

Making It Happen: Legitimizing Design Thinking in Large Organizations

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Many large firms claim they find it challenging to be innovative (Jaruzelski, Loehr, and Holman, 2012), and researchers argue that this is linked to the strong focus on efficient operations and short-term profits (e.g., Lawson and Samson, 2001). To address this challenge, many companies make efforts to find new ways of working to increase their innovativeness (Jaruzelski et al., 2012).

Lisa Carlgren



In recent years, design thinking (DT) has gained ground in industry, especially in the United States (e.g., Wong, 2009) and Europe. DT can be interpreted as a management concept (Carr, Halliday, King, Liedtka, and Lockwood, 2010) derived from a way of working with innovation mainly proposed by Tim Brown and David Kelley (Brown, 2008; Kelley and Kelley, 2013), both connected to Silicon Valley-based design firm IDEO and Roger Martin (Martin, 2009) at the Rotman School of Management in Toronto. They argue that everyone can learn from the way that designers think and work to come up with better ideas and enable the development of more innovative offerings (Brown, 2009). In this regard, the normative and mainly practitioner-oriented concept of DT that they propose shows some similarities to decades of research on DT that investigates the practice of professional designers and architects; see Johansson-Sköldberg, Woodilla, and Çetinkaya (2013) for an elaboration on previous research streams.

Maria Elmquist



DT is being implemented in various organizational settings (e.g., Liedtka, King, and Bennett, 2013; McCreary, 2003), often through executive education and consultancy projects. As a result, it has developed into a management concept that is now taught at numerous business schools (e.g., Fraser, 2012; Liedtka and Ogilvie, 2011; Stanford d.school, 2009) and applied in a variety of industrial contexts (Wong, 2009). However, the implementation of new concepts such as DT is always challenging (e.g., Nussbaum, 2011; Walters, 2011), as it tests existing ways of working and induces ambiguity and uncertainty regarding the new practice and its impact (Birkinshaw, Hamel, and

Mol, 2008). With the prevailing focus on effectiveness in large organizations, this naturally leads to a demand for evaluating the concepts and their impact on the organization.

DT is strongly connected to exploration and learning (Beckman and Barry, 2007) and mainly used in the fuzzy front end of innovation and product development (e.g., Cooper, Junginger, and Lockwood, 2009; Lindberg, Meinel, and Wagner, 2011). This implies that the work includes ambiguity, unknown parameters, and a long distance to market. As with any front-end method, challenges can be expected when trying to evaluate its impact. Earlier research on DT has also shown that perceived values linked to the use of DT in large organizations go beyond project output, and include the development of long-term innovation capabilities (Carlgren, Elmquist, and Rauth, 2014a), yet another dimension that is difficult to measure. Implementation of DT in a large organization will thus always be questioned and there will be a number of difficulties to address, including the lack of appropriate metrics.

Despite the wide interest in DT among practitioners, there is a lack of research on how organizations work with DT in practice (e.g., Jahnke, 2013; Johansson-Sköldberg et al., 2013), with a few exceptions (e.g., Carlgren, Elmquist, and Rauth, 2014b; Lindberg, Köppen, Rauth, and Meinel, 2012). In particular, there is little knowledge about what

managers actually do to make DT happen in organizations. The purpose of this paper is therefore to investigate efforts made by managers in large organizations to enable the implementation of DT. The paper is based on an interview study in six large organizations. First, it outlines the typical challenges perceived in the implementation of DT, and then it accounts for the efforts taken to support the implementation. We then propose that the legitimacy perspective, as introduced by Suchman (1995), is a useful framework to understand how large companies relate to concepts such as DT. This theoretical lens not only helps to understand the implications of our findings, but can also help managers to derive strategies for how to actively work with legitimizing DT and securing continued organizational support.

Theoretical framework

DT as a management innovation

Management innovation can be defined as “the generation and implementation of a management practice, process, structure, or technique that is new to the state of the art and is intended to further organizational goals” (Birkinshaw et al., 2008, p. 829). In literature, DT is described and understood in a variety of ways (Johansson-Sköldberg et al., 2013): as a philosophy or way of thinking, as a specific process for innovation or problem solving, or as

a toolbox of methods inspired by design (Carlgren et al., 2014b; Liedtka, 2014; Lindberg et al., 2012). Liedtka (2014) argues that, while the practices attributed to DT in isolation may not be new, the bundle of practices can be considered new. This paper builds on earlier, empirical research on the use of DT in large organizations, framing DT as a set of five core principles: *focus on the user, challenge the problem, include diverse viewpoints, make tangible, and experiment* (Carlgren, 2013; Carlgren et al., 2014a; 2014b). These principles can be enacted or embodied in a variety of ways, and individuals concerned with implementing DT in an organization adapt and develop related practices, techniques, and mindsets in relation to their environment and the intended use (Carlgren, 2013).

Following the definition proposed by Birkinshaw et al. (2008), DT can be considered a management innovation. Knowledge from the field of management innovation is thus considered relevant to understanding implementation of DT. Based on the challenges of implementation identified in the study, one relevant perspective is legitimization theory (Birkinshaw et al., 2008; Suchman, 1995), which helps explain ways in which individuals in firms seek support for an innovation within the organization. The following section will briefly introduce theories of legitimacy that will later be used in the analysis of our findings.

Legitimacy theories

Birkinshaw et al. (2008) argue that the introduction of a new concept creates ambiguity and uncertainty in firms. They suggest that these stem from a lack of understanding of the new concept as well as a fear of negative consequences for the individual as well as the firm. To achieve acceptance and support of a new concept, it is therefore essential for those who seek to implement and sustain it to create a general belief that the new concept is useful or legitimate (Birkinshaw et al., 2008). As a result, the establishment of legitimacy becomes a key task in gaining acceptance and support for new concepts (Ashforth and Gibbs, 1990; Birkinshaw et al., 2008; Suchman, 1995).

Building legitimacy aims at influencing how individuals understand a certain concept and its consequences for their direct and indirect environment. As legitimacy defines the relation of constituencies and new practices, it is socially constructed (Suchman, 1995). Additionally, as the consequences of new concepts are evaluated by individuals and take place in social systems, building legitimacy has to take these systems into account. As a result, legitimacy is created subjectively but has to address social systems. Due to this, legitimacy is context bound since it resides between the new practice, the individual, and the social system (organization). Given these interdependencies, legitimacy can be defined as the “generalized perception or

assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman, 1995, p. 574).

To clarify how certain actions may contribute to legitimacy, Suchman (1995) identified three basic forms of legitimacy—*pragmatic*, *moral*, and *cognitive*—and ways in which they can be established. *Pragmatic legitimacy* rests on an audience’s calculations of self-interest. It is evoked by showcasing the extent to which a particular practice leads to results that are in line with the self-interest of the audience and the organization (Birkinshaw et al., 2008; Suchman, 1995). *Moral legitimacy* resides on a positive, normative evaluation of structures, results, and actions in relation to the value system of an organization (Birkinshaw et al., 2008). It can be created by pointing out the relation to already-established practices and/or pointing to a tradition of embracing and trying new practices (Birkinshaw et al., 2008; Suchman, 1995). *Cognitive legitimacy* rests on the plausibility of explanations addressing how a practice fits with the audience’s experienced reality and larger belief systems (Birkinshaw et al., 2008; Suchman, 1995). It can be established by explanations that render the new practice an incontestable way to address specific challenges faced by the organization (Birkinshaw et al., 2008; Suchman, 1995).

Method

The study underlying this paper is an explorative, qualitative study carried out in 2011–2012. Data were collected through semi-structured interviews with representatives from six large American and German firms with at least five years of experience in using DT. As the study relied largely on individual perceptions, individuals from multiple backgrounds have been interviewed in relation to their role in the implementation of DT (Eisenhardt and Graebner, 2007). The interviewees were typically individuals responsible for implementing DT in the firms, innovation/research and development (R&D) managers, and employees with some experience of using DT. In total, 36 interviews were conducted in six firms (Table 1). The interviews were 45–120 minutes long and were recorded and transcribed. The majority (21) were performed face-to-face; the rest were done via telephone and Skype.

Analyzing the data, we focused on the initial challenges in implementing DT and on what design managers found they needed to do to implement it. An early discussion of the data led to a hypothesis that practitioners were trying to show the value of DT to their organizations, in other words, trying to legitimize its use. This inspired the use of legitimization theory, as it is often used in studies of management innovation (Birkinshaw et al., 2008). A number

Case (type of company)	No. of employees	Year started using DT	No. of interviews	Position of interviewees
Software	>50,000	2005	7 (6 ftf)	Director DT initiative (VP), DT manager & facilitator, Product Design (VP) (previous DT facilitator), Design leader, Designer, Innovation manager, R&D manager
Software	>5,000	2007	5 (2 ftf)	DT manager, DT facilitator, R&D manager, Innovation manager, HR manager
Consumer Products	>100,000	2002	7 (3 ftf)	Director DT initiative (Dir) & facilitator, DT manager, DT facilitator, R&D manager, R&D engineer, Senior manager, Business development manager
Electronic Products	>100,000	2006	5 (4 ftf)	DT leader & R&D corporate unit (VP), R&D manager, R&D manager, Strategy manager R&D, Concept developer
Healthcare	>100,000	2003	7 (6 ftf)	Director DT initiative (VP), Senior manager, DT manager, DT specialist & nurse, DT specialist & designer, Performance improvement manager (VP), Nurse manager
Finance	>100,000	2008	5 (1 ftf) Total: 36	Head of DT initiative (VP), Innovation manager, Innovation manager, HR manager, DT specialist & internal consultant

Note: ftf = face-to-face interviews.

Table 1. Sample set.

of subcategories were identified. As a next step, we applied selective coding (Flick, 2009) to identify further examples and refine the existing categories. Findings regarding efforts were interpreted based on the three types of legitimacy proposed by Suchman (1995).

Challenges related to the implementation of DT

In this section, we briefly outline the challenges of implementation as perceived by our interviewees. Some challenges were linked to managers or coworkers not appreciating what interviewees considered to be important values of DT, such as the value of going in unexpected directions, learning from failed projects, interacting with users at various steps of the innovation process, and having

fun. For example, there was mention of how the use of DT could lead to ideas or concepts outside the project scope or existing product categories. Several interviewees saw a value in these odd ideas and concepts because they provided learning and offered an alternative perspective on the current offerings. However, they also expressed concerns that these outcomes would not be supported if they could not show how to develop them into marketable offerings. Some interviewees also mentioned that managers and coworkers perceived the focus on having fun as a signal that DT was not “serious.”

Interviewees further noted that DT was not prioritized in daily work, especially when resources were scarce or when the workload was high. Even though interviewees acknowledged

that DT would speed up later stages of the development process, they reported a perception that it might extend early project phases, mainly due to the use of ethnographic studies. As a consequence, several interviewees found it difficult to motivate management to acquire the additional resources necessary to implement DT.

Several interviewees described that, during the early phases of implementation, there was an initial honeymoon period during which managers and coworkers were excited about DT—with the fundamental belief that it was working and with little demand for proof of its usefulness. However, after this initial enthusiasm, interviewees described a growing demand for tangible proofs of concept and for finding some sort

of measure that would enable such proofs. But measuring and evaluating the outcome of DT efforts were reported as challenging, especially with the concept being so young with not much of a track record. Although a common perception was that DT represented more than merely output, demonstrating its value was thus found difficult. Indeed, several values held forward in relation to DT (e.g., Brown, 2008; Martin, 2009) are fairly intangible. From this perspective, common output-oriented measures of innovativeness (e.g., number of new product introductions or number of patents) would not capture the perceived benefits of using DT.

The interviewees also mentioned the problem of traceability. Even if DT activities would eventually lead to a successful product, it was hard to trace that success back to the use of DT, which is often concentrated at the front end of a project, especially when development cycles are long. Another perception was that it could be hard to correlate a successful outcome with the DT activities because it cannot be isolated from other parameters. Overall, the discrepancy between organizational and DT values and norms was perceived as creating a need for proof. Therefore, individuals saw themselves confronted with the challenge to demonstrate and quantify the value of DT.

Other challenges were of a more political nature because the introduction of DT often challenged

established practices, roles, and project responsibilities. In some organizations that had an in-house design function, the introduction of DT was perceived to create some irritation and fear of exclusion among designers. In some cases, designers considered DT as representing a simplified view of design: something that questioned their professional education and diminished it to a three-day workshop, or something that everyone could do. This was often described as a sensitive topic in the organizations studied.

The specialized DT teams were also perceived as questioning previously established development functions. Interviewees described that some people were reluctant to learn from the internal DT consultants and felt threatened by them meddling in their areas of expertise. In one firm, this led to an initial reluctance to work with the team responsible for DT; however, this reluctance was perceived to decrease as the organization became more used to working this way. Further, DT efforts sometimes created disturbances in the decision-making processes, as it moved many decisions to the team level, thereby questioning and possibly reducing the authority of managers, implicitly questioning their status and power in the organization.

In the studied companies, DT was made to happen by a number of individuals advocating for its value in various ways. In the next section, we account for the five main types of

efforts found in the studied companies.

What managers do to make DT happen

While providing quantified proof that “DT works” was found hard to obtain, individuals in the study had various ways to create or sustain support for DT within the organization. Five types of efforts were identified (see Table 2): demonstrating the usefulness of DT, meshing DT with organizational culture, convincing through experience, the creation of physical spaces and artifacts, and the creation of ambassador networks.

Demonstrating the usefulness of DT

Initially, some managers invited representatives of other companies as well as experts (i.e., external consultants who had documented experience of using DT successfully) in order to inspire and convince employees. One interviewee explained:

Once a quarter we bring someone in from the outside to speak to the entire company [. . .] And all employees are invited, for an hour, two hours, sometimes three hours, to participate in the discussion or workshop or just to listen to the interview. And it's to constantly inspire and keep our eyes on the prize.

In some cases, this was supported by the distribution of free books. In addition, external resources

Demonstrating the usefulness of DT	Meshing DT with org. culture	Convince through experience	Creation of ambassador networks
Create proof of concept through the involvement of external resources (e.g., speakers, business press articles, research publications).	Include representatives of powerful groups within the organization, early on.	Make executives as well as employees experience DT through workshops.	Engage top management as spokesperson for DT, through video statements, company mailings, and conference speeches.
Develop internal success stories based on select project engagements.	Merge DT with existing practices.	Open up presentations for a larger audience.	Support the development of bottom-up initiatives through training and certification.
Develop project-based metrics. Evaluate using multiple data points.	Find a new company-specific label for DT.	Support other employees in their projects.	Collaborate with other functions such as human resources (HR).

Table 2. Overview of efforts made to legitimize design thinking.

such as business press articles, research results, and videos (e.g., presentations, success stories) were distributed digitally within the organization.

These external success stories worked initially, but the creation of internal success stories was seen as an important next step. Stories covered successful internal projects in which it was clear that it was the use of DT that had contributed to their success. Some companies reported on their strategic choice of what projects to take on—challenging enough to represent a real problem, but not too complex for feasibility.

... This was very smart thinking, to not take on risky projects early, 'cause we were just learning. Now we're getting more and more risky every year, and that's good; we now have our skills and how we do our work, but that was very intentional.

In other companies, DT was used in specific projects that were

previously regarded as failures or that fell outside the typical work of the organization. According to interviewees, these projects were chosen because they were perceived as low risk—they had already failed, after all—and high reward, if they could be saved. These “display projects” were then used to showcase what could be accomplished through the use of DT to attract interest.

Interviewees reported a growing urge to find more explicit ways to prove DT’s value once the initial honeymoon was over. In one company, DT was merged with improvement science, enabling the creation of project-specific metrics to assess different concept ideas within projects:

A lot of it was observation. . . . My team and I would go every week or once a month and watch people use the innovation, and we would check off if they're doing the process properly; we would quiz them, “How do

you feel about this? You said it was great five months ago, do you still feel that way?”

Project documentation would include project-specific metrics for before and after the implementation. One interviewee stated that multiple measures were necessary in order to ensure robustness, gathering several data points before and after:

For outcome and process metrics, we usually go a minimum of 12 data points so [. . .] we can see the line of what's actually happening. “Before and after” is crap—we don't believe in before and after.

For projects resulting in new working procedures to be spread within the organization, these metrics were used to convince staff about the advantages. In one company in which DT was seen as a corporate culture change, employee satisfaction scores were used to illustrate how the spread of DT had affected the

employees. In general, tapping into existing data was seen as a vital resource in monitoring the effects of interventions.

Meshing DT with organizational culture

Interviewees stressed that, in order to gain acceptance for DT within the organization, the concept could not be implemented like an off-the-shelf package, but had to be adapted to fit the organizational context. One interviewee stated that taking context into account helped them create momentum around the implementation of DT:

I think figuring out the cultural context of where it is that you are working [...] You don't just read, "Here is how ABCD methodology works," or whatever, and then you slam it into your organization because you read this is how it is supposed to happen.

In one company, there was a prevalent number-driven culture with a strong focus on evidence-based facts. After using DT for some years, the group responsible realized that finding ways of measuring the impact of their solutions would be helpful not only in their own iterative process, but also in gaining acceptance for their solutions, which were to be implemented later as new work practices across the organization.

In another organization, a union representative was involved in

early DT trials. The manager responsible for the DT initiative explained:

The reason we were even assessing this is because we have a very strong management labour partnership that means we work very closely with our labour unions. And we have to be very careful when we bring in new methods that they are a cultural fit, that they are not gonna seem like top-down management beating down on labour.

Several interviewees described how DT as a term could be difficult to understand and that the use of design terms could be confusing or even provocative, especially in relation to established design functions. Therefore, efforts were made to create company-specific terms for DT or to simply call it "innovation." This adaptation of language was described as facilitating the acceptance for their methods:

Literally it's a language transition, a lexicon. . . . When we show up, we don't say we're gonna do something different, we just speak their lexicon. . . . We do our best just to slide right into their methods.

In another company, the founder perceived DT as a way to reconnect with the company culture from the founding years, when developers had been working directly with clients on their problems. This influenced the decision to implement DT across the company—not as a specific innova-

tion process, but as part of a long-term culture. This could be seen as a reverse culture fit—in which top management consciously attempted to change the organizational culture in line with DT values and build new norms.

Convincing through experience

One commonly held belief was that DT could not be understood (and thereby appreciated) through lectures or reading—it had to be experienced. Therefore, several individuals consciously involved key stakeholders in projects and had executives participate in workshops. One interviewee described the result of letting managers experience DT and start to support user involvement in innovation work:

So we gave them [chief executive officer and top management] an opportunity to talk with customers [...] We had them come up with a bunch of ideas [...] and then we made them go back to the customers and get feedback on their ideas. I mean it was transformative—these leaders were like, "Oh my god, first of all it's been forever since I talked to a customer, I can't believe these are their problems, and, you know, wow, I thought I came up with great ideas but they were actually terrible, they didn't like my ideas.

Another interviewee explained how they managed to convince reluctant employees to do

ethnography—through letting them experience the method themselves:

And [I] just said, “I am asking you for judgment and let the work speak for itself. And after we do this, [if] you don’t find value in it, then you don’t have to do this with us again.” [...] They loved it. And it’s actually the group that now does the video ethnography class.

In the same company, a large number of stakeholders were involved in projects, mainly in order to create support for the solutions:

We are very very intentional. It requires us to work harder upfront, because we need to get more people involved, we need to do more work than is required to get the design, but it’s political, and it works—we are able to go to and spread to all of our [locations] because of it.

Overall, DT was perceived as having a tacit nature. As such, making others experience DT through short workshops and project guidance was seen as the most effective way of convincing them.

Creation of ambassador networks

Several interviewees also stated the importance of identifying and supporting DT ambassadors or advocates within the organization in what could be seen as a “viral approach.” This was done, for example, by engaging top management in executive programs and recording positive postworkshop statements. These

were then used in DT introduction workshops for other employees. In some of the companies, top management was involved in presenting DT and successful projects during internal conferences. This was done to create awareness and show the importance of the initiative. In a number of companies, the creation and support of bottom-up initiatives were seen as vital in increasing the adaptation of DT. It was believed that DT as such was more suitable for this way of diffusion:

[With “lean”], you can do more top-down, you can force it to some extent and force full structure around it, but if you don’t take the people there, they can still boycott. But I think lean is a more technocratic topic. . . . Design thinking can’t be driven by force.

The companies developed different approaches to diffuse DT among their employees. Internal training programs were developed—in some cases, as part of other training offered by the human resources function (HR). Programs were perceived as most successful if adapted to the employees’ ways of working. The participants were sometimes recorded in an internal database, and they were offered further training and support using DT in their respective parts of the organization. In some companies, a special coach or facilitator education was offered. Once completed, individuals were rewarded with a facil-

itator title and became part of a support group. Members then got a certain amount of time to support other parts of the organizations with DT activities.

To reach new employees, one manager reported a close collaboration with the firm’s recruiting and human resource function. These collaborations resulted in mandatory training programs for new employees as well as workshops during recruitment events. The creation of an ambassador network was seen as a central effort in diffusing and implementing DT in the organization—especially the involvement of top management and the internal training and certification programs for employees, as well as the collaboration with HR.

Creation of physical spaces and artifacts

Interviewees reported the importance of creating dedicated DT spaces. These spaces had a startup feel and a flexible interior that allowed for DT activities and facilitated group work. For example, the space needed to provide material and tools for prototyping and allow participants to display interview results as well as other gathered information. This was usually done through the installation of big whiteboards (or walls painted in a special whiteboard color) and with furniture that could be flexibly arranged. As such, the physical space was seen as contrasting to

established, sometimes cubical, workspaces.

In addition, the development of company-specific references and training material such as instructions for DT tools was seen as important in facilitating the use of DT. Further, individuals reported the creation of internal and external web pages that allowed exchange and discussion of information material. In some companies, advertising material was created and distributed through internal newsletters and information boards. Additionally, some projects were presented in small exhibitions and presentation events—for example, in the company cafeteria or in the traditional work environments.

Making DT happen: proposing a legitimacy perspective

Creating legitimacy is a central challenge

Management concepts such as DT introduce ambiguity and uncertainty by challenging existing practices (Suchman, 1995). In this study, the challenges identified in the large organizations relate to the overarching challenge of creating legitimacy around this new concept. This was found to be especially true in some of the companies that had existing design functions and traditional R&D structures. However, even in companies without these functions, similar challenges emerged due to an overall cultural misfit between DT and the prevailing culture. As many

companies focus on reducing failure and increasing efficiency to be profitable (e.g., Bartezzaghi, Corso, and Verganti, 1997), practices encouraging failure and exploration outside the organizational scope challenge existing norms and values. As a result, introducing DT may face even higher resistance than a concept such as Lean, which is better aligned with a more rational logic, typical to many organizations. Interviewees reported this resistance as evident in the challenge to gain organizational support and resources.

It thus seems reasonable to advocate that legitimization is a central challenge of implementing DT. Based on this assumption, the efforts undertaken by the managers in the study will be discussed from a legitimacy perspective.

Legitimizing DT

In line with Suchman's (1995) definition of legitimacy, building the legitimacy of DT can be defined as a series of actions undertaken by individuals that render DT as desirable, proper, or appropriate within an organizational context. The five types of efforts previously identified will here be discussed in light of legitimization theories.

Demonstrating the usefulness of DT was of central concern to all individuals involved in implementing DT. While external success stories seemed enough as an initial proof of concept, the creation of internal success stories and measuring

project-specific contributions became essential a few years into a DT initiative. The creation of project-related metrics legitimized DT by building cognitive legitimacy (Suchman, 1995). In addition, the DT projects had to adhere to pragmatic legitimacy, in that they were in line with the companies' larger interest of achieving innovative outcomes. Measurements seem to depend on the organizational context. In high-risk settings such as hospitals, the quantification of results seemed to take a central role, while in settings such as retail and product development, more general as well as project-related measures were seen as appropriate.

Although success stories seem to provide some legitimacy, aligning the communication of results with internally accepted standards and already established measures (e.g., patient data) is a further step in building comprehension and thus moral legitimacy. One might argue that project-specific metrics do not provide an overall legitimization of DT; yet the existence and communication of these metrics seem important to influence individual judgments of the legitimacy of DT. This could be explained by the fact that legitimacy is built individually, over time. An overall proof of value might thus be replaced by establishing a record of consistent performance (Suchman, 1995, p. 588), such as through the constant, repeated report of successful cases.

Meshing DT with organizational culture is strongly related to cultural adaptation. As such, it may primarily be seen as addressing moral legitimacy. However, the inclusion of stakeholders—such as union members—shows that pragmatic legitimacy also plays an important role. Giving influential organizational groups a role in the implementation results in an exchange of legitimacy (Suchman, 1995, p. 578). Because DT advocates the use of diverse teams from the outset, building legitimacy this way is inherently part of the concept as such. Equally, an alignment with existing practices, such as continuous improvement, creates pragmatic legitimacy because it renders results in a way that is familiar to the organization. Moreover, it influences moral legitimacy because work structures, practices, and results are tailored toward organizational standards, making it “the right thing to do.” Thus, DT is changed to fit company-specific practices, norms, and values. This can result in new practices (management innovation) as well as supplementing existing practices (improvements). Using company-specific terms and rendering DT in light of existing practices that are taken for granted also seems to make the concept easier to understand. This results in improved comprehensibility and as such influences cognitive legitimacy. An oddity was found in that in two companies the chief executive officer (CEO) helped to legitimize the

concept by connecting it to the company’s previously successful—but lost—way of working. This reverse culture fit may be interpreted as mainly relying on the CEO as a person. However, it presents an interesting account of legitimization by referring to a distant history, foreign to a majority of employees in an organization. As such, it presents a way to gain moral legitimacy by drawing on past procedures and structures (Suchman, 1995), independent of individual experiences.

Given the stated mainly tacit nature of DT, *convincing others through experiencing DT* and seeing the results was reported as being essential. Letting individuals experience DT in a workshop enhanced their ability to comprehend the approach, thus creating cognitive legitimacy. In addition, learning about user needs and addressing them in small workshops led to positive experiences that affected individual evaluations, thus creating moral legitimacy. Because legitimacy is built individually, enabling others to experience DT can be a way of bypassing an evaluation solely based on company norms and values. Further, it has been argued that DT addresses a shortcoming in management education through addressing the self-interest of individual managers (Dunne and Martin, 2006). Titles of “coach” or “facilitator” of DT, and connected rewards such as individual training, create pragmatic legitimacy. An interesting exhibit is the

statement of one employee who asked participants not to evaluate DT before experiencing it themselves. Possibly, evaluations based on moral and cognitive legitimacy are thus temporarily suspended and leave room for the creation of pragmatic legitimacy, in which managers invest a little bit of time to experience something new in a direct exchange.

When seeking to work with DT, the *creation of physical spaces and artifacts* such as training and advertising material was seen as an integral part of making DT work in an organizational context. Beyond providing space for DT-related activities, physical spaces can be seen as a symbolic display that showcases the physical embodiment of DT within an organization. As such, it not only displays moral legitimacy, but it also lends its legitimacy to employees who work within the space because it thus appears that they are doing the right thing. Further, the flexible interior of rooms decorated with Post-its advertises the product (DT) as a novel way of working with innovation. This creates pragmatic legitimacy. These “advertising characteristics” can also be ascribed to the various artifacts (e.g., instruction manuals, case reports) as well as exhibitions. Additionally, these artifacts render DT as “sanctioned” by the organization. Thus, working in these spaces and with these artifacts was seen as a way to gain legitimacy for one’s actions. As such, artifacts

not only symbolize legitimacy but can themselves become interpreted as providing legitimacy (as actors).

Finally, many companies stated the *establishment of ambassador networks*, considering the “viral approach” to be essential in disseminating DT throughout the organization. First, the symbolic involvement of top management creates moral legitimacy, as it acts in favor of DT and thereby builds pragmatic legitimacy (Suchman, 1995, p. 582), showing that DT “is the right thing to do.” Equally, a large number of employees who have participated in DT workshops will influence the moral legitimacy of colleagues. Collaborations with other units have a similar effect. The collaboration with HR seems particularly influential, as it reaches across the entire organization and is a widely accepted provider of training programs. Also, when HR includes DT in the introduction programs for new employees, this can be considered a critical function to build legitimacy on an individual and, over time, an organizational level.

The value of the legitimacy perspective

We have shown that the need for legitimization emerges out of the ambiguity and uncertainty that were found to be the result of a misfit between organizational and DT values and norms, as well as difficulties of demonstrating the benefits of using DT. Therefore, individuals who seek

to secure support and resources for DT initiatives often see themselves confronted with the challenge of tracing and measuring the impact of DT. It is proposed here that the legitimacy perspective enables us to better understand the efforts undertaken to make DT happen. These efforts all affect the perception of DT within the organization, but are also described as altering DT itself as it becomes adapted to organizational norms, values, and practices. This means that legitimization issues can be a reason for the emergence of company-specific practices (Carlgrén, 2013), rendering DT a management innovation in relation to each company. While a measurable proof of the impact of DT is often seen as the Holy Grail in large organizations, it is difficult to achieve in practice. Instead, individuals tend to conduct various other efforts to legitimize DT within their companies. Prior to their involvement with DT, interviewed individuals were seldom aware of the challenges involved in the introduction of this type of new concept. As a result, efforts to legitimize DT in the organization were seldom planned but mostly reactive and done out of necessity. This might also explain why some strategies such as “consulting doubters” (Suchman, 1995, p. 600) were not evident in most of the interviews.

Additionally, early critiques of DT in the business press (e.g., Nussbaum, 2011; Walters, 2011) have criticized the concept for trans-

forming design into a “linear, gated, by-the-book methodology” (Nussbaum, 2011) that hardly leads to any innovation. Our study highlights that managers are forced to take a number of initiatives to secure support for DT in their organizations. The result may be that the DT that takes place in organizations is quite different from the one advocated by its proponents. This study has not focused on the level of innovativeness of the DT initiatives, but its use of a legitimacy perspective adds to the debate in highlighting reasons as well as actions that contribute to a DT transformation.

Using a legitimacy perspective is useful to understand the rationales behind efforts undertaken in organizations. It can also help managers derive strategies for how to actively work with legitimizing DT and securing continued organizational support. To our knowledge, legitimization has not previously been used to understand the implementation of DT, and further studies are needed to create any generalizations around these efforts and how they may influence legitimization. However, in line with earlier research on management innovation, we believe that this is an interesting avenue for further research. It could also be interesting to compare DT with implementation of other managerial innovations, as that might lead to the identification of innovation-specific approaches, which would enrich our understanding. Similar to discussions on DT, the tendency to

argue for legitimacy can also be found in relation to design. As such, the framing of the question of value as a question of legitimacy proposes an alternative perspective and study approach.

Conclusion

This paper set out to investigate efforts made in large organizations to enable the implementation of DT. It first outlined typical challenges of the implementation of DT as perceived in the studied organizations and then accounted for five types of efforts taken to support the implementation: (1) demonstrating the usefulness of DT, (2) meshing DT with organizational culture, (3) convincing through experience, (4) the creation of physical spaces and artifacts, and (5) the creation of ambassador networks. Based on the analysis of the empirical material, it was argued that the overarching challenge was to create legitimacy for DT in the organization. It was then proposed that the legitimacy perspective, as introduced by Mark Suchman (1995), is a useful framework to understand how large companies relate to concepts such as DT.

This theoretical lens not only helps to understand the implications of our empirical findings, but can also help managers to derive strategies for how to actively work with legitimizing DT and securing continued organizational support. The research also contributes to our understanding

of the diffusion of DT as a managerial innovation inside large organizations.

One of the main challenges in making DT happen is gaining the acceptance and support of the organization. As a result, legitimizing DT within the organization becomes a central activity for managers. Here, a main focus seems to be the quantification of DT's contribution as an "ultimate proof" of its value. This seems to be extremely challenging and was not achieved by any of the studied companies. However, interviewed managers reported various alternatives that can be categorized in five general approaches (Table 2) to create legitimacy within organizations.

As these activities emerged out of necessity, this study argues that an awareness of the various kinds of and approaches to legitimacy can be beneficial to managers who seek to make DT happen.

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