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**Incumbents' strategies in response to new entrants:
heterogenous adaption of traditional luxury firms to
digitally native vertical brands**

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Abstract

New entrants with disruptive business models have challenged incumbent firms in recent years. In fragmented and competitive markets, digitally native brands have emerged as a threat, especially for traditional luxury brands in the luxury market. Given their digital and direct-to-consumer business model, newcomers address better the challenges of the luxury industry, inducing incumbent firms to heterogeneously adapt their business model. The purpose of this study is to investigate the winning strategies adopted by incumbent luxury firms to respond to the digital disruption posed by digitally native vertical brands and how the redefined strategies could solve the rising issues in the luxury market. The theory about disruption, business models and theoretical frameworks will be tested in the luxury industry with a qualitative approach leveraging on the case studies of the incumbents Louis Vuitton and Gucci. The research will demonstrate that the best innovators combine internal and external research to innovate and established firms and new entrants can learn from each other.

Table of Contents

<i>Introduction</i>	5
<i>1. Literature Review</i>	7
1.1 The theory of disruptive innovation and business models	7
1.2 General phenomenon of new entrants and incumbents	11
1.3 Multiple strategic frameworks of incumbents to reply to disruptors.....	14
1.3.1 Drivers of strategic responses: ability and motivation.....	14
1.3.2 Frameworks of incumbents' adaption: resource-based view, barriers to adaption and dynamic capabilities	15
1.3.3 Build or buy strategies: experimentation, alliance and acquisition	18
<i>2. Methods and Results</i>	24
2.1 Overview of the luxury industry: fundamentals and key challenges.....	24
2.2 Interplay of digitally native vertical brands and incumbent luxury firms	32
2.3 Case studies	41
2.3.1 Louis Vuitton Company.....	42
2.3.2 Gucci Company	55
2.4 Results	71
<i>3. Discussion</i>	75
<i>Conclusions</i>	77
<i>Bibliography</i>	78

Introduction

Disruptive innovation is challenging many industries through changes in products, processes, services and business models. Disruptive innovation consists in a process characterized by changes in the perceived benefit, the architecture of value creation and the business models. This phenomenon, typically introduced by new entrants, threaten incumbent firms in reinventing their business model with a redesign of the strategies to maintain the positioning in the market. On the other hand, disruptive innovations driven by digital innovations could provide opportunities for traditional players to improve and expand their product and service portfolios. The disruption process starts from new entrants targeting neglected low-end segments by offering quality products typically at lower prices. As the disruptors begin capturing market share, the leading incumbents start perceiving them as a threat and react consequently. In order to define how firms adapt their business models in response to disruptive innovations, it is important to understand who are the incumbents and the new entrants. Indeed, incumbent firms respond differently to technological innovation respect to disruptors because they want to defend their position and are characterized by organizational inertia.

Starting from the theory of disruptive innovation, business models, frameworks of business model adaption and the multiple strategic responses of incumbents to disruptors, the research examines what are the winning strategies adopted by incumbent luxury firms to respond to disruptive digitally native vertical brands. Digitally native vertical brands (DNVBs) are a kind of direct-to-consumer brands born digitally and inspiring to the codes of luxury. These start-ups' business model is characterized by direct sell to consumers without intermediaries. Therefore, newcomers can offer high-quality products at lower prices through their own channels -website and social media- and advertising and marketing techniques. DNVBs rely on specific capabilities involving technology, operations, data, analytics and an agile operating model. Indeed, the most important competitive advantage of the DNVBs is the deep understanding of customers and control over data, thanks to the digital business model and direct relationships. Nowadays, DNVBs represent a threat for traditional luxury brands since they address better some key challenges of the luxury industry: meet fast the expectations of younger audiences, data collection and analysis, sustainable consumption and inventory management. Through their disruptive business model, DNVBs redefine what an existing product or service is and how it is provided to customers. Thus, incumbents are asked to adapt their business model by looking for new ways of creating and capturing value, thus readapting resources, capabilities, structures and strategies. Incumbents heterogeneously adapt the business model to respond to digital attackers and the most agiles have an interplay between internal and external research to foster innovation. As identified by the current research, the potential pathway of responses includes on the one hand a defensive strategy of alliances and acquisitions and on the other hand standalone experimentation. The choice among the possible strategies is driven by the ability and motivation of the firms. The ability to respond is determined by the company's resources, capabilities and the extent to which the professional and organizational cultures clash.

Instead, the motivation depends on the growth rate of the new business, the presence of synergies and the probability to lose existing customers to the new business. The frameworks of business model adaption address the choice between the resources and capabilities to build, buy or invest. Furthermore, the reinvention of incumbents' structure and strategies for business model adaption is articulated through the resources and capabilities to shift. Specifically, established players are asked to enhance the existing strong capabilities through experimentation, while they should build the necessary digital capabilities thanks to alliances and acquisitions with technology start-ups and corporates.

The theory about the incumbents' strategic responses to new entrants will be tested in the luxury industry through the case studies of the incumbent luxury firms Louis Vuitton and Gucci. The research draws on a qualitative methodology combining secondary data of interviews and archival data about the digital acceleration and the direct-to-consumer strategies to absorb, imitate or adapt to the best practices of digital born start-ups. Luxury industry is one of the most disrupted from direct-to-consumer business models and fragmented, even more after Covid-19, thus leading companies are asked to react with speed and scale to outperform against the threatening digitally native vertical brands. The challenge for traditional luxury retailers consists in understanding how these practices could solve their issues in terms of meeting fast new customer demand, digitalisation, sustainability consumption and inventory management, but staying true the brand's identity. The sampling of the traditional players Louis Vuitton and Gucci is justified by their leading position in the luxury business, experience, and innovativeness. From the analysis results that both firms experiment new ways of innovating via in-house separate business units on the one hand, and investments in directly operated sales channels primarily targeted by digitally native vertical brands on the other hand. In addition, given the saturation, competitiveness and the attempt to further differentiate, luxury incumbents, rather than imitating DTC, have invested in new neglected sales channels by digital attackers. To be more specific, Louis Vuitton and Gucci used their scale and new capabilities to expand in virtual realities, like NFTs and metaverse, which are expected to become very significant drivers of revenue growth in the years to come.

The findings of the research add value to the literature of business model innovation and the frameworks of the resources and capabilities to mobilise in the luxury industry, which have received limited attention from the academics. Moreover, the empirical evidence contributes to other retail industries since any retail sector address the same challenges of the luxury sector. But the qualitative nature of the research represents also a limitation that could be overcome by future research. Researchers may integrate primary and secondary data to explore and measure the timing of business model adaption and the level of investment and effort in implementing redefined strategies of response.

Chapter 1 – Literature Review

1.1 The theory of disruptive innovation and business models

Unprecedented competition and emerging digital technologies are disrupting industries by challenging products, processes, services and business models. Digitalisation causes rising trends in terms of new technologies, consumer preferences and business models from disruptive digital attackers. The availability of new technologies ranging from Internet of Things (IoT), Big Data, Artificial Intelligence, Cloud Computing, Augmented and Virtual Reality and Blockchain represents a source of disruption and offers new opportunities. Many of these digital technologies reveal significant changes in demand, capacity and technology costs. At the same time, businesses are facing shifts in customers' preferences with a special focus on Millennials and Gen-Z's needs and sustainable consumption.

According to Christensen, the disruptive innovation theory describes how firms may be challenged if they neglect the upward encroachment of a disruptive product or service offering alternative benefits. Academic attention has been addressed towards digital technologies as the drivers of developing new business models or changes in the existing ones. Before going in depth with the process of disruptive innovation, it is useful to clarify the definitions of innovation and disruption. The common definition of innovation is the creation of new products, business processes and practices or organizational forms. In addition, there are four innovation models defined by two dimensions: the requirement of new business models or not and the use of existing or new technical capabilities. These models are incremental, radical, disruptive and architectural. Instead, the term disruption refers to a process in which new entrants with fewer resources are able to challenge established incumbent firms (Christensen and Raynor, 2003). Disruptive innovation requires a different business model and existing capabilities to take place, such as the introduction of Google's Android open-source operating system. Thus, differently from incremental innovation, disruptive innovation challenges the status quo and radically reshapes supply and demand (Assink, 2006). The process of disruptive innovation includes two distinctive parts: disruptive technologies and disruptive business models. Following the original definition by Christensen and Bower, the disruptive technologies are the ones disrupting an existing trajectory of performance improvement or redefining the meaning of performance. For the same logic, disruptive business models "disrupt an established model or redefine what value creation and capture mean" (Christensen and Bower, 1996). In the process model, the two components are likely to emerge in different times and have different impacts on incumbents' adaption process. Indeed, disruptive technologies emerge first because new technologies require new markets, models and experimentation to profit from them, so create opportunities for established players. New digital technologies allow players to increase convenience, customer experience, customer satisfaction, speed and operational efficiency through changes in the business model. On the other hand, disruptive business models emerge later when disruptors find ways to commercialize the new technologies, threatening incumbent's business model and inducing a

defensive response to quickly adapt. On a strategic perspective, the purpose of this research is beyond the analysis of the effects of innovative digital technologies on the development of competitive business models, since digital technologies are a necessary but not a sufficient driver of business model adaptation.

Teece defined a business model as “the design or architecture of the value creation, delivery, and capture mechanisms’ of an organization”. Generally, disrupters build different business models from those of incumbents and threat their competitive position. For example, Apple and Google defeated the market leader Nokia through new mobile operating systems, applications and ecosystems, while Netflix overthrew Blockbuster due to online movie rentals and enhanced customer experience. The key to any successful business model innovation consists in the redefinition of an existing product or service and how it is provided to end consumers, rather than inventing from scratch. At a granular level, disruptive business models have an impact on value creation and market position of incumbent firms, requiring a reinvention of business models through the reconfiguration of resources (assets, core competences and architecture), value propositions, strategy and structure. In particular, a value proposition addresses the products and services offered by the firm, the revenue models and target segments. On the other hand, the operating model by which the offering can be delivered profitably includes changes in the value chain, cost and organizational structures. Thus, business model innovation consists in changes in the operating model to deliver new value propositions that are not developed by established competitors. This entails a new approach to enhance firm’s value, especially in terms of revenue and pricing structure. In addition, firms manage the risk related to the uncertainty of the set or distribution of possible outcomes to efforts in shifting value creation and capture. Disruptive business models may be decisive for a firm’s growth and survival in the long run. Alternatively, they are fundamentally financially unattractive in the short-term due to the degree of uncertainty in refer to the economic viability and customers’ willingness to employ the disruptive innovation. Clarified that firms’ assets and competitive environments are key drivers of the company’s value, they also affect adjustment costs associated with the sharing and the conflict among resources across business models. An incumbent pursuing the new model faces various adjustment costs. These costs are related to expenses of transferring human resources, developing new capabilities and organizational routines, adapting existing assets to the new model, coordination costs associated with sharing of resources across business models and mistakes resulting from learning how to implement the new model. For incumbents with a high level of assets that are specific to the existing model the investment in the new business model requires significant adjustment costs and lowers the firm’s value relative to when it invests in the existing model. In refer to competitive environments characterized by low entry barriers and intense rivalry, incumbents are threatened more by disruptive business models and by competitor firms that may adopt an aggressive response to the displaced market. In this context, adjustments costs are exacerbated since the required threshold of assets and competences to outperform against the disruptors is likely to be higher in a more competitive market. In contrast to technological innovations, disruptive business model innovations

can coexist with traditional business models instead of completely supplant them. The issue for incumbent firms consists in how disruptors address unmet needs and demand uncertainty, in terms of new Millennials and Gen-Z's preferences, the collection and exploitation of big data, sustainable consumption and inventory management. All these new models timely respond to the market by offering quality products at competitive prices, managing direct customer relationships digitally with a higher rate of engagement and through a "slow" model, meaning that the production process is transparent and ethic about the origin and communication of the long-lasting products made with sustainable fabrics. In sum, established players should balance the exploitation of their knowledge and assets within the existing business model and the opportunities' exploration within the new model. Moreover, incumbent firms are called for business model adaption to meet new market trends.

After the analysis of disruptive business model innovation's nature, within innovative business models that have disrupted the industry, it is useful to have a focus on the direct-to-consumer business model (DTC), which includes digitally native vertical brands. Apart from digitally native vertical brands, DTC business model includes retail brands with stores that fully sell their products online through their own website and established consumer brands with products sold by retail partners that are experimenting DTC channels. Over the past decade, emerging start-ups, such as Warby Parker and Everlane, helped build a new business model. In addition, given the increase of online shopping in response to Covid-19 pandemic, direct-to-consumer became the easiest and the most convenient solution to have access to specific product categories and has outperformed other channels. Nowadays 77% of apparel and accessory firms have adopted a direct-to-consumer approach, among which stands out the name of Nike. The DTC approach consists in bypassing retailers and resellers to sell directly to consumers. Traditionally, the chain flows from wholesalers, distributors and retailers to end consumers. In contrast, in the DTC model the manufacturer advertises, communicates, and sells through its own channels -website, social media- without intermediaries. DTC brands typically shift to a digital business model, fully exploiting digital channels for marketing and selling. However, DTC approach and traditional retail may coexist because these brands, after gaining market share, could decide to operate also offline. The value proposition of DTC model includes innovative, quality and cost-effective product offerings. First of all, thanks to their business model directly reaching customers, DTC brands can differentiate themselves from traditional firms in terms of product development, product delivery, storytelling and brand-building. For example, Everlane co-creates with consumers, Warby Parker provides free home try-on service and Glossier has built a strong online community. In addition, DTC brands address a niche market because of their uniquely designed products. As regards cost-effectiveness, DTC model displays pricing advantages in comparison to traditional business models, since cutting intermediaries leads to higher margins and so the possibility to sell high quality product at better prices. In refer to the operating model, one of the most important competitive advantages concerns the collection and use of data directly from customers and digital technologies to optimize various areas of the business. Mastering data from the

direct relationships and feedback loops, they control the user experience and may upgrade their strategies and adjust products and services to offer tailor-made solutions. Through active engagement across every touchpoint from website to social media, respondents co-create products. Co-creation means that brands and customers collaborate in product development through a two-way relationship based on the sharing of ideas and gathering customer feedbacks. For example, Everlane, an apparel brand founded in 2010, thanks to customer feedbacks, has changed wool trousers' materials and redesigned them adding new features required by customers, such as belt loops and interior closures. Another relevant example is the beauty brand Glossier founded in 2014 which embeds the determinant of co-creation is its brand identity from its conception. Indeed, the brand was built upon the conversations with influential female figures who shared tips and recommendations for a personalized beauty case on the blog 'Into the Gloss'. Co-creation determines a customer-centric approach in which customers actively participate in product development highlighting their needs and wants. This degree of personalisation leads to a superior customer experience and a positive brand evaluation in which the perception of consumers about brands is more authentic and sincere. In addition, the focus on customer-centric capabilities includes digital capabilities as regards technology, operations, data and analytics and an agile operating model. First, this customer centricity is enabled through digital assets, such as images, videos and reviews. Then, due to the shortage of the supply chain, DTC have the chance to deliver fast, free and convenient shipping options, such as click and collect or delivery to partner retailers, and easy returns experience. In order to quickly adapt to shifting demand and provide products and services based on customer outcomes, DTC businesses should adopt an agile operating model. This agile operated model should be constituted by small, cross-functional teams with transversal skills to work in short prints and enhance cooperation within the firm. In addition, DTC shifts the supply chain from design-make-sell to sell-design-make. Thanks to direct communication with customers, firms understand the needs before designing the product, so they produce only what customers will effectively purchase with an effect on efficient inventory management with less inventory, working capital freedom and waste reduction. These data-enabled business models exploiting digital technologies base their success also on global ecosystems and digital platforms. Ecosystem formation is underpinned by value-reinforcing complementarities determining multilateral relations, rather than bilateral interactions. In this context, the connections between firms, resources and activities within a community are expressed as data relations based on the practices of data generation and exploitation to provide a great deal of services. Ecosystems are characterized by the integration of IT, mobile applications enhancing multimedia storytelling, customer acquisition and benefits' communication. Digital business models rely on digital platforms to balance the distribution of value among an ecosystem with multiple firms and customers. Network capabilities are relevant in platforms where firms and customers co-create to enhance product offering and a seamless customer experience across different touchpoints. DTC organizations access to assets joining digital platforms with the advantages of increasing their buying power, economies of scale and operational efficiencies. Economies of scale are related with a cost advantage, meaning that the larger quantities are produced, the lower is the average cost. Especially at

the initial stage, they outsource much of the operations by participating in ecosystems built on digital platforms where the infrastructure becomes a shared resource. Therefore, for incumbents the business model adaption to this new form of organization represents a challenge requiring new ways of creating and capturing value. Value creation derives from a combination of internal and external knowhow, while value capture results from proprietary ecosystems in the form of digital platforms to exchange external resources and control consumers' data.

1.2 General phenomenon of new entrants and incumbents

At this point it is useful to have a deep dive in the disruption process to have a panoramic about the phenomenon of incumbents vs. new entrants and then on how incumbents react to disruptors. As stated in the previous paragraph, disruption indicates a process in which new entrants with fewer resources threaten firms already in the market. Following the advent of disruptive technologies, the disruption process evolves with the entry of disruptors initially targeting the low-end of the market and introducing new business models. Since new entrants address the unserved or low-end customers, disruptive innovation process is delineated as a bottom-up approach redefining value creation, delivery and capture. According to McKinsey, digital entrants increase latent demand by almost 0.5% a year with an effect on the size of the industry. In addition, they steal share from incumbents through new business models and challenge the level of competitiveness in the industry. The effect of price appears to be modest, but in reality, it impacts the margins of established players. Having a profit rate of 10%, a decrease of 2% corresponds to a 20% drop in profitability. The experience curve asserts that new entrants can gain a sustainable competitive advantage via rapid investment in capacity and an aggressive pricing strategy. Disruptive innovation model (Figure 1) challenges the status quo and reshapes supply and demand, indeed new entrants offer to neglected segments quality products with a mix of attributes unappealing to high-end customers at lower prices. Since they initially overlook mainstream consumers, leading incumbents do not have the urgency to respond to new entrants. But, when disruptors start gaining market share, established firms perceive them as a threat and are incentivized to react. In a second stage, new entrants could decide to penetrate the mainstream market by enhancing their product offering with features encountering the mainstream customers while still maintaining their competitive advantage in the niche market. As mainstream segment start purchasing from disruptors huge quantities of products risen in quality with lower prices, disruption has occurred and prices drop in the market. Furthermore, when new entrants succeed moving from the low-end to the high-end of the market, incumbents incur in a decrease in their market share and profitability. Generally, disruption takes time and this is another reason why incumbents overlook disruptors.

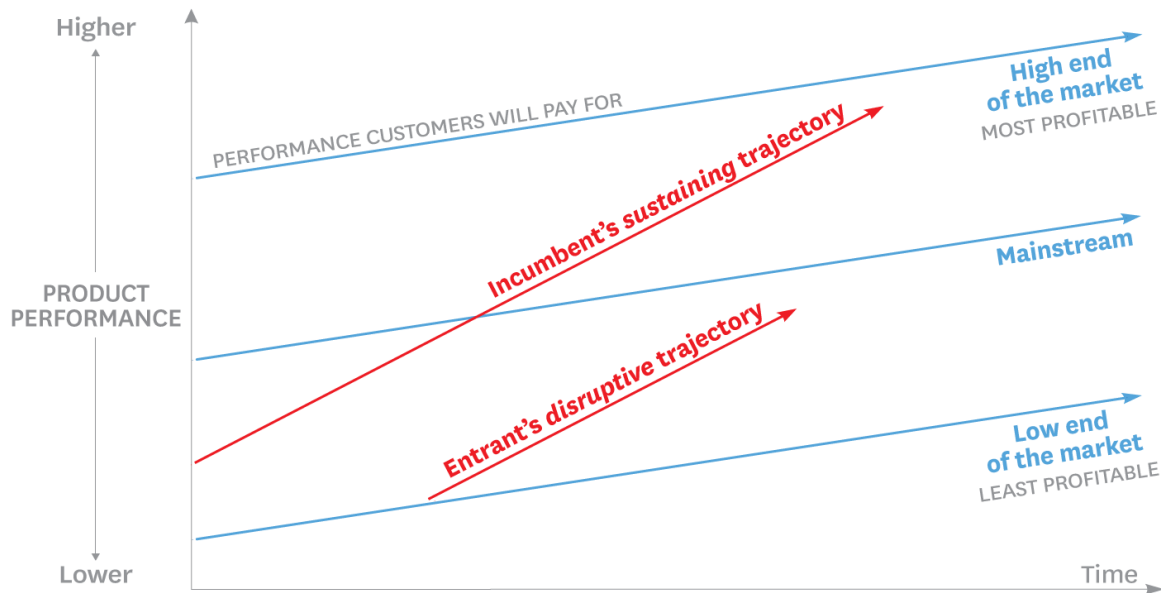


Figure 1 Disruptive Innovation Model. Source: Christensen C. M., Raynor, M.E., McDonald, R. (2015). What is disruptive innovation? *Harvard Business Review*.

The graph compares product performance trajectories (the red lines delineating how products and service enhance over time) and customer demand trajectories (blue lines reflecting customers' willingness to pay for performance). When leading incumbents introduce higher-quality products to high-end customers, who are the most profitable, they neglect the needs of low-end market and part of mainstream segment. This gap offers an opportunity for new entrants that, by improving their performance on a disruptive trajectory, address low-end and mainstream customers with low profitability respect to high-end market, threatening incumbent firms.

A relevant example of an innovative newcomer in the established automotive industry is Tesla. Tesla is recognized as a leader in electric vehicles and charging systems. The firm initially entered the market with a focus strategy targeting a niche but offering very expensive models. Later on, Tesla decided to strengthen competitiveness with the main car makers (General Motors, Toyota Motor Corporation, Volkswagen) by expanding its business through the target of the mass-market. Tesla's business model differs from the one of leading automakers. The company's differentiation strategy relies on its distinctive resources and capabilities. Tesla offers advanced environmentally friendly technology in design, aesthetic, functionality, the best internal batteries and is effective in marketing capabilities because of the CEO's charisma and brand popularity. Apart from Elon Musk's charisma that attracted potential customers, talents and investors, Tesla retains customers also through direct interaction and direct sales. The newcomer pursues an intensive growth strategy by investing in research and development to offer new products that satisfy market demand for enhanced renewable energy solutions. Another intensive growth strategy consists in market penetration by increasing sales revenues in the current markets through aggressive marketing. In addition, Tesla has an outstanding quality of human resource management attracting the best engineers. The combination of a

generic competitive strategy with a focus on advanced technologies in electric cars and related products and intensive growth strategies leads to company's operational effectiveness. Another key driver of Tesla's superior performance consists in the high level of vertical integration backward and forward. This means that Tesla performs different activities of the value chain, reaching the over control of assets and capabilities with a positive impact on product performance and customer experience. Indeed, Tesla produces internally the main components of electric cars and relies on its distribution network instead of a franchising dealer. Thus, the new entrant represents a multiple specialist firm that competes in battery, drivetrain and assembly instead of focusing only on one part of the value chain (Figure 2). The disruptive innovation brought by Tesla in the automotive market pushed established automakers to reply. Toyota, a market leader with excellent product engineering and efficient, high-quality manufacturing, has become one of the profitable players in the electric vehicle market. Indeed, Toyota addressed the mass market with hybrid electric vehicles without abandoning its core internal combustion business.

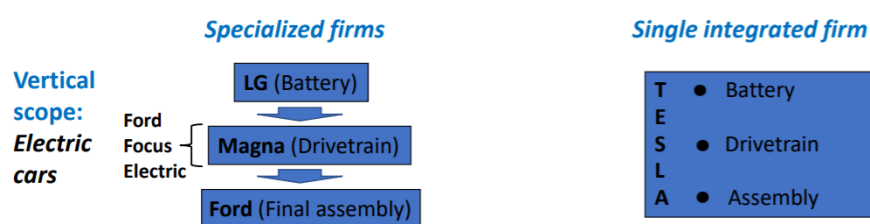


Figure 2 Multiple Specialist firm vs. integration within a single firm. Source: Syrigos, E. (2021). Corporate Strategy Course. *Luiss Guido Carli*.

Generally, incumbent firms tend to avoid disruptive innovation and focus on incremental innovation for different reasons. First, business model adaptation results to be a complex and challenging process for established players because of organizational inertia. On the other hand, disrupters do not have to adapt the business model in response to digital innovation because they can design it from scratch, even though they are forced to spot the new features provided by the new digital technology. Organizational inertia depends on resource dependence upon mainstream customers with investments in innovation valued by the most demanding customers. However, there are also other sources of inertia in the face of disruption, such as rigidity of existing routines and competences, institutional resistance towards change in terms of social, political and organizational structures, as well as economic incentives and dependence on an established value network. Organizational routines represent existing patterns of coordinated activities causing tensions for individuals and organizations in developing new capabilities when change occurs. Organizations create structures fitting particular strategies and the change of the strategy implies modifications in structure, systems, social relationships and power. In addition, incumbents are reluctant to embrace disruptive innovation because they want to defend their position and their network of suppliers, buyers and consumers.

1.3 Multiples strategic frameworks of incumbents to reply to disruptors

This empirical research examines the winning strategies adopted by incumbent firms to react and heterogeneously adapt their business model to the digital disruption posed by new entrants. In order to maintain their positioning and be flexible and innovative, established players are asked to find new ways of creating and capturing value through the redefinition of their resources, capabilities, structures and strategies. Business model changes depend on various types of emerging digital technologies and the resources and capabilities to mobilise to face the disruption. Thus, incumbent firms should adopt multiple strategic approaches to respond to disruptors. In the next paragraphs, the work investigates the drivers, the frameworks, and the effects on the incumbents' adaption process in terms of build or buy strategies. Even though strategy literature has posed recent attention on the theory of disruption and business models, there are still limitations about how companies readapt their business models to handle disruptive innovation.

1.3.1 Drivers of strategic responses: ability and motivation

To understand what the winning strategies are to respond to disruptors inducing business model adaption, it is necessary to assess the drivers of ability and motivation. First, the ability to respond depends on incumbents' resources and capabilities and to what extent the traditional business model conflicts with the new one. In the era of digitalisation one of the main challenges for established players is the strategic choice of the capabilities to build, invest or enhance. On the one hand, incumbents need to enhance their strong capabilities differentiating themselves, in terms of capital, scale, knowledge and experience. In contrast, traditional companies are asked to build new digital capabilities focusing on the strongest attackers' capabilities in responding rapidly to shifting customer trends. As regards the driver of motivation, it depends on factors such as the new business's growth rate, the possibility to lose existing clients in favour of disruptors and the existence of shared assets and competencies with disruptive companies. In practice, firms need to prioritize those resources that effectively cope with the current challenges of demand uncertainty, sustainability consumption, data enabled business models and inventory management. For example, disruptors' business models are guided by an integration of technologies including digital devices, social media and characteristic elements of the fourth industrial revolution (big data, artificial intelligence, robotics). However, traditional players should understand the extent to which these new technologies address the existing challenges and exploit new market opportunities rather than blindly adopting them with huge resource commitments. For this reason, incumbent firms need to compare innovative business models with their own to delineate ways to further differentiate themselves, imitate or adopt the new practices, considering their ability and motivation.

1.3.2 Frameworks of incumbents' adaption: resource-based view, barriers to adaption and dynamic capabilities

To formalize the general theory of incumbents' adaption to disruptive innovation, the research analyses the theoretical frameworks of resource-based view, the barriers to adaption and dynamic capabilities. These frameworks help traditional players to address the challenge of the trade-off between building new digital resources and capabilities and enhancing existing assets and competences.

First, the adaption process is analysed through resource-based view (RBW) lens. According to this framework, strategies are articulated as the development of new or enhanced distinctive capabilities to reach superior returns over competitors (Figure 3). For definition, resources are the inputs used by a firm to create goods and services and are easy to transfer. While capabilities represent a firm's skill in using its resources to create goods and services, the system of procedures, processes, and expertise. Since capabilities are unique, these cannot be transferred unless when acquiring the company. Consequently, technological capabilities required in the digital era consist in the combination of interpersonal and individual resources, knowledge and routines that underpins the technology's development. To be more specific, adaption requires a bundle of technological and complementary resources to develop and commercialize a new technology. There are several possible choices to access these new resources – they could already exist within the firm, they may be created via internal development, commercialized as a product or service and then sold to external stakeholders or transferred across a vertically integrated firm and they could be acquired externally through acquisitions or partnerships. In this way, the adaption to technological change translates into processes of acquiring and organizing technological and complementary assets. However, the RBW involves a static view of resource value, requiring a more dynamic approach to understand why a firm needs to assemble a new bundle of resources.



Figure 3 Resource-based model of superior returns. Source: Syrigos, E. (2021). Corporate Strategy Course. *Luiss Guido Carli*.

Summarizing, the organizational adaption to technological change requires incumbent firms to find multiple means to access new technological knowledge and complementary assets and other means to commercialize the new technology. The factors affecting the process of adaption are identified through multiple theoretical perspectives, beyond the model of resource value, acquisition and reconfiguration provided by the RBW. The academics have posed little attention on the dynamic outlook of the barriers to incumbents' adaption and how to overcome these barriers to provide a framework to contextualize the research on incumbent adaption. According to the framework, incumbents' possession or external access to necessary knowledge and the means to commercialize the technology could be hindered by internal and external barriers. Specifically, incumbents adapt to technological change by investing in a new technology through internal and external experimentation, alliances and acquisitions, and the barriers may affect the possible choices among the means and vice versa as well. These barriers limit the flow of technological and complementary assets from outside the company to inside and within the firm, hindering the organizational initiatives to access and organize both knowledge and commercialization. The barriers can be summarized in three categories: barriers to the acquisition of relevant resources, barriers to the assimilation of new resources and barriers to reconfiguration. The first type refers to external barriers erected by stakeholders that limit external research of technological and complementary resources through for example hiring new talents or partnering with a company with downstream resources. In refer to the barriers hindering the assimilation of resources, these delineate internal limitations which create tensions in integrating and using necessary resources to which firms have access. Last, even though an incumbent possesses both knowledge and resources, there may exist additional internal barriers impeding successful adaption via the reconfiguration and organization of these assets. However, these three barriers are based on an initial assumption that the firm does not already features the assets to successfully adapt. To sum up, understanding and overcoming the barriers through the four stages of possession, acquisition, assimilation, and reconfiguration is determinant for established firms' adaption (Figure 4).

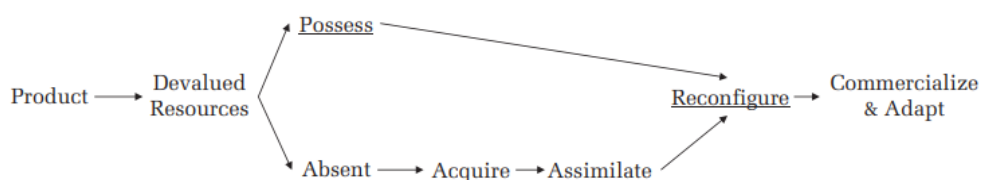


Figure 4 Adaption Process for Incumbent Firms. Source: Eggers, J.P, & Park, K.F. (2017). Incumbent Adaption to Technological Change: The Past, Present and Future of Research on Heterogenous Incumbent Response. *Academy of Management*.

Furthermore, a bottom-up approach to study incumbent adaption to technological change has identified single factors impacting specific types of barriers at specific stages in the adaption process, thus affecting the

drivers of business model adaptation. Effectively, firm size, experience and complementary resources may increase the probability to survive for incumbents entering in new markets, but each affecting different stages of the adaptation process. Thanks to larger size, firms may overcome barriers limiting the external research of new resources because larger firms have resources in excess that may be used to put in commerce new technologies. But larger size is also correlated to coordination problems which create internal tensions in adapting to technological innovation, even when the company possesses the assets and the means of commercialization. On the other hand, firm experience affects adaptation in three distinct ways. First, having an increased ability to commercialize a new technology, experience develops dynamic adaptation capabilities and so the capacity to assimilate new knowledge and reconfigure existing resources. Then, firms can gain specific knowledge and competences from precedent technological experience that can be reapplied into processes to pursue new opportunities. Technological experience can also influence the motivation to promote innovative initiatives. As regards complementary assets, they affect the motivation and incentive to enter new markets but also the capacity to commercialize new technologies. Incumbents are more likely to possess valuable complementary assets than new entrants and they can use their specific capabilities as a motive for alliances with startups lacking complementary resources. On the other hand, inadequate commitment, cognitive frame, managerial thinking and organizational structure may limit the assimilation and reconfiguration of resources. The firm's strong commitment to existing technologies, procedures and routines increases organizational inertia and lower the incentive and the ability to overcome internal barriers to adaptation. To address the issue, companies should create standalone divisions commercializing the new technology without being subject to the inertial forces of other parts of the firm. Then, cognition refers to the role played by managers and top executives in guiding the firm towards disruption and affects all the model's barriers. Academics suggest that the commitment of resources to disruptive technologies is stronger when decision markers recognize and interpret a new innovation as a threat rather than an opportunity. The research reveals that CEOs with narcissistic characteristics are more likely to make acquisition activities and take excessive risk. Different organizational structures may facilitate or hinder adaptation. For example, the degree of vertical integration and its nature enable or inhibit organizational adaptation. Research demonstrates that firms vertically integrated into the new technology perform better than firms vertically integrated in existing technologies to address the opportunity of technological change. Also temporary decentralization in a turbulent environment would have a positive impact in the long run on the adaptation process. In addition, stakeholders should be taken into account in the process because they influence the company's ability to acquire, assimilate and reconfigure new core resources. The model of the barriers to adaptation presents similarities with the dynamic capabilities framework of sensing, seizing, and reconfiguring. However, it takes more a resource-based approach respect to seizing and reconfiguring, recognizing that dynamic capabilities could reveal more as the absence of barriers to adaptation.

The theory of dynamic capabilities takes a more top-down approach compared to the barriers of adaption because it indicates a more general adaption process not focusing on the impact of specific antecedents. For definition dynamic capabilities represent the firm's capacity to respond and adapt effectively to changing environments by creating or reconfiguring its internal and external resources and capabilities. The dynamic capabilities framework involves three steps: sensing, seizing and build and reconfiguring. The capacity to sense opportunities and threats delineates the capability to learn quickly and build strategic assets. Sensing is related to a firm's ability to collaborate and make strategic partnerships to acquire necessary knowledge. Then, the capability of seizing opportunities refers to both the ability to acquire knowledge and the ability to integrate it within the firm by commercializing the technology. Last, since the needs for assets change due to evolving environment, firms should also develop the capacity to transform or reconfigure assets. Specifically, the dynamic capability of strategic agility governs the choice of organizational capabilities to enhance with the aim of increasing an existing competitive advantage or catch-up the advantage of disruptors effectively. Incumbent firms need strategic agility to design and implement a fast response in combination with a flexible mindset that accepts and learns from the dynamic perspectives of digital disruption.

1.3.3 Build or buy strategies: experimentation, alliance and acquisition

The organizational adaption to disruptive innovation posed by new entrants requires incumbents to adopt multiple strategies, differentiating according to resources and capabilities to mobilise. In the era of digitalisation first movers and fast followers gain a huge advantage over competitors and the best innovators mix internal and external research to access existing or new necessary assets and competences. Generally, incumbent firms successfully induce business model adaption through experimentation on the one hand and alliances and acquisitions on the other hand. Thanks to these two strategic approaches, established players redefine the value creation and capture of business model. Incumbents develop or enhance dynamic capabilities to respond fast to digital attackers in a rapid changing environment. To protect from one of disruptors' excellent capabilities – adapting to customer trends – traditional firms catch-up defend via alliances and acquisitions. While incumbents counter-attack new entrants leveraging their strong distinctive capabilities of capital, scale, knowledge and experience to experiment new ways to innovate. Thus, the study demonstrates that there is not a right or wrong strategy in the process of business adaption, but successful firms adopt both strategies of defence and stand-alone experimentation. To be specific, as mentioned before, the theory of disruption argues that when disruptors gain market share by offering quality products at lower prices, the incumbents start perceiving them as a threat and accelerate innovation and flexibility to maintain their positioning and gain an advantage over their competitors. When launching new initiatives to increase innovation, firms can either build or buy the required capabilities to speed up the adaption process. The evolution of the process of business model adaption after disruption conceives two phases. In the first phase, the emergence of disruptive technologies entails economies of scale and thus provide opportunities for

incumbents to exploit external resources via experimentation. In contrast, in phase 2 novel disruptive business models pioneered by new entrants become visible and, since incumbent firms perceive a threat related to potential losses, the latter rapidly and effectively react by the means of alliances and acquisitions. In this phase incumbents follow a protectionist approach buying up any owner of essential assets through alliances and acquisitions to acquire technical resources, even buying threats through the acquisition of attackers. Business model adaption to promote innovation is also expressed through the acquisition or alliances between established firms rich in complementary resources with more innovative start-ups. Alliances and acquisitions are riskier because require huge resource investments that lead to higher expected returns, and their timing is faster than experimentation. Furthermore, buying innovation through alliances and acquisitions entails balancing an integration strategy that preserves knowledge transfer and innovation capability with autonomy of units and the performance risk of a potential clash of professional and organizational cultures. The latter could be indicated as the conflict between entrepreneurial start-up and large-firm bureaucracy and may be solved operating start-ups as separate units.

Specifically, for definition acquisition involves a process to purchase an asset, such as a plant, a division, or an entire firm, by making a huge investment in it to get profits. The acquisition implies control over the asset with low transaction cost, even though there is no change in the legal entities. Acquisitions take place in presence of developed market for corporate control, high absorptive capacity by the acquirer and high synergies. For definition: “Operational synergy potentially exists if two businesses operated jointly are more valuable than the two businesses operated independently”. “Operated jointly” means that the decisions across the two businesses are coordinated to increase the joint value. Synergies come from the combination of resources and capabilities within the value chain, so integration is facilitated by acquiring companies with similar business model or channel focus. Synergies are categorized in four types according to the dimensions of similar or dissimilar resources across the two businesses integrated and the extent to which resources should be modified to achieve synergies (Figure 5).

	Involves similar resources	Involves dissimilar resources
High modification of resources required	<i>Consolidation</i>	<i>Customization</i>
Low modification of resources required	<i>Combination</i>	<i>Connection</i>

Figure 5 The 4Cs framework of synergies.

Consolidation involves similar resources from similar value chain activities but high level of modification. This kind of synergy affect mostly costs and invested capital, rationalizing resources by the elimination of redundancies. An example could be a reduction in headcount by merging departments in which the same

work is done by fewer employees. Then, combination is based on similar resources and low modification of resources required. Two instances are combining purchasing to obtain volume discounts or acquiring a competitor and then raising prices for customers. The third category of customization is one of the most difficult because it involves dissimilar resources and a high level of modification. It is very common in technology industry and entails joint value creation by revenue or cost synergies through a final product that works better or cost less. Last, connection synergy results from the combination of dissimilar resources with low modification of resources required. Here the value creation is determined by bundling together dissimilar resources from different value chains. Going back to the entry mode of acquisition, the main rationales for M&A activity are manoeuvring to take market share, exploiting new opportunities, and expanding capabilities. The consolidation for market shares induces players to address new categories or geographies and acquire new technical capabilities. Technology and technological capabilities represent an acquisition motive for value creation and capture dimensions. This approach offers speed to market in terms of resource allocation, but technology-based acquisition present also key challenges. First, acquiring technology carries heavy price tag respect to building in-house. Then, since technological capabilities are embedded in individuals, there could be an issue related to retaining talents. Third, the clash of cultures with fragmented perspectives may cause difficulty in integrating the acquired firm with a potential risk for growth synergies. Last, the acquirer's size could bring tensions in terms of coordination.

Focusing on the other defence strategy of alliances, this strategic choice refers to “the purposive relationship between two or more firms that involves the exchange, sharing, or co-development of resources or capabilities to achieve mutually relevant benefits”. Alliances can be distinguished mainly in three types: non-equity alliance, equity-alliance, and joint venture. A non-equity alliance consists in licensing to another firm goods or services, for example a technology, to supply, produce or distribute without equity sharing. Because of the lack of an equity investment, non-equity alliances are considered less risky than equity alliances. In contrast, two companies may opt for strengthening their relationship through an equity alliance that requires changes in the equity state. In equity alliances firms take equity stakes in one another. The third category delineates a joint venture in which two companies create an additional independent company by combining parts of their assets and sharing ownership. The choice between an equity or non-equity alliance is driven by the equity-integration dilemma, but also the benefits and costs of equity alliances. According to the equity-integration dilemma, the more the organizational integration between partners, the higher the equity ownership level (Figure 6). Then, the benefits of equity ownership in strategic alliance requiring a high level of equity investment relevant for synergies and thus for increasing value from the joint operation are exclusivity, cooperation, and coordination. This means that excluding rivals from accessing the resources of the partner and the need for extensive knowledge sharing involve a high level of equity ownership. However, strategic alliances bring also costs reducing the equity ownership, such as motivation on the one hand that reduces the joint value from the operation and on the other hand uncertainty and commitment, control premium and cost

of synergy independent integration increasing the cost of entry. Indeed, in case of equity alliances employees' motivation risks to drop because of changing routines and processes. Also the uncertainty regarding quality, exclusive and very specialized assets being accessed from the partner increase the cost, lowering the expectation to engage in an equity alliance.

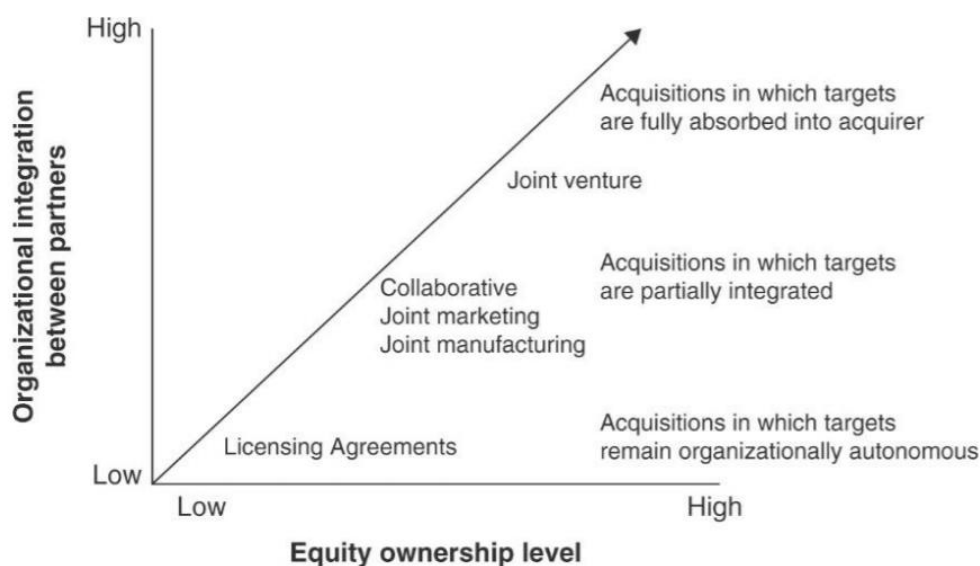


Figure 6 Equity-Integration Dilemma. Source: Syrigos, E. (2021). Corporate Strategy Course. *Luiss Guido Carli*.

Similarly to acquisitions, alliances are challenged by general relational and performance risks. Partners may lack commitment to the alliance determining coordination and cooperation conflicts and their possible opportunistic behaviour by misappropriating resources could threaten the prospects of an alliance. In addition, even when businesses show full commitment to the agreement, there are performance risks related to cultural clashes and conflicting objectives that could lead to failure. Specifically, incumbents can adapt their business model through alliances with new entrants or established players from outside the core industry. These alliances can help incumbents to gain access to new resources, capabilities and customers closer to the new model. Thus, the benefits of this kind of alliances consist in accessing new competences, learning, cost and risk sharing. For instance, these deals could reduce the conflicts of resources allocation and mitigate coordination costs due to fewer organizational interdependencies between traditional and disruptive business models. On the other hand, incumbents can pursue alliances within the traditional approach with other incumbents, entrants, or companies from outside the focal industry but without benefitting from indirect costs.

To sum up, buying capabilities by the means of alliances and acquisitions constitutes a big bet (high risk investment for huge but uncertain expected return) and the outcome will be largely driven by uncertainty on novel technologies and consumer trends. However, this research presents limitations in terms of assessing the impact of the strategies' investment levels and timing on business model adaption. Future research could focus

on quantitative data referred to the level of investment and effort in capabilities over time by integrating multiple performance indicators, such as sales revenues, profits and return on investments.

Another way to react to digital disruption promoting innovation consists in building in-house resources and capabilities via experimentation. This approach represents a more flexible and less risky source of learning than mergers and acquisitions with a lower upfront investment. Generally, incumbents could decide to set up a new business unit or subsidiary to adopt or imitate the disruptive business model while keeping their existing one. Since new entrants and incumbents adopt different business models, for incumbents dismantling entirely their business model in favour of the disruptive BMI reveals the wrong choice because it may be cost-prohibitive and pose various tensions. Thus, companies could induce business model adaption by testing new approaches in a more controlled internal environment, such as incubators, accelerators, and innovation centres. These means of experimentation allow the development of resources and capabilities internally and challenge the status quo of established firms. The first option to disrupt the traditional business model consists in implementing corporate incubators that represent specialized business units within the firm responsible for the development of innovation through new projects and products. The success of this approach depends mainly on keeping these business units separate from the core business to avoid conflicts. Then, a business-unit accelerator indicates a scaled-down digital factory incubating the transformation into a business unit. The corporate decision to settle a new business unit entails a degree of decentralization with benefits outweighing centralized scale. Thanks to decentralization, the organization delegates decision-making responsibilities to sub-units. This means that sub-units are independent from the rest of the organization taking operational decisions on their own in terms of building their technological skills with full control over investments. Thus, this structure promotes effectiveness with an external focus on products, regions and customers because is market-responsive in a rapidly changing environment. However, incumbents must also mitigate several risks in choosing this model. When business units adopt their own digital tools and processes, complexity and costs related to enterprise architecture increase. Furthermore, there is an issue of coordination within the organization because the autonomous units are very specialized making difficult to build and share different capabilities across the company. Apart from testing via incubators and accelerators, established firms are increasingly embracing digital channels as a primary and sometimes exclusive route to market. By imitating the direct-to-consumer strategy, incumbents decided to be fast followers in exploring new digital channels that offer opportunities for community-building, immersive consumer experiences, commerce and capturing untapped value streams. In doing so, traditional players should implement a digital strategy drawing on DTC's best experience in responding directly and fast to new consumer trends in combination with their traditional competitive advantages in scale, knowledge, and experience. For these reasons, incumbents invested in new sales channels directly operated, such as Facebook and Instagram stores, WeChat mini-programs and Weibo. Indeed, to have an effective social media strategy that integrates different platforms, companies need to build relevant contents for each of these channels with significant investments. In contrast, rather than imitating

DTC brands by investing in online sales channels primarily targeted by the first movers, established players could differentiate themselves leveraging the disruptive technologies (AR/VR, artificial intelligence, robotics and advanced analytics) to invest massively in channels less developed or neglected by digital attackers, such as the metaverse. Much of the excitement around virtual realities is directed towards the new concept of metaverse, which has seen an explosion of interest in 2021. In a broader sense, metaverse refers to a full spectrum of virtual worlds combining augmented reality, virtual reality and IoT. Due to the saturation and competitiveness of the market, in the years to come metaverse is expected to become a very significant driver of revenue growth.

To conclude, the study demonstrates that traditional firms could pursue different strategies to adapt their business model according to the resources and capabilities to mobilise. When deciding between the multiple strategic approaches to respond to new entrants, the first question to ask concerns the internal resource relevance. Established firms should determine if they have the knowledge to build the resource internally and if this is part of the core competences. In case of a positive answer, firms need to keep the resources in-house and protect them from external factors. Otherwise, in the absence of knowledge and organization fits, companies should borrow outside. At this point the second question regards the resource tradability that depends on resources' clarity and protection. In presence of tradable assets and remote competencies, firms might have a licensing agreement which defines a contract to sell an asset, such as a technology, to another company in exchange of fees and royalties. If the level of resource tradability is low, then the incumbent should investigate the willingness to stay close to the partner to borrow resources. The more closeness to the partner in presence of related competences, the more firms engage in an external relationship via a joint venture to have access to new knowledge and learn. However, the equity-integration dilemma mentioned before indicates that as the level of integration increases, the equity investment rises. This means that a high desired closeness with the partner induces to buy assets via an acquisition if the level of target integration's feasibility is high. The theory identified the drives of acquisition – ability and motivation – and the lack of these determinants of acquisition's feasibility entails companies to revisit the build, borrow and buy options.

Chapter 2 – Methods and results

2.1 Overview of the luxury industry: fundamentals and key challenges

The key challenges and trends that the global luxury market have already experienced in recent years have been accelerated by Covid-19 pandemic. Even before Covid-19's outbreak, self-disruption was top of mind for 2019 with 79% of luxury executives identifying it as an urgent priority, as the BoF-McKinsey State of Fashion 2021 Survey states. Under the influence of Covid-19, retailing is undergoing an accelerated restructuring and digital transformation. In addition, according to the luxury goods worldwide study by Bain and Altagamma (2021), luxury industry registered a full recovery of profitability with EBIT % back to 2019's levels due to 2020 efficiencies and sales rebound. The fashion sector represents a global industry with high-turnover products that are likely to be easily transferred to online channels. Traditional retailing has been challenged by e-commerce and digital retailers which put pressure on business model transformation to defend market share. Generally, to remain competitive brick-and-mortar retailers have expanded online, developed web-based stores and mobile apps, increased the number of online and offline customer journey's touchpoints, merging physical and digital realities.

Before having a deep dive in luxury industry's key changes, it is useful to analyse the market forces and the fundamentals of luxury. First, fashion industry is characterized by low entry barriers favouring the competition from small players with large brands losing their traditional scale advantages. The increasing market concentration with few dominant players experienced an explosion of small firms thanks to new values and consumption patterns. Even before Covid-19, fashion was a winner-take-all industry with top 20% of the industry responsible for the economic profit thanks to clear value proposition and positioning in consumers' minds, while the remaining firms earn little profit. Furthermore, this winner-take-all industry is characterized by extreme scale economies. The small brands, many of which are new entrants, currently represent 2% of the market but are rising twice as fast as the established players. Thus, in this context scale constitutes a competitive advantage, but speed remains the main success factor for firms of any size. A strong luxury strategy comprises of differentiation on the demand side, referring to the needs of customers, and on the supply side, so the company and competitors. Through the business strategy of differentiation (Figure 7), luxury brands provide extra value and superior quality based on unique features. The main purpose of luxury products consists in creating a unique value proposition to the customer base that traditionally satisfies an ego-related eccentricity need. Luxury companies build a strong individual identity or brand DNA based on heritage and unique values and then wave the identity through evolving symbolic signals or codes expressed in every product or experience related to the brand. To formulate a differentiation strategy, first luxury firms should investigate the customer needs satisfied by the product, the interplay

between their preferences and product’s attributes and the premium price justified by superior quality. On the supply side, the luxuriousness offering is characterized by several sources of uniqueness. Primarily, luxury companies have a quality focus expressed in product features and performance, such as craftsmanship, design, aesthetic appeal, and superior technical performance. This quality derives from the luxury attributes of exclusivity, scarcity, and brand reputation. One of the main determinants of the luxury industry concerns the paradox between tradition and innovation. This means that luxury brands should maintain consistency with their image being creative and innovative to deliver excellence. While heritage continues to represent a key advantage, luxury companies should adapt to new market trends reimagining their business model with an updated value proposition, including innovation and sustainability as primary elements. The constant effort to differentiate products via rapid innovation involves emphasis on brand advertising to reinforce the brand image, investment in product innovation with a focus on design, quality and service that requires capability in R&D and product engineering skills, and cross-functional coordination to boost creativity and agility. Another differentiating factor in luxury offering is represented by the superior customer experience through personalized customer services and omnichannel capabilities that will be analysed in deep in the next paragraph. The enhanced customer experience is also impacted by the luxury firms’ degree of vertical integration that allows control over inputs, intermediate processes and channels, tracking all the phases of the client journey. Last but not least, luxury firms apply premium prices because differentiation requires a huge amount of investments to provide unique features and extra value.

<i>Generic strategy</i>	<i>Key strategy elements</i>	<i>Resource and organizational requirements</i>
Differentiation	<ul style="list-style-type: none"> • Emphasis on branding advertising, design, service, quality, and new product development 	<ul style="list-style-type: none"> • Marketing abilities • Product engineering skills • Cross-functional coordination • Creativity • Research capability

Figure 7 Key elements and requirements of differentiation strategy.

In the renewed digital disruption, the luxury industry expanded the mission integrating economic, social, and cultural value creation. Even though luxury is defined as exclusive and rare, due to globalization and increasing higher income classes, the sector witnessed the phenomenon of “democratization”. The democratization of luxury concerns making luxury accessible to everyone, turning it from the individual differentiation to the mass reach. Before the 1970s luxury was elitist with a few clients represented by exceptional people buying luxury products and services in an ordinary way. After that period, luxury included a big consumer base – the many – that indicates ordinary people buying luxury products and

services in an exceptional way, reaching 400 million potential luxury clients in 2020. In this context, the traditional market segmentation in accessible, aspirational, and absolute luxury lost relevance because now brands are multi-price point to answer to different customer needs. Nowadays, luxury recreates social classifications more flexible where the individuality can express itself following the macro-trends of diversity, equity and inclusivity (DEI). “DEI” reflects consumers’ demand and represents another source of competitiveness and a driver of attraction and retention of best talents.

Erwan Rambourg, an expert Luxury analyst and well-known author of books about the future of luxury, shares growth opportunities for the sector through optimistic trends established in the last decade. Retail is evolving at an accelerated rate because of changes induced by technologies and shifting consumer behaviours. Newer forces are already influencing the selection of channels, goods and services and purchase decision-making. The most important factors impacting the future of luxury are:

- New customer expectations
- Digitalisation
- Sustainability
- Omnichannel strategy
- Growing Asiatic ecosystem

Covid-19 accelerated these key changes in the industry entailing luxury players to rethink their business models to adapt to disruption. First, luxury retail evolved from a traditional model, characterized by few stores in a limited number of cities for the few consumers with willingness to pay for scarce and exclusive products, to an omnichannel model, which needs to adapt and anticipate the different needs, attitudes and expectations of new segments of customers (traditional vs new luxury shoppers, mature vs emerging markets, younger generations, such as Millennials and Gen-Z etc). The key challenge consists in offering a consistent customer experience through an omnichannel strategy to cater and surpass customer expectations. The luxury goods worldwide study realized by Bain and Altagamma (2021) identifies a renewed customer base represented by young audience (Millennials and Generation Z). These segments of consumers account for 30% of new customers that entered the luxury market since 2019, constituting 25% of the personal luxury goods market. Millennials and Gen-Z are disrupting traditional sales model by the redefinition of luxury goods consumption and sales approach. Nowadays consumer preferences focus on customization and branding. Consumers are likely to choose new brands for their innovation, differentiation, values, the way they engage customers and the impact on the environment. Then, customers want to take part of the brand community or ecosystem, collaborating with companies in an inclusive way. The accent on inclusivity creates value also for luxury firms that can address a wider range of customers. In addition, the phenomenon of gamification has spread to reinforce relationships with younger generations. Gamification combines effectively classic video gaming tools, technology and entertainment with creativity, branding and virtual

reality. Thus, new customer segments can enter in a truly immersive experience with an authentic storytelling. These attitudes and needs are impacting other generations as well. Nowadays digitalisation is likely one of the most relevant transformations of retail. According to McKinsey Fashion Scenarios, fashion executives consider digital as the biggest opportunity for 2021 led respectively by China, Europe and US. Almost 70% of executives expect growth of more than 20% in their e-commerce channels. Online and brick-and-mortar commerce turned out the key channels for 2021 recovery, leading the mid-term growth of the market and going hand in hand. The trend of digitalisation influences all aspects of the business: reach and accessibility, new communications channels, pricing and distribution approaches, forms of commerce and purchasing processes. The pandemic has been a strong accelerator of online consumption and digital adoption of new technologies. Covid-19 established channels' integration and the power of big data as new prerequisites of competitiveness, pushing the adoption of IoT, virtual and augmented reality and artificial intelligence. The current top priorities for data and analytics consist in powering e-commerce growth, a personalized customer experience and gaining behavioural insights. Digital innovation poses benefits and challenges for the luxury industry. First, retailers that are able to collect and use effectively big data can track and make better predictions about customer behaviour. So, consumers are likely to receive more tailor-made offers and play an active role in relationships with brands. Furthermore, technology assists retailers in reach out conveniency in terms of costs and speed due to technological efficiencies, leading to enhanced profitability. But the issue for brands concerns the technology and data use in a non-intrusive and ethical way. Among the new digital technologies, Covid's outbreak has put attention mainly on artificial intelligence and AR and VR implementations. Artificial intelligence analyses the massive amounts of data and their variety and AI investment impacts the margin compression by creating efficiencies while responding fast to customers' needs. There are numerous applications of artificial intelligence in retail. First, virtual try-ons on social media and apps provide customers with vivid contextual information while engaging them to create a personalized customer experience. Then, AR apps contribute to create an immersive experience through community-building, reviews, questions about the items and location-based augmented reality via GPS systems that locate stores, goods and services. Another opportunity for value creation in augmented reality field is represented by wearable AR devices, such as Augmented Reality Smart Glasses (i.e., devices worn like normal glasses but merging physical and virtual reality). Finally, the use of AI in demand forecasting and product design reduces the lead time, minimizing the excess inventory or missed sales due to inaccurate forecasting. As regards virtual reality implementations, virtual stores represent one of the most important applications of VR in sales channels. Indeed, by utilizing a smartphone based virtual reality viewer, consumers can gather information about the items, inspect goods in a realistic way by moving, rotating and zooming and finalize purchases by the app. In addition, VR technology can enhance brand building by virtual reality images, videos, films and live streaming for a virtual brand storytelling and to drive purchase decisions. In a disrupted environment characterised by changes in consumer behaviour, superior customer experience yields financial results and opportunities for companies

to redefine their offerings. The client experience refers to the interaction between the client and the brand across multiple touchpoints online and offline. Throughout this client journey, the brand DNA should be reflected in all the phases to create a long-term relationship with customers. The shift from selling experiences online and in stores more than products and services represents a key challenge for luxury firms. In other words, “experiential marketing” has become a top priority and digital technologies are determining to deliver an excellent luxury experience. The “crime framework” identifies the key success factors of customer experience. In this framework, each letter stands respectively for customized, relevant, involving, memorable and elevating experience. Customization represents the most significant feature in customer experience and is associated with multiple meanings. Experiences require a customer segmentation based on clients’ value to the brand established in relation to customer’s average spending and their influence. Customization concerns also matching the experience to the identified client segment by adapting the same experience across more segments or creating diverse experiences. Precisely, experiential marketing relies on three key features to engage luxury consumers and may take place within a seamless omnichannel experience. First, young audience looks for authenticity in local and in-depth experiences. Then, storytelling constitutes one of the best ways to engage customers curious about the history of the brands, creative processes, and artistic inspirations. Thus, clients want to be engaged intellectually but also entertained online and in stores through credible, unique, and fun contents. In this sense, visual storytelling is particularly relevant with images and videos in a journey of discovery. In addition, retailers should improve customer experience by leveraging social media easily accessible by smartphones, tablets and apps to provide relevant information, participate in dynamic conversations, co-create and generate customized contents. Another opportunity to enhance experiences is represented by the presence of technology in stores, such as digital displays, with the aim of creating a dynamic emotional connection which in turn minimizes customers’ price sensitivity and fulfil more hedonistic needs. So, the omnichannel strategy is important to offer a consistent luxury customer experience. Omnichannel allows to offer new experiences and services, like payment methods, online pickup in store or social commerce. The key challenge consists in meeting clients when and where they are across physical stores, digital ecosystems, mobile apps and social media. In a context in which the worlds of online and offline are converging, every aspect of the omnichannel strategy should work easily from online to offline and vice versa to consolidate the strong relationships with clients. New capabilities, competences and talents are required to provide a seamless integrated experience across touchpoints. In the luxury retail evolution, a successful omnichannel experience is fuelled by digital and human dimensions: data, IT and people collaborating in cross-functional teams. The interplay between online and brick-and-mortar stores requires the redefinition of the role of physical retail. In 2021, physical stores are still relevant but should be rethought in phygital ecosystems, in terms of format, size and location. When entering in stores, clients are looking for pleasant and facilitated experiences and expertise with an emotional focus instead of a functional focus on product. This entails the need to rethink the role of POS transforming them into relationship-centric platforms. Stores are becoming more interactive and

personalized through the integration of e-commerce features emerged particularly during the pandemic, like real-time reviews, AR try-on, virtual shop windows and video clienteling. Sustainability represents the most disruptive trend of the next decade requiring the creation of social value in terms of ethical transparency, production traceability and environmental sustainability. On the one hand, luxury firms are becoming more aware about sustainability since it constitutes an urgent priority for a polluting business as luxury. Luxury companies are setting ESG (Environmental, social and corporate governance) criteria for the future with carbon emission reduction as a priority. On the other hand, consumers, especially new generations, are demanding environmental sustainability with a “less is more” approach in line with changes in fashion cycle. A McKinsey survey conducted during Covid-19 crisis asserted that 65% of consumers want to purchase more long-lasting and high-quality items, lowering the focus on the attribute of “newness” in purchase decisions (Figure 8). Furthermore, Millennials and Gen-Z predilect brands with transparent processes and communication and that are engaged in sustainable activities or are guided by sustainable values and principles. Luxury industry is now familiar with sustainable concepts, such as ethical fashion (production methods, working conditions, and fair trade), circular fashion (recycling, upcycling, and thrifting) and slow fashion (sharing, renting). Therefore, the responsible consumption tendency has determined the rise of new business models, such as circular and second-hand luxury business with an extended product lifetime. According to Bain’s annual study, second-hand reached the value of € 26 billion in 2019 and has grown at 9% from 2019 until now. Thus, luxury companies are required to redefine their business models to promote environment and social responsibility in design, production, distribution and communication. Luxury goods companies are exploiting technology to determine material innovation with environmentally-friendly new materials, such as biomaterials. Biomaterials represent materials biological in origin and circular by design. For example, Stella McCartney was the first luxury house to launch the world’s first-ever garments made of Mylo mushroom leather. Mylo consists in a sustainable alternative to leather developed by Bolt Threads, a company with an expertise in R&D of new alternative materials and a long-time collaborator of the established luxury firm. This is just one relevant example of the numerous collaborations between luxury players and startups specialized in biotech.

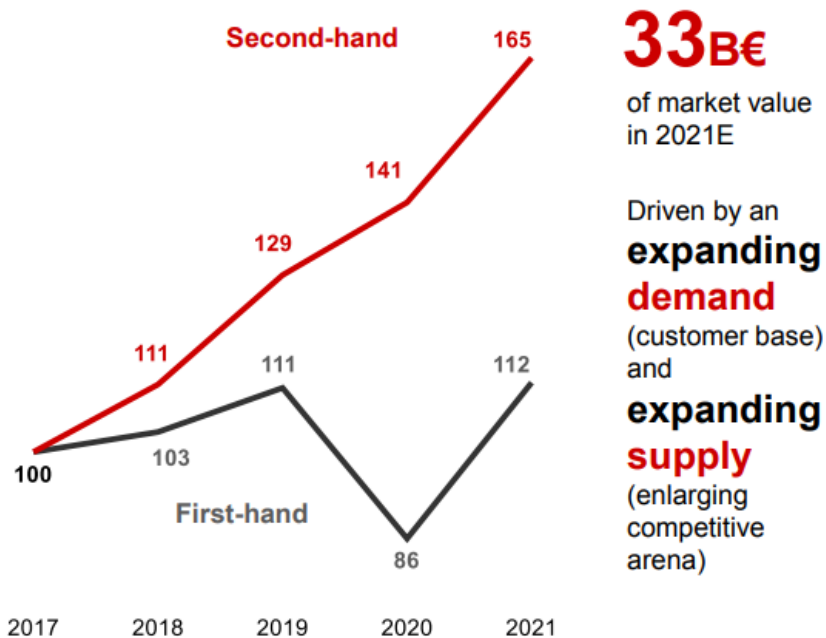


Figure 8 Second-hand vs. first-hand luxury goods market. Source: D’Arpizio, C. & Levato, F. (2021). Luxury goods worldwide market study fall 2021 – 20th edition. *Bain & Company – Altgamma*.

As consumer expectations shifted, the supply chain became a critical point for purchasing decisions. Covid-19 exacerbated supply chain issues impacting luxury retailers, in terms of supply chain delays, production and factory halts, stores and factories closures, cancellation of product orders and unpredictability of demand forecasting. Due to the disruption of production timelines, luxury firms have the opportunity to take control of excessive inventories and widespread markdowns by rethinking inventory management processes for a “less is more” mentality. The inventory planning, if done right, represents a key success factor for retailers. Indeed, inventory shortages entail lost sales and a decrease in customer loyalty, while excesses determine a relevant increase to the ‘cost to serve’. Even before the pandemic, excessive inventories and widespread markdowns diffused, leading to just 60% of items sold at full price with billions of dollars of lost revenues and margin. Luxury companies should plan to employ several strategies to avoid overstock in the future (Figure 9), focusing on three needs for the next years: accelerate on demand manufacturing, reduce assortment complexity, and face the rebalancing between price and volume. First, brands are experimenting zero-inventory concepts, such as pre-order models, by manufacturing products after an order is placed to avoid overproduction and not hold stocks. Firms need to capture more value through a new balance between pricing and volume to solve the overstock issue. In this sense, companies have two means: the reduction of discounts and the optimisation of prices. After a discounting strategy in the initial phase of Covid-19, the next step has seen the implementation of “no sale” strategies to protect margins and price increases leveraging on brand’s desirability. Second, brands are aiming to reduce assortment complexity by aligning product launches and collection drops with customers’ needs rather than following the traditional fashion calendar. Indeed, the current significant number of seasonal collections conflicts with the demand focused approach. Thus, many brands, such as Off-White and Gucci, have announced to reduce the fashion calendar

each year to adapt to the trend of seasonless fashion. Furthermore, established brands are overcoming the operational challenges of inventory processes by investing significantly in technology. In 2021, we expect luxury players to sharpen their assortment using AI in demand forecasting and product design to speed up on-demand production. A new trend in inventory management is represented by the massive investment in inventory-tracking technologies, such as NFT, QR codes, RFID and blockchain. Non-fungible tokens (NFTs) consist in unique digital assets, relevant for the blockchain technology to prove their authenticity and ownership. Luxury accessories are connected by radio-frequency identification tags (RFID) to sync up to available inventory in the store and enhance client experience, guaranteeing authenticity, transparency, and sustainability. RFID value is mostly around the micro-chip that creates a digital link in the cloud with the blockchain. For instance, Prada implies RFID and joins the Aura Blockchain to connect with sustainability driven consumers and guarantee traceability of products and materials. The Aura program enables Prada to control its own supply chain and showcase the origin and authenticity of its unique products, conveying their real value.

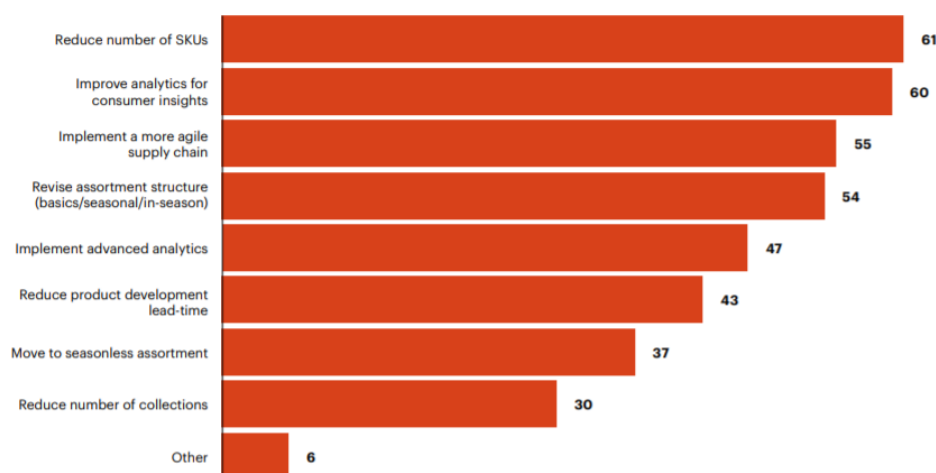


Figure 9 Percentages of fashion executives planning to employ several strategies to avoid overstock in the future. Source: McKinsey & Company. (2021). *The State of Fashion*. *McKinsey & Company*.

Another industry's trend is represented by the increase in Chinese consumption, accounting for half of global luxury goods sales by 2025 (Bain). Due to high profitability and wealth creation fuelling the next generation of Chinese shoppers, China will be the main driver of growth in the next decade and the largest market globally. Other Asian markets are growing significantly with China and Korea spreading trends in terms of online shopping and marketing techniques. As well as younger generations, Chinese customers are hyper-connected. China pioneered a lot of digital innovations, specifically advanced online channels, given the importance of e-commerce for Chinese luxury consumers. China contributed to bridge the gap between physical and online worlds through the introduction of livestream commerce. The livestream's tendency started in 2016 with the launch of Alibaba's Taobao Live and in 2020 Chinese livestream revenues hit \$138 billion, of which 60 have been risen by lockdowns. Influencers have shown their value in livestreaming, in

some cases generating more sales in few yours than brick-and-mortar stores in a day. The trend started diffusing beyond China, with US livestreaming incomes expected to reach \$25 billion by 2023. Livestream commerce boosted in 2021 due to direct online checkouts enabled by big tech firms and social media. For instance, Instagram developed in-app checkout for Instagram Live in 2020 and in the same year TikTok launched its first shoppable livestream. Apart from shaping the future of luxury via a connected future, Chinese consumers are trendsetters for sustainability, diversity and inclusion, thanks to their traditional but at the same time modern culture, younger audience with purchasing power, higher maturity in luxury perception and a global mindset fluid to different cultural contexts. In addition, Andrew Wu, Group President of LVMH China, has pointed to the increasing importance of high-end retail and experiential retail in Chinese market as crucial pillars to reinforce consumers' loyalty.

2.2 Interplay of digitally native vertical brands and incumbent luxury firms

Direct to consumer business model has permanently disrupted the market by reshaping what an existing product or service is and how it is provided to the end customer. Nowadays, DTC business model, with a focus on digitally native vertical brands (DNVBs) threatens incumbent luxury firms because DNVBs are changing the ways traditional retailers approach and engage with customers and address some luxury market's current challenges: the expectations of younger audiences, digitalisation, sustainability, and inventory management. From the emergence in the 2000s and early 2010s, DNVBs represent an increasing portion of disruptive players in the market, including 15% of the new entrants funded in 2020 respect to 10% in 2019 and 5% in 2018. They are growing on average three times more than e-commerce, while the fastest ones have scaled from \$50 million in revenues to \$1 billion between four and eight years (McKinsey, 2021). The definition of digitally native vertical brands consists in start-ups born online with an intense focus on customer experience. Thanks to their direct-to-consumer approach, they sell directly to consumers without intermediaries, controlling all the phases of the production process with increasing margins. Bypassing the middleman, these brands can keep costs down and offer high-quality products at reduced prices in comparison to traditional retailers. Their fully online model carries additional advantages in terms of transparency of the supply chain and customer relationships with younger audiences via social communities. The DNVBs are characterized by a digital business model rather than a legacy one since they are driven by different types of data, analytics and digital innovations to understand and capture customers' needs, create tailored offerings based on the developed knowhow and move at speed to respond to market changes. Table 1 summarizes the key success factors of digitally native vertical brands. DNVBs are not perceived as luxury brands due to their experience, production models and pricing, but they manage to create desirability trough unique and quality proposals. What differentiates these new entrants from established luxury firms are mainly the specialization on a single or small range of product categories and product or business model

innovations. With a growing loyal customer base, especially Gen-Z and Millennials, they are gradually taking a relevant portion of the luxury market. However, traditional and DTC approach may coexist because retail disruptors, after gaining market share, could decide to operate also offline. Today, to remain competitive, DNVBs must offer even more differentiating propositions playing in product categories with distinct dynamics and creating tighter ties with their communities through an omnichannel strategy. From a strategic perspective, these disruptors follow a niche strategy, international positioning and economies of scale and scope. Initially without a sufficient scale digital natives address a niche market while incumbents can attack all the niches together. Strong DNVBs attempt to optimize the value chain by increasing their buying power, economies of scale and operational efficiencies to prove also to investors the path to profitability and increasing margins as they scale. The digitally native vertical brands' growth path from start-up to grown-up involves four main stages (Figure 10). First, the early growth is driven by clear and compelling brand personality and online engagement. Second, expanding the current assortment by product mix helps intermediate growth and attracts potential customers. The next step consists in entering brick-and-mortar to gain greater access to cheaper traffic. Last, diversification by products or geographies drives further growth.

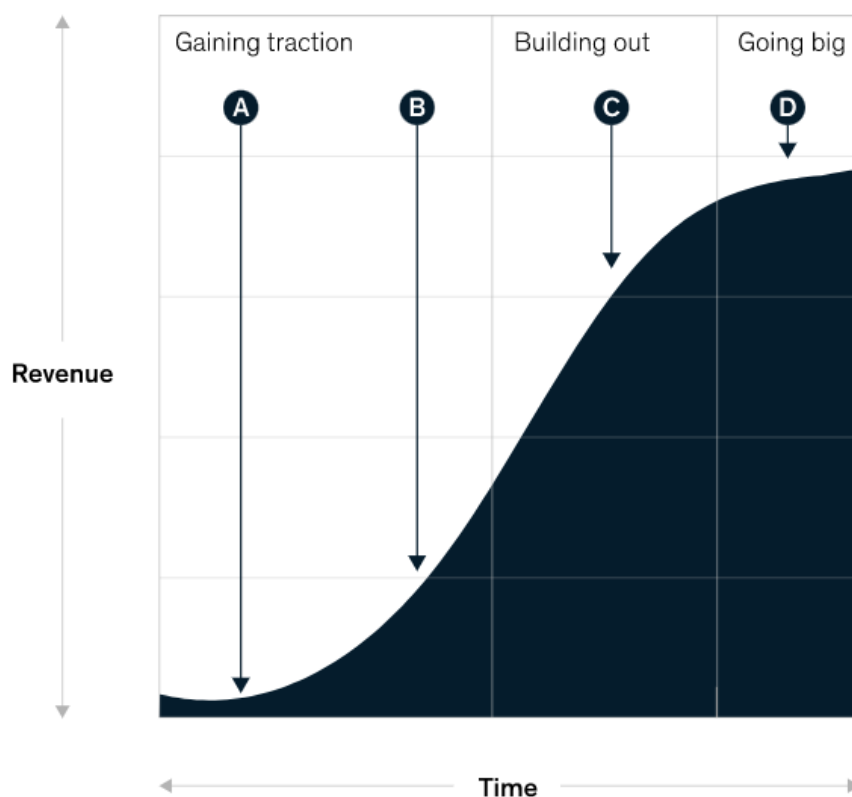


Figure 10 Growth milestones for digitally native vertical brands. Source: Broitman, A, Hunter, E & Schmidt, J (2021). Digitally native brands: Born digital, but ready to take on the world. *McKinsey & Company*.

Going more in depth in DNVB's business model, their value proposition involves innovative, quality and cost-effective product offerings. Thanks to DTC approach, digital born brands differentiate themselves from

established players in terms of visual identity, product development, product delivery, storytelling and brand-building. Digitally native brands invest in product experiences leveraging on visual, descriptive and transparent features. As customer acquisition costs are increasing in the competitive marketplace, digital born brand vertically integrate to expand margins. The degree of vertical integration backward (raw material, manufacturing, and distribution) and forward (distribution, retail and after sales service) is a source of uniqueness for a differentiation strategy and a vertical scope as regards corporate strategy. Digital born start-ups should be particularly open to build vertically integrated capabilities for three reasons. Primarily, at the early growth stage start-ups do not have expertise in any core competence and finding the right mechanisms aiming at controlling the manufacturing operations is a driver of early-stage venture strategy. Second, for highly innovative newcomers the required product design, manufacturing, and distribution skills may not be available from third parties, forcing entrants to build the new capabilities on their own. Finally, vertical integration allows companies to deliver a superior performance recognized by customers for which they are willing to pay premium prices, and better experiences at every touchpoint with customers. Vertical integration includes different benefits and costs. In terms of advantages, vertically integrated DNVBs can exploit technical economies from processes' integration, with an increase in the internal level of integration and coordination. Second, vertical integration allows to avoid transaction costs of market contracts. Third, vertical integration enables digital born brands to be faster and more flexible in responding to changes in technology and customer preferences with a central role in defining new and innovative trends. On the other hand, performing all the steps of the production process requires costs of technical, strategic and monetary nature. The first cost is related to the differences in scale of production for the various operations, not leading to the optimum scale of production (at the lowest possible cost). Second, the more a company is vertically integrated, the less is specialized in developing distinctive capabilities. Last, vertical integration entails difficulties in managing different businesses and operating risks. In addition, there is a strong association between DTC brands and sustainability, since they develop new business models leveraging sustainability at their core in terms of manufacturing, marketing and branding. The production process of slow fashion represents a key component of DNVBs' value proposition. Slow fashion consists in offering timeless pieces with long-lasting value, made from locally sourced or fair-trade recycled and organic materials of higher quality. Slow fashion brands focus on the luxury segment and, apart from the quality products and timeless design, they serve niche markets, utilize localized suppliers and sometimes sell through own-brand boutiques. While start-ups leverage their agility and flexibility to design innovative business models incorporating social and environmental sustainability, incumbents are characterized by resource rigidity and legacy business model. Thus, traditional retailers tend to adopt a more cautious approach experimenting with small-scale green initiatives and address structural issues, such as promoting transparency in supplier configuration and management. Furthermore, slow fashion is transparent and ethic about the communication strategy and DNVB's technological innovation can be useful to implement and scale up the sustainable business model. Slow fashion model mainly monitors factors of quality,

sustainability, prices and quantities. As regards pricing, slow fashion encompasses premium prices and transparency due to the high-quality origin of materials and fair cost working conditions. Since slow fashion is mainly locally sourced, brands incur higher expenses and so cannot compete on cost of production. As traditional luxury firms, slow fashion brands offer a customized, unique, and authentic experience that, combined with sustainable marketing tools and pricing strategies, create a key competitive advantage. Finally, slow model encourages the quality over quantity mindset and lifestyle. Shifting the focus to the DNVB's operating model, value capture results from the digital business model with two main competitive advantages: deep knowledge of customer base and extensive control over consumers' data. Digital born brands fully exploit digital channels for marketing and selling and leverage data to delight, convince and convert customers, driving sales. Data-driven models collect and use data directly from customers and manage digital technologies to optimize the business. Specifically, AI investment is significant for margin compression because it creates efficiencies while responding to customers' needs more quickly. By mastering data from the direct relationships and feedback loops with the support of predictive analytics, digitally native vertical brands perform different activities. First, they build knowledge about customers' preferences, behaviours and attitudes. Second, they provide personalized solutions by upgrading their strategies and adjusting products and services. Last, data-driven models elevate customer experience by controlling the customer journey from the brand and its environment, product, distribution channels, communication and customer service. Digital attackers pursuing a high level of engagement through strong relationships and a high level of satisfaction must provide an excellent customer service that solves issues rapidly via "social media listening", email and chatbots, and encompasses loyalty programs. Another DNVB's competitive advantage lies in community engagement across every touchpoint from website to social media. It looks like a two-way relationship in which community members collaborate with brands in the co-creation of products and services. Nowadays, the web is increasingly crowded, and the customer acquisition cost is becoming much higher. In this sense, the rise of e-commerce and social media platforms to connect with younger generations, such as Facebook and Instagram, enable new entrants, lacking the capital to launch immediately retail stores, to interact directly with users without intermediaries. The use of social media is traduced in increasing margins and the possibility to own the interface with customers and associated data. In addition, nowadays traditional luxury brands and retail disruptors are required to adopt an omnichannel strategy that is fuelled by data to develop capabilities in offering a seamless click-and-brick shopping experience. Many retailers still do not have the digital capabilities to invest enough in this core enabler, thus forming new partnerships, alliances or acquisitions with innovative start-ups could be an efficient solution to create a profitable omnichannel experience. DNVB's operating model is also innovative for inventory management. Generally, many traditional retailers implement a forecast-based supply-chain system that leads to huge gaps between forecasted and actual consumer demand with excess inventory eroding profits. Physical stores represent one of the main differentiating factors for traditional players. But traditional retail stores with fully stocked inventories need an accurate forecast of local demand by

merchandising and predictive analytics. The more failures in local demand forecasting, the more excess inventory. Therefore, today traditional retailers are attempting to reduce their store sizes and inventories and enhance the customer experience via free pick-up in store, sustainable products, recycling in stores and the use of social media. On the other hand, inventory management and demand uncertainty do not represent an issue for digital born start-ups due to the concepts of showroom and sell-design make. As digital native brands reach scale and experience, they further differentiate and scale up expanding offline through showrooms. Indeed, operating offline stores as showrooms requires minimal inventory because they carry the minimum number of items allowing customers to see the available sizes and styles as in an interactive catalog. Showrooms retain the advantages of traditional physical stores, such as upselling and cross-selling, while reducing the costs for operating brick-and-mortar stores. Indeed, showrooms save operational expenses in terms of fewer needed sales assistants, less floor space and less returns because customers have the possibility to find the sizes and styles in presence. In addition, DTC model shifts the supply chain from design-make-sell to sell-design-make. This means that, thanks to direct relationship with customers, newcomers understand the needs before designing the offering, thus they produce only what will be effectively purchased with an impact on efficient inventory. DNVB's move to open physical retail stores is justified mainly by growth, the Halo effect, brand building, customer service and omnichannel experience. First, the competitive pressure and need for differentiation push mature DNVBs to rethink their digital-only model in terms of sales channels by expanding offline. Physical stores drive online and offline luxury sales because they leverage conversion rates, increase average purchase values by experienced sales associates and control the entire customer journey. Second, physical presence creates the Halo effect, meaning that stores also increase the organic traffic for e-commerce enhancing digital engagement, and lower CAC via paid search and email. Furthermore, brick-and-mortar stores help build brand awareness by communicating brand values in differentiated way. Then, as regards the customer services, stores can act as fulfilment channels. Through buy online pick-up in store option (BOPUS), retailers can fulfil orders conveniently by reducing high shipping costs and speeding up the delivery process. In addition, physical stores help gain deeper insights about customers and control the customer relationship through the support of in-store technology. Nowadays, the redefined role of stores is not explicated only by showrooms, but both digitally native brands and legacy retailers are transforming physical stores in every form – showroom, pop-up, flagship – from transactional centres into experiential retailing that immerses consumers in the brand's culture. Beyond shopping, physical stores immerse people in a unique, immersive, holistic and memorable experience. For digital born brands, opening brick-and-mortar stores provides the opportunity to offer a compelling high-end experience that reinforces the digital one. Furthermore, they can experiment different activations and innovations offline. On the other hand, the trend of inspirational pop-up stores diffused within traditional players. Pop-up stores are temporary physical locations not tied to traditional retail contracts that create an enchanting experience driving sales and virality.

KEY SUCCESS FACTORS OF DIGITALLY NATIVE VERTICAL BRANDS	
• Customer-centricity	Community engagement and omnichannel strategy
• Digital business model	Different types of data, analytics and digital innovations to understand customers' needs, create personalized offerings and respond rapidly to market changes
• Direct-to-consumer approach	Provide directly to consumers innovative, quality and cost-effective product offerings without intermediaries
• Niche strategy	Specialization on a single or small range of product categories
• Vertical integration	Increase margins and control over customer experience
• Sustainable values and slow fashion	Timeless pieces made from locally sourced or fair-trade recycled and organic materials of higher quality. Transparent production process and communication strategy
• Minimized inventory	Showroom concept and sell-design-make approach

Table 1 Key success factors of digitally native vertical brands

To understand in practice what are DNVB's key success factors and to identify later on in this research the multiple strategic approaches adopted by incumbent luxury firms to respond to new entrants, it is useful to illustrate the two pioneering digitally native vertical brands Everlane and Sézane. The former, emerged in the first wave of this new model, is a US DNVB known for its concept of radical transparency. While the latter established lately as the first digital born slow fashion brand in French fashion. Thanks to the DTC approach, they both sell high-quality luxury items directly to consumers, but with affordable prices, less mark-ups and inhouse design by working closely with their factories.

Everlane is an online-only brand that began in San Francisco in 2010 pioneering the digitally native vertical model. The brand was born from the idea of bypassing traditional intermediaries, such as department stores and boutiques, that impose high overhead costs of operating physical stores and markups leading to basic items like t-shirts priced up eight times more than their production cost. Thus, Everlane adopted an online model selling through e-commerce and social media high-quality t-shirts with a minimalistic aesthetic at lower prices compared to traditional retailers. Since its foundation, the brand has been growing significantly. Only after four years it reached \$36M of revenues, in 2015 it launched 170 new products expanding from menswear to womenswear, leather accessories, and childrenswear, and in 2018 the brand was listed as one of TIME's most genius companies. As regards Everlane's business model, the firm offers timeless basics with an enhanced product experience made of quality of materials, sourcing and online shopping experience. Thanks to its aspirational idea focused on no-frills luxury ethos but materials, Everlane mainly addresses social conscious Gen-Z and Millennials who seek a product with a story. Apart from its minimalism, Everlane's differentiation advantage lies on the concept of radical transparency in pricing model and around its factories. The brand showcases on its website the final product price specifying each cost component -

materials, hardware, labour, duties and transport – and how much the items would likely cost at traditional retailers. For example, one of the best sellers *Cotton Heather V* is priced \$30 compared to other retailers’ price of about \$50, and its price is split mainly in \$3.19 for materials, \$0,73 for hardware, \$2.80 for labor, \$1.11 for duties and \$0.21 for transport (Figure 11). Everlane is also transparent about the factories where items are manufactured. Initially, the brands produced only in US, but, in order to scale up the production, it involved China in the production process overcoming the stigma of sweatshops. Indeed, for the *Cotton Heather V* the consumer can also find on the website information on the Los Angeles factory where it was produced and scroll the pictures about its production process. Everlane pursues innovation through a “test-and-learn” approach to new product categories. The digital attacker tests new categories maintaining the focus on few productive styles with product improvements. For instance, Everlane launched a higher-end line experimenting in new fabrics and shape to learn, but not as a permanent strategy.

Transparent Pricing

We publish what it costs us to make every one of our products. There are a lot of costs we can't neatly account for - like design, fittings, wear testing, rent on office and retail space - but we believe you deserve to know what goes into making the products you love.



Figure 11 Everlane’s transparent pricing. Source: Everlane’s website.

Everlane’s operating model captures value by focusing on the production of a luxury product lowering overhead costs without a luxury price tag. First, Everlane adopts an online-only distribution model without physical presence to bypass capex and labor expenditures related to stores. Without intermediaries, the brand designs in-house its items and works directly with factories for cost savings and to ensure that factories comply with labor and ethical sourcing standards. As regards inventory management, Everlane follows a low inventory policy to minimize working capital costs. Everlane proceeds by ordering less products than its forecasted demand. It launches small lots to gain feedback and to design more versions, while the strong relationship with factories speeds up feedback loops. This sell-design-make approach accentuates consumer hype and allows Everlane to co-create with customers. For instance, thanks to customer feedbacks, the firm changed wool trousers’ materials and redesigned them adding new features desired from customers. In addition, the digital attacker expands its product category iterating the line one product at a time with no seasonal collections. In refer to merchandising and marketing, Everlane opts for no advertising and no discounting policy. Instead of advertising that is effective but expensive, the brand sells through social media

platforms and website (Figure 12), entailing authentic emotional stories that create deeper connections with customers and drive sales. Everlane engages customers and create interactive experiences through Instagram, its own app and recently via Facebook's service *Business on Messenger* to connect with customers by using Facebook's Messenger. The brand does not apply discounts, even on holidays and Black Friday, to stay consistent with its transparency and differentiate from other retailers.

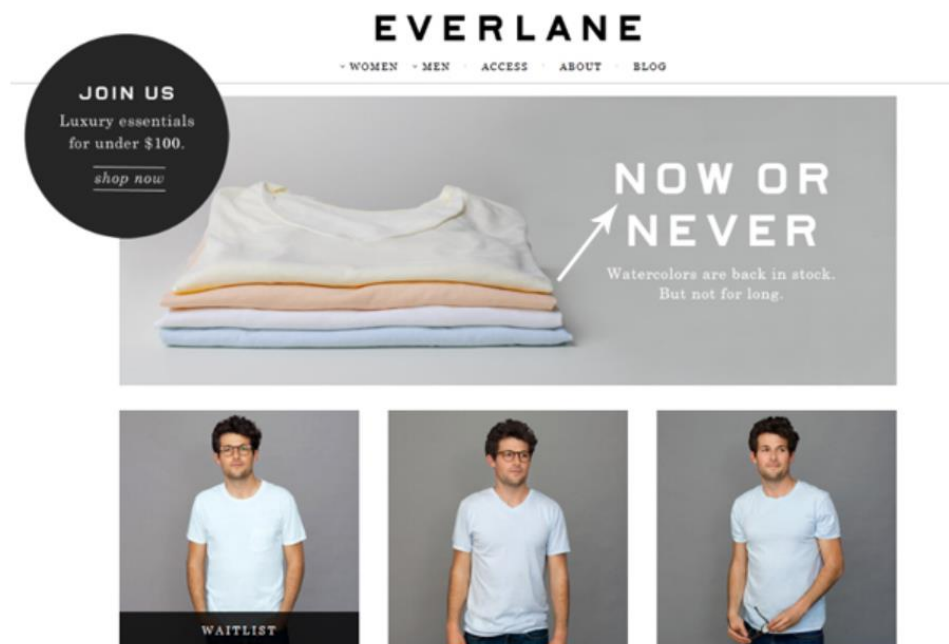


Figure 12 Everlane's product page. Source: Everlane's website.

As regards S ezane, in 2013 it established as the first DNVB in French fashion. The brand was born with an online-only business model, even though today it does 92% of business online with an extended presence offline. The slow fashion brand produces French-inspired luxury items of high quality for every occasion at fair and accessible prices. The founder Morgane S ezalory refuses the comparison with brands like Everlane, which focus on basics like t-shirts. Indeed, S ezane entails 200 fabrics to produce fashion items for every collection. S ezane rejects also Everlane's differentiation advantage of transparent pricing because the French brand focuses on desire and not price's justification. S ezane has strong relationships with its factories, of which more than two-thirds are in Europe and the rest in China and India, and shoes, which are S ezane's top-selling category, are made in factories working also with luxury brands. However, given the DTC business, S ezane can have different prices compared to traditional luxury brands. The business manages in-house also shipping and logistics from a warehouse in West France and sells online only via S ezane.com. The brand's long-lasting products at the fairest price are based on the values of eco-responsibility and sustainability. Its commitment towards raw materials, working conditions, environmental footprint and engagement in the public has been rewarded with the B Corp Certification. This globally recognized label is awarded to companies complying with societal and environmental requirements, governance, and transparency with the community. In slow fashion the certification represents also a tool to increase the

awareness about sustainability and change consumers' perceptions. To give some numbers, 70% of materials was eco-responsible (eg. biodegradable and recycled clothing labels) and the brand recycled more than 12,000 items in 2020. In addition, since its creation the brand raised four million euros to donate to partner associations participating in their philanthropic program DEMAIN. In refer to inventory management, the French label has built its success on the lack of end-of-season markdowns, relying on occasional archive, sample sales and connected showrooms. In 2015, Sézane opened its first e-shop in Paris called "L'appartement", inspired to a Parisian apartment. In the showroom customers can try on items and then order online them through tablets available in store or purchase the specific pieces available on-site with the "Take Away" service. In this way the brand avoids the inventory management required for traditional shops. In addition, the Apartment is integrated with the Conciergerie service to pick up, try and eventually return orders freely and in an eco-friendly way. The Conciergerie also provides repair service, as well as monogramming and engraving for unique pieces. The Apartment showroom is an example of experiential retailing because it immerses customers in an aspirational atmosphere recreating a high-end customer experience that remains accessible. The digitally native brand also offers a small selection of stationery and homeware and enhances the experience via books and coffee in the Librairie and a private seated cinema that recall the brand's values and sends out a high-end brand image. The Apartment's debut was followed by further physical expansion in France and internationally in United Kingdom and America. In 2016 Sézane obtained an apartment-style concession space at Le Bon Marché in Paris. Then, the French brand experimented with pop-ups in other markets, such as London, Los Angeles and recently it partnered with the wholesale Nordstrom to open pop-ups in the style of a French apartment in Seattle, Chicago, Costa Mesa and San Francisco.



Figure 13 Sézane l'appartement Paris. Source: Sézane's website.

As regards collections and capsules, Sézane releases a seasonal collection four times a year, a capsule once a month and the latest news and restocks every Wednesday and Sunday. This short production cycle brings innovation for customers and avoids leftover stock via no discounting and promotions policy and items sold on website that regularly sell out. To conclude, it is possible to define Sézane as a “love brand” since its storytelling inspires customers and create an emotional relationship via all the five senses with empathy and passion in the various points of sale. Sézane continuously interact with the community, especially on social networks and mobile app via #SézaneLovers and through the weekly appointments to launch the latest news, retaining a loyal customer base.

2.3 Case studies

The purpose of this qualitative research consists in identifying what are the winning strategies adopted by incumbent luxury firms to respond to disruptive digitally native vertical brands and how the traditional luxury players address the issues of meeting customer demand fast, data collection, sustainability consumption and inventory management, through their strong or enhanced capabilities. Luxury industry has been disrupted by emerging business models that redefine what an existing product or service is and how it is provided to the end customer. In this context, digitally native vertical brands threaten incumbent luxury firms because of their origins and infrastructure and the way they engage with customers. For this reason, traditional luxury firms should adapt heterogeneously their business model by looking for new ways of creating and capturing value. So, incumbent luxury companies are asked to build digital resources and capabilities inspiring to the best practices of DNVBs or enhance their existing assets and competences, such as capital, scale, knowledge, experience and traditional physical stores. Second, accordingly to the resources and capabilities to mobilise, established luxury players should redefine their structures and strategies to outperform against the disruptors. After reviewing the theory about disruption, business model adaption and the drivers of strategic responses, the work builds on the frameworks of incumbents’ adaption: resource-based view, barriers to adaption and dynamic capabilities. These frameworks guide the process of adaption by addressing the trade-off between building or leveraging resources and capabilities, proposing multiple means to access existing or new required assets and competences. Generally, incumbent firms successfully induce business model adaption mixing internal and external research by experimentation on the one hand and alliances and acquisitions on the other hand. Firms can either build or buy the required capabilities to speed up the adaption process and understanding and overcoming the internal and external barriers to adaption may affect the possible choices among the strategic approaches. In particular, when responding and adapting rapidly to changes, established companies are asked to develop dynamic capabilities of sensing, seizing and build and reconfiguring, with a focus on strategic agility. When launching new initiatives to promote innovation, incumbent firms can experiment with internal and external research via corporate incubators, accelerators, investments in direct operated sales channels and recently in the neglected metaverse. Contrary to the experimentation in a more controlled internal environment, the choice to buy

capabilities through alliances and acquisitions, mainly of innovative start-ups, is riskier and requires a balance between integration strategy and autonomy of units. In order to answer the research question empirically, the theory about digital disruption, business model adaption and the multiple strategic frameworks will be tested in the luxury industry with a qualitative analysis of the case studies of Louis Vuitton and Gucci. These traditional luxury brands were selected in relation to their positioning, identity in the luxury market, and for leading the business model adaption within respectively LVMH and Kering groups. Following the qualitative approach, case studies will draw on a combination of text and video-based interviews conducted by third parties and archival data including business press articles, proprietary materials and external publications about the firms' responses. The purpose of the method is to explore and analyse which strategies the fashion executives of the two innovative companies implement to solve the issues related to meeting customer demand fast, digitalisation, sustainability, and inventory management, in response to digitally native vertical brands. Specifically, the methods section includes considerations about sample selection, the process of data collection and data analysis. Then, the results paragraph will present the interpretation and discussion of the findings of the analysis, clarifying if the propositions emerged from the theoretical frameworks can be supported.

2.3.1 Louis Vuitton Company

The luxury brand Louis Vuitton is recognized as the most valuable brand among the world's leading luxury companies and constitutes the leading luxury brand of the luxury's conglomerate LVMH. Since its foundation, the firm's success has been built on the heritage of master trunk maker, its complete control over distribution and its rigorous spirit of innovation. By balancing new designs and iconic leather goods lines, the brand's offering includes a full range of products: fine and high-end leather goods, women and men's ready-to-wear, shoes and accessories, watches, jewelry, eyewear and, starting from 2017, a collection of fragrances for women and men. The Louis Vuitton's brand was founded in early 1854 by the French fashion designer Louis Vuitton in Paris. The first boutique was opened in 1885 in Oxford Street in London. In the following years the brand established thanks to the Damier Canvas pattern. In 1913 the boutique in the Champs-Élysée was opened, which today stands for the biggest worldwide shop of the brand. Starting from the 1987, the brand is part of the renowned luxury group LVMH. Moët Hennessy Louis Vuitton (LVMH) is one of the world's leading luxury groups, parent to 75 luxury houses, as the result of successive alliances with historic companies and the newer brands. In 2021 LV's key figures include:

- The brand value of approximately 14.86 billion U.S. dollars
- A retail network of 460 stores around the world in fifty countries
- More than 28,000 employees

The brand's values of innovativeness, bold creativity, and uncompromising demand for excellence are expressed through its DNA and codes. From its foundation, the brand universe inspires and surprises

customers through its art of travel. Thanks to the emergence of new modes of travel and the commitment to adapt to specific customer's demands of the journey, Louis Vuitton developed trunks, luggage and travel-inspired objects with cutting-edge designs, materials and ergonomics. From its origins, the company combined heritage and innovation through the introduction and reinvention of its product line – from luggage to handbags and more – and materials, shapes and colors. The flat-top trunk, lightweight Damier and Monogram canvas and the tumbler lock provide just some examples of the endless inspirations for re-interpretation by the Maison's artistic designers. Louis Vuitton's legacy is also expressed through LV's logo, the iconic finish Epi, the timeless Capucines bag and the recognizable packaging. From the late 90s, Louis Vuitton reinforced its connection with high-end traditional customers and new generations via a network of collaborations with world-renowned artists, architects, and designers. Artists such as Stephen Sprouse, Takashi Murakami and Yayoi Kusama, have given their own interpretation to the brand's iconic pieces by enriching its storytelling, but maintaining the consistent and strong brand identity and DNA. Furthermore, the firm promoted art and culture in the years through numerous initiatives, such as the brand's museum in the seventh and last floor of Champs-Élysée's shop and the cultural center sponsored by LVMH known as the Louis Vuitton Foundation. The brand extensions, the no-discount policy and the very selective distribution strategy helped the brand's development while preserving the equity. As regards Louis Vuitton's distribution strategy, the brand controls 100% of its distribution with a premier international network of exclusive boutiques under its name and the mono-brand e-commerce site louisvuitton.com. The control of products distribution represents a core strategic priority for LVMH to benefit from distribution margins and control over customers' data by understanding and anticipating their expectations. In the attempt to build a solid omnichannel distribution strategy by merging DOS, mobile app, e-commerce website and brand owned social media, Louis Vuitton's e-retail is equal to the omnichannel because the brand does not have wholesale partners. Louis Vuitton maintains an exclusive image because it sells only on its own e-commerce website and not on marketplaces or e-tailers. However, the company does not provide loyalty programs, thus a CRM system, for a complete and seamless luxury consumer journey. Louis Vuitton pioneers omnichannel experience, thanks to its ability to reach their customers through several touchpoints, but the firm should implement a CRM strategy that includes e-mails and in-app notifications for an enhanced customer experience.

Sampling strategy and data collection

Louis Vuitton's case study draws on a combination of sources. First, the analysis will be based on text and video-based interviews carried by third parties to senior roles in LVMH and Louis Vuitton's organizational structure. In particular, the participants involved will be respectively the Digital & Client Development Director of Louis Vuitton Charles-Henri Levaillant, the Head of Innovation and Blockchain at LVMH Gautier Pigasse, the CEO and founder of LVMH's e-commerce site 24 Sèvres Ian Rogers and the LVMH chief executive Bernard Arnault. These figures were chosen because they address the strategy of the firm

and have a holistic cross-functional organizational overview. The first video-interview to Charles-Henri Levaillant and Gautier Pigasse about the Aura blockchain during the Viva Tech event 2021 in Paris is carried by the anchor Marijorie Paillon and posted on LVMH's Youtube channel. Secondly, the text-based interview to Ian Rogers regarding LVMH's multi-brand e-commerce platform 24 Sèvres is transcribed by Tommaso Palazzi on MF Milano Finanza. Last, the interview to Bernard Arnault concern his view on the metaverse and is published by Hilary Milnes on Vogue Business. To further the qualitative analysis, the work includes also complementary considerations from press releases and external publications regarding Aura Blockchain, LV's sponsorship of Viva Technology, LVMH accelerator La Maison des Startups and LVMH Innovation Award, direct-to-consumer approach via WeChat mini programs in partnership with JD.com, live-streaming, mobile app, experiential retail in Osaka Midosuji flagship store in Japan and pop-up stores, such as the one in Printemps Department store in Paris, and metaverse's initiatives, such as the partnership with the gaming company Riot and the release of NFTs Game App.

The first video-based interview to the Digital& Client Development Director of Louis Vuitton Charles-Henri Levaillant and the Head of Innovation and Blockchain at LVMH Gautier Pigasse refers to the Aura Blockchain consortium. The Aura Blockchain originated from a discussion between the luxury brands Louis Vuitton, Cartier and Prada in April 2021 and represents the first global luxury blockchain. With the purpose to develop the applications of blockchain technology and create value for customers and luxury brands, Aura authenticates products by assigning each a unique digital identity. The information can be attached to products to enable consumers to access the history of a product and verify its authenticity through various means, such as QR codes and RFID tags. All Louis Vuitton's leather goods are Aura-enabled with a real traceability and authenticity, as Charles-Henri Levaillant says. From scanning the item, the customer can prove the authentication, but also retrieve information about the origins and materials in compliance with the highest environmental standards. "It has a huge value for our clients. They build trust, they want to know the source. For us is also important because we want to show that sustainability and authenticity are linked", says Charles-Henri Levaillant. As explained by Gautier Pigasse, Aura blockchain was born from a collaborative spirit between competitors in the luxury industry to propose a dedicated independent technology for the market to answer to the new luxury market expectations. Aura stands also for a non-profit association, but the platform's developments are possible because of the fees that the maisons pay to use the platform as a license. Secondly "we can understand what we can do as a business case with Aura, depending on their strategy, the data they get from all of these product life cycles with track-and-trace technologies and so on", he says about how the Consortium serve its members. Gautier Pigasse argues that the blockchain technology covers the entire product lifecycle from upstream to downstream. Furthermore, Aura aims to propose a new luxury storytelling to consumers.

The second text-based interview released by Tommaso Palazzi on Milano Finanza covers Ian Rogers' take on 24 Sèvres. In June 2017, the global luxury conglomerate launched the multi-brand eCommerce portal

inspired to LVMH's Parisian luxury department store Le Bon Marché in rue de Sèvres. Through its website and IOS app, the e-tailer's offering includes luxury items, cosmetics and luggage from both LVMH companies, such as Louis Vuitton and Celine, and non-group firms, accounting for 150 brands and a distribution network in 80 countries. Originated from an agile e dynamic start-up approach, the Arnault-founded holding company has invested heavily in this entirely Made in Paris project, hiring around 60 experts in digital, retail and fashion, and Ian Rogers to head its digital division. In few years, 24 Sèvres grew reaching massive sales volumes in USA and Instagram and now aims to expand in China. "Brands on the platform leverage the platform's overall features, including chatbots, on-demand stylists, stunning graphics, efficient checkout and fast delivery. In addition, the company gathers and analyses cross-brand consumer insights across the platform", Ian Rogers says. To differentiate from other luxury e-commerce platforms, 24S focuses on visually-led digital "storefront" windows, as we can observe from the website's homepage and product page (Figure 14), and interactive customer service technology. The manager adds that they have launched a new editorial appointment named «le look du jour», which represent shots taken on Parisian streets, in line with social media language. The Instagram profile @24sevres includes an e-commerce functionality and relies on a community of fans that share their looks with the hashtag #24SLookduJour, for an engaging and convenient experience. Furthermore, 68 luxury brands, of which Louis Vuitton, were asked to release exclusive capsule collections with 24S, featuring reimagined versions of the most iconic pieces. According to Ian Rogers, another distinctive feature of the e-tailer concerns the packaging, indeed each pack contains a card with a three-dimensional sculpture of the Eiffel Tower. Last, Ian Rogers argues that 24 Sèvres Parisian-themed site and experience aim to replicate online the visual merchandising techniques of the department store Le bon marché.

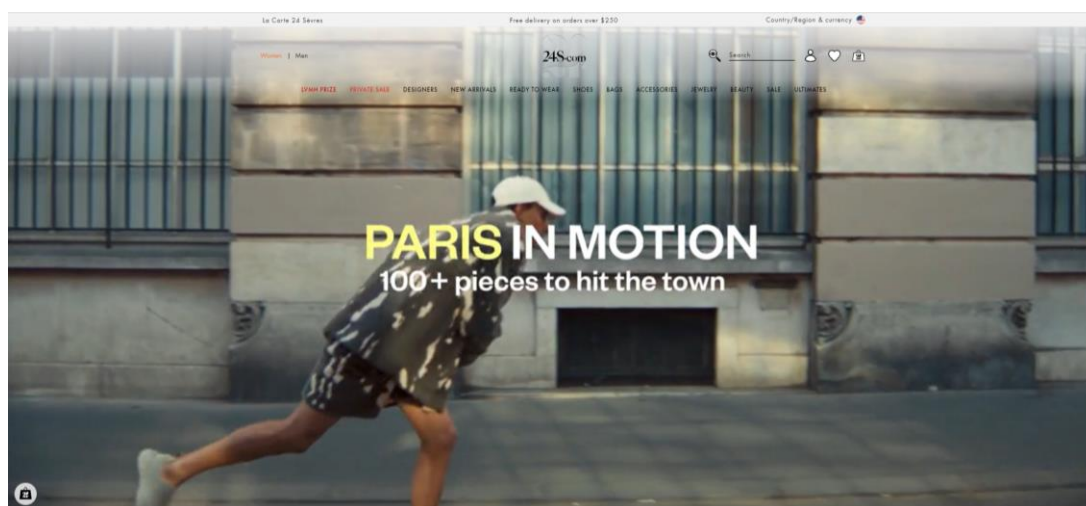


Figure 14 24 Sèvres Homepage. Source: 24 Sèvres's website.

Last, during LVMH's annual presentation to investors in January 2022, the chief executive Bernard Arnault expressed his cautiousness about the metaverse "bubble". He linked to Internet's bubble in the early 2000s as players converge in the space, thus he currently adopts a wait-and-see approach to virtual 3D and 4D

worlds and products. The metaverse, that was one of 2021's hottest buzzwords, includes an array of immersive digital realities in which cryptocurrency and blockchain play a relevant role. "At present we're in the real world selling real products. Surely it's captivating, it's interesting, it's fun. But we have to see what the application of the metaverse and these NFTs will be", said Arnault. He continued saying that metaverse could have a positive impact on group's companies for sure, if it is well done. "But it's not our objective to sell virtual sneakers for 10 euros. We're not into that. But there may be more relevant applications", he argued. LVMH is not excluding the metaverse opportunity and is eyeing other companies, such as Nike, Gucci, Adidas, Prada and Balmain that have already embraced this online channel. According to Morgan Stanley's report, the whole luxury sector will benefit from the advent of metaverse, but the soft luxury brands (leather goods, ready-to-wear, shoes, etc.) are particularly well positioned. However, the global luxury group has already made some strategic moves complying with metaverse: LVMH joined the Aura Blockchain and Louis Vuitton pioneered the metaverse's developments among the other group's Maisons, partnering with Riot Games for the League of Legends Game, it developed Snapchat's AR tool and released NFTs within its own video game. As a market leader having the most exclusive brands, the capability to invest and big audience of consumers, LVMH is not required to be the first mover, but they also should worry to not be too late. We should expect adoption to be very gradual since Louis Vuitton, as a case, sells a culture more than virtual products, according to Bernard Arnault.

As stated in LVMH and Business of Fashion's press releases, Louis Vuitton announced the launch of Aura Blockchain, the first in-house luxury blockchain, at Viva Technology in Paris in 2019. The collaborative platform uses blockchain technology to track goods in the entire value chain, from product's sourcing to post-sale, benefitting both customers and luxury brands (Figure 15). Customers' shift of attention on sustainability and transparency, pushed luxury companies to provide tools to communicate authentication, sustainability, digital tokens and NFTs, for a personalized and convenient customer experience. Thus, Aura platform relies on various capabilities, including "track and trace" capabilities, inform customers and offer an NFT collection. By promoting the use of a single global blockchain from luxury brands for luxury brands, the non-profit association accelerates the transition to a circular business model, trust, transparency, innovation and sustainability. The alliance focused on the luxury market was developed in partnership with blockchain software company ConsenSys, using Microsoft technology. Franck Le Moal of Aura's Board of Directors says that they are open to eventual partnerships, but for the moment, creating a private in-house platform, versus using an existing alternative, is important for data and processes control without a third party in between.

BENEFITS OF BLOCKCHAIN SYSTEM	
For Customers	For Brands
• Luxury authentication	• Easy use of the platform
• Supply chain transparency	• Data ownership & Security
• Transfer of ownership	• Flexibility & Excellence of platform
• Personal relationship	• Personal relationship
• Convenience & Circular economy	• Ease of access through a common standard
• Sustainable blockchain	• Product lifecycle
	• Pre-owned control
	• Collaboration: from brands for brands

Figure 15 Benefits of Blockchain system for customers and brands.

Louis Vuitton sponsors Viva Technology, an annual technology meeting dedicated to innovation and start-ups held in Paris. Always maintaining the balance between heritage and innovation, the brand and its conglomerate organize contest with start-ups about innovative technologies and the awarded project will be used by Louis Vuitton and the other houses. In addition, LVMH Maisons take advantage of VivaTech to reveal their recent innovations that enhance the customer experience thanks to immersive in-store engagement (Bulgari, Fendi, Acqua di Parma...), innovative products (Louis Vuitton, Kenzo...), virtual reality (Maison Francis Kurkdjian) and augmented reality (La Samaritaine, Ruinart...). LVMH Lab (Figure 16) at Viva Technology is open to great innovations from other annual initiatives fostering innovation and engaged in the start-up ecosystem: La Maison des Startups LVMH, DARE and LVMH Innovation Award. La Maison des Startups LVMH consists in a business acceleration program at the Station F incubator that offers workstations and support for 50 start-ups each year. From its launch in 2018, almost 230 collaborations between startups and LVMH Maisons have been signed. The Group's intrapreneurial program DARE helps accelerating innovation, transforming the culture, and developing talents. DARE is based on an open innovation platform in which people within the group can propose a new project relevant to the conglomerate's spirit and challenges. An example is represented by Nona Source, an online platform developed by four members of LVMH with support from DARE that resells exceptional materials from LVMH Fashion & Leather Goods brands to young designers outside the Group at convenient prices. On the other hand, the LVMH Innovation Award welcomes start-ups established within the past five years, valued less than US\$100 million, that have no more than 50 employees, and whose solutions comply with the Group's tech and digital acceleration. Candidates can compete among six categories and the awarded project in the final of Viva Technology gains the chance to partner with the Group and its Maisons. From its launch in 2017, the startups that have won the LVMH Innovation Award are Heuritech (deep learning), Oyst (e-

commerce solution), Kronos Care (post-purchase solution), VeChain (blockchain), Crobox (customer behavior analysis), 3D Look (trial experience) and Bambuser (live stream shopping).



Figure 16 LVMH Lab at Viva Technology Event in Paris in 2019. Source: LVMH News. (2019). LVMH showcases the customer experience of tomorrow at Viva Technology 2019. *LVMH*.

As regards Louis Vuitton’s experiential retail, two inspiring examples are represented by LV’s pop-up store in Printemps Haussmann in Paris and the flagship store in Osaka, Japan. The exclusive Louis Vuitton Loves Printemps collaboration (Figure 17) in 2016 invites customers for a futuristic journey displayed in the windows and in the pop-up store in the atrium. The lunar fantasy celebrating femininity and highlighting an inner escape showcases an exclusive range of products, from the first collection of perfumes by Louis Vuitton to leather goods, accessories, shoes and prêt-à-porter.



Figure 17 “Louis Vuitton Loves Printemps” pop-up store. Source: LVMH’s press release.

In February 2020, Louis Vuitton proved its resilience towards the pandemics, in combination with its boundless spirit of innovation and *Art de Vivre*, thanks to the opening of its first café and restaurant in the new Louis Vuitton Maison Osaka Midosuji flagship store in Japan (Figure 18). Le Café V and Sugalabo V propose a unique food experience that mix the Franco-Japanese influences. The new flagship store strengthens the close relationship between the Maison and Japanese culture, rooted in a respect for tradition combined with vibrant contemporaneity. Designed in collaboration with artists, such as Jun Aoki and Peter Marino, the store represents a masterpiece of architecture, art and innovation. The façade tributes Osaka's nautical spirit with the sails of traditional Higaki-Kaisen cargo ships, while traditional Japanese materials, such as woodwork and origami washi paper, are blended with the Maison's recognizable style over the four levels of the store.

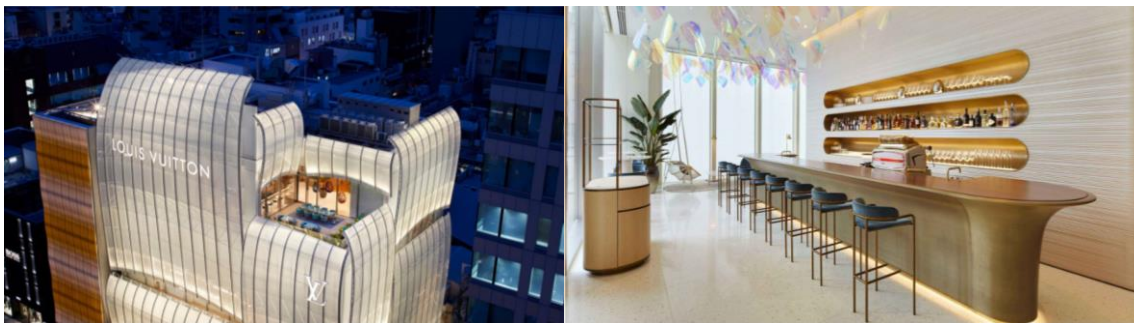


Figure 18 Louis Vuitton Maison Osaka Midosuji flagship store with Le Café V. Source: Achim, A.L. (2021). What Luxury's Next Big Market Wants. *Jing Daily*.

The heritage Maison proven to conquer the direct-to-consumer universe also by leveraging its own mobile app, WeChat Mini Programs and livestreaming. Louis Vuitton's mobile app engages directly with young customers. LV's account enables the subscription to newsletter to be immediately informed about the brand news, have an history of purchases and create a Wishlist. Thanks to visual recognition-based predictive technology, the feature LV finder allows to scan a specific item and have more information or search similar products on the website, creating customisation. Differently from the other luxury brands, Louis Vuitton has created a complex digital ecosystem within WeChat well connected with the other digital platforms and based on a one-to-one interaction with local customers. A significant example is the Mini Program launched in June 2019 to educate consumers on the latest news and brand products. By clicking on WeChat, users are greeted by an avatar holding a Louis Vuitton bag and a poker card that explains what the program is about. Logging in the Program with their personal details, they can preview the latest LV editorial content. In this section named the World of Louis Vuitton, customers can read about the history of the emblematic Monogram, or the latest products, such as the waterproofed travel luggage line. At the end of the editorial tab, users can access another stand-alone Mini Program showcasing the details about the brand retail stores. Customers can also connect with a real-time customer service Mini Program, by which they can find key information of the account, and instructions to subscribe to the brand's WeChat account. Apart from selling online through its own website and 24S, another strategic decision is represented by the partnership between

Louis Vuitton's WeChat mini program and the Chinese luxury e-commerce platform JD.com. The deal is a rare move for the French Maison and is the brand's first with a third-party online platform in China. Thanks to the collaboration, Chinese customers are able to access to a customised LV's page on JD and, by clicking on the single items, to be redirected to Louis Vuitton's WeChat mini program where they can finalize the transaction. The partnership elevates Chinese e-commerce luxury experience for JD and provides for both a seamless shopping experience. Furthermore, the move helped JD.com to establish in the luxury industry, as other Chinese luxury e-commerce players, such as Tmall with its Luxury Pavilion. The rise of China as the most important global market for the luxury industry led major luxury players to experiment with livestreaming. Luxury brands tested gradually livestreaming, but this trend accelerated since Louis Vuitton was the first luxury company to debut in livestreaming on the Chinese social e-commerce platform Little Red Book (Figure 19). The debut livestream consisted in an informative session with two influencers sharing their LV's items and styling tips in a friendly and inspiring atmosphere appropriate for the language of Little Red Book's community. Louis Vuitton's first livestreaming on Little Red Book represented a successful investment and a new type of shopping experience. The livestream show saw positive engagement from users, reaching over 152,000 pageviews and numerous comments about the hosts' looks or encouragements by sales associates to get in touch with them or visit LV's Chinese stores.



Figure 19 Livestream on Little Red Book hosted by Yvonne Ching and Zhong Chuxi. Source: Zheng, R. (2020). Louis Vuitton's Debut Livestream on Little Red Book. *Jing daily*.

The trend of gamification has provided a way to interact and engage with Millennials and Gen-Z consumers while testing virtual realities. Established luxury companies have started using games to combine technology, entertainment, and branding to build an immersive and authentic experience. In a funny and pleasant way to experience luxury shopping, the Maisons catch the opportunity to test new products via VR, AR and NFTs, in order to get insights and tailor the collections to be launched also in physical stores. LVMH responded promptly to the phenomenon of gamification with the alliance between Louis Vuitton and Riot Games in the League of Legends game (Figure 20). They partnered to develop branded collections for the characters, as five custom skins and a travel case for the League of Legends trophy designed by LV's creative director Nicolas Ghesqui re. In addition, a real capsule collection inspired by League of Legends was released and they created several looks for Animal Crossing. The Maison partnered also with the Chinese social commerce platform Bilibili to develop an AR filter for League of Legends' users. Thus, the deals with Riot games and the luxury e-commerce platform provide a branded entertainment for luxury consumers and a seamless customer journey. The heritage brand added to its universe the Game App, an NFT App encouraging players to learn about its history with an NFT raffle for the most competitive users, featuring the anthropomorphism of the firm's monogram Vivienne. The strategic decision to create the Game App rewarding players for gathering information about its history and giving away NFTs for free stands for a cautious approach towards crypto fashion and metaverse because the brand has more control of the environment. Furthermore, Louis Vuitton is planning to expand its Game also offline in the family home in Asni res and Los Angeles.



Figure 20 LV's case for the League of Legends trophy. Source: The Business of Fashion (2019). Louis Vuitton Partners With Riot Games for E-Sports Tournament. *The Business of Fashion*.

Data analysis

To maintain its leading position and take advantage over the new entrants in the luxury industry, Louis Vuitton accelerated innovation and flexibility by launching new initiatives. The brand's innovative initiatives mix internal and external research via the enhancement or building of required resources and capabilities to address the adaption process and rising market trends. Primarily, the Aura blockchain constitutes the first alliance among luxury industry's competitors aiming to have a global blockchain. The non-profit association resulting from the alliance responds to the new luxury market expectations, in terms of data collection, inventory management and sustainability. For this strategic alliance of luxury brands and technology partners, as Microsoft and Consensys, a consortium model was implemented to make the platform accessible to other eventual partners with the same objectives. Even though Aura stands for a non-profit organization, the brands license the platform through the payment of the fees for its developments. By these unique global alliance, Louis Vuitton and the other partners benefit from a collaborative approach for the common goal of authenticating items by assigning them a unique digital identity, without incurring in relational and performance risks, like coordination, cooperation and cultural clashes. Aura Blockchain leverages on knowledge sharing about track and trace capabilities and storytelling across the entire product lifecycle. For instance, by scanning the product via tools like QR codes and RFID tags, the customer can verify its authenticity and retrieve information about the origins and the materials. This is valuable for the customers because it builds trust, transparency and links authenticity with sustainability. Furthermore, the creation of a private in-house platform within the luxury industry without relying on an existing platform enables data and processes control. To conclude, the knowledge sharing and the notion of control embedded in the Aura Blockchain Consortium allow Louis Vuitton to drive efficiency, transparency, faster transactions and personalization. On the other hand, Louis Vuitton experiments via Viva Technology innovative initiative, the business acceleration program la Maison des Startups, the open innovation platform DARE and the contest with start-ups LVMH Innovation Award. The purpose of these initiatives consists in supporting the innovative start-ups with enhanced digital capabilities by leveraging on Louis Vuitton's strong assets of capital, knowledge and experience. Alternatively, accelerators and innovation initiatives help the brand to absorb or adapt some of the most pioneering practices and ideas of newcomers with speed and flexibility. The collaborations with start-ups enable the firm to learn quickly and bring new strategic assets in its ecosystem. Thus, these organizational initiatives address mainly the issues of data collection and the need to respond fast to rising market expectations. In practice, Louis Vuitton takes advantage of Viva Technology events to engage with start-ups, also coming from other annual appointments, such as LVMH Innovation Award, and showcase its recent digital innovations. In LVMH Lab at Viva Tech, the awarded start-up from LVMH Innovation Award gains the chance to partner with the Maison and the group, and Louis Vuitton presents the latest innovative products. Then, Louis Vuitton is involved in the business acceleration program la Maison des Startups LVMH at the incubator Station F. Station F corporate incubator represents a separate

conglomerate's business unit providing workstations to support approximately 50 start-ups each year with speed and scale in fostering innovation via new projects and products developments. In addition to partnering with start-ups, LVMH and its Maisons promote the open innovation platform DARE to make accessible the best ideas and practices of talents within the group, across multiple channels.

In contrast, rather than learning and building strategic assets via business acceleration programs and incubators in partnership with start-ups, Louis Vuitton imitates DTC brands by investing in online sales channels primarily targeted by the first movers. The strategic move responds to the need to adapt effectively to DTC business models and bring the brand close to younger demographics through the reconfiguration of e-commerce, direct-to-consumer, storytelling and omnichannel capabilities. Building and leveraging the digital capabilities developed by the DNVBs in combination with the ability to ramp-up online activities quickly with sizable levels of investment of money and effort represent a distinctive dynamic capability. Indeed, the heritage brand allocates management effort and hires new talents within agile teams to provide a seamless shopping experience across different touchpoints based on data control, personalization, and fast transactions. As a matter of fact, the launch of LVMH-owned e-tailer 24 Sèvres offers a differentiated online experience built on unique e-commerce features and the expertise at the department store Le Bon Marché in Paris. Originated from a dynamic start-up approach, the multi-brand platform invested massively in hiring new talents of various skill levels and experience, a distribution network in eighty countries aiming to expand also in China and disruptive technologies. 24S enables a personalized and convenient shopping experience through interactive customer service technologies, such as fast delivery, click-and-collect at Le Bon Marché, chatbots, on-demand stylists on the 24Sèvres app and visually-led digital "storefront" windows in its website. The incumbent luxury company proven to conquer the direct-to-consumer universe also by leveraging its own mobile app, WeChat and livestreaming. Louis Vuitton app connects and engages directly younger audiences by informing customers about latest news and items and collecting data via newsletter, history of purchases and Wishlist to control and provide tailored suggestions. Moreover, the distinctive AR feature Louis Vuitton finder based on visual recognition provides information about the scanned item or a similar one. Louis Vuitton WeChat Mini Programs represent a meaningful illustration of how to integrate effectively data collection, personalization, storytelling and omnichannel capacities. With speed and scale, the traditional Maison adapted to GENz consumer needs and implemented e-commerce features for a one-to-one interaction by creating a smooth consumer journey that connects WeChat with other digital platforms and offline tools. WeChat's avatars give access to sections showcasing history of the brand, new products and information about the brand retail stores, relying on the specific functions of editorial content and customer service that result in record-breaking sales on the website and Chinese offline stores. The live streaming session on the Chinese social media platform Little Red Book constituted the first experiment with livestreaming for a luxury brand, aiming to adapt fast to an emerging trend in the Chinese market and drive sales online and offline. Louis Vuitton's livestreaming debut succeeded among numerous younger

consumers that interacted and engaged with the brand through comments about the influencers' outfits and customer service, and social commerce. Indeed, the Maison proved its social media marketing capacities and promoted the brand image through the informative session led by local KOL's dressed in Louis Vuitton in which they provided styling suggestions in the language of Little Red Book's community with monetization of the event. Furthermore, Louis Vuitton established a partnership with JD.com. to gain visibility on one of the major Chinese marketplaces, but always maintaining control over transactions and customer data. The alliance created value for both players by reinforcing organizational learning and the seamless shopping experience via a customised Louis Vuitton brand page on JD.com that redirects consumers to Louis Vuitton's official WeChat Mini Program to finalize purchases. Specifically, the deal helped Louis Vuitton to expand customer base rapidly while controlling the customer journey with the Mini Programs jointly developed and similar to the brand's own ones. On the other hand, the alliance helped the Chinese multi-brand, originally strong in the consumer electronics, computers, and telecommunications sectors, to establish in the luxury e-commerce business. Louis Vuitton experiments also via experiential retail to integrate enhanced existing store competences, such as design, visual merchandising techniques, sales associates' expertise and storytelling, with the acquisition of new omnichannel and digital capabilities. Louis Vuitton's initiatives of global pop-up stores and experiential flagship stores with cafes and restaurants combine heritage and innovation to address the issues of adapting fast to new customer expectations, data collection and inventory management, as digitally native vertical brands do. On the one hand, pop-up stores, such as Louis Vuitton Loves Printemps collaboration in Paris, provide an immersive environment showcasing self-centred stories, via iconic and new items and artistic collaborations, and technology upgrade investments, such as interactive displays and AR tools. In addition, pop-up collaborations offer a flexible approach to test the launch of new products integrated with digital content in potentially growing markets and manage inventories faster than warehouses, without incurring in stocks and costs of traditional brick-and-mortar stores. Thus, Louis Vuitton's pop-up stores represent an alternative channel to release new products and contents, resulting in increased sales and virality in a creative and inspiring way. On the other hand, the brand's experiential flagship stores with cafes and restaurants create a multisensory experience to attract new customers in store and retain top clients. For instance, the Café V and Suglabo V restaurant in Osaka flagship store in Japan offer a unique food experience fusing Japanese and French tradition. Designed in collaboration with architects and designers, Louis Vuitton Osaka's store, café and restaurant combine heritage, art and innovation for an integrated experience across different touchpoints, such as social media platforms via sharing contents.

The best innovators mix internal and external research to access existing or new necessary assets and competences. The metaverse is proving to be a differentiated channel to invest, in order to leverage the core capability of scale and build new digital resources and capabilities. Louis Vuitton and other leading luxury players could be effective in establishing a competitive advantage in the metaverse less developed or

neglected by new entrants. Due to the saturation and competitiveness of the market, in the years to come metaverse is expected to become a very significant driver of revenue growth to strengthen the positions in direct-to-consumer, virtual and sustainable realities. LVMH CEO Bernard Arnault expressed his cautiousness about the metaverse by adopting a wait-and-see approach, since the conglomerate, and Louis Vuitton as a case, sells a culture more than virtual products and does not want to compromise its exclusivity as other pioneering luxury players in these virtual worlds. Despite the fear of a metaverse “bubble”, Louis Vuitton has already experimented with crypto fashion and metaverse and collaborated with a gaming company through respectively its own NFTs Game App and the alliance with Riot Games for the League of Legends Game. The Game App allows the brand to test new products via NFTs and at the same time interact and engage with Millennials and Gen-Z consumers. Through its own App the brand controls the end-to-end experience and owns customer data. The avatar Vivienne that features the NFT raffle for the most competitive players is dressed up in Louis Vuitton capsule collection and enables players to discover new products. By focusing on producing successful limited pieces and items according to the gamers’ feedback, Louis Vuitton enhances its co-creation, customer centric and personalization capabilities. Then, the digital skins primarily tested in the game are sold in real life, generating a parallel stream of revenues. Since the brand continues expressing its creativity without requiring physical goods, virtual outfits, beyond data collection and higher margins, comply with sustainability consumption. In addition, the strategic move allows players to learn more about Louis Vuitton’s history, resulting in an increase in brand awareness and customer engagement. Louis Vuitton is also planning to expand its Game offline in Asnières and Los Angeles for an integrated strategy both online and offline. The alliance with Riot Games stands for another promptly response of Louis Vuitton to the phenomenon of gamification, with the purpose to test, learn and continuously adapt to young consumer needs. The shared development of branded collections for the characters, custom skins, the travel case for the League of Legends trophy and an AR filter, required speed, scale and an omnichannel strategy. Indeed, Louis Vuitton created an agile operating model with a dedicated team for the metaverse initiatives and learned quickly from the collaboration by testing new products via VR, AR and NFTs. Of course, the hiring of new talents and management effort allocated to the initiative required a huge capability to invest that Louis Vuitton is one of the few luxury brands to have. The further partnership between Louis Vuitton and the Chinese social commerce platform Bilibili to develop an AR filter for League of Legends’ gamers on the one hand and insights collection and user feedback to tailor the release of a real capsule collection inspired by League of Legends on the other hand, provide a seamless customer journey across multiple online platforms and stores.

2.3.2 Gucci Company

Founded in 1921 in Florence by Guccio Gucci, Gucci is recognized as one of the most desirable luxury personal goods brands worldwide. Since 1999 Gucci constitutes the leading brand of the French international luxury group Kering. The global luxury group manages the development of renowned Houses in Fashion,

Leather Goods and Jewelry: Gucci, Saint Laurent, Bottega Veneta, Balenciaga, Alexander McQueen, Brioni, Boucheron, Pomellato, DoDo, Qeelin and Kering Eyewear. Acknowledged as one of the most influential, innovative, and progressive brands, Gucci envisions to redefine the modern approach to luxury fashion. The company's sales are driven respectively by high-end classical and fashion-oriented leather goods, ready-to-wear and shoes, followed by watches and jewelry, eyewear, and other, such as perfume and home décor. According to Gucci's 2021 annual report, the firm has been the greatest contributor to the Kering's revenue, generating a global revenue of about 9.73 billion euros. The excellent performance and sales increase are mainly attributed to the success of its iconic lines, new product launches, an intense schedule of events and a strong social media presence. The appealing iconic pieces include articles inspired by the equestrian world, such as the horsebit and stirrup designs, the red and green bands, and the double G logo. Furthermore, Gucci registered 3,71 billion euros of recurring operating income, it operates a total of 487 stores worldwide and counts on approximately 17,157 employees. By placing creativity at the heart of its strategy, Gucci is renowned for eclectic and contemporary creations rooted in Italian craftsmanship. Gucci's vision to redefine the concept of luxury developed from 2015 when Alessandro Michele and Marco Bizzarri were appointed respectively as Creative Director and CEO. Alessandro Michele's appreciation for the house's historical codes combined with modernity and imaginative design has contributed to a new compelling narrative that creates an emotional bond with younger customers. Gucci crafts tomorrow's luxury in a sustainable, social and responsible way via different initiatives. Gucci is playing a part in circular economy through the environmental program "Chime for Change" and Vault Gucci, an e-concept store stocking vintage pieces alongside work by emerging designers. Since 2018, Gucci's operations and supply chain have been carbon-neutral and the brand plans to become 100% sustainable in manufacturing in the coming years. In addition, the House empowers dream-makers with self-expression, inclusivity and a breaking attitude, also thanks to the expansion in street style fashion. The company relies on exclusive distribution channels including company-owned stores, wholesalers, flagship stores, DOS, e-commerce site, social media platforms, Gucci's app and e-retailers. Gucci is an experiential company with an outstanding omnichannel strategy that integrates digital and instore experience. The brand recreates an immersive and dynamic experience online and offline through in-store technology, virtual stores and experiential spaces, such as Gucci Garden, Gucci Osteria by Massimo Bottura and Gucci Circolo. The firm partners with contemporary artists and celebrities, such as the singer Harry Styles, and the leading luxury e-market places YOOX and Farfetch.

Sampling strategy and data collection

The research methodology is built also through the sampling, data collection and analysis of external interviews and archival data about the case study of Gucci. First, data had been collected respectively through two interviews to Grégory Boutté and one to Robert Triefus, of which one published by Maghan Mcdowell on Vogue Business in 2019 and two conducted by Robert Williams and released on the State of Fashion 2021 and 2022. Within incumbent luxury firms, the interviews to the Chief Client and Digital

Officer of the group Kering and the executive Vice President and Chief Marketing Officer of Gucci were sampled because these executives are responsible for implementing the corporate and marketing strategies to compete effectively in the digital economy and respond fast to newcomers. Specifically, interview questions sought to understand how Kering, and consequently Gucci, fast-track the digital upgrade, respond to digitally native brands and in which way and why the Italian brand experiments luxury's opportunities in the metaverse. The interviews are cross-validated by archival data including internal and external media articles and publications about Gucci's responses to provide a more accurate and comprehensive analysis. In particular, the analysis draws on archival data about experiential retail and omnichannel strategies via pop-up stores, the mobile app, livestreaming sessions and Wechat Mini Programs, experimentation in the innovation hub Gucci ArtLab and the first mover advantage in crypto fashion and gaming through the partnership with Zepeto and the virtual store Gucci Garden.

The first text-based interview to Kering's Chief Client and Digital Officer Grégory Boutté takes on the group's fast reply to digitally native brands, data, AI and technology in-store. In order to compete with the new digitally native brands, Kering is making significant investments in proprietary technology, including an in-house e-commerce platform and an AI-powered sales forecasting tool. For the moment none of the digital born brands have posed any serious competition to Gucci, but, according to Boutté, they represent for sure a threat to take into consideration. He developed a direct-to-consumer strategy to make the conglomerate's existing family of brands start behaving like digital natives. The strategy aims giving to the company's brands as much control over online channels as their physical stores. The executive's decision includes powering the monobrand websites through a proprietary platform, instead of relying on third parties, and using AI to improve internal productivity and customer experience. Boutté believes that this direct-to-consumer approach leverages on Kering's strengths in storytelling and direct sales, thanks to its own effective communication and vast retail network. By owning the end-to-end shopping journey via Kering's own websites, AI and virtual concessions (i.e on Farfetch allowing a degree of control), the group expands omnichannel capabilities, realizes better products, attracts more users and increase sales. Boutté argues "We want to make sure we understand all the products you looked at, and you're interested in. That's very valuable information for us to better know you and offer you personalised communication when you call client service". In refer to the presence of technology in store, the company is integrating AI into sales forecasting to address the issue of inventory allocation. Indeed, Kering is using RFID tags and iterates on a proprietary app for sales associates.

Secondly, the interview to Grégory Boutté published by Robert Williams on the State of Fashion 2021 concerns the role he plays at Kering in the digital upgrade to create an integrated customer experience and the challenge to reinvent the group's extensive network of physical stores to adapt to new the expectations of ultra-connected luxury consumers on multiple platforms. Thanks to the pandemics, the role of e-commerce became a crucial prerequisite to compete in the market and Kering immediately seized this opportunity

seeing its share of online revenues more than double. Before Covid-19, McKinsey predicted that e-commerce would account for around 20 percent of overall luxury sales by 2025. However, despite a slowing travel retail and store closures also challenging omnichannel strategy, Kering exceeded that forecast in 2020, five years earlier than expected. After such a rapid surge, online sales channels will continue to grow in the following years because the luxury growth is coming from younger generations and Chinese consumers that are ultra-connected. In this digital ecosystem, Grégory Boutté has to find a way to make Gucci's network of nearly 500 stores relevant and he also has to accelerate an e-commerce adaption at Kering's other brands like Saint Laurent and Bottega Veneta. The luxury e-commerce platform Yoox Net-a-Porter had been operating the e-commerce businesses of the group's brands Saint Laurent, Balenciaga, Bottega Veneta and Alexander McQueen, except Gucci, via a joint venture, but in 2021 those functions were moved inhouse. According to Grégory Boutté, the strategic decision is justified by the willingness to control the online experience to enhance the seamless customer journey online and offline. Since the pandemic, Kering has boosted the omnichannel approach through different initiatives, such as BOPUS (buy online and collect in store), booking online in-store appointments and distance sales. Recently, Gucci as introduced Gucci Live as a feature available on the e-commerce website that allows sales associates to chat with customers and do video to show some items and even close a sale. Boutté, referring to Gucci Live, confirmed that "we're getting an amazing response from our clients, both in terms of qualitative feedback and conversion". The phygital stores had been integrated with back-end tech innovations, rather than other brick-and mortar IT investments already deployed by luxury competitors, such as connected mirrors. Moreover, Gucci released the Gucci Luce app to augment the performance of sales associates. The app developed in partnership with Apple allows client advisors to check stocks in real time, do clienteling and access to customers' purchase history to recommend products and sizes based on past purchases for a personalised experience. As regards inventory management, the Chief Client and Digital Officer says that Kering introduced algorithms leveraging on AI to forecast sales for new products. Kering aspires to zero-inventory to not hold stocks, yet there is still a long way to go. The group is also experimenting pre-order model, while on-demand production is out of scope because for Boutté "part of the magic of the in-store experience is being able to try a product in the store and then have it immediately. We want to keep that". Another trend established in the market and not only in the digital space consists in the polarisation of big brands and small new entrants. Digital efficiency and relevancy online and offline require huge investments, thus only big brands or companies belonging to groups have the capital to leverage on this transformation. Boutté's advice for these native brands is to do a few things extremely well and serve a niche of customers to increase visibility online. In recent years Asia has been characterized by a distinctive digital ecosystem with its own advanced digital channels. In order to scale up activity in this environment, Gucci launched its Chinese site and Kering opened flagship stores for Gucci and some of its other brands on Tmall's Luxury Pavilion and WeChat stores. Being present on diverse Chinese platforms represents an opportunity rather than a risk because of

control. The chief client and digital officer argues also that the creation of relevant contents for the different social media platforms inspires trust and loyalty.

Last, the text-based interview to Robert Triefus, the Executive Vice President and Chief Marketing Officer of Gucci, leverages on the conviction that NFTs and metaverse more broadly represent a durable and profitable shift for Gucci in the years to come. Incumbent luxury firms have started competing in these fast-evolving virtual environments, with Gucci being one of the first movers. As a matter of fact, in 2021 Kering's leading brand auctioned off its first NFT, sold its first-ever virtual sneakers for \$12 a pair, staged a Gucci Garden exhibition on Roblox, activated on life simulation game The Sims and released intangible products on Pokémon Go and Animal Crossing. To show its authentic interest and commitment in these second worlds, the brand has even hired a dedicated team specialised in the development of digital assets in collaboration with Gucci's creative director Alessandro Michele. For Robert Triefus that oversees Gucci's experiments in the metaverse the challenge is to understand how to create an immersive experience as in the physical world, staying true to the brand's values and what luxury consumers expect from the brand. Social media channels remain for sure one of the online realities the customers are most familiar and Gucci will continue to invest in global platforms with an effective strategy in compliance with the diverse platforms' experiences. Deepening the NFTs concept that plays a central role in the blockchain technology, cryptocurrency and gaming, the audience for NFTs constitutes an interesting market to engage with due to the recent cultural intersection between digital art and luxury fashion. The NFTs remain a niche market in this early stage of adoption and Gucci will understand in the years ahead their potential for customer experience and added value only through a test and learn approach. Even though NFTs' valuations skyrocketed last year but fell significantly later in 2022, Triefus states that "When you test and learn, you always do that with an understanding that the learnings may move you not to proceed. Is it better to test and learn or sit on the sidelines? If you ask me, it's better to test and learn". Moreover, as an essential foundation for a broader adoption, customers' learning experience about how to purchase and resell these digital assets still has a way to go. Speaking more broadly about the metaverse, Triefus argues that one of the principal learnings from this experience concerns the dynamism of the gaming world. The rationales behind the deals between Gucci and emerging players in the metaverse, like Roblox or The Sims, include branding and revenue share. The brand's pioneering expansion in the metaverse is justified by the increased brand equity based on great perceptions, but therefore by an authentic interest and financial commitment to understand how to outstand in the metaverse benefitting the brand and customers. For instance, recently Roblox gained a remarkable market capitalisation thanks to the monetisation of virtual experiences, leading 19 million customers to visit Gucci Garden in the platform.

Further considerations about Gucci's direct-to-consumer approach and experiential retail include pop-up stores, the brand's mobile app and social commerce. The first strategic move to open pop-up stores globally meant to Gucci experimenting in certain regions where the brand was absent, addressing different customer

segments better than traditional brick-and-mortar stores and raising sales. In 2019 and 2020 Gucci rolled out temporary “Gucci Pin” with different thematic waves, complying with holidays seasons, the Chinese “Year of the Mouse” and the dreamy “psychedelic”. Furthermore, every new pop-up opening was integrated with dedicated digital content. Many of the first stores opened in Middle East and Asia Pacific regions (Figure 21) due to their fast-growing and relevant sales. Target destinations also include the West with Europe, Latin America and the US. As a matter of fact, the decision to open the first ever store in Denver in the US reflects the willingness to seize an opportunity in a growing market for luxury shopping, that saw a sales slowdown during Covid’s outbreak. The Gucci Chief Executive Marco Bizzarri defined Gucci Pin pop-ups as a tool to execute the strategy of "ephemeral" shopping experiences, in combination with immersive digital activation to attract and engage even more clients.



Figure 21 The first Gucci Pin pop-up in Hong Kong. Source: Fernandez, C., (2019). Gucci Rolls Out New Pop-Up Concept. *The Business of Fashion*.

During Covid-19 crisis, Gucci has given a complete makeover to its mobile app for a convenient and fun user experience in the immersive universe of Gucci. The app includes enhanced digital features divided into 5 sections: Home displaying the brand’s news and events, Live-streaming runways, Podcasts, the novels AR try-on and Gucci Arcade. Thanks to virtual try-on, customers can play with garments and accessories, photograph them, share online and get feedbacks from the community. In March 2020 Gucci released a collection of digital sneakers designed by Alessandro Michele that consumers could buy in the app for \$11.99 and try on using Augmented Reality. In addition, these sneakers available in the Gucci Sneaker Garage can be customized by shoppers to fit their individual styles. While Gucci Arcade (Figure 22) consists in a videogaming section inspired by the game rooms of the 80s where users can entertain within the brands’ aesthetics and new collections and share their results with other users.

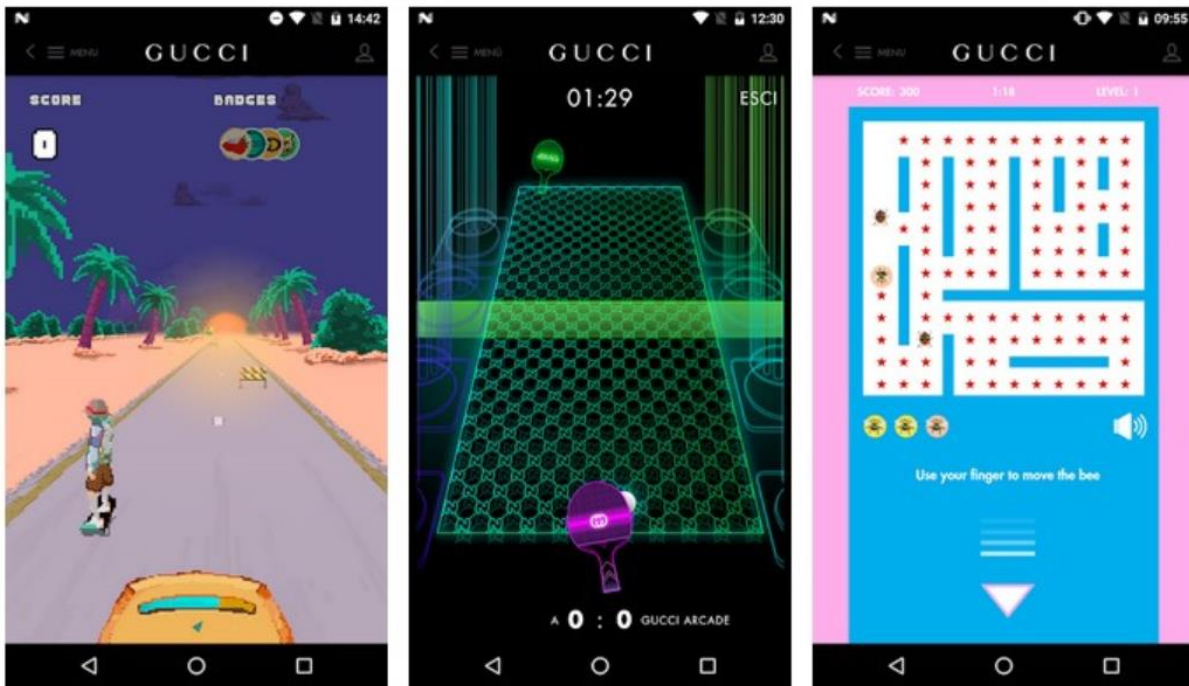


Figure 22 Gucci Arcade section on the mobile app. Source: Accademia del Lusso Magazine, (2020).
Gamification and Fashion. *Accademia del Lusso Magazine*.

Gucci maintains an active presence on Western and Eastern social media accounts. The e-commerce website signals the presence on Facebook, Twitter, Instagram, Youtube, Pinterest and LinkedIn on the one hand, and WeChat, Weibo, TikTok, Tencent Video and Little Red Book on the other hand. By consuming and creating content on social media, Gucci engages with a global community of Gen-Z and Millennials that spend more time browsing and interacting on these platforms. The success of Gucci’s social media strategy, that results in being one of the brands with the greatest engagement rate and conversions, lies on a consistent narrative across different touchpoints and collaborations. Indeed, the original, authentic and inclusive narrative of Gucci which reflects Alessandro Michele’s vision tailors different online platforms, not only social media. The firm’s sense of coherence derives from the expression of one narrative with the vision of Alessandro Michele, instead of having multiple creative directors that challenge the consistency of the message. In addition, Gucci stands for a “love brand” that inspires a global community of customers by co-creating with them, in order to truly feel part of the immersive ecosystem of the brand. Some examples of its social media strategy are the user generated campaigns and outstanding collaborations with other brands or artists, presented primarily on Instagram and then coherently also on the other social media accounts. Instagram so far represents the signature platform for Gucci in terms of traffic and engagement with currently 48,2 million followers and basic and bonus competitive features given by posts, reels and stories with hashtags, challenges, collaborations and AR effects. Two of the most recognizable user-generated content campaigns are #GucciGram and #TFWGucci (That Feeling When Gucci). The hashtag campaigns respectively consisted in inviting influencing artists and illustrators to reinvent and share on Instagram three of Gucci’s iconic patterns and the meme project to launch a new timepiece collection by encouraging followers to

create their own memes with Gucci products and witty texts. In refer to collaborations, the most recognizable and engaging are represented by The North Face x Gucci collection and The Beloved Show. The collaboration between Gucci and The North Face (Figure 23), an outerwear brand, celebrates exploration, eco-sustainability and 70s nostalgia in ready-to-wear, accessories, footwear and specific camping equipment like tents and sleeping bags, realized with sustainable materials and packaging. The social media campaign on Instagram has been integrated with an advertising campaign displayed on Youtube and the e-commerce website, special content created for TikTok, and communicated offline via dedicated Gucci Artwalls. Starting from China, the collection has been distributed in stores, Gucci Pin pop-ups and exclusively on Gucci's website for some products.

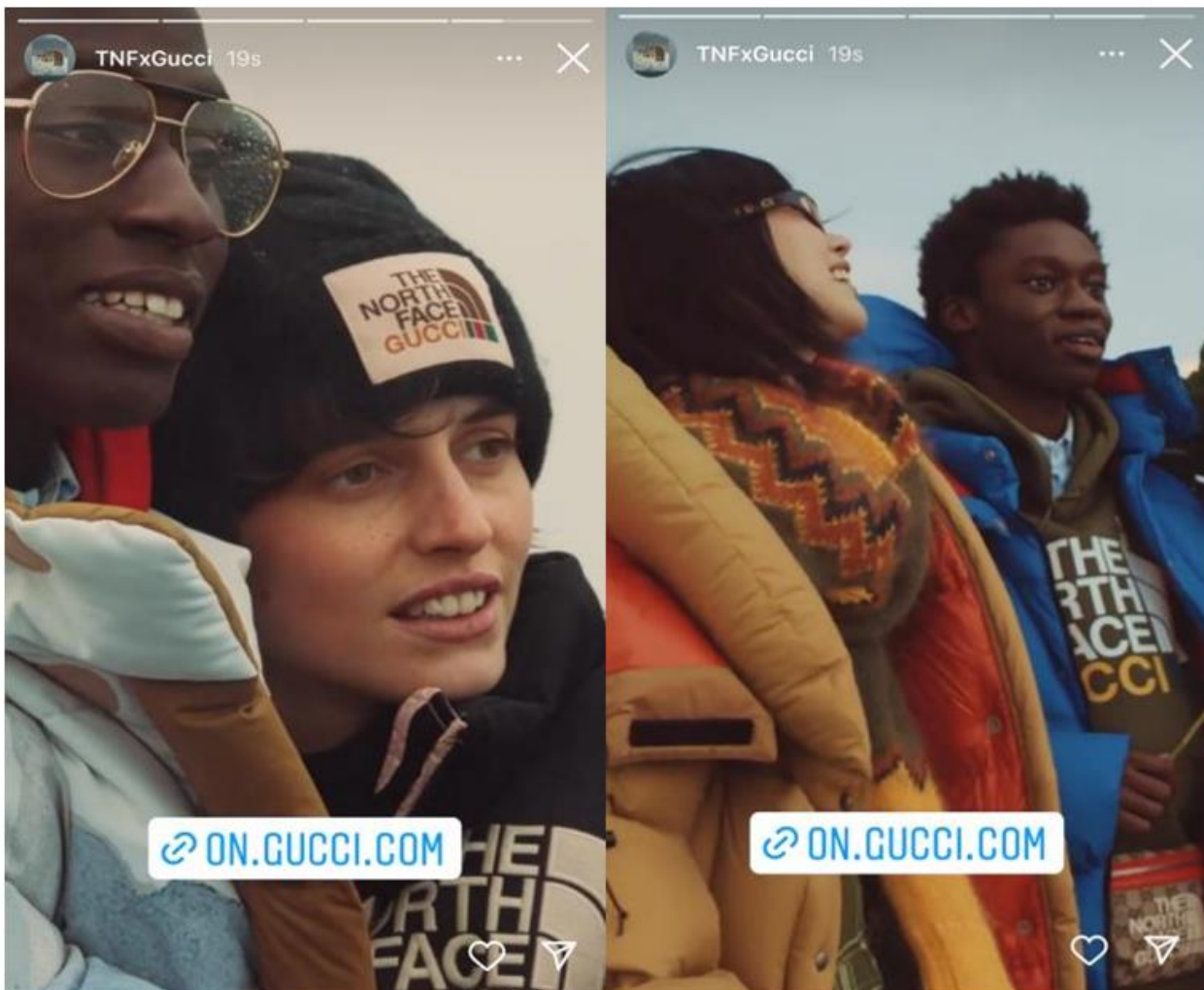


Figure 23 The North Face x Gucci collection promoted on Instagram's stories with the link to the e-commerce website. Source: Gucci's Instagram account.

Differently, the Beloved campaign (Figure 24) consists in a fictional and scripted talk show hosted by James Corden with Gucci-outfitted guests, including Serena Williams and Harry Styles. The advertising campaign dedicated to the House's signature handbag lines puts the Beloved collection Handbags in a new interactive way that goes beyond a traditional social media campaign.



Figure 24 Gucci Beloved campaign featuring host James Corden and guest Serena Williams. Source: Booker, A. (2021). Social Media Isn't the Future of Digital Luxury Marketing. *Jing Daily*.

Deepening the digital strategy for Chinese channels, Gucci has a dedicated team creating specific contents for local social media platforms, the most important of which is WeChat. Gucci was an early WeChat adopter, translating the account from subscription to service with the purpose of connecting it with other online channels to increase visibility and social commerce (Figure25). Since Chinese new generations particularly enjoy elements such as emojis and animations, Gucci is embedding more of these contents. For instance, to mark the Chinese Year of the Dog, Gucci showcased a Mini-Program featuring two dog animojis responding to facial recognition. Moreover, Gucci recently rollout WeChat a collaboration with Japanese manga character Doraemon for the Year of the Ox, which proved to be a hit in China for nostalgic branding, word-of-mouth marketing and online and offline sales.

WELCOME TO THE OFFICIAL GUCCI WECHAT ACCOUNT

Open WeChat, Click "+" in the upper right corner, select "Add Contacts", search "Gucciofficial", and click on "Follow". Or scan the following QR code directly, and click "Follow".

[Read More](#)



Figure 25 WeChat's QR code displayed on Gucci's website. Source: Gucci's e-commerce website.

To engage a younger and more diversified demographic, Gucci also adapted the Chinese e-commerce livestreaming model globally with the unveil of the Epilogue collection and Gucci Live. The Epilogue collection (Figure 26), presented in a twelve-hour live stream in 2020, resulted in a further Alessandro Michele's experiment to reverse traditional fashion rules and perspectives by showing the backstage of a fashion ad, and drew an audience of more than 16 million on Weibo. On the other hand, Gucci Live (Figure 27) aims to recreate the experience of in-store shopping via a personalised live video shopping hosted by the client advisor Valentina. Operating out of the Florence service centre, Valentina provides a new remote clienteling, the first of its kind in the luxury sector.



Figure 26 Gucci Epilogue. Source: Gucci's e-commerce website.

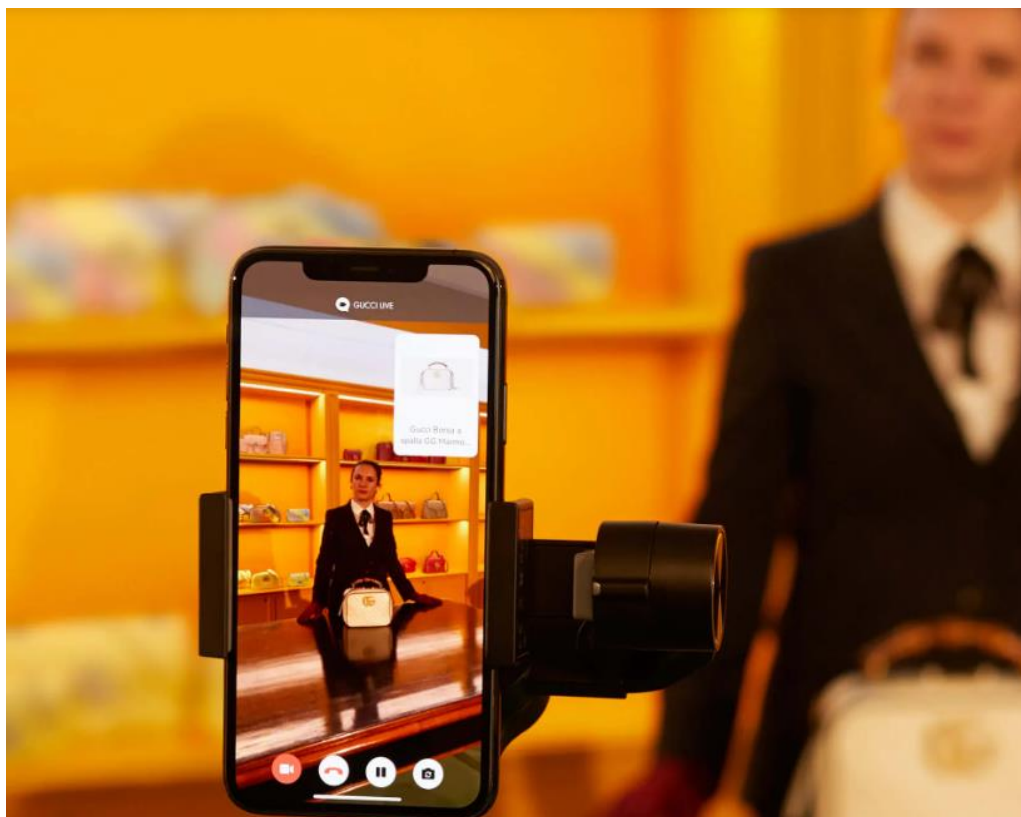


Figure 27 Gucci Live. Source: Gucci's e-commerce website.

Another remarkable achievement of Gucci's test and learn approach is the investment in the Gucci ArtLab (Figure 28), a 37,000-square-metre innovation hub of creativity, craftsmanship and sustainable innovation. According to Gucci CEO Marco Bizzarri, Gucci ArtLab expresses the brand's culture of optimising the sharing of expertise and best practices. Staffed with a workforce of 800 people, the hub plays a central role

in product development and lab testing for new materials, metal hardware and packaging, with in-house prototyping and sampling activity for leather goods and footwear. Thanks to its innovative processes, the supply chain is integrated in all aspects, helping meet the high demand for Gucci's items.



Figure 28 Gucci ArtLab. Source: Hayford, A.C., (2018). Gucci Unveils A Centre Of Creativity, Craftsmanship & Sustainability. *Vogue Business*.

Gucci has been an early mover in the experimentation with multiple NFT drops, virtual real estate and an internal metaverse team. Much of the excitement around gaming and crypto fashion is directed towards NFTs, which registered a significant market performance in 2021. A truly demonstration of the Maison's commitment to art and digital culture is represented by Gucci's first NFT titled "Proof of Sovereignty" (Figure 29). The digital looped one-minute video directed by Alessandro Michele and Flavia Sigismondi and inspired by the Aria campaign constitutes a unique asset that cannot be altered, replaced, or duplicated. The digital art film was auctioned by Christie's for \$25k and all proceeds were donated to UNICEF USA to support equal access to COVID-19 vaccines.

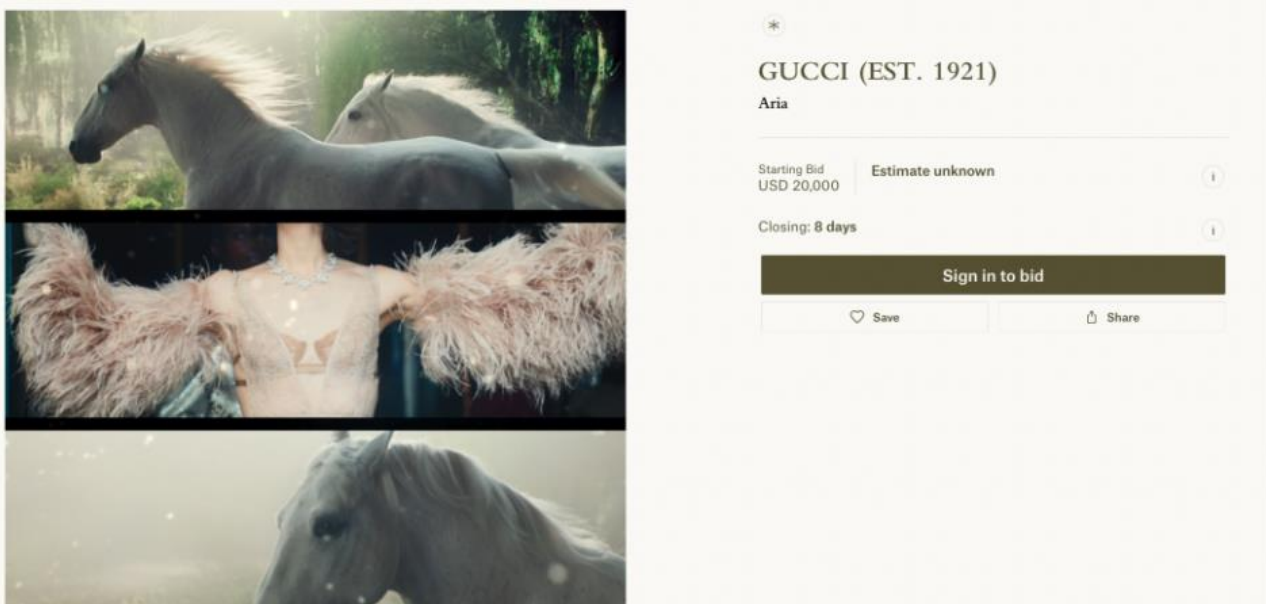


Figure 29 Gucci’s NFT video “Proof of Sovereignty”. Source: Li, J., (2021). Gucci Launches First NFT, a Film Inspired by Recent Aria Collection. *Hypebeast*.

As regards metaverse mindset, in many cases engagement has taken the form of collaborations with gaming companies to design virtual items. For instance, Gucci released digital assets for the gaming interfaces the Sims, Zepeto and Roblox. In October 2020 the Sims’ avatars were Gucci-outfitted with the sustainable collection Off the Grid. While Gucci collaborated with Zepeto, a South Korean social media app specialised in the creation of 3D digital characters, in the realisation of the interactive space Gucci Villa where avatars dressed in Gucci’s last ready-to-wear collections can interact. The profitable collaboration yielded \$150 million. Furthermore, in 2021 the brand partnered with Roblox to bring the Gucci Garden exhibition to the metaverse. The Gucci Garden in Florence immerses customers in a store with exclusive merchandise, in combination with a museum and a restaurant headed by three-Michelin-star chef Massimo Bottura. On Roblox the Gucci Garden Experience (Figure 30) aims to build brand awareness among young audiences via a virtual store where visitors can purchase Gucci’s limited-edition virtual items for their avatars. The experiment resulted in a virtual-only digital twin of a Gucci purse – the Dyonisus Bag – sold for a higher price than its real-world counterpart. However, these virtual items are only usable within Roblox, and unlike NFTs, they don’t have any value outside the platform.

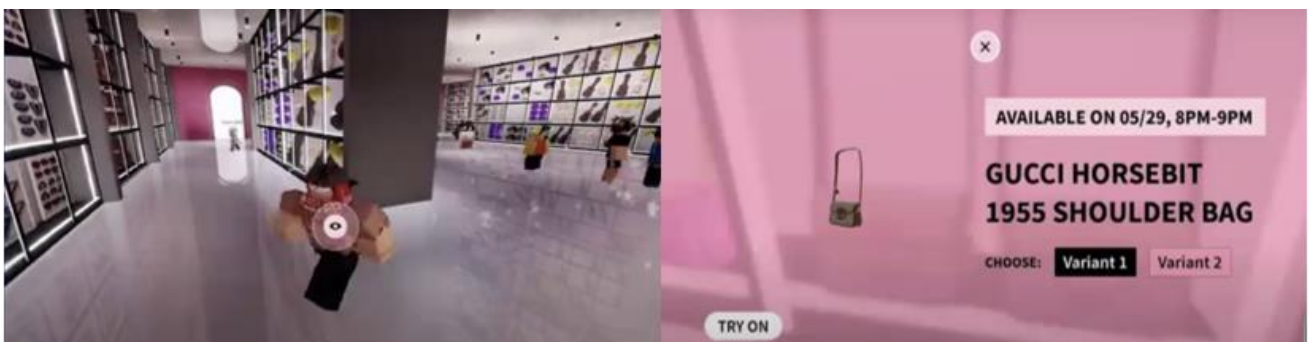


Figure 30 The Gucci Garden Experience. Source: Roblox’s Gucci Garden Experience.

Data analysis

The firm Gucci developed a direct-to-consumer strategy to reply to digitally native vertical brands and readapt its business model by building digital technologies and capabilities inspired to the best practices of DNVBs and enhancing its strengths in storytelling, direct sales and social media. For the moment none of the digital born companies have poised any serious competition to Gucci, but, as Gregory Boutté revealed in the interview, they represent a threat to consider. The strategy aims giving to the company control over customer experience through proprietary technological tools, its own digital platforms and virtual concessions, personalization via data exchange and customer insights and speed in adapting to sustainable and digital expectations from Gen-Z. In addition, Gucci's technology upgrade investments leverage on AI for better inventory management and to reinvent the network of physical stores. To follow the direct-to-consumer approach, Gucci experimented direct operated sales channels, like mobile app, livestreaming, social media platforms, pop-ups and in-store technologies. First, Gucci's mobile app provides an integrate and immersive experience in the brand's universe for the most loyal younger audience ultra-connected and looking for entertainment, leading to positive sales effects. Gucci experimented in the app with innovative digital features, such as AR try-on and Gucci Arcade, to combine technology with branding and a personalized and integrated shopping experience. Indeed, thanks to the virtual try-on, customers play with items and share their photographs with the community, reaching more visibility and engagement. While Gucci Arcade gaming section enables users to learn and discover more about the brand's aesthetics, nostalgic worlds and new collections. Moreover, virtual sneakers are available in the Gucci Sneaker Garage, a section where customers can customize their footwear to fit their individual styles and enables Gucci to understand and anticipate their needs. In refer to livestreaming, Gucci adapted the Chinese model with an effective communication and consistent contents in different channels, from Chinese social media platforms to Youtube and e-commerce website. Indeed, the Epilogue collection released in 2020 and transmitted in Chinese and Western social media platform consists in an untraditional twelve-hour live streaming session about the backstage of a fashion ad. Differently, Gucci Live represents a digital functionality available on the brand's website which replicates the experience of in-store shopping via a personalised live video shopping hosted by a sales associate. Gucci Live provides the first distance sales in the luxury market where the client advisor shows the items selected by the customer and even close the sale conveniently. Operating from Florence service centre, this remote clienteling provides a phygital experience integrated with back-end tech innovations that led to positive feedbacks from customers and conversions. Another notable Gucci's initiative implemented with rapid speed and large scale is represented by its continuous digital innovations in social media marketing. Maintaining an active presence on Western and Eastern social media accounts, the brand constantly experiments to collect, use and monetize data for an integrated and customised experience across different touchpoints. The success of the smart and target localized social media strategy of Gucci derives from a consistent narrative and relevant collaborations with artists and celebrities. Indeed, Gucci's

social media content effectively communicate authentic, original and inclusive stories with high degree of sophistication and inspired to Alessandro Michele's vision, resulting in a stronger emotional engagement. However, digital efficiency and relevancy online and offline require huge investments that are leveraged by Gucci thanks to its existing capital. The firm's social media strategy involves a direct-to-consumer approach that focuses on co-creation capacities shown in user-generated contents. For instance, two relevant hashtags campaigns on Instagram – #GucciGram and #TFWGucci – converted customers in brand ambassadors. The contents of both user-generated campaigns tailor to the language of Instagram, considered the Western signature platform for the brand which includes digital features providing a bonus competitive advantage, such as AR effects and Gucci Instagram shop. Indeed, the launch of the project #TFWGucci (That Feeling When Gucci) leverages on “meme marketing” which consists in younger audiences' new way of expressing on social media. The digital advertising strategy of the Maison includes other traditional and untraditional campaigns. The recognizable collaboration between the brands Gucci and The North Face reinforces the seamless customer journey via an integrated communication on Instagram, Youtube, TikTok, the e-commerce website and even offline on Gucci Artwalls and Gucci Pin pop-ups stores in China. On the other hand, Gucci's Beloved Show surprised customers and led to increased sales of Beloved collection Handbags, thanks to an unconventional digital advertising campaign. The fictional and scripted talk show featuring celebrities totally dressed in Gucci recreates a friendly and informal atmosphere which engages and inspires existing and new customer base. Chinese social media platforms represent for Gucci an opportunity rather than a risk by which the brand has responded redefining the organizational structure with a dedicated team that creates specific contents for local social media channels. Gucci was an early WeChat adopter and nowadays the Chinese platform represents the most profitable one for the brand within the Eastern digital ecosystem. Gucci's WeChat strategy combines relevant emojis and animations with digital features, such as facial recognition, leading to increased trust, loyalty and sales online and offline. The challenge identified by Grégory Boutté in the interview about reinventing the role of stores has been addressed by Gucci through investments in pop-up stores format and in-store technologies to create interactive and multisensory experiences. The experimentation via the massive use of cross-channel features responds to the need to adapt to the growing demand for newness from ultra-connected luxury consumers, collect data via connected retail to offer personalised solutions and a superior customer service, and, as a consequence, to sustainable development and inventory management. The strategic decision to open global pop-up stores, as the Gucci Pin pop-up stores targeted in Middle East, Asia Pacific, Europe, Latin America and US regions, feeds the growing demand of different young demographics better than traditional brick-and-mortar stores by combining storytelling capabilities, high-touch customer service and digital contents. Apart from digital upgrade investments, Gucci's pop-up stores are co-created with artists that engage consumers and build an immersive environment through installations that reflect Alessandro Michele's vision. Agreed that physical stores continue to play a central role in the communication strategy of Gucci, nowadays they include additional omnichannel features and act as a vehicle to inform consumers about sustainability practices. The

BOPUS (buy online and collect in store), booking online in-store appointments, distance sales via Gucci Live, in store RFID tags and the proprietary app for sales associates Gucci Luce are few examples of the omnichannel capabilities implemented by the brand in the new era of digitalisation. Instead of investing in brick-and mortar IT already deployed by luxury competitors, such as connected mirrors, Gucci focused on back-end tech innovations. For instance, the app Gucci Luce developed in partnership with Apple aims to optimize the performance of sales associates. Gucci Luce constitutes an AI-powered sales forecasting tool that enables sales associates to check stocks in real time for inventory management, access to customers' purchase history and do clienteling for a fast and customized shopping experience. By using RFID tags and the proprietary app, Gucci introduced algorithms leveraging on AI to forecast sales for new products, with a positive effect on brand equity. According to Boutté, the conglomerate aspires to zero-inventory to not hold stocks and is experimenting pre-order model, relevant for the sustainable development, but excludes on-demand production because part of the experiential retail consists in trying the product in store and then having it immediately.

One of the keys enables of Gucci's experimentation to foster innovation and product development is represented by the investment in the innovation hub Gucci ArtLab. The futuristic centre blends artistic experimentation from designers with innovative production processes at a higher speed than luxury competitors and disruptors. Via the activities of in-house prototyping and sampling for leather goods and footwear, Gucci ArtLab meets the high demand for fast and unique drops from younger generations while redefining the resources and capabilities to have an integrated supply chain. Indeed, Gucci ArtLab plays a central role in the optimisation of the brand's research and development capabilities, collaboration and knowledge sharing to reduce the lead time. Having product development and lab testing for new materials centralized in the internal innovation hub is also a matter of control of the production process and customer journey.

To stay ahead of competitors and digitally native vertical brands, Gucci has been one of the first movers to seize the opportunity to invest in NFTs and metaverse more broadly. Differently from other luxury brands, such as Louis Vuitton, the brand adopts a test and learn approach to understand in the coming years the potential of virtual realities to offer a profitable and differentiated route to creativity, community-building and commerce. The experimentation in second worlds requires Gucci to leverage on the existing capital, since massive investments are needed to create unique digital assets and digital efficiency. Apart from the financial commitment, the metaverse strategy focuses on a new agile operating model based on the collaboration between a metaverse's dedicated team and Alessandro Michele to elaborate the new communication and branding. Much of the excitement around NFTs, which registered a significative market performance in 2021, derives from Gucci's "Proof of Sovereignty". The digital art film revealed a profitable opportunity to engage the new audience of crypto enthusiasts with an authentic, unique and exclusive content that cannot be replicated. Other Gucci's metaverse initiatives involve the collaboration among the

brand and gaming firms to design virtual items. The main motives behind these deals include branding and revenue share. Indeed, gaming collaborations give the chance to create parallel streams of revenues thanks to capsule collections showcased first in a game and then released in real life. In addition, these partnerships enable Gucci to reinforce its commitment towards sustainability via the try on of these virtual garments and the production of limited pieces thanks to the feedbacks of the community of gamers. The partnerships with the gaming interfaces the Sims, Zepeto and Roblox enable Gucci to have early insights into experiential 3D and 4D technologies and ecosystems, design limited collections for avatars interacting with the brand and each other in the community, shop virtual items in the single platform in in-game currency and create unreal real estate spaces to raise brand engagement. Specifically, the realisation of virtual events and store, as Gucci Villa in Zepeto and Gucci Garden in Roblox, allow avatars to meet and shop Gucci's limited-edition virtual items even at a superior price to real homologue. Online virtual stores are valuable since they allow visitors to save time by shopping in realistic-looking store without having to visit a physical store, learn and discover existing and new products and get inspired by immersive realities. To conclude, the availability of increasingly sophisticated e-commerce ecosystems and partnerships allows Gucci to keep the control over the brand's E2E e-commerce transaction, own the customer data and sell physical products. This results in Gucci growing its e-commerce business and direct sales.

2.4 Results

The findings of data analysis of Louis Vuitton and Gucci's case studies support the propositions presented in the theoretical frameworks of the literature review. Focusing first on Louis Vuitton and then on Gucci companies, both samples required business model adaption to comply with disruptive digital born companies and related challenges of meeting fast rising expectations from Gen-Z and Millennials, digitalization, sustainable consumption and inventory management. In this context, Gucci and Louis Vuitton were asked to shift their value proposition and operating model to gain access to existing or novel resources and competences. From the interplay between incumbent luxury firms and digitally native vertical brands emerges that none of new entrants represent a serious competition for incumbent luxury brands, since they only inspire to the attributes of luxury and leverage on a small scale with a niche strategy. However, they are certainly considered by established luxury firms a threat to which respond promptly by fostering innovation to adapt and exploit new market opportunities. The qualitative analysis of Louis Vuitton and Gucci based on the combination of interviews and archival data draws to several findings related to theoretical frameworks presented in the literature review. First, both companies address the trade-off between enhancing existing resources and capabilities and building new digital ones in compliance with the frameworks of adaption. Secondly, the redefinition of structures and multiple strategies of incumbent luxury firms for business model adaption is articulated according to the resources and capabilities to mobilise to reach superior returns over disruptors. Last, from the data analysis emerges that the leading luxury companies promote innovative initiatives and meet huge customer demand for novelty by mixing internal and external research. Thus, none

of the defensive strategies of alliance and acquisitions on the one hand and stand-alone experimentation on the other hand prevails over the other, since Louis Vuitton and Gucci adopt the different strategies to access required assets and competences. In refer to the enhanced resources and capabilities to speed up the adaption process, the innovative traditional firms strengthen storytelling, direct sales in retail network, capital, social media marketing and managerial commitment in internal research. Storytelling capabilities are leveraged respectively in the Aura Blockchain for Louis Vuitton and in-store and in directly operated sales channels for both companies. Indeed, thanks to the scan of Louis Vuitton's items, Aura Blockchain Consortium enables customers to retrieve information about the origins and materials, which is valuable for clients because it builds trust, loyalty and transparency around the brand's processes and communication. Given the importance of physical stores in distribution and communication strategy of brands, despite the emergence of e-commerce business, Louis Vuitton and Gucci immerse consumers in the brand's culture through self-centred stories, legacy and new products displayed in interactive windows, and retail's design. In addition, online sales channels, including e-commerce website and social media platforms, constitute a fundamental vehicle to communicate effectively and consistently the narrative of the brands via digital assets, such as images, videos and reviews, that create a stronger emotional engagement with ultra-connected customers. In order to differentiate and remain competitive, Louis Vuitton and Gucci continue enhancing their store competences in visual merchandising techniques, sales associates' expertise, design and storytelling, leading to increased sales. Then, the polarisation of Louis Vuitton and Gucci and small new entrants derives from the capital required to seize new market opportunities. The capacity to ramp-up activities quickly in social media channels, metaverse and offline with sizable levels of investment of money and effort constitutes a distinctive dynamic capability. To have a relevant social media strategy across different platforms and implement disruptive technologies (AR/VR, robotics and advanced analytics) in the metaverse and real world, the two leading players are required to invest massively in innovative initiatives, also hiring new skilled talents. Certainly, Louis Vuitton and Gucci exploit traditional capabilities for their social media strategy by interacting with a global community of fans via likes, comments and reviews to drive conversions and creating social campaigns in collaboration with celebrities and artists or users that become brand ambassadors. These traditional social media techniques are reinforced with the integration of digital features, such as virtual try-on and livestreaming, to increase and differentiate the customers' base, drive virality and sales. The managerial commitment of the established players overcomes the barrier to adaption of assimilation and reconfiguration of resources. The creation of independent business-units to address the challenges of data collection and analysis, fast response to emerging needs and sustainable consumption constitutes a relevant example of their strong commitment, reflecting the cognitive approach of managers and top executives in guiding the firms towards disruption and overcoming all the barriers that limit adaption. Apart from enhancing existing distinctive assets and competences, Louis Vuitton and Gucci have embraced quickly more of the new capabilities of attackers to outperform in the digital age. The new set of competences acquired by luxury incumbents include digital, e-commerce, track and trace, direct-to-

consumer, speed and omnichannel capabilities. The new digital features implemented by Louis Vuitton and Gucci include try-on of garments and AI-powered sales forecasting tools respectively in gaming platforms, mobile app for customers and Gucci Luce app for sales associates. The developed digital capabilities inspired to the best practices of DNVBs enable both firms to collect and use data to understand and anticipate customers' need, making shopping experience controlled and personalised. The two established players introduced also new e-commerce features for remote clienteling and fast transactions. To mention some illustrations, Louis Vuitton and Gucci implemented on their e-commerce websites and partner e-commerce platforms chatbot, checkout buttons and live video shopping. In refer to track and trace capabilities, Louis Vuitton's participation in the global luxury blockchain Aura allows the brand to authenticate items by assigning a unique digital identity via QR codes and RFID tags to drive efficiency and control. Then, Louis Vuitton and Gucci have strengthened their position in booming direct-to-consumer market through the acquisition of customer-centric and co-creation expertise in social media platforms, mobile apps and gaming platforms. Limited collections launched first on gaming interfaces and then sold in stores, the possibility for customers to customize virtual footwear in the Gucci Sneaker Garage section of the mobile app and Gucci's user-generated campaigns enable the acquisition and integration of customer feedbacks within the firm to seize an opportunity. Louis Vuitton and Gucci's capacity to respond fast in combination with a flexible mindset to transform or reconfigure assets represent another distinctive capability. Business acceleration programs, corporate incubators and innovation hubs enable knowledge sharing and collaboration with speed, while reconfiguration of the organizational structures through specialized teams operating for metaverse and Chinese social media platforms show the companies' effort and continuous adaptation to new consumer needs. Last, traditional firms' strategic move to merge online and offline channels has required new competences and talents to allow customers to interact seamlessly across multiple touchpoints. Third-party platforms redirecting to owned social accounts or e-commerce website, capsule collections released first in a game and then sold in real life and in-store technologies such as, BOPUS, booking online in-store appointments, 121 video shopping, QR codes, RFID tags, smart fitting rooms and memory mirrors, are just some applications of omnichannel strategy to create parallel streams of revenues and controlled end-to-end experience. According to the resources and capabilities to build or buy, Louis Vuitton and Gucci have promptly reinvented their strategies. The established firms partnered with innovative start-ups and allied with technology companies to protect from disruptors' excellent capability of adapting to customer trends by addressing existing customers and expand into younger and Chinese demographics. In addition, deals helped luxury incumbents to share, co-develop and learn digital, track and trace and e-commerce capabilities. Louis Vuitton benefitted from the acquisition of these capabilities via the partnerships and alliances with the Aura Blockchain Consortium, the e-commerce platform JD.com and gaming firm Riot Games for the League of Legends game. While Gucci gained access to these necessary assets and competences through the partnership with Apple for the development of Luce App and collaborations with gaming interfaces Roblox, Zepeto and The Sims. Alternatively, the companies' choice to

internalize research via experimentation leverages on their strong distinctive capabilities of scale, storytelling, retail network, social media marketing and commitment, in combination with flexibility, speed, omnichannel and DTC capabilities. Louis Vuitton and Gucci imitated digitally native vertical brands by setting up in-house corporate incubators, accelerators and innovative hubs to test and learn effectively from disruptive business models and initiatives but keeping them separate from the core business to avoid conflicts. Viva Tech Lab, la Maison des Startups LVMH at the incubator Station F, the open innovation platform DARE and the contest LVMH Innovation Award on the one hand and the Gucci ArtLab on the other hands consist in innovation centres to absorb or adapt disruptive assets, ideas and practices, learn quickly and integrate the supply chain in a controlled environment. The heritage maisons further imitate the first movers' digital strategy by exploring online sales channels and new store formats and locations via Western and Eastern social media accounts, livestreaming, mobile app, pop-ups and cafes. In doing so, traditional players have implemented a direct-to-consumer strategy drawing on new speed, co-creation, e-commerce and omnichannel capabilities and existing expertise in retail, storytelling and social media marketing to target younger generations, control customer experience via data collection and analysis, have better inventory management and sustainable consumption. Due to the fragmentation and saturation of the market, instead of merely adopting or imitating DTC business model, Louis Vuitton and Gucci seized the opportunity to invest in NFTs and metaverse. While Gucci was a first mover, Louis Vuitton adopted a wait-and-see approach, but both legacy firms experimented with crypto fashion and metaverse. Through the release of NFTs and collaborations with gaming companies, they aimed to combine technology, entertainment and branding in a controlled proprietary environment, such as the website or mobile app, with speed and scale. Agreed that in the era of digitalisation first movers and fast followers gain a huge advantage over competitors and the leading innovators combine internal and external research to build, buy or invest in needed assets and competences, Louis Vuitton and Gucci adapted their business model mainly through the strategies of experimentation and alliances rather than acquisitions. Clarified that the strategic decisions are driven by the reconfiguration of resources and capabilities, alliance and experimentation provide more cautious approaches towards disruption in a turbulent environment than acquisitions. Indeed, acquisition carry more disadvantages than advantages for incumbent luxury firms in the process of adaption to a more digital and direct-to-consumer business model similar to the one of digital born players. Even though Louis Vuitton and Gucci could have acquired technology start-ups and established firms because of the motives of exclusivity, faster timing and closeness to the partner, technology-based acquisition present key challenges. The inexistence of shared assets and competencies and cultural and professional clashes may hinder the integration of the acquired firm with a risk for growth synergies. In addition, technology-based acquisitions require huge upfront investment for high but uncertain outcomes driven by uncertainty on novel technologies and luxury consumer trends. To conclude, luxury incumbents and digitally native vertical brands can learn from each other through experimentation and alliances. Due to their origins and infrastructure, DNVBs can address better the market trends of meeting customer demand fast, digitalisation,

sustainability, and inventory management, however they lack the incumbents' strong distinctive capabilities of capital, storytelling and retail distribution networks. Differently, Louis Vuitton and Gucci are relatively effective in establishing competitive advantages to appropriate value from innovations but are characterized by resource rigidity and legacy business model to catch up new opportunities and change accordingly.

Chapter 3 – Discussion

The research examines the process of heterogeneous business model adaptation of incumbent luxury firms to respond to the disruptive business model of digitally native vertical brands. Specifically, the research investigates the winning strategies adopted by incumbent luxury companies to respond to the new digital and direct-to-consumer business model of new entrants. Digital attackers threaten traditional luxury players by challenging the status quo of current business models via their specific value creation and value capture models and addressing better the market trends of meeting unpredictable customer demand, digitalisation, sustainability and inventory management. Incumbents are asked to enhance their existing capabilities and build new competences inspiring to the best practices of DNVBs to remain competitive and exploit new market opportunities. Thus, according to shifting resources and capabilities, established players should adopt the three different strategies of alliances, acquisition and experimentation to outcompete. The literature review about disruptive innovation, frameworks of business model adaptation and build or buy strategies, has been tested and validated in the luxury industry through the qualitative analysis of the incumbent luxury companies Louis Vuitton and Gucci. The methodology draws on text and video-based interviews to managers and executive figures of the leading companies, since they address the strategies of the firms and have a holistic cross-functional organizational overview, supported by archival data including business press articles, proprietary materials and external publications. From the exploratory analysis of the secondary sources results that both companies leverage on existing assets and competences, such as capital, physical stores and storytelling, to experiment via in-house business-units and online sales channels with an imitative approach, as stated in the theory, or differentiate with investments in virtual realities justified by branding and market share. On the other hand, heritage maisons establish partnerships and alliances with innovative start-ups and technology companies to access new technology they lack and discover, learn and integrate in the firm new strategic assets, gaining efficiency. However, contrary to the proposition emerged from the literature review, the strategic move of acquisition is currently neglected by established luxury players in responding and adapting to DNVBs' business model. Indeed, technology-based acquisitions present key challenges that are risky in such a turbulent environment, in terms of shared assets and competences, cultural and organizational conflicts and huge investment for uncertain returns depending on digital technologies and luxury consumers' demand. To sum up, experimentation and alliances represent the main sources of learning for both corporate incumbents and digital born start-ups.

The findings of the work make practical and theoretical contributions to the literature of the core research area and the adjacent field of retail. First, the findings add value to the theory of business model innovations in the luxury industry and the frameworks of the resources and capabilities to enhance, build or invest, which have received limited attention. Despite the importance of the topic and strategy literature recently posing attention on the theory of disruption and business models, we still only have limited empirical evidence about how firms adapt their models and how they implement this modification in the face of disruptive innovations. To be more specific, academics given limited attention to the dynamic outlook of the barriers to luxury incumbents' adaption and how to overcome these barriers to frame the research on the adaption of established players. Secondly, even though the study focuses on the luxury sector, its findings can be applied to other retail industries, as any retail sector face the same challenges of meeting new consumer expectations, digitalisation, commitment towards sustainability and inventory management.

In spite of the managerial contributions, the study presents some limitations. Given the exploratory nature of the work, the anecdotal evidence provided in the research are only some of the possible strategic responses of incumbent firms to newcomers. Precisely, the research question about the winning strategies adopted by traditional luxury retailers for business model adaption is answered only through the secondary data of interviews and archival data. Since the work is driven by a qualitative methodology, the aim of the analysis is pursued through "what and how happened" in refer to assets and competences enhanced and developed in reinventing the strategies and structure to accomplish with the changes of luxury market. The research does not examine "the extent" to which the multiple strategies impact on the company performance and the timing of business model adaption. Incumbents manage the risk associated to the uncertainty of possible outcomes depending on the level of investment and effort in corporate but also competitive strategies. The work goes beyond the assessment of the adjustment costs related to the sharing and the conflict among resources across business models impacting the firm's value.

According to the limitations emerged from the empirical study, future research could deepen the theoretical dimensions identified by empirically testing their validity with primary sources that assess the impact of these strategies on the luxury businesses. Academics may pose attention on quantitative data related to the level of investment and managerial effort in assets, competences, and strategies over time. Following a quantitative approach, future research could use primary data from surveys or interviews in the luxury market to explore and measure the issues. The integration of primary and secondary data may provide a more complete and cross-validated analysis of incumbents' strategic responses to new entrants. For instance, acquisition could turn to be a winning strategy for luxury corporates through the assessment of the upfront investment, outcomes and faster timing of technology-based acquisitions. Therefore, researchers should complement interviews and archival data with the analysis of multiple performance indicators, such as sales revenues, profits and return on investments.

Conclusions

The research explores how incumbent luxury firms heterogeneously adapt their business model to respond to the threat of digitally native vertical brands. In the fragmented and competitive luxury market, DNVBs threaten established players due to their new way of creating and capturing value. Given their origins and infrastructure based on a digital and direct-to-consumer business model, newcomers address better the challenges of meeting fast customer demand, digitalisation, sustainable consumption and inventory management. Therefore, business model changes depend on various types of emerging digital technologies and the resources and capabilities to mobilise to face the disruption. According to the frameworks of incumbents' adaption, established companies should enhance their existing assets and competences or build digital expertise by imitating the direct-to-consumer approach. The choice about how to access required resources and capabilities depends on the drivers of ability and motivation. Defined the resources and capabilities to mobilise, incumbents are asked to redefine their strategies and structures to defend or counter-attack disruptive start-ups. On the one hand, incumbent firms build or invest in new disruptors' excellent capabilities, such as adapting to customer trends with speed, via the strategic moves of alliances and acquisitions. Alternatively, incumbents counter-attack new comers leveraging their strong distinctive capabilities of capital, scale, knowledge and experience to experiment new ways to foster innovation and product development. The theory of disruptive innovation, business models, frameworks of adaption and multiple strategies have been tested in the luxury industry through a qualitative analysis of the leading players Louis Vuitton and Gucci. The qualitative approach draws on secondary data from interviews conducted by third parties targeting managers and executives of both firms and their conglomerates in combination with archival data about digital acceleration, the response to disruptors and the strategic decisions to face the key challenges of luxury. The study reveals that both key players innovate mixing internal and external research to access existing or new required assets and competences. Therefore, the research supports the propositions that successful firms adopt the strategies of alliances and experimentation in the process of business model adaption and companies that embrace quickly more of the best practices of DNVBs are expected to maintain their leading positions and spot new market opportunities. Precisely, incumbent luxury players and digitally native vertical brands can learn from each other, since traditional players effectively establish huge advantages but are characterized by a business model resistant to spot and adapt to new business opportunities, while start-ups are innovative but lack the resources and capabilities to capture value from the innovations. However, the strategy of acquisition to respond to new entrants theorized in the literature review has not been implemented by Louis Vuitton and Gucci. Indeed, the acquisition of technology companies is considered riskier than alliance and experimentation in such a turbulent context. Despite the practical and theoretical contributions of the findings of the study to business model innovations and resources and capabilities' frameworks in luxury industry and other retail sectors, the work presents some limitations. The empirical results of the thesis, exploratory in its methodological

approach, focuses only on secondary data without measuring the timing, the level of investment and effort required for each strategy. The current research demonstrates only some of the possible strategic responses of incumbent luxury firms to digitally native vertical brands. Therefore, academics may further future research with the combination of qualitative and quantitative analysis.

Bibliography

Abnett, K. (2016). Scaling Sézane, France's First Online Fashion Brand. *The Business of Fashion*.

Abrams, M. (2020). Why luxury fashion houses still open restaurants. *Vogue Business*.

Achim, A. L. (2020). Will Luxury Players Embrace China's D2C Revolution? *Jing Daily*.

Achim, A.L. (2021). These Western Brands Are Winning China's Local Markets. *Jing Daily*.

Achim, A.L. (2021). What Luxury's Next Big Market Wants. *Jing Daily*.

Amed, I., Balchandani, A., Beltrami, M., Hedrich, S. & Rölken, F. (2019). Self-disruption in the fashion industry. *McKinsey & Company*.

Aura Blockchain Consortium Press release. (2021). LVMH, Prada Group and Cartier come together to form the Aura Blockchain Consortium supporting the first global blockchain dedicated to the luxury industry. *Aura Blockchain Consortium*.

Balchandani, A. & Berg, A. (2021). The postpandemic state of fashion. *McKinsey & Company*.

Bell, D.R., Gallino, S. & Moreno, A. (2018). The Store Is Dead - Long Live the Store. *Harvard Business Review*.

Biondi, A. (2021). Louis Vuitton joins China's JD.com amid online luxury battle. *Vogue Business*.

Bloomerg. (2019). Louis Vuitton Partners With Riot Games for E-Sports Tournament. *The Business of Fashion*.

Bodley, D., Liedtke, A. & Tekin, P. (2021). Even Big Brands Need a Direct-to-Consumer Strategy. *Boston Consulting Group*.

Booker, A. (2021). Social Media Isn't the Future of Digital Luxury Marketing. *Jing Daily*.

Broitman, A, Hunter, E & Schmidt, J. (2021). Digitally native brands: Born digital, but ready to take on the world. *McKinsey & Company*.

Calluso, C. (2021). Organizational Design Course. *Luiss Guido Carli*.

Christensen, C.M., Raynor, M.E. & McDonald, R. (2015). What Is Disruptive Innovation? *Harvard Business Review*.

- Cozzolino, A, Verona, G & Rothaermel F. T. (2018). Unpacking the Disruption Process: New Technology, Business Models, and Incumbent Adaptation. *Journal of Management Studies*.
- D'Arpizio, C. & Levato, F. (2021). Luxury goods worldwide market study fall 2021 – 20th edition. *Bain & Company – Altgamma*.
- D'Ippolito, B., Petruzzelli, A.M. & Panniello, U. (2019). Archetypes of incumbents' strategic responses to digital innovation. *Journal of Intellectual Capital*.
- Deloitte. (2020). Global Powers of Luxury Goods 2020. *Deloitte*.
- Deloitte. (2021). Global Powers of Luxury Goods 2021. *Deloitte*.
- Devetag, M.G. (2020). Markets and Strategies Course. *Luiss Guido Carli*.
- Eggers, J.P, & Park, K. F. (2017). Incumbent Adaptation to Technological Change: The Past, Present, and Future of Research on Heterogeneous Incumbent Response. *Academy of Management*.
- Eklund, J. & Kapoor, R. (2019). Pursuing the New While Sustaining the Current: Incumbent Strategies and Firm Value During the Nascent Period of Industry Change. *Organization Science*.
- Fernandez, C. (2019). Gucci Rolls Out New Pop-Up Concept. *The Business of Fashion*.
- Florine Eppe Beauloye, F.E. (2021). Why Digital-Native Luxury Brands Are Opening Physical Stores. *Luxe Digital*.
- Giano, A.M. (2020). The North Face x Gucci: svelata la collezione. *Vogue Business*.
- Grigorescu, A. & Ion, A.E. (2021). Qualitative Analysis of Sustainability and Innovation Within the Luxury Business Sector. *Journal of the Knowledge Economy*.
- Gucci Equilibrium. (2018). Gucci ArtLab. *Gucci*.
- Harvard Business Review. (2015). Everlane: Building a Business on Radical Transparency. *Harvard Business Review*.
- Hayford, A.C., (2018). Gucci Unveils A Centre Of Creativity, Craftsmanship & Sustainability. *Vogue Business*.
- Hilken, T., Heller, J., Chylinski, M., Keeling, D.I., Mahr, D. & De Ruyter, K. (2018). Making omnichannel an augmented reality: the current and future state of the art. *Journal of Research in Interactive Marketing*.
- Jensen, E. (2020). How Gucci, LV Leveraged China To Survive COVID-19. *Jing Daily*.
- Jin, B.E & Shin D.C. (2020). Changing the game to compete: Innovations in the fashion retail industry from the disruptive business model. *Business Horizons*.

- Kammerlander, N., König, A. & Richards, M. (2018). Why Do Incumbents Respond Heterogeneously to Disruptive Innovations? The Interplay of Domain Identity and Role Identity. *Journal of Management studies*.
- Kansara, V. A. (2016). Michael Preysman on Iterating Everlane and ‘Fixing’ Fashion Retail. *The Business of Fashion*.
- Kering Press Release. (2021). 2021 annual results. *Kering*.
- Kim, N.L., Shin, D.C & Kim, G. (2021). Determinants of consumer attitudes and re-purchase intentions toward direct-to-consumer (DTC) brands. *Fashion and Textiles*.
- Langley, P & Rieple A. (2021). Incumbents' capabilities to win in a digitised world: The case of the fashion industry. *Technological Forecasting and Social Change*.
- LVMH Group Publications. (2021) Universal Registration Document. *LVMH*.
- LVMH News. (2017). Launch of 24 Sèvres, the new online shopping experience. *LVMH*.
- LVMH News. (2018). 24 Sèvres announces exclusive capsule collection with Louis Vuitton. *LVMH*.
- LVMH News. (2019). LVMH showcases the customer experience of tomorrow at Viva Technology 2019. *LVMH*.
- LVMH News. (2020). Louis Vuitton celebrates unique ties with Japan with opening of new flagship in Osaka. *LVMH*.
- LVMH News. (2021). LVMH at Viva Technology: day two highlights. *LVMH*.
- LVMH News. (2021). LVMH partners with other major luxury companies on Aura, the first global luxury blockchain. *LVMH*.
- LVMH Youtube Channel. (2021). VivaTech 2021 #14 | LVMH’s blockchain secures luxury products: Hublot & Bulgari cases. *LVMH*.
- Mao, J.Y., Su, F., Wang, B., & Jarvenpaa, S.L. (2020). Responding in kind: How do incumbent firms swiftly deal with disruptive business model innovation. *Journal of Engineering and Technology Management*.
- McDowell, M. (2019). There are no digitally native luxury brands. Kering wants to retrofit one. *Vogue Business*.
- McDowell, M. (2021). 2021: The year in fashion-tech. *Vogue Business*.
- McDowell, M. (2022). 2022 fashion-tech predictions. *Vogue Business*.
- McDowell, M. & Shoaib, M. (2022). Louis Vuitton to release new NFTs. *Vogue Business*.

- McKinsey & Company. (2020). DTC e-commerce: How consumer brands can get it right. *McKinsey & Company*.
- McKinsey & Company. (2021). The State of Fashion. *McKinsey & Company*.
- McKinsey & Company. (2022). The State of Fashion. *McKinsey & Company*.
- Milnes, H. (2022). LVMH's Arnault is wary of the metaverse "bubble". Should luxury be? *Vogue Business*.
- O' Connor, T. (2018). Sézane Names Nordstrom as First US Retail Partner. *The Business of Fashion*.
- Palazzi, T. (2018). 24 Sèvres crede nel multibrand. *Milano Finanza*.
- Rovai, S. (2018). Digitalisation, luxury fashion and "Chineseness": The influence of the Chinese context for luxury brands and the online luxury consumers experience. *Journal of Global Fashion Marketing*.
- Schlesinger, L.A., Higgins, M. & Roseman, S. (2020). Reinventing the Direct-to-Consumer Business Model. *Harvard Business Review*.
- Sherman, L. (2016). Can Young Luxury Brands Bypass Wholesale? *The Business of Fashion*.
- Syrgios, E. (2021). Corporate Strategy Course. *Luiss Guido Carli*.
- The Business of Fashion & McKinsey & Company. (2020). The Year Ahead: Less is More for Both Consumers and Brands. *The Business of Fashion*.
- Todeschini, B.V., Cortimiglia, M.N., Callegaro, D., Ghezzi, A. (2017). Innovative and sustainable business models in the fashion industry: Entrepreneurial drivers, opportunities, and challenges. *Business Horizons*.
- Verhoef, P.C. & Bijmolt, T.H.A. (2019). Marketing perspectives on digital business models: A framework and overview of the special issue. *International Journal of Research in Marketing*.
- Williams, R. (2022). Bernard Arnault's Take On The Metaverse. *The Business of Fashion*.
- Zheng, R. (2019). Louis Vuitton Educates Fans Via a New WeChat Mini Program. *Jing Daily*.
- Zheng, R. (2020). Louis Vuitton's Debut Livestream on Little Red Book. *Jing Daily*.

Executive Summary

Disruptive innovation is challenging many industries through changes in products, processes, services and business models. It consists in a process characterized by changes in the perceived benefit, the architecture of value creation and business models. Disruptive innovation is typically introduced by new entrants threatening incumbent firms. Thanks to their origins and infrastructure, new entrants address better and fast the rising market challenges. Alternatively, disruptive innovations could provide opportunities for traditional players to improve and expand their product and service portfolios and target effectively existing customers or new demographics. Firms adapt their business models in response to disruptive innovations by shifting their value proposition and operating model. This means that incumbents are asked to reinvent their resources, capabilities, structures and strategies to outperform against disruptors. Despite the importance of the topic and the recent attention by strategy literature on the theory of disruption and business models, we still only have limited empirical evidence about how firms adapt their models and how they implement this change to face disruptive innovations posed by new entrants. The fragmented and competitive market of luxury has been one of the most disrupted, even more after Covid-19's pandemic. In this context, the disruption process started from digitally native vertical brands threatening traditional luxury firms. The purpose of this study is to investigate the winning strategies adopted by incumbent luxury firms to respond to the digital disruption posed by digitally native vertical brands and how the redefined strategies address the key challenges of the luxury market.

Theory of disruptive business model innovation

According to Christensen, the disruptive innovation theory describes how firms may be challenged if they neglect a disruptive product or service offering alternative benefits. Disruptive innovation requires a different business model and existing capabilities. The process includes two distinctive parts: disruptive technologies and disruptive business models. The availability of new technologies, such as Big Data, Artificial Intelligence, Augmented and Virtual Reality and Blockchain provide significant changes in demand, capacity and technology costs. At a granular level, disruptive business models have an impact on value creation and capture, demanding a reinvention of business models through the reconfiguration of resources, value proposition, strategy and structure. The process of disruptive innovation starts from new entrants targeting neglected low-end segments with the introduction of new business models. In the first phase of disruptive innovation model (Figure 1) new entrants offer to neglected segments quality products typically at lower prices. Since they initially overlook mainstream consumers, leading incumbents do not have the urgency to respond to new entrants. In a second stage, new entrants could decide to penetrate the mainstream market by enhancing their product offering while still maintaining their competitive advantage in the niche market. When mainstream segment start purchasing huge quantities of products risen in quality with lower prices from disruptors, disruption occurs, and market prices drop. When new entrants succeed

moving from the low-end to the high-end of the market, incumbents incur in a decrease in their market share and profitability and react to threatening disruptors. To sum up, the graph compares product performance trajectories (the red lines delineating how products and service enhance over time) and customer demand trajectories (blue lines reflecting customers' willingness to pay for performance). When leading incumbents introduce higher-quality products to high-end customers, who are the most profitable, they neglect the needs of low-end market and part of mainstream segment. This gap offers an opportunity for new entrants that, by improving their performance on a disruptive trajectory, address low-end and mainstream customers characterized by low profitability compared to high-end market.

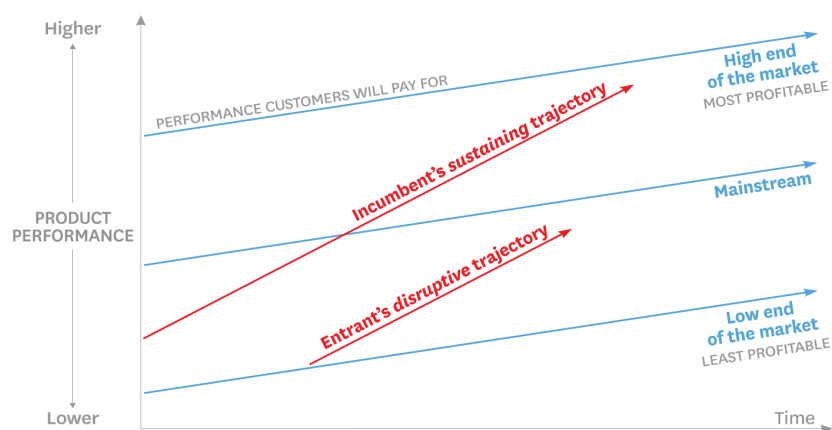


Figure 1 Disruptive Innovation Model. Source: Christensen C. M., Raynor, M.E., McDonald, R. (2015). What is disruptive innovation? *Harvard Business Review*.

Generally, incumbent firms tend to avoid disruptive innovation and focus on incremental innovation for different reasons. First, business model adaptation results to be a complex and challenging process for established players because of organizational inertia. The sources of inertia are rigidity of existing routines and competences, institutional resistance towards change in terms of social, political and organizational structures, as well as economic incentives and dependence on an established value network. Alternatively, disrupters do not have to adapt the business model in response to digital innovation because they can design it from scratch.

Within disruptive business models the direct-to-consumer business model (DTC), including digitally native vertical brands, emerged. Given the increase of online shopping, direct-to-consumer became the easiest and the most convenient solution to have access to specific product categories. Nowadays 77% of apparel and accessory firms have adopted a direct-to-consumer approach. The DTC approach consists in bypassing retailers and resellers to sell directly to consumers. Traditionally, the chain flows from wholesalers, distributors and retailers to end consumers. In contrast, in the DTC model the manufacturer advertises, communicates, and sells through its own channels -website, social media- without intermediaries. Cutting intermediaries leads to higher margins and so the possibility to sell high quality products with pricing

advantages compared to traditional business models. The value proposition of DTC model includes innovative, quality and cost-effective product offerings. In addition, DTC brands address a niche market because of their uniquely designed products. This new model timely responds to the market by offering quality products at competitive prices, managing direct customer relationships digitally with a higher rate of engagement and through a “slow” model, meaning that the production process is transparent and ethical about the origin and communication of the long-lasting products made with sustainable fabrics. DTC companies typically leverage on a digital business model since they were born online and fully exploit digital channels for marketing and selling. However, DTC approach and traditional business models may coexist because these digital born start-ups, after gaining market share, could decide to operate also offline. In refer to the operating model, one of the most important competitive advantages concerns the collection and use of data directly from customers and digital technologies to optimize various areas of the business. Mastering data from the direct relationships and feedback loops, they control the user experience, upgrade their strategies and adjust products and services to offer tailor-made solutions. Through active engagement across every touchpoint from website to social media, new entrants develop a customer-centric approach in which respondents co-create with firms. This degree of personalisation leads to a superior customer experience and a positive brand evaluation. Due to the shortage of the supply chain, DTC have the chance to deliver fast, free and convenient shipping options, such as click and collect and easy returns experience. DTC rely on an agile operated model constituted by small, cross-functional teams with transversal skills. In addition, DTC approach shifts the supply chain from design-make-sell to sell-design-make. This means that, thanks to direct relationships with customers, firms understand the needs before designing the product, so they produce only what customers will effectively purchase, resulting in efficient inventory management. These data-enabled business models exploiting digital technologies base their success also on global ecosystems and digital platforms. The connections between firms, resources and activities within a community are expressed as data relations based on the practices of data generation and exploitation. Ecosystems are characterized by the integration of IT and mobile applications to enhance multimedia storytelling, customer acquisition and benefits’ communication. Digital business models rely on digital platforms to balance the distribution of value among an ecosystem with multiple firms and customers. Moreover, DTC organizations joining digital platforms access to assets with the advantages of increasing their buying power, economies of scale and operational efficiencies. To sum up, given their digital and direct-to-consumer business model, newcomers address better unmet needs and demand uncertainty, in terms of new Millennials and Gen-Z’s preferences, the collection and exploitation of big data, sustainable consumption and inventory management. Incumbent firms need to understand the extent to which the new business model addresses the key challenges and prioritize those resources that effectively cope with digital disruption.

Theoretical frameworks

The academic research argues that traditional firms are asked to adopt multiple strategies for business model adaption, according to the resources and capabilities to mobilise. The frameworks of business adaption – resource-based view, barriers to adaption and dynamic capabilities – help incumbent companies to address the trade-off between enhancing and building resources and capabilities. On the one hand, incumbents need to enhance their strong capabilities that differentiate themselves, such as, capital, scale, knowledge, and experience. In contrast, traditional companies are asked to build new digital capabilities inspiring to the strongest attackers' capability in responding rapidly to shifting customer trends. According to the resource-based view (RBW) framework, strategies are articulated as the development of new or enhanced distinctive capabilities to reach superior returns over competitors. There are several possible choices to access new technological resources – they could already exist within the firm, they may be created via internal development, commercialized as a product or service and then sold to external stakeholders or transferred across a vertically integrated firm and they could be acquired externally through acquisitions or partnerships. In this way, business model adaption translates into processes of acquiring and organizing technological and complementary assets. However, the RBW involves a static view of resource value, requiring a more dynamic approach to understand why a firm needs to assemble a new bundle of resources. The academics have posed little attention on the dynamic outlook of the barriers to incumbents' adaption and how to overcome these barriers. According to the framework, incumbents' possession or external access to necessary knowledge and the means to commercialize the technology could be hindered by internal and external barriers: barriers to the acquisition of relevant resources, barriers to the assimilation of new resources and barriers to reconfiguration. Furthermore, barriers may affect the possible strategic choices and vice versa as well. The first category refers to external barriers erected by stakeholders that limit external research of technological and complementary resources. While the barriers hindering the assimilation of resources delineate internal limitations which create tensions in integrating and using necessary resources. Even though an incumbent possesses both knowledge and resources, there may exist additional internal barriers impeding successful adaption via the reconfiguration and organization of these assets. Following a bottom-up approach, there exist single factors impacting specific types of barriers at specific stages in the adaption process. For instance, firm size, experience, and complementary resources may increase the probability to survive for incumbents entering in new markets, but each affecting different stages of the adaption process. On the other hand, inadequate commitment, cognitive frame, managerial thinking and organizational structure may limit the assimilation and reconfiguration of resources. Then, stakeholders influence the company's ability to acquire, assimilate and reconfigure new core resources. The barriers to adaption present similarities with the dynamic capabilities framework. However, it takes more a resource-based approach, recognizing that dynamic capabilities could reveal more as the absence of barriers to adaption. For definition dynamic capabilities represent the firm's capacity to respond and adapt effectively

to changing environments by creating or reconfiguring internal and external resources and capabilities. The dynamic capabilities framework involves three steps: sensing, seizing and build and reconfiguring. Sensing opportunities and threats delineates the capability to collaborate and make strategic partnerships to acquire necessary knowledge and learn quickly. While the capacity of seizing opportunities refers to both the ability to acquire knowledge and integrate it within the firm by commercializing the technology. Since the needs for assets change due to evolving environment, firms should also develop the capacity to transform or reconfigure assets. Specifically, incumbents need the dynamic capability of strategic agility to design and implement a fast response in combination with a flexible mindset that accepts and learns from digital disruption dynamics.

In the era of digitalisation and disruption first movers and fast followers gain a huge advantage over competitors and the best innovators mix internal and external research to access existing or new assets and competences. Generally, incumbent firms successfully induce business model adaption through experimentation on the one hand and alliances and acquisitions on the other hand. To protect from disruptors, traditional firms catch-up defend via alliances and acquisitions. Differently, incumbents leverage on their strong distinctive capabilities to counter-attack new entrants and experiment new ways to innovate. The defensive strategy of acquisition takes place in presence of developed market for corporate control, high absorptive capacity by the acquirer and high synergies from the combination of resources and capabilities within the value chain. The main rationales for M&A activity are manoeuvring to take market share, exploiting new opportunities, and expanding capabilities. Technology-based acquisitions represent the main acquisition motive since they offer speed to market in terms of resource allocation. But they also present key challenges in terms of heavy price tag, the retention of talents that embed technological capabilities and the clash of cultures, with an effect on integration, growth synergies and coordination. Incumbents can adapt their business model through alliances with new entrants or established players with the aim of exchanging, sharing, or co-developing resources or capabilities to achieve mutually relevant benefits. Alliances can be distinguished in non-equity alliance, equity-alliance, and joint venture. A non-equity alliance consists in licensing to another firm goods or services to supply, produce or distribute without equity sharing. Because of the lack of an equity investment, non-equity alliances are considered less risky than equity alliances. In contrast, two companies may opt for strengthening their relationship through an equity alliance that requires changes in the equity state. Then, according to the joint venture, two companies create an additional independent company by combining parts of their assets and sharing ownership. The choice between an equity or non-equity alliance is driven by the equity-integration dilemma, the benefits and costs of equity alliances. The equity-integration dilemma states that the more the organizational integration between partners, the higher the equity ownership level (Figure 2). The benefits of equity ownership in strategic alliance are exclusivity, cooperation, and coordination. Strategic alliances bring also costs reducing the equity ownership, such as motivation, uncertainty and commitment, control premium and cost of synergy

independent integration, that increase the cost of entry. Moreover, similarly to acquisitions, alliances are challenged by general relational and performance risks. Relational risks include lack of commitment to the alliance and opportunistic behaviour of misappropriating resources. In contrast, there could be performance risks related to cultural clashes and conflicting objectives.

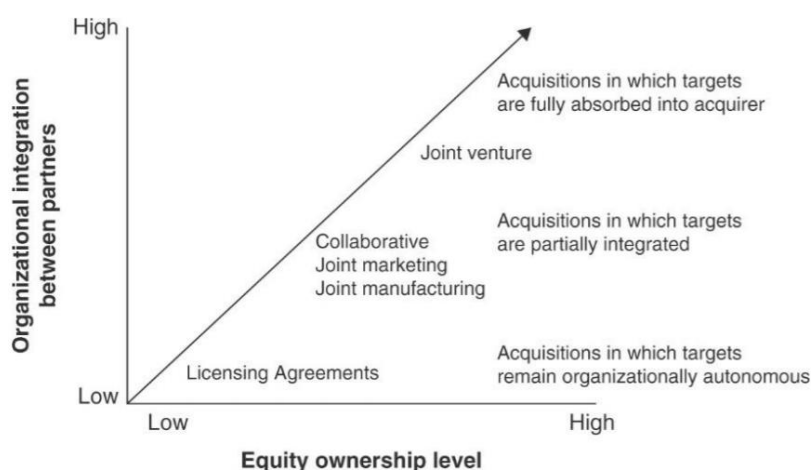


Figure 2 Equity-Integration Dilemma. Source: Syrigos, E. (2021). Corporate Strategy Course. *Luiss Guido Carli*.

To sum up, alliances and acquisitions are riskier than experimentation because require higher resource investments that lead to greater expected returns. The outcome will be largely driven by uncertainty on novel technologies and consumer trends. Then, the timing of alliances and acquisitions is faster than experimentation. Furthermore, these defensive means entail the balance between an integration strategy with autonomy of units. The strategic decision to enhance existing competences via experimentation represents a more flexible and less risky source of learning compared to alliances and acquisitions. Generally, incumbents could adopt or imitate the disruptive business model by testing in a more controlled internal environment, like incubators, accelerators, and innovation centres. Corporate incubators represent specialized business units within the firm kept separated from the core business to avoid conflicts. Secondly, a business-unit accelerator indicates a scaled-down digital factory which incubates transformation with a certain degree of decentralization, meaning that the organization delegates decision-making responsibilities to the sub-unit. Apart from testing via in-house business units, established firms imitate the direct-to-consumer strategy by embracing digital sales channels. In doing so, fast followers could combine their traditional competitive advantages with the DTC's best experience in responding directly and fast to new market trends. Alternatively, established players could differentiate themselves testing new digital technologies in channels less developed or neglected by digital attackers, such as the metaverse. The metaverse refers to a full spectrum of virtual worlds combining augmented reality, virtual reality and IoT. Due to the saturation and competitiveness of the market, metaverse is expected to become a very significant driver of revenue growth in the years to come.

Methods

In the luxury industry digitally native vertical brands threaten incumbent luxury firms because of their origins and infrastructure and the way they engage with customers. In addition, they address fast and better the key challenges of luxury: meet customer demand, data collection and usage, sustainable consumption and inventory management. For this reason, traditional luxury firms adapt heterogeneously their business model by building digital resources and capabilities or enhancing their existing assets and competences, such as capital, scale, knowledge, experience, and traditional physical stores. According to the resources and capabilities to mobilise, established luxury players redefine their structures and strategies to outperform against disruptors. The theory of disruptive business model innovation and the frameworks of adaption and multiple strategies have been tested in the luxury industry through a qualitative analysis of the established players Louis Vuitton and Gucci. These traditional luxury brands were selected in relation to their positioning and for leading the business model adaption within the luxury market. To answer the research question empirically, the method explores and analyses which strategies the fashion executives of the two innovative companies implement to solve the key issues in response to digitally native vertical brands. The qualitative approach draws on secondary data from text and video-based interviews conducted by third parties targeting managers and executives of both firms and their conglomerates that address the strategy and have a holistic cross-functional organizational overview. Interviews are cross validated by archival data including business press articles, proprietary materials and external publications about digital acceleration and the strategic perspectives to face the key challenges of luxury.

Interplay of incumbent luxury firms and digitally native vertical brands

Luxury market is characterized by low entry barriers and increasing market concentration with few dominant players losing their traditional scale advantages due to competitive small firms. Luxury has always been a winner-take-all industry with top 20% of the industry responsible for the economic profit and extreme scale economies. But digitally native vertical brands are rising twice as fast as the established players. Thus, in the luxury industry scale constitutes a competitive advantage, but speed remains the main success factor for firms of any size. To be specific, the digitally native vertical brands' growth path from start-up to grown-up involves four main stages. First, the early growth is driven by clear and compelling brand personality and online engagement. Initially disruptors follow a niche strategy since they lack a sufficient scale, while incumbents can attack all the niches together. Second, the intermediate growth and attraction of potential customers is driven by the expansion of the current assortment. Then, brick-and-mortar to gain greater access to cheaper traffic and diversification by products or geographies drive further growth. Deepening the interplay between incumbent luxury firms and digitally native vertical brands, both retailers pursue the business strategy of differentiation to provide quality products and services based on unique features. Luxury firms' value proposition involves superior quality product offerings and service. This quality derives from the luxury attributes of exclusivity, scarcity, and brand reputation. The premium prices applied by heritage

brands are justified by huge investments to provide unique features and extra value. But the process of adaption required luxury incumbents to update the value proposition including innovation and sustainability as primary elements. Thus, luxury brands emphasize brand advertising to reinforce the brand image, R&D and product engineering capabilities for product innovation, and cross-functional coordination to boost creativity and agility. On the other hand, DNVBs are not perceived as luxury brands due to their experience, production models and pricing, but they create desirability through unique and quality proposals. What differentiates these new entrants from established luxury firms are mainly the specialization on a single or small range of product categories and business model innovation. Their value proposition involves innovative, quality and cost-effective product offerings. What both players have in common is the enhanced customer experience through personalized customer service and omnichannel capabilities. The key challenge for an omnichannel strategy consists in creating tighter ties with clients across physical stores, digital ecosystems, mobile apps and social media to provide a seamless customer journey and a consistent customer experience. A successful omnichannel experience is fuelled by digital and human capabilities: data, IT and collaboration in cross-functional teams. Moreover, since the pandemics, many luxury companies introduced new omnichannel features, such as BOPUS (buy online and collect in store), booking online in-store appointments and distance sales. Physical stores represent one of the key factors of differentiation for traditional players. Physical stores drive online and offline luxury sales because they leverage conversion rates, increase average purchase values by experienced sales associates, build brand awareness and provide an excellent customer service acting as fulfilment channels. For digital born brands, opening brick-and-mortar stores gives the opportunity to grow and offer a compelling high-end experience that reinforces the digital one. The interplay between online and offline channels requires the redefinition of the role of physical retail in phygital ecosystems, in terms of format, size and location. This entails for both players the need to transform stores from transactional centres into experiential retailing that immerses consumers in the brand's culture. Thanks to the integration of in-store technologies, stores are becoming more interactive to offer a personalized and convenient shopping experience. From the strategic perspective, either luxury firms or DNVBs vertically integrate to expand margins and control inputs, processes and channels. Vertical integration is particularly profitable for digital born brands since at the early growth they do not have expertise in any core competence. Then, product design, manufacturing, and distribution skills required by DNVBs may not be available from third parties. Incumbent luxury firms and digital native brands identified a renewed customer base represented by younger audience. Millennials and Gen-Z are redefining traditional sales model via new expectations and sales approach. What they value the most in purchase decisions are quality, innovation, customization, branding, entertainment, inclusivity and sustainability. Many dominant companies reinforced the relationships with younger generations via the phenomenon of gamification. Gamification combines effectively classic video gaming tools, virtual reality and entertainment. In contrast, DNVBs connect directly with younger demographics through e-commerce and social media platforms that enable co-creation, increasing margins and control over the interface's data. As regards the trend of

digitalisation, Covid-19 established channels' integration and the power of big data as new prerequisites of competitiveness. The current top priorities for data and analytics consist in powering e-commerce growth, gaining behavioural insights, make better predictions about customer behaviour and reinforce the personalized customer experience. Differently from incumbent's legacy business model, DNVBs are characterized by a digital business model integrating different types of data, analytics, digital innovations and digital channels for marketing and selling. In refer to the disruptive challenge of sustainability, luxury companies and DNVBs redefined business models including environment and social responsibility in design, production, distribution and communication. On the one hand, traditional firms are setting ESG (Environmental, social and corporate governance) criteria with carbon emission reduction as a priority and establishing circular and second-hand models. However, given their legacy and resource rigidity, traditional retailers tend to adopt a more cautious approach with small-scale green initiatives. While DNVBs' business model leverages sustainability at its core in terms of manufacturing, marketing and branding through the concept of slow fashion. Slow fashion consists in offering timeless pieces with long-lasting value, made from locally sourced or fair-trade recycled and organic materials of higher quality. Covid-19 exacerbated supply chain issues impacting luxury retailers. Luxury firms can take control of excessive inventories and widespread markdowns focusing on acceleration of demand manufacturing, reduction of assortment complexity and facing the rebalancing between price and volume. For instance, luxury incumbents are experimenting zero-inventory concepts and investing in AI, NFT, QR codes, radio-frequency identification tags (RFID) and blockchain for demand forecasting and inventory-tracking. Furthermore, the use of digital channels, free pick-up in store, sustainable products and recycling in stores help traditional retailers to reduce store sizes and inventories. Differently, inventory management and demand uncertainty do not represent an issue for new entrants due to the concepts of showroom and sell-design make. Showrooms retain the advantages of traditional physical stores, such as upselling and cross-selling, while reducing the costs for operating brick-and-mortar stores. Indeed, showrooms have fewer sales assistants, less floor space, less returns and carry the minimum number of items allowing customers to find the sizes and styles in presence. Figure 3 summarizes the key success factors of digitally native vertical brands. To understand in practice who are DNVB's and to identify the strategic responses of luxury incumbents, the thesis presents the two pioneering digitally native vertical brands Everlane and Sézane. The former is a US DNVB known for its concept of radical transparency. While the latter established lately as the first digital born slow fashion brand in French fashion. Thanks to the DTC approach, they both sell high-quality luxury items directly to consumers, but with affordable prices, less mark-ups and inhouse design.

KEY SUCCESS FACTORS OF DIGITALLY NATIVE VERTICAL BRANDS	
• Customer-centricity	Community engagement and omnichannel strategy
• Digital business model	Different types of data, analytics and digital innovations to understand customers' needs, create personalized offerings and respond rapidly to market changes
• Direct-to-consumer approach	Provide directly to consumers innovative, quality and cost-effective product offerings without intermediaries
• Niche strategy	Specialization on a single or small range of product categories
• Vertical integration	Increase margins and control over customer experience
• Sustainable values and slow fashion	Timeless pieces made from locally sourced or fair-trade recycled and organic materials of higher quality. Transparent production process and communication strategy
• Minimized inventory	Showroom concept and sell-design-make approach

Figure 3 Key success factors of digitally native vertical brands.

Louis Vuitton company

The luxury firm Louis Vuitton is recognized as the most valuable brand among the partner LVMH and the world's leading luxury companies. Since its foundation, the firm's success has been built on the heritage of master trunk maker, its complete control over distribution and its rigorous spirit of innovation. The brand extensions, the no-discount policy and the very selective distribution strategy helped the brand's development while preserving the equity. As regards Louis Vuitton's distribution strategy, the company controls 100% of its distribution with a premier international network of exclusive boutiques under its name and the mono-brand e-commerce site louisvuitton.com. Louis Vuitton maintains an exclusive image because it sells only on its own e-commerce website and not on marketplaces or e-tailers. In the attempt to build a solid omnichannel distribution strategy by merging DOS, mobile app, e-commerce website and brand owned social media, Louis Vuitton's e-retail is equal to the omnichannel because the brand does not have wholesale partners.

The video-based interview to the Digital & Client Development Director of Louis Vuitton Charles-Henri Levaillant and the Head of Innovation and Blockchain at LVMH Gautier Pigasse refers to the Aura Blockchain consortium. The Aura blockchain constitutes an alliance among the luxury industry's competitors Louis Vuitton, Cartier and Prada aiming to have the first global luxury blockchain. As explained by Gautier Pigasse, the non-profit association responds to the new luxury market expectations, in terms of data collection, inventory management and sustainability. The creation of a private in-house platform within the luxury industry enables data and processes control. For this strategic alliance of luxury brands and technology partners, as Microsoft and Consensys, a consortium model was implemented to make the platform accessible to other eventual partners with the same objectives. However, the brands license the

platform through the payment of the fees for its developments. Thanks to the deal, Louis Vuitton and the other partners benefit from a collaborative approach for the common goal of authenticating items by assigning them a unique digital identity, without incurring in relational and performance risks. Aura Blockchain leverages on knowledge sharing about track and trace capabilities and storytelling across the entire product lifecycle. For instance, by scanning the product via tools like QR codes and RFID tags, the customer can verify its authenticity and retrieve information about the origins and the materials. In addition, “It has a huge value for our clients. They build trust, they want to know the source. For us is also important because we want to show that sustainability and authenticity are linked”, says Charles-Henri Levaillant. On the other hand, Louis Vuitton experiments via Viva Technology annual technology meeting, the business acceleration program la Maison des Startups, the open innovation platform DARE and the contest with start-ups LVMH Innovation Award. The purpose of these initiatives consists in supporting the innovative start-ups with enhanced digital capabilities by leveraging on Louis Vuitton’s strong assets of capital, knowledge and experience. Furthermore, collaborations with start-ups enable the firm to learn quickly and bring new strategic assets in its ecosystem. In practice, in LVMH Lab at Viva Tech event, the awarded start-up from LVMH Innovation Award gains the chance to partner with the Maison and the group, and Louis Vuitton presents the latest innovative products. Then, the Station F corporate incubator of the business acceleration program la Maison des Startups LVMH represents a separate conglomerate’s business unit providing workstations to support approximately 50 start-ups each year with speed and scale in fostering innovation. In addition, LVMH and its Maisons promote the open innovation platform DARE to make accessible the best ideas and practices of talents within the group. Thus, these organizational initiatives address mainly the issues of data collection and the need to respond fast to new market expectations. Louis Vuitton imitates DTC brands also by investing in online sales channels primarily targeted by the first movers. The strategic move responds to the need to adapt to DTC business models and bring the brand close to younger demographics by building DNVB’s digital capabilities in combination with the ability to ramp-up online activities with sizable levels of investment of money and effort. Indeed, the heritage brand allocates management effort and hires new talents within agile teams to provide a seamless shopping experience based on data control, personalization, and fast transactions. The CEO and founder of LVMH’s e-commerce site 24 Sèvres Ian Rogers reveals in the interview that the multi-brand platform offers a differentiated online experience built on unique e-commerce features and the expertise at the department store Le Bon Marché in Paris. The e-tailer invested massively in hiring new talents of various skill levels and experience, a distribution network in eighty countries and disruptive technologies. 24S enables a personalized and convenient shopping experience through interactive customer service technologies. Ian Rogers argues that “Brands on the platform leverage the platform’s overall features, including chatbots, on-demand stylists, stunning graphics, efficient checkout and fast delivery. In addition, the company gathers and analyses cross-brand consumer insights across the platform”. Louis Vuitton proven to conquer the direct-to-consumer universe also leveraging its own mobile app, WeChat and livestreaming. Louis Vuitton app connects and

engages directly younger audiences by informing customers about latest news and items, collecting data via newsletter, history of purchases and Wishlist, and providing information about the scanned item or a similar one through the AR feature Louis Vuitton finder. Louis Vuitton WeChat Mini Programs represent a meaningful illustration of how to effectively integrate data collection, personalization, storytelling and omnichannel capacities. WeChat Mini Programs include e-commerce features to create a smooth consumer journey that connects WeChat with other digital platforms and offline tools. WeChat's avatars give access to the history of the brand, new products and information about the brand retail stores through specific functions of editorial content and customer service, resulting in increased sales online and in Chinese stores. Then, the Maison proved its social media marketing capacities and promoted the brand image through the informative session led by local KOL's dressed in Louis Vuitton in the livestreaming debut on the Chinese social media platform Little Red Book. During the livestreaming session the influencers provided styling suggestions in the language of Little Red Book's community while monetizing the event. Furthermore, Louis Vuitton partnered with JD.com. to gain visibility on one of the major Chinese marketplaces and expand customer base. However, the customised Louis Vuitton brand page on JD.com redirects consumers to Louis Vuitton's official WeChat Mini Program to finalize purchases and control transactions. The alliance benefitted also the Chinese multi-brand, originally strong in the consumer electronics, computers, and telecommunications sectors, establishing in the luxury e-commerce business. The company experiments also via experiential retail to integrate enhanced existing store competences with the acquisition of new omnichannel and digital capabilities. Louis Vuitton's initiatives of global pop-up stores, such as Louis Vuitton Loves Printemps, and experiential flagship stores with cafes and restaurants, like Louis Vuitton Maison Osaka Midotsuji flagship store with Le Café V and Sugalabo V in Japan, address the DNVB's issues of adapting fast to new customer expectations, data collection and inventory management. Pop-up stores are temporary physical locations not tied to traditional retail contracts that provide an immersive environment featuring self-centred stories and technology upgrade investments in interactive displays and AR tools. In addition, pop-up stores offer a flexible approach to test the launch of new products in potentially growing markets and manage inventories faster than warehouses. While the brand's experiential flagship stores with cafes and restaurants create a multisensory experience to attract new customers in store and retain top clients. For instance, Louis Vuitton Osaka's store, the Café V and Sugalabo V combine heritage, art, innovation and food for an integrated experience across different touchpoints. LVMH CEO Bernard Arnault expressed his cautiousness about the metaverse by adopting a wait-and-see approach, since the conglomerate sells a culture more than virtual products and does not want to compromise its exclusivity. "At present we're in the real world selling real products. Surely it's captivating, it's interesting, it's fun. But we have to see what the application of the metaverse and these NFTs will be", said Arnault in 2022 LVMH's annual presentation to investors. Despite the fear of a metaverse "bubble", Louis Vuitton has already experimented with crypto fashion and metaverse through its own NFTs Game App and the alliance with the gaming company Riot Games for the League of Legends Game. The Game App's avatar Vivienne dressed up in

Louis Vuitton capsule collection enables players to discover new products and features the NFT raffle for the most competitive players. By producing limited pieces for avatars according to the gamers' feedback, Louis Vuitton enhances its co-creation, customer centric and personalization capabilities. Beyond data collection, virtual assets comply with sustainable commitment. Then, digital items can be sold in real life, generating a parallel stream of revenues. The alliance with Riot Games resulted in branded collections, also sold in stores, and an AR filter, requiring speed, scale and an omnichannel strategy. Indeed, Louis Vuitton used its capital to create a dedicated team for metaverse and learns quickly in the virtual world by testing new products via VR and AR.

Gucci company

Gucci is recognized as one of the most desirable luxury companies in the partner group Kering and worldwide. By placing creativity at the heart of its strategy, the excellent performance and sales increase are mainly attributed to the success of its iconic lines, new product launches, an intense schedule of events and a strong social media presence. Gucci crafts tomorrow's luxury in a sustainable, social and responsible way via different initiatives, like the environmental program "Chime for Change" and the e-concept store stocking vintage pieces Vault Gucci. The company relies on exclusive distribution channels including company-owned stores, wholesalers, flagship stores, DOS, e-commerce site, social media platforms, Gucci's app and e-retailers. Gucci is an experiential company with an outstanding omnichannel strategy that integrates digital and instore experience through virtual stores and experiential spaces, like Gucci Garden, Gucci Osteria by Massimo Bottura and Gucci Circolo. The firm partners with contemporary artists and celebrities and the leading luxury e-market places YOOX and Farfetch.

The firm developed a direct-to-consumer strategy to reply to digitally native vertical brands and readapt its business model by building digital capabilities inspired to the best practices of DNVBs and enhancing its strengths in storytelling, direct sales and social media. For the moment none of the digital born companies have poised any serious competition to Gucci, but, as the Chief Client and Digital Officer of the group Kering Gregory Boutté revealed in the interview, they represent a threat to consider. The strategy aims giving to the company control, personalization and speed through proprietary technological tools, its own digital platforms and virtual concessions. In addition, Gucci's technology upgrade investments leverage on AI for better inventory management and to reinvent the network of physical stores. Gucci experimented direct operated sales channels, like mobile app, livestreaming, social media platforms, pop-ups and in-store technologies. First, Gucci's mobile app provides an integrate and immersive experience through innovative digital features, such as AR try-on and Gucci Arcade, that combine technology, branding and personalization. In refer to livestreaming, Gucci adapted to the Chinese model with an effective communication and consistent contents in different channels, from Chinese social media platforms to Youtube and e-commerce website. The Epilogue collection released in 2020 and transmitted in Chinese and Western social media platforms consists in an untraditional twelve-hour live streaming session about the

backstage of a fashion ad. Differently, Gucci Live consists in the first distance sales in the luxury market and replicates the experience of in-store shopping via a personalised live video shopping hosted by a sales associate in Florence's store. According to Boutté, the success of the smart and target localized social media strategy of the Maison derives from a consistent narrative and relevant collaborations with artists and celebrities that inspire trust and loyalty. Digital efficiency and relevancy online and offline require huge investments leveraged by Gucci's existing capital. The digital advertising strategy includes traditional and untraditional campaigns. Thanks to the user-generated campaigns launched on Instagram – #GucciGram and #TFWGucci – Gucci enhanced co-creation capacities, turning customers in brand ambassadors. Then, the collaboration between the brands Gucci and The North Face reinforced the seamless customer journey via an integrated communication on Instagram, Youtube, TikTok, the e-commerce website and even offline on Gucci Artwalls and Gucci Pin pop-ups stores in China. Differently, the unconventional advertising campaign Gucci Beloved Show, which consisted in a fictional and scripted talk show featuring celebrities totally dressed in Gucci, led to engagement with existing and new customer base and increased sales of Beloved collection Handbags. In refer to Chinese social media platforms, Gucci redefined the organizational structure with a dedicated team that creates specific contents for local social media channels. For instance, the brand was an early WeChat adopter and the platform's strategy includes digital features, emojis and animations to tailor Chinese expectations and build loyalty. The challenge identified by Grégory Boutté about reinventing the role of stores has been addressed by Gucci through investments in pop-up stores and in-store technologies. The experimentation via the massive use of cross-channel features addresses the challenges of growing demand for newness from ultra-connected luxury consumers, data collection via connected retail, and, as a consequence, sustainable development and inventory management. The move to open global pop-up stores, such as the Gucci Pin pop-up stores, respond to different customer needs better than traditional brick-and-mortar stores by combining storytelling, high-touch customer service and digital contents. Traditional retail continues to play a central role in Gucci's communication strategy, but stores include omnichannel features, such as click-and-collect, booking online in-store appointments, distance sales via Gucci Live, in store RFID tags and the proprietary app for sales associates Gucci Luce. Specifically, Gucci Luce constitutes an AI-powered sales forecasting tool developed in partnership with Apple to allows client advisors to check stocks in real time. According to Boutté, the conglomerate aspires to zero-inventory to not hold stocks and is experimenting pre-order model but excludes on-demand production because for Boutté “part of the magic of the in-store experience is being able to try a product in the store and then have it immediately”. Another remarkable achievement of Gucci's experimentation is represented by Gucci ArtLab. The innovation hub blends artistic experimentation from designers with innovative production processes at a higher speed than luxury competitors and disruptors. Via the activities of in-house prototyping and sampling for leather goods and footwear, Gucci ArtLab meets the high demand for fast and unique drops while redefining the resources and capabilities. Indeed, Gucci ArtLab plays a central role in the optimisation of the brand's research and development capabilities, collaboration and knowledge sharing to reduce the lead time.

Having product development and lab testing for new materials centralized in the internal innovation hub is also a matter of control of the production process and customer journey. To stay ahead of competitors and digitally native vertical brands, Gucci has been one of the first movers to seize the opportunity to invest in NFTs and metaverse. As stated by the Executive Vice President and Chief Marketing Officer of Gucci Robert Triefus, NFTs and metaverse represent a durable and profitable shift for Gucci in the years to come. Apart from the financial commitment to test and learn, Gucci's metaverse strategy focuses on a new agile operating model based on the collaboration between a metaverse's dedicated team and the Creative Director Alessandro Michele. Much of the excitement around NFTs derives from Gucci's "Proof of Sovereignty", a digital art film with an authentic, unique and exclusive content that cannot be replicated, that engaged the new audience of crypto enthusiasts. Other metaverse initiatives involve the collaboration among the brand and gaming firms to design virtual items. The main motives behind these deals are branding and revenue share. The partnerships with the gaming interfaces the Sims, Zepeto and Roblox enable Gucci to have early insights into 3D and 4D technologies and ecosystems, design limited collections for avatars interacting each other and with the brand, shop virtual items in the single platform in in-game currency and create unreal real estate spaces. This results in Gucci growing its e-commerce business, control the E2E e-commerce transaction and direct sales.

Results and conclusions

From the interplay between incumbent luxury firms and digitally native vertical brands emerges that none of new entrants represent a serious competition for incumbent luxury brands, since they only inspire to the attributes of luxury and leverage on a small scale with a niche strategy. However, they are certainly considered by established luxury firms a threat to which respond promptly. The findings of data analysis of Louis Vuitton and Gucci support the propositions presented in the theoretical frameworks. First, both companies address the trade-off between enhancing existing resources and capabilities and building new digital ones. Secondly, the redefinition of structures and multiple strategies of incumbent luxury firms for business model adaption is articulated according to the resources and capabilities to mobilise to reach superior returns over disruptors. Last, from the data analysis emerges that the brand's innovative initiatives mix internal and external research. Thus, none of the defensive strategies of alliance and acquisitions on the one hand and stand-alone experimentation on the other hand prevails over the other, since Louis Vuitton and Gucci adopt different strategies to access required assets and competences. In refer to the enhanced resources and capabilities, the traditional firms strengthen storytelling, direct sales in retail network, capital, social media marketing and managerial commitment in internal research. Storytelling capabilities are leveraged respectively in the Aura Blockchain for Louis Vuitton and in-store and in directly operated sales channels for both companies. These means constitute a fundamental vehicle to communicate effectively and consistently the narrative of the brands, creating a stronger emotional engagement with younger audience. Then, to differentiate and remain competitive, Louis Vuitton and Gucci continue enhancing their store

competences in visual merchandising techniques, sales associates' expertise, design and storytelling, leading to increased sales. The polarisation between luxury incumbents and new entrants derives from the capital of dominant players required to maintain their leading position and take advantage over new entrants. The capacity to ramp-up activities quickly in social media channels, metaverse and offline with sizable levels of investment of money and effort constitutes a distinctive dynamic capability. For instance, implementing new digital technologies and hiring new talents in cross-functional teams require huge investments. Furthermore, the creation of independent business-units reflects the cognitive approach of executives in overcoming the barriers of adaption. Apart from enhancing existing assets and competences, Louis Vuitton and Gucci have embraced quickly more of DNVBs' capabilities. The new set of competences include digital, track and trace, e-commerce, direct-to-consumer, speed and omnichannel capabilities. The new digital features include try-on, AI-powered sales forecasting tools and Aura Blockchain for Louis Vuitton to collect and use data, making shopping experience controlled, authenticated and personalised. While chatbot, checkout buttons and live video shopping represent some illustrations of the new e-commerce features to do remote clienteling and fast transactions. Traditional companies boomed direct-to-consumer market via the acquisition of customer-centric and co-creation expertise in social media platforms, mobile apps and gaming platforms. Thus, Louis Vuitton and Gucci integrated customer feedbacks within the firms through the customization of virtual items and user-generated campaigns. Dominant firms' capacity to respond fast in combination with a flexible mindset to transform or reconfigure assets represent another distinctive capability. For example, business acceleration programs, corporate incubators and innovation hubs enable knowledge sharing and collaboration with speed. Last, the omnichannel strategy required new competences and talents, such as third-party platforms redirecting to owned interfaces and in-store technologies, to provide an integrated shopping experience. As regards the reinvention of strategies, Louis Vuitton and Gucci partnered with innovative start-ups and allied with technology companies to share, co-develop and learn digital, track and trace and e-commerce capabilities and protect from disruptors' excellent capability of adapting to customer trends. Louis Vuitton benefitted from the acquisition of these capabilities via the partnerships and alliances with the Aura Blockchain Consortium, the e-commerce platform JD.com and gaming firm Riot Games for the League of Legends game. While Gucci partnered with Apple for the development of Luce App and collaborated with the gaming interfaces Roblox, Zepeto and The Sims. Alternatively, the companies' choice to experiment via in-house corporate incubators, accelerators, innovative hubs, directly operated online channels and new store formats leverage on the enhancement of existing capabilities, such as scale, storytelling, retail network, social media marketing and commitment, with flexibility, speed, omnichannel and DTC competences. Viva Tech Lab, la Maison des Startups LVMH at the incubator Station F, the open innovation platform DARE, the contest LVMH Innovation Award and Gucci ArtLab enable dominant firms to test, learn and integrate the supply chain quickly in a controlled environment. While the exploration of social media accounts, livestreaming, mobile app, pop-ups and cafes allow firms to imitate and adapt to the direct-to-consumer approach. Louis Vuitton and Gucci seized the opportunity to invest in NFTs and

metaverse neglected by disruptors, respectively with a wait-and-see approach and a first mover advantage. Through the release of NFTs and collaborations with gaming companies, they combine technology, entertainment and branding in a controlled proprietary environment, such as the website or mobile app, with speed and scale. However, Louis Vuitton and Gucci adapted their business model mainly through the strategies of experimentation and alliances rather than acquisitions. Alliances and experimentation provide a more cautious approach than acquisitions in a turbulent environment. Even though leading firms could have acquired technology start-ups and established firms because of exclusivity, faster timing and closeness to the partner, technology-based acquisition present key challenges. The inexistence of shared assets and competencies and cultural and professional clashes may hinder the integration of the acquired firm with a risk for growth synergies. In addition, technology-based acquisitions require huge upfront investment for high but uncertain outcomes driven by uncertainty on novel technologies and luxury consumer trends.

The findings of the work make practical and theoretical contributions to the literature of the core research area and the adjent field of retail. First, the research adds value to the theory of business model innovations in the luxury industry and the frameworks of the resources and capabilities to enhance, build or invest, which have received limited attention. Despite the importance of the theory of disruption and business models, we still only have limited empirical evidence about the dynamic outlook of the barriers to luxury incumbents' adaption and how to overcome these barriers. Secondly, even though the study focuses on the luxury sector, its findings can be applied to other retail industries, as any retail sector face the same challenges of meeting new consumer expectations, digitalisation, sustainability and inventory management. Despite its contributions, the work presents some limitations. The empirical results of the thesis, exploratory in its methodological approach, focus only on secondary data without measuring the timing, the level of investment and effort required for each strategy. Thus, the study demonstrates only some of the possible strategic responses of incumbent luxury firms to digitally native vertical brands. Therefore, academics may further future research about incumbents' adaption to new entrants in the luxury sector with the combination of qualitative and quantitative analysis. In practice, researchers should complement interviews and archival data with the analysis of sales revenues, profits and return on investments to explore and measure the theoretical dimensions.

To conclude, luxury incumbents and digitally native vertical brands can learn from each other through experimentation and alliances. Due to their origins and infrastructure, DNVBs can address better the trends of meeting customer demand fast, digitalisation, sustainability, and inventory management. However, they lack the incumbents' strong distinctive capabilities of capital, storytelling and retail distribution networks. Differently, Louis Vuitton and Gucci are relatively effective in establishing competitive advantages to appropriate value from innovations but are characterized by resource rigidity and legacy business model to catch up new opportunities and change accordingly.