© *Academy of Management Journal*
2020, Vol. 63, No. 2, 554–583.
https://doi.org/10.5465/amj.2017.0706

THE GENESIS AND METAMORPHOSIS OF NOVELTY IMPRINTS: HOW BUSINESS MODEL INNOVATION EMERGES IN YOUNG VENTURES

YULIYA SNIHUR
Toulouse Business School

CHRISTOPH ZOTT
IESE Business School

In this research, we ask whether and how founders bring about business model innovation. Grounded in an in-depth longitudinal multiple-case study, our analysis reveals three practices that help explain how founders' thinking patterns and behaviors shape business model innovation in their ventures: industry-spanning search, complex system thinking style, and powerful centralized decision making. Three corresponding yet opposing founder practices are present in cases with low business model innovation. When interpreted through the lens of imprinting theory, our findings reveal how founders achieve novelty imprinting, which we conceive as imprinting processes that result in novel imprints. Our emergent theoretical framework affirms the possibility of novelty imprinting, and thus explains a puzzle regarding the coexistence of imprint stability and novel structure. It also delineates the nature of cognitive imprinting and explains how cognitive imprints reinforce structural imprints in the context of business model innovation, thereby expanding the scope of imprinting and business model research.

Two roads diverged in a wood, and I—I took the one less traveled by,

And that has made all the difference.

—Robert Frost (1916)

New ventures often bring about business model innovation (BMI), or the introduction of novel "system[s] of interdependent organizational activities centered on a focal firm" (Zott & Amit, 2010: 217). Examples of business model innovators include Amazon, which brought online retailing to the bookselling, and then general retail, market space (Markides, 2006), and Netflix, which innovated the business model of movie rentals (Ahuja & Novelli, 2016). Despite the documented positive consequences of BMI on performance for new ventures (Zott & Amit, 2007), our understanding of BMI emergence is limited (Foss & Saebi, 2017). Research has revealed, for example, that exogenous, environmental factors such as economic crises, changing customer preferences, and technological change can trigger the development of BMI (Markides, 2006; Teece, 2018). Yet, despite the presence of these factors, not all new ventures that are influenced by them develop innovative business models.

Our limited understanding of BMI emergence is problematic because, once in place, business models can be difficult to change due to path dependencies, dominant logics, managers' cognitive limitations, and resistance to change (Gilbert, 2005; Tripsas & Gavetti, 2000). Important characteristics of business models are shaped during the sensitive period of early founding (Chesbrough & Rosenbloom, 2002; Siggelkow, 2002). These characteristics can persist for long periods

We acknowledge financial support from the IESE Research Division, as well as from the Spanish Government, Grant ECO2012-38131: Innovación en modelos de negocio. Yuliya Snihur acknowledges the financial support from the IDEX-Nouveaux Entrants Scholarship provided by the Université Fédérale Toulouse Midi-Pyrénées. We would also like to thank our editor, Zeki Simsek, three anonymous reviewers, and our colleagues, Professors Erkko Autio, Swapnil Barmase, Diane Burton, Albert Cannella, Quy Huy, Kathy Eisenhardt, Hakan Ener, Mark Gruber, Anil Gupta, Don Hambrick, Andreea Kiss, Thomas Klueter, Markus Kreutzer, Solon Moreira, Woody Powell, Julia Prats, Rhonda Reger, Sebastian Reiche, Joan Enric Ricart, James Westphal, and Mike Wright, as well as session attendants during presentations at the IESE, Grenoble Ecole de Management, Stanford University, Vrije Universiteit Amsterdam, and Toulouse Business School for their feedback on earlier drafts of this paper.

of time despite subsequent environmental changes, which is a quality of imprints (Marquis & Tilcsik, 2013). Indeed, the imprinting perspective (Stinchcombe, 1965) suggests that entrepreneurs' early choices at founding shape the structure of their ventures (Beckman & Burton, 2008). Subsequently, these features should remain relatively stable (Marquis & Tilcsik, 2013), although they might change over time (Simsek, Fox, & Heavey, 2015). This raises interesting questions about the role of the founder for BMI imprinting, and how imprint stability and business model novelty (which often implies ongoing change, rather than stability) can coexist.

Studies on imprinting have not typically explored the mechanisms through which imprinting takes place, particularly in the context of novelty emergence (Johnson, 2007). What mechanisms lead some founders, but not others, to create novel structures, such as innovative business models? Can such mechanisms be specified at all? Or is structural innovation a rather random (and perhaps even improbable) outcome, as suggested by the statement that "the mechanism by which organizational imprinting initially takes place. . .may result in isomorphic organizations; it may also result, intentionally or otherwise, in innovative organizations" (Johnson, 2007: 100)? Existing studies have pointed to the possibility that imprinting could yield innovation, yet they have not addressed why some founders create isomorphic ventures (e.g., by following existing templates), whereas others create innovative ones (e.g., by recombining templates to introduce novelty). A related theoretical puzzle is the question of whether and how novelty as a stable characteristic can be *imprinted* at all, without subsequent structural inertia settling in and reducing the degree of novelty over time. Insights from prior studies have often stemmed from examining single organizations (e.g., Ainamo, 2005; Hsu & Kenney, 2005; Johnson, 2007). This precludes us from understanding more precisely why and how different ventures adopt different degrees of novelty, and what role the founder plays in this process. In this study, we therefore ask: *How (if at all) do founders imprint business model novelty?*

To address the question, we study the emergence and persistence of BMI in six new ventures. We adopt a qualitative research design and analyze in-depth field and archival data from multiple sources, including founders. Following calls for longitudinal studies of imprinting (Simsek et al., 2015), we track each of these ventures' business models over a period of almost 10 years. Our findings suggest an emergent framework of BMI that relies on two founder imprinting pathways. The first pathway, which we label *structural imprinting*, explains how a founder's degree of novelty orientation directly shapes a venture's BMI. In particular, we find that a founder's *industry-spanning search*, *complex system thinking style*, and *powerful centralized decision making*—which, taken together, constitute high founder novelty orientation—give rise to BMI in ventures. We find three opposing founder practices (constituting low founder novelty orientation) in ventures with low BMI—*industry-focused search*, *internal efficiency thinking style*, and *organic decentralized decision making*. The second pathway, which we label *cognitive imprinting*, involves founders influencing BMI through venture members who come to assimilate and enact the founder's novelty orientation. Structural and cognitive imprints alone and as reinforcing imprints help to explain how BMI emerges and persists over time in ventures.

Several important theoretical insights emerge from our analysis. First, our research advances theory by demonstrating the existence of novelty imprinting, which we define as a subset of processes that result in novel structural imprints. Our analysis reveals specific founder practices that embody founder novelty orientation and are at the heart of the novelty imprinting process. Our analysis also explains how imprint stability and ever-changing structure can coexist—a seeming paradox. Second, while existing imprinting research has held that founders are the main imprinters, our research extends this view by suggesting an important role for others through cognitive imprinting, which we define as the process through which venture members assimilate and institutionalize founder practices. Finally, our analysis suggests that cognitive imprinting reinforces structural imprinting (i.e., imprinting that affects structural venture characteristics such as the business model) in promoting or inhibiting BMI. Our research thus begins to develop a more nuanced understanding of novelty imprinting as a multilevel, interrelated process that is initiated by founders and maintained through collective agency.

THEORETICAL BACKGROUND

Business Model Innovation

A business model is a boundary-spanning activity system that centers on a focal firm, yet may encompass activities performed by its partners, suppliers, and customers in the pursuit of value creation and capture (Amit & Zott, 2015; Chesbrough, 2010; Zott & Amit, 2010). It has three core elements: content, structure, and governance. Content refers to the selection of activities that are performed within the system;

governance pertains to issues of control, or who is in charge of what activity; and structure refers to how activities are linked (Amit & Zott, 2001). Firms such as new ventures can innovate their business model by adding activities (novel content), bringing in partners to perform specific activities (novel governance), or linking activities in novel ways (novel structure). We use the term BMI to refer to the introduction of a business model that is novel (in terms of its content, structure, or governance) to the product market space in which the venture competes.

Consider Netflix and the BMI it introduced to the movie rental space (Ahuja & Novelli, 2016). At the end of the 1990s, Netflix adopted a business model that differed significantly from existing movie rental incumbents such as Blockbuster. Netflix partnered with movie studios to rent out movies recorded on DVDs, instead of VHS tapes, to customers through its website, rather than using rental stores. To deliver DVDs, Netflix partnered with the U.S. Postal Service to ship DVDs with a pre-paid return envelope to customers' homes. Netflix introduced novel business model content (burning and shipping DVDs), governance (new partner for DVD delivery), and structure (customers order online) to the movie rental space. Its BMI was "new to the state of the art" (Birkinshaw, Hamel, & Mol, 2008: 825). Such novelty-centered design has been shown to positively impact venture performance (Zott & Amit, 2007).

Yet, despite its economic importance, little is known about the precise mechanisms through which BMI emerges (Foss & Saebi, 2017). Only a few studies have considered possible drivers of BMI in terms of broader triggers or individual antecedents. For example, some studies have identified economic crises (Sosna, Trevinyo-Rodríguez, & Velamuri, 2010), changing customer preferences (Markides, 2006), entry in low-income markets (Sanchez & Ricart, 2010), or technological change (Teece, 2018) as exogenous triggers that can spur BMI. These triggers enable BMI but they do not systematically explain it. In addition, scholars have theorized about how individual-level cognition, through creativity, mindfulness, or analogical reasoning (Amit & Zott, 2015; Martins, Rindova, & Greenbaum, 2015; Svejenova, Planellas, & Vives, 2010), can foster BMI. These studies have indicated the importance of founders for BMI. Founders' early business model choices matter because these models are often enduring (Siggelkow, 2002; Tripsas & Gavetti, 2000). For instance, Siggelkow (2002) found relatively few changes at Vanguard, a mutual fund, after its founder John Bogle had made key early structural decisions. This suggests that important characteristics of business models, including those that determine the models' degree of novelty, are shaped during early venture founding and subsequently locked in. In other words, business models are likely to be subject to imprinting, which is "a process whereby, during a brief period of susceptibility, a focal entity develops characteristics that reflect prominent features of the environment, and these characteristics continue to persist despite significant environmental changes in subsequent periods" (Marquis & Tilcsik, 2013: 199).

Using an Imprinting Lens to Examine Business Model Innovation

Rooted in organizational sociology, the imprinting concept captures the idea that ventures founded under similar circumstances often have similar structural characteristics, such as design choices and practices, that tend to persist over long periods of time; this argument is also known as the "imprinting hypothesis" (Johnson, 2007; Marquis & Quiao, 2018; Stinchcombe, 1965). Indeed, much of the literature on imprinting in young ventures has focused on such structural imprints (for a review, see Simsek et al., 2015); e.g., formal positions (Beckman & Burton, 2008), bureaucratization (Baron, Hannan, & Burton, 1999), or employment blueprints (Hannan, Burton, & Baron, 1996; Leung, Foo, & Chaturvedi, 2013).

In this paper, we apply the imprinting lens to the business model; per our definition, the business model is an activity system that typically spans firm boundaries, since activities in that system are often performed by customers, suppliers, or partners. In other words, the business model can be conceived as a boundary-spanning organizational design (Zott & Amit, 2007). Accordingly, we define structural imprinting as an imprinting process that affects characteristics pertaining to either a venture's internal organizational design or its boundary-spanning design in the form of its business model. Structural imprints are those characteristics of internal or boundary-spanning venture design that have been subject to imprinting.

Studies of imprinting have often assumed that imprinted characteristics are grafted from an environment in which they previously existed (Baron et al., 1999; Stinchcombe, 1965), which has led some researchers to surmise that "imprinting delimits the range of opportunities for innovation" (Suddaby, Bruton, & Si, 2015: 1). Other scholars have suggested that novel features can be imprinted. According to Johnson (2007), founders can recombine existing templates, as also recognized in the business model literature (Amit & Zott, 2015) (such as a "royal

academy" or "commercial theater"), to create novel formats (such as the Paris Opera). But what mechanisms lead some founders and not others to create such novel formats?

To advance this literature, we introduce the concept of novelty imprinting, which we define as the subset of imprinting processes that result in novel structural imprints such as BMI. The few papers that have examined imprinting in the context of novelty and innovation have pointed to founders' cognitive processes as a potential conduit of environmental influences and a counterforce to inertia (Ellis, Aharonson, Drori, & Shapira, 2017; Powell & Sandholtz, 2012). Similar arguments have been made in the literature on antecedents of BMI (e.g., Martins et al., 2015). Together, these works have suggested that explanations for novelty (especially BMI) imprinting involve cognitive processes.

Simsek et al. (2015) emphasized the importance of distinguishing between imprinters (sources of imprints), imprinted (targets of imprinting), and the imprinting process. They also raised the possibility of various types of imprints besides structural ones, such as cognitive imprints, which they defined as a category of imprints that "examines how imprinters influence the content, range, and stability of strategic choice; the extent and direction of organizational learning; the formation of memory systems; the development of aspirations; and perceptions" (Simsek et al., 2015: 297). Accordingly, we define cognitive imprinting as the process during which features of cognition, such as thinking, learning, aspiration, or memories of key venture members, become deeply embedded in the cognition of other members.

Tentatively supporting the idea of cognitive imprinting, Powell and Sandholtz (2012: 104) indicated that when scientists founded the first biotech ventures, they imprinted these with a particular mindset of "in business to do science." Powell and Sandholtz's (2012) research suggested that employees internalize founders' practices, and so contribute to the development of innovation. Other imprinting studies have suggested that founders can also transmit knowledge and collective memories (Ellis et al., 2017; Lippmann & Aldrich, 2016). In general, however, little attention has been paid to cross-level imprinting processes between founders, employees, and their ventures (Marquis & Qiao, 2018; Simsek et al., 2015), or the potential role of these parties in novelty imprinting.

In sum, existing research on BMI and imprinting has collectively emphasized the key role of founders in designing a specific, sometimes novel, and often enduring activity system during early years. However, it has not revealed the mechanisms involved in this process (e.g., Foss & Saebi, 2017; Marquis & Tilcsik, 2013; Simsek et al., 2015). Hence, we ask: How (if at all) do founders imprint business model novelty?

METHODS AND DATA

Research Design

Given the limited theory and evidence concerning our research question, we adopted a multiple-case-study research design. Drawing on replication logic (Eisenhardt, 1989), this approach facilitated theory elaboration about cognitive imprinting and its links with structural imprinting of novelty, which have not previously been explicated in the literature. We began the project in 2011, with a focus on new ventures founded between 2008 and 2009. We initially considered ventures aged between two and three years from founding, to ensure they already had revenues and products and to allow longitudinal patterns to emerge, given our interest in the genesis and metamorphosis of novel structural imprints. We performed cohort sampling within a confined geographic area in one European country (i.e., same geographic region, with strong competition in the sampled industries, such as social networks or mobile applications), which enabled us to keep environmental and geopolitical influences constant. After selection, we tracked the sampled ventures' business models from founding until 2017. This embedded design with multiple levels of analysis (business model components, founder and employee practices) strengthened the richness and accuracy of our theorizing. Below, we foreshadow our data analysis by explaining our coding of high and low BMI. This explanation also details our theoretical sampling approach.

Case Selection

We followed Zott and Amit (2007) to distinguish between high- and low-BMI ventures. We examined the three elements of each venture's business model: content (i.e., activities that are performed within the business model), governance (i.e., which participants are in charge of which activity), and structure (i.e., links among activities). We considered ventures that innovated all three elements compared to their industry peers at the time of sampling as high BMI, and those that did not innovate any as low BMI (Table 1). We assessed the BMI of about 160 local ventures (details in Appendix A, which is available

TABLE 1
Business Model Innovation: Definition and Illustration

Construct[a]	Definition	Illustrative Quotes	Source
Novel business model content	Business model content refers to the selection of activities performed within the business model (Zott & Amit, 2010: 220). Novel content involves adding, changing, or eliminating some of the existing activities, resulting in new-to-the industry configurations.	"We develop technology to provide different ways to pay for users, and this generates customer behavior information. We integrate vendor loyalty programs, and provide pricing information from various points of sale. This information is very useful to vendors. Existing credit card companies or banks are unable to offer this kind of detail; they do not have access to this data." (Founder, MN) *Novel business model content*: Providing real-time pricing information is new to the industry.	Interview with founder
		"We provide digital receipts, loyalty integration, as well as access to various pricing information for interested vendors. We can also manage vending machines and interact with third-party applications." (MN)	Triangulated with business plan presentation
Novel business model governance	Business model governance refers to who performs the activities in the business model (Zott & Amit, 2010: 220). Novel governance involves adding, changing, or eliminating partners that perform different activities, resulting in new-to-the-industry arrangements.	"To make it even better, the patient donates the information to make the science improve. We also need medical doctor engagement to connect all this. Like hospitals, what medical doctors work for are reputation and money. Finally, instead of us selling data, various firms such as Nestlé can sponsor the research protocols." (Founder, HC) *Novel business model governance*: Adding product vendors is new to the industry.	Interview with founder
		"*Health*'s open source platform connects health care service providers at different levels in order to exchange an integrated health care plan library and to create an anonymous clinical health data bank. This system is accessible to all participating hospitals, doctors, and vendors." (HC)	Triangulated with business plan
Novel business model structure	Business model structure refers to how the activities are linked and captures their importance for the business model (Zott & Amit, 2010: 220). Novel structure involves linking activities in novel-to-the-industry ways, or giving them different emphasis in terms of their core, supporting, or peripheral nature.	"Instead of buying villas, we lease properties for three years. We have similar control over the villas as if we bought them, and we also have much more control over the price for customers. The short-term risk is smaller as we have the travel agency to offset any problem with the club members." (Founder, VL) *Novel business model structure*: Coordinating long-term leases with time sharing is new to the industry.	Interview with founder
		"Imagine a members-only club that offers access to a hand-picked selection of private villas in upscale destinations with the finest amenities for your family holidays or corporate retreats. We control the properties through long-term leases and offer easy booking 24–7." (VL)	Triangulated with business plan

Notes: HC = *Health*, MN = *Money*, VL = *Villa*

[a] We evaluated the novelty of the sampled ventures' business model content, governance, and structure by comparing them to the business models of an average of four established competitors that were active locally in the focal firm's industry at founding, during stage two (about two to three years after founding), and at the end of stage three (about nine years after founding).

on request from the authors), and focused on six extreme cases—three with highly novel business models (which we refer to as *high BMI*), and three with little novelty (*low BMI*). A sample size of six ventures offers an advantage over a single case, as it increases richness and variation. Table 2 summarizes the key characteristics of the cases and data sources.

Data Collection

We relied on longitudinal data collection from four main sources: (1) interviews with founders, employees, investors, board members, and customers; follow-up emails; and phone calls to clarify questions; (2) on-premises real-time observation; (3) firm documents, which were often highly confidential, such as detailed business plans or strategy formulation documents; (4) archival data, including firms' websites, press coverage, blogs, and video excerpts. The variety of data strengthened inference accuracy and limited retrospective bias. In total, we conducted 53 interviews, observed 16 meetings, and collected 1,270 pages of internal documents.

Our study's strength lies in our rare longitudinal and real-time access to founders, employees, and investors. We conducted three waves of data collection to track novelty imprinting at each venture. The first wave (2011–2012) aimed to understand whether, how, and why novel elements had become embedded in the business model since founding. Each interview was semi-structured, lasted 1–4 hours, and was recorded and transcribed. We asked predetermined questions, such as: "What activities are performed by your firm or by your partners?" (content and governance), "Why have you connected activities in this way?" (structure), "What were the sources of inspiration for these choices?" and "How did they come about over time?" The second part was less structured—discussing the team, hiring process, industry prospects, etc.—to reveal new constructs. This is how we noted the importance of founder practices that suggest founders' novelty orientation. The second wave (2012–2013) involved real-time data collection through repeated visits and observations of interactions between founders and their teams on premises. We also interviewed investors and employees, several of whom had been present throughout the whole lifetime of the venture.

A key concern was how to establish whether imprinting really occurred. We mitigated this issue by conducting a third wave of data collection (2017), about 9–10 years after our ventures' founding. We asked managers and employees questions such as, "Has your business model changed over the past few years, and if so, how?" We relied on informants at different hierarchical levels (CEOs, managers, employees) and in different functional areas to gain an accurate picture, and promised anonymity to encourage sincerity. A key strength was the use of an outsider perspective from investors and board members. This, together with our multiple interview waves and real-time observation, supplied rich accounts, mitigated retrospective bias, and enabled triangulation (Yin, 2013). We stopped collecting data after the third wave, as our analysis revealed that we had reached theoretical saturation. Our codes were sufficiently rich to explain the observed phenomena; additional responses were already contained in the existing codes, and no new codes were identified.

Data Analysis and Coding

In our data analysis, we used an iterative process, going back and forth between our data, additional literature, and the emerging theoretical framework through two phases: (1) discovery and narrowing, and (2) enriching and validating (Pratt & Rosa, 2003).

Discovery and narrowing. As mentioned above, we identified and coded BMI elements in terms of their novelty for each case at the time of sampling (Table 1). We then wrote thickly descriptive case narratives and timelines focusing on BMI development since founding (Langley, 1999), which were validated by the founders for accuracy. We applied temporal bracketing (Langley, 1999) to decompose each chronology into distinct periods accounting for founding and early imprint genesis (up to one year after founding), imprint genesis (1–3 years after founding), and metamorphosis (more than three years after founding). We tracked the evolution of the three business model elements—content, governance, and structure—by starting with narratives, and also by checking our interview data, different versions of business plans, investor presentations, and internal strategy documents from founding to 2017, triangulated with archival documents (websites, press coverage). This enabled us to identify 72 nonincremental changes that increased or decreased BMI in the six cases over the roughly 10 years analyzed. To determine whether a change fostered or impeded novelty, we compared it to industry competitor business models. Table 3 summarizes the BMI evolution in the six ventures.

To address our research question regarding whether and how founders imprint BMI, we searched

TABLE 2
Case Descriptions and Data Sources

Characteristic	*Health*	*Money*	*Villa*	*Football*	*Fashion*	*Travel*
Industry[a]	Information systems for health care	Mobile applications	Online vacation rentals	Social network	Social network	Travel services
Founding	2009	2009	2008	2008	2008	2009
Business model at founding	Software developer for home care of patients with chronic illnesses	Short-message-service (SMS)-based payment system for a developing country	Online marketplace for luxury vacation rentals	Online social network for football fans of different clubs	Online fashion community: users post pictures of daily looks, and sell clothing	Online travel platform for a European city
Business model nine years after founding	Knowledge-sharing platform for hospitals: patients donate medical data that is shared among doctors, hospitals, and patients' relatives	Mobile payment network that aims to replace credit cards, and to provide management of loyalty programs and a platform for banks	Luxury villa-sharing club standardizing customer experience in different properties around the world	No major (nonincremental) business model changes since founding	Online fashion community allowing users to post pictures of daily looks	Travel agency specialized in one country's travelers visiting a specific region in another country
External funding	Government grant	None	Investment from an incubator	Investment from an incubator	Investment from an incubator	None
Members of founding team	3	4	2	2	1	2
Number of interviews	13	9	9	7	9	6
Informants (number of interviews)	Founders (8), COO (1), manager (1), board member (1), investors (2)	Founders (5), investor (1), customers (2), employee (1)	Founders (2), managers (5), board member (1), investor (1)	Founders (3), managers (2), investor (2)	Founder (3), managers (3), board member (1), investor (2)	Founders (5), customer (1)
Data sources	246 pages of interview transcripts, 492 pages of internal documents, business plan versions, various internal and external reports, press coverage, etc.	150 pages of interview transcripts, 270 pages of internal documents, business plan versions, presentations to investors, press coverage, etc.	163 pages of interview transcripts, 160 pages of internal documents, business plan versions, various presentations, press coverage, etc.	124 pages of interview transcripts, 150 pages of internal documents, business plan versions, presentations to investors, press coverage, etc.	135 pages of interview transcripts, 80 pages of internal documents, business plan versions, presentations to investors, press coverage, etc.	87 pages of interview transcripts, 118 pages of internal documents, business plan and website versions, reports, etc.
Video or audio excerpts	2	4	2	6	2	0

[a] Industries defined based on characterizations provided by interviewees and evaluation of available secondary data about the specific, geographically limited, market of the venture.

TABLE 3
BMI Evolution in Sampled Ventures Over Time

New venture	Stage one: Founding and early imprint genesis (first year)	Stage two: Imprint genesis (up to three years after founding)	Stage three: Metamorphosis (4–9 years after founding)
Health	Low BMI	High BMI	High BMI
Content	Development of software sold to one hospital for home care of chronically ill or elderly patients [*content exists in local industry*]	Cooperation with clusters of doctors in disease areas who can follow each other's protocols across hospitals [*content new to local industry*]	Opening up the platform to relatives who can subscribe to follow updates about patients [*content new to local industry*]
Governance	Patients and doctors interact, hospital sets some rules [*partners used in local industry*]	Patients, doctors, hospitals; *new-to-industry partners*: product vendors, "case managers," telecom operators	Patients, doctors, hospitals, vendors; *new-to-industry partners*: relatives, neighbors
Structure	Hospital integrates software with existing systems to lower admissions [*structure exists in local industry*]	Patients donate information, doctors post protocols for treating diseases, vendors sponsor research in areas of interest [*structure new to local industry*]	Structure optimized for "collaborative care," where relatives and neighbors can check on the patient [*structure new to local industry*]
Money	Low BMI	High BMI	High BMI
Content	Development of an SMS-based payment system on mobile phone for customers with no bank account who live in a developing country [*content exists in local industry*]	Launch of payment infrastructure for smartphones managing loyalty schemes and discounts and selling data on local real-time pricing to merchants [*content new to local industry*]	Upkeep of the payment infrastructure, development of additional offering to banks to become a bank-sponsored platform [*content new to local industry*]
Governance	Customers, merchants, telecom operators [*partners used in local industry*]	Customers, merchants, telecom operators; *new-to-industry partners:* payment processors	Customers, merchants, payment processors; *new-to-industry partners:* banks
Structure	Customers use pre-paid SMS on their phones to pay in shops without the need for a bank [*structure exists in local industry*]	Mobile payment substitutes credit card payment; merchants become the center, enabling them to access price data and loyalty management [*structure new to local industry*]	Banks become the center, enabling them to have more control and personalization of service to both merchants and general public [*structure new to local industry*]
Villa	Low BMI	High BMI	High BMI
Content	Development of an online marketplace for announcements between travelers looking for luxury vacation rentals; villa owners; and service providers [*content exists in local industry*]	Developing a club for villa-sharing with standardized service offering in select locations around the world [*content new to local industry*]	Managing the exclusive club, packaging tours for "exotic experiences" and event-related travel based on virtual reality content [*content new to local industry*]
Governance	Customers, villa owners, service providers [*partners used in local industry*]	Customers, villa owners, service providers; *new-to-industry partner:* travel agency	Customers, villa owners, service providers, travel agency; *new-to-industry partner:* virtual reality producer
Structure	Coordination of supply of vacation rentals and service offerings and demand of customers through online listing of villa availability and service provider contact [*structure exists in local industry*]	Coordination of long-term leases, time-sharing agreement with club members, using a travel agency to rent the remaining villa time-shares [*structure new to local industry,* usually villas are rented per use]	Structure scaled and pricing adapted, [*club structure is still new to local industry*]
New venture	Stage one: Founding and early imprint genesis	Stage two: Imprint genesis	Stage three: Metamorphosis

TABLE 3
(Continued)

New venture	Stage one: Founding and early imprint genesis (first year)	Stage two: Imprint genesis (up to three years after founding)	Stage three: Metamorphosis (4–9 years after founding)
Football	Low BMI	Low BMI	Low BMI
Content	Developing a news and communication platform for football fans of a particular club [*content exists in local industry*]	Scaling the platform for several local and regional football clubs [*content exists in local industry*]	Translating the platform for international growth, enabling mobile access [*content exists in local industry*]
Governance	Fans, vendors such as ticket providers [*partners used in local industry*]	Fans segmented by clubs, advertising offered either for local clubs or for the whole platform [*partners used in local industry*]	Same as previously, advertising options managed locally by each country [*partners used in local industry*]
Structure	Coordination of websites for football clubs, use of volunteers to monitor forum and picture quality [*structure exists in local industry*]	Same structure as previously, but scaled to a higher number of users [*structure exists in local industry*]	Same structure as previously, with multi-language support [*structure exists in local industry*]
Fashion	High BMI	Low BMI	Low BMI
Content	Development of an online community of fashion enthusiasts sharing pictures of different outfits that customers can buy from a specific brand [*content new to local industry*]	Maintaining the online community for sharing photos of outfits and managing a secondhand market for clothing between customers [*content exists in local industry*]	Maintaining the online community and secondhand market for clothing, development for mobile use [*content exists in local industry*]
Governance	Customers, clothing advertising brands; *new-to-industry partner:* specific brand selling clothing	Social network users, clothing advertising brands [*partners used in local industry*]	Partnerships with brands and secondhand sellers [*partners used in local industry*]
Structure	Coordination between users posting looks and the brand's catalog to match looks to specific products and enable online ordering by customers browsing looks [*structure new to local industry*]	Platform connecting fashion-oriented users, bloggers, and brands through photo-sharing tools [*structure exists in local industry*]	Same as previously [*structure exists in local industry*]
Travel	High BMI	Low BMI	Low BMI
Content	Providing a free online guidebook of a European city to attract customers interested in travel services advertised [*content new to local industry*]	Providing travel services and developing travel packages for travelers and travel agencies interested in one destination [*content exists in local industry*]	Same as previously, with more focus on hiking and biking tours for private and business groups [*content exists in local industry*]
Governance	Customers, local service providers; *new-to-industry partners:* photographer and blog writer	Customers, travel agencies, local service providers [*partners used in local industry*]	Partnerships with additional service providers and travel agencies [*partners used in local industry*]
Structure	Users download the free guidebook, but pay for travel services for specific attractions, guides, or tours mentioned in the guidebook, high social interaction [*structure new to local industry*]	Coordination of logistics between travelers and service providers in a local region [*structure exists in local industry*]	Same as previously, but scaled to a larger number of customers and more efficient operations [*structure exists in local industry*]

the interview transcripts, on-premises observation notes, and archival data for traces of behaviors that fostered the nonincremental changes to the business model elements identified. For each change event (Langley, 1999), we assembled information about who initiated the change (founders or employees), when (founding, genesis, or metamorphosis stage), and how (change enablers), forming a chain of events (Kouamé & Langley, 2018). For example, we coded reasons provided by interviewees from *Health* (cofounder, manager, investor) for no longer selling software (novelty-inducing content change). These stakeholders said that "Jane [the founder; a pseudonym] had the vision and the last word," "Without Jane this wouldn't have worked," and "Jane is the boss pushing this." This allowed us to determine that the founder had made the final call in this instance.

We developed empirical codes for novelty-increasing or novelty-decreasing enablers to capture the common meaning of multiple data excerpts.[1] We discovered that during the genesis stage founders originated and implemented most novelty-inducing changes due to certain thinking patterns and behaviors. We also noted that over time other employees began to participate in the imprinting (late genesis or metamorphosis stage). We went through a data reduction process (see Jarzabkowski, 2008) by iterating the coding scheme and quote interpretation between the first and second author until agreement was reached, narrowing from descriptive codes, such as "analogy from mobile phone industry" or "insight from a Harvard class on innovation" to three conceptually distinct clusters (Miles & Huberman, 1994). These clusters indicated the type of founder thinking and behavior with respect to search boundaries, system-level thinking, and decision making that fostered either high or low BMI.[2] Taken together, they form the new construct of founder novelty orientation. To surmount the limitations of interviews caused by retrospective bias (Huber & Power, 1985), we retained codes that could be triangulated with at least one other source (observed meetings or archival data). To ascertain coding consistency, we tested intercoder reliability (see Appendix B, which is available on request from the authors).

Given our finding that founders were often at the origin of BMI, and interviewees' confirmation that only *one* founder in the three high-BMI cases called the shots on business model changes,[3] we examined the literature on power. Following Finkelstein (1992), we considered founder experience as the basis for *expertise* power and ownership stake as the basis for *ownership* power. To evaluate *prestige*-derived power we tracked how many times the founder was mentioned positively on the Internet (proxy for reputation) and measured their number of LinkedIn connections (proxy for founder network [Arora & Nandkumar, 2012]). Table 4 provides a summary of founder characteristics.

Enriching and validating. The second analytical phase enabled us to zoom in on the imprinting process and empirically distinguish between structural and cognitive imprinting. Drawing on Simsek et al. (2015), and in line with our definition of cognitive imprints as the long-lasting impact on venture members' thinking, learning, aspirations, and memories, we reexamined case narratives, the database of novelty-inducing changes, interview transcripts, and observation data. We performed the last wave of interviews in 2017, focusing explicitly on enriching and validating our insights. We classified data as evidence of cognitive imprints if they fulfilled three criteria: (1) illustrating organizational-level practices rather than founder-level behavior (e.g., "Our employees pick up on these system issues"), (2) originating during imprint genesis, rather than during metamorphosis (e.g., "During the early days, the founder taught us"), and (3) displaying a repetitive pattern (i.e., mentioned by several informants).

To dig deeper into the mechanism of cognitive imprinting, we examined the case narratives to identify specific practices during genesis that might have influenced employee imprinting, such as early interactions after hiring (Tilcsik, 2014). We grouped the practices into categories, tracing how they were involved in cognitive imprinting. We again used multiple data sources to examine how practices such as formal meetings or perception of the founders as role models influenced employee thinking. We discovered that

[1] E.g., a mobile app firm founder remarked: "I was thinking about how petrol stations operate" when discussing reasons for including loyalty management (content change inducing BMI). We coded this "inspiration from retail industry."

[2] We iterated the data analysis and literature review to validate the theoretical relevance of our clusters, adopting terms that surfaced from our literature review (such as "boundary spanning" or "complex thinking") to label our empirically grounded constructs. We found that the latter were conceptually close to academic work on boundaries (Santos & Eisenhardt, 2005), complex thinking (Eden, Ackermann, & Cropper, 1992), and power (Pitcher & Smith, 2001).

[3] Following Pitcher and Smith (2001), we asked stakeholders to pinpoint who made decisions on business models.

TABLE 4
Characteristics of Founders and Their Teams

High-BMI firms	*Health*	*Money*	*Villa*
Founding team size	3	4	2
Number of key business model founders[a] (**ownership** stake)	1 (majority shareholder)	1 (majority shareholder)	1 (majority shareholder)
Expertise (number of people on the team in parenthesis)			
Serial entrepreneur?	Yes (1)	Yes (1)	Yes (1)
International experience?	Yes (2)	Yes (4)	Yes (2)
Inside industry experience?	Yes (2)	Yes (1)	No
Outside industry experience?	Yes (2)	Yes (4)	Yes (2)
Prestige: Number of Google mentions for key business model founder; average for other team members	54; 44	2900; 200	12; NA
Prestige: Key business model founder's LinkedIn connections; average connections of other team members	500+; 307	500+; 120	500+; NA
Low-BMI firms	***Football***	***Fashion***	***Travel***
Founding team size	2	1	2
Number of key decision makers regarding business model issues[a] (**ownership** stake)	4 (2 majority shareholders; 2 employees)	1 (10%)	2 (50%, 50%)
Expertise (number of people on the team in parentheses)			
Serial entrepreneur?	Yes (1)	No	No
International experience?	No	No	Yes (2)
Inside industry experience?	Yes (1)	Yes	Yes (1)
Outside industry experience?	Yes (3)	No	Yes (1)
Prestige: Average per-person number of Google mentions of key business model decision makers	396	170	125
Prestige: Average number of LinkedIn connections of key business model decision makers	500+	350	114

[a] Key business model founders or key decision makers regarding business model issues were identified during our interviews, following Pitcher and Smith (2001), by asking various stakeholders (cofounders, investors, board members, employees) to pinpoint who made decisions about activities pursued, the governance of these activities, and their structure.

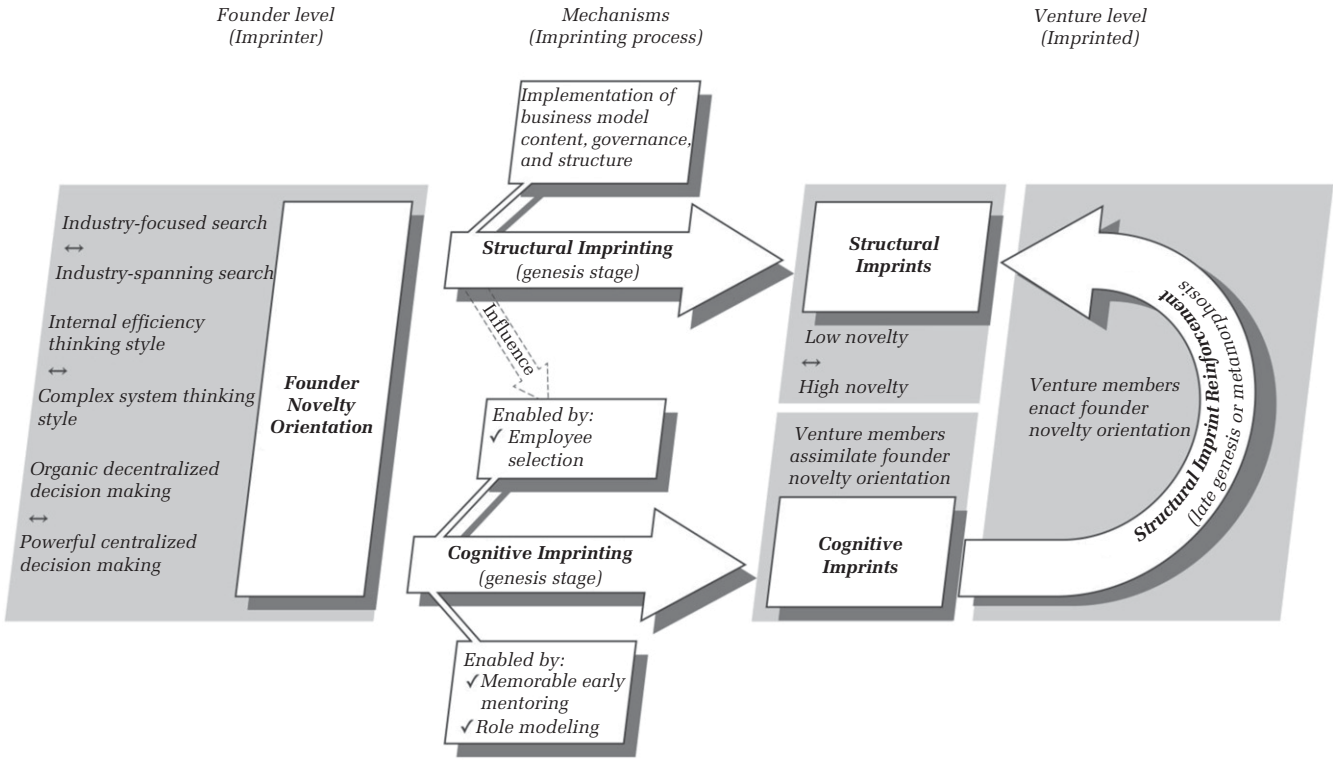
cognitive imprints were not only influenced by founder novelty orientation, but also impacted the persistence of BMI as employees began to suggest novel ideas. This prompted us to examine the data concerning evidence of how cognitive imprints influenced structural ones. We performed member checks with both founders and employees several times during the analysis to ensure our interpretations reflected informants' experiences. As a result of our iterative data analysis, we reached a point of theoretical saturation where the conceptual categories formed a coherent framework delineating how founders and employees engage in novelty imprinting.

THE GENESIS AND METAMORPHOSIS OF NOVELTY IMPRINTS

Our data analysis suggests that founders have a strong influence on novelty imprinting. The analysis presented below reveals that founders' search behavior, thinking style, and decision making patterns help imprint ventures' business models with high or low novelty. Therefore, these practices can be considered to indicate *founder novelty orientation*. Unexpectedly, we also found that founder novelty-oriented practices affect other venture members in terms of how they think and behave, which we refer to as the *cognitive imprint*. Interestingly, our findings reveal that cognitive imprints reinforce structural imprints in the form of BMI. This led us to an important insight; namely, that stable *cognitive* imprints that promote novelty facilitate *structural* imprint change at the level of the business model.

Figure 1 summarizes our findings and illustrates our emergent framework of novelty imprinting. Structural imprinting is the mechanism that connects founder novelty orientation and structural imprints in terms of BMI. Cognitive imprinting, the second mechanism, connects founder novelty orientation and cognitive imprints through employees who come to assimilate and enact a founder's novelty-oriented

FIGURE 1
Emergent Framework of Novelty Imprinting



practices. The two mechanisms are linked through employee selection, which has traditionally been viewed in the imprinting literature as a structural issue, yet our findings reveal that it also facilitates cognitive imprinting. Cognitive imprinting is further enabled by memorable early mentoring and role modeling. Cognitive imprints, once formed, can influence structural imprints, and thereby reinforce or subdue structural novelty.

For ease of exposition, we focus on two cases, one that developed high BMI (*Health*), and one that developed low BMI (*Football*), to explain the various elements of our framework (Figure 1). Tables 5 and 6 present systematic evidence from *Money, Villa, Fashion,* and *Travel*.

Founder Practices Promoting High BMI: The Case of *Health*

The founders of *Health* worked with a hospital to help improve care for patients with chronic illnesses. They developed software with protocols for care procedures for various chronic diseases, having received a European grant for this objective, and started with low BMI, as several other firms provided software to the hospital for related purposes. While working on this software, the founders realized that the hospital they served lacked a centralized depository for information about patients' medical records that could be accessed by doctors and nurses. As one founder put it, to solve this problem they shifted the business model to "an open platform to share clinical knowledge around a patient-centric health care model," providing a depository that would connect patients, doctors, hospitals, insurance providers, and other companies.

Over three years, *Health* transitioned to high BMI under the guidance of one of the founders, Jane. High BMI was preserved over subsequent years through continuous renewal and addition of novel features to the business model content, governance, and structure. *Health* combined novel content in the local health care industry (centralizing medical information), novel governance uncommon in this industry (partnerships with IT firms, and later patients' relatives who receive patient updates), and a novel structure for relationships that had not previously existed (an open-source platform to which patients

TABLE 5
Founder Practices and Cognitive and Structural Imprinting: Representative Data

Industry-spanning search occurs when founders or employees actively search outside their industry for the stimulus to develop novel business models.	
Structural imprinting (of high BMI)	***Money***: "I got inspiration from loyalty schemes, looking at how petrol stations operated with loyalty programs. Loyalty is the key component of our system because end users do not want more payment options, they are bored to death with payment options, they just want to pay and leave, and now they can do it in many ways. What are they interested in? Discounts, coupons, air miles, rewards. I needed to understand, that's why I went to conferences, spoke to people, tried to get the psychology behind this. We are now developing a platform where you manage all memberships, cinema tickets, and coupons, with an ability to filter them." (Founder) *Note: MN offers a mobile application, and does not compete with petrol stations. Petrol stations influenced the design of MN's* business model content (*adding management of coupons, loyalty schemes).* Outside-industry examples in interviews: 18 ***Villa*:** "I worked in the luxury car business, and learnt about high-income customers there—what they wanted, what level of service was enough, what they did not want. This became important for villa rentals. We started with a platform business, with all these listings, but we could not expect customers to spend hours browsing. I decided to change—now customers call us, they do not browse, we browse listings for them." (Founder) *Note: VL offers a villa-sharing club, and does not compete with luxury car businesses. The luxury car industry influenced the design of VL's* business model content *(eliminating browsing).* Outside-industry examples in interviews: 16
Cognitive imprinting (of employee thinking, aspirations, memories)	***Money***: "I had no experience with the world of banking before, now I often try to figure out [what] the future of banking might look like when keeping in mind the interests of the merchants. The founder does it all the time, I like the mental challenge of imagining [what] the future could look like when combining different industries, too. I learnt it from the founder, but I do it myself now." (Manager); "[Key founder] discussed AirBnB taking over Barcelona, Uber centralizing drivers; he pushes us to always think along these lines, can we function like them, and how that would work. It is fun to try to apply these ideas to our mobile payment business, the founder encourages that, but I would say that we also like doing it ourselves." (Employee) ***Villa*:** "[Key business model founder] has influenced our thinking a lot around here. He always finds inspiration elsewhere, in the music industry or in automobile clubs. For example, inspired by him, we started to similarly think about what we might learn from a Spotify premium membership features or from a Luxury Car Club. This is very useful to improve what we can offer our customers." (Manager)
Cognitive imprints reinforcing structural imprints	***Money***: "The [key business model founder] made us all read this book on 'platform revolution,' and we discussed how we could become a platform, helping banks unite together through this platform structure. This is often how things function here, ideas come from various places and other industries, so we might update our own model to new insights, like this platform idea [regarding] how AirBnB does business rather than how banks work right now." (Employee) ***Villa*:** "[Key business model founder] often worked with analogies to other industries; this became a usual practice for us as well. For example, we often look at new developments in [the] luxury car industry: what kind of new value propositions come up there, how we can transfer that to our business. This often happens in meetings, and can be a reason to test a new offering to our customers. Even when the founder does not push it, we come up with ideas." (Manager)
Industry-focused search occurs when founders or employees benchmark and copy elements of what they consider to be successful business models in their industry.	
Structural imprinting	***Fashion*:** "Lookbook is a big inspiration, with a community similar to ours; we especially like how they worked to minimize noise in what users see. That is one of the reasons I kept advertising away from our community; this is not going to be part of our model either." (Founder) *Note: FS developed an online community that shares clothing trends through images, with a business model similar to other social networks such as Lookbook. Lookbook influenced the* business model content *design for FS, which decided, following Lookbook, to eliminate advertising activities.* Use of outside-industry examples in interviews: 2

TABLE 5
(Continued)

	***Travel*:** "[A] travel agency in [—] has always been our model; they do wine tours, bike tours, all these engaging activities that are easy to set up and fun at the same time. We analyzed what they did and got into activities such as renting apartments in specific areas, selling football tickets, getting involved in these event-planning activities. Yes, we explicitly looked at their activities, and got involved in those that made most sense for us." (Founder) *Note: TR changed to a more classic travel agency business model after having started with an online platform. A geographically proximate travel agency inspired this transformation of* business model content. Use of outside-industry examples in interviews: 0
Cognitive imprinting	***Fashion*:** "There is this newcomer, 21 Buttons, that has found novel solutions to the problem of how to match what looks users post with the brand's catalogue. So this company is paying users to actually match the brand's catalogue with the clothing they take pictures in. It's a new idea, and the founder has incited the team to think [about whether] it might be a viable option for them. That is often how they proceed: something new appears in the industry, and *Fashion* often quickly implements what makes sense." (Investor)
	***Travel*:** "Now that things have been rolling for us for several years, I would say that we pay less attention to others, even our competitors; I am aware of them, but am not actively looking at what they are doing all the time. Our customers are returning to us with very high conversion rates. We do not feel we need to do anything extra at this time, so looking for inspiration elsewhere is not high on the agenda at this point." (Cofounder)
Cognitive imprints reinforcing structural imprints	***Fashion*:** "We often replicate things from our competitors; it is the quickest way to ensure we stay on the edge of technical development. Sure, this also means that we are not the most innovative company in terms of our business model out there anymore, but finding a new way to monetize our community's input is difficult; we are not searching for new ways, but if a competitor figures it out, we keep our eyes open for sure." (Manager)
	***Travel*:** "Today we are very much like many other travel agencies in the region, not much different in most aspects. This is probably because over time we copied many ways of functioning from them, things that make sense, like focusing on [tours that added the most value] and customers for whom we can make a difference." (Cofounder)
Complex system thinking style occurs when founders or employees engage in reflection about participants and interactions in their industry.	
Structural imprinting	***Money***: "Then we discovered the existence of payment processor companies, First Data, Chase Payment Tech, Stripe, etc. They work with card companies (Visa, MasterCard), together with banks, facilitating the payment from the vendor's point-of-sale terminal to the customer's wallet and bank account. You have to find out exactly who does what, how they make money, and who you can afford to push out, and with whom you can work. It is important to understand how the system works, especially when our objective is to challenge this existing infrastructure with a new system." (Founder) *Note: Complex system analysis of the mobile payment industry enabled the founder to design novel "payment network"* business model content and structure.
	***Villa*:** "We . . . worked with both villa owners [and] vacation travelers who want to rent villas during our travel agency days. These are two sides of the same coin; similar, but different. Both have needs and requirements and it is up to us to find the common ground. That was the start for my ideas about the club model—owners wanted peace of mind with their villa, travelers wanted access to great properties in different places year-round. We could come up with a way to offer both." (Founder) *Note: Complex system understanding of the villa rental industry enabled VL's founder to design the novel "club"* business model structure.
Cognitive imprinting	***Money*:** "My thinking has been impacted since I started working here. I ask broader questions and have a more business-focused understanding of what is going on." (Employee); "I am always amazed that [key business model founder] can think at all these levels; I would like to be like that too." (Employee); "[Key business model founder] encourages us to think from different perspectives, during meetings and one-on-one conversations with him, it is always about different stakeholders." (Cofounder)

TABLE 5
(Continued)

	***Villa*:** "I have been learning about this industry all along, it is gratifying, with the founder and colleagues, in meetings and informal chats, I think it has influenced how I make decisions." (Employee); "[Key business model founder] used to emphasize how we need to consider the structure of this industry, how what the customer wants is not exactly what the villa owner needs, and we have to find a way to accommodate their needs. Considering [the] different parties, maybe even sometimes cooperating with our competitors could make sense, this is what [key business model founder] taught us." (Manager)
Cognitive imprints reinforcing structural imprints	***Money*:** "We used to think about merchants as [being] in the center of our system, but now we are more focused on banks as the principal actors to whom we can bring added value through our services. This kind of thinking about different actors we collaborate with helps to provide new options to customers, a more seamless integration of the bank account into all possible interactions, and it also enables us find the sweet spot, to offer something new and exciting to the different parties." (Employee) ***Villa*:** "The founder always talked about how there are these different actors in our industry, the villa owners (who usually want a return on their real estate investment), the service providers, and then our customers who want the best possible quality, but often do not even know where they want to go on vacation—we have to imagine their vacation and make sure they like it. It helps me to think about these different actors and figure out our place. Having the travel agency partnership simplified our life, but we still need to update how we get the attention of customers; we constantly work on new offerings for them, as otherwise our place in the system [will become unsustainable]." (Manager, in interview conducted three years after the founder had left)
Internal efficiency thinking style occurs when founders or employees pay attention to internal issues such as cost control and operational efficiency.	
Structural imprinting	***Fashion:*** "In our relationship with a partner such as [well-known clothing brand], we considered the needs of our firm first; internally we decided what products we would be willing to sell. It is often difficult to find a common ground with partners about this. Eventually, we stopped our collaboration; it was not going anywhere, and we were losing money." (Founder) *Note: FS sustained losses during an unequal partnership with a much bigger firm during its original high-BMI attempt. The financial losses prompted FS's founder (under pressure from investors and the board) to focus on internal firm efficiency, reducing the novelty of its* business model governance (Table 3). ***Travel*:** "Profitability has always been an important focus for our company since the beginning. But with this change of the model, the idea that we sell the same things as the normal travel agency, we have to survive all this, to pay salaries. We don't need to be rich, but a salary for the employees is a requirement." (Founder) *Note: TR sustained losses during the first year after launch with a high-BMI attempt. The financial losses prompted TR's founder to focus on internal firm efficiency, reducing the novelty of its* business model content, governance, and structure (Table 3).
Cognitive imprinting	***Fashion*:** "We have to be efficient, otherwise our survival is at risk. [The founder] keeps saying this, so you know, we end up being convinced too, and act accordingly." (Manager); "The founder has moved the company toward efficiency early on, that has continued through its development, the team functions with efficiency in mind." (Investor) ***Travel*:** "Efficiency is very important, it is part of the organization's DNA, if you will; this is how we have been operating all along." (Cofounder)
Cognitive imprints reinforcing structural imprints	***Fashion*:** "Efficiency has been very high on our agenda; we try to minimize all extra work by streamlining the processes of filling in various forms. Sometimes this might have a negative impact on what the customer sees on the website. We try to minimize that, but our objective is to be profitable as soon as possible. That is what the founder has communicated over and over again this year, and we have focused all our efforts on this. Practically, this means minimizing the time our employees have to spend filling in these forms online." (Manager)

TABLE 5
(Continued)

	***Travel*:** "Reaching profitability fast has always been an important goal. It has driven how we organize, the shape of our company today." (Cofounder)
Powerful centralized decision making occurs when the founder exercises unilateral control, enabling things to get done according to expectations.	
Structural imprinting	***Money*:** "[Founder] has several years of experience developing technology start-ups, and regulatory experience in Central America. He has been the driving force behind this company. He decided to focus [his] energies on the vendor rather than the telecom companies or banks, [and] that makes a lot of sense." (Investor) *Note: The founder's expertise provided knowledge for BMI.* "[Founder] presented to EuroCommerce, a European vendor organization. He got contacts with the national vendor association as well. This helped him increase [his] prestige; people respect what he thinks about payment solutions and are curious about what he wants to do with the company." (Investor) *Note: The founder's prestige enabled him to drive BMI.* "The CEO decides, it is also his company, his vision prevails also because he is an owner of the majority of the shares. With such a stake, going for a new idea [on] how to operate is risky, but the gains will be his—and ours if [it] all works out." (Investor) *Note: The founder's ownership enabled him to focus on BMI.* ***Villa*:** "[Founder] has worked in [the luxury market] for years. Very rich customers have special needs. Having had contact with rich customers is a big differentiator, especially now that he wants to launch the club. It is more innovative, but the stakes are higher. Having this knowledge, [the founder] can impose his will, and pull this through." (Investor) *Note: The founder's expertise provided knowledge to impose his will for BMI.* "I have known of [founder] for years, he has developed an excellent reputation, first with his luxury car business, and now with luxury travel services. Having sold California-imported Mustangs or stays at gorgeous châteaux, he is well-known and respected. When he says he wants to do it, I think he is on to something, I might even give him money for this club idea." (Investor) *Note: The founder's prestige helped raise funds for the "villa-sharing club" BMI.* "[Founder] had a low percentage of the business, but we had a restructuring; now he has a majority share. I notice a big difference: he always worked, but now he is at the next level, takes new initiatives." (Investor) *Note: The founder's ownership changed behavior for BMI.*
Cognitive imprinting	***Money*:** "[Key business model founder] always made the decisions himself. Although it's a startup, it is very centralized. It's been that way since I started with the company not long after founding. There were fewer of us, but it was still very centralized." (Employee); "[Key founder] is the main driving force for this. It has been his idea for many years, and he has tried to develop it. This has not changed much in the last [few] years." (Investor) ***Villa*:** "Since the founder left, it still works the same; now it's [employee name] making the calls." (Manager); "We have a very hierarchical organization, I [make] operational decisions, [but] everything related to strategy goes up to the founder. The founders set it up this way from the start." (Manager, in interview conducted three years after the founder had left)
Cognitive imprints reinforcing structural imprints	***Money*:** "I would say they have a very centralized decision-making [approach] there. [Key business model founder] either approves [initiatives] or not; [things can move] very quickly with new initiatives that he thinks make sense—like they are implementing this change to a bank platform on the go now. But if he sees no value in something, it will not get done. They have a small team, but it helps them to execute very quickly when the founder signs off." (Investor) ***Villa*:** "[Key business model founder] is definitely in charge here, the decision making has always been very centralized around his authority. This is great because he is so up to date on the latest trends and evolution in business in general, so he can easily see through hype and point out the ideas that are sustainable to implement and change our business model." (Manager)

TABLE 5
(Continued)

Organic decentralized decision making occurs when actors jointly exercise control in relation to business model design to advance separate and common goals.	
Structural imprinting	***Fashion*:** "From the start the team has assumed different roles, IT, fashion, communication. We were all very young, and I let everyone make arguments, decisions. This might have created a weakness for the company as we had little experience in all these fields, most of us were just a year or two out of school, none over [age] 26. We started with some wild ideas, to sell clothes for all brands, but it was very complicated to implement, so we agreed to change. We all had to agree, I did not impose anything." (Founder) *Note: FS's founder described the emergence of decentralized decision making in the management team. Unanimity-favoring practices led to compromise rather than proceeding with the innovative business model structure and content.* ***Travel*:** "Without my partner it would never have been that solid—she has 20 years' experience from the travel agency world. I am still new to it, despite dedicating two years to the company. We share work equally between the two of us—she has the travel experience, me the IT part. She owns 50% of the company. We have an equal share of work. It would be easier if she was more tech-savvy to implement some of the ideas I have—for instance, we had to drop the blogging and free information offered—but I'd rather have her on board for all important decisions, so yes, we often compromise when making decisions." (Founder) *Note: The shared decision making (and equal firm ownership) at TR, which emphasizes unanimity, has led to the less innovative business model content and structure (travel agency) as the technology-inclined founder compromised with the cofounder with travel industry experience, and eliminated the more innovative business model content and structure (Table 3).*
Cognitive imprinting	***Fashion*:** "The founder lets everyone make decisions, but we all have to agree. That usually means that in preparation for a meeting I try to find a common denominator, where I know my colleagues will have little opposition to the suggestions I have. Yes, probably that makes the outcome less innovative, but meetings go through more rapidly." (Manager) ***Travel*:** "Since the beginning we [have relied] on each other. But on the main decisions we have to agree—it is a question of respect and transparency. That is how we function around here." (Cofounder)
Cognitive imprints reinforcing structural imprints	***Fashion*:** "They do everything in teams, they call it a 'cocreation' process where everyone participates. They are very similar in age, so maybe that is why they never developed a more centralized decision-making [process]. This strong 'cocreation' mindset makes it hard for them to experiment with many novel ideas, though. In the beginning I thought this venture had a very high potential to develop a very novel way of doing business, but today they [have become] much more of a follower." (Investor) ***Travel*:** "I would say that, overall, 90% of decisions we [make] together; that means that we both have to agree, otherwise we do not proceed. We know each other well, we rarely disagree, but it can happen. Then, most often, we just do not do it, even if it's a great idea. But [if] it means much more work for either of us, we will stay with more efficient activities, maybe less fun, but with a known profit, less risk, and less extra work. We have functioned like this for many years, it's our habitual way, there is no reason to change now." (Cofounder)

Notes: FB = *Football*, FS = *Fashion*, HC = *Health*, MN = *Money*, TR = *Travel*, VL = *Villa*.

donate information, on which doctors describe treatment protocols, and through which vendors sponsor clinical studies and relatives get patient updates). Our analysis revealed that high BMI at *Health* was promoted by three founder practices: industry-spanning search, complex system thinking style, and powerful centralized decision making.

Industry-spanning search: Structural imprinting. Our data suggest that *industry-spanning search* occurs when founders or other members of the venture actively search outside their industry for the stimulus to develop novel business models. In the case of *Health,* Jane explained how she came up with the idea of centering the business model around doctor

TABLE 6
Data Illustration for Processes Enabling Cognitive Imprinting

Process	Illustrative quotes or observations
Employee selection: Founders developed particular criteria regarding which employees to hire	**High-BMI cases**: Based on "fit" with firm goals and novelty mindset, hiring of individuals with little work experience in focal firm industry but high perceived long-term individual potential. Interviews: *Money* founder: "I interviewed students from [—] University, good candidates as they are open-minded and use mobiles more than the previous generation." *Money* founder 2: "It is more important to employ people who share our vision of the future payment industry than those who have worked for Visa or Santander." *Villa* founder: "Our main criteria for hiring is whether we can train that person to our ways. Experience is great, but we favor a blank slate that can be fashioned to our needs and preferences." **Low-BMI cases**: Based on operational readiness for immediate challenging work and capabilities for specific tasks, hiring mostly from the same industry as the focal firm. Interviews: *Fashion* founder: "We have ultra-optimized hiring; we hire for very specific capabilities, such as Java or C++ programming. We write up a careful description of the role, and then choose who has the best capabilities for it, with no room for errors." *Travel* founder: "I hired this girl from Denmark [who] was supposed to replicate our model for Swedish clients with the clients from Denmark. She had a lot of experience in the travel industry—that was a very important criterion of selection."
Memorable early mentoring: Formal and informal early interactions with the founder during which the founder taught employees specific practices	**High-BMI cases**: Memorable early mentoring fostered employee internalization of founder practices, enabling employees to persistently use these practices without being prompted or told what to do by the founders. Observation of meetings: *Money* founder organized meetings in a room with a blank board, titled "New Ideas". Operational and management meetings at *Villa* also involved formal speeches from the founder (repeated in emailed summaries) about the need to push the boundaries of villa rental practices. Interviews: *Money* employee: "I was mentored by the founder early on. I remember the advice I got well, as I did not understand well how things were done. It helped to get the philosophy of *Money*. I started to think differently about the payment industry, what the main issues were and what to do about it." *Villa* manager: "I used to work in a hotel, that was very different. I learnt more about the industry here in first meetings and informal talks, we discussed industry organization with the founder, who does what and why, and how we can fit in, find a niche. Now I get the subtleties." **Low-BMI cases**: Memorable early mentoring led to employee internalization of founder practices. Observation of meetings: We saw *Fashion* founder set quantitative incentives for efficient implementation of the mobile app, echoed by manager 1 in another meeting with engineers, centering them on efficient and timely execution, rather than new ideas. In our notes, three competitors were mentioned more than 10 times in a 30-minute advertising meeting with the founder. In a meeting of *Travel* founders, an efficiency focus was similarly emphasized. Interviews: *Fashion* manager: "I started work here as I was finishing my master's [degree]. I was surprised my opinions mattered. The founder explained we had to all be on board." *Travel* founder 2: "Efficiency is the goal we all believe in. It's like a religion we preach in meetings and emails."
Role modeling: Employees are inspired to imitate founders	**High-BMI cases**: Founders typically perceived as strong role models, providing either intrinsic inspiration or signaling promotion-relevant behaviors for employees to emulate. Interviews: *Money* employee: "[Founder] hired me; he is like a big brother. I'd like to be like that;" *Villa* manager: "When I started, the founder groomed me. I got inspired by his courage to start a company so young and to push so hard." **Low-BMI cases:** Founders typically perceived as pertinent role models, providing either intrinsic inspiration or signaling "safe," acceptable, or promotion-relevant behavior for employees to imitate. Interviews: *Fashion* manager: "The founder taught me a lot. I remember first lessons clearly. He became a model for me to copy;" *Travel* founder: "I am always careful what I say as they often think I am a role model, I have to live up to their high standard[s]."

interaction, an important innovation in terms of business model structure:

> During the initial period, I was thinking about Twitter, where you have followers. The more you give, the more you get. It is then that I decided that this company is going to be like Twitter, this is the point of how to engage medical doctors.

Given that *Health* does not compete with Twitter, we coded this inspiration from Twitter as *industry-spanning search*. Third parties (board member, investors) confirmed the founder's boundary-spanning behavior, discussing her "outsider's" way of thinking as important for the development of *Health*'s BMI. A board member explained that Jane had a medical education as well as an MBA, and experience in starting other businesses with information technologies (ITs), which "enables her to consolidate a vision about what elements are useful for *Health* to borrow from other industries. Without her, the project would not have been that innovative." During several hours of interviews, Jane referred to 32 firms outside health care, explaining how she had been inspired by the structure and governance of Twitter, Haier, HTC, and others to redesign her venture's business model and increase novelty.

Industry-spanning search: Cognitive imprinting. The founder's industry-spanning search was actively picked up by other venture members, who helped make this behavior enduring. These were not simple interactions where employees reacted to the demands of their leaders by doing what they were told. At a deeper level, founder search behavior affected what key employees learned, and influenced their behavioral patterns. At *Health*, industry-spanning search, performed repeatedly by Jane, influenced the cognition of team members in terms of their thinking, aspirations, and memories.

This happened in two ways. First, before hiring key employees in the genesis phase, founders developed particular criteria for selection decisions about which employees to hire; we refer to this as *employee selection* (Table 6). Jane explained recruitment practices at *Health* as follows:

> One of the main criteria I use is about openness and learning. Our business model is so novel, and there is so much we still need to fine-tune and figure out, that we need employees who pay attention to such things and are open to learn more. I ask candidates: Give me a recent example of a learning experience. That often tells me a lot about the candidate.

Hiring at *Health* was therefore based on the perceived "fit" of employees with the company goals for novelty, reflected in the novel business model, resulting in recruitment of individuals with little work experience in health care but high perceived long-term potential for valuable contributions.[4] The founder's structural imprinting (of high BMI novelty) influenced employee selection in terms of the focus on their ability to learn rather than on existing skills or industry knowledge (see dotted arrow in Figure 1). A good example is the hiring of the Chief Operating Officer (COO), who had an automotive rather than medical background, but was strongly motivated by *Health*'s BMI effort.

Second, hiring practices prepared the ground for subsequent processes that enabled cognitive imprinting of employees: *memorable early mentoring* and *role modeling*. Employees internalized founder behavioral and thinking patterns through early formal and informal interactions with the founder, such as meetings or business trips, during which the founders conveyed specific innovation-related practices. We refer to this process as *memorable early mentoring.* Employees frequently mentioned these early experiences during our interviews, often several years after having been hired, hence the label "memorable." For example, the founder of *Health* organized regular meetings during which everyone was encouraged to share examples from other industries to solve problems related to *Health*'s business model. Many years later, the COO recalled that, "My first month here was eventful, the first meeting was about revolutionizing health care, not something I expected in [this city], maybe in Silicon Valley, but not here." The COO's memories about his first month at *Health* almost six years after he had been hired suggest that his early learning had a deep and lasting influence on his thinking; he did not simply execute founder orders but had adopted the founder's way of thinking. The *Health* cofounder reflected during our 2011 interview that Jane taught new employees to create bridges "by always comparing how things are done in different industries as she has experience in these different worlds, medicine, software, business." Another manager explained how a memorable early trip to China enabled him to generate novelty through industry-spanning search:

> Jane brought several of us on this trip to China. We returned with many ideas. For example, we realized the importance of the mobile phone with the elders there. It made us think how we can adapt to this in our

[4] This is similar to Baron et al.'s (1999) *star* employment model, where selection is based on long-term potential rather than current skills.

> organization. Thanks to Jane, we often think outside our industry frontier to bring ideas to what we do.

This quote explains how employees other than the founder also started to search for ideas outside health care for *Health* to implement. Such interactions during their early days at *Health* were etched into their memories, often because the experiences contrasted with their prior work-based interactions. One manager commented: "I recall well my first days, it was so different to my past experiences, here we always searched for new ways of doing things." This suggests that early mentoring left a permanent mark on key employees. Similarly, early meetings became memorable mentoring experiences at *Money* and *Villa* (Table 6).

Another enabler for cognitive imprinting was *role modeling*, which occurred when founders displayed behaviors that employees perceived as inspiring. This process is distinct from mentoring, which involves founders' purposeful (inter)actions to teach employees something specific. In contrast, role modeling is neither necessarily based on direct interaction nor does it necessarily have a teaching purpose. For example, *Health*'s COO told us: "Jane, she's kind of a genius, very hard-working, and always open to what is new. I learnt from just observing her style, her way of thinking, building on what we know and blending in improvements." Role modeling thus enabled the assimilation of founder novelty-oriented practices by key employees.

Cognitive imprints reinforcing structural imprints. Cognitive practices of employees at *Health*, which focused on a search for novelty outside industry boundaries, helped sustain high BMI by continuously generating ideas for updates, such as getting additional revenues from patients' relatives, who were willing to pay for updates about a patient's status. Analogies with firms with subscription revenue models from other industries, such as Netflix (movies), or Spotify (music), were helpful to identify additional revenue sources. Ideas for improving business model structure and thus reinforcing BMI also came from social media. A *Health* manager said that while Jane mentored employees, ideas to generate novelty also came from other team members:

> We constantly innovate with different services to enable more collaborative health care. Jane is a big part of this, she makes us think about it. So we often come up with new ideas based on other industries, like social media. For instance, we created groups for doctors who are interested in some particular research or surgery techniques.

This quote suggests that while the founder stimulated novel thinking at *Health,* employees also picked up on innovative practices and "constantly" applied them. The institutionalized industry-spanning search thus helped sustain high BMI.

Complex system thinking style: Structural imprinting. Our data suggested a second founder practice that promotes high BMI. It occurs when the founders, and subsequently other members of the organization, display exceptional awareness of their industry structure and functioning. We coded this as *complex system thinking style*. We qualified this thinking as complex when iterating with the cognition literature, which has defined complex belief structures based on the number of concepts and the number of links between them (e.g., Eden, Ackermann, & Cropper, 1992). Such thinking surfaced in our interviews when founders engaged in deep reflections about the different types of participants in their industries and their interactions, and how they were guided by these considerations to design novel business models. For instance, in the case of *Health*, during our interviews Jane discussed at length how value-creating activities were divided between industry actors, what exchanges (physical goods, information, etc.) took place, and what incentives motivated participants. She explained:

> I have been involved with the health care industry for the last 30 years, and have learnt how it works. It is a very complicated industry, patients are customers, state and private insurance pay the bills, doctors have an opinion and responsibility, hospital administrators have a say, and pharmaceutical companies want to make money. I spent a lot of time the first year thinking how *Health* could fit in, and then came up with the new plan. For me the first step was to center around the doctors. We needed medical doctor engagement to connect all this, this was the missing piece—the adoption decision depended on doctors. If the doctors bought in, the whole system could turn around them like clockwork. So that was how the major change, from hospital software to a doctor network, happened.

Careful consideration of the various types of industry actors and understanding of their differing incentives enabled Jane to reorient *Health*'s business model structure to a network of high-profile doctors, who were followed (akin to Twitter) by other doctors and patients seeking best practices to treat diseases. Building on her excellent grasp of the health care system, the founder shifted the design of content and structure from selling software to hospitals to a

collaborative knowledge-sharing platform. Following successful experiments and adaptation, in the new model doctors voluntarily joined the platform (rather than hospital administrators imposing software adoption, as in the original model at founding), and value was created from knowledge exchange rather than from selling software (original content).

Complex system thinking style: Cognitive imprinting. The complex system thinking style originating with Jane was adopted by other venture members. As mentioned above, employees were selected by the founder, often from outside the health care industry, to develop the novel business model. Next, founder-generated complex system thinking style was imparted to them through memorable early mentoring during various meetings. For example, *Health*'s cofounder explained: "I often have a talk with new employees to tell them how we think about the industry here during the first or second meeting they attend."

Changes in employee thinking were also initiated by mentoring. For example, the cofounder commented: "Our employees pick up on these system-level issues. This is what mentoring is about." In particular, Jane's exceptional knowledge of the health care industry helped other employees to "understand relationships in this industry from a different angle," in the words of another cofounder. The COO explained:

> This more abstract understanding of the system helps us, I learnt it from the founder. She always takes a step back and asks a more general question about industry interactions or roles inside the hospital, and that helps solve problems. She always finds a solution, it involves combinations of ideas, it keeps amazing and inspiring me. I try to do it too.

This suggests that employees often emulated the founder's thinking by trying to think at a more abstract level about different industry participants, participants' respective needs, and how participants could be satisfied by *Health*'s offering.

Cognitive imprints reinforcing structural imprints. Through a clearer understanding of industry subtleties, *Health* employees continued to promote BMI; for example, by starting to charge hospitals for consulting services about how to reorganize care for chronic-disease patients. The idea for consulting came from a *Health* manager, rather than from the founder:

> I realized doctors, they just react on the spot, something happens and then they tell the nurse what to do. So they are used to this limited collaboration. But they are not used to thinking about a bigger picture, like what could prevent that accident in the first place. At *Health*, we always ask these big questions about the industry: How to improve health care? How to improve a patient's life? I think that kind of thinking made me more receptive to this issue and willing to tackle it. That's how I came up with the consulting idea.

This quote suggests that employees internalized the founder's complex system thinking style, which, in turn, helped them create innovative ideas themselves. In another interview, *Health*'s COO explained how his team continuously used system-level industry analysis:

> We spend a lot of time [on analyzing] the interactions, we have to consider how hospitals react, what is done by doctors, and what the patients do... we never sit comfortably with what we discover and stop looking. We always ask, "What's new? What's coming? What can we do better?" like how can technology, like the mobile, help us change how the doctors or family members interact with patients. This is how we started this collaborative social care model.

Cognitive practices of analyzing interactions between doctors, patients, and nurses thus fostered new ideas to maintain high BMI at *Health*.

Powerful centralized decision making: Structural imprinting. Previous research has suggested that heterogeneous and diverse teams favor the generation of innovations (Keller, 2001), specifically in the product space. The evidence from our study, however, suggests an alternative view. Most of our sampled ventures had diverse teams (Table 4), but high BMI emerged only in cases where one individual (who could be considered the key business model founder) had considerable power regarding business model-related decisions. We call this *powerful centralized decision making,* and, in iteration with the existing literature, define it as unilateral control over resources, which enables the key founder "to get things done the way one wants them to be done" (Salancik & Pfeffer, 1977: 14).

As our interview data alerted us to the importance of founders' power, we sought to analyze more deeply the emergence of centralized decision making from different sources of power, described by Finkelstein (1992) as *expertise, prestige*, and *ownership*. Evidence from the high-BMI cases confirmed that the key business model founders, such as Jane in the case of *Health*, leveraged all three sources of power simultaneously (Table 4). For instance, Jane was the only majority shareholder out of the three

founders of *Health* (ownership); she also had experience founding other ventures (expertise), as well as a network of connections with doctors, investors, and IT specialists (prestige).

A *Health* board member explained how leveraging *expertise* had helped Jane convince others to support her ideas about the adaptation from selling software to a knowledge-sharing collaborative platform:

> One of the advantages Jane has in this business is knowledge—she stayed open and curious over the years, she also has a medical degree. This helps her to be relevant. It was easier to buy into her ideas about *Health*'s novel business model design knowing that she is an expert in this. She mentions her expertise repeatedly.

Key business model founders also relied on *prestige*-derived power to convince team members and stakeholders about the benefits of transitioning to novel business model designs. A *Health* investor explained why he thought Jane could succeed with the move to high BMI:

> She is an interface between the two worlds of business and health care, she is respected and admired in both for her achievements and past success with her other company. There are few people who can play this part well, who understand the challenges of the two worlds and can make them talk to each other. That is why I joined, I like the novel business model she is developing, it is very interesting, and Jane can sure push it through to the next level.

All key business model founders of the ventures that evolved to high-BMI configurations were majority shareholders (Table 4). This reinforced their formal position of authority with team members and external stakeholders, and likely helped implement novelty relatively quickly and with little resistance. For instance, a *Health* board member observed:

> They started to change what the company does, going from software to this novel model based on information about specific diseases and patients who give up their records. I support Jane as I can, but ultimately, she is the owner, it is her responsibility. This is the reason she is in this position, to make things happen and to have the final call.

In line with this quote, during our observation of meetings at *Health*, Jane usually made decisions during the last five minutes through a centralized decision-making process.

Powerful centralized decision making: Cognitive imprinting. Jane's exercise of power resulted in highly centralized decision making that endured at *Health* over time. The newcomers who passed the hiring *employee selection* process learned about centralization during initial formal meetings (part of *memorable early mentoring*) and from the founder through *role modeling*. Employees typically adopted centralized decision making, as it was perceived to enhance implementation speed through rapid approval (or disapproval) of new initiatives and contribute to the high quality of the ideas approved. The COO explained:

> Decision making is indeed very centralized. This is probably because Jane has a very clear understanding of what she wants, and we quickly implement. Luckily, almost 100% of the time she is right. She is a gatekeeper in many ways here.

Cognitive imprints reinforcing structural imprints. Venture members other than Jane also centralized decision making in their respective domains of activity. This was confirmed by a *Health* programmer, who explained how centralization was also propagated by the COO (not Jane). He told us:

> Now that we have the cutting-edge tools, centralization helps to move fast and implement best possible ideas quickly. In my case, it's the COO who makes the decision when I have a new idea, he is in charge of selecting what we take to the next level.

Founder Practices Promoting Low BMI: The Case of *Football*

Our analysis of low-BMI cases revealed that they were not only characterized by the mere absence of the founder novelty-oriented practices explained above. Interestingly, we discovered three distinct practices that promote low BMI. We use the case of *Football* to explain and illustrate this. *Football*'s founders Dave and Peter (pseudonyms) were fans of both football (soccer) and Internet forums. After realizing the potential to connect football fans online, they launched a news and communication website for football fans, financed by advertising from interested companies. The founders replicated the business model template of well-established social networks such as Facebook, by allowing photo uploads and status updates, combined with the football forum layout, to foster interaction among football club fans. Several similar companies existed in the same space based on an advertising revenue stream from firms interested in reaching a large number of football fans, which led us to characterize *Football* as

low BMI. Over time, Dave and Peter scaled the platform for local and regional football clubs, and subsequently launched the business model in several other countries, keeping a similar structure with multilingual support. Our analysis reveals that low BMI at *Football* was promoted by a low degree of founder novelty orientation characterized by industry-focused search, internal efficiency thinking style, and organic decentralized decision making.

Industry-focused search: Structural imprinting. Our data suggest that *industry-focused search* occurs when founders or other venture members benchmark and copy elements from what they consider to be successful business models in their industry. This enables improved efficiency through imitation (Amit & Zott, 2015), but without increasing novelty. In the case of *Football,* Dave explained how the business model was modeled on the template of Facebook:

> Every time we look more like Facebook—we added groups, notifications, friends. This is no coincidence. Since [it] came out, Facebook has been a great inspiration and model for us to organize and structure our community interactions.

Facebook served as an important industry reference for *Football*, providing a continuous flow of ideas for the structuring of the venture's business model, as mentioned in several of our interviews. The success of Facebook over time made it an even more legitimate reference for industry-focused search. The founders repeatedly copied various elements of community interaction design from it, fostering a low degree of BMI at *Football*, as its business model strongly resembled other social forums focused on football discussions.

Industry-focused search: Cognitive imprinting. Similar to high-BMI cases, the data revealed that founder industry-focused search behavior was also adopted by key employees, which indicates the presence of cognitive imprints. For instance, the *Football* brand manager explained:

> My team and I, we are always inspired by how things are done in football—we work with brands that invest a lot into football sponsorship, and their interest is to learn more about the users. That is what we can provide. We have been exploiting this insight in our business model over the years, this has not changed much.

This key executive's buy-in of the founders' industry-focused search resulted in an enduring impact on *Football's* team that persistently benchmarked and copied features from competitors such as the United Kingdom's venture 90 Minutes and Germany's Onefootball over the years[5], sustaining low BMI. Our data also revealed that such cognitive imprinting is fostered by the same enablers that were discussed earlier: employee selection, memorable early mentoring, and role modeling. For example, hiring criteria at *Football* were based on determining specific capabilities needed to work on an immediate challenging task, and choosing the best-suited candidate, usually with accumulated experience from the same industry. Dave gave an example:

> We hired a brand relations manager to boost sales, he knew exactly what he was doing because he had a very similar job before. We profiled our needs, and found the candidate with the best-fitting experience for the task.

These hiring practices anchored in *Football's* industry facilitated the transmission of founder practices to employees. For instance, the founders' industry-focused search was taken up by the team of hired executives and became an enduring imprint. Key employees became markedly focused on continuously benchmarking and rapidly copying competitors' ideas, sustaining low BMI. This was also the result of memorable early mentoring, during which employees learned the explicit and implicit ways of functioning at the company. For example, a *Football* manager in charge of the website explained: "When making decisions, I simply think in terms of competitors—would they do this or that? I learnt it from our founders when I started here."

Similar to high-BMI cases, Dave and Peter were also perceived as role models by key employees, who adopted the founders' practices as their own. A manager commented: "Peter says passion has to come from users, I find this inspiring, it's a good rule for our business." Another manager provided a different reasoning: "If the founders do it, it means it is safe, it's how things should be done, I do it too."

Cognitive imprints reinforcing structural imprints. Our data confirm that the industry-focused search initiated by Dave and Peter was continuously propagated by other team members and helped sustain low BMI over time. For instance, the brand manager we interviewed was reluctant to change any elements of the existing and functioning business

[5] More information is available at https://www.90min.com, and https://onefootball.com.

model with respect to relationships with brands. Remembering his initial days at *Football*, he told us:

> When I started here, the founders mentored me. They explained how they were organized, it made a lot of sense. I have kept this up with my team, for instance with the benchmarking we perform continually when we implement various features on the website.

The persistence of low BMI at *Football* was also confirmed by an investor, who commented: "Overall, the organization has followed the trends in the industry. New entrants are probably more innovative, but *Football* is still around, doing what it has been always doing."

Internal efficiency thinking style: Structural imprinting. Our data suggest that founders of low-BMI ventures are often highly preoccupied with internal issues, such as cost control and operational efficiency, which promote incremental rather than radical innovation (Gurtner & Reinhardt, 2016). We coded this as *internal efficiency thinking style*. *Football*'s focus on internal efficiency was prevalent from inception, reflected in interviews and the original business plan, which noted, "Reaching breakeven and financial sustainability as soon as possible is our first objective." One of *Football*'s investors confirmed: "[*Football*'s founders] always focused on profitability, not so much on novelty, making the business work out financially; that is what I appreciate about them, and what makes it a good investment." This dominance of internal efficiency thinking style at *Football* fostered low BMI as Dave and Peter often resisted implementing novel features; for instance, postponing the conversion to mobile content until it became clear how this could be done efficiently.

Internal efficiency thinking style: Cognitive imprinting. Cognitive imprinting occurred in several ways. First, employees had to be well-versed in *Football*'s industry. Dave explained: "We have standardized hiring, there are required skills for the job, we go by that first." Then, memorable early mentoring influenced what employees learned on the job during their initial days. For instance, a *Football* manager described how his decision making was affected through early meetings: "I have learnt here to always think about efficiency first. Ideas can be very interesting, or creative, but the question arises in every meeting about costs. So now I first ask the question about the cost, in every case."

Cognitive imprinting also occurred through founders becoming role models for employees, who, in turn, also strove for efficient operations. Key employees adopted an internal efficiency thinking style, making it their own, and propagating it to employees further down the line. For example, a manager explained: "The founders are always careful with costs, and I emphasize efficient implementation with the programmers too."

Cognitive imprints reinforcing structural imprints. Internal efficiency-oriented thinking by venture members sustained the low-BMI structure of the company over the years, as the main criterion for decisions was the efficient execution of internal tasks, rather than the introduction of novel elements. A *Football* marketing manager explained how this affected features that were (not) implemented on their website:

> We have to choose what to do with the few resources and few good people, we prioritize based on the numbers and our understanding of how to operate efficiently in this space, that is the main criterion for what we implement on the website. Novel features are sometimes tested, but often they reduce efficient operations, and are not rolled out.

Organic decentralized decision making: Structural imprinting. Our data from the low-BMI cases also suggest the prevalence of *organic decentralized decision making*, which we define as key actors in the venture jointly exercising control in relation to important decisions about business model design. We qualified this decision making as organic because it often occurred outside formalized structures with few hierarchical distinctions (Morand, 1995). This contrasts sharply with powerful centralized decision making in the high-BMI cases. Our interviews, secondary data, and onsite observations suggest that when several team members (and sometimes investors and board members) actively participated in design decisions, the BMI stayed low or was lowered. We observed several organic decentralized decision-making instances when visiting *Football*'s premises and sitting in on management and operational meetings. This practice facilitated high collaboration but reduced risk-taking and novelty. In a similar vein, research on idea generation has found that teams working together generate fewer and lower-quality ideas for new products than do comparable groups in which individuals work independently (Girotra, Terwiesch, & Ulrich, 2010).

Football's founders Dave and Peter consciously favored unanimity for key business model decisions, and allowed every team member to have a right of veto because this ensured low conflict and fostered buy-in. Peter explained: "Introducing novelty is not the main priority, it is often difficult to agree on unproven features. We usually stick with the known as the business case is easier to argue, and the team agrees quicker."

Organic decentralized decision making: Cognitive imprinting. Over time, *Football*'s employees also favored organic decentralized decision making within their team. For instance, Peter described how a typical meeting took place:

> The team is composed of the product and marketing managers, the brand director, and me. We share in the decisions with equal rights. Ideas are [plentiful]. Recently we discussed software for club management, [which is] a very different business model from what we do [we do not sell to the clubs]. We decided not to pursue [this]—[the] marketing manager did not find it promising.

Cognitive imprinting of organic decentralized decision making occurred in several ways. First, employees were selected with reference to their knowledge of the venture's industry. After employee selection, cognitive imprinting occurred during early meetings. For example, a marketing manager explained how he adopted the organic decentralized decision making due to a memorable early mentoring experience during such a meeting: "At my first meeting at *Football* I learnt [that] agreement was important, all opinions matter. Now it is also my working principle." Another manager confirmed:

> Based on my experience here, consensus is important. This is how we solve issues, we have to agree. I learnt this during my first meetings, if others are not on board, I stop pushing. I always remember when [another employee's] ideas got shut down; he was inexperienced, it was painful, but also a good lesson.

This suggests that *Football* kept BMI low not necessarily because its individual members lacked innovative ideas but because there was a lack of unanimity about the usefulness of novelty.

Cognitive imprints reinforcing structural imprints. Organic decentralized decision making was sustained over time at *Football*. One of the investors remarked that whenever he visited the firm, which he did several times a month, he never witnessed disagreements or conflict. He commented: "They seem to all agree on the direction to follow. The founders definitely are driving this, this is how they organized from the start, it's not the case in all my companies." Organic decentralized decision making made the emergence of novelty less likely in low-BMI cases, as the brand manager confirmed: "We are not always very willing to launch all possible new features, but if everyone agrees, it usually goes quickly." They focused on ideas copied from competitors, incremental innovation, or strengthened efficient operation, rather than radical novel initiatives.

DISCUSSION

We began our research with the question of how (if at all) founders imprint novel business models. Our inductively derived framework (Figure 1) reveals two mutually reinforcing pathways that help explain novelty imprinting. The first pathway (structural imprinting) explains how founders directly impact the novelty of a business model. The second (cognitive imprinting) explains how founders convey their practices to other venture members, who in turn influence BMI. In high-BMI ventures, employees began to aspire to innovate, envisioning new ideas for their ventures. In low-BMI ventures, employees aspired to incremental innovation and efficiency-driving improvements of the business model instead. Our model also reveals the links between these pathways. Structural imprinting affects cognitive imprinting through employee selection, and cognitive imprints serve to reinforce structural imprints. These findings shed light on the genesis and metamorphosis of novelty imprints, which are defined as structural imprints that are novel at a particular point in time. Our analysis yields the counterintuitive insight that stable cognitive imprints that promote novelty can facilitate structural imprint change at the level of the business model, which is nonetheless consistent with the imprinting concept (Stinchcombe, 1965), as we explain next.

Genesis and Metamorphosis of Novelty Imprints

Our theoretical framework has important implications for scholarship on imprinting. First, our study is the first to demonstrate the existence of novelty imprints and develop a theoretical framework that explains how novelty imprinting works. Our analysis reveals that founder imprinting of venture members' cognition ensures organizational plasticity to sustain structural novelty. This contrasts strongly with the existing literature, which has suggested that imprinting inevitably leads to inertia (Beckman & Burton, 2008; Hannan et al., 1996) and that the "imprinting hypothesis assumes a reduction of managerial discretion" (Schreyögg & Sydow, 2011: 326). Our findings suggest a more nuanced view: some firms learn and adapt, and are capable of continuously introducing BMI through founder and managerial agency, while in other cases structural inertia settles in. This echoes the findings of Barr, Stimpert, and Huff (1992), who examined two railroad companies and found that while one company

kept learning, updating its cognitive beliefs and ways of functioning, the other company did not change its cognitive practices over the 25-year study period. We provide an explanation for this heterogeneity anchored in imprinting theory, and suggest how imprinting can facilitate both the emergence and persistence of novelty in some cases ("novelty imprinting"), and the preservation of less novel designs in others.

Second, our study reveals the importance of cognitive imprints for novelty imprinting. As noted above, the process of novelty emergence has been largely unexamined. This has fostered a somewhat simplistic conception of BMI emergence as a matter of founders' imagining and then implementing novel business model elements. Our analysis raises the possibility that prior research may have overlooked a subtler process underlying novelty imprints by either assuming a too-powerful role for the founder or ascribing imprinting to environmental circumstances. Revealing a richer view of novelty imprinting, which includes founder agency but also relies on other venture members, is a key insight of our analysis. This theoretical insight is important, as the cascade of founder practices to other venture members in the form of cognitive imprints may help to explain why researchers have observed strong effects of founders many years after their departure (Harris & Ogbonna, 1999; Tripsas & Gavetti, 2000).

Third, we delineate the mechanism of how this happens, and thus contribute to the imprinting literature a novel insight into the influence of cognitive employee-level on structural venture-level imprints. This influence can sustain an initial path chosen: both high and low BMI, fostered by certain founder practices, are preserved through the cognitive imprints of employees. This is important because the influence of cognitive on structural imprints can sustain novelty over time. In one of our cases, *Villa*, the founder left in 2014, yet employees remembered and repeatedly referred to him during our interviews in 2017. They commented that the novel practices associated with his legacy were treasured, assimilated, and enacted, motivating employees to sustain ongoing novelty at *Villa*. Thus, founder legacy can continue through cognitive imprints at the employee level.[6]

[6] The quest for constant innovation is also a key topic in the strategic management field. Our findings might inform this debate, and more specifically help shed light on the origins and micro-foundations of dynamic managerial capabilities, defined as managerial actions through which firms adapt organizational resources to cope with strategic change (Adner & Helfat, 2003; Huy & Zott, 2019; Teece, 2007).

Lastly, our study informs the imprinting literature by showing that the sensitive period for founder imprinting can extend over several years—in our cases around three years after founding. The imprinting literature has often lacked specific details about how long this sensitive period might last (Simsek et al., 2015). Such an important question requires elucidation because it touches on the essence of imprinting theory—if imprinting is strictly viewed as a stamp, impressed on a venture by an external force (e.g., Stinchcombe, 1965), it can influence some features of organizational design, such as employment templates (Baron et al., 1999) or governance arrangements (Nelson, 2003). However, other important features of boundary-spanning designs (e.g., those involving third parties) require considerable development and pivoting (Bryan, Tilcsik, & Zhu, 2017; McDonald & Eisenhardt, 2019), and cannot be imprinted instantaneously.

The longer the sensitive period, the greater the scope for founders and other venture members to exercise agency, influence structural novelty, and more generally use imprinting strategically (Bryant, 2014; Simsek et al., 2015). In a review of the literature, Simsek et al. (2015: 306) commented, "Most accounts of imprinting processes are oversocialized, emphasizing the role of institutional and cultural embeddedness [. . .], without sufficient focus on the role of individual and collective agency during sensitive periods." Our study brings agency sharply into relief in imprinting research, showing how founders and other venture members are actively involved, rather than merely serving as inert "conduits through which economic, social, or cultural forces systematically shape organizational blueprints" (Baron et al., 1999: 542). While the literature has suggested that "it might be difficult for an organization to deviate from founding patterns in its very early years" (Boeker, 1989: 408), our cases suggest and explain the mechanisms for a more active role for founders and their teams in novelty imprinting.

Implications for Business Model Innovation

Our study also contributes to the BMI literature. Despite the growing body of research on BMI, the emphasis has been on performance implications rather than on BMI antecedents (Foss & Saebi, 2017). The rare empirical studies on BMI emergence have tended to portray it as a matter of the founders' imagining and implementing novelty. For instance, Brea-Solís, Casadesus-Masanell, and Grifell-Tatjé (2015) described how Walmart founder Sam Walton imagined and implemented different

practices (e.g., pricing, pressure on vendors, technology use), which constituted BMI at the company. Chesbrough and Rosenbloom (2002) explained how the founder of Xerox, Joe Wilson, imagined a BMI consisting of leasing instead of selling expensive copying machines. But what does founders' imagining and implementation of novelty precisely mean?

Our framework highlights that founders' search behavior, thinking style, and decision-making patterns shape a venture's BMI, which, taken together, embody the founder's novelty orientation—a new construct suggested by our research. First, in high-BMI cases, founders perform industry-spanning search, which involves long "jumps" to search other industries for inspiration to design novel business models. The literature on business models has identified templates, or default solutions, to organize activities and exchanges, from which entrepreneurs can borrow mindfully to design novel business models (Amit & Zott, 2015; McDonald & Eisenhardt, 2019). We complement this work by showing that useful templates can be identified, similar to novel technologies (Rosenkopf & Nerkar, 2001), by means of distant search.

Second, some founders and their teams engage in complex system thinking to analyze industry actors and their interactions. The complexity of managers' belief structures has been shown to facilitate appropriate strategic actions due to better information processing (Nadkarni & Narayanan, 2007). Consistent with the notion of the business model as an activity system (Zott & Amit, 2010), our research suggests that systemic thinking positively influences BMI, probably because it promotes a holistic understanding of where novelty lies at the system level.

Third, it appears that some founders leverage power to implement BMI. We find that key founders leverage ownership (formal source of power), as well as expertise and prestige (informal sources of power), to impact business model novelty through centralized decision making that enables BMI. This insight is counterintuitive in the context of innovation research, which has emphasized the importance of heterogeneous teams for product innovation (Keller, 2001). In the case of BMI, however, organic decentralized decision making seems to constrain novel solutions.

Taken together, our findings suggest that founder power might solidify the imprinting of BMI. While industry-spanning search and complex system thinking style foster the conception of novel designs, founder power facilitates their implementation. In other words, founder search behavior and thinking style might be necessary, yet insufficient, in the absence of powerful centralized decision making to implement novel solutions. For instance, in the case of *Fashion*, the founder reverted to low BMI under investor pressure, lacking expertise- and prestige-derived power to enforce the implementation of his original high-BMI ideas. Similarly, the founder of *Travel* lacked ownership and prestige-derived power to realize high BMI.

Interestingly, we find that some business model innovators not only engage in one-off innovations of content, governance, or structure, but also continuously innovate. This insight suggests that ventures might be able to build a dynamic managerial capability (Adner & Helfat, 2003; Huy & Zott, 2019) to sustain novelty over time, rather than just to achieve a one-off innovation. The mutually reinforcing structural and cognitive imprinting mechanisms that our research revealed could thus help explain the origins of dynamic capabilities for BMI (Amit, Giessen & Zott, 2019).

Our research also has a number of important managerial implications. First, it suggests that founders do indeed have great influence on important structural features of their ventures. It also suggests, however, that it might be difficult for managers to modify the degree of the BMI once founder novelty orientation has been imprinted. This might lead to a trap-like situation, in which it is difficult to significantly pivot firm trajectory several years after founding. The specific practices we identify, along with the associated mechanisms, provide some clues to managers as to which practices might be important to change in order to prevent or counteract the imprinting forces. This is where the leadership of founders could play a role (Simsek, Heavey, & Fox, 2018). Founders are in a privileged position to select their team, transmit values and goals through mentoring, and become role models. They have to remain mindful of what cognitive practices become institutionalized in their ventures.

Limitations and Future Research

Our study has several limitations, which suggest opportunities for further research. First, we sampled new ventures in a few industries in one country, following them for about 10 years. The generalizability of our findings could be enhanced by studying different industries in other countries to account for environmental variations in the imprinting process. Second, our focus was on the business model, but it could also be interesting to examine whether and how other key features, such as resources or culture (Simsek et al., 2015), are

imprinted. In a similar vein, the role of founder power in BMI design and implementation could be more closely examined. Additionally, there is a research opportunity to further examine the link between BMI and performance by studying whether ventures that introduce high BMI early on perform better or worse than those that pivot from more incremental to more novel business models later.

CONCLUSION

This study was motivated by the need to better understand the genesis and metamorphosis of BMI, and whether novelty can be imprinted at all. It reveals the existence and origins of novelty imprints and shows how founder novelty orientation and venture members' enactment of this orientation and its associated practices coalesce to imprint novelty in new ventures. The founders in our sample clearly affected key structural and cognitive features of their ventures during imprint genesis. This suggests that entrepreneurs may have a limited, but significant, time window after founding before path dependence sets in to develop their legacy by taking the road "less traveled," and so make "all the difference."

REFERENCES

Adner, R., & Helfat, C. 2003. Corporate effects and dynamic managerial capabilities. ***Strategic Management Journal***, 24: 1011–1025.

Ahuja, G., & Novelli, E. 2016. Incumbent responses to an entrant with a new business model: Resource co-deployment and resource re-deployment strategies. In T. B. Folta, C. E. Helfat, & S. Karim (Eds.), ***Advances in strategic management***, Vol. 35: 125–153. Bingley, U.K.: Emerald Group Publishing.

Ainamo, A. 2005. Coevolution of individual and firm-specific competences: The imprinting conditions and globalization of the Jaakko Pöyry group, 1946–1980. ***Scandinavian Economic History Review***, 53: 19–43.

Amit, R., Giessen, E., & Zott, C. 2019. ***Building a business model innovation capability***. Working Paper.

Amit, R., & Zott, C. 2001. Value creation in e–business. ***Strategic Management Journal***, 22: 493–520.

Amit, R., & Zott, C. 2015. Crafting business architecture: The antecedents of business model design. ***Strategic Entrepreneurship Journal***, 9: 331–350.

Arora, A., & Nandkumar, A. 2012. Insecure advantage? Markets for technology and the value of resources for entrepreneurial ventures. ***Strategic Management Journal***, 33: 231–251.

Baron, J. N., Hannan, M. T., & Burton, M. D. 1999. Building the iron cage: Determinants of managerial intensity in the early years of organizations. ***American Sociological Review***, 64: 527–547.

Barr, P. S., Stimpert, J. L., & Huff, A. S. 1992. Cognitive change, strategic action, and organizational renewal. ***Strategic Management Journal***, 13(S1): 15–36.

Beckman, C. M., & Burton, M. D. 2008. Founding the future: Path dependence in the evolution of top management teams from founding to IPO. ***Organization Science***, 19: 3–24.

Birkinshaw, J., Hamel, G., & Mol, M. J. 2008. Management innovation. ***Academy of Management Review***, 33: 825–845.

Boeker, W. 1989. Strategic change: The effects of founding and history. ***Academy of Management Journal***, 32: 489–515.

Brea-Solís, H., Casadesus-Masanell, R., & Grifell-Tatjé, E. 2015. Business model evaluation: Quantifying Walmart's sources of advantage. ***Strategic Entrepreneurship Journal***, 9: 12–33.

Bryan, K. A., Tilcsik, A., & Zhu, B. 2017. Which entrepreneurs are coachable and why? ***American Economic Review***, 107: 312–316.

Bryant, P. T. 2014. Imprinting by design: The microfoundations of entrepreneurial adaptation. ***Entrepreneurship Theory and Practice***, 38: 1081–1102.

Chesbrough, H. 2010. Business model innovation: Opportunities and barriers. ***Long Range Planning***, 43: 354–363.

Chesbrough, H., & Rosenbloom, R. S. 2002. The role of the business model in capturing value from innovation: Evidence from Xerox Corporation's technology spin-off companies. ***Industrial and Corporate Change***, 11: 529–555.

Eden, C., Ackermann, F., & Cropper, S. 1992. The analysis of cause maps. ***Journal of Management Studies***, 29: 309–324.

Eisenhardt, K. M. 1989. Building theories from case study research. ***Academy of Management Review***, 14: 532–550.

Ellis, S., Aharonson, B. S., Drori, I., & Shapira, Z. 2017. Imprinting through inheritance: A multi-genealogical study of entrepreneurial proclivity. ***Academy of Management Journal***, 60: 500–522.

Finkelstein, S. 1992. Power in top management teams: Dimensions, measurement, and validation. ***Academy of Management Journal***, 35: 505–538.

Foss, N. J., & Saebi, T. 2017. Fifteen years of research on business model innovation: How far have we come,

and where should we go? ***Journal of Management***, 43: 200–227.

Frost, R. 1916. ***Mountain interval***. Rahway, NJ: Henry Hold and Company.

Gilbert, C. G. 2005. Unbundling the structure of inertia: Resource versus routine rigidity. ***Academy of Management Journal***, 48: 741–763.

Girotra, K., Terwiesch, C., & Ulrich, K. T. 2010. Idea generation and the quality of the best idea. ***Management Science***, 56: 591–605.

Gurtner, S., & Reinhardt, R. 2016. Ambidextrous idea generation—Antecedents and outcomes. ***Journal of Product Innovation Management***, 33: 34–54.

Hannan, M. T., Burton, M. D., & Baron, J. N. 1996. Inertia and change in the early years: Employment relations in young, high technology firms. ***Industrial and Corporate Change***, 5: 503–536.

Harris, L. C., & Ogbonna, E. 1999. The strategic legacy of company founders. ***Long Range Planning***, 32: 333–343.

Hsu, D. H., & Kenney, M. 2005. Organizing venture capital: The rise and demise of American Research & Development Corporation, 1946–1973. ***Industrial and Corporate Change***, 14: 579–616.

Huber, G. P., & Power, D. J. 1985. Retrospective reports of strategic-level managers: Guidelines for increasing their accuracy. ***Strategic Management Journal***, 6: 171–180.

Huy, Q., & Zott, C. 2019. Exploring the affective underpinnings of dynamic managerial capabilities: How managers' emotion regulation behaviors mobilize resources for their firms. ***Strategic Management Journal***, 40: 28–54.

Jarzabkowski, P. 2008. Shaping strategy as a structuration process. ***Academy of Management Journal***, 51: 621–650.

Johnson, V. 2007. What is organizational imprinting? Cultural entrepreneurship in the founding of the Paris Opera. ***American Journal of Sociology***, 113: 97–127.

Keller, R. T. 2001. Cross-functional project groups in research and new product development: Diversity, communications, job stress, and outcomes. ***Academy of Management Journal***, 44: 547–555.

Kouamé, S., & Langley, A. 2018. Relating microprocesses to macro-outcomes in qualitative strategy process and practice research. ***Strategic Management Journal***, 39: 559–581.

Langley, A. 1999. Strategies for theorizing from process data. ***Academy of Management Review***, 24: 691–710.

Leung, A., Foo, M. D., & Chaturvedi, S. 2013. Imprinting effects of founding core teams on HR values in new ventures. ***Entrepreneurship Theory and Practice***, 37: 87–106.

Lippmann, S., & Aldrich, H. E. 2016. A rolling stone gathers momentum: Generational units, collective memory, and entrepreneurship. ***Academy of Management Review***, 41: 658–675.

Markides, C. 2006. Disruptive innovation: In need of better theory. ***Journal of Product Innovation Management***, 23: 19–25.

Marquis, C., & Qiao, K. 2018. Waking from Mao's dream: Communist ideological imprinting and the internationalization of entrepreneurial ventures in China. ***Administrative Science Quarterly***. doi: 10.1177/0001839218792837.

Marquis, C., & Tilcsik, A. 2013. Imprinting: Toward a multilevel theory. ***Academy of Management Annals***, 7: 195–245.

Martins, L. L., Rindova, V. P., & Greenbaum, B. E. 2015. Unlocking the hidden value of concepts: A cognitive approach to business model innovation. ***Strategic Entrepreneurship Journal***, 9: 99–117.

McDonald, R., & Eisenhardt, K. M. 2019. Parallel play: Startups, nascent markets, and effectively designing a business model. ***Administrative Science Quarterly***. doi: 10.1177/0001839219852349.

Miles, M. B., & Huberman, M. A. 1994. ***Qualitative data analysis: An expanded sourcebook*** (2nd ed.). Thousand Oaks, CA: Sage Publications.

Morand, D. A. 1995. The role of behavioral formality and informality in the enactment of bureaucratic versus organic organizations. ***Academy of Management Review***, 20: 831–872.

Nadkarni, S., & Narayanan, V. K. 2007. Strategic schemas, strategic flexibility, and firm performance: The moderating role of industry clockspeed. ***Strategic Management Journal***, 28: 243–270.

Nelson, T. 2003. The persistence of founder influence: Management, ownership, and performance effects at initial public offering. ***Strategic Management Journal***, 24: 707–724.

Pitcher, P., & Smith, A. D. 2001. Top management team heterogeneity: Personality, power, and proxies. ***Organization Science***, 12: 1–18.

Powell, W. W., & Sandholtz, K. W. 2012. Amphibious entrepreneurs and the emergence of organizational forms. ***Strategic Entrepreneurship Journal***, 6: 94–115.

Pratt, M. G., & Rosa, J. A. 2003. Transforming work–family conflict into commitment in network marketing organizations. ***Academy of Management Journal***, 46: 395–418.

Rosenkopf, L., & Nerkar, A. 2001. Beyond local search: Boundary-spanning, exploration, and impact in the optical disk industry. ***Strategic Management Journal***, 22: 287–306.

Salancik, G. R., & Pfeffer, J. 1977. Who gets power—and how they hold on to it: A strategic-contingency model of power. ***Organizational Dynamics***, 5: 3–21.

Sanchez, P., & Ricart, J. E. 2010. Business model innovation and sources of value creation in low-income markets. ***European Management Review***, 7: 138–154.

Santos, F. M., & Eisenhardt, K. M. 2005. Organizational boundaries and theories of organization. ***Organization Science***, 16: 491–508.

Schreyögg, G., & Sydow, J. 2011. Organizational path dependence: A process view. ***Organization Studies***, 32: 321–335.

Siggelkow, N. 2002. Evolution toward fit. ***Administrative Science Quarterly***, 47: 125–159.

Simsek, Z., Fox, B. C., & Heavey, C. 2015. What's past is prologue: A framework, review, and future directions for organizational research on imprinting. ***Journal of Management***, 41: 288–317.

Simsek, Z., Heavey, C., & Fox, B. C. 2018. Interfaces of strategic leaders: A conceptual framework, review, and research agenda. ***Journal of Management***, 44: 280–324.

Sosna, M., Trevinyo-Rodríguez, R. N., & Velamuri, S. R. 2010. Business model innovation through trial-and-error learning: The Naturhouse case. ***Long Range Planning***, 43: 383–407.

Stinchcombe, A. L. 1965. Organizations and social structure. In J. G. March (Ed.), ***Handbook of organizations***: 142–193. Chicago, IL: Rand-McNally.

Suddaby, R., Bruton, G. D., & Si, S. X. 2015. Entrepreneurship through a qualitative lens: Insights on the construction and/or discovery of entrepreneurial opportunity. ***Journal of Business Venturing***, 30: 1–10.

Svejenova, S., Planellas, M., & Vives, L. 2010. An individual business model in the making: A chef's quest for creative freedom. ***Long Range Planning***, 43: 408–430.

Teece, D. J. 2007. Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. ***Strategic Management Journal***, 28: 1319–1350.

Teece, D. J. 2018. Business models and dynamic capabilities. ***Long Range Planning***, 51: 40–49.

Tilcsik, A. 2014. Imprint–environment fit and performance: How organizational munificence at the time of hire affects subsequent job performance. ***Administrative Science Quarterly***, 59: 639–668.

Tripsas, M., & Gavetti, G. 2000. Capabilities, cognition, and inertia: Evidence from digital imaging. ***Strategic Management Journal***, 21: 1147–1161.

Yin, R. K. 2013. ***Case study research*** (4th ed.). New York, NY: Sage Publications.

Zott, C., & Amit, R. 2007. Business model design and the performance of entrepreneurial firms. ***Organization Science***, 18: 181–199.

Zott, C., & Amit, R. 2010. Business model design: An activity system perspective. ***Long Range Planning***, 43: 216–226.

Yuliya Snihur (y.snihur@tbs-education.fr) is an associate professor of strategy, entrepreneurship, and innovation at Toulouse Business School in Toulouse, France. Originally from Ukraine, she received her PhD from IESE Business School, Spain. Her research explores business models and their evolution in new and established firms.

Christoph Zott (czott@iese.edu) is a professor of entrepreneurship at IESE Business School in Barcelona, Spain. He received his PhD from the University of British Columbia. In his research, he explores how entrepreneurial actors acquire, mobilize, combine, and deploy resources to build new organizations or rejuvenate existing ones.