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A study on strategic activities to foster design practices in a local government organization

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Abstract: In recent years, governments have increasingly pursued innovation by embedding design into their organizations. One particularly common approach to embedding design in government organization is to establish public sector innovation labs. These labs are described as contributors and facilitators of innovation in policymaking processes; however, less light has been shed on the role of in-house designers (including these labs) in fostering and managing the changes made by design practices within government organizations. In the current study, design management has been used as a theoretical lens to study the strategic activities of in-house designers in a Dutch municipality to embed design within the organization. The findings show the importance of strategic activity by in-house designers to foster design practice and resulting organizational changes and the need for participation of more organizational members in this activity. We conclude with setting an agenda for more research and practices on strategic activities to foster design practices and organizational changes in government.

Keywords: design for government; embedding design; design management; local government

1. Introduction

The growing interest in social innovation in the design field is attracting governments around the world to employ design as an innovation method. To engage in design practices, government organizations increasingly choose to "embed" design inside their organizations (Kimbell et al., 2010).

In particular, Public Sector Innovation (PSI) Labs have proliferated as a way to embed design practices within government organizations recently. Fuller and Lochard (2016) counted over sixty labs in central and regional governments in Europe alone in 2016. Often, these labs are described as spaces for civil servants to experiment with new ways of doing things and as policy innovators that propose creative policy solutions with design approaches (Carstensen & Bason, 2012; Lewis et al., 2020, p.118; McGann, Blomkamp, & Lewis, 2018; Tõnurist, Kattel, & Lember, 2017).



However, embedding design in government organizations goes beyond applying design approaches to public policy processes. Design practices can influence people's mindset, practices, culture, and structure in government organizations, and thus the responsibility of inhouse designers (including the labs) can extend to managing the resulting changes within their organization. In private sector organizations, designers have been engaged in strategic activities known as "design management" to create more value and change by design in these organizations. However, in the context of government organizations, these strategic activities of in-house designers have not been explored in depth (Junginger & Sangiorgi, 2017).

To contribute to the understanding of strategic practices to foster design and organizational change in government organizations, we investigated how design practices have been fostered over time, what the strategic activities of in-house designers have influenced, and what changes have been made by design in a Dutch municipality. We conducted this study through interviews with in-house designers and organization members engaged in design practices. The research findings show the importance of strategic activity in fostering design practices and related organizational changes, and the need for the participation of more organizational members in this activity.

In the following section, we review literature regarding embedding design and design management activities in the context of government organizations.

2. Literature study

Kimbell et al. (2010) explain that embedding design in an organization means that the organization no longer applies design to projects in a one-off mode, but hires in-house designers and may apply design "to its whole structure and all its functions" (p.2).

However, in reality, embedding design in a government organization can mean a wide range of design uses and a variety of dimensions of relevant change within the organization, from being used as a part of the policy process to design "infiltrat[ing] every organizational nook and cranny" (Meyer, 2013, p.192). Therefore, embedding design in government organizations involves creating more value with design in these organizations.

However, to date, there have been few answers to the question of how to embed design and create more value with design in government organizations. One recurring claim is that design needs to be integrated with the existing government ways of working. Dorst (2015) described this as "adaptation":

"When core principles are transposed to other fields by practitioners abstracting from everyday design practices and connecting these fundamentals to the corresponding needs in the target field, the actor must delve much more deeply into the practices, and adapt this understanding to the new use context" (p.23).

There are studies examining design practices in government organizations from this perspective. In the Netherlands Court of Audit (NCA), Meijer-Wassenaar & Van Est (2019) took two

audit cases and explored what value design approaches add to the auditing process. They found that auditors take "a deductive and/or inductive approach to objective knowledge.... [while the] design process uses iteration to allow for new information and to understand the user's needs" (p.1064). They concluded that "the NCA should integrate the audit process with the design process, the knowledge-centred approach with the impact-centred approach" (p.1064).

Malmberg (2017) had a similar view but approached the issue from a learning perspective. According to her, the process by which organizations learn new practices evolves from exploratory learning to transformative learning, and then to exploitative learning. The transformative learning phase is an "assimilation" phase where the organization integrates the new knowledge of design into "the organization's existing structures, routines, and processes in order to later be exploited" (p.211). However, the selected cases in her study involved new projects/programs, and thus did not yield many insights into how the transformative and exploitive learning works with design practices.

In the meantime, some scholars emphasized the role of management in the process of embedding design practices in government organizations. Deserti and Rizzo (2014) claimed that "little reflection is being made on how public organizations can internalize and integrate the new knowledge and how the change process can be fostered or managed" (p.87). Junginger and Sangiorgi (2017) brought the concept of design management to the public sector arguing that "it is obvious that the activities and efforts of design in the public realm require new ways of design management" (p.491). As they pointed out, design management has been mostly discussed in the context of private sector organizations. Design management is defined as using design knowledge and resources for the management of an organization (de Mozota, 2011). In short, the following activities were identified as design management in the design management literature:

- Resourcing design capability and embedding it in various levels of an organization (Mortati, Villari, & Maffei, 2014)
- Connecting business (existing practices of an organization) and design (Jevnaker, 2000)
- Elevating design as a strategic practice (Jevnaker, 2000; Micheli, Perks, & Beverland, 2018)
- Communicating value of design, legitimizing design within an organization (Jevnaker, 2000; Rauth, Carlgren, & Elmquist, 2014)
- Changing organizational culture and integrating design into an organization's DNA (de Mozota, 2011)
- Formalizing design into the routine, process, and structure of an organization (Malmberg, 2017; Micheli et al., 2018)

What Junginger & Sangiorgi (2017) most likely meant above by the need for "new ways of design management" in the public sector is that government organizations are different from private organizations, and thus requires different approaches. Clarke and Craft (2017)

stated that the public policymaking process is so complex and political that there is often no room for "design." Staff at Colombia's Innovation Centre (a PSI Lab) explained about the closure of the Centre, "Some traditional politicians feel that innovation is a threat because they don't want to have to change the way they do politics" (Apolitical, 2019). In other words, the specificity of the government as an organization, including its political nature, may influence how design management works in government organizations.

Lastly, from the design management perspective in the context of government organizations, the study by Terry (2012) on the Australian Taxation Office (ATO) is important. Based on actor network theory, she unraveled how multiple human and non-human actors played a role in the evolution of design practices within the ATO. Human actors in various design roles (designers, design champions, and design managers) have formed communities of design practices both inside and outside the organization. Non-human actors of "standardized packages' such as Design theory and methods," workshops, design roles, and forums also contributed to its organizational change. Since the ATO's design journey started in 2000 at a design conference directed by Richard Buchanan, "multiple strategies and engagement of many different actors" have been carried out. Most importantly, the three design roles placed in all levels of management allowed the "managing by design" – which is, according to her, the gist of what's going on in the ATO.

Meyer (2013) evaluated the ATO as "the largest and most complete design transformation project to be documented to date" (p.192). However, the ATO case raises the question of whether such design transformation is possible in other governmental organizational contexts (e.g., central, state, regional or local governments). In this regard, the current study aims to gain insight in how design practices have been fostered over many years in a local government context.

3. Method

This research was conducted through a case study with a qualitative approach. Case study is a research method that investigates a phenomenon of interest within a boundary of a case (Yin, 2014). Therefore, it is a suitable research method to study "the evolution of design practices within an organization" – the unit of analysis in this study. In order to understand how organizational members experience design practices at the workplace, the data were collected through interviews.

3.1. Case: The Municipality of Eindhoven

Eindhoven is the fifth largest city in the Netherlands (population of 231K) and is known as the "design capital" of the Netherlands ("This is Eindhoven," n.d.). The Dutch Design Week, one of the biggest design events in Europe, is held there every year in the city. Philips was founded in this city, and it is also home to two well-known design schools and Philips Design Studio. The municipality embedded design by hiring designers in existing departments, instead of forming a separate unit such as a PSI Lab.

The Municipality of Eindhoven is selected from among governments in Europe using the following criteria: 1) its designers are hired in-house to embed design practices within the organization; 2) the design practices have been embedded longer than three years because a shorter history of design practices may mean a scarcity of both changes created by design as well as the activities to foster such changes; and lastly 3) its in-house designers have an explicit strategy to foster design practices within the organization. Before the data collection began, the first and second authors met with in-house designers to ensure that the candidate organization satisfied all these criteria for use as a case for this study.

3.2. Data collection

Data for this study were obtained by interviewing three groups of employees relevant to design practices – in-house designers, design sponsors, and project managers (see the table below). In-house designers are defined as design experts employed within the organization to build its design capabilities. The design sponsors are non-designer members of the organization at senior management positions, who can thus support the dissemination of design practices within the organization. Project managers are non-designer members of the organization at a manager level who choose to either use or not use design approaches in their projects. All these interviews were conducted in a semi-structured manner.

Table 1. In	formation	ahout	interview	participants
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Code	Description (position)	Department	Work years
P01	In-house designer	Strategy	4
P02	In-house designer	Human resources	2
P03	Design sponsor (Head of the department)	Strategy	20
P04	Design sponsor (former design program manager)	Strategy	13
P05	Design sponsor (Head of the department)	Human resources	8
P06	Project manager	Urban planning	7
P07	Project manager	Urban planning	10
P08	Project manager	Human resources	19
P09	Project manager	Social domain	5
P10	Project manager	Urban planning	9

Table 2 presents the research questions in relation to the interview questions. For the first research question, in-house designers and design sponsors were asked about key events related to design practices within the organization. For the second research question, in-house designers were asked what activities they had been engaged in to foster design in the organization. For the final research question, project managers and design sponsors were asked what they think about design practice and related changes within the organization. When

¹ In a previous study by the authors (Kim & van der Bijl-Brouwer, 2019), it was found that not all designers inside government have a clear strategy to foster design practices in their organizations.

interviewing the in-house designers, we also asked them to draw on a piece of paper the events and activities over time (Figure 1). These drawings were helpful in reconstructing the timeline of events related to design practices within the organization.

Table 2. Research questions and interview questions

Research questions	Interview questions
1. What has been done to embed design practices within the organization?	(For in-house designers and design sponsors) Looking back on your years in the municipality, what were the important events in relation to design practices? Can you draw a timeline of them? Who were the contributors? What have been people's responses to those events?
2. What are the strategic activities of in-house designers to foster design in the organization?	(For in-house designers) What was your goal with design practices? What have you done to foster design practices or achieve your goal? What are the things that you have learned so far, and what are your current concerns?
3. What have been the changes made by design in the organization?	(For design sponsors and project managers) When and how did you first hear of design practices? How do you practice design? Do you see any changes in your work, your colleagues' work, or the organization because of design practices?

3.3. Data analysis

Based on the interviews with in-house designers and design sponsors, we first reconstructed the timeline of events related to design practices in the organization. We then sought answers for the research questions through a coding and thematizing process. In this process, we compared the designers' responses with those of non-designer participants to check if they had similar views on the changes made by design within the organization. In the coding process, the literature of design management helped us to identify strategic activities of inhouse designers to foster design in the organization.

4. Findings

This section consists of three parts. First, we provide a brief timeline of the events related to design practices within the organization. Second, we discuss three strategic activities we identified whereby in-house designers foster design within the organization. Finally, we present the changes made by design within the organization.

4.1. Evolution of design practices in the Municipality of Eindhoven

Design practices in the municipality began around 2008, as several interviewees have recalled (P04, 07, & 10). A "visionary" alderman, inspired by a project by Philips Design, saw the possibility of using design approaches to address the problems of the city. Then, "a study group" (P04) for design was set up within the city council. In 2009, when the municipality bid

for World Design Capital 2012,² its slogan was "Creating a caring city," which implied, as P04 put it, "exactly what we meant to do, to use design to tackle our own problems."

The municipality did not win this competition, but the city council granted a design program, which invited designers and design students in the city to participate in tackling the societal problems of the city. However, the organization "didn't internalize design thinking" (P04) as the result of this program. Thus, the design program manager proposed hiring designers as employees. The organization hired only one designer, as this was a period when the municipality went through budget cuts. It was expected that one designer could make a "snowball effect" (P05) in this organization with two thousand employees.

Table 3. Timeline of events related to design practices in the organization

2008	An alderman proposed the idea of using design to tackle problems in the city
2009	Eindhoven municipality bid for the World Design Capital with the slogan, "Creating a caring city"
in between	A design program was conducted over a period of four years
2014	The program ended with the decision to hire an in-house designer
2015	The first designer was hired
in between	The first designer went through a messy phase of making sense of the organization The first designer collaborated with external designers
2017	The second designer was hired In-house designers reflected on the last two years and decided to focus on long term projects for more impact
2019	Four designers are present in different departments In-house designers are more involved in organizational strategy projects

The first designer was positioned in the strategy department. For the first few months, she talked to people who "would be open and interested in design or new ways of working" (P01) and participated in several projects. She made sense of the organizational context during this period, which she described as a "messy phase." After this period, this designer proposed hiring at least two more designers, but it took another year to hire the second designer. Thus, the first designer collaborated with a team of external designers during this period.

By the time the first designer's two-year contract with the municipality was ending, she reflected on the previous two years. Her first key insight from this reflection was that she did not observe non-designer colleagues having as many mindset changes as she had expected.

"I thought in the beginning ... by designers getting to know public servants, you start a different kind of conversation. So, then you kind of question what is going [on], so it

² The World Design Capital is awarded every two years by the World Design Organization to a city in recognition of its "effective use of design to drive economic, social, cultural, and environmental development" ("World Design Capital," n.d.).

[would] happen. The mindset [change], it [would] happen.... But in the end, it didn't happen as much" P01

A second insight was that she realized the need to involve people in executive positions — and not just project managers — in design practices. She said that senior managers and political leaders are "where the reframing usually starts in this kind of organization [and] where the really big change was happening." When the first designer's contract was renewed, she decided to focus only on a few long-term projects that involve people in diverse layers across departments and the hierarchy of the organization (this will be further explained in the next section).

At the time of the interview, another two years had passed since this adjustment (the decision to focus on long-term projects). The first designer evaluated that the past two years focusing on long-term projects had been more successful than the first two years.

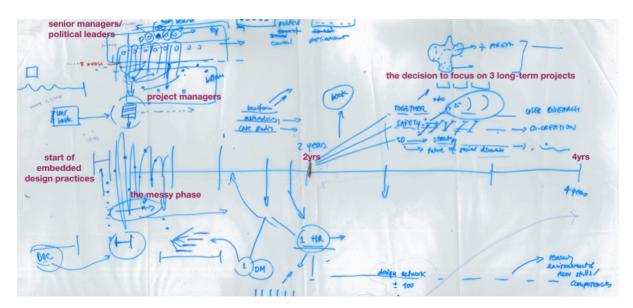


Figure 1. Drawing of the first in-house designer about the events related to design practices

4.2. Strategic activities of in-house designers to foster design

In the practices of in-house designers, we identified three strategic activities to foster design in the organization: disseminating design practices, making a connection between design and organizational problems, and elevating design to a strategic practice.

Disseminating design practices

The in-house designers disseminated design practices within the municipality through three activities. First, the first designer made design visible within the organization. The head of the strategy department, the first designer's direct boss, believed it to be important "to give this new way of working a face [and] make it approachable" (P05). The first designer made herself visible in the organization through presentations and participation in projects. P07

said that "the novelty of a designer was ... really quickly among all the people in the management layers of this organization." P03 mentioned that the first designer was "everywhere helping with difficult sessions and workshops and trainings." The first designer was even described as "the personification of design thinking" (P09) as she promoted design practices within the organization and in the city.

Second, the in-house designers disseminated design practices by showing good results in projects, to which external designers also contributed. Several interviewees (P04, 08, 09& 10) talked about positive project outcomes with design approaches. Especially, P04 described how the first designer impressed the organizational leaders through participatory design sessions with citizens.

"They [external design agency] helped us by also [organizing] different sessions with different parties it was really a different approach. And I had very positive reactions from the different stakeholders." P09

"Those aldermen participated in one or more sessions and they saw how she handles this and how she gives the inhabitants the feeling that they are listened to, which for politicians is very important because those inhabitants are the ones re-electing them." P04

Lastly, the in-house designers provided design training and coaching. Training was given only in the early days, because the in-house designers found that the trainees could not "transfer the learned stuff into their daily jobs" (P02). Coaching took place organically. When necessary, non-designer colleagues approached the in-house designers, who then coached them on the job. Coaching also took the form of expert advice, "making sure that the right type of designer was allocated to the right type of project when [project managers] work with external designers" (P05).

Making a connection between design and organizational problems

As briefly explained previously, at some point of their journey, the in-house designers decided to use a few long-term projects as a means to "actually make a difference" (P01). In these long-term projects, they intentionally involved people from different departments and hierarchies of the organization to show organizational leaders what hinders design practices, described as "working together" in the quote below.

"one way to overcome this barrier (silo working) is to involve more people than only the people from the pilot projects. So that's why this group [pointing senior managers in her drawing] is here because they learn the same things as the [projects managers] What we take from this project is where the hiccups are, what really blocks us from working together So, the political layer knows now why certain things are not working inside the organization." P01

In-house designers referred to the connection of design to organizational problems as "anchoring." The quote below, illustrates how the first designer interpreted her job as finding

the anchor points, the places where design becomes more relevant to the organizational needs.

"My job was really open in the beginning. It was first to find the anchor points, first to find out what's actually going on and then to do something with it So, by doing all this [pointing to the first year's work in her drawing] ... we kind of [made a clearer connection] with the problems of the organization." P01

The in-house designers found the anchor points in citizen understanding, internal collaboration, and learning. P02 explained that these anchor points were found through "continuously reflecting together with the designers to compare what is happening in different projects ... what we were seeing a lot."

The in-house designers stressed that they shared these insights with leaders of the organization. However, the understanding of design as a means for organizational change did not seem to be shared broadly with the organizational members. The head of the strategy department (the direct boss of the first designer) was the only person among all the non-designer interviewees who perceived design practices in this way (see quote below).

"My assignment was how to introduce design thinking and get a kind of a new tool kit for our problems. And the realization that the transformative power might be there was not by me thought in advance but came realization in the more projects we did and how people got affected by it." P05

Elevating design to a strategic practice

The last strategic activity of in-house designers to foster design in the organization was to elevate design to a strategic practice. As seen in the quotes below, design was not initially seen as a strategic practice in the organization. The in-house designers became more involved in projects for organizational strategy only in recent months.

"In the last six months, I did a lot of work myself for the boards. So, I helped them to define the strategy of their own" P01

"Something else I noticed the last few months is that we are working on a different level, like we're working with the management of the whole organization more." P02

There was some evidence that this change was the result of in-house designers having gained the trust of the organizational leaders.

"The strategy department needed a different approach. And what [head of the strategy department] did was he hired the old office where I used to work (an external design agency) ... I asked him, why did you do that? And he said, OK, we couldn't ask you ... because you're in the department. So, we asked the people that were most close to the work that you do because I trust very much that the strategy that you do is something we could benefit [from] the most." PO1

"From the role I'm doing now, I'm doing a lot with aldermen and with the mayor. And I hear whenever they have a problem, they ask [the first designer] to solve it." P04

4.3. Changes made by design in the organization

Regarding the changes made by design in the municipality, our study suggests that the awareness of design has broadly changed, and some employees have now gained new design capabilities. Yet, design practices seemed to be rather unstable in the organization, as further explained below.

Regarding design awareness, two interviewees mentioned that there is a broad awareness of design within the organization. Many people in the organization now know that design is "more than making a nice chair" (P04) and that "it's a process ... [and that] we have [hired] designers" (P10).

In addition, now the municipality has some employees with design capabilities. There was a group of employees who understand the value of design and sponsor it. The quote below shows that design sponsoring is closely related to the sponsor's design knowledge.

"Some things didn't go [well] in that department.... And they asked me, can you [find out] what's going well [and] what's not going well? ... I said to the managers that I think design thinking is the best way to do this project because it makes clear what the experiences of the people of the department could [be]." P08

A group of employees used design approaches by themselves at work. In-house designers divided these people into two groups: those who only use design tools and those who also understand the design mindset.

Despite these positive changes, there have been no indications that design practices have yet become part of the organizational routine. In-house designers described the current state of design practices in the organization as "everywhere and nowhere" (P01) and "fragile" (P02). Decisions on design practices were still up to individual project managers. One project manager said that using design approaches in a project should be a "conscious choice" (P06), which involves taking some risks under time and budget pressures.

In addition, project managers perceived design as a useful practice for internal/external stakeholder collaboration but not as a practice to create value beyond that. Several project managers (P05, 07, 08, 09& 10) said they are increasingly placed in situations where they have to work with other parties in the city. P05 described that the co-creation with citizens is "a social tendency," while P09 said that public problems are getting "more complex, [and thus] you need to work with other parties." Regarding the organizational changes related to design practices, P07 said that although design helps the municipality change toward a collaborative way of working, "I don't know whether the change wouldn't have been there if we didn't have the designers."

5. Discussion

This study of design practices within the Municipality of Eindhoven provided a timeline of what has been done to embed design, identified the strategic activities of in-house designers

to foster design practices, and revealed changes made by design in the organization. A limitation of this study is that it may not capture the organization-wide experience with design practices because the data was obtained only from design stakeholders in the organization. Nevertheless, it provides the following insights regarding design practices within government organizations.

The findings showed first the role of in-house designers in fostering design practices in the organization is important. In-house designers in the municipality constantly reflected on the changes by design in the organization and adjusted their strategy to grow its impact. As a result, they have elevated design to a strategic practice, built broad design awareness, and gained new design capabilities in some employees.

However, at the same time it was revealed that multiple actors are involved in the evolution of design practices in the organization. There were design sponsors who made the decision to embed design and hire designers within the municipality and who encouraged employees to participate in design practices. There were also project managers in need of an alternative approach in situations where they had to work with internal/external stakeholders. Although in-house designers tried to relate design to organizational problems, many of the interviewed non-designer employees did not perceive design as a means for organizational change.

What would be the next step in the evolution of design practices in this organization? According to Mutanen (2008), design can evolve in a corporation from "an individual, professional ability" to "a collective, organizational capability" (p.502). This means that when design is integrated as part of an organizational innovation process or used for an organizational strategy, it can create more value within the organization. Many scholars agree with this view (Jevnaker, 2000; Micheli, Perks, & Beverland, 2018; Mortati, Villari, & Maffei, 2014). In this respect, design is being perceived as a strategic practice, but has not yet been integrated as a process of the organization in this municipality. Which new organizational processes and structures emerge as design is embedded in government organizations is a topic that requires more exploration. Scholars have only speculated that the new processes and structures will be related to new ways of collaborative, networked governance as design supports participatory practices in government (Mortati, Christiansen, & Maffei, 2018).

Another way to reflect on design practices of this organization is to examine what is being said around the design practices in the organization. Marshak, Grant, and Floris (2018) claimed, "Successful organization-wide change requires new organization-level discourses to emerge to persuade stakeholders of the value and purpose of the change" (p.85). In this perspective, design should be widely discussed in the organization not only as a useful practice but also a practice for obtaining further value (e.g., organizational transformation). This could mean more organizational people participating in the "managing by design" activities as we have seen in Terry (2012).

6. Conclusion

The topic of strategic activities to foster design practices and create more value with design in government organizations has not yet been explored much. By investigating how design practices have been fostered in a Dutch municipality, this study contributes to the current design literature as follows: It has demonstrated the importance of strategic activities to foster design in government organizations. It has shown that these strategic activities require the involvement of not only in-house designers, but also more members of the organization. Lastly, this study suggested additional research areas, such as new organizational processes and structures supporting design practices and discourse on the legitimacy of design practices in government organizations.

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