Achieving Agility in High-Reputation Firms:
Agile Experimentation Revisited

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Abstract – Agility has become a key capability for contemporary firms, constantly facing fast-changing markets and evolving customer needs. The greatest challenge firms encounter today is to endure continuous change and successfully navigate through uncertainty, hence developing agility to identify and exploit market opportunities while striving within uncertain contexts. In recent years, several approaches have emerged to spur agility in business model innovation (BMI), advocating the principles of gathering customer feedback, through continuous testing and iteration, thus promoting the implementation of a quasi-scientific, experimental approach to cope with uncertainty. However, companies – particularly those fearing reputational threats – may face significant barriers when trying to implement such approaches. Indeed, in high-reputation firms, the risk of failure associated to the experiments performed may put their reputation at stake. By means of a multiple-case study on three high-reputation firms, this study aims at understanding how these high-reputation firms carry out BMI and strive to practice agility through experimentation notwithstanding their contingent and idiosyncratic constraints. Our findings suggest that high-reputation firms adopt already-validated assumptions on the most critical aspects of their BM, such as the value proposition, while still extensively experimenting on other BM elements. We then propose a process model highlighting how the Agile experimentation process in high-reputation firms unfolds. Our study holds relevant implications for both theory and practice, extending the domain of theory on BMI and experimentation to the context of high-reputation firms, while providing managers with useful guidelines to implement Agile when reputation is at stake.

Keywords: Business Model Innovation, Experimentation, Agile Methods, Reputation, Lean Startup Approaches

"A reputation once broken may possibly be repaired, but the world will always keep their eyes on the spot where the crack was." - Joseph Hall.

1. Introduction

Agility, or better "the ability to detect and seize market opportunities with speed and surprise" [1] (p. 245), has become a key capability for contemporary firms. With fast-changing markets and constantly shifting customer needs [2], the greatest challenge firms have to face today is how to endure continuous change and operate in a resulting constant condition of uncertainty [3] [4]. As the outcomes of uncertainty cannot be predicted [5], companies are required to develop techniques and methods to surf through unforeseeable events to mitigate the effects of unpredictability and exogenous triggers [6]. Previous studies identified Agile software development as a possible solution for coping with protracted uncertainty by accommodating change throughout the whole development process [2] [7] [8]. Since Agile in software development involves fast product releases, and rapid cycling to gather and implement customer feedback, previous literature on digital entrepreneurship has borrowed these practices, and identified Agile as a means to validate the riskiest assumptions in a startup's business model (BM) through continuous experimentation [8]. Although extant literature has often identified the challenge of navigating through uncertainty with a clear focus on new and digital ventures [9] [10], established corporations are no stranger to the issue. As a matter of fact, business model innovation (BMI) in a firm – intended as "the search for new logics of the firm and new ways to create and capture value for its stakeholders" [11] (p. 464) – does not fall far from a typical entrepreneurial endeavor, encompassing great instability and uncertainty [12]. Uncertain conditions characterize day-by-day endeavors as firms are required to keep up with fast-paced, ever-evolving markets [3]. As firms struggle to maintain their competitive status or gain competitive advantage, frequent BMI becomes crucial [13]. Firms are thus

required to keep challenging *who they are,* while trying to determine *who they will be.* However, they have limited awareness of the potential impact of the resulting choices [6], requiring constant and increasing agility.

To this regard, while entrepreneurial ventures are required to constantly make-do with the limited resources they have at hand [14] [15] [16], established corporations have less constraints on resources, but still encounter relevant barriers to BMI [17], that could result in hindering the company's ability to change and, therefore, to act in an agile fashion. In particular, extant literature suggests that the threats towards a firm's reputation are one of the greatest constraints to the capability to experiment for BMI [16] [18]. A firm's *reputation* is intended as the collective judgement of the entity based on financial, economic, and environmental attributes over time, resulting in a unique and intangible asset that signals the company's quality in the market [19]. Consequently, reputational threats, such as product failures, perception-expectation gaps, and inability to keep up with evolving markets, may impair the opinion of the firm by multiple stakeholders (e.g., shareholders, customers, employees) [79].

Just like new ventures constantly experiment to validate their BM choices [12], high-reputation firms must engage in extensive experimentation to face the uncertainty related to BMI and overcome the threat of inertia caused by their barriers to it [17] [20]. In this context, hence, experimentation would facilitate the identification and validation of the appropriate forms of BMI to pursue [17] through the development of *strategic agility*, defined by extant literature as the capability not only to rework product specifics leveraging customer feedback, but rather the awareness of what the firm should and can afford to pursue [21].

However, extant scholarly work has yet to focus on the way companies facing relevant reputational threats overcome the barriers to experimentation that threaten their agility. Recently, the scholarly body of literature has focused on the processes of experimentation that

both new ventures and established firms deploy to achieve strategic agility to innovate their BM [7] [8] [16] [22] [23] [24] [25]. Still, as the practice of experimentation itself is inherently related to failure [26], constant iteration and adjustment – often embodied in the process of gathering early and frequent customer feedback [7] through minimum viable products [24] or prototypes [2] – are necessary to generate learning as the output of experimentation [28] [29]. As a result, not all failures can be deemed "affordable" [17] when threatening to cause reputational issues [16], raising the issue of whether and how high-reputation firms may ensure to remain agile despite their constraints to deploying an experimental approach.

Based on these premises, our study sets forth to investigate how well-established and high-reputation firms perform BMI and strive to practice agility through experimentation notwithstanding their contingent and idiosyncratic constraints. By means of a multiple-case study on three high-reputation firms that have introduced a BMI, i.e., the Walt Disney Company, Gianni Versace, and Luxottica, this study investigates the process through which high-reputation firms ensure strategic agility by deploying Agile experimentation when undergoing BMI.

Our contribution is two-fold. First, we extend the extant theoretical understanding on experimentation for BMI to the context of high-reputation firms. In particular, we point out how firms are still able to carry out Agile experimentation despite the existence of significant boundary conditions. Our findings highlight how these boundary conditions may be overcome by (i) de-risking assumptions related to the key elements of the new business model - e.g., the value proposition - adopting those already validated by others; (ii) experimenting on less critical areas of their business model that are involved in the reputation of the company; and (iii) performing the experimentation starting from pilot projects in secondary environments. Second, we extend the current breadth of Agile beyond the software domain, extending it to the context of BMI for high-reputation firms and incorporating it into a broader strategic

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perspective, and we propose a process model that illustrates the way high-reputation firms deploy Agile experimentation when undergoing BMI. Our original process model highlights how high-reputation firms employ Agile experimentation as a mindset, rather than as a tool, to permeate their BMI process and promote strategic agility.

2. Theoretical background

2.1 Business model innovation through Agile experimentation

Defined as the architecture of the value creation, delivery, and capture mechanisms employed by the firm [30], the business model concept has historically been considered as a locus of innovation itself, beyond traditional product, process, and organizational innovations [36] [37]. Its innovation has been referred to by previous studies as the alterations to a firm's BM that involve its elements or the architecture linking them, and can be defined as "designed, novel, nontrivial changes" [38] (p. 201), hence attracting considerable attention because of its ability to foster firm performance and enable adaptation caused by changes in the external environment, leading to strategic renewal [21] [39]. BMI has often been compared to entrepreneurial endeavors: launching new BMs, within consolidated firms as well as new entrepreneurial ventures, is characterized by strong novelty, volatility, and uncertainty [17] [22] [25]. Hence, diving into the process of BMI is not free of risk, often requiring the deployment of resources whose future return is far from being predictable in the short term, additionally strengthened by the uncertainty and turbulence characterizing the external environment [38] [40]. This aspect caused structured approaches to support the BMI to be increasingly addressed in latest research (e.g., [8]). These approaches commonly consist in a limited employment of resources upfront and the execution of multiple cycles of incremental improvement concerning the novel element(s) introduced, often through the involvement of the final customer in the activity of validation; hence avoiding the implementation of costly

solutions that may ultimately fail to meet the favor of the market [41]. The approaches to BMI heavily rely on the notion of experimentation in strategy, according to which innovative BMs (or some of their elements) should be operationalized in falsifiable hypothesis to be externally tested, thus leveraging on the learning nature of experimentation that may allow to collect relevant insights and suggesting whether the innovation process can proceed or needs to be rethought [40] [42] [43]. According to previous studies [8], these approaches rely on the principles of Agile development [45] [46] to enable firms to achieve strategic agility by means of BMI [21].

Agility, intended as the quick and continuous capability to adapt to changing requirements [47], acquires a *strategic* significance as it constitutes the means to improve the firm's capability to detect and gain awareness of potential strategic developments, and to quickly repurpose resources and capabilities accordingly [21]. In this context, experimentation provides an approach for firms to keep or improve their strategic agility through BMI [21] [48] [49]. In particular, the emerging "Agile" approach, already established in the software world, has been progressively gaining popularity among firms of any sector, advocating principles of experimentation that support the establishment of processes and principles to promote and achieve agility [2] [7] [8] [20] [50], [47] [48], [49]. Although Agile traditionally emerged as a methodology for IT software development [45] [51], extant research has investigated the applicability of its core principles to more traditional industries, and in combination with more established practices in new product development [45] [46] [51] [53]. These grounding principles encompass early and frequent interaction with potential customers [7] [45] [46] [50] [51] [54], quick implementation of responses to fit changing customer needs and technical advancements [7] [45] [51] [54], promoting the capability to cope with ambiguity and uncertainty [7] [50] [51], while reducing cycle time and improving productivity [45] through the minimization of waste [50] [54] [55].

Firms employ an agile approach to BMI as an answer to the growing dynamism of their surrounding environment [2] [7] [8] [20]. This is particularly true in new ventures [9] [10], which have the necessity to primarily validate their BM [38] [56], trying to achieve the optimal strategy-market fit [33]. The main characteristic of Agile experimentation processes in these contexts, thus, rely on the iterative nature of Agile [34] [42] [58] [59], translating into a continuous and adaptive process to refine and fine-tune a company's BM, while gaining valuable insights from market feedback [7] [50] [60].

From a process perspective, extant literature has proposed the inclusion of Agile principles to the traditional stage-gate model to promote agility within new product development, in the so-called Agile-stage-gate process [45] [46] [51]. This process holds a strongly experimental basis, as each of its phases is made of a series of sprints aimed at delivering a tangible result to be validated with external stakeholders involved in the process [46] to integrate speed, adaptability, and responsiveness [51]. Customer and stakeholder feedback inform the following sprints, becoming a vital part of this participatory process [46]. Cooper and Sommer's [46]-[51], formulation of the Agile-stage-gate process includes five main phases that precede official product launch; these phases can be synthesized as: (i) discovery and ideation, involving sprints to define the initial product idea, (ii) concept, including sprints to refine and validate the core concept of the business, (iii) business case, with the aim of validating the economic feasibility of the solution, (iv) development, involving sprints aimed at technically developing the solution, (v) testing, involving feasibility testing of product prototypes. Finally, these phases ideally culminate in the official product launch. Each of the phases includes a set of activities, such as interaction with stakeholders and customers or evidence-based product definition, to ensure feedback is inherently embedded within the product as the process proceeds [51]. At the end of each phase, the company needs to take a go-no-go decision, as proceeding with the next the commitment made towards the development of a given product increases [46] [51].

2.2 Barriers to experimentation

The introduction of Agile and experimental methods to enable BMI, however, may present different kinds of challenges [8]. In established firms, these processes are often carried out in parallel to traditional practices already taking place, thus potentially conflicting with them [41] [50] [52]. For instance, because of the involvement of specific functions of the firm, agile processes may experience lack of commitment from both the top management and the rest of the organization, potentially resulting in frictions in carrying out the process [50]. This may cause resistance to change and skepticism toward the new way of working, possibly resulting in unproductivity and inefficiencies [61]. Moreover, human resources involved in the agile process are often appointed with cross-functional roles that may create confusion regarding responsibility definition and project accountability, representing possible shortcomings in the effective deployment of the initiative [62] [63]. They require investments in terms of training and coordination, whose effective allocation is often subjected to the nature of the firm introducing them, mainly because of its size [64]. In particular, agility through experimentation encompasses the necessity to adopt a learning-oriented approach aiming at continuously validating the intermediate steps in the deployment of the solution. However, an intrinsic concept with learning is the one of failure. Whether this may represent a limited hurdle for new ventures because of the absence of prior activities and stakeholders' expectations [65], it may be considered one of the main obstacles for established firms with a long history on the market [66] [67] [68]. Thus, established companies may face rigidity in the learning process within experimentation because of the necessity to going through intermediate failures, eventually considered unacceptable due to the potential damage to their competitive positioning [69].

2.3 High-reputation firms

Previous literature highlights how firms seldomly fail because of poorly designed innovation processes, rather shedding light on the elements of rigidity constraining them to the status-quo [16] [21] [70] [71]. As pointed out by Bojovic and colleagues [40], prior research highlights how aspects related to firm's identity (i.e., "who we are") have an impact on the firm's strategy (i.e., "what we do"). This is particularly true for high-reputation firms, those which have consistently satisfied stakeholders' expectations through the decades [72]. Pursuing experimentation in BMI may threaten, by means of failure, the most valuable intangible asset of these firms: reputation [18] [19] [73] [74] (i.e., "how we want to be perceived") [76]. Despite the misuse of the term 'corporate reputation' with other similar terms, such as corporate image and corporate brand [75] [76] [77], previous studies consolidated the idea to deal with a dynamic and possibly time-changing construct, dependent on the different interest group taken as reference. Sinking its roots in sociopsychology, reputation in the field of business is a multi-stakeholder construct whose determinants may vary according to the specific interest group, or better "stakeholder groups" (e.g., customers, investors, employees), thus suggesting its inherent external nature, relying on different human agents' opinions. Moreover, one firm's reputation is not independent from other firms' reputation competing in the same industry, suffering from the "guilty by association" threat [78]. In particular, reputational threats may come from both inside and outside, threatening the very perception of the firm by its surrounding stakeholders, such as investors, suppliers, customers, and employees [79]. In the last three decades, multiple scales have been developed to assess corporate reputation [80] [81] [82], mainly dominated by worldwide business magazines (e.g., Fortune's America's Most Admired Companies). As highlighted by Fombrun and colleagues (2000), all these instruments suffer from three sources of bias: size, public status, and sector membership, mainly because of their structure as surveys to boards of directors and financial analysts, thus lacking the multi-stakeholder's perspective clearly remarked in the academic literature. Aiming at filling this gap, Fombrun and colleagues

propose the *Reputation Quotient* (RQ) [83], building on the 20 items grouped in 6 macro-categories, rigorously validated in a multi-stage process through survey and focus groups across different industries, as well as considering several scales previously developed for a managerial audience [77] [84]. The RQ has been employed in different studies, looking for example at how reputation may impact the rise of a firm's stock price, the public perception toward media, or even at the country level, positioning it as the reference construct for the assessment of reputation in both scholarly and managerial contexts [85] [86] [87].

3. Methodology

This study investigates the process through which high-reputation firms attain agility by deploying Agile experimentation when undergoing business model innovation by adopting a case study methodology [88] [89] [90].

Given the lack of investigation devoted to the topic of BMI in high-reputation firms, this research has been built as exploratory multiple-case study [88], deemed a suitable methodology to gain valuable insights from emergent themes [89] and support theory-building [90].

3.1 Case selection

Within our multiple-case study, we have examined the BMI process in three high-reputation firms, varying in terms of industry and size. We firstly looked for recent or running projects involving a process of BMI which had gained relevant media coverage. To do so, we conducted an analysis of managerial magazines (e.g., Harvard Business Review, The Economist), as well as financial newspapers (e.g., Financial Times), triangulating with press conferences, video interviews, and other media material available online with the aim to gather as much information as possible and select exclusively those projects involving a BMI. We thus crafted

a list of potential firms undertaking these kinds of projects. Then, in order to account for the high-reputation trait of the study, we evaluated the firms in the list through the six qualitative dimensions pointed out in the Reputation Quotient [82] [83], namely (i) financial performance, (ii) products and services, (iii) emotional appeal, (iv) social responsibility, (v) vision and leadership, and (vi) workplace environment. Specifically, through an analysis of secondary sources (e.g., firms' financial statements, marketing agencies' reports, consulting firms' research), we identified three high-reputation firms that had recently introduced a BMI within the year prior to the time of recollection of events, all resulting in possession of the twenty sub-attributes outlined by the Reputation Quotient. As the tool does not provide a scale to assess different degrees within the sub-attributes, we looked for the presence of the specific attribute in each of the firms under scrutiny. For all the three cases, the unit of analysis adopted has been the BMI process undertaken by each high-reputation firm, eventually deeper investigated in its underlying steps. Each of the cases had undergone a BMI process that lasted between 10 months and 1.5 years. The relatively short period along which the BMI processes took place found explanation in contingent reasons, differing according to the case. In particular, The Walt Disney Company and Luxottica had prior experience with other related solutions in the past, while Gianni Versace was externally forced to be extremely rapid in the execution because of the Covid-19 pandemic, with the risk of missing a whole seasonal collection sale. Table 1 summarizes the cases selected.

Table 1. Case description.

Firm	Revenue (2019)	Industry	Object of BMI	Period of BMI
The Walt Disney Company	69,57 billion $	Entertainment	Proprietary video-streaming platform	January 2019 – November 2019
Gianni Versace	843 million $	Luxury fashion	Virtual showroom and 3D models	October 2019 – July 2020
Luxottica	20,70 billion $	Apparel	Customization platform for B2C customers	March 2019 – December 2019

3.2 Data gathering

Following Eisenhardt [89], we collected information from multiple sources, both primary and secondary. Primary evidence was collected through sixteen semi-structured interviews with informants, selected among company managers responsible for the projects and employees directly involved within them. The interviews were conducted between March 2020 and March 2021 by two of the authors and two external collaborators, using a pre-defined set of generic questions concerning the BMI process, such as "how did you recognize the need or opportunity to carry out this project?", "what elements did you innovate?", or "how did the project unfold?", and the way reputational threats and barriers affected such process, such as "what challenges did you face in carrying out the project?", "what were the obstacles you encountered to implement the project?". The interview protocol was probed and validated through a pilot interview with a director at a high-reputation firm. This information has been supplemented by secondary data all along the primary data collection process to ensure appropriate data triangulation [89]. The researchers also consulted the informants periodically to validate the data collected. Table 2 summarizes the sources of evidence employed in the case analysis.

Table 2. Sources of evidence employed in the case analysis.

Data Type		Quantity	Original Data Source
Primary	Semi-structured interviews	1 Pilot interview	Director in high-reputation firm
		16 in-depth interviews	Informants
		The Walt Disney Company (6 interviews, March 2020-March 2021)	Vice President (6 interviews)
		Gianni Versace (5 interviews, May-July 2020)	Senior Manager Digital Innovation (4 interviews) Innovation Specialist (1 interview)
		Luxottica (5 interviews, June-July 2020)	E-commerce Roadmap Manager (4 interviews) Business Analyst (1 interview)
	Informal emails	61 informal emails	Informants

Secondary	External documents and sources	47 internet pages	Company websites, informants
		54 news articles	News outlets
		17 annual reports	Company financial statements

3.3 Data analysis

We recorded and entirely transcribed the responses provided by interviewees, later contacting them through email or telephone whenever some information remained unclear. Then, according to Eisenhardt [89], we analyzed each case to systematically reconstruct the fundamental elements under examination. In particular, following Corley and Gioia [91], two of the authors and two external collaborators independently developed and structured inductive data trees grouping informants' responses, then comparing them to ensure inter-rater reliability [92] and improve data triangulation [89]. Informants were treated as "knowledgeable agents" [93]; thus, first-order categories were developed using the informants' own words, and then abstracted to second-order themes, which have been reconducted to the theoretical constructs referring to BMI and experimentation, allowing to gain valuable insights for the phenomena under examination. Finally, the second-order themes were further grouped into aggregate dimensions. Following the systematic analysis of each single case, the authors performed a cross-case analysis, comparing the findings from the three cases and critically observing the similarities and differences between them [89]. Figure 1 illustrates the final data structure, whereas Table 3 provides selected evidence from the construction of first-order categories and the second-order themes resulting from the inductive coding process.

The findings were then synthesized and logically organized into a process model that characterizes the Agile experimentation process for BMI in high-reputation firms [94].

The authors periodically went back to the informants during both the data collection and data analysis process, to verify the inductive interpretations accurately portrayed reality of facts,

thus ensuring result validity [95]. Overall, the authors adopted a strict research protocol to ensure the replicability of the study and, thus, reliability [95].

Table 3. Excerpt of representative supportive data for the second-order themes and first-order categories.

Aggregate Dimension: BUSINESS MODEL INNOVATION IN HIGH-REPUTATION FIRMS	
Second-order themes	**First-order categories and representative quotations**
Value Delivery and Value Creation as Objects of Experimentation	*Value Proposition has been historically validated and does not require a deep focus.* "I believe nobody would have ever doubted that a Disney direct-to-consumer service would have been a success, because we know our customers and their love towards Disney products. Children tend to watch Disney movies over and over and we have built a huge success upon that." – VP Disney+, The Walt Disney Company
	Innovating and testing the way of interacting with customers and external stakeholders results core. "One of the things upon which we acted was the response time for customer service and the difficulties related, for example, to the user onboarding process." – VP Disney+, The Walt Disney Company "What we are interested in is the access to the platform, how much time [the customers] spend on it, on which catalogues and which products they spend more time. They are all functional information to improve the experience and then become insights, insights become actionable, and actions become future developments and value." – Senior Manager Digital Innovation, Gianni Versace "We created a customization section of our e-commerce website, where customers can freely customize the items they purchased. We didn't structure the process in steps to follow, we leave total freedom to the customer in personalizing the components" – E-commerce Roadmap Manager, Luxottica
	Innovations in customer interface often require internal reorganization to deliver the new solutions. "When we decided we were going to get serious with the streaming services, Disney's response was to reorganize the company." – VP Disney+, The Walt Disney Company "As far as 3D is concerned, the process has been improving processes, renewing those that are in need of renewal for a brand like ours in the luxury fashion sector." – Senior Manager Digital Innovation, Gianni Versace "for Remix we have a dedicated area in Sedico. (…) while for standard products like Ray-Ban, the main market is US. (…) At launch it was very small, and a very manual process. Now it is quite a large, well-organized area where the process is less automated than the standard production." - E-commerce Roadmap Manager, Luxottica
Barriers to Experimentation	*Operating in highly structured environments may speed down the experimentation processes* "In our hyper-structured context, if the innovation is structured maybe there is more control, but it does not develop with the speed with which it develops in a less controlled context." – Senior Manager Digital Innovation, Gianni Versace

	"The 'no-go' option did not exist: it just meant finding another solution to 'go'. As soon as we announced a launch date for the US we knew we had to launch." – VP Disney+, The Walt Disney Company
Reputational Issues	*Having a worldwide recognized image require a careful attention to its preservation throughout all the touchpoints.* "When you have reached a certain level of image you have to ensure that that image level remains consistent across all touchpoints. And ensuring that consistency, ensuring that Versace is perceived as Versace even in the virtual context is one of the main challenges." – Senior Manager Digital Innovation, Gianni Versace *Having large groups of external stakeholders require a careful attention in the presentation of innovative projects because of their judgment.* "In April last year we presented the first demo at the Los Angeles Investor Conference, where we showed our 300 most relevant shareholders what the Disney+ product would look like." – VP Disney+, The Walt Disney Company

Aggregate Dimension: AGILE EXPERIMENTATION PROCESS IN HIGH-REPUTATION FIRMS

Second-order themes	First-order categories and representative quotations
Detect	*Continuous benchmarking within the industry of reference in terms of innovations introduced, with the aim to depict possible game-changer elements.* "We are disrupting an industry that remained unchanged within the last 100 years – for Disney, a bit less, as it was founded in 1923, but we are almost at 100-years-old – and the organization is something that Walt Disney himself wanted, similar to Warner, Paramount and Universal. To face the challenge of a digitalized world that kind of company cannot exist anymore." – Disney+, The Walt Disney Company
	Continuous scan of the external environment even beyond industry boundaries, looking at possible sources of inspiration for new projects. "Other competitors, not in the same industry, but for example Nike that has all the customization part of the shoes, have advanced." – E-commerce Roadmap Manager, Luxottica
Copycat	*Adoption of business model innovations which have already been introduced successfully by other players on the market.* "Mainly what was done was to watch other brands doing similar things […] let's start as quickly as possible and go into fine tuning and variations to improve the whole flow" – E-commerce Roadmap Manager, Luxottica "the whole industry is moving towards streaming services. (…) Within the end of the year, all the majors will have a natural streaming distribution channel. Obviously, Disney had to somehow get into this market." – VP Disney+, The Walt Disney Company *Design of the firm-specific solution, fitting the context by its distinctive traits, especially in terms of image.* "When you have reached a certain level of image you have to ensure that that image level remains consistent across all touchpoints. And ensuring that consistency, ensuring that Versace is perceived as Versace even in the virtual context is one of the main challenges." – Senior Manager Digital Innovation, Gianni Versace

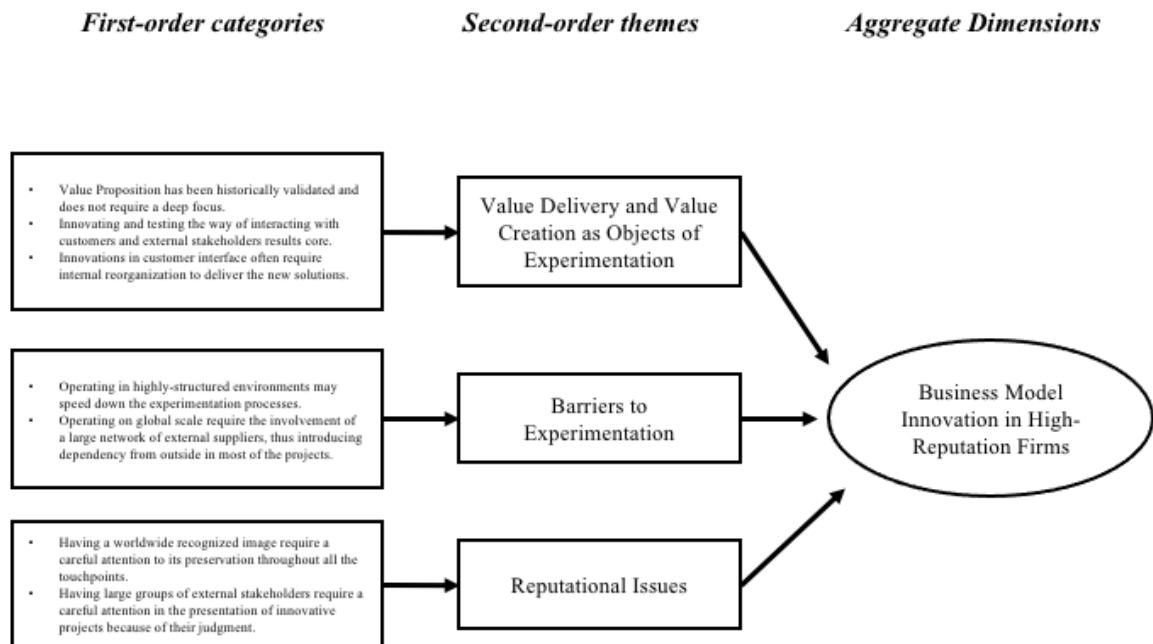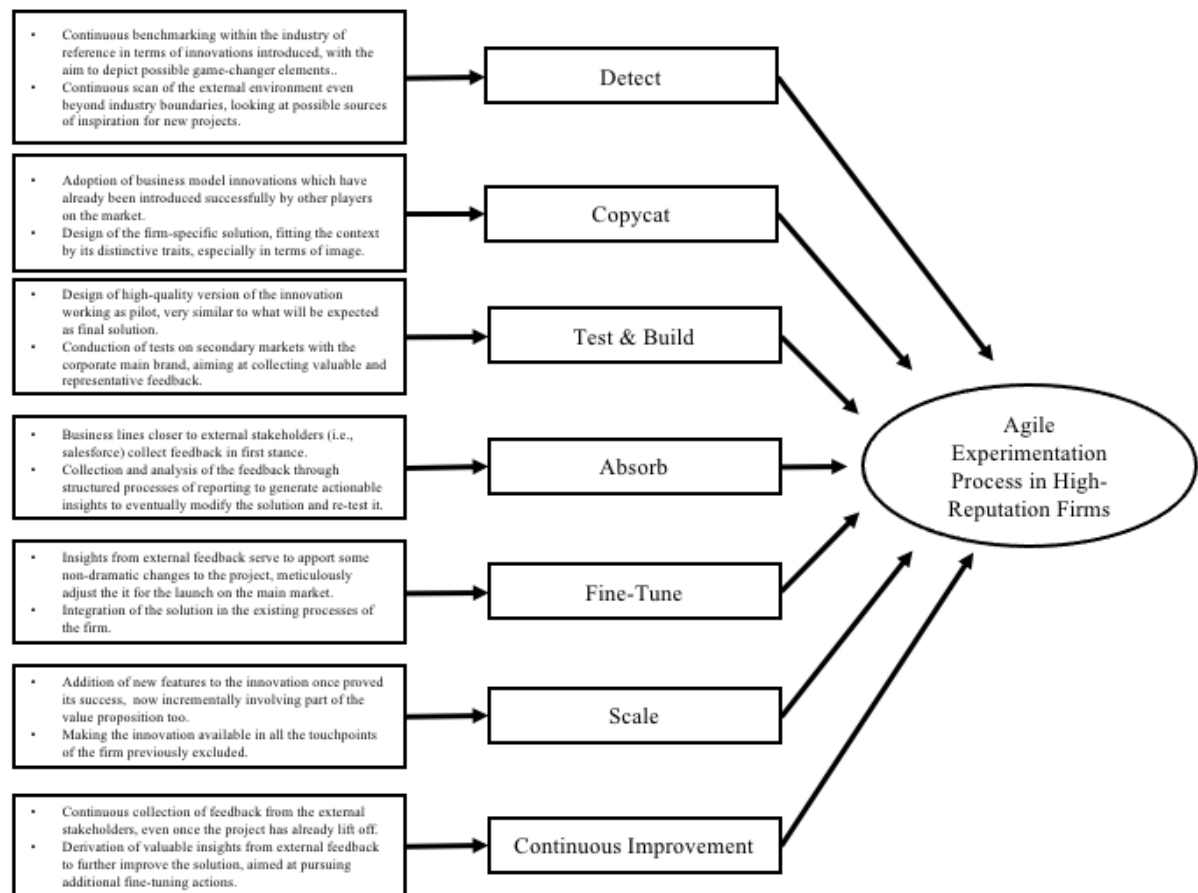|	
Test & Build	*Conduction of tests on secondary markets with the corporate main brand, aiming at collecting valuable and representative feedback.* "We started using the virtual showroom with the child collection. We backed up the product photos and made them available anyway. But inside the virtual showroom we added 3D models as an additional asset." – Senior Manager Digital Innovation, Gianni Versace "The first launch where few models were launched and only in some European countries, in particular Italy, Germany, France, Spain and UK to see first of all what was the response of the European market. For us, the main market has always been US, because we wanted to understand what the feedback from the market was." – E-commerce Roadmap Manager, Luxottica *Design of high-quality version of the innovation working as pilot, very similar to what will be expected as final solution.* "The purpose of our launch in the Netherlands was to have a dry-run of the "real" US launch, two months before. The purpose was testing the platform, the subscription mechanisms, and content management." – VP Disney+, The Walt Disney Company
Absorb	*Business lines closer to external stakeholders (i.e., salesforce) collect feedback in first stance.* "The sales managers have had direct contact with customers, and the sales managers have reported collective feedback to the wholesale team. The wholesale team then added their own and integrated those of the sales managers. They then turned them over to me and prioritize them." – Senior Manager Digital Innovation, Gianni Versace *Collection and analysis of the feedback through structured processes of reporting to generate actionable insights to eventually modify the solution and re-test it.* "[I] have a weekly meeting with a customer service responsible who gathers, analyzes, and prioritizes requests coming from the customer service, both from emails and from phone calls. We also have a social media monitoring system through which we gather insights from customers, influencer, or anybody. We then convey the feedback to the specific teams." – VP Disney+, The Walt Disney Company
Fine-tune	*Insights from external feedback serve to apport some non-dramatic changes to the project, meticulously adjust it for the launch on the main market.* "We would not perform dramatic changes in the set up and framework of the service, but we would mainly fine-tune the platform to make sure everything would be ready for the official US launch." – VP Disney+, The Walt Disney Company *Integration of the solution in the existing processes of the firm.* "The next step will be to integrate this process with our ERP, the order goes automatically into the system and does not have to pass manually to anyone" – Senior Manager Digital Innovation, Gianni Versace
Scale	*Making the innovation available in all the touchpoints of the firm previously excluded.* "Only recently the 'smart shopper' was launched, a sort of digital totem, where the customer can create. The customer enters the store also not in Ray-Ban stores like Sunglass Hut or Salmoiraghi Viganò with the possibility to create his own model or engraving on the axis or case" E-commerce Roadmap Manager, Luxottica

Figure 1. Final Data Structure (1/2).

First-order categories	Second-order themes	Aggregate Dimensions

- Value Proposition has been historically validated and does not require a deep focus.
- Innovating and testing the way of interacting with customers and external stakeholders results core.
- Innovations in customer interface often require internal reorganization to deliver the new solutions.

→ **Value Delivery and Value Creation as Objects of Experimentation**

- Operating in highly-structured environments may speed down the experimentation processes.
- Operating on global scale require the involvement of a large network of external suppliers, thus introducing dependency from outside in most of the projects.

→ **Barriers to Experimentation**

- Having a worldwide recognized image require a careful attention to its preservation throughout all the touchpoints.
- Having large groups of external stakeholders require a careful attention in the presentation of innovative projects because of their judgment.

→ **Reputational Issues**

→ **Business Model Innovation in High-Reputation Firms**

Figure 1. Final Data Structure (2/2).

- Continuous benchmarking within the industry of reference in terms of innovations introduced, with the aim to depict possible game-changer elements..
- Continuous scan of the external environment even beyond industry boundaries, looking at possible sources of inspiration for new projects.

→ **Detect**

- Adoption of business model innovations which have already been introduced successfully by other players on the market.
- Design of the firm-specific solution, fitting the context by its distinctive traits, especially in terms of image.

→ **Copycat**

- Design of high-quality version of the innovation working as pilot, very similar to what will be expected as final solution.
- Conduction of tests on secondary markets with the corporate main brand, aiming at collecting valuable and representative feedback.

→ **Test & Build**

- Business lines closer to external stakeholders (i.e., salesforce) collect feedback in first stance.
- Collection and analysis of the feedback through structured processes of reporting to generate actionable insights to eventually modify the solution and re-test it.

→ **Absorb**

- Insights from external feedback serve to apport some non-dramatic changes to the project, meticulously adjust the it for the launch on the main market.
- Integration of the solution in the existing processes of the firm.

→ **Fine-Tune**

- Addition of new features to the innovation once proved its success, now incrementally involving part of the value proposition too.
- Making the innovation available in all the touchpoints of the firm previously excluded.

→ **Scale**

- Continuous collection of feedback from the external stakeholders, even once the project has already lift off.
- Derivation of valuable insights from external feedback to further improve the solution, aimed at pursuing additional fine-tuning actions.

→ **Continuous Improvement**

→ **Agile Experimentation Process in High-Reputation Firms**

4. Findings

The Walt Disney Company first launched its Disney+ streaming service in the Netherlands in September 2019, as a response to the shift in consumption habits in the entertainment industry. The launch followed nine intense months of building preliminary versions of the platform, focus groups, user experience testing, and interactions with internal stakeholders (e.g., announcement to shareholders), organized around monthly milestones (see Table 3 for selected quotes). By November 2019, the platform had been launched to the US market, the firm's major geographical market.

In late February 2020, Gianni Versace's team found itself unable to hold fashion shows and welcome buyers into its showrooms due to the Covid-19 pandemic's emergency restrictions. As the restrictions were soon realized to threaten several of the upcoming seasonal campaigns and a shift in its customers' fruition habits, the Digital Innovation team decided to set in place a virtual showroom to move all campaigns online. March 2020 saw the team set in place, through frequent customer interaction, development of a preliminary version of the online catalogue, and recombination of internal resources, a virtual showroom for the kidswear campaign. The months leading to June 2020, the following seasonal campaign, saw the team work on extensive testing of the customer experience, systematically analyze customer feedback, and produce continuous improvement to extend to all of Versace's fashion lines.

Luxottica realized product personalization was a rapidly growing trend in the apparel market. In March 2019, after receiving positive signals from the market, the company decided to internally establish a product personalization service, delivered through a full-online e-commerce experience. The project was carried out on its timeless Ray-Ban product line, upon which the e-commerce team devoted significant efforts to gathering customer feedback to refine their purchase experience, deploying A/B tests, administering customer surveys, as well

as the backend logistics of the service. The service is now being scaled towards further, higher-end product lines.

Looking at each of these cases individually, observing how each of the high-reputation firms carried out business model innovation, one can start to observe some common patterns. The processes followed by each, on the one hand illustrated the use of extensive experimentation, and, in particular, the use of practices such as early and frequent customer involvement, testing and prototyping, organized in rapid iteration cycles. As a matter of fact, our findings highlight the use of several practices that characterize Agile, consistently with previous studies (e.g., [2] [7] [8] [51] [52]) and transposed to the business model innovation process of high-reputation firms. On the other hand, being this context unique, the cases present interesting idiosyncrasies in the implementation of Agile experimentation that enabled the companies to overcome the barriers to experimentation raised by the boundary conditions of having a high reputation.

The following sections aim at comparing and contrasting the cases presented above, highlighting their similarities and differences in accordance with the case study methodology [89] [90] [91] [93]. First, we present a narrative of how Agile experimentation enabled high-reputation firms to achieve agility in their business model innovation process, and we then elaborate on six process steps for high-reputation firms emerged by the comparison of the cases (represented in Figure 2 and synthesized in Table 4).

4.1 Experimenting for business model innovation in high-reputation firms

4.1.1 Object of experimentation. Once approaching the BMI processes, the analyzed high-reputation firms suggest how the pursued experimentation process at the beginning tend to be circumscribed within clear boundaries: "*We tested mainly how to offer the Disney+ service to our customers, rather than the Disney+ as a product itself. […] because we know our customers and their love towards Disney products*" reports Vice President of Disney+ at The

Walt Disney Company, thus stating that the company's value proposition is not tested, with the project focusing more on the way through which that value is delivered to customers. A similar point has been expressed by the E-commerce Roadmap Manager of Ray-ban at Luxottica: "*On the product side, I actually work in the E-commerce team and it has been always okay*." Thus, the analyzed high-reputation firms tend to center testing on their interaction with their customers and, more broadly, external stakeholders. From a BM perspective, stakeholder interactions are regulated by the value delivery mechanisms. As affirmed by a Senior Manager of Digital Innovation at Gianni Versace: "*what we have changed is the experience itself, in the sense that there is a user flow from the moment they enter [the platform] that ended up directly in one category rather than another. The customization of this path by client was completely revised*", following the direction given by Donatella Versace, co-founder of the company, in an interview released to the New York Times in 2015: "*We have to worry, how to bring Versace in the 21st century, how to keep Versace relevant*"[1]. This suggests how the experimentation on this limited perimeter of their offer is carried out with extreme attention, from a strict planning in terms of overall structure of the project to the minor operational details. To this extent, a further point was highlighted by Disney+'s VP, revealing how he had and still has "*a weekly meeting with a customer service responsible who gathers, analyzes, and prioritizes requests coming from the customer service, both from emails and from phone calls*" and "*a social media monitoring system through which gathering insights from customers, influencer, or anybody, thus conveying the feedback to the specific teams*." He continues in stressing the degree of attention to the most intimate details saying that "*Deciding the number of clicks the user would have to perform from acquisition to the first streaming is one of the major concerns of every streaming platform*".

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[1] Friedman, V. (2015) "Donatella Versace Interview", The *New York Times*. Accessible here.

The intimate care concerning the path experienced by the customer on their proprietary channels seems to be one of the most important sources of attention of high-reputation firms pursuing BMI, as illustrated also by Ray-ban: "*When we started this customization project […] customers could have the possibility to customize their glasses, only from the online channel, only from the website. […] the access point to the product is an ad hoc experience that we must be sure is clear and understandable for the user, we must also do many tests to understand if what we are creating has value for the customer.*"

In all three cases, it emerges how the implementation of such changes in the value delivery requires the firms to rethink their value creation mechanisms too, in particular in their internal reorganization. Disney+'s VP affirmed that "*When we decided we were going to get serious with the streaming services, Disney's response was to reorganize the company within a whole division dedicated to this kind of services.*" It should also be noticed how The Walt Disney Company incrementally acquired the majority of the stakes in BamTech Media, a streaming-specialized studio, with a 33% in 2016 and then the majority ownership in 2017, thus internalizing a key asset with the goal to delivery such new service[2], with an investment in technology estimated in around 2.7 billion dollars[3]. To this extent, Ray-ban's informant revealed that "*In general, for our markets we always have a local presence, in terms of production and warehouse, the only difference is Remix. All customized products are produced in Sedico in a separate dedicated area: the Remix area.*" As a matter of fact, the Sedico plant is the main production hub of Luxottica, opened in 2001 and now manages approximately 26,000 orders per day, shipped all around the world[4]. These statements indicate how the creation of value related to innovation in the BM of these high-reputation firms started in well-

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[2] Company Timeline, *BamTech Media Website*. Accessible here.
[3] Jarvey, N. (2019) "Disney Over the Top: Bob Iger Bets the Company (and Hollywood's Future) on Streaming", *Hollywood Reporter*. Accessible here.
[4] Luxottica Annual Report (2018), *Luxottica Website*. Accessible here.

confined areas of the company, dedicated and narrowly focused on the specific project. However, once experimentation produces the first results through the collection of positive feedback that show project's potentialities in the eyes of external stakeholders, these dedicated business units seem to be scaled and made central to the organization. Indeed, Disney+'s VP affirmed how today "*Disney+ has become the funnel through which the whole company communicates directly with the consumer beyond Disney parks. So, any person who works at Disney today has top of mind the need of what they can do for Disney+*", a main strategic direction encompassed in the renewed mission of The Walt Disney Company itself, promoted by the former CEO Bob Iger[3]. and Ray-ban that: "*at launch it was very small, and a very manual process. Now it is quite a large, well-organized area where the process is less automated than the standard production.*" These two statements suggest how the high-reputation characterizing both Disney and Ray-ban allow them to scale the experimental projects across the whole organization once proved their effectiveness. Moreover, Disney+'s VP points out an additional aspect between the aspect of scaling and experimentation: "*at the beginning we were just 7 people in a room working in our function of Disney+, today we are 75. The decision to scale was clear since the first results of the platform, but it took a while to be implemented. Not because this was not clear the destination to go, but because it is necessary to build the car while you are driving it. And we are driving it pretty fast, we are driving a supercar and we are still building it*", suggesting how even once scaled to the whole organization, the process of experimentation and continuous testing does not tend to end.

4.1.2 Barriers to Experimentation - All the three cases analyzed show relevant commonalities in terms of potential elements hampering the experimentation in carrying out the different projects of BMI. For instance, Gianni Versace's Senior Manager Digital Innovation posed emphasis on the peculiarities of the environment in which they operate, shedding light on the necessity to pursue more flexible approaches in dealing with innovation,

saying "*In our hyper-structured context, if the innovation is structured maybe there is more control, but it does not develop with the speed with which it develops in a less controlled context*", reinforced by Disney+'s VP from the perspective of external expectations, since "*The 'no-go' option did not exist: it just meant finding another solution to 'go'. As soon as we announced a launch date for the US, we knew we had to launch.*" Moreover, even if dedicated business units were created to carry out the processes, these innovations often required relationships with external actors, thus posing challenges in their execution because of the high coordination involved, as Gianni Versace's Senior Manager Digital Innovation stated "*For the models whose image version did not exist, we had to develop ad-hoc 3Ds, so we had to coordinate with the specific product office. […] Other parties involved were merchandising, wholesale, certainly the industrial part and the product offices, the supplier.*" Another challenge to the processes is represented by an inherent characteristic of being established firms with a worldwide presence, indeed both the informants from Disney+ and Gianni Versace underlined the complexity in dealing with experimentations involving players globally dispersed all around the world.

4.1.3 Reputational Issues - The worldwide presence additionally reinforced the pressure in terms of preservation of their reputational heritage, very well described in the words of Gianni Versace's Senior Manager Digital Innovation: "*When you have reached a certain level of image you have to ensure that that image level remains consistent across all touchpoints. And ensuring that consistency, ensuring that Versace is perceived as Versace even in the virtual context is one of the main challenges.*" The reputational issue does not involve only customers, but also internal and external shareholders that pay attention to the innovative activities of the firm and play a crucial role in determining which projects to pursue and which not. For instance, Gianni Versace's Senior Manager Digital Innovation reported how "*A project that requires an investment of 100k turns a light on and questions, it has to be presented to a board*" and

Disney+'s VP reported: *"we presented the first demo at the Los Angeles Investor Conference, where we showed our 300 most relevant shareholders what the Disney+ would have looked like."* As a matter of fact, the following day Disney's share price recorded a +20% in the stock exchange[5].

4.2 The Agile experimentation process in high-reputation firms

Our findings let a process pattern emerge as high-reputation firms approached the introduction of BMI. Our cross-case analysis reveals the emergence of six distinct phases: within this process, high-reputation firms seem to, first, (i) *detect* interesting BMI possibilities from the external environment, then (ii) *copycat* the selected value propositions. Once done, the high-reputation firms seem to set up pilot projects, where they can (iii) *test and build* value delivery and creation mechanisms around the new value proposition, and then (iv) *absorb* them into the organization. As the pilot projects conclude, they are (v) *fine-tuned* for official launch, and finally (vi) *scaled* to other markets or segments. This does not mark the conclusion of the process, but rather triggers continuous cycles of improvement.

4.2.1 Detect– In all the three cases, an element of primary interest is represented by the fact that none of three BMI projects analyzed represented a new-to-the-industry innovation, but rather the firm's version of an offer already implemented by other players in the market. Indeed, the informants affirmed how the projects started from observing other players in their respective market or even in parallel industries, as Ray-ban's E-commerce Roadmap Manager said *"Mainly what was done was to watch other brands doing similar things. […] for example, Nike that has all the customization part of the shoes."* As a matter of fact, Nike was one of the

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[5] The Walt Disney Company Interactive Stock Chart, *Yahoo Finance*. Accessible here.

first brands launching a customization service, with Nike ID in 2000[6]. This comparison with other players seemed to have generated an alert in high-reputation firms, becoming then aware of the necessity to keep their relative positioning in the market, as highlighted by Disney+'s VP, stating "*Netflix has certainly opened the way, Amazon has followed closely but at this point all the major media companies are launching or have launched something similar*"[7], as well as the continuous comparison with closed competitors[8] as affirmed by Gianni Versace's Senior Manager Digital Innovation: "*I also spoke to Ferragamo's CIO who told me more or less the same path, so there is some logic behind it.*" Indeed, the closest competitors of these high-reputation firms implemented similar innovations.

4.2.2 Copycat – The observation of competitors and other similar players' moves led the analyzed high-reputation firms to adopt copycat strategies, thus entering the game in a second moment not to miss the opportunity to join the train of the innovative players. This concept is particularly clear from the words of Disney+'s VP: "*the whole industry is moving towards streaming services. […] Within the end of the year, all the majors will have a natural streaming distribution channel. Obviously, Disney had to somehow get into this market.*" These data suggest how high-reputation firms keep always monitoring the external environment with a critical eye in terms of the innovation there emerging, not only limited to their closest industry boundaries. Results suggest how the three cases kept an agile behavior in the capability of effectively observing and processing what is going on outside their own walls, rather than a pure and active movement, hence capturing possible opportunities to introduce innovations in the different value mechanisms of their BM. Agility may be interpreted as the never-ending self-posed question concerning firms identify ("who we are") in the present and in the future,

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[6] McLaughlin, A. (2019) "Nike ID rebrands as Nike by You", *Creative Review*. Accessible here.
[7] Scooter, N. (2020) "History of Video Streaming", *Mobile Geeks*. Accessible here.
[8] D'Elia, D. (2020) "Ora la moda si converte agli showroom in realtà virtuale", *Wired*. Accessible here.

with the aim to depict external valuable signals to keep the consolidated competitive positioning built in decades of activities.

4.2.3 Pilot – Once the analyzed high-reputation firms have decided to pursue the current innovations taking place in the market themselves, their informants pointed out how the issue concerning the practical implementation of the solutions needs to be faced. The three cases disclose how this is often carried out through pilot projects, realizing preliminary high-quality versions of the final offer, with the aim of validating the most critical hypotheses beyond the one of the value proposition already validated externally. In particular, following the detect and copycat phases, the three firms seem to have implemented pilot projects that focus on assumptions which are peculiar to their target market and their organizational structure.

Test & Build – This process of validation has been reported to take place through experimentation, by way of realizing versions of the offers embedding these hypotheses and looking for market feedback in the peculiar context of operation of the high-reputation firms. For instance, Disney+'s VP revealed that: "*The purpose of our launch in the Netherlands was to have a dry-run of the "real" US launch, two months before […] to test the platform, the subscription mechanisms, and content management.*" These words suggest that high-reputation firms seem to experiment on secondary markets that hold similarities with the main target market, with the aim to collect relevant and reliable insights but at the same time do not play directly on the big show. Indeed, Disney+'s VP continues: "*We chose [the Netherlands] because it was an easier starting point given the high penetration rate of broadband connection, and then it was a good test without requiring further investment to create further dubbing and subtitling.*", thus even suggesting an attention towards the resources allocated to these preliminary tests. Moreover, the test launch in the Netherlands was not supported by any promotional and marketing activities, self-suggesting the inherent provisional nature of the test. As reported by the Hollywood Reporter in 2019: "*There was no marketing, no billboards and*

no social media campaign. But on Sept. 12, the 17 million residents of the Netherlands became the first people in the world to see Disney's high-profile streaming offering Disney+, for free."[9]

This attitude has been expressed in the remaining cases too. Indeed, Ray-ban's E-commerce Roadmap Manager said: "*the first launch where few models were launched and only in some European countries, in particular Italy, Germany, France, Spain, and the UK to see first of all what was the response of the European market. For us, the main market has always been US, because we wanted to understand what the feedback from the market was*" while Gianni Versace's Senior Manager Digital Innovation added something related to the specific line of business used to test the new solution: "*We started using the virtual showroom with the child collection. We backed up the product photos and made them available anyway. […] the data we were interested in were access, time on the site, the products on which [the customers] spent more time and then within the photographs themselves, on which photographs they remained longer.*" All the three cases thus suggest how the analyzed high-reputation firms decided to firstly test what they copycatted from other players, rather than spending time and time in meticulously building the object of the preliminary test. From the words of the informants and what previously reported about their trust in the characterizing elements of their own value proposition, as well as their established customer base, it seems how building a high-quality first version embedding their reputation is inherent to their high-reputation status, with more focus placed on the way through which this innovative idea is communicated and brought to the customer base. Indeed, as highlighted in all the cases, the role of the customer is central to the process, with a sort of informal contract the high reputation has with all those people who allow them to be identified with this status. However, it is worth underlying how despite

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[9] Roxborough, S. (2019) "Why Disney+ Quietly Launched in the Netherlands First"*, Hollywood Reporter.* Accessible here.

the confidence in their value proposition, all the three cases evidenced how the process is iterative, with possible minor modifications to continuously perform on the testing version. Being all the projects related to the way firms interact with customers, it is not surprising to notice how the elements of greater attention were related to the user interface. However, some differences seemed to arise in terms of the typology of tests implemented by the different companies, related to the specific kind of solution they were offering and the main goal of the experimentation. Disney+'s VP revealed how "*We verified those activities or product functionalities that could not be tested if not through a launch and customer response, such as concurrent streaming, customer service responses or, for example, the time to solve a problem. […] So, the goal was to try to bring as many customers to the platform as possible to put it under stress and try to test if there were any problems or things to check.*" Ray-ban's E-commerce Roadmap Manager provided some practical insights concerning the tests themselves: "*we understand through surveys with our users what could be the features that could be of interest in terms of customization at a Ray-Ban level and all this design and requirements [through] A/B tests. Practically we show to 50% of the traffic one experience, to the other 50% another. Within 3 weeks we have the data, we see experience A and experience B and we immediately understand which one works better.*"

Absorb – The experiments and tests carried out by all three firms generated a series of insights concerning their preliminary version of the solutions, thus providing elements to adjust some of their features. Being established companies, the process in collecting market feedback was strictly structured with clear lines of actions and well-defined roles in order to generate a positive and reinforcing flow. Disney+'s VP reported how "[*I] have a weekly meeting with a customer service responsible who gathers, analyzes, and prioritizes requests coming from the customer service, both from emails and from phone calls. We also have a social media monitoring system through which we gather insights from customers, influencers, or anybody.*

We then convey the feedback to the specific teams." On the other hand, Gianni Versace's Senior Manager Digital Innovation suggested that "*sales managers have had direct contact with customers, and the sales managers have reported collective feedback to the wholesale team. The wholesale team then added their own and integrated those of the sales managers. They then turned them over to me and I prioritize them.*" This evidence suggests that high-reputation firms directly collect feedback with teams that are closer to the external market, then pursue a backward process through which the collected feedback is enriched, from back-office teams until the final decision-maker. Once this process has been accomplished, a new forward cycle of experimentation may be executed, with the aim to implement potential modifications and test the new conditions.

4.2.4 Fine-tune – All three cases showed evidence of how, once the pilot phase had provided successful results validating the main hypothesis, the firms were ready for minor modifications and iterations. Indeed, as told by Ray-ban's E-commerce Roadmap Manager: "*We didn't launch a version just to make it work*", and as similarly reported by Disney+'s VP: "*We did not perform dramatic changes in the set up and framework of the service, but we had mainly fine-tuned the platform to make sure everything would be ready for the official US launch.*" The feedback collected in the previous phase enabled to consider the extension of the solution within the company itself, as pointed out by Gianni Versace's Senior Manager Digital Innovation: "*The next step will be to integrate this process with our ERP, the order goes automatically into the system and does not have to pass manually to anyone.*" Hence, the advanced level of similarity of the tests with the final offer seemed to enable the three high-reputation firms to only marginally modify them before the actual launch.

4.2.5 Scale – Once the solution has been launched on the market achieving or going beyond the success expected, the firm can start considering the possibility to scale it to other markets or segments. This might be done by furtherly enriching and diversifying the offer, introducing
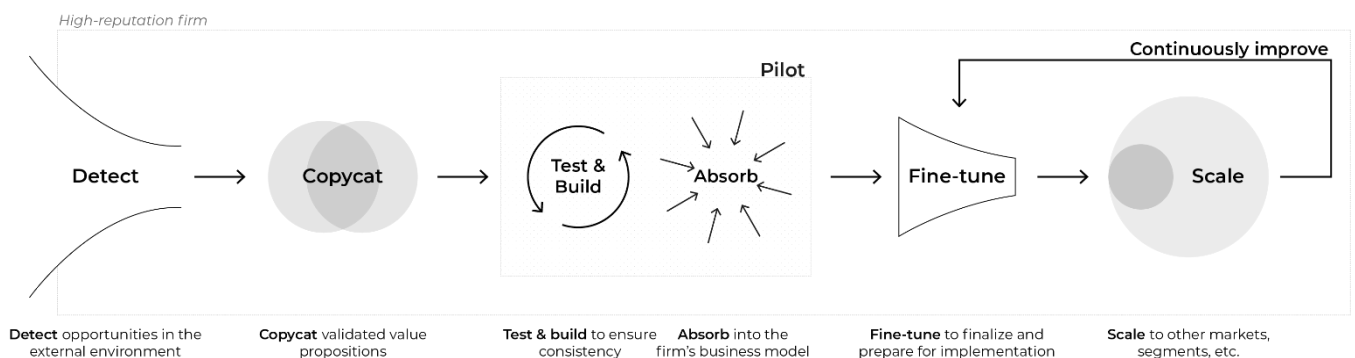
some modifications to the core element of the value proposition previously adapted from similar players (e.g., Disney+ STAR[10]). The scaling phase might be further strengthened in the dimension of value delivery, as told by Ray-ban's E-commerce Roadmap Manager: "*only recently, the 'smart shopper' was launched, a sort of digital totem, where the customer can create. The customer enters the store also not in Ray-Ban stores like Sunglass Hut or Salmoiraghi Viganò with the possibility to create his own model or engraving on the axis or case*" and potentially making available the innovation for other business lines of the group as the informant continued "*if we have to launch a new type of product, or launch in a new country, or a new feature on E-commerce, the approach is that we start with Ray-Ban and then if it works we extend it to other Luxottica brands.*" Finally, Gianni Versace's Senior Manager for Digital Innovation concluded: "*we will continue to develop [the solution] because it has now become a value-added service and it can allow our clients' buyers not necessarily to come to Milan and therefore reduce costs for the company*", suggesting how further opportunities may arise also in the approach or repopulation of minor customer segments. The three cases thus show alternative ways in scaling the pilot project previously carried out, from the involvement of other product lines or portfolio brands as done in Ray-ban, to the diffusion of the innovative mindset developed within the whole organization in the cases of Disney+ and Gianni Versace, making the new reality the main gateway of the company and a daily-used platform respectively, as well as expanding to additional geographical and product markets such as the international expansion of Disney+ and the enrichment of the streaming offer.

5.2.6 Continuously Improve – Despite the success in carrying out the BMI, the three cases suggest how the process should not end with the scale of the project, but rather continuously feed with new insights from the direct experience on the market aiming at possibly improving

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[10] The Walt Disney Company Press Release (December 2020), *The Walt Disney Company Website*. Accessible here.

the solution. The words of Disney+'s VP well summarize this idea: *"it is necessary to build the car while you are driving it. And we are driving it pretty fast, we are driving a supercar and we are still building it."* Indeed, in the specific case of Disney+, after some months of activities and feedback collected from customers pointing out how the service was mainly limited to kids and teenagers, the firm decided to add the STAR section to their project, targeting a wider audience and furtherly improving the subscription numbers. Ray-Ban, instead, introduced a search-by-image capability in the U.S., which allows users to upload a picture of any pair of Ray-Ban frames and then search for them on the extensive Ray-Ban.com catalogue, thus making a step further in the relationship and interaction with the final customer through the new channel[4]. Gianni Versace, on the other hand, is at an earlier stage of development. As illustrated by the words of Stefano Righetti, CEO of Hyphen, a firm specialized in Digital Transformation and collaborating with the fashion company, drawing from an interview released to Vogue in March 2021 about the future of the collaboration around advancements in technology and integration between the virtual showroom and the physical one: "*Imagine you are in a clothing store and want to know what colors would go best with the trousers you are trying on. The salesman can now consult the Digital Twin of the trousers in real-time and provide you with these suggestions*."

Figure 2. A process model for Agile experimentation in high-reputation firms.

| Detect opportunities in the external environment | Copycat validated value propositions | Test & build to ensure consistency | Absorb into the firm's business model | Fine-tune to finalize and prepare for implementation | Scale to other markets, segments, etc. |

5. Discussion

Our study addresses the emerging need of shedding light on the way high-reputation firms – an idiosyncratic type of established corporations under severe constraint – deploy Agile to perform business model innovation. By investigating three BMI initiatives carried out by high-reputation firms, our analyses offer original findings that contribute to and are corroborated by extant theory in BMI and Agile development. In particular, (i) we extend the extant theoretical understanding on experimentation for BMI to the idiosyncratic context of high-reputation firms, and (ii) we extend the current breadth of Agile to the context of BMI for high-reputation firms and incorporating it into a broader strategic perspective. The study's contributions are hereinafter presented and discussed.

5.1 Agile experimentation in high-reputation firms: experimenting on the value delivery and value creation mechanisms of the business model

First, our study has unveiled how high-reputation firms engage in experimentation efforts when introducing BMI, consistently with what has been observed in extensive literature on both entrepreneurial ventures [8] [16] [97] [98] [99] [100] and established corporations [17] [21] [34].

Prior studies on BM experimentation in the context of entrepreneurial ventures (e.g., [97]) reported that new ventures primarily devote their experimentation efforts to the core aspects of their BM – i.e., value proposition and target segments. Contrarily, our findings suggest that high-reputation firms benefit from the adoption of experimentation as a means to frame the validation process: validation efforts are directed beyond new product or service (e.g., value proposition) validation and encompass also additional BM elements, such as the value delivery and value creation mechanisms [97]. Our empirical analysis also reveals that, after identifying an opportunity and forming BM hypotheses around it, high-reputation firms follow analogical

reasoning [101] to observe competitors' moves and copy them – an action we label "copycat" in our process model – which enables them to refrain from testing the riskiest hypotheses themselves [102]. Through copycat, firms absorb the outcomes of the experimentation and learning processes performed by external players on value proposition elements; by doing so, they experiment with "someone else's money" [103] and turn what they learnt from competitors into less-risky or non-risky hypotheses [102]. As a result, they refocus the effort of their experimentation effort towards other, less critical BM elements (e.g., channels) which are yet to be de-risked through experiments and thus become the hypotheses with the highest testing priority. In sum, within the context of high-reputation firms, the need to preserve reputation reorients the focus and effort of experimentation by first copycatting learning from the outside through analogical reasoning [101], and then turning to less critical BM elements which become the risky assumptions to test. This way, through Agile experimentation, firms learn to hypothesize and follow analogical reasoning to rank hypotheses and prioritize testing. Our findings are consistent with and extend Frankenberger and Stam's [104] claim that copycatting already proven BMs may be a performance-enhancing strategy when paired with industry experience that enables resource recombination efforts.

Furthermore, as observed in the Pilot phase, high-reputation firms devote these integration and experimentation efforts to secondary markets or segments which require lower cost for implementation and may present lower repercussions on their reputation. This finding is consistent with Doz and Kosonen's [21] suggestion to leverage experiments that are confined to individual divisions, projects, or products, to drive BMI and foster strategic agility, especially when operating in turbulent environments [104].

Finally, the idiosyncratic use of Agile experimentation by high-reputation firms may lead them to overcome some of the reported "dark sides" of Agile involving Agile teams (e.g., [105] [106]). The strict delivery requirements and deadlines have been documented to potentially

increase Agile teams' peer pressure to perform and, in turn, negatively influence innovative output [106]). However, this decrease in performance is often caused by the possibility to perform last-minute changes and implement additional specifics to the product, sometimes leading to obstinacy [105]. As opposed to software firms, however, high-reputation firms employ Agile experimentation to achieve the agility that is necessary to quickly react to market changes and face novelty and uncertainty. The influence of reputation pushes firms to finalize decisions regarding the product once they meet market acceptance, rather than respond to client requirements until the last minute. To this extent, high-reputation firms may be less subject to the "dark sides" of Agile concerning agile teams as reported by extant literature, thanks to their idiosyncratic adoption of Agile experimentation.

5.2 Looking beyond software: incorporating Agile in experimentation for high-reputation firms

Second, we shed light on the idiosyncrasies that characterize the Agile experimentation process in high-reputation firms. Prior studies mostly reported how Agile is deployed in software firms [2] [7], entrepreneurial ventures [8], consulting firms [22], and manufacturing firms [45] [46] [51]. Our findings challenge the traditional formulation of the traditional Agile Stage-Gate approach employed in established firms [45] [51]. The comparison of the two processes is presented in Table 4.

While the traditional perspective on Agile software development [2] [7] is strongly focused on product development and delivery, our study includes it within the broader-scoped perspective of strategic agility [21] [107] [108], depicting how, in high-reputation firms, Agile experimentation practices are mostly confined into the Pilot phase of the BMI. This way, Agile acquires a more strategic relevance – serving not just as a tool, but as a mindset in the strategic

decision-making process, whose principles govern the overall BMI process for high-reputation firms [109].

This renewed role of Agile within the BMI process allows to overcome some of the reputational threats firms may fear. While traditional Agile development sees upfront customer involvement since the early stages of the process, through rapid and frequent deliveries of the product [45] [46], high-reputation firms resort to the external environment, which they leverage to detect and import already-validated value propositions to copycat [104] to overcome the reputational threats connected to high-risk assumptions [16] [103].

Instead, high-reputation firms concentrate Agile's core principles to the middle of the BMI process, where frequent and rapid testing is beneficial and can effectively support the firm in how to integrate value propositions imported from the external environment with the firm's idiosyncrasies, so to ensure consistency with the firm's identity [110]. For example, as observed from our cases, high-reputation firms leverage on artifacts – preliminary versions of a platform, system, or product aimed at testing specific assumptions – that support the experimentation process and customer interaction during the Pilot phase, consistently with Agile's principles [2].

Once it comes to scaling the BMI to primary markets, segments, and projects, however, high-reputation firms show contrasting scaling logics as compared to the rapid and trial-and-error scaling carried out by entrepreneurial ventures [111] [112] but adopt a more traditional approach to strategic action, that involves the fine-tuning of insights and experiences gathered in the Pilot phase to validate the lowest-risk assumptions and prepare for launch.

Building on the arguments presented above, our findings illustrate how high-reputation firms employ Agile experimentation with a strategic perspective. High-reputation firms deploy Agile experimentation as a mindset, rather than a tool; Agile experimentation hence becomes a novel perspective that permeates their strategic decision-making process.

Table 4. The Agile experimentation process in high-reputation firms as compared to the Agile stage-gate model.

Agile stage-gate Model [45] [51]	Agile experimentation in high-reputation firms (authors' original elaboration)	
Discovery & Ideation. Generation of the initial product ideas	**Detect.** Looking for BMI opportunities in the external environment, even beyond the industry boundaries, to capture trends that may be suitable to the firm's context.	
Concept. After screening the initial project ideas generated, development of the core project concept, then followed by its scoping. .	**Copycat.** Selection of value propositions already validated in the market by other players to be implemented within the firm, without the necessity to test the core hypothesis associated to them.	
Business Case. Validation of the economic feasibility of the solution.	**Pilot.**	**Test & Build.** Testing rapidly, starting from the copycatted value propositions, the elements of the BMI introduced within the peculiar context of the high-reputation firm to ensure consistency. Although testing revolves around features such as the value delivery and value creation mechanisms, the pilot is conducted in secondary markets or segments aiming at collecting valuable feedback from external stakeholders, limiting the potential reputational threats. The outcomes of the testing are then built into the next testing version, creating an iterative cycle.
Development. Actual creation of the solution from a technical point of view.		**Absorb.** Collection and integration of the feedback gathered into the firm's peculiar context of operation through the formalization of valuable insights, involving the whole team responsible for the project.
Testing. Field trials, customer testing, trial operations, testing the feasibility of product prototypes.	**Fine-tune.** Implementation of the insights coming from the pilot phase, getting ready for the launch in main markets or segments through marginal adjustments of the BMI.	
Launch. Start of production and sales as the phases culminate in the official product launch.	**Scale.** Diffusion of the project across the whole organization, expanding to additional product lines and markets, as well as in terms of mindset and culture.	
Post-launch review. Performing post-launch activities such as product, production and marketing or sales improvements to ensure feedback is constantly embedded into the product.	**Continuously improve.** Collection of feedback from the market which does not stop, notwithstanding the possible success of the project, continuation of the fine-tuning of the solution for each peculiar context of implementation.	

6. Conclusions

Our study discloses that high-reputation firms achieve strategic agility when undergoing business model innovation by leveraging Agile experimentation. However, in order to overcome the reputational barriers that may impair the possibility to implement Agile

experimentation, high-reputation firms revise the traditional Agile Stage-Gate process to adapt it to their idiosyncratic context, using it as a means to frame the validation process. Our findings highlight how high-reputation firms overcome the boundary conditions their unique context poses by (i) de-risking assumptions related to the key elements of the new business model - e.g., the value proposition - adopting those already validated by others; (ii) experimenting on less critical areas of their business model that are involved in the reputation of the company; and (iii) performing the experimentation starting from pilot projects in secondary environments. Contrarily to what prior studies on entrepreneurial ventures and established companies suggested, high-reputation firms use Agile experimentation as a mindset, rather than as a tool, to permeate their BMI process and promote strategic agility. In particular, instead of involving customers early on for frequent and rapid reviews of the product, high-reputation firms leverage analogical reasoning to copycat value propositions that have been validated by other players and industries, de-risking the riskiest hypotheses related to the new BM, and re-prioritize their BMI hypotheses by focusing their testing efforts on less core elements of the BM, such as value delivery and creation mechanisms, still crucial to consistently introduce the BMI into the firm. The principles of Agile – i.e., short and iterative development cycles, active user involvement to gather feedback, constantly updating the project's scope – are then focused and exploited at the heart of the process. Here, high-reputation firms launch pilot projects of their BMI in secondary markets and segments, to rapidly test the validity of their core assumptions and ensure consistency with the firm's BM. Finally, once getting to scaling the new BM to primary markets and segments, high-reputation firms revert again to more traditional strategic decision-making approaches, fine-tuning with the insights gathered from the pilot project and then scaling to the rest of the organization.

Our study contributes to the theoretical discourse on experimentation for BMI, responding to frequent calls for empirical studies that would address the relationship between reputational

threats and the use of experimentation. Furthermore, our findings extend the applicability of Agile experimentation to an unexplored domain, that of high-reputation firms, proposing a process view on the deployment of Agile experimentation in high-reputation firms.

From a practical perspective, our study can inform managers and entrepreneurs dealing with inertia to experimentation caused by reputational threats to deploy Agile experimentation when willing to undergo BMI. Our original process model supports managers and entrepreneurs from firms in environments characterized by relevant boundary conditions to experimentation, in particular when dealing with reputational threats, with the possibility to pick up actionable steps and guidelines for the implementation of BMI.

Finally, this study is not free from limitations, which are worthy to be mentioned and may be addressed by future research. First, we selected three high-reputation firms leveraging the established model of the reputation quotient. However, future research may address the meaning of reputation from an ontological perspective, elaborating on the boundary conditions of our study's propositions. Second, this research was carried out by investigating a limited number of cases that pertain to a restricted number of domains, lacking on specific – and possibly idiosyncratic – ones (e.g., banking). Third, our study considered only established firms and, even if the essential traits of high-reputation ones are likely to be possessed by firms with decades of activities on the market, it cannot be excluded the possibility of having startups which grew fast or have high valuations (e.g., scaleups, unicorns) matching such characteristics. As a matter of fact, previous studies [16] suggested the existence of reputational issues also in established startups starting to handle delicate relationships with their clients. To this extent, it may be worth extending the investigation of reputational influences in the different approaches to Agile experimentation for BMI compared to the established firms that are object of our research. Fourth, this study builds on the theoretical school that considers reputation as a multi-stakeholder construct. Scholars may devote attention to investigating

whether firms considered high-reputation by only a portion of the interest groups (e.g., considered as high-reputation only by investors vs only by employees) exhibit differences in the approaches to carry out their business model innovation process, thus advancing the depth of the knowledge in terms of high-reputation firms. Future research may also address projects of a wider scope to improve the generalizability of results. Finally, the performance of the innovated BM was not included as a variable in our analyses. To extend our considerations, future research may seek to investigate the performance implications of the adoption of Agile experimentation in high-reputation firms.

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