

**The Creation of Routines and Roles in Startups**

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Startups exist to do work and that work is organized into routines and roles which in turn are the fundamental building blocks of a startup's organizational design. These building blocks influence not only what work is done, by whom, and how effectively, how rewards and opportunities allocated, and whether organizations can attract and retain employees but also how work is coordinated, what strategies are put in place and executed, and whether the firm can innovate. These initial structures are especially important in the context of startups: creating a single new routine or role in an organization with five employees and few formal routines and roles has potentially far greater impact than creating one routine or role in an organization with 500 employees performing hundreds of routines and roles. Creating routines and roles are two of the main structural changes central to organizational scaling (see Clough, Hallen, & Vissa in this volume for a discussion of scaling). Further, these initial structures become entrenched and continue to determine what resources will be available to organizations (Beckman & Burton, 2008), how that organization will be structured (Alexy, Poetz, Puranam, & Reitzig, 2021; Burton & Beckman, 2007), and how they will be perceived by potential stakeholders (Ferguson, Cohen, Burton, & Beckman, 2016) far into the future.

At the same time, it is less obvious what new routines and roles should look like in a startup versus an established firm. Without an established organizational design to fit into, there are fewer internal constraints that shape them; but startups may also be more subject to far greater external pressures from investors and other key ecosystem actors. They also have little in the way of existing routines, roles, structures and employees to draw on in creating new ones and few resources to deploy in creating them. Therefore, the process of creating routines and roles is fundamentally different in startups and merits focused attention. In this paper, we examine where initial routines and roles come from and how they are made to adhere in startups. Specifically, we articulate the process through which routines and roles are created in startups and why it differs from existing models that explain how routines and roles are generated in organizations.

Even though the creation of routines and roles are crucial steps in the developmental path of startups, our review of the literature shows that their emergence has only rarely been studied or theorized in the startup context (for exceptions see Haase & Eberl, 2019; Miner, Gong, Baker, & O'Toole, 2011; Schmidt, Braun, & Sydow, 2019). Some scholars have examined the creation of routines and roles in startups under the broader categories of organizational designs, practices, and blueprints (e.g., Aldrich & Yang, 2014; Alexy et al., 2021; Baron, Hannan, & Burton, 1999, 2001; Darr, Argote, & Epple, 1995; Feldman, Ozcan, & Reichstein, 2019). And others have examined them in the context of more established firms (e.g., Cohen, 2013; Cohendet & Simon, 2016; Dittrich, Guérard, & Seidl, 2016; Nigam, Huising, & Golden, 2016;

Zbaracki & Bergen, 2010). As a result, we lack a clear overall picture of how these initial structures are created in startups.

While the concepts of routines and roles are distinct, they are closely linked and share many properties. As a result, there are many parallels in how the concepts are treated in the literature. While precise definitions of both routines and roles vary, there is foundational agreement about each. Most agree that routines are repetitive patterns of interdependent actions to accomplish tasks (e.g., Feldman & Pentland, 2003; Nelson & Winter, 1982; Parmigiani & Howard-Grenville, 2011; Pentland & Feldman, 2005). Roles have been treated as a position or an assembly of tasks under an administrative title and term used interchangeably with position and job in much of the literature reviewed for this chapter (Ashforth, 2001; Burton & Beckman, 2007; Cohen, 2013; Ferguson et al., 2016). In fact, roles have been studied as a special case of a routine—a repeated pattern of action (Miner, 1990).

At the most basic level, routines and roles are both ways of bundling tasks: within person for roles, and across people for routines. Like routines, roles involve repetitive and patterned action to accomplish particular outcomes. However, routines, as they are studied and theorized, cross-cut roles and are thus critical in connecting and coordinating work across roles. Both routines and roles are relational in nature and depend upon the performance and expectations of others for both their creation and enactment (Biddle, 1986; Katz & Kahn, 1978). Considered in this way, the two might have similar developmental paths that are especially visible in a startup environment where there are frequent opportunities to structure which jobs contain which tasks, and which tasks will be done across multiple roles.

For both routines and roles there is increasing focus on the potential difference between what is broadly understood to be done and what is actually done. For routines, scholars distinguish between ostensive aspects, which represent the structural elements of routines, and performative aspects, which represent agency on the part of those who enact routines, providing a theoretical basis for routines to change or evolve (Feldman & Pentland, 2003; Haase & Eberl, 2019). While less explicitly developed, there is also emerging evidence that treating roles as organizationally given and stable positions, especially as formalized ones, fails to explain much of what happens in organizations—that as for routines, there is a distinction between the formal aspects of the role—the ostensive role—as laid out in things like job descriptions and organizational charts and the role as actually performed. Together this suggests that formal definitions of and artifacts around routines or roles are starting points from which they evolve that may be deeply revised through performance.

Building from our review of research on routines and roles in startups and in more established firms, we develop a two-step model of their creation process. This model is shown in Figure 1. In the first step, ideas that could be used for the design of routines and roles are gathered into a consideration set. However, these ideas are only proto-ideas—suggestions—for the routines and roles that will eventually be adapted and adopted. These ideas align with the ostensive aspects of routines and roles and alone do not determine the ultimate shape of routines and roles in new organizations. Proto-ideas may at times conflict with other ideas and elements in the organization or may not be directly applicable in the startup. Thus, the second step involves working through the options generated to put routines and roles into practice.

### **Step 1: Gathering Proto-Ideas for Routines and Roles**

Creating routines and roles is a costly undertaking and introduces liabilities for any organization going through the process (Stinchcombe, 1965). Because they lack internal structural models to build from and have limited local histories and experiences to draw on, startups may experience even greater costs and risks when creating routines and roles. The effects of increased costs and risk for startups are reinforced by their lack of deep resources to underwrite these costs and the dependence on outsiders who might provide these resources, which together shape how roles and routines evolve in startups (see Aldrich, Birkhead, and Ruef in this volume for more discussion of this). Further, the costs and liabilities will be heightened for routines and roles that are created *de novo* rather than built from a base of existing routines and roles. Consistent with this, scholars have argued that rather than invent new routines and roles, startups should draw on existing ideas. By imitating established and proven structures, founders can avoid upfront learning and information costs and build the legitimacy needed to attract resources from those in their environment (Aldrich & Yang, 2014; Boyd & Richerson, 2005; Levinthal, 1991).

In this context, it is not surprising that there is little discussion of the pure invention of routines and roles. Even in papers that consider the creation of routines and roles in more established firms, it is relatively rare that these are described as being created completely from scratch. Indeed, when invention happens, evidence suggests that invented elements compete and are combined with elements transported from elsewhere. For instance, Cohen (2013) describes how *de novo* ideas become one of many inputs into the creation of new roles. It seems likely that the dynamic would be similar for routines. It follows that most proto-ideas for routines and roles will be borrowed from sources in the startup ecosystem. Yet, these ideas cannot arrive of their own volition which leaves the question of how they are imported and selected into the consideration set for routines and roles. We describe the processes through which this happens below and illustrate it on the left-hand side of Figure 1.

***Founders and Employees as Carriers of Proto-Ideas.*** Much of the discussion of the sources of what we call proto-ideas focuses on founders as the most frequent and best sources. For instance, Feldman and colleagues (2019) argue that the practices, or routines, that are the most valuable for a start-up are more likely to be those brought in by founders because founders understand their local context and are likely to transfer practices that fit the immediate context of a new startup and are easier to follow. In fact, when startups often have multiple founders, those who have worked together previously may be especially likely to replicate the routines from their prior firm (Honoré, 2022).

Founders often carry these proto-ideas in their founding blueprints (Alexy et al., 2021; Baron et al., 1999, 2001). These ideas are often based on their own direct experiences but may also build from experiences with people in other roles or other organizations. For instance, a founder who was a software developer may carry ideas for routines and roles in customer service or marketing from their prior employers as well as ideas about routines and roles they saw performed by their competitors, clients, or other interaction partners. Alexy and colleagues (2021) argue that in addition to blueprints founders may transport ideas through their deeply held convictions. While experiences of success are core to them, these convictions are not formed only based on what they have seen work well over the course of careers; they also develop convictions based on what they have seen not work well. For instance, Alexy and colleagues (2021) give the example of Valve Software, whose founder gave his startup a design that contrasted sharply with a prior employer's rigid and hierarchical design.

While much of this literature has centered on the founding team as carriers of ideas, other early startup employees can also contribute to the pool of proto-ideas for routines and roles. Each startup employee, from founder down to intern, can serve as a repository of distinct ideas; each carries their own distinct history of experiences in and interpretations of institutional environments and these potentially contribute to the pool of ideas. When they come from similar environments, employees may share similar ideas. Like ideas carried by founders, employee ideas may be based on their own direct employment experience, their educational backgrounds, or their own preferences for how work might be performed (Dokko & Jiang, 2017) as well as experiences in other organizations.

***Outside Actors as Sources of Proto-Ideas.*** Founders and early employees are not the only sources of proto-ideas. Other powerful actors in their ecosystems—investors, granting agencies, recruiters, accelerators, incubators, partners, and customers—can push ideas forward. As compared to their more established counterparts, those outside of a startup may even have extra opportunities to influence the

structure of startups. Even seemingly less powerful outside actors provide proto-ideas for routines and roles. For instance, job candidates, even those not hired by the startups, provide input about the design of startup roles (Cohen & Mahabadi, 2022; Levesque, 2005). Startup consultants and even casual advisors provide ideas about how these various pieces should fit together. Yet, even when ideas are delivered from, by, and through outside actors, internal startup actors are likely to mediate them in important ways.

Proto-ideas for roles and routine are only starting points for initial organizational design. In themselves they are insufficient to coordinate and perform work. These ideas are prototypes and require development and adaptation to the new context. Coming from different contexts and sources, they may be in conflict or may need to be adapted to a new context. We discuss some of the processes, specifically translation, learning, and negotiation, through which they are shaped below.

## **Step 2: Shaping Routines and Roles**

As argued above, routines and roles in startups are usually not created *de novo*; they are mostly selected into organizations by founders and other employees from a consideration set of proto-ideas based on their prior experiences, models from the broader startup ecosystem, and local communities (Becker, 2004; Cohendet & Llerena, 2003). Founders may try to replicate routines and roles they are familiar with, but replication is limited to ostensive, abstract aspects. Because routines and roles in startups will be inhabited by different people than in prior experiences, the performance of routines and roles will differ. Even founders coming from the same prior firm are unlikely to have had exactly the same experience with a given role or routine, since their experience would be limited by their own roles and the perspectives they come from. Thus, a second step consisting of translation and adaptation-by-doing is needed to shape routines and roles into a workable organizational blueprint (see Figure 1).

***Translation of Proto-Ideas.*** In Step 2, the proto-ideas are translated into the startup's context. Translation is the process of conceptualizing an idea and editing it to fit a new context: emphasizing some aspects and de-emphasizing others, and assigning new meaning to activities to give them value in a new context (Sahlin & Wedlin, 2008). Studies of translation and practice variation show how individuals importing practices interpret and edit them according to the institutionalized beliefs and norms of the new context (Boxenbaum & Battilana, 2005; Czarniawska-Joerges & Sevón, 2005; Dokko & Gaba, 2012). Founders and other actors in startup contexts do not have firm-specific beliefs and norms institutionalized by history and experience, so efforts to translate may be limited to generalized industry- or startup-specific institutional beliefs and norms. Because of this limitation that startups face, the process of importing ideas about routines and roles requires a second stage that we call adaptation-by-doing: a more interactive stage

where the startup works through the issues that emerge from practicing routines and roles that have been selected and translated.

*Adaptation through Doing.* A performative perspective on routines and roles foregrounds the agency of inhabitants in adjusting routines and roles through their practice (Feldman & Pentland, 2003), suggesting that any turnover in a role or adjustments in which roles are involved in a routine will result in changes to the role or routine. As individuals are repositories of ideas coming from distinctive institutional environments, they bring these things to the performance of routines and roles, shaping how work is done or even what work is done. Though routines and roles are always subject to variation, the extent of change to any given role or routine in a mature organization is limited by the structured framework of the existing design and surrounding roles. By contrast, in startups that have no strong structures in place, agency should play a stronger role. The individuals who take on the roles could have a stronger influence in the ultimate tasks that the role entails. For example, Cohen and Mahabadi (2022) found that jobs often evolve through the hiring process as startups learn about various roles from the people they interview or adjust their ideas about roles based on the job candidates they want to hire. Further, there is evidence that the first holders of a position have outsized influences on their roles, e.g., Burton and Beckman (2007) find that initial role holders leave an imprint on jobs that affects the likelihood of turnover for future role holders.

Though establishing routines and roles in startups is subject to fewer constraints, at least internally, studies of change in roles and routine dynamics in mature organizations can offer insight into the shaping forces that result in a quasi-stable set of routines and roles that constitute the imprint of an emerging organization. These shaping forces - learning and negotiation - tie directly to the performative aspects of routines and roles. In the performance of a role or a routine, problems and unexpected situations and outcomes arise. Dealing with those problems can create expectations about which roles take on particular tasks of fixing problems or representing problems to other people, what Cohen (2013) calls “development by doing,” or can highlight places in a routine where nascent routines need to change (Alexy et al., 2021).

*Adaptation through Learning.* Learning at the organization level also shapes a startup’s initial blueprint of routines and roles. As routines are performed and generate outcomes, organizations can adjust them to better meet goals or refine the goals, thereby encoding their experience and knowledge in routines (Miner, Ciuchta, & Gong, 2008; Parmigiani & Howard-Grenville, 2011). Through the mix of routines that startups adopt or abandon, and how those routines are modified, they create a design framework that forms a unique organizational blueprint. Further, the interdependence of routines and their simultaneous performance create opportunities for innovation and new routines. Since innovation results from the

recombination of knowledge, points of interaction between routines creates opportunities for new arrangements of knowledge and adjustments to routines, as well as the creation of new routines (Sele & Grand, 2016). Organizational learning also impacts roles that have been adopted. Miner (1990, 1991) treats roles as a form of routine, and shows that formal roles can be abandoned after adoption or can even be created after a person is already doing a collection of tasks, as organizations learn from experience. In a startup environment, organization learning can happen more quickly as startups have less slack and failures are quickly evident, leading to quicker abandonment or modification of routines and roles. Further, not only are routines and roles new in startups, its market offerings, people, and many other things are new. As a result, startups may encounter surprises not only in the performance of routines, but also from the external environment that creates a need for routines and roles to adjust. Responses to failures or surprises entail experimentation and improvisation (Bechky & Okhuysen, 2011; Gong, Baker, & Miner, 2005), which can change not only routines, but organizational schemas through which actions and outcomes are interpreted (Dionysiou & Tsoukas, 2013; Rerup & Feldman, 2011).

*Adaptation through Negotiations.* A related shaping process is social interaction during early performance of routines and roles. In the process of encountering other roles, routines, and other design features of the startup (e.g., incentives, hierarchy, etc.), conflict and overlap can arise, leading to negotiation of boundaries between roles and reworking of routines. Negotiations occur between participants who are central to any given role or routine, but also with those who are involved with adjacent routines and roles. In fact, participants with differing interests and perspectives can shape how routines and roles are implemented. For instance, negotiation between a startup CEO and sales director led to a full-cycle sales role being shifted to a lead generation role, and subsequent conflict between the sales director and lead generation role eventually led to the role being eliminated altogether (Cohen & Mahabadi, 2022). Political processes might be less developed or hardened in startups, but even new routines and roles have desired outcomes that may not be perfectly in sync. For example, role-specific goals and framing processes can affect which routines are seen as needing to change (Nigam et al., 2016). Further, changes in routines and roles can present opportunities for political processes to have an impact. Zbaracki and Bergen (2010) show how external pressures for product price changes created conditions that allowed conflicts that have been suppressed by the truce of a routine to re-emerge and get re-settled in a new configuration.

Thus, as routines and roles are inhabited and performed, they take on a particular shape that results from learning and negotiation forces. Nelson and Winter (1982) in their seminal work on routines characterize the establishment of routines as “settlements” or truces between political and power interests. Cohen (2013) characterizes establishment of roles as “performance as acceptance,” with the performance of tasks defining what is in-role, and by implication, not in other roles. In a startup, these settlements occur not



only within a given routine or on the borders of a role or routine, but for the interdependent pattern of routines and roles that together make up an organizational design. The nature of both routines and roles, with their regular, repeated performances has a tendency toward stability, even though normal variation in their repeated performance can carry the seeds of change (Feldman & Pentland, 2003; Pentland & Feldman, 2005).

***Routines and Roles as Organizational Design.*** Once tasks associated with both routines and roles are performed in concert, with interdependencies and conflicts more or less worked out, their configuration forms an organization-level blueprint that serves as the startup's early organizational design. The overall design, along with some of the elements is subject to another shaping force from the environment that imposes expectations on a startup's organizational design. Pressures for isomorphism (DiMaggio & Powell, 1983), especially concerning the roles that startups adopt, come from key sources of legitimacy from the entrepreneurship ecosystem, such as investors or the media. Startups may be particularly subject to pressures for isomorphism because of their need for legitimacy, especially if the startup is in an emerging field (Aldrich & Fiol, 1994; Deephouse & Suchman, 2008).

The two steps described here speak to the creation of initial routines and roles in startups and their formation into a workable organizational design. Note that the steps and stages of translation and adaptation-by-doing may not follow a neat linear sequence. For example, a startup may assume it needs to hire a developer, but learn through practice that they really need a chief technology officer. With rapid growth, a startup may just know they need to hire somebody, and generate models for the precise role later. As a result, startups may iterate between the stages and steps of the model, as shown in the recursive arrows in Figure 1. In any case, the description of these processes raises many important related questions. Below, we focus on three of these and their implications for further research on this process: when does this process converge and diverge with parallel processes in more established firms; to what degree is there differentiation in this process within and between routines or roles; and how do these processes relate to innovation.

In many ways, the model we developed resembles the variation, selection, and retention (VSR) models common to evolutionary perspectives on startups (Aldrich, Birkhead, and Ruef in this volume). However, the process our model describes is much more specific—the creation of new routines and roles—and as a result the process we describe is distinctive. Our model emphasizes translation and adaptation prior to retention. Variation consists of the generation of proto-ideas that must be shaped as part of the selection process, and can lead to new draws from the pool of proto-ideas as adapted roles and routines fail in practice or reveal the need for additional roles and routines. Therefore, rather than selection being driven

by the larger environment and fitness in the sense of strength, it is driven by both the larger environment and fit with the emerging web of routines and roles within the firm.

### **The Process of Creating Routines and Roles in Startups versus Established Organizations**

Even working through—through further selection, translation, adaptation, and doing—these ideas for routines does not determine what routines will become permanent fixtures, which will be retained in the long term. These may be temporary truces that are subject to further working through as startups grow, pivot, and otherwise change. Yet, at some point, this further working through of routines and roles in startups will resemble those in more established firms. Throughout our discussion we have introduced several ideas about why the process in startups might diverge from that in established firms—fewer internal actors, less internal history, differing pressures for legitimacy—but these differences may not persist over the long term and future research might address the question of when these processes will converge and diverge across startups and established firms: at what developmental point are there no longer evident distinctions?

A related question concerns how the routines and roles initially created influence those created later when the organization crosses into being an established firm. There is evidence that roles in place at startup shape what roles are later put in place. For instance, initial role incumbents become models for how roles should be constructed (Burton & Beckman, 2007) and the roles put in place at startup shape subsequent roles (Beckman & Burton, 2008). However, there is less evidence about this kind of path dependence in routines. Future research might examine to what degree initial routines shape the routines that are later added to the organization: do these create path dependence in a way similar to initial roles?

### **Innovation in Routines and Roles**

Startups are expected to be engines of innovation, and the routines and roles they put in place may themselves be innovative. Because startups are less embedded in existing institutional and social structures, it may seem that they are more likely to generate new types of routines and roles. Yet, as we discussed, startups' consideration set for routines consists largely of borrowed ideas, and startups are dependent on outsiders for resources and as a result may be constrained to copy what outsiders expect. Further, they do not necessarily have the resources needed to support routines and roles that are radically different from those in other firms. For example, hiring staff might be difficult if the roles offered by a startup are not on a recognizable career path. However, because ideas for routines and roles can come simultaneously from many sources and are worked out in the context of the organization and its actors, there is room for recombinant innovation in routines and roles, albeit limited.

Though routines and roles may not be themselves completely novel, recombination of routines and roles put in place may also foster innovation in products, technologies, and services. For instance, studies have shown that certain configurations of roles make these types of innovations more likely (Grimpe, Murmann, & Sofka, 2019; Lahiri, Pahnke, Howard, & Boeker, 2019). Apart from work that suggests that innovation capabilities stem from routines (e.g., Hargadon & Sutton, 1997; Nelson & Winter, 1982), there is also evidence that the enactment of routines and connections between routines create opportunities for innovation (Sele & Grand, 2016).

### **Differentiating Routines and Roles**

Our discussion for the most part has treated all roles as roughly equivalent and all routines as roughly equivalent. We have not addressed the question of how these processes might differ depending on the specific type of routine or role being created. Recent research has suggested that routines in startups can be categorized into those that are central to survival in early life or core to the startup's product offering, and those that can be de-prioritized or even outsourced until the startup is more mature (Haase & Eberl, 2019; Schmidt et al., 2019). Processes of selection and adaptation may differ for different types of routines. Distinguishing routines in this way has resonance with the classic organization theory distinction between core and peripheral activities of a firm (Hannan & Freeman, 1984; Thompson, 1967). These theories use the idea of an organization's core to understand things that are so central to the organization's function or identity that they must be buffered from the effects of the environment. Routines that are central to survival in early life might indeed be core as they are focused on innovation, the distinctive challenge for startups. However, in startups, focusing on core routines is less about what needs to be buffered from the environment than carving out a place for the startup in the environment. Moreover, it is likely that the routines that are core would evolve as startups age and grow.

For roles, a different distinction—that between top management team and other roles—may yield additional insights. While there could be a broad range of roles—from lowly intern to CEO—in even early-stage startups, much of the existing literature has focused on the roles of founders and members of the top management team (Beckman & Burton, 2008; Lazar et al., 2020). There's some logic to this focus. These are often the first roles created in organizations, the incumbents of these roles are highly influential, and these roles are likely to persist over time. Yet, other roles warrant examination. Some scholars have expanded the discussion to consider other employees in startups and in doing so provided some important insights (e.g., Cohen & Mahabadi, 2022), such as showing how lower level roles evolve as a result of changing needs and negotiation between top managers. The pressures toward conformity may be less constraining for lower-level roles than they are for more visible founders and top managers.

Finally, we did not identify differences in processes between the creation of routines and the creation of roles. One of our contributions in this chapter was to consider the processes of creating routines and roles as essentially the same. We were able to draw on the collective knowledge of the two processes to create a model that can apply to both. We have not discussed how the differences between routines and roles may contribute to differences in the processes for their creation. For example, because roles are inhabited by individuals, they may be more subject to boundary management through negotiation than routines would be. Once inhabited, roles may be less likely to shed tasks, since shrinking responsibilities could be associated with lower power and status. By contrast, routines may be more likely to manage boundaries through learning, and equally likely to grow or shrink.

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**Figure 1: Model of the creation of routines and roles in startups**

**Step 1: Gathering proto-ideas**

**Step 2: Shaping routines and roles**

