucci-est-19216/121268>

Contactlab (2021). Assegnati gli Altagamma Digital Awards 2021 in collaborazione con Contactlab. Available at: <https://contactlab.com/it/assegnati-gli-htagamma-digital-awards-2021realizzati-in-collaborazione-con-contactlab/>

Coutinho, T. (2022). The microtransaction business model: a study on modern videogame monetization and the economic sustainability of microtransactions (Doctoral dissertation).

D'Arpizio, Levato (2021). Luxury is back...to the future. Bain-Altgamma. Luxury Goods Worldwide Market Study. Fall 2021-20th edition. Available at: <https://altgamma.it/media/source/Altgamma%20%20Bain%20Luxury%20Market%20Monitor%202021.pdf>

D'Asaro (2021). La collezione Balenciaga x Fortnite sarà l'inizio del meta-fashion. NSS Magazine. Available at: <https://www.nssmag.com/https://www.nssclub.com/it/fashion/27453/5-pattern-trendautunno-inverno-2021>

Datamonitor Report, (1998). Global Apparel, Accessories & Luxury Goods.

de Boissieu, E., Kondrateva, G., Baudier, P. and Ammi, C. (2021). The use of blockchain in the luxury industry: supply chains and the traceability of goods. *Journal of Enterprise Information Management*, Vol. 34 No. 5, pp. 1318-1338. <https://doi.org/10.1108/JEIM-11-2020-0471>

De Chernatony, L. (2001). Succeeding with brands on the Internet. *The Journal of Brand Management*, 8, 186-195

De Hesselde. (2021). The associations between Big Five personality traits, gaming motives, and self-reported time spent gaming. *Personality and Individual Differences*, 171. <https://doi.org/10.1016/j.paid.2020.110483>

Dean B. (2022). Roblox User and Growth Stats 2022. Available at: <https://backlinko.com/robloxusers>

DeMarco A. (2022). Jacob & Co. Launches NFT Collection of Digital and Physical watches Inspired by the Metaverse. Forbes. Available at: <https://www.forbes.com/sites/anthonydemarco/2022/03/23/jacob--co-launches-nft-collection-of-digital-and-physical-watches-inspired-by-the-metaverse/?sh=e21cc5d3fb7d>

Denman S. (2019). The Gucci app tells the story of the fashion house in 8-bit arcade form. Lifestyle. Available at: <https://www.thenationalnews.com/lifestyle/luxury/the-gucci-app-tells-the-story-of-the-fashion-house-in-8-bit-arcade-form-1.908739>

Derval, D. (2018). Designing luxury brands. In *Designing Luxury Brands* (pp. 77-104). Springer, Cham.

DFC Intelligence. (2021). Number of video gamers worldwide in 2021, by region (in millions) [Graph]. In Statista. Retrieved April 17, 2022, from <https://www.statista.com/statistics/293304/number-video-gamers/>

Dion D., Mazzalovo G. (2016). Reviving sleeping beauty brands by rearticulating brand heritage. J.

Bus. Res. 69 (12), 5894–5900

Dion, D., & Borraz, S. (2015). Managing heritage brands: A study of the sacralization of heritage stores in the luxury industry. *Journal of Retailing and Consumer Services*, 22, 77-84.

Dionisio, J.D.N.; Burns, W.G., III; Gilbert, R. 3D Virtual worlds and the Metaverse. *ACM Comput.*

Surv. 2013, 45, 1–38.

Dizionario Olivetti. Available at: <https://www.dizionario-latino.com/dizionario-latinoitaliano.php?lemma=FAS100>

Dubois B., Laurent G. (1995). Luxury possessions and practices: an empirical scale. in *E - European*

Advances in Consumer Research Volume 2, eds. Flemming Hansen, Provo, UT: Association for Consumer Research

Epic Games: (2021). Available at: <https://www.epicgames.com/fortnite/en-US/news/high-digital-fashion-drops-into-fortnite-with-balenciaga>

Ernest M. (2021). A virtual Gucci bag sold for over \$4,000- more than the real deal. Input. Available at: <https://www.inputmag.com/style/roblox-gucci-bag-handbag-purse-digital-virtual-nftsold-4000>

Evans T.M. (2019). Cryptokitties, cryptography, and copyright. *AIPLA QJ.*;47:219–247.

Faccioli, Sheehan. 2021. Global Power of Luxury Goods 2021. Deloitte Report.

Franceshet. M. (2021). The sentiment of Crypto Art. *CHR 2021: Computational Humanities Research Conference*, November 17–19, 2021, Amsterdam, TheNetherlands

Gadeschi E. (2020). Gucci, gaming partnership with Tennis Clash. *MF Fashion*. Available at: <https://www.mffashion.com/news/livestage/gucci-gaming-partnership-con-tennis-clash202005271357124073>

Gallagher J. (2021). NFTs Are the Biggest Internet Craze. Do they work for Sneakers? *The Wall Street Journal*. <https://www.wsj.com/articles/nfts-and-fashion-collectors-pay-big-money-for-virtualsneakers-11615829266>

Gartner (2022). Estimated Metaverse use case among consumers and businesses worldwide in 2026

[Graph]. In Statista. Retrieved April 16, 2022, from <https://www.statista.com/statistics/1290160/projected-Metaverse-use-reach-global-consumersbusinesses/>

Geerts, A., & Veg-Sala, N. (2011). Evidence on Internet communication management strategies for luxury brands. *Global Journal of Business Research*, 5, 81-94

Ghorbanian, M., Dolatabadi, S. H., Siano, P., Kouveliotis-Lysikatos, I., & Hatziargyriou, N. D. (2020). Methods for flexible management of blockchain-based cryptocurrencies in electricity markets and smart grids. *IEEE Transactions on Smart Grid*, 11(5), 4227-4235

Girelli M. (2021). Gucci: la storia di uno dei brand più famosi al mondo. *Ermes*. Available at: <https://ermesverona.it/2021/05/12/gucci-la-storia-di-uno-dei-brand-piu-famosi-al-mondo/>

Gobè M. (2001). *Emotional branding: the new paradigm for connecting brands to people*. Allworth Press, New York.

Godey, B., Pederzoli, D., Aiello, G., Donvito, R., Chan, P., Oh, H., & Weitz, B. (2012). Brand and country-of-origin effect on consumers' decision to purchase luxury products. *Journal of Business research*, 65(10), 1461-1470

Goldman Sachs. (2022). *Understanding the Metaverse and Web 3.0*. Exchanges at Goldman Sachs. <https://www.goldmansachs.com/insights/podcasts/episodes/01-11-2022-eric-sheridan.html>

Google Trend, Access date: 11/03/2022, <https://trends.google.com.tr/trends/?geo=TR>

Green, R., Delfabbro, P. H., & King, D. L. (2021). Avatar identification and problematic gaming: The role of self-concept clarity. *Addictive Behaviors*, 113, 106694.

Gucci, Patricia (2016). *In the Name of Gucci: A Memoir*. Crown Archetype. ISBN 9780804138932.

Guo, Y. (2019). Research on Strategy Innovations of Luxury Marketing Based on Consumer Behaviors. 2019 5th International Conference on Economics, Management and Humanities Science (ECOMHS 2019)

Gurunath R., & Samanta, D. (2022). A Novel Approach for Semantic Web Application in Online

Education Based on Steganography. *International Journal of Web-Based Learning and Teaching*

Technologies (IJWLTT), 17(4), 1-13. <http://doi.org/10.4018/IJWLTT.285569>

Harkison, T. (2017). The importance of the human touch in the luxury accommodation sector. *Research in Hospitality Management*, 7(1), 59-64.

Hayden S. (2021). Epic Games Secures \$1B Investment to Buy Its Unreal Engine-powered Metaverse. *RoadTovr*. <https://www.roadtovr.com/epic-games-unreal-engine-1b-investment/>

Herbach C. (2021). *Gaming and the Metaverse*. WPP. <https://www.wpp.com/wppiq/2021/09/gaming-and-the-Metaverse>

Hirschmann E.C., Holbrook M.B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *Journal of Marketing*, Vol. 46, Summer, pp. 92-101 (1982).

Hitti N. (2020). Balenciaga's Afterworld video game takes players to a secret rave in the forest. *Dezeen*. Available at: <https://www.dezeen.com/2020/12/09/balenciaga-afterworld-the-age-of-tomorrow-video-game/>

Holmqvist, J., Diaz Ruiz, C., & Peñaloza, L. (2020). Moments of luxury: Hedonic escapism as a luxury experience. *Journal of Business Research*.

Holmqvist, Wirtz, J., & Fritze, M. P. (2020). Luxury in the digital age: A multi-actor service encounter perspective. *Journal of Business Research*, 121, 747–756. <https://doi.org/10.1016/j.jbusres.2020.05.038>

Howcroft E. (2021). Virtual real estate plot sells for record \$2.4 million. *Reuters*. Retrieved from: <https://www.reuters.com/markets/currencies/virtual-real-estate-plot-sells-record-24-million-202111-23/>

Iglesias, O., Markovic, S., & Rialp, J. (2019). How does sensory brand experience influence brand equity? Considering the roles of customer satisfaction, customer affective commitment, and employee empathy. *Journal of Business Research*, 96, 343-354.

Ipsos. (2022). Feelings toward the Metaverse according to adults in the United States as of January

2022 [Graph]. In Statista. Retrieved April 16, 2022, from

<https://www.statista.com/statistics/1290667/united-states-adults-feelings-toward-Metaverse/>

Jain S., (2022). India is home to 420 million online gamers, second highest after china. *Forbes*. Available at: <https://www.forbesindia.com/article/news-by-numbers/india-is-home-to-420-million-online-gamers-second-highest-after-china/73239/1>

Janet McBride. (1999). Gucci ordered to open talks with LVMH Court leans to French firm. *National Post*.

Javornik A. (2016). 'It's an illusion, but it looks real!' Consumer affective, cognitive and behavioral responses to augmented reality applications, *Journal of Marketing Management*, 32:910, 987-1011, DOI: 10.1080/0267257X.2016.1174726

Jing, N., Liu, Q., & Sugumaran, V. (2021). A blockchain-based code copyright management system. *Information Processing & Management*, 58(3), 102518.

Kamenov, (2017) K. Immersive Experience—The 4th Wave in Tech: Learning the Ropes. Available at: <https://www.accenture.com/gb-en/blogs/blogs-immersive-experience-wave-learningropes>.

Kapferer, J. N., & Bastien, V. (2012). *The luxury strategy: Break the rules of marketing to build luxury brands*. Kogan page publishers

Kapp, K.M.; O'Driscoll, T. (2010) *Learning in 3D: Adding a New Dimension to Enterprise Learning and Collaboration*; Pfeiffer: San Francisco, CA, USA, 2010; ISBN 9780470504734.

Karim, S. (2019). *A Comparison of the Media Consumption Habits of Gen X, Gen Y and Gen Z*.

Allana Inst of Management Sciences, Pune, 9, 1-5.

Kelly D. (2021). A Virtual Gucci Bag sold For More Money on Roblox Than The Actual Bag. Hyperbeast. Available at: <https://hypebeast.com/2021/5/virtual-gucci-bag-roblox-resale>

Kering (2021). Group History. Available at: <https://www.kering.com/en/group/culture-andheritage/group-history/>

Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, 65, 1480-1486.

Klimmt, C., Hefner, D., & Vorderer, P. (2009). The video game experience as "true" identification: A theory of enjoyable alterations of players' self-perception. *Communication theory*, 19(4), 351373.

Krishnamurthy, G. C. (2008). Key differences between Web 1.0 and Web 2.0. *First Monday*, 13(6).

Kumagai, K., & Nagasawa, S. Y. (2019). Psychological switching mechanism of consumers' luxury and non-luxury brand attitude formation: the effect of store location prestige and self-congruity. *Heliyon*, 5(5), e01581

Kumar, N., & Mittal, S. (2021). *Gucci: Staying relevant in luxury over a century*. Singapore Management University. Centre for Management Practice.

Kumara B., Govanakoppa, R. (2019). *Library Homepage: Tools and Techniques*.

10.14662/IJALIS2014.024.

Leavy, B., (2019), *Thriving in the era of the Connected Consumer*, *Strategy & Leadership*. Vol. 47, No.5, pp. 3-9.

Ledger Insights (2021). *Dolce & Gabbana sells 9NFTs for \$5.65 million*. Available at: <https://www.ledgerinsights.com/dolce-gabbana-sells-9-nfts-for-5-65-million/>

Lee, Alexander. (2021). *With the Metaverse Hype Cycle at Full Blast, Experts Take the Long View*. *Digiday*, August 4, <https://digiday.com/marketing/with-the-Metaverse-hype-cycle-at-full-blastexperts-take-the-long-view/>

Lee, H. N., Lee, A. S., & Liang, Y. W. (2019). An empirical analysis of brand as symbol, perceived transaction value, perceived acquisition value and customer loyalty using structural equation modeling. *Sustainability*, 11(7), 2116

Li J. (2022). *Gucci Launches Vault Project for Customizable NFT PFPs*. *Hypebeast*. Available at:

<https://hypebeast.com/2022/3/vault-project-10kft-gucci-grail-inspired-by-alessandro-michelecollections-nft-pfp>

Lim, W. Y. B., Xiong, Z., Niyato, D., Cao, X., Miao, C., Sun, S., & Yang, Q. (2022). *Realizing the Metaverse with Edge Intelligence: A Match Made in Heaven*. arXiv preprint arXiv:2201.01634.

Lokesh Rao (2021). *How fashion brands can enter Web 3.0 Metaverse Worlds*. *Nasdaq*. Available at: <https://www.nasdaq.com/articles/how-fashion-brands-can-enter-web-3.0-Metaverse-worlds>

Lounge, T. W. Choosing the right blockchain for your NFT. (2020).

<https://medium.com/phantasticphantasma/choosing-the-right-blockchain-for-your-nftd1df2bebae91>.

Luxe Digital (2021). The 15 Most Popular Luxury Brands Online in 2021. Available at: <https://luxe.digital/business/digital-luxury-ranking/most-popular-luxury-brands/>

Luxury Daily (2021). Tiffany & Co., Gucci are 2021 marketers of the year. Retrieved from: <https://www.luxurydaily.com/tiffany-co-gucci-are-2021-marketers-of-the-year/>

Maddalena (2021). Perché il metaverso potrebbe essere una grande opportunità per i marchi del lusso. Forbes Business. Available at: <https://forbes.it/2021/11/17/perche-il-metaverso-potrebbeessere-una-grande-opportunita-per-i-marchi-del-lusso/>

Marr. (2022). How Luxury Brands Are Making Money In the Metaverse. Forbes. Available at: <https://www.forbes.com/sites/bernardmarr/2022/01/19/how-luxury-brands-are-making-money-inthe-Metaverse/?sh=38299a7f5714>

McAlexander, J. H., Schouten, J. W., & Koenig, H. F. (2002). Building brand community. *Journal of marketing*, 66(1), 38-54.

Mcdowell M. (2022). Gucci goes deeper into the Metaverse for next NFT project. Vogue Business. Available at: <https://www.voguebusiness.com/technology/gucci-goes-deeper-into-the-Metaversefor-next-nft-project>

Meta Website (2021). Connection is evolving and so we are. Accessed on 17 April 2021: <https://about.facebook.com/meta/>

Miele (2022). Gucci e Superplastic, Progetto NFT per Vault. MF Fashion. Available at: <https://www.mffashion.com/news/livestage/gucci-e-superplastic-progetto-nft-per-vault202201171718238879>

Mitselmakher K. (2021). The “Metaverse” Economy: Journey From Web 2.0 to Web 3.0. Medium. <https://medium.com/@bloccelerate/the-metaverse-economy-journey-from-web-2-0-to-web-3-08ad0b1af7f69>

Muller, B., Kocher, B., & Ivens, B. (2007). Internet: la Face Cachée des Produits de Luxe. In (pp. 18-36): Ecole des HEC -Lausanne.

Muret D. (2021). Dolce & Gabbana reports record sales for first NFT collection. The Fashion Network.

Muret D. (2021). Balenciaga planning launch of department dedicated to Metaverse. The Fashion Network. <https://www.fashionnetwork.com/news/Balenciaga-planning-launch-of-departmentdedicated-toMetaverse,1359016.html>

Murphy, I. P. (2011). Living Social. American Drycleaner (Vol. 77, pp. 32).

Mystakidis, S. (2022). Metaverse. Encyclopedia, 2, 486. <https://doi.org/10.3390/encyclopedia201003497>

Mystakidis, S.; Fragkaki, M.; Filippousis, G. (2021) Ready Teacher One: Virtual and Augmented Reality Online Professional Development for K-12 School Teachers. Computers, 10, 134.

Nadini, M., Alessandretti, L., Di Giacinto, F., Martino, M., Aiello, L. M., & Baronchelli, A. (2021). Mapping the NFT revolution: market trends, trade networks, and visual features. Scientific reports, 11(1), 20902. <https://doi.org/10.1038/s41598-021-00053-8>

Napoli C. (2017). US: Marketing Luxury to Gen Z. WGSN. Available at https://www.wgsn.com/content/board_viewer/#/70753/page/1.

Nguyen A. (2020). Behind the Scenes at Gucci's Virtual Show. Milan Fashion Week. The Cut.

Available at: <https://www.thecut.com/2020/07/behind-the-scenes-at-the-gucci-epilogue-cruise2021-show.html>

Okonkwo, U. (2009): Sustaining the Luxury Brand on the Internet, in: Journal of Brand Management, 16, 5/6, pp. 302–310

Parisi, T. (2021). The Seven Rules of the Metaverse. Available online: <https://medium.com/metaverses/the-seven-rules-of-theMetaverse-7d4e06fa864c>

PC Magazine. (2021). Main reasons for joining the Metaverse according to Internet users worldwide in 2021 [Graph]. In Statista. Retrieved April 16, 2022, from <https://www.statista.com/statistics/1288870/reasons-joining-Metaverse/>

Pini, F. M. (2017). A narrative approach to luxury brands. In *New Luxury Management* (pp. 69-83). Palgrave Macmillan, Cham

Praetorius, A. S., & Görlich, D. (2020). How avatars influence user behavior: a review on the proteus effect in virtual environments and video games. In *International Conference on the Foundations of Digital Games* (pp. 1-9).

Ragnedda, G. D., & Destefanis, G. (2019). *Blockchain and Web 3.0*. London: Routledge, Taylor and Francis Group.

Ramaswamy, V. (2020). Leading the experience ecosystem revolution: innovating offerings as interactive platforms. *Strategy & Leadership*, Vol. 48 No. 3, pp. 3-9. <https://doi.org/10.1108/SL-012020-0014>

Raza A. (2022). Investing in Decentral Games (DG)- Everything You Need to Know. *Securities*. <https://www.securities.io/investing-in-decentral-games-everything-you-need-to-know/>

Reyburn, S. JPG file sells for \$69 million, as “NFT mania” gathers pace. (2021). <https://www.nytimes.com/2021/03/11/arts/design/nft-auction-christies-beeple.html>. (Accessed 4 May 2021). (The New York Times).

Richins M.L. (1994). Special possessions and the expression of material values. *Journal of Consumer Research*, vol. 21.

Riegelhaupt, R. (2021). Results: Beeple’s purely digital NFT-based work of Art achieves \$69.3 million at Christie’s. <https://www.christies.com/about-us/pressarchive/details?PressReleaseID=9970&lid=1>. (Christie’s Press Release).

Salamone L. (2022). Gucci ha comprato dei terreni nel Metaverso. *NSS Magazine*. Available at: <https://www.nssmag.com/it/fashion/28942/gucci-sandbox>

Salinas (2021). Luxury Fashion and Gaming: a Bright future in The Horizon. Luxiders. Available at: <https://luxiders.com/luxury-fashion-and-gaming/>

Sandbox (2022). <https://www.sandbox.game/en/about/sand/>

Sannino S. (2020). Come Gucci ha previsto la pandemia. La Critica. Available at: <https://www.lacritica.org/come-gucci-ha-previsto-la-pandemia/>

Sarica, Federico. (2018). Marco Bizzarri and the Gucci Revolution. RivistaStudio, available at <https://www.rivistastudio.com/marco-bizzarri-gucci/>

Schroeder, R., Huxor, A., & Smith, A. (2001). Active worlds: geography and social interaction in virtual reality. *Futures*, 33(7), 569- 587, Access date: 14/12/2021, <http://Metaverse.sourceforge.net/>

Schwarz, R., Steptoe, W.; et al. (2020). The Ethics of Realism in Virtual and Augmented Reality. *Front. Virtual Real.*, 1, 1.

Seward, G. H., & Seward, J. P. (1937). Internal and external determinants of drives. *Psychological Review*, 44, 349–363

Sheth, J. (2020). Impact of Covid-19 on consumer behavior: Will the old habits return or die?. *Journal of business research*, 117, 280-283.

Singha, A. (2022). Web 3.0: Information Security and Application for Library Services. *International Journal of Recent Advances in Multidisciplinary Topics*, 3(1), 107-110.

Slater, M., Gonzalez-Liencre, C., Haggard, P., Vinkers, C., Gregory-Clarke, R., Jelley, S., Watson, Z., Breen, G., Schwarz, R., Steptoe, W., Szostak, D., Halan, S., Fox, D., Silver, J. (2020). The Ethics of Realism in Virtual and Augmented Reality. *Frontiers in Virtual Reality*. 1. 1. 10.3389/frvir.2020.00001.

Socha, M. (2021). Metaverse Seen as Potential Mega Opportunity for Luxury Brands. *WWD*. Available at: <https://wwd.com/business-news/technology/Metaverse-nft-luxury-business-morgan1234997156/>

Sortlist. (2022). Business point of view regarding the Metaverse according to companies worldwide that have already invested in the Metaverse as of March 2022 [Graph]. In Statista. Retrieved April 16, 2022, from <https://www.statista.com/statistics/1302156/business-point-of-view-regarding-theMetaverse-worldwide/>

Sortlist. (2022). Which type of companies do you think have to be present in the Metaverse? In Statista. Retrieved April 16, 2022, from <https://www.statista.com/statistics/1302167/business-pointof-view-regarding-the-Metaverse-worldwide/>

Statista (2021). Esports market revenue worldwide from 2019 to 2024. <https://www.statista.com/statistics/490522/global-esports-market-revenue/>

Statista (2021). Share of adults in the United States who have heard of Facebook's virtual reality project Metaverse as of November 2021. Available at: <https://www.statista.com/statistics/1278840/united-states-adults-who-have-heard-of-facebookMetaverse/>

Statista (2022). Augmented reality (AR) and virtual reality (VR) market size worldwide from 2016 to 2024. Available at: <https://www.statista.com/statistics/591181/global-augmented-virtual-realitymarket-size/>

Strauss A. (2019). Two-Thirds of Gen Z Males Say Gaming is a Core Component of Who They Are. Research Services. Whistle. Available at: <https://www.aaa.org/gen-z-males-say-gaming-corecomponent-who-they-are/?cn-reloaded=1&cn-reloaded=1>

Sutcliffe, C. (2022). How Gaming Created the Language of the Metaverse. The Drum. <https://www.thedrum.com/news/2022/01/17/how-gaming-created-the-language-the-Metaverse>

Takahashi D. (2021). The Sandbox's NFTs gain momentum with marketplace, new partners, and investors. VentureBeat. <https://venturebeat.com/2021/04/09/the-sandboxs-nfts-gain-momentumwith-marketplace-new-partners-and-investors/>

Team, N. (2021). Non-fungible tokens quarterly report Q1 2021. <https://nonfungible.com/subscribe/nft-report-q1-2021>. (Accessed 4 May 2021). (NonFungible Corporation)

The Popular Times (2021). Will Consumers Pay for Gucci Sneakers that Don't Exist?. Available at: <https://www.thepopulartimes.co/articles/gucci-wanna-nft-ar-virtual-sneaker>

Thomas, D., (2021). Dolce & Gabbana Just Set a \$6 Million Record for Fashion NFTs. The New York Times.

Tong A. (2021). Beyond the Bubble: Making NFT work for fashion. Available at: <https://www.voguebusiness.com/technology/beyond-the-bubble-making-nfts-work-for-fashion>

UNXD. (2021). Collezione Genesi. Available at: <https://unxd.com/drops/collezione-genesi>

Vault Gucci Website. Available at: <https://vault.gucci.com/en-US/story/about-vault>

Wang, Q., Li, R., Wang, Q., & Chen, S. (2021). Non-fungible token (NFT): Overview, evaluation, opportunities and challenges. arXiv preprint arXiv:2105.07447.

Werner S. (1967). *Luxury and capitalism*. Ann Arbor, MI: University of Michigan Press

Westerkamp, M., Victor, F. & Küpper, A. (2018) Blockchain-based supply chain traceability: Token recipes model manufacturing processes. IEEE International Conference on Internet of Things (iThings)

Weston G. (2022). Web 3.0 vs Metaverse: key differences. 101 Blockchains. <https://101blockchains.com/web-3-0-vs-Metaverse/>

Whitaker A. (2019). Art and blockchain: A primer, history, and taxonomy of blockchain use cases in the Arts. doi: 10.34053/artivate.8.2.2

Williams R. (2019). Gucci adds AR sneaker try-ons to its mobile app. Marketing Dive. Available at: <https://www.marketingdive.com/news/gucci-adds-ar-sneaker-try-ons-to-its-mobile-app/557838/>

Wise J. (2022). Discord Statistics 2022: Valuation, Revenue & Users. Available at: <https://earthweb.com/discord-statistics/>

XRToday (2021). Gaming in the Metaverse. The Next Frontier? <https://www.xrtoday.com/virtualreality/gaming-in-the-Metaverse-the-next-frontier/>

Yotka (2021). Balenciaga and Fortnite Team Up for a Digital-to-Physical Partnership. Vogue. Available at: <https://www.vogue.com/article/balenciaga-fortnite-partnership>

Zhang Y. (2021). What Can Luxury Brands Learn from Gucci Digital Strategy?. Hapticmedia. Available at: <https://hapticmedia.com/blog/what-can-luxury-brands-learn-from-guccis-digitalstrategy/>

Zibbo M. (2021). Fortnite incontra Balenciaga e i prezzi della linea di abbigliamento sono alle stelle. Eurogamer.it Available at: <https://www.eurogamer.it/news-videogiochi-fortnite-balenciagaprezzi-linea-abbigliamento-altissimi>