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Adaptation or Persistence? Emergence and Revision of Organization Designs in New Ventures

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Abstract. How organization designs evolve between adaptation to changing conditions and the pressures toward persistence of the designs adopted at founding remains an understudied phenomenon. To fill this lacuna, we conducted a longitudinal, multicase study of eight young ventures. We find that, in these ventures, specific organization design *solutions* changed frequently, triggered by various internal and external developments, although the changes were typically incremental and myopic. However, the more abstract *principles* of design, captured in the founders' logics of organizing, were less amenable to change. This explains why observations of imprinting effects in logics of organizing may be consistent with observations of dynamic change to organization designs.

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Keywords: organization design • emergence • updating • design solutions • design principles • imprinting • microstructures • qualitative research • entrepreneurship

Introduction

An organization's design manifests itself in its specific *design solutions* to the fundamental problems of organizing: how labor is divided through task division and allocation, how effort is integrated through the provision of information and rewards, and how potential exceptions are handled (see, e.g., March and Simon 1958, Lawrence and Lorsch 1967, Mintzberg 1979, Puranam et al. 2014). As nascent organizations grow and mature, do they preserve how they are organized, or do they alter their approach in response to the changing conditions they experience? It would seem intuitive that as organizations age, they face different internal and external pressures, making changes to designs inevitable (Chandler 1962, Child 1972, Donaldson 2001, Siggelkow 2002). Research on new ventures' adaptation to growth and shifting environmental conditions (e.g., Greiner 1972, Churchill and Lewis 1983, Donaldson 2001, Siggelkow 2002, Ambos and Birkinshaw 2010) seems to bear out this intuition. Yet there is also evidence for the persistence of initial designs imprinted on new organizations by their founding environments (Stinchcombe 1965, Marquis and Tilcsik 2013, Simsek et al. 2015). In particular, scholars have noted that the founders' "logics of organizing" (Baron et al. 1996, 1999b)—belief systems composed of *principles* of organization design, which, in turn, describe founders' subjective propositions about which organization design solutions are appropriate to divide labor and integrate effort and are reflected in the first set of design solutions (Stinchcombe 1965, Johnson 2007, Simsek et al. 2015)—restrict further changes.[1]

To illustrate the two possibilities, consider two successful organizations, both in the software sector. GitHub makes continuous integration software tools. For the first seven years of its existence, GitHub prided itself on its unusual organization design, in which workers self-selected into tasks and there were no bosses (or even mandatory meetings). However, in 2015, it underwent a dramatic change that left it looking much more like a traditional organization, complete with bosses, a multilayered hierarchy, and standardized job titles (Burton et al. 2017; also see Rao and Sutton 2014 for an account of a similar transformation at Google). The gaming software company Valve, by contrast, has an unusual organization design with no managers and a two-layered structure (the founder/CEO and everybody else) (Laloux 2014, Baldwin 2015, Zenger 2015). Valve has retained this design since its inception more than two decades ago and ascribes innovation and motivational benefits to it (Laloux 2014).

Although these particular instances (salient because of the unusual nature of their designs) are hardly definitive or generalizable, they nevertheless illustrate the question we seek to answer in this paper:

when do we observe stability (imprinting) or change (adaptation) in the designs of organizations as they grow? An answer can help us better understand the conditions under which organization designs change as organizations grow and develop, the processes through which they change (or do not) (e.g., Johnson 2007, Simsek et al. 2015, DeSantola and Gulati 2017), and what to recommend to executives shaping organizational structures eventually. As Siggelkow (2002, p. 157) notes in his seminal work on the evolution of the mutual fund provider Vanguard, the question of "why firms add (or do not add) new core elements in their evolution towards a configuration" remains important and understudied. Indeed, a burgeoning literature suggests *that* an organization's design may be subject to change as it grows (e.g., Boeker and Goodstein 1991, Ambos and Birkinshaw 2010, Zuzul and Tripsas 2020). Still, as several scholars remark (e.g., Siggelkow 2002, Johnson 2007, Wasserman 2008, Bryant 2014, Simsek et al. 2015, DeSantola and Gulati 2017), much remains to be learned about *how* such change in organization design comes about and *when* and *why* change does (not) arise.

Answering our research question requires that we observe organizations and how and why they are designed in considerable detail and over time. We theoretically sampled (Glaser and Strauss 1967) eight nascent ventures to ensure these had broadly similar goals and starting points in order to isolate differences in subsequent updating dynamics. Drawing on archival, observational, and interview data, we inductively developed a process model explaining adaptation and persistence in organization designs. We find a clear difference between changes to organization design *solutions*—what founders actually do to address the universal problems organizations face in terms of division of labor and integration of effort—and the higher order principles on the basis of which a specific solution is selected. We find that design solutions change frequently in these young ventures although the changes are typically incremental and appear myopic. However, the more abstract principles of design, jointly forming the founders' logics of organizing, seem less amenable to change, at least in the eyes of the founders themselves.

We traced the relative stability of the principles composing the logics of organizing to two mechanisms. Most frequently, founders were *entrenching* their logics of organizing, meaning they (for near-ideological reasons) preserved design principles despite feedback indicating that they should not. Second, some founders reinterpreted their logics of organizing by *extending* their design principles: either to include an organization design dimension they had not addressed saliently so far or by interpreting an existing principle more flexibly (so that additional design solutions would fit). In only two cases did we see founders *exchanging* their initial organizing principles for new ones. Here, however, they did not embark on a search for a new logic but switched to an alternate (dormant) set of principles that other members of the organizations already held but had not championed vociferously before.

In sum, our insights help us (1) present a theoretical account that may reconcile observations of imprinting effects in logics of organizing with observations of dynamic change to organization designs and (2) provide a more nuanced framework to help practitioners think through these complex issues.

Theoretical Background: Adaptation and Persistence in Organization Design

Any organization is inevitably caught in the dialectic between adaptation and persistence (e.g., Burns and Stalker 1961, DeSantola and Gulati 2017). On one hand, it is intuitive that organizations need to adapt their strategies and structures to changing internal and external contingencies (Donaldson 2001, Siggelkow 2002, Davis et al. 2009). On the other hand, concepts emphasizing the persistence of organizational attributes—described more or less interchangeably as imprints (Stinchcombe 1965), pathologies (Burns and Stalker 1961), or logics of organizing (Baron et al. 1996)—suggest that this potential for adapting organizational structure is limited or at least somehow moderated by the structure the organization displayed at its inception (Marquis and Tilcsik 2013, Simsek et al. 2015).

To ground our study of persistence and adaptation in organization design, we rely on the synthesis of the extant variety of definitions of "organization"[2] from Puranam et al. (2014), which led them to conclude that, in order to exist, any organization must—consciously or intuitively—divide its goals into tasks and find a way to allocate those to members (the division of labor, consisting of task division and allocation), incentivize and coordinate those members so that their efforts serve the organizational goal (the integration of effort, consisting of the provision of information and rewards), and manage potential exceptions. A specific set of solutions to these fundamental problems manifests itself in the observable part of an organization design. Updating the organization design would, therefore, imply that the organization would change solutions to at least one of the five basic problems of organizing.

Distinctly from the actual organization design solutions themselves, a number of studies of nascent organizations show how individual founders draw on their logics of organizing (Baron et al. 1996, 1999b)—subjectively held principles for the "right" way to design organizational procedures, role structures, and governance mechanisms—with which they were

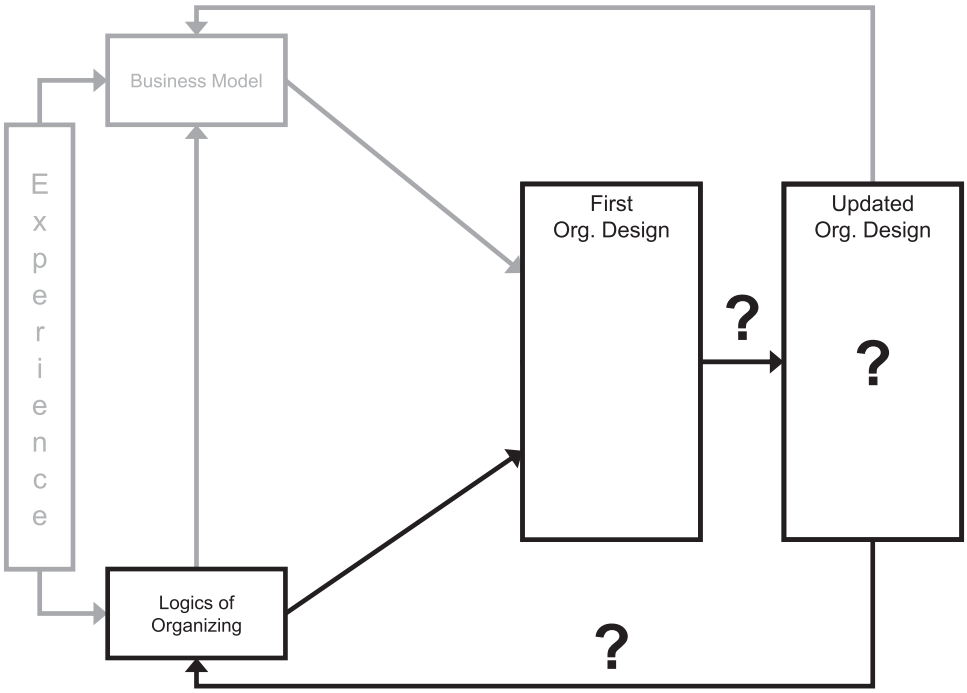
acquainted in previous jobs, for example, and which they then implicitly or explicitly replicate (Baron et al. 1996, 1999a, b; Hannan et al. 1996; Feldman et al. 2019). After inspiring the first organization design, such logics of organizing may also become a source of conformance pressure originating from the resource base and institutional environment from which they draw (e.g., Stinchcombe 1965, Marquis and Tilcsik 2013, Lippmann and Aldrich 2015, Simsek et al. 2015). For example, the foundational work of Baron et al. (1996, 1999a, b) shows clear evidence of such "imprinting": the persistence of the original organization design long after the initial act of founding. In line with Stinchcombe (1965), they highlight how specific design decisions, such as the degree of administrative intensity and decisions regarding reward systems, control, and hiring, correlate with the logics of organizing from the time of founding. Other work shows that the original role structure of the organization could often persist long after the founders have gone (e.g., Burton 2001, Burton et al. 2002, Burton and Beckman 2007) and points to similar persistence effects for organizational capabilities and cognition (e.g., Tripsas and Gavetti 2000) as well as firms' networks and network positions (e.g., Marquis 2003, Milanov and Shepherd 2013).

At the same time, scholarship points out that work on imprinting often falls short of explaining why persistence occurs, suggesting a need to inquire into the process dynamics through which the original imprint operates and is either reenacted or potentially revised over time (e.g., Johnson 2007, Marquis and Tilcsik 2013, Simsek et al. 2015). In fact, Stinchcombe (1965) himself did not insist on the perpetual stability of initial organizational designs; rather, he argued that they should persist only so long as either no superior alternatives were discovered or because of resource constraints, vested interests, or external institutional pressures. If we consider that a first organization design might even be purposefully created to be flexible (Stinchcombe 1965, Johnson 2007, Gartner 2016) so as to better react to an uncertain environment (Galbraith 1994, Garud et al. 2008), organization design change, in particular in response to performance feedback, remains a constant possibility (Boeker 1989, Boeker and Goodstein 1991).

Open Questions About the Updating of Organization Designs

Understanding how organization designs may be updated is a crucial question, yet our insight into the actual updating process is limited. As we summarize in Figure 1, our current state of understanding suggests that prior experiences of founders shape their logics of organizing, which, in turn, influences the initial organization design solutions: how to divide and allocate tasks among members, how to motivate and coordinate them, and how to manage exceptions as they arise. What we do not yet sufficiently understand is whether and how the performance feedback the young organization receives as it operates leads to updates to the organization design.

Figure 1. Updating of Organizing Design and Logics of Organizing in Current Literature



Note. Boxes and arrows that are grayed out represent insights from existing literature, such as work on new venture growth and updating of market-facing activities (which we were also able to corroborate in our case organizations).

First, the literature emphasizing the persistent imprinting effect of logics of organizing leaves open the question of how to explain instances of updating of organization design (Simsek et al. 2015). This is partly a result of how research has been conducted in this line of inquiry in the past; traditionally, quantitative data are gathered that describe the early stage of an organization (often through retrospective surveys) and complemented by data that describe the enterprise at one later point in time. Yet specific events in which firms decide (or not) to perpetuate the initial design remain unobserved (cf. Baron et al. 1996, 1999b; Reynolds et al. 2004), meaning that we are short of empirical insights into the dynamics that *actually* took place (also see Johnson 2007, Simsek et al. 2015).

Second, work on the adaptive coevolution of organizational strategy and structure clearly shows that performance feedback and organization design are linked (e.g., Boeker and Goodstein 1991, Ambos and Birkinshaw 2010, Zuzul and Tripsas 2020). Yet, as several scholars remark, these insights cannot be easily extended to questions of when and how performance feedback triggers potential updates of the organization design and when it does not (e.g., Siggelkow 2002, Wasserman 2008, Bryant 2014, Simsek et al. 2015, DeSantola and Gulati 2017). For example, as ventures grow and environments change, underperformance could result from an inappropriate business model, organization design, or both (Greiner 1972, Hannan and Freeman 1977, Hannan and Freeman 1984, Donaldson 2001). Although the business model—the set of choices about who the firm's customers should be, what value the firm creates for them, and how to set up the corresponding value chain (Markides 1999; Zott and Amit 2007, 2013; Foss and Saebi 2017a, b; Massa et al. 2017)—describes how the firm creates value for the customer, the organization design—both principles and solutions—emerges as rules, rights, and responsibilities governing the actors who inhabit and animate the resulting value chain (DeSantola and Gulati 2017). Organization members may not be able to attribute performance cues to one or the other precisely because observed performance is a function of both (also see Siggelkow and Rivkin 2009). The circumstances under which performance feedback would lead to adaptation versus persistence of the organization design, thus, remain elusive. This ambiguity and the need for its resolution is highlighted by Siggelkow (2002, p. 157) in his seminal work on the evolution of Vanguard, when he calls for research "to address the question of why firms add (or do not add) new core elements in their evolution toward a configuration. . . .The second broad line of inquiry could investigate the organizational consequences of having followed one developmental pattern rather than a different one. For instance, what is the relationship between a firm's prior developmental path and its ability to respond to environmental change?"

Rather than treat prior accounts of adaptation and persistence as either contradictory or confusing, we accept as a premise that both accounts may be accurate. What remains is the need for a meta-theory that reconciles these. Such a theory might take the form either of the discovery of contingencies that act as boundary conditions on each prior account or of a refinement in our phenomenological understanding of what is being observed to change or stay stable (and how both sorts of observations can coexist). Thus, in this paper, we first want to shed light on what changes occur to the organization designs with which new ventures begin and what stays the same as they begin accumulating performance feedback. Second, we seek to investigate how any such changes take place: what triggers them, who undertakes them, their scale and scope, and their potential impact on the broader logics of organizing. In effect, we mean to follow up on Stinchcombe's (1965, p. 167) apt observation that, although it may be easy to attribute the persistence of organizational designs to "tautologous statements," such as tradition, it is imperative to understand that organizational actors, through their conscious and unconscious actions, choose which traditions they want to establish and which ones they may want to adapt or reject (see also Johnson 2007). Accordingly, we ask, given updating opportunities, such as market feedback (e.g., Gartner 2016), new technological developments (e.g., Zammuto et al. 2007), or even newly discovered approaches to organizing (e.g., Puranam et al. 2014), when, where, why, and how do new organizations update (1) (parts of) their organization design solutions and (2) possibly even the logics of organizing inherent in the design?

Data and Methods

The objective of our study—to extend existing theory on how organization designs of young organizations evolve—merits a qualitative approach (Edmondson and McManus 2007). Our perspective is one of theory elaboration (Lee et al. 1999, Fisher and Aguinis 2017): we intend to build on established constructs from theories of strategy, organization design, and imprinting and to extend these through a process perspective to shed light on the question we outlined.[3]

Sample

We began our investigation by discussing major organizing challenges during start-up growth and development with representatives (managers, consultants) of the business incubators associated with two leading European universities. We also spoke informally to (many) founders during start-up events

hosted there and elsewhere to verify the validity of our broad research question and identify a relevant setting.

During this first phase, we learned that tackling problems of teamwork and organization design was gaining importance in the incubation programs. Simultaneously, we gained access to potential case firms at the universities. Following the logic of theoretical sampling (e.g., Glaser and Strauss 1967), we chose a broad sampling approach to ensure we could observe our phenomenon of interest. We studied multiple organizations in parallel to minimize the risk that our results would be idiosyncratic to a specific case (Yin 2014). By focusing on IT ventures, we tried to ensure that our sample firms had largely the same cultural and institutional resources when starting out. To increase the likelihood that we would observe differences in updating dynamics at play, we sampled for variably composed founding teams (team size, founder backgrounds, familiarity with one another, clarity about business plan) in different development stages (nascent start-up in founding process versus zero- to two-year-old incorporated business). Through this sampling approach, we expected to observe (1) uniformity in the importance of organization design issues, (2) cross-case variation in organization designs, and (3) changes in organization designs over time.

Eventually, we sampled eight cases (C1–C8), described in Table 1, which we studied in depth through multiple interactions, both retrospectively and in real time. We began with three cases (C1–C3) for which we could initially draw on existing longitudinal interview data collected during a study on business model development overseen by one of the authors. Given that data had been collected for a different purpose, we felt particularly confident beginning here as any findings related to our phenomenon of interest could not be an artifact of our seeking them deliberately (Glaser and Strauss 1967). Here, C1 was already registered as a firm and in the process of finalizing the production of a software application ("app"). C2 and C3 were preregistration start-ups that already had a first product on the market and were focused on improving their business models. Following suggestions from the incubators and our own notes from the start-up events, we then selected C4–C6 as they were still in the early stages of developing their business model (C4 and C6: social media platform; C5: software). Third, our last two cases, C7 and C8, represent two more advanced companies with established market access, now focused on expansion. Because these eight cases provide varying and recurring patterns (see the following for more details), we eventually decided that we had reached a point of sufficient literal and theoretical replication (i.e., saturation) for our multiple-case study (Glaser and Strauss 1967, Yin 2014). In particular, this became evident when considering the inclusion of a ninth case study for which we had begun to collect data but found that major developments of interest could be explained by our emergent theorizing.

Data Collection and Sources

For our analysis, we draw on multiple sources of data for each case. First, we gathered internal and public documents. We asked founders for business plans, presentation decks, and screenshots illustrating their use of communication and project management tools (e.g., Slack or Asana). We also searched their websites and social media accounts (news, blog posts, Twitter, Facebook, etc.) as well as press archives and business registration databases for company data and archival information about the teams' histories (dates and circumstances of major events). In addition, we triangulated information about the founders' education and work experience with their LinkedIn profiles. Finally, we compared archival data about the development of their organizations with their personal social media accounts when publicly accessible. By sifting through the posts and tweets as well as when attending events, we not only learned about some performance feedback that our founders had received, we also obtained cues about how they processed it and, more generally, about their thoughts during successful as well as challenging periods.

Second, we collected various kinds of observational data. We visited the ventures at their premises and asked the founders for a tour, during which we noted elements such as office layout, task boards, company language, and similar aspects of organization design. Whenever possible, we took photos of communication and project management tools "in use" (whiteboards, sticky notes, boards, etc.). Because we visited many of the start-ups repeatedly, we paid special attention to any changes. We also attended two start-up events at which the teams presented their ideas and pitched their business models to investors, and we observed some of the coaching sessions received by the ventures enrolled in incubation programs.

Third, we conducted a total of 21 interviews with 15 of the founding members of the eight teams: one initial interview with each start-up and 13 follow-up interviews with at least two interviews for each case. Whenever possible, we conducted group interviews with the entire founding team (C2, C4–C6). Alternatively, we talked with parts of the team (C1, C7) or just the CEO (C3, C8). In the initial interviews, we used a semistructured interview guideline (see Table A.1) to obtain both retrospective and real-time accounts from the founders who experienced the processes we wanted to study (Yin 2014). In the follow-up interviews, we asked participants to summarize the evolution of their organization designs and their

Table 1. Case Descriptions

	Cases							
	C1	C2	C3	C4	C5	C6	C7	C8
Development stage and age	Young company (one year)	Young company (1.5 years)	Young company (one year)	Nascent venture (3/4 year)	Nascent venture (1/2 year)	Nascent venture (1/2 year)	Young company (one year)	Young company (two years)
Main product/ services	App/ entertainment	Platform/ entertainment	Software/media industry	Platform/social media	Software/ service industry	Platform/social media	Software/service industry	Big data/service industry
Founding team size	4	2	3 (4)	3	4	2	3 (4)	2
Founding team description	2 business and 2 IT students	2 business graduate students	3 IT entrepreneurs and 1 former employee	2 business graduates, 1 IT entrepreneur	4 students (business, science, and IT)	2 freelancers in the creative industry	2 business managers, 2 IT entrepreneurs (one joined later)	2 IT entrepreneurs with business experience
Initial hierarchy	Flat	Flat	Steeper	Steeper	Flat	Flat	Flat	Flat
Degree of familiarity	High (medium)	High	High (medium)	Low	High	High	High (medium)	Low
Entrepreneurial experience	Low	None	High	High	Low	Low	Low	High
Industry experience	High	Low	High	High	High	None	High	High
Organization design experience	Low	High	High	High	Low	Low	High	High
Employees/ coworkers	0; delegate software development to free-lancers	2 IT (one of them holds shares)	2 interns (sales and PR); delegate to sister company	0; 2 people involved in early stages sometimes helped out	0	0; delegate software development to free-lancers	5 freelancers seen as part of the team (3 business, 2 IT), outsourcing (legal/ accounting)	12 (full-/part-time + freelancers seen as part of the team); some outsourcing
Financing	Seed investor	Bootstrapping	Accelerator (5%); corporate client	Bootstrapping; incubation program	Incubation program	Bootstrapping; incubation program	Start-up grant; incubation program	Start-up grants; external investors

most important learnings. Moreover, at the end of the follow-up interviews, we walked participants through a set of printouts containing a simplified representation of our then-preliminary process model and asked them to comment on the findings step by step. Each interview conversation lasted about 1.5 to 2.5 hours, yielding nearly 1,000 pages of transcripts (1.5 line spacing).

Fourth, we used visual representations to enhance the quality and reliability of the interview data: to provide a baseline for discussing changes in organization designs, in the initial interviews, we equipped participants with pens and paper cards in different colors and asked them to map tasks, people, communication tools, and motivational factors to illustrate their current organization design solutions (without explicitly mentioning this term). We photographed these representations and presented them to the participants in the follow-up interviews to discuss interim design changes and reduce retrospective bias. More specifically, we placed the photos in front of the participants and asked them about changes in general (when they did not mention those unprompted), external environmental constraints, or any internal difficulties (see also Figures A.1 and A.2).

Fifth, beyond several informal chats with our founders, we had several informal conversations with their coaches (from the incubators) and mentors about the observations they had made and, later in the project, introduced some of our initial theorizing to them to solicit their feedback. We also twice discussed our theorizing with two advanced entrepreneurs who had completed one of the incubation programs several years ago and now ran a successful, six-year-old high-tech firm. Each discussion lasted approximately 1.5 hours and focused on the entrepreneurs' own past experiences as well as their assessment of their fellow founders' thoughts and behaviors in relation to our theorizing. Finally—albeit admittedly only on two occasions—we also spoke informally with employees of the ventures.

Data Analysis

To process our data comprehensively, we used the qualitative analysis software NVivo to build a database containing all data and followed recommendations on good practice in analyzing and coding qualitative data (as summarized recently by Walsh et al. 2015a, b; Eisenhardt et al. 2016).

First, all authors read the full transcripts of all interviews and screened much of all the other materials gathered. In parallel, we regularly discussed interesting developments and emerging themes during meetings between all authors, which yielded extensive research notes that would inform our subsequent data collection. In these meetings, we also discussed preliminary within-case coding attempts (see the following), which we continuously updated as new information came in (Gioia et al. 2013; Walsh et al. 2015a, b; Eisenhardt et al. 2016). With clarity on each case increasing, one of the authors constructed detailed case narratives (drawing on all data sources). The narratives closely followed the wording from the interviews and were further independently triangulated by a research assistant and verified by the case firms.

Second, in the narratives we developed, we tried to identify "incidents" involving organization design: situations of performance feedback in which the organization design could or would change (for a similar logic to coding incident-based updating phenomena, see, e.g., Christianson et al. 2008, Barton and Sutcliffe 2009, Rudolph et al. 2009, Maitlis and Christianson 2014, Grimes 2018, Christianson 2019). We soon realized that, in order to make meaningful and coherent before–after comparisons, we had to define a bounded set of elements of organization design that would also allow for granular observation.

After evaluating alternatives, we decided on the definition by Puranam et al. (2014) to capture participants' descriptions of initial organization design solutions and consecutive updating on five mutually exclusive but collectively exhaustive dimensions: task division, task allocation, reward distribution, information exchange, and exception management. We believed this approach was more useful for our purposes than alternatives defined by dimensions such as centralization or formalization, which seemed better suited to aggregate descriptions of larger, more established organizations and would not be fine-grained enough for us to observe and understand variance within and across our start-up firms.

When we applied this approach to measure actual design solutions in place (i.e., how the ventures actually organized), we discovered that our ventures made distinctions between those solutions and the broader design principles these solutions should embody (i.e., what the design solution should help achieve). For instance, we found design principles pertaining to information exchange, such as "we must always coordinate face to face as far as possible," might be instantiated by specific design solutions, such as "regular weekly meetings" or "regular daily meetings" or "Skype." A principle pertaining to reward distribution, such as "members should be motivated by more than money," could be instantiated in terms of design solutions that highlighted "fun," "autonomy," and "positive feedback from customers."

As we elaborate, we saw that, jointly, these design principles composed what prior work would describe as the logics of organization (e.g., Baron et al. 1996)[4]

of the founding team. Yet we learned that such organizing principles had not always been explicitly articulated among the founders (and definitely not when the ventures were founded). We also discovered that not all principles relevant to the different organization design dimensions appeared to enjoy the same articulation or strength in the founders' logics of organizing, meaning founders perceived some problems of organizing more saliently than others.

Drawing on this approach, we then tried to isolate incidents in which external or internal factors led our start-ups to reconsider their original organization design solutions and possibly the principles behind those. Eventually, we identified a total of 129 incidents, eight of which were team formation, defining the original design solutions, and 121 subsequent feedback incidents. We then recorded an update to the organization design if, across two subsequent incidents, firms changed their solution to at least one of the five fundamental problems of organizing. Nearly all of the 121 feedback incidents led to a change in at least one design solution, but some also involved a complete redesign. In turn, to capture updating in logics of organizing, we tried to identify (changes in) the latter over time—as shown by our founders expressing (changing) views of why they would or should organize in a certain way or have reorganized (see, e.g., Christianson 2019 for a similar approach)—potentially even independent of actual changes to the design solutions (see also Weick and Roberts 1993, Mohammed and Dumville 2001, Bryant 2014).

Third, we studied the 121 feedback incidents to understand what would explain the type, degree, and process of updating that we observed. To do so, beginning with the narratives, we developed a set of codes to represent patterns in our data and tried to infer factors that seemed to trigger changes and to characterize the organization design–related processes we observed in our data. For each feedback incident, we studied (a) which solutions were changed, (b) the reasons why these changes came about, and (c) potential effects on the founding team's logics of organizing. Starting from these preliminary codes, two of the authors independently developed a consistent set of first and second order codes (Van Maanen 1979) capturing the elements of the process of structural change. Through several rounds of meetings among authors, during which all original case material was repeatedly revisited, we consolidated these emerging codes and categories, discussed alternative explanations, and eventually elaborated the final data structure (see Table 2). One of the authors then recoded all incidents using this scheme. The other authors verified the coding. We jointly discussed any discrepancies until we reached consensus (Gioia et al. 2013).

Fourth, to help us search for patterns across cases, we cross-tabulated (Miles and Huberman 1994) coding outcomes to investigate relative frequencies of combinations between some of the coding categories: Table 3 shows the distribution of organization design solution updates chosen in response to different types of feedback incidents across all cases. Table 4 shows, per case, how often one type of feedback incident caused what kind of change in design solutions and logics of organizing. We further developed a temporal sequence of feedback incidents for all ventures, displaying how they occurred over time and the dimensions of organization design solutions that changed (see Table A.2); we also tabulated the specific initial design solutions and principles, and how they changed (see Table A.3).

Finally, drawing on our collective evidence, we began developing a process model based on recurring patterns of causal conditions, actions and strategies, and consequences. As part of this process, we increasingly consulted extant literature on models of organizational learning, search, the dynamics of imprinting, and related work to move to a more abductive process of reasoning, leading to an analysis process characterized by iterations between data, existing theory, and emerging theory (Gioia et al. 2013, Mantere and Ketokivi 2013, Eisenhardt et al. 2016). The findings we report are the basis of the intermediate theory we derive. We further summarize the revised process model of the updating of organizational design and logics of organizing in Figure 2.

Findings

Drawing on all our sources of data, in the following, we develop a refined model of the updating of organization designs (summarized in Figure 2). To substantiate this model, first, we delineate how the initial set of solutions to an organization design in our ventures arose. Next, we highlight when and where the design solutions as well as subsequent versions were updated. Finally, we analyze when these changes to design solutions were accompanied by changes to the underlying logics of organizing.

Origins: Initial Organization Design Solutions Are Shaped by Logics of Organizing

To study the designs of our organizations over time, our first task was to identify their original one. In our sample, all ventures had identifiable initial solutions to the basic problems of organization design though they varied in the articulation of the design principles or explicit design efforts that appeared to have produced them. In each case, we could document an answer to the questions of what tasks the organization

Table 2. Coding Tree

Layer 1 codes	*Layer 2 codes*	*Theoretical dimensions*
	ΔTD	Updating the organization design
The first task is to come with an idea	Creating tasks	
Founder introduce operational management, HR, PR, NPD, sales, distribution, legal, support …		
Founders divide organization into typical business areas (IT, sales, marketing…)		
Founders add new tasks given a new partner, joining an accelerator…		
Founders define specific tasks for marketing, product development, sales	Elaborating tasks	
Founders specify hiring producers for employees and contracting procedures for freelancers		
Founders adapt technologies, distribution, to new market		
Refinement of IT back end or front end (including website, logos)		
Founders elaborate marketing, product through trial and error		
	ΔTA	
Definition/announcement of CEO or CxOs roles	Defining or elaborating roles	
One founder is sent to do sales talks with potential large customer		
Founders take on tasks appearing "naturally" in the vicinity of what they did before, what they like doing		
Founders change from administrating topic areas to role profiles		
One founder self-selects to take over incubator management, legal, finance, IT		
Founders realize they cannot complete a task themselves and outsource or delegate	Handing over roles or tasks	
Founders purposively hand over existing task to new employees, partners		
One founder/employee replaces another		
Some founders temporarily hand over tasks to other founders (reasons: vacation, preference, skills…)		
Founders insource tasks, such as development of IT, also by hiring new team members		
Founders switch to working jointly on a task (software development, legal…)	Creating overlaps in roles, task	
Founders/employees keep specializations, but can now "help out" in other areas		
(Newly hired) back-end experts (operations, IT) are assigned to multiple areas (sales, PR…)		
New tasks with no clear skill fit (operations, legal, IT) are shared between founders		
Founders purposively do everything together like "Siamese twins"		
Strategic management, direction defined as "gray area" and shared responsibility		
	ΔRD	
Problems with freelancers boost unity, feelings of control within the team	Learning and receiving feedback	
Newly identified talks provide learning opportunities		
With progress, founders start to see pieces coming together		
Founders are (more) motivated by seeing employees making progress		
Feedback (thank you notes, sales, website traffic) from customers is personal gain		
Discovery of new opportunity: founders may no longer enjoy current one any more		
Design of work as exiting growth opportunity to attract new talent	Exercising autonomy and voice	
Interns, employees can dedicate X% on their time on self-selected tasks (as in 3M, Google)		
Once tasks are assigned, people can decide themselves how to complete them (sense of ownership, responsibility)		
Founders allow people to have voice in what the company should be, do		
Awards, sales pitches, conference presentations improve reputation of firm, individuals	Gaining in status	
Introduction of performance evaluation systems so people know when they are doing a great job		
Venture development allows different styles of working (from home, in international city…)		
As venture grows, becomes vehicle to reach other goals (retirement, wealth…)		
Entrepreneurial experience (for founders and employees) as stepping-stone for another career		
Use of contracted freelancers to do programming	Paying people	
Founders focus on generating sales to create personal income, hire employees, externals		
Increase salaries to attract specialists (especially programmers) or labor at all (even interns)		
Payout following specific events (e.g., funding round) to boost motivation		
Founders switch from same pay to paying people "what they are worth"		
Founders can increase work hours of employees (who are paid by the hour)		
Founders agree on growth ambitions (exit yes/no, scaling yes/no)	Incentivizing through ownership	
Founders change from salaries to themselves/employee to granting ownership shares/options or vice versa		
Freelancers are paid via shares rather than lump sum payments		

Table 2. (Continued)

Layer 1 codes	*Layer 2 codes*	*Theoretical dimensions*
	ΔIE	
Specialization favors meetings in small teams at home, university	Clustering	
Regular/constant face-to-face interaction replaced by digital channels used less frequently, constantly		
Specific individuals take over communication with externals (e.g., investors) or physically distant team members		
Founders start private chats on digital media, have conversations (physically, digitally) in separate rooms		
Founders move back to communicating among original founding team		
More full team meetings, also with externals, to ensure everyone is up to speed	Declustering	
Disclosing all documents, information on IT tools to every team member		
Introduction of new IT tools that allow everyone to be involved		
Move toward colocation, face-to-face communication, personal meetings; often enabled by move to larger office		
Investors, mentors introduce regular meetings or reporting procedures	Standardization	
Founders introduce IT tools to standardize communication and people know where to find information		
Founders introduce meeting rules (times, agendas, preparation and postprocessing rituals for meetings, etc.)		
Founders introduce office rules (physical layout, noise)		
Founders change project management approaches (usually from planning to agile or vice versa)		
Founders professionalize ad hoc project management, reporting lines, interfaces, often to "keep people focused"		
	ΔEM	
Joint discussions and decision making in which the opinion of all team members counts the same	Delegating and consensual decision making	
Big decisions, even if function specific, are jointly discussed; "if one disagrees, we will not do it"		
Founders draw on external feedback to resolve disputes among them amicably		
Everyone can suggest operational changes, adopted by some form of majority vote		
Founders introduce, exercise (shared-based) voting systems, usually connected to functional organization	Installing a hierarchy and escalating conflicts	
Founders enforce agreements with externals (freelancers, etc.)		
Founders enforce previously made decisions, rules, in the team; reduce self-selection possibilities for employees		
Founders increasingly take on decision making even for smaller matters; insist on final say in discussion		
Founders introduce and enforce performance monitoring of employees		
Increasing disagreements between functional areas (e.g., IT and sales)		
Founders change from big-picture focus (and sticking to it) to approach focus on small steps (or vice versa)	Reprioritizating tasks	
Founders newly emphasize specific feature of their BM (location, tech) or OD (rewards, specialization)		
Founders expedite processes (usually NPD) and drop certain tasks, features		
	Viability of BM	Feedback incident as trigger for change
Investors or mentors give feedback on how to implement the idea	Seeking new information on opportunity	
Customers do not like the idea, but feedback points to a modified opportunity		
Customers like the idea, give positive feedback		
Founders discover new (sub)markets for their idea through various channels		
Successes or misses in tenders, grant applications		
New team members bring new ideas, skills		
Lack of money (to buy things, pay people…)	Realizing resource constraints	
Lack of key complements (brand, distribution, marketing, production)		
Lack of key people or skills (programming, growth, management)		
Shortage of founders' time (studies, study-abroad programs, other jobs)		
	Viability of the OD	
Cofounders, employers, or freelancers do not perform as expected (quality of work)	Sensing cooperation problems	
Conflicts about when, how, or by whom work should be completed arise		
Founders question the skills or motivation of cofounders, employees		

Table 2. (Continued)

Layer 1 codes	*Layer 2 codes*	*Theoretical dimensions*
New employees, partners, demand more information to be able to complete their tasks and evaluate their performance		
Employees emphasize their wishes to pick their own task and/or to complete tasks in the way they prefer		
Cofounders, employers, or freelancers do not or cannot complete tasks (lack of information)	Recognizing coordination problems	
Founders discover that previously specified (essential) task are not taken on by anyone		
The same issue is unnecessarily tackled by multiple people at once		
Founders feel overwhelmed by the information they need to handle or think employees have that issue		
	Learning dynamics	Updating the logics of organizing
We have done well on our business, organization, so we should continue as is	Entrenching	
It is really important that we did not give in, stood our ground; we would rather fail than give in		
Even if short on cash (sales, resources…), that is a good experience because it makes us focus		
We see successful companies that (seem to) follow our approach, so it must work		
What we are doing feels right; had we changed, other problems would have surely appeared		
A difficult-to-solve problem is attributed to another part of the organization		
We had simply not thought of this topic (marketing, brand, legal, ownership shares…) before and will do now	Extending	
We now understand this issue (marketing, legal…) better, but we cannot address it		
We were aware of this issue but could/did not need to address it before; now we can/should		
We had always planned it to do this way (though they had not)	Exchanging	
Had we had more time/resources, we would have started like this (though it is not clear how they could have)		
	Strength of initial beliefs	
Prevent a negative experience from the past being repeated	"Core" OD elements (often from strong founder)	
Clear preference for specific mode of working, usually self-motivated, autonomous, in line with larger ambitions in life		
Preference for individual aspects of "lean," "agile," MBO, or other "textbook" organizing philosophies as guidance for all activities		
Key individual (versus the team) produced the idea		
Experienced founder must know what they are doing		
Clear initial goal versus focusing on "having a start-up together" (with no idea or business model in the beginning)	Exhaustiveness of organizing logics	
Full application of a complete (textbook) organizing approach (e.g., scrum, holacracy)		
Original organization design is not discussed when people (think they) are familiar with each other		
Founders do not have experience in all areas of organizing		
Resource constraints (lack of cash, time, room), family obligations prevent people from working on dreaming up a vision		
Cofounders have (prior theories) or collect (experience) alternative approaches to OD but do not implement those	Availability of alternatives	
Founders recall past experience they had previously not thought applicable		
New organizing philosophies are discovered (new team members, founders go abroad, read book, receive advice…)		
	Power of feedback	
Feedback is "detailed" and/or "actionable"	Richness of alternatives	
Feedback is in line with other ideas about organizing		
Feedback highlights another known, complete organizing philosophy as potential solution		
Investor, mentor explains that (or wants explanation why) firm cannot go on like this and reach its goals	Severity of feedback	
Investor, mentors condition, do not give, threaten to withdraw, or withdraw funding, support		
Discovered problem would suggest that current goals are not attainable		
Product/service fails or not delivered in time		

Note. TD, task division; NPD, new product development; TA, task allocation; RD, reward distribution; IE, information exchange; EM, exception management; OD, organization design; BM, business model; MBO, management by objectives.

Table 3. Pattern of Observed Feedback Incidents and Triggered Structural Changes[a] in TD, TA, RD, IE, and EM[b]

	Triggers			ΔTD				ΔTA					ΔRD							ΔIE					ΔEM				
Row number	Feedback incident category	Number of incidents	Percentage of total	Number of ΔTD	Percentage of category	Creating tasks	Elaborating tasks	Number of ΔTA	Percentage of category	Defining roles	Handing over roles	Creating overlaps	Number of ΔRD	Percentage of category	Learning and feedback	Autonomy and voice	Status	Pay	Ownership shares	Number of ΔIE	Percentage of category	Clustering	Declustering	Standardization	Number of ΔEM	Percentage of category	Delegation and consensus	Hierarchy and escalation	Reprioritizing
1	**Viability of business model**	**79**	**65%**	**51**	**65%**	**33**	**19**	**43**	**54%**	**8**	**28**	**9**	**44**	**56%**	**22**	**8**	**15**	**17**	**7**	**29**	**37%**	**8**	**16**	**8**	**23**	**29%**	**10**	**7**	**6**
1.1	Seeking new information on opportunity	57	47%	40	70%	26	15	33	58%	8	21	6	31	54%	16	3	11	11	4	21	37%	4	14	5	17	30%	8	6	3
1.2	Realizing resource constraints	22	18%	11	50%	7	4	10	45%	0	7	3	13	59%	6	5	4	6	3	8	36%	4	2	3	6	27%	2	1	3
2	**Viability of organization design**	**42**	**35%**	**16**	**38%**	**8**	**9**	**16**	**38%**	**3**	**9**	**5**	**13**	**31%**	**5**	**5**	**3**	**3**	**2**	**24**	**57%**	**7**	**8**	**18**	**26**	**62%**	**8**	**14**	**7**
2.1	Cooperation problem	28	23%	12	43%	7	5	11	39%	3	5	4	10	36%	3	3	2	2	2	15	54%	4	4	9	20	71%	7	12	2
2.2	Coordination problem	14	12%	4	29%	1	4	5	36%	0	4	1	3	21%	2	2	1	1	0	9	64%	3	4	9	6	43%	1	2	5
	Total[#]	*121*	*100%*	*66*	*55%*	*40*	*28*	*59*	*49%*	*11*	*37*	*14*	*56*	*46%*	*27*	*13*	*18*	*19*	*9*	*53*	*44%*	*15*	*24*	*26*	*49*	*40%*	*18*	*21*	*13*

Notes. TD, task division; TA, task allocation; RD, reward distribution; IE, information exchange; EM, exception management.

[a]The table should be read horizontally. Note that most feedback incidents led to changes in several of the five organizing dimensions (TD–EM); also note that multiple changes within one dimension are counted as only one overall change per organizing dimension (this especially concerns number of ΔRD).

[b]Please see the codes in Table 2 for an elaboration and examples of the specific structural changes with TD, TA, RD, IE, and EM (see theoretical dimension "Updating the organization design").

Table 4. Number of Incidents, Extent of Design Updates and Updating of Logics of Organizing (per Case)

Case Feedback categories	Number of incidents per case	Share of total incidents, %	Extent of organization design updating (sum of ΔTD–ΔEM)[a]						Updating the logics of organizing		
			0	1	2	3	4	5	Entrenching	Extension	Exchanging
C1	**17**	**14.05**		**5**	**9**	**1**	**1**	**1**	**12**	**4**	**1**
Viability of BM	10	8.26		3	5	1	1		9	1	
Viability of OD	7	5.79		2	4			1	3	3	1
C2	**20**	**16.53**	**1**	**3**	**9**	**4**	**3**		**12**	**8**	
Viability of BM	16	13.22	1	2	6	4	3		12	4	
Viability of OD	4	3.31		1	3					4	
C3	**26**	**21.49**		**6**	**9**	**4**	**7**		**15**	**11**	
Viability of BM	18	14.88		3	7	3	5		13	5	
Viability of OD	8	6.61		3	2	1	2		2	6	
C4	**16**	**13.22**	**1**	**2**	**5**	**4**	**2**	**2**	**5**	**5**	
Viability of BM	11	9.09	1		4	2	2	2	4	2	
Viability of OD	5	4.13		2	1	2			1	3	
C5	**9**	**7.44**		**2**	**3**	**2**	**2**		**6**	**3**	
Viability of BM	6	4.96		1	1	2	2		5	1	
Viability of OD	3	2.48		1	2				1	2	
C6	**6**	**4.96**		**1**	**1**	**3**		**1**	**3**	**3**	
Viability of BM	4	3.31		1		2		1	2	2	
Viability of OD	2	1.65			1	1			1	1	
C7	**10**	**8.26**		**3**	**4**	**2**	**1**		**7**	**9**	
Viability of BM	6	4.96		3	1	1	1		7	4	
Viability of OD	4	3.31			3	1				5	
C8	**17**	**14.05**		**6**	**5**	**3**	**2**	**1**	**5**	**11**	**1**
Viability of BM	8	6.61		4	4				4	4	
Viability of OD	9	7.44		2	1	3	2	1	1	7	1
Total	*121*	*100.00*	*2*	*28*	*45*	*23*	*18*	*5*	*65*	*54*	*2*
Percentage of total	—	—	1.7	23.1	37.2	19.0	14.9	4.1	53.7	44.6	1.7
Percentage cumulative	—	—	1.7	24.8	62.0	81.0	95.9	100	53.7	98.3	100

Notes. BM, business model; OD, organization design; TD, task division; TA, task allocation; RD, reward distribution; IE, information exchange; EM, exception management.

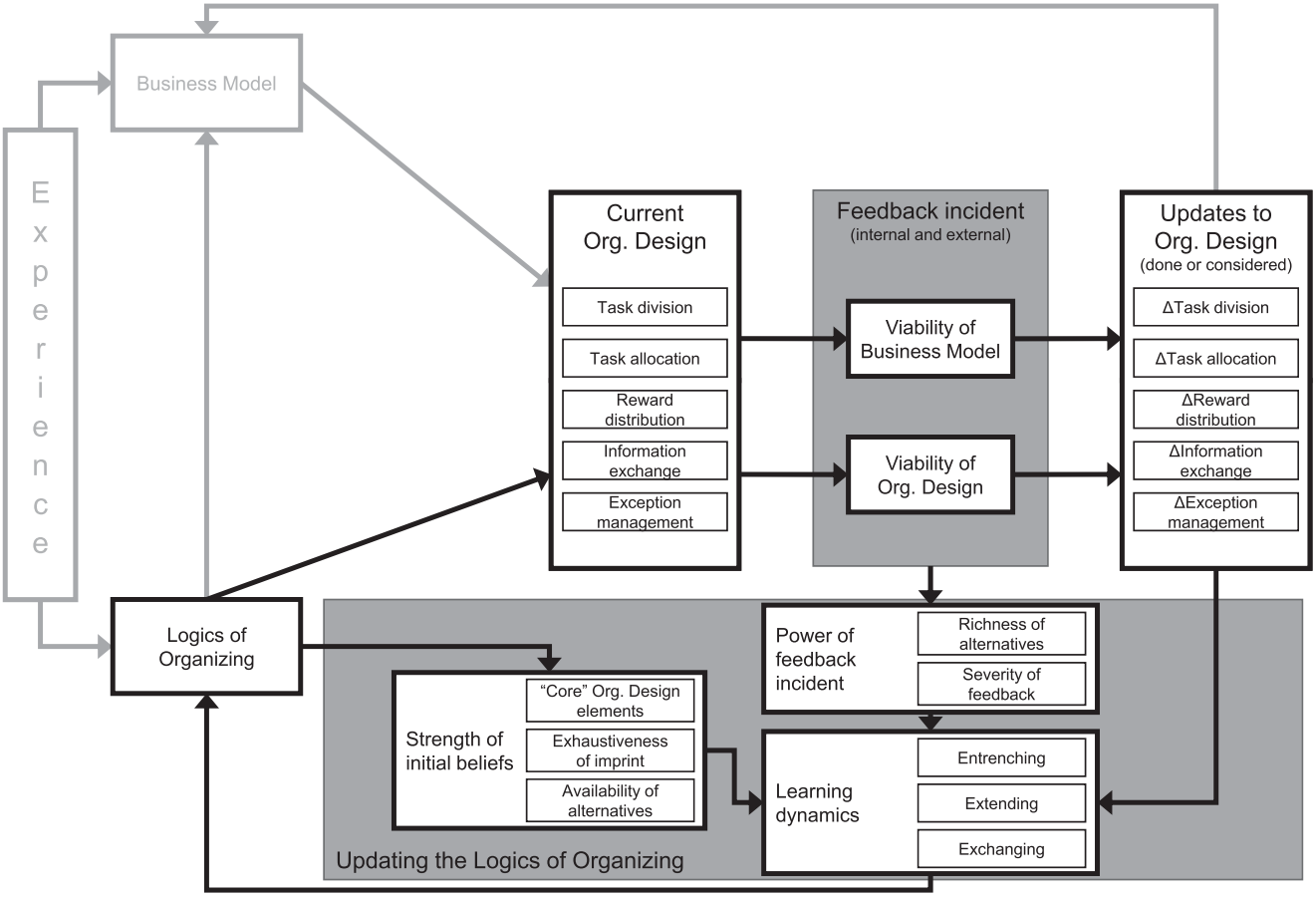
[a]The extent of organization design updates refers to the sum of changed dimensions in response to one feedback incident (category 0 means no changes; category 5 means changes in all five organizing dimensions).

must conduct (task division), who did what (task allocation), how members were motivated (reward provision) and coordinated (information exchange), and how exceptions were resolved (exception management). The answers varied in level of detail as well as whether they seemed to have resulted from careful consideration and planning or were reported simply as the "natural" way in which these issues were addressed. Founders within a venture also differed in the detail with which they could describe these solutions if at all. But, collectively, these answers existed, which, as Puranam et al. (2014) note, is necessary in order to consider the ventures in our study as (at least proto-) organizations.

Most teams began with an initial business idea of which one founder had independently conceived (C4, C8) or that our founders had jointly developed as friends or colleagues (C2, C3, C6, C7). Two teams (C1, C5) had set up ventures with the sole initial purpose of starting a business together with only a vague idea of what that business would actually consist of (e.g., "to build an app" in the case of C1). As stated by a C5 founder, "We lacked a business idea but knew that the organization or our team is good . . . we wanted to do a project together! For the sake of doing it, rather than to really have a result." In this case, the high levels of motivation and coordination within the group preceded other organization design elements and indeed even the choice of business.

We also found that individually held and varying logics of organizing shaped the initial organization design choices that our founders had made (see also Table A.3). Significantly, it did not appear that this variation was connected to the ventures' business models. Rather than principles of organizing of the form "do X when Y," these principles were not contingent on some condition; they seemed more of the form "always do X." For example, one of the founders of C4—a management program graduate—noted, "I remember we said that the most important thing in a start-up is to set goals. How the person reaches them does not matter at all. [We should be] Fully managed by objectives."[5] Similarly, the C4 core founder had particularly strong prior beliefs about one aspect of organization design: reward distribution.

Figure 2. A Revised Process Model of the Updating of Organization Design and Logics of Organizing



Note. The sections shaded in gray symbolize the focus of this paper, and the areas that are grayed out represent insights from existing literature (which we were also able to corroborate in our case organizations).

She had left an earlier venture because her cofounders were trying to take away equity from her, which led her to focus intensely on the matter of equity when forming the C4 team.

In other teams, we observed that the start-up literature that founders had read shaped their logics of organizing. In particular, the ideas depicted in the "business model canvas" (Osterwalder and Pigneur 2010) and the "lean start-up" (Ries 2011) were seen as organizational best practices to be emulated: two teams (C5, C6) clearly built their initial task division around "getting feedback" and "testing" (the C6 founders, e.g., listed "customer interviews" and the development of a "click dummy" as central initial task areas). Similarly, the founders of C2, C3, C5, and C8 repeatedly emphasized that they had deliberately refrained from instituting any task-allocation or information-exchange structures they did not consider "lean and agile." They strongly preferred not having clear job specifications (task allocation) and would often try to avoid high-maintenance email, chat, or ticketing solutions (information exchange). This left us with the impression that, no matter what business they conducted, this was how they would organize.

Some founders developed full-fledged articulations of their logics of organizing. These became clearly salient to us when two of the more advanced founders expressed in comprehensive metaphors (see also Cornelissen et al. 2011) what they thought organization designing meant in the follow-up interviews. One of the C7 founders gave an elaborate account of organizing as an activity of moving a rock through a landscape (see also Figure A.1).[6] He explained the organization design solutions (all aspects: task division, task allocation, reward distribution, information exchange, and exception management) necessary to "keep the force on the rope" if terrains change, obstacles appear, or internal problems arise. At C8, one of the founders drew on the transition from a "gang of cowboys in the Wild West" to a more civilized "little town" to explain the introduction of structures in the emerging organization (across all of task division, task allocation, reward distribution, information exchange, and exception management). Throughout the interviews, we noticed that these

metaphors allowed the two founders to talk about and reflect on linkages between their business model and organizing efforts.

In sum, in the ventures we studied, whereas some initial organization designs reflected the initial business model, they did not exclusively do so. More often, there were aspects of initial design that reflected deeply held convictions about how to organize that seemed independent of the specific business in which the founders were engaged.

Change: Revision of Design Solutions Is Frequent but Partial and Parochial

Armed with an understanding of from where initial designs had come, we explored when, why, and how founders decided to update their organization design solutions. We discussed each episode of change and corroborated founders' accounts when possible using other sources of data. The image that crystallized was one of many instances of feedback (121 in all) triggering partial organization design changes (see Table 3). Further, we saw a link between which specific organization design solutions were changed and whether the feedback was perceived to be about the business model or about organization design.

Our founders interpreted most feedback incidents (65%; see Table 3, row 1) as related to the viability of their business model. These incidents occurred either when founders were looking for new information on the opportunity they were pursuing—from mentors, incubation programs, or in one case a Dragons' Den–style program—or when they realized resource constraints in the current model, particularly around how to pay employees. In turn, we found that these feedback incidents primarily led to updates in the organization design solutions in the division of labor (task division and task allocation) and in the distribution of rewards and much less to updates in information exchange or exception management.

In about 35% (see Table 3, row 2) of incidents, our founders reacted to feedback they described as arising from the discovery of (internal) errors in the original designs in that they had either forgotten to address or (in hindsight) incorrectly addressed one of the problems of organizing. The cues about the viability of the organization design would usually manifest themselves as cooperation problems, when cofounders, employees, or freelancers would not perform as expected or conflict arose, or coordination issues, which become salient when tasks mounted and could not be completed on time, were duplicated, or were not done at all. As shown in Table 3, in these 42 episodes of change, we saw that founders primarily responded by changing exception management or information exchange. Changes to task division, task allocation, or reward distribution—the dominant reactions to cues related to business model viability—occurred less frequently in these episodes.

Putting these observations together, first, we find that changes to organization design solutions are quite common in our data. Every case undergoes at least some changes, and across 40 (8 cases × 5 initial solutions) dimensions, no more than three initially chosen solutions are preserved intact over an average of two to three years of observation (see also Table A.5). Persistence in organization designs, if it exists, is certainly not in evidence in our sample at the level of individual design solutions that remain unchanged. It is possible that this reflects the relative youth of our ventures, but even if this were true, at a minimum, our results suggest that the age at which measurements are conducted should be an important boundary condition on any claims of persistence in organization designs.

Second, when we look at the effect of feedback on the organization design of our ventures, we see that, across all categories, updating seems to happen primarily on a design dimension that is perceived to be close to the feedback cue. Concerning cues seen as speaking to the perceived viability of the business models, new information on the opportunity mainly triggered changes in task division and allocation (65% and 54% of all resulting changes; see Table 3, row 1.1), and perceived resource constraints primarily led founders to find other methods of reward distribution (56%, row 1.2). Regarding feedback linked to the viability if the organization design, perceived cooperation problems affected exception management (71%, row 2.1); coordination problems affected information exchange (64%, row 2.2).

Our interviews suggest that these reactions reflect founders' heuristics to adjust their operations to novel information in the most direct way they can imagine. Feedback about the viability of business models "naturally" (so several founders) led to changes of who (else) they could target, what (else) they could offer, and how (else) they could deliver value. They would purposively solicit feedback to test "what works" to improve division of labor, and they would consider "what else" they could do for their employees when hitting resource constraints. Feedback on the viability of the organization design equally triggered reactions by founders that they would consider the most natural remedy. Here, issues pertaining to integration of effort would dominate, such as when fixing coordination through altering communication, for example, by increasing face-to-face exchanges in geographically dispersed teams. As a C4 founder put it, "When I see that there are [coordination] problems, I have to change the meetings, the communication, or we have to fly in people more often."

Measures changing multiple dimensions of organizing at once, which could have been more effective in certain cases, were seen as too costly and were, thus, avoided when possible as elaborated by a C8 founder:

> I'd say [information exchange] is easiest to change—because you gather three people around you and say, "Listen up guys, we will do it differently." When changing [reward distribution] ... that means you have to put more skin into the game—no matter if you give them more benefits, more money, other goals, a motivation weekend, or whatever; that's more complicated than gathering people for a meeting and changing communication ... you always try to solve problems with as little effort as possible.... Only if you talk about a [coordination] problem too often, you should look into finding a sensible solution [elsewhere].

In sum, we find that the changes to organization design we observed were, thus, often parochial and partial. In theory, our founders could have redesigned the integration of effort following a new division of labor and vice versa given that all elements of organization design should be linked in a strong, complementary fashion (see also Fjeldstad et al. 2012, Puranam et al. 2014). Yet such concurrent updating on multiple dimensions happened only in a minority of cases. As shown in Table 4 (last column), in 62% of cases, firms changed two or fewer dimensions, and in 81% of cases, three or fewer. And when multiple changes happened, as described earlier and as shown in Tables 3 and A.2, these would happen almost exclusively in those areas also perceived as close to the specific feedback cue.

The process of updating designs in our ventures is consistent with the well-known principle of local search (Cyert and March 1963, Levinthal 1997, Greve 2003) driving largely incremental changes. The first place founders looked for potential adaptations to the organization design was in close cognitive proximity to the feedback cue. Here, a feedback cue perceived as related to the business model would have, per se, a different likelihood of leading founders to rethink the integration of effort (low) than the division of labor (high) and vice versa for cues perceived to be about internal organizing. A founder of C8 likened the proximity in change dynamics to an opportunity-driven process: "So basically, it's like [how] a tree grows: a new branch is emerging when you realize there is something missing, or there is a lot of sun here, so we should grow a branch there ... every time we change something, when a new branch is built, we have to look into what [tasks and roles] stays the same and what will change."

But, critically, it is the one focal "branch" that is examined, not the others—let alone the whole "tree." This is why design revisions are accurately described as "local."

Logics of Organizing: A Source of Stability

So far, we have shown that organization design solutions in our set of cases seemed to be "changing all the time" (as one of our interviewees expressed it), an observation that puzzled us significantly given that we had expected to observe persistence on at least some design attributes across our ventures.

On probing this matter further, what we discovered was that, despite changes in the set of design solutions in use, there was far greater stability on the level of design principles, which collectively form the logics of organizing. We saw that founders seemed to have a general tendency to try and *not* change design principles. In fact, in only two cases (C1, C8) were there substantial and broad-scope revisions to the principles composing their logic of organizing. In most other cases, the founders would themselves describe their changes of design solutions as still preserving design principles.

As we elaborate, this stability seemed aided largely by two factors. First, the principles were typically described at a higher level of abstraction than the specific solutions in existence at any given time. This made it possible to view new solutions as being broadly consistent with existing principles by (if necessary) redefining the principles in somewhat malleable terms. Second, initially, not all aspects of design (i.e., task division, task allocation, reward distribution, information exchange, and exception management) had explicitly articulated associated principles even though they had de facto solutions. The relevant principles could become explicitly articulated over time, but because they did not replace preexisting principles, this was also perceived as a form of preservation and persistence of principle.

How Logics of Organizing Are (Not) Updated: Entrenching, Extending, and Exchanging

We unearth three processes through which founders were able to align frequent change in their design solutions with relative stability in their logics of organizing (see Tables 4 and A.3 for case-by-case details). First, we found that founders were most often entrenching their logics of organizing. They preserved their design principle despite feedback indicating that they should not, and even if actual design solutions were changed, they would often later be changed back to the original state to remain consistent with the principle. The reasons, as we note, almost seemed ideological. Second, founders could reinterpret their logics of organizing by extending their design principles: either to include an organization design dimension they had not addressed saliently so far or by interpreting an existing principle more leniently (so that additional design solutions would fit). In only two cases did founders exchange their

organizing principles completely following a feedback event.

Entrenching. Overall, in 53.7% of cases (see Table 4), even a potentially broad change in organization design solutions had limited impact on founders' logics of organizing. Such entrenching amounted to a form of principle preservation based on ideology rather than (potentially more) objective performance feedback. For example, some founders would cite precedent upon receiving feedback so as to indicate that there was no need to question the current design principle. Illustrating this point, to fuel its expansion into France and South Korea, C3 needed to hire new employees. Clearly, new design solutions in terms of extended task division and allocation were necessary. The principle through which these occurred, however, remained unchanged: a founder proposed to simply "hire a young and motivated guy, someone who does not cost a lot of money, and see how it goes" because "it worked very well in my case." Drawing on the logic of the lean start-up, they proposed to leave the task structure unspecified, fill the role inexpensively, and essentially, hope for the best. Yet note how the founders had already gained experience from prior expansions that might have led them to a more systematic definition of roles and search for candidates. Still, they went on to recreate, from scratch, the process of incremental task discovery by simply hiring a young coder and letting the coder discover what to do, which had guided their implementation of lean start-up principles from the beginning. The specific organization design solutions had changed (the new task structure included operations in France and South Korea and allocations of these tasks to new hires), but the design principles had not. Although, after our observational period, we even learned that a fundamental clash between investor feedback and C3's founders' strongly favored design principles led the founders to exit their venture much earlier than originally planned.

In other cases, when feedback outright clashed with the existing logics of organizing, we often saw it being rejected and existing logics strengthened. For example, one of the founders of C5 discovered a novel project management tool that could have helped make coordination within the team easier. Faced with increasing difficulties in coordinating work across locations, he introduced the new solution, but he eventually retreated following complaints from his cofounders that it was unnecessary. This was due to the team's strong preference for self-organization and consensus finding, which was reaffirmed and articulated explicitly following this change to the design solution: "For keeping the team together, it is, on the one hand, important that nobody feels run over and, on the other, that you realize that you were wrong."

Similarly, C2's founders learned that their venture would only be scalable if they bought expensive software and brought costly experts on board. Yet they also saw that this shift could change the nature of work (task allocation) and motivation (reward distribution) prevalent in the venture: given that they were motivated mainly by fun derived from being autonomous and self-determined, they rejected this change. Rather, they began to argue that the fact that they "really have to make ends meet" was a positive thing: "it's a good experience because you learn that there are things you do not really need."

In sum, when founders were faced with feedback that challenged their prior beliefs about how to organize, they often seemed to entrench their views rather than modify them. It was upon observing this that we began seeing analogies between logics of organizing and the "hard core" of a scientific paradigm, which has been described as being similarly impervious to evidence (Lakatos 1970).

Extending. Although it is true that logics of organizing seemed less likely to be updated than the design solutions, this did not mean that they were never updated in our sample; indeed, extending accounts for 44.6% of our cases (see Table 4). Here, following a feedback incident, some founders realized that properly addressing extant shortcomings could challenge their previous views (on which a solution for task division, task allocation, reward distribution, information exchange, or exception management would prove most efficient in a given situation). They would embark on a process of sensemaking in the form of deeper reflections about how the venture was organized and why in this particular way. As part of this process, we realized that founders often discovered gaps in their organizing logics, meaning they held no prior beliefs about how to solve a specific problem of organizing, often because they had not considered it or because a current principle could be reinterpreted to encompass additional design solutions. In such cases, we saw that founders were able to amend their organizing principles relatively easily.

Consider the C2 founders, who began with a shared, strong belief that the primary reward should be fun derived purely from (autonomously) "build[ing] a company together" and the learning opportunities this offered to them, stating, "You really learn to get things done or at least try…" and "what I have learned in the last year is tenfold what I learned in my entire studies." Yet, because their business centered on organizing romantic weekends for couples, they soon began receiving deeply personal thank you notes

from customers, and the founders began to see that "the feedback we get from our customers is a real personal gain." In turn, they realized how their original focus of deriving fun from autonomy and learning could easily be extended to include fun derived from customer engagement and feedback.

C4, which had a strong focus on reward distribution through shares but no prior belief on information exchange, illustrates the process of adding a new principle. Shortly after the first hires, the C4 team moved into a shared office and first began to reflect actively on the coordination benefits of colocation as a means of information exchange. At the same time, they also discovered a connection to reward distribution, the organizing dimensions they had previously considered most saliently. Although the founding team continued to be motivated by a potential financial exit, they saw how the shared office space could boost morale (which, in turn, should increase the odds of success of the firm):

> . . . the office has taken up the core because everybody knows, also [cofounder 4; based abroad] knows, that we have an office right now and that we are here. And that something happens here, that we are not working from home anymore. That kind of creates an official frame for the whole thing, not anymore this elusive, kind of we are all working here in some kind of way, but instead in one room. It is a place, the company has found its place. And in this sense, it has gained more strength because it got a stronger part. Everything has somehow grounded itself through this office.

Similar to C4, C1's founding team had thought most carefully about one dimension, task division (separate functional areas with heavy emphasis on outsourcing), from the beginning. However, with their idea taking off and their outsourcing relationships intensifying, they realized that their model was contingent on also developing approaches to information exchange and exception management:

> Due to our different expertise, it was clear from the beginning that everyone would have his own area he is in charge of. But you have to say that through working with the developers now, with all the daily operational tasks, [name of cofounder] and I have to make a lot of decisions without a technical background. That's different from what I had expected, especially with regard to the interactions with the developers—when it comes to acting strategically ... I thought that once the app development is on its way, it will just work out and be ready at some point, and we just have to say what we like and don't like. But now we're really challenged to devise a strategy for every single task although we don't have all the IT knowledge... So there are some overlaps even though everyone is basically running his own department.

In sum, founders seemed to be trying to keep their initial principles intact with the extension (if not by reinterpretation) happening on dimensions of organizing previously not considered explicitly. In such cases, as highlighted by the C1 and C4 examples, it was also clear that the new principles (task division, information exchange), at the time they were introduced, were less salient than those held originally (information exchange, exception management, reward distribution). Yet, when revisiting C1 and C4, we noted that these differences would disappear in the minds of the organization members over time and that the design attributes would become taken for granted. Put differently, organization design principles created by extending dynamics could afterward become entrenched. For new employees, they could be indistinguishable from elements of the organization design with which the firm began.

The dynamics of exception management in C2 illustrate this process nicely. Originally, the founders did not even consider this dimension given how they had designed task allocation in a nonoverlapping fashion "because otherwise you will just interfere with the other person's work." They only began to actively consider exception management when identifying a third cofounder who would bring IT experience when they made explicit that decision making should be consensus-based to ensure that they could "bring [third co-founder] on board because it would really help us move forward." This consensus principle became further entrenched until, with more employees joining C2, the core founders realized that a consensus model embodying all organizational members would increasingly slow the organization, in particular, given that the team was not colocated: "you [would be] so much faster. If you develop[ed] something together and one person has a problem, you [could] just ask them to look at your monitor." They remarked (almost sarcastically) that, even if the coordination issues could be solved, consensus required skill and the willingness to collaborate, abilities they did not see in all employees: "If you work together and there is some spirit, that's actually really cool. Who would have thought!" Thus, they further amended exception management to the final version of their design solution: "consensus-finding among founders, who can then engage in hierarchical decision making in their task areas relative to employees."

Exchanging. Finally, we observed that two teams (C1, C8), on one occasion each, managed to truly exchange the principles underlying their logics of organizing when feedback and prior beliefs collided. In these cases, what we observed was that founders first overturned a prior belief on one dimension of

organizing (i.e., they made a conscious organization design change that contradicted the existing logics of organizing) following a challenge to the viability of their venture to then ultimately exchange all of them.

The founders of C8 radically changed their logics of organization by introducing the "scrum" method (see, e.g., Schwaber 2004 for a description). With hindsight, the founders stated that this was something that they had "always planned to do" but never had the time for. Yet, although they had known what scrum was (one of the founders had used it with a previous employer), our data clearly show how, only *after* their investors had extensively reprimanded them for a lack of structure, they changed all other organizing dimensions and even put in place a dedicated scrum manager.

Similarly, the C1 founders had hoped to implement their envisaged business model through delegating the programming to short-time hires. This approach nearly resulted in a catastrophic failure of the venture—"a breaking point"—as the core product simply did not get finished, and they replaced their clear-cut, arm's-length outsourcing with a more participative design. Yet they justified their choice of initial design based on a lack of time when setting up the venture, claiming that, otherwise, they would have chosen the new organization design already at the start. Of course, they had been aware of that possibility; however, all data we collected suggested that a lack of time for planning had never been an issue to them. They had quite consciously chosen a pro-outsourcing position initially because the (only) IT specialist in the founding team wanted to continue working on other projects on the side.

Why Logics of Organizing Are (Not) Updated: Boundary Conditions of the Revision Process

Given these rather different reactions to what seemed, at first glance, similar feedback incidents, we tried to unearth what had caused our firms to varyingly process them through entrenching, extending, or exchanging their logics of organizing. To do so, we first looked more closely at the two exchanging instances (C1, C8) and found that they seemed to be characterized by an unusual set of conditions. Upon further including all other updating incidents in our analysis, we eventually realized that two factors seemed to determine whether our founders would update their existing logics of organizing (see also Table 5): the strength of the initial beliefs and the power of the feedback incident.

Strength of Initial Beliefs. Our cases varied greatly in how explicitly existing logics of organizing were detailed; in the extent to which design principles were seen to be core to the venture; and in whether other, alternative logics existed somewhere in the venture.

Concerning the level of explicitness, we saw that no team had initial logics of organizing that spoke clearly to all dimensions of organization design. Although all teams had solutions, the principles underlying these may have remained tacit for some dimensions. For example, C1's founders "never sat down and structured [the venture] ... Instead, it was clear to everyone from the very beginning what the other person is doing. After all, we had known each other for quite some time." Similarly, when founders had previous shared experience, such as work, family, or friendship ties (as in C1, C2, C5–C7; see also Table 1), they would usually not only rely on self-selection for task allocation, but also let the organization itself "[unfold] as a matter of course," often taking for granted that all cofounders shared the same mental model of what that course might be. More explicitly defined principles resulted mainly from founders discussing how to organize initially, such as in C8.[7]

At the same time, we found that, on those dimensions on which a principle of organizing had been explicitly articulated, there was variance on just how salient (or core) it was thought to be. Recall the C4 founder who had left her previous venture because her earlier cofounders tried to dilute her shares and her resulting uncompromising focus on the matter of equity distribution when forming the C4 team: "I think what I want to add about the shares, we talked about that very early. ... And we talked relatively soon about the shares, and also not just about our shares, but also how about investors. When we get an investor, how much of our shares would we be willing to give away, what if we take on early employees, like how much of the stock do we reserve for early employees, those things have been considered quite early, like really within, I would say, the first months."

Table 5. How Strength of Imprint and Power of Feedback Contribute to the Updating of Logics of Organizing

	Low	Usually extending	Exchanging possible
Strength of prior beliefs	High	Entrenching	Usually entrenching
		Low	High
		Power of the feedback incident	

Given that she had entrepreneurial experience and that she had independently conceived of the idea for the venture, there were simply no grounds for any member of her team to challenge this element of the logic of organizing. Even to her core technical employee, she had initially offered only "would you like to get a certain percent in, like, fixed sum—like a fixed salary—and less shares, or would you like to get everything in shares?" and he felt strongly obliged to accept the shares-only offer.

Finally, when looking at the two "exchanging" cases, we discovered that neither C1 nor C8 had actively searched for alternative logics of organizing. As one of the C8 founders remarked, "The more wheels you change, the more risk you have. Since a startup is already exposed to so many risks, why should I take the risk of a completely different organization design?"

Rather, C1 and C8 drew on the previously described sets of alternate principles that some team members held (C1: from university; C8: from previous job) but had not championed vociferously. For both ventures, these dormant principles became the basis for the newly adopted logics of organizing: exchanging coincidentally occurred in both respective events (see Table A.4, #11), and the new logics of organizing were reified through the dynamics of entrenching and exchanging subsequently.

Power of the Feedback Incident. As to what distinguished feedback that caused higher levels of change to organizing logics, we saw clear parallels to the sensemaking literature (e.g., Weick 1995, Weick et al. 2005, Christianson et al. 2008, Maitlis and Christianson 2014, Christianson 2019). We found those incidents causing greater changes to logics of organizing to be more severe—sometimes even threatening the survival of the organization as described earlier—although rich in content. For example, our interviewees in C1 and C8 stated that, although their investor feedback had been harsh, it was also "clear," "rich," "detailed," and "actionable." In turn, it was this level of rich detail and the urgency to produce substantial change quickly that seemed to create the idea and the willingness to switch to the alternative logics of organizing present in those teams. In effect, as our examples highlight, either the C1 and C8 founders realized that there was still "wiggle room" in their logics of organizing (e.g., because different team members truly held slightly different views) or helped construct this wiggle room (i.e., when they convinced themselves that the change was something already considered in the past).

In sum, as we show in Table 5, we suggest that whether a feedback incident would cause founders to entrench, extend, or exchange their logics of organizing depended on the joint configuration of the strength of the (then current) logics of organizing and the power of feedback received: Entrenching happened when weak feedback hit organizing principles in those areas in which founders held strong prior beliefs. Extending would mainly occur when initial logics were not as strong or as explicitly developed. Finally, our two occurrences of exchanging share a combination of lower strength initial organizing principles, and the weakening is a result of readily available alternative organizing logics and extremely strong, rich feedback pointing toward the alternative logics.

Discussion

Our goal in this paper was to investigate the process through which organization designs evolve between the dialectic of persistence—caused by the imprinting forces inherent in logics of organizing (Stinchcombe 1965, Marquis and Tilcsik 2013) and adaptation—given the requirement to adapt to changing contingencies to ensure business success (Donaldson 2001, Siggelkow 2002, Gartner 2016). Our in-depth qualitative inquiry provides fresh insights into when, where, and why firms may either persistently reproduce the original design they begin with or create new paths along which they evolve and when and why these may lead to updates to the original logics of organizing. We find a useful window into the complex processes of organizational design emergence and change by conceptually separating specific design solutions from more abstract design principles. The latter constitute what previous research has labeled logics of organizing; the former describes how organization designs solve the fundamental problems of division of labor and integration of effort.

Initial organization designs, manifested as specific sets of solutions to the basic problems of organizing, are inspired by founders' logics of organizing, possibly to a greater extent than considerations of the business model itself. As summarized in Figure 2, we find that changes to organization design solutions, triggered by various internal and external developments associated with new information about the business opportunity or about inadequacies of current solutions, occur frequently in these young ventures. These changes are typically incremental (i.e., changing few solutions at a time) and myopic (i.e., perceived as proximate to the feedback incident with limited consideration of systemic consequences). However, the more abstract principles of design, captured in founders' logics of organizing, though not frozen either, seem far less amenable to change.

Based on this process account of how organization designs evolve, we contribute to discussions on the dynamics of logics of organizing. Here, three literatures

make partly consistent, partly conflicting predictions: work on founding conditions (e.g., Baron et al. 1999a, b) arguing for consistency; the growth literature (Greiner 1972, Miller and Friesen 1982, Tushman and Romanelli 1985) for abrupt, drastic changes; and the dynamic routines or strategy-as-practices literatures (Feldman and Pentland 2003, Jarzabkowski et al. 2012, Whittington 2015, Feldman et al. 2016) for continuous adaptation.

Our findings highlight that each perspective may be valid: when applied to different concepts that vary in their specificity, observations of imprinting effects in logics of organizing are *consistent* with observations of dynamic change to organization designs. Depending on the resolution of the microscope they bring to the table, analysts may leave with an impression of stability and persistence or of relentless change. They could be right in both cases (also see Feldman and Pentland 2003 for a similar approach to organizational routines). We would suspect that imprinting effects may be unlikely in terms of organization design solutions because there is little if any stability in design solutions in the new ventures we observed; we must look instead to logics of organizing. Much like scientific theories, logics of organizing appear to be revised, if at all, in a Kuhnian process of accumulating disconfirming evidence (Kuhn 2012) and resistance to change around the core paradigm (Lakatos 1970) rather than strict and rapid Popperian falsification (Popper 2002), which our firms seem more comfortable applying when prototyping and testing their business models or even particular organization design solutions.

We traced persistence in logics of organizing to two different mechanisms that can work in tandem. The first involves entrenchment, an ideological commitment to abstract principles of organizing that survive changes in specific solutions. For some of our founders, agile principles or face-to-face communication just seem universally "correct." The second involves extension; because founders' initial logics of organizing are often incomplete (i.e., do not cover all dimensions of organization design) and often lack specificity, they can be preserved. De facto new principles can be inducted into the logics of organizing for dimensions that formerly had none or were treated as specific instantiations consistent with more abstractly stated preexisting principles. Autonomy at work and a casual, lighthearted work atmosphere seem like two distinct design principles that address the problem of motivating effort, but our founders had no difficulty treating these as subsets of the broader category of "fun," allowing them to claim that their design principles had remained unchanged even as they switched from one to the other.

These results help reconcile the consistency and change views of organizational designs. Logics of organizing did not appear to change when there was still wiggle room in the original logics, so founders could interpret feedback as an extension—and a compatible one—of their current organizing logics. This finding relates to the idea of imprints as genealogically evolving systems (Marquis and Tilcsik 2013): we see that, when initial logics are incomplete, new layers can be added without damage to the original. An analogy may be useful: as in a multilayered image flattened to a single layer, when the contents of each layer are nonoverlapping, the new image that forms loses no original information and can become the starting point for further additions and modifications (but with future authors unable to disentangle the originally separate layers).

Yet this is not to say that logics of organizing never change. When strong feedback meets weaker initial beliefs so that organizations are vulnerable (Boeker and Goodstein 1991, Marquis and Tilcsik 2013), there can be wholesale revision of all elements of logics of organizing; although, in the two cases in which we observed it, we still saw that the "new" model drew on existing organization design knowledge within the organization.

Limitations

Our study suffers from the limitations generally ascribed to qualitative research. Those aside, we acknowledge that the specificity of our case settings, although allowing us to keep constant certain environmental conditions, could also affect our results. For example, the institutional factors, cultural resources, similarity in training, or just similar socialization of our founders may not have only ensured some comparability in the imprinting dynamics we observe; we cannot fully rule out that they may even be their very cause and that the process dynamics we describe might unfold entirely differently in a different sociocultural setting. Although we see no differences between teams in which founders spent significant time abroad and those that did not, we acknowledge that many ideas about how to organize best came from the entrepreneurial hot spots of the world—in particular, what our ventures felt was best practice in Silicon Valley. We cannot exclude that the firms actually setting these very standards themselves or firms in other cultural contexts may face either more scrutiny (given tighter audience control, e.g., Zuckerman 1999) or more leniency (given their reputation for being different, e.g., Smith 2011) in the design and evolution of their organization structures. Finally, although some of our founders had both traditional job and entrepreneurial experience, we cannot rule out that serial entrepreneurs or seasoned managers may traverse the cognitive processes we describe in a different fashion.

Implications for Practice

Despite these limitations, we believe that our inductive work offers a useful initial window onto the question of how organization designs evolve. The theory we develop makes clear predictions for how, when, where, and why organization design and logics of organizing are most likely to change. It, thus, helps us bridge the chasm between accounts of persistence and adaptation that have so far characterized the literature. In addition, we may also derive a few suggestions for practice.

Primarily, our results imply a call for actors in this space to become more conscious about the role, effects, and importance of organizing. For example, we might encourage founders, mentors, or incubator managers to brainstorm ideas for how to organize at a venture's inception. Yet, to do so, we need to develop tools and techniques to help founders safely experiment with organization design in order to avoid getting stuck with suboptimal solutions. Here, creating ways for founders—or (aspiring) managers more generally—to express individually held logics of organizing, such as through surveys, role playing, or software tools, may go a long way. To the best of our knowledge, there is no "organization design canvas" today as a counterpart to the business model equivalent. Extending our earlier idea on introducing analogous reasoning to organization designing, we could, for example, imagine exercises in which individuals consider what the organization design of their own venture, employer, or any firm would look like if they copied that of very different (e.g., the Catholic Church) or even imaginary (e.g., Hogwarts) organizations. In ways such as these, we may hope to inspire future organization designers to see new ways in which they may achieve (better) fit between strategy and structure.

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Appendix

Table A.1 Interview Guidelines

Topic	Main questions and subquestions (to elicit further responses)
A. Organization goal	A1. Who are you? ☐ Please briefly describe your start-up and the team members including their roles. Please name anyone who is adding value to the organization as a contributor (whether legally affiliated or not). ☐ Please briefly describe how your start-up developed and name key events. ☐ Option 1 (retrospective): Clarify who the original founders were, any employees or partners that joined the venture, and when. A2. (OG) What would you say is the overall goal of your organization? ☐ Please describe what you think your organization should accomplish. [If unclear] Please think of the purpose or mission of the organization you are creating. An organization's overall goal could, for example, be "to design and produce smartphones" and can be related to profitability, innovativeness, or merely survival. ☐ Option 1: If you think back to the early days of the ventures [prefounding/product development, up to first customers], was the overall goal of your organization different? In what way?
B. Division of labor (description [D], history [H], and challenges [C]). By division of labor, we mean the division of tasks to be accomplished and the allocation of these tasks to organizational members.	B1. (TD) What tasks are you currently working on to achieve your goal? ☐ Description (D) Please describe what tasks each of you has been working on in the last working week. By organizational tasks, we mean specific activities, such as developing the prototype for XY, writing a specific software code, or acquiring a particular customer/partner. ☐ (D) Which of these tasks are particularly important for achieving your goal? Which are less important? Why? ☐ (D) To what extent is it clear/transparent that these tasks are important and undone [ask for examples]? ☐ (D) Is it possible to work on these tasks independently/without knowing what the others are doing? For which tasks? When? When not? ☐ (D) Are there overlaps between the different tasks [how do the tasks influence each other]? Which tasks complement/substitute each other [ask for examples]? ☐ (D) Do all tasks involve similar activities, or are they very different from each other? In what way? ☐ (D) Who decided that these tasks need to be done? Why? Is there a central designer? ☐ History (H) How did you develop this task structure? ☐ Basis for decision making (type of information and access to information). ☐ Through which other means could you reach your goal (alternatives), advantages and disadvantages of the plan (expectations), why did you decide to divide the tasks in this way—influence of product market, technology, uncertainty, norms… (valuation).

Table A.1. (Continued)

Topic	Main questions and subquestions (to elicit further responses)
	☐ Decision-making authority (who had the final say). ☐ (H) Option 1: Has any of this changed significantly since the early days of your venture? How? Why? ☐ Ask them to compare their schedules/diaries today and a year ago. ☐ Ask them about changes in TD that came about as result of key events (e.g., hiring, taking part in a competition). ☐ Ask about problems with TD and exception management. ☐ Ask them if this set of tasks was clear from the beginning, which tasks were added over time, why, consequences. ☐ (C) Option 2: How frequently do you experience problems with task division at the moment? What is the nature of these problems? Do you remember a specific situation in which you had problems with dividing tasks? What caused the problem? How did you solve the problem? ☐ Ask them about future/hypothetical scenarios—which tasks do you expect to come when you grow? Which tasks are you missing? ☐ [Exception management: authority, slack, discussion, voting]. B2. (TA) How does the allocation of specific tasks to specific team members work in your organization? ☐ (D) Please describe how tasks are allocated to specific individuals or groups (units) within your team. ☐ (D) Who became responsible for which task and why? On which basis are people assigned to tasks? ☐ (D) Who is responsible for assigning the tasks? Can members freely select what you want to do when? Is there a central decision maker? ☐ (D) To what extent are members free to define their own ways of reaching goals/their own goals? ☐ (H) How did you come up with this way of allocating the tasks? ☐ What other ways of allocating tasks did you consider (alternatives). ☐ Advantages/disadvantages (expectations). ☐ Why did you decide to allocate tasks in this way—influence of market, technology, uncertainty, norms… (valuation). ☐ Difficulties in the process of deciding who does task allocation [authority]. ☐ (H) Option 1: Has any of this changed significantly since the early days of your venture? How? Why? ☐ Ask them to compare the process of allocating tasks today and a year ago. ☐ Ask them what came first—tasks or roles. ☐ Ask them about changes in TA that came about as result of key events (e.g., hiring). ☐ Ask about problems with TA and exception management. ☐ Ask them if TA was like this from the beginning, what changes were made, which consequences that had. ☐ (C) Option 2: How frequently do you experience problems with allocating tasks to specific people/groups at the moment? What is the nature of these problems? Do you remember a specific situation in which you had problems with allocating tasks? What caused the problem? How did you solve the problem? ☐ Future/hypothetical scenarios—what TA if you get a new member/an employee today? What will be different when horizontal/vertical growth? ☐ What happens if no one has suitable skills for a new task? ☐ [Exception management: authority, slack, discussion, voting].
C. Integration of effort (description [D], history [H], and challenges [C]). By integration of effort, we mean the mechanisms established to ensure that members are sufficiently motivated to participate in the organization and have the necessary information to successfully accomplish the tasks assigned to them.	C1. (RD) What do members of your organization, including yourself, get in return for participating in the organization? ☐ (D) Please describe what kind of rewards you/your team members received in the last working week. Please describe your personal motivations as well as factors related to the working environment in your team. ☐ Intrinsic versus monetary. ☐ Individual versus group rewards. ☐ Internal versus external status and recognition. ☐ User need-driven ☐ (D) How do you motivate your employees and other partners contributing to the accomplishment of tasks? ☐ (D) Do you have a specific system for hiring/compensating team members? ☐ (H) How did you come up with this system of distributing rewards? ☐ Appropriate behavior and rules, accountability and consequences of not participating. ☐ Alternatives (why reward them in this way and not in any other), expectations (what will be advantages and disadvantages of rewarding them in this way), valuation (why this reward scheme—market, technology, uncertainty, norms…). ☐ Difficulties in the process of deciding who receives which rewards. ☐ (H) Option 1: Has any of this changed significantly since the early days of your venture? How? Why? ☐ Ask them to compare their motivation to complete their tasks today and a year ago. ☐ Ask them about changes in RD that came about as result of key events (e.g., hiring). ☐ Ask about problems with RD and exception management. ☐ Ask them if TA was like this from the beginning, what changes were made, which consequences that had. ☐ (C) Option 2: How frequently do you experience problems with motivation? What was/is the nature of these problems? Do you remember a specific situation in which you had problems with motivation? What caused the problem? How did you solve the problem? ☐ Future scenarios—how do you expect to motivate new members/employees? ☐ [Exception management: authority, slack, discussion, voting].

Table A.1. (Continued)

Topic	Main questions and subquestions (to elicit further responses)
	C2. (IE) How does the exchange of information work in your company so that you receive the right information from each other right now? ☐ (D) Please describe how you exchanged information and coordinated your tasks in the last working week. [Ask for examples/events]. (D) What kind of information do you need to successfully complete your tasks, and where is this information located? ☐ (D) What communication channels did/do you use? Do you talk face to face/use communication technology/use written communication? ☐ (D) Are there any written rules with regard to how you communicate, who communicates what to whom, etc.? ☐ (D) Do you have a shared space to store and access information? What role does it play? ☐ (D) For which tasks is close coordination most important/less important? Why? ☐ (D) What does the decision-making process look like? How do the different communication channels influence it? ☐ (H) How did you come up with this way of exchanging information and communicating with each other? ☐ Feedback versus programming. ☐ Alternatives (why communicate in this way and not in any other), expectations (what will be advantages and disadvantages of communicating in this way), valuation (why this way of communicating with each other—market, technology, uncertainty, norms…). ☐ (H) Option 1: Has any of this changed significantly since the early days of your venture? How? Why? ☐ Ask them to compare the way they exchange information today and a year ago. ☐ Ask about changes in IE that came about as result of key events (e.g., hiring, competition). ☐ Ask about problems with IE and exception management [authority, slack, discussion, voting]. ☐ Ask how different types of problems influence communication and decision making. ☐ (C) Option 2: How frequently do you experience problems with information exchange? What is the nature of these problems? Do you remember a specific situation in which you had problems with communicating with each other? What caused the problem? How did you solve the problem? ☐ If problems arise that need to be solved immediately, what is the process? ☐ Future/hypothetical scenarios: how do you expect communication will work if you grow? ☐ [Exception management: authority, slack, discussion, voting—majority, abstention, what happens if people do not agree].
D. Relationship between organization design solutions	D1. Up to now, we have talked about how you divide your goals into tasks you need to accomplish, how you assign tasks to specific people, how people get rewarded for their efforts, and how you exchange information. I would now like to discuss with you how these mechanisms are related to each other. ☐ (R) Overall, do you think that the way you have organized yourselves helps you to achieve your organization's goal? In what way? How does it influence your behavior at work? ☐ (R) How does the organization of your start-up, that is, labor division and integration of effort, differ from existing, large organizations with which you are familiar? ☐ (R) Why is it important that you divide and allocate the tasks in this way [refer back]? How does this influence motivation and the way you need to communicate with each other? ☐ (R) Why is it important that you motivate people and communicate with each other in this way [refer back]? How does this influence the way you need to divide task and allocate them? ☐ (H) Option 1: Has any of this changed significantly since the early days of your venture? How? Why? ☐ Ask them to compare their organization today and a year ago. ☐ Ask them about changes in organization that came about as a result of key events (e.g., hiring). ☐ Ask about changes in TD/TA/RD/IE that came about as a result of changes in TD/TA/RD/IE. ☐ Ask if organization design was like this from the beginning, what changes were made, which consequences that had. ☐ (C) With regard to the way you have organized yourself, what mechanisms do you expect to change in the future? Why? Which trade-offs are you willing to make? What do you want to avoid at all costs? ☐ Maintaining independence versus need for/acceptance of authority—under which conditions? ☐ Changes in rewards you need. ☐ Changes in information exchange and way of communicating.
E. Future plans and wrap-up	E1. What are your next steps with regard to further developing/establishing your organization? E2. Do you have any further comments or remarks concerning the challenge of organizing a new business? Thank you for the interview. We will now transcribe the interview contents and contact you after a first analysis of the data.

Figure A.1. Visualization Example 1—"Pulling a Heavy Stone Through the Wilderness" (Reprint of a Founders' Drawing (C7))

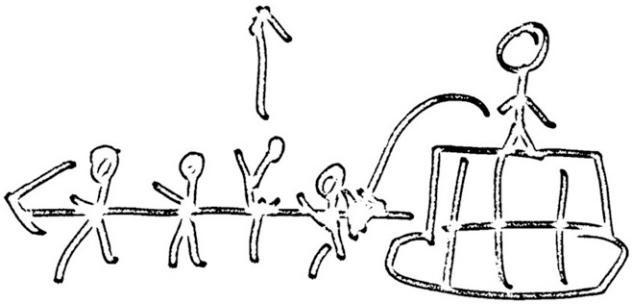

Figure A.2. Visualization Example 2—Organization Design Mapping of C5

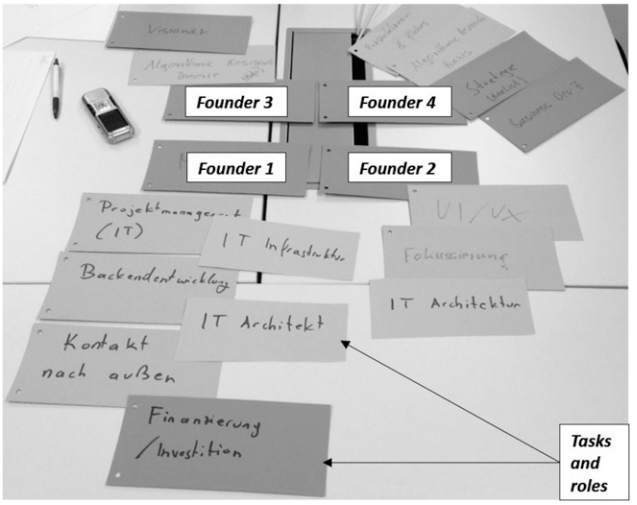

Table A.2. (Color online) Temporally Sequencing Updating Opportunities

Cases	Trigger: Viability of…	Subtrigger (Layer 2 Code)	Seeding Phase (pre-founding) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM	Founding Phase (first year) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM	Maturing (> year) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM
C1	BM	New inf./opp.		x													
	BM	Res. constraints															
	BM	Res. constraints		x													
	BM	Res. constraints	x														
	OD	Coop. problem					x										
	BM	New inf./opp.	x														
	BM	New inf./opp.								x							
	BM	New inf./opp.															
	OD	Coop. problem						x									
	BM	Res. constraints							x								
	OD	Coop. problem										x					
	OD	Coord. problem															
	BM	New inf./opp.															
	OD	Coop. problem															
	OD	Coop. problem															
	BM	New inf./opp.							x								
	OD	Coop. problem															x
C2	BM	New inf./opp.	x														
	BM	New inf./opp.															
	BM	Res. constraints		x													
	BM	New inf./opp.			x												
	BM	Res. constraints								x							
	BM	New inf./opp.							x								
	BM	Res. constraints						x									
	BM	New inf./opp.							x								
	OD	Coord. problem															
	OD	Coord. problem										x					
	BM	New inf./opp.															
	BM	Res. constraints						x									
	BM	New inf./opp.												x			
	BM	New inf./opp.											x				
	BM	New inf./opp.													x		
	OD	Coop. problem															x
	BM	New inf./opp.													x		
	BM	Res. constraints															
	OD	Coop. problem															x
	BM	Res. constraints											x				
C3	BM	New inf./opp.	x														
	BM	New inf./opp.															
	BM	New inf./opp.		x													
	BM	New inf./opp.						x									
	BM	New inf./opp.															
	OD	Coop. problem										x					

Table A.2. (Continued)

Cases	Trigger: Viability of…	Subtrigger (Layer 2 Code)	Seeding Phase (pre-founding) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM	Founding Phase (first year) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM	Maturing (> year) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM
	BM	New inf./opp.							x								
	BM	New inf./opp.						x									
	BM	Res. constraints								x							
	BM	Res. constraints							x								
	OD	Coop. problem									x						
	BM	New inf./opp.						x									
	BM	New inf./opp.															
	OD	Coop. problem															
	BM	New inf./opp.						x									
	BM	Res. constraints							x								
	BM	New inf./opp.															
	BM	New inf./opp.							x								
	OD	Coord. problem									x						
	BM	New inf./opp.												x			
	OD	Coord. problem															
	BM	New inf./opp.											x				
	OD	Coop. problem														x	
	OD	Coop. problem															x
	BM	New inf./opp.											x				
	OD	Coop. problem															
C4	BM	New inf./opp.		x													
	BM	Res. constraints	x														
	OD	Coop. problem										x					
	BM	New inf./opp.															
	BM	New inf./opp.						x									
	OD	Coop. problem															
	BM	New inf./opp.								x							
	OD	Coord. problem															
	OD	Coop. problem										x					
	BM	New inf./opp.							x								
	BM	New inf./opp.								x							
	BM	New inf./opp.						x									
	BM	New inf./opp.							x								
	OD	Coop. problem										x					
	BM	Res. constraints													x		
	BM	New inf./opp.												x			
C5	BM	New inf./opp.			x												
	BM	New inf./opp.	x														
	BM	New inf./opp.		x													
	BM	Res. constraints		x													
	BM	Res. constraints															
	OD	Coord. problem															
	OD	Coop. problem					x										
	OD	Coord. problem					x										

Table A.2. (Continued)

Cases	Trigger: Viability of…	Subtrigger (Layer 2 Code)	Seeding Phase (pre-founding) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM	Founding Phase (first year) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM	Maturing (> year) ΔTD	ΔTA	ΔRD	ΔIE	ΔEM
	BM	New inf./opp.			x												
C6	BM	New inf./opp.	x														
	BM	New inf./opp.		x													
	OD	Coord. problem				x											
	OD	Coop. problem					x										
	BM	Res. constraints			x												
	BM	Res. constraints															
C7	OD	Coop. problem				x											
	BM	New inf./opp.	x														
	BM	New inf./opp.															
	BM	New inf./opp.		x													
	OD	Coord. problem					x										
	BM	New inf./opp.	x														
	OD	Coord. problem				x											
	BM	New inf./opp.															
	BM	New inf./opp.															
	OD	Coop. problem				x											
C8	BM	New inf./opp.															
	OD	Coop. problem					x										
	BM	Res. constraints															
	BM	New inf./opp.	x														
	BM	Res. constraints								x							
	OD	Coord. problem									x						
	BM	New inf./opp.						x									
	OD	Coop. problem									x						
	BM	New inf./opp.															
	OD	Coop. problem										x					
	OD	Coord. problem												x		x	
	OD	Coop. problem															
	BM	New inf./opp.													x		
	BM	Res. constraints															
	OD	Coop. problem														x	
	OD	Coord. problem															
	OD	Coop. problem													x		

Notes. Each row marks one of the 121 feedback events, sorted by within-firm occurrence (i.e., the first line for C7 is the respective event #1, etc.). Fields marked "x" are the elements of organization design in which the respective firm first tried to address the received feedback. All other colored fields imply subsequent, usually complementary changes. The color-coding is chosen to highlight the high consistency in particular in primary response: feedback related to the viability of the business model would primarily trigger changes in TD, TA, or RD; feedback related to the viability of the organization design would primarily affect IE and EM.

Table A.3. Design Principles and Solution at Firm Foundation vs. at the End of the Observational Period

Cases	C1	C2	C3	C4	C5	C6	C7	C8
Initial design principle	**TD:** Planning versus operations; modular clusters	**TD:** High-level functional task division	**TD:** Discovery of "right" tasks	**TD:** Add new tasks around product as they come	**TD:** Discovery of "right" tasks across functional areas	**TD:** Discovery of "right" tasks across functional areas	**TD:** Follow the business plan	**TD:** Discovery of "right" tasks; modular product architecture
	TA: Nonoverlapping task allocation among founders; outsourcing	**TA:** Founders self-select for skill matching	**TA:** skill-based task assignment, outsource for speed	**RD:** Financial benefits (mainly through exit)	**RD:** Fun	**TA:** Both founders do everything together; "Siamese twin strategy,"[a] self-selected skill matching on who leads which task	**TA:** Skill matching ideally allowing for self-selection even if overlapping task assignments result	**TA:** Self-selection on module and tasks therein by skill; overlap in the administration
	RD: Through exit	**RD:** Fun	**RD:** Exit	No explicit prior beliefs on TA, IE, EM	**EM:** Consensus	**RD:** User need, intrinsic motivation	**RD:** Fun	No explicit prior beliefs on RD, IE, EM
	No explicit prior beliefs on IE, EM	No explicit prior beliefs on IE, EM	**IE:** Face to face No explicit prior beliefs on EM		No explicit prior beliefs on TA, IE	No explicit prior beliefs on IE, EM	**IE:** Ad hoc, online; via chats and data No explicit prior beliefs on EM	
Design principle at the end of period of observation	**TD:** Elaboration of all tasks to the microlevel	**TD:** As above	**TD:** As above	**TD:** As above with tasks beginning to aggregate around clusters areas	**TD:** As above	**TD:** As above	**TD:** As above but if task is missing from plan and makes sense, add	**TD:** Elaborated micro task structure
	TA: Overlapping task allocation insourcing	**TA:** As above but with delegation to employees	**TA:** As above but less outsourcing	**TA:** Skill-based task allocation, including outsourcing	**TA:** Skill matching, ideally allowing for self-selection	**TA:** As above	**TA:** As above	**TA:** (near automatic) task allocation to predefined role profiles
	RD: Exit; but fun is its own reward	**RD:** As above but realize that salary is required to have fun	**RD:** As above though some cofounders receive salary (to be deduced from exit value)	**RD:** As above for founders; new: intrinsic "perks" for (potential) employees	**RD:** As above; even stronger (leave if you are not motivated by fun; even employees)	**RD:** As above	**RD:** As above	**RD:** "Pay what they are worth"
	IE: Near real-time online information exchange	**IE:** Face-to-face interactions	**IE:** Face to face; selective	**IE:** Structured online communication plus colocation	**IE:** Regular, online, structured, recorded	**IE:** Face to face or email, no preference	**IE:** Increasing routinization in online communication, some face to face	**IE:** Office, project management tools; prespecified communication interfaces and rules
	EM: Most qualified person should lead (may change over time)	**EM:** Consensus among founders (who may decide hierarchically in their task areas)	**EM:** As above but made explicit	**EM:** Consensus	**EM:** As above	**EM:** Consensus if possible, else specialist decides	**EM:** Avoid confrontation	**EM:** Hierarchical decision making in task areas
Initial design solution	**TD:** High-level description of modular clusters of tasks	**TD:** Functional task structures created through trial and error	**TD:** High-level specification of tasks	**TD:** High-level specification of tasks	**TD:** High-level specification of tasks	**TD:** Creation of task and subtask design in trial-and-error fashion	**TD:** Sequential structure of tasks (per business plan)	**TD:** High-level specification of tasks

Table A.3. (Continued)

Cases	C1	C2	C3	C4	C5	C6	C7	C8
	TA: Functional split; founders focus on strategic planning	**TA:** Founders self-selected on tasks according to skill; coin toss if no skills in founding team	**TA:** Subcontracting	**TA:** Task assignment to cofounder with highest skill in area	**TA:** Founders self-select task areas and do all tasks therein	**TA:** Everything is done together	**TA:** Self-selection into tasks in which founders are strong	**TA:** Cofounders self-select onto interesting programming tasks (roughly split front end versus back end) and share the "boring" business and management tasks
	RD: Ownership agreement, revenue plan	**RD:** Autonomy	**RD:** Ownership agreement	**RD:** Ownership agreement	**RD:** Mainly autonomy	**RD:** Importance of problem to (dearly held) customer group, fun from autonomy and collaborating with each other	**RD:** Autonomy; note: ownership agreement exist, but seems pure formality (i.e., no exit intent, revenue distribution, impact on voting rights, etc.)	**RD:** Enjoyment of programming
	IE: Irregular face-to-face meetings; online chats; emails	**IE:** Meetings at university campus	**IE:** Daily meetings at university	**IE:** Mainly ad hoc Skype meetings of subteams	**IE:** Google Hangouts, spontaneous	**IE:** Cofounders and in constant contact, either by colocation or email	**IE:** File exchange via Dropbox; chats via Skype and Facebook	**IE:** Meet and work at incubator, chat via Facebook and Skype
	EM: CEO	**EM:** Discussion and joint decision making among founders	**EM:** Group discussions; veto rights approach (i.e., only unanimously supported decisions are implemented) introduced very soon in life of venture	**EM:** Ad hoc as needed	**EM:** Discussions	**EM:** Discussion and/or decision making by task expert	**EM:** Discussion; power struggles between front end (F1, F2) and back end (F3); domineering behavior rewarded (F3)	**EM:** Discussions (even if F1 decides, at least all opinions are heard) focusing on big issues
Design solution at the end of period of observation	**TD:** Detailed task structures	**TD:** Increasing subtask elaboration	**TD:** Increasing subtask elaboration	**TD:** Emerging functional split in departments (into which newly emerging tasks automatically go)	**TD:** Increasing subtask elaboration	**TD:** As above	**TD:** As above, plus creation of task and subtask design in trial-and-error fashion	**TD:** Elaborated task structure
	TA: Founders focus on operational management	**TA:** Founders self-select as before; new members are assigned tasks by founders	**TA:** Task deemed strategic increasingly insourced (as outsourcing may render their completion slower)	**TA:** As above and also now outsource if no one in team has skill	**TA:** As above and also outsourcing task or reallocating task area when realizing others have more skill	**TA:** As above though who was in charge of which task partly changed (as per the design principle)	**TA:** As above but tasks are reassigned when required skills or skill level shifts (e.g., developer completes eases task difficulty, gives to cofounders with less IT skills)	**TA:** Role definitions and assignments of people to roles done by founders

Table A.3. (Continued)

Cases	C1	C2	C3	C4	C5	C6	C7	C8
	RD: As above, plus feeling "in control" as a result of switch to operational management	**RD:** Autonomy, learning, positive feedback	**RD:** Ownership agreement; salaries (but subtracted from share value)	**RD:** As above for founders; intrinsic motivation, such as work as a "puzzle" in particular for prospective employees	**RD:** Autonomy, learning, positive feedback	**RD:** As above; also realize that fun can stretch to employees, but that externals need payment	**RD:** Autonomy, learning, positive feedback	**RD:** Performance monitoring and measurement, pay for performance
	IE: Online project management tool; little face-to-face	**IE:** Infrequent meetings	**IE:** Daily conversations at office but often in separate subgroups; daily electronic founder-employee communication in clear rules	**IE:** Regular all-founder discussions; office; clearly regulated information flow on various information and project management tools	**IE:** Google Hangouts, prescheduled, detailed agendas, and written protocols stored in a Wiki	**IE:** As above, plus they begin archiving some of their conversations	**IE:** Two cofounders begin meeting face to face; Skype meetings with third cofounder increasingly regular meetings with agenda	**IE:** Two projects teams with clear communication inferfaces, rules for online (who sees what) and off-line communication (including rules for what [not] to do at the office)
	EM: CEO	**EM:** Founders take smaller decisions on their own (in their functional areas), bigger decision discussed by team	**EM:** Mainly bilateral conversations preceding a vote (with less group discussion)	**EM:** Regular conversations	**EM:** Voting; result needs to be unanimous; founders may abstain, but can also veto	**EM:** As above though who was in charge of which task partly changed (as per the design principle)	**EM:** As above (intensified); F1/F2 start trying to work around without upsetting F3	**EM:** Founders supposed to interfere regularly even in day-to-day work to ensure skill matching and employee effort
Notes on design solutions (e.g., changes not obvious from above summaries)	**EM:** Over the course of events, the basis of hierarchy shifts drastically with the CTO being in charge in the time of crisis, and then back again to the CEO	**IE:** With the team growing, founders try all sorts of IE mechanisms to come back to face-to-face meetings, eventually	**IE:** Before moving into a shared office, various online communication methods used; even the in office, much communication is on IT systems	—	**IE:** After (also physically) coparticipating in a hackathon, the team experiments with various IE design solutions, including meetings at incubator until converging on the one stated above	—	—	—
Evaluation	Exchanging—at some point, all existing organizing principles change (in addition undefined ones become defined)	Entrenching and extending. Although, strictly speaking, only TD is clearly unchanged, founders suggest they are still following similar principles ("lean")	Entrenching and extending. TD, TA, EM are unchanged, and even the RD principle change (one founder gets a salary) is created in a way to be compatible to exit orientation	Entrenching and extending	Entrenching and extending	Entrenching and extending. Interviews suggest that no initially existing principle has changed	More extending than entrenching	Exchanging case—at some point, all organizing principles change

[a]The label "Siamese twin strategy" is a verbatim quote from this founding team when we asked them to describe how they operate.

Endnotes

[1] As an example, think of the logic of organizing denoted "autocracy" by Baron et al. (1999a). Here, the governing design principles representing this logic of organizing propose that employees are best allocated to their work by their superiors, that staff is motivated financially, and that coworkers are best monitored closely by managerial authorities. Yet note that how these principles manifest themselves in design solutions may vary across firms (e.g., financial motivation by stock, salary).

[2] From this perspective, every organization (to qualify as one) must necessarily have a design. However, not every design comes from the imperative of a designer; designs could also be emergent or taken for granted. Indeed, as we argue, it is precisely the revision of emerging organization designs that we know little about.

[3] Given that we are essentially interested in differences in outcomes, our intent is arguably more accurately described as striving for an intermediate variance theory rather than a process theory (Eisenhardt 1989, Langley 1999) though both approaches share similar practices and recommendations on research design (e.g., Eisenhardt 1989; Eisenhardt and Graebner 2007; Langley and Abdallah 2011; Yin 2014; Walsh et al. 2015a, b; Eisenhardt et al. 2016). For similar approaches, see, for example, Ben-Menahem et al. (2016) and Gilbert (2005).

[4] These authors describe logics of organizing in their sample of new ventures in terms of configurations of principles pertaining to the dimensions of attachment, coordination/control, and selection. These correspond broadly to principles (rather than particular solutions) along the dimensions of reward distribution (attachment), information exchange and exception management (coordination/control), and task allocation (selection); our analysis adds the task division dimension and further distinguishes more clearly between design principles and design solutions.

[5] Management by objectives is a particular set of solutions mainly to reward distribution and information exchange. For this founder, this set appeared to be universally the best, and he ignored task division, task allocation, and exception management.

[6] When asked about the origin of this metaphor, the founder explained that a police officer friend had given it to him as a piece of advice. Note how similar it is to visual language used by Barnard (1968) in his work on the functions of the executive (and possibly even used in management education to which the police officer may have been exposed).

[7] Notably, C8, a purpose-built team, is the only team that explicitly discussed different approaches to organizing in the start-up phase, which also meant that alternative logics of organizing would remain available to the team.

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