

# Building Reflexivity Using Service Design Methods

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Josina Vink<sup>1</sup> and Kaisa Koskela-Huotari<sup>2</sup>

## Abstract

The transformative potential of service design rests on its ability to enable people to intentionally shape institutionalized social structures. To avoid simply reproducing social structures unconsciously, people need reflexivity—an awareness of existing social structures. Scholars suggest that the use of service design methods can enhance people’s reflexivity. However, the theoretical underpinning of this effect remains unclear, which in turn limits the realization of service design’s transformative potential in practice. In response, using an abductive approach that combines theoretical and empirical inputs, we develop an integrative framework that explains the mechanisms by which service design methods can increase people’s reflexivity. The current study contributes to the evolving service design discourse with an alternative categorization of service design methods, based on their affordances for different modes of reflexivity. The framework also reveals the underlying processes by which the use of service design methods can support people’s work with institutionalized social structures as design materials to enable transformation. This research supports a more thoughtful use and strategic development of service design methods to support transformative aims.

## Keywords

service design, reflexivity, institutionalization, social structures, abductive research

*“Not everything that is faced can be changed, but nothing can be changed until it is faced.”*

—James Baldwin

Around the world, organizations and communities are enthusiastically adopting service design to drive transformation (Patricio et al., 2018). Increasingly, scholars are shifting their views of service design to acknowledge it as a transformational force within social systems (Holmlid, Wetter-Edman, and Edvardsson 2017; Sangiorgi 2011). Longitudinal studies in various contexts, such as a Norwegian telecom company (Kurtmollaiev et al. 2018) or Australian emergency services (Akama 2015), demonstrate how service design can catalyze change in institutionalized social structures over time. Vink et al. (2021) propose a definition of service design as intentionally shaping institutionalized social structures to facilitate the emergence of desired value cocreation forms. Their work highlights *reflexivity*, or an awareness of existing institutionalized social structures, is essential to this effort, because otherwise people simply reproduce rather than reform the structures surrounding them (see also Ruebottom & Ellen R, 2018; Suddaby et al., 2016). In this way, the transformative potential of service design rests at least partly on its ability to enhance people’s reflexivity.

Some recent studies highlight connections between service design methods and reflexivity (Akama and Prendiville 2013; Vink et al. 2019; Wetter-Edman, Vink, and Blomkvist 2018),

though how the use of service design methods can lead to reflexivity is not well understood. Without this knowledge, the increased adoption of service design methods globally risks the spread of superficial uses, with limited results (e.g., Akama and Prendiville 2013). The mere adoption of methods, without understanding the underlying principles that guide their use, cannot produce the transformative outcomes for which they were developed initially. Furthermore, the uptake of such methods, without any reflection on how they work, can create the risk of embracing service design practices that impose one dominant culture on others (Akama, Hagen, and Whaanga-Schollum 2019)—a scenario that undermines the institutional complexity required to creatively shape institutionalized social structures (Sitaloppi, Koskela-Huotari, and Vargo 2016). Thus, understanding the mechanisms by which service design methods enable people to build reflexivity is essential to realizing the transformative potential of service design practice

<sup>1</sup>Oslo School of Architecture and Design, Oslo, Norway

<sup>2</sup>Department of Marketing and Strategy, Stockholm School of Economics, Stockholm, Sweden

### Corresponding Author:

Josina Vink, Institute of Design, Oslo School of Architecture and Design (AHO), Maridalsveien 29, Oslo 0175, Norway.

Email: [Josina.vink@aho.no](mailto:Josina.vink@aho.no)

and also supporting ongoing efforts to enhance critical reflection on its methods and their underlying assumptions.

The purpose of this study is to understand how the use of service design methods aids in building people's reflexivity. To do so, we take an abductive approach that involves systematically combining inputs from empirical observations and existing theory (Dubois and Gadde 2002). This abductive approach integrates four sources of evidence: (1) first-hand experiences of service design practice, its methods, and extensive observations of their use; (2) a database of methods commonly used in service design practice, assembled from popular books and validated with a survey of service designers; (3) semi-structured interviews with service designers, focused on how and why they use service design methods in their work; and (4) literature on reflexivity from management and social sciences.

In turn, this research contributes an integrative framework to the evolving service design discourse; it specifies and explains the mechanisms by which the use of service design methods helps people build reflexivity. With this integrative framework, we make two key contributions. First, this study shows that service design methods have varying affordances for six modes of reflexivity: temporal, material, corporeal, relational, cultural, and cognitive. Understanding the multi-modal means by which service design methods can build reflexivity supports the development of an alternative categorization of service design methods, that aid people in building a clearer awareness of their service context. Second, the framework outlines three processes facilitated by the use of service design methods through which people build reflexivity: revealing hidden structures, noticing structural conflict, and appreciating structural malleability. These core processes make it possible for people to work with institutionalized social structures as service design materials and intentionally shape them over time. As such, the framework lays a foundation for a more thoughtful use and strategic development of service design methods to support transformative aims.

## Theoretical Background

### *Service Design as the Intentional Shaping of Institutionalized Social Structures*

Service design is not merely a phase in a new service development process; it constitutes a transformational force within social systems (Holmlid, Wetter-Edman, and Edvardsson 2017; Sangiorgi 2011). This transformative potential stems from its ability to enable people to shape social structures intentionally (Akama, 2015; Joly et al., 2019; Patrício et al., 2019; Windahl & Wetter-Edman, 2018). Kurtmollaiev et al. (2018) show that when an organization adopts service design methods, its members better recognize problems with the dominant institutionalized social structures and undertake significant changes that lead to the emergence of a new set of symbols, practices, and social structures. Other recent studies similarly recognize service design methods as a valuable way to stage disruptive

experiences that help people break free from ongoing reproduction of existing institutionalized social structures (Wetter-Edman, Vink, and Blomkvist 2018) and reshape the mental models that underpin institutionalized social structures (Vink et al. 2019). Noting that institutionalized social structures are key coordination mechanisms in service exchange Vargo & Robert F (2016), Vink et al., (2021) propose that these structures and their physical enactments are the central materials of service design.

To establish the properties of institutionalized social structures as service design materials, we draw from institutional theory, the study of "the processes and mechanisms by which structures, schemas, rules, and routines become established as authoritative guidelines for social behavior" (Scott 2005, p. 408). Institutional scholars argue that social structures, in their most basic form, are mutually agreed typifications that identify categories of people and their appropriate activities and relationships (Berger Peter & Thomas Luckmann, 1967). Over time, such typifications can *institutionalize* and gain objectivity or a law-like status (Berger and Luckmann 1967). When social structures institutionalize, they become social orders that are able to reproduce themselves (Jepperson 1991). The most entrenched and widespread social structures are institutions (Colyvas and Jonsson 2011; Giddens 1984), which come in various forms, including codified laws, informal social norms, or cultural-cognitive meanings (Scott 2014). They typically are parts of more comprehensive, interrelated assemblages or arrangements (Greenwood et al. 2011; Vargo and Lusch 2016). Institutionalized social structures exist at multiple levels of aggregation, from a handshake between individuals to broad legal systems based on due process (Greenwood et al. 2008).

After being institutionalized, social structures have three particular properties. First, they can be widely shared and automatically reproduced, so people are no longer consciously aware of their existence (Greenwood et al. 2008; Jepperson 1991; Zucker 1983). In essence, they are *invisible* to the individuals and collectives that internalize them. Second, due to their law-like status, institutionalized social structures tend to be *taken for granted*, to the extent that "alternatives may be literally unthinkable" (Zucker 1983, p. 5). Such "taken-for-grantedness is distinct from conscious awareness," because a person might scrutinize a social structure, such as a formal law, carefully but still take it for granted as an external, objective constraint (Jepperson 1991, p. 147). Third, when social structures institutionalize, they are "characterized by inertia, a tendency to resist change" (Scott 2005, p. 408) and thus remain *enduring* in nature (Giddens 1984; Greenwood et al. 2008). These three properties—invisibility, taken for grantedness, and endurance—make institutionalized social structures difficult for people to shape intentionally (Lawrence, Leca, and Zilber 2013).

### *Reflexivity as a Prerequisite of the Intentional Shaping of Institutionalized Social Structures*

Institutional theory seeks to address how social structures change, despite the pressure toward stasis created by

institutionalization (Dacin, Goodstein, and Scott 2002; Greenwood and Suddaby 2006; Powell 1991). Institutional change can occur unintentionally (Micelotta, Lounsbury, and Greenwood 2017), but service design involves intentional efforts to shape the institutionalized social structures, so it is primarily linked to institutional work (e.g., Vink et al. 2021; Windahl and Wetter-Edman 2018). Institutional work refers to the “purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions” (Lawrence and Suddaby 2006, p. 215), such that it “focuses on situated practices of actors *reflexively* engaged with the institutions that surround (penetrate) them” (Lawrence, Suddaby, and Leca 2011, p. 56, emphasis added). Within institutional theory, studies of people’s intentional efforts to influence institutionalized social structures thus emphasize *reflexivity*, an awareness of existing social structures, as a critical concept for understanding people’s ability to engage in such intentional action (e.g., Lawrence, Leca, and Zilber 2013; Lawrence and Suddaby 2006; Ruebottom and Auster 2018; Suddaby, Viale, and Gendron 2016).

Reflexivity implies awareness of the constraints and opportunities created by surrounding social structures such that people can recognize the mutability of their social world (Suddaby, Viale, and Gendron 2016). Without this awareness, people likely reproduce the institutionalized social structures that they have internalized (Berger and Luckmann 1967; Jepperson 1991). Both cognition and context are part of reflexivity. On the one hand, scholars studying reflexivity focus on what happens internally, such as the development of mindsets (Voronov and Yorks 2015) and internal conversations (Mutch 2007). On the other hand, scholars suggest that greater reflexivity stems from a focus on individual, embedded structural positions and the extent of people’s social skills (Suddaby, Viale, and Gendron 2016), as well as acts of disembedding from one context and re-embedding in another (Ruebottom and Auster 2018). By including cognition, the institutional theory view of reflexivity is closely connected to concepts such as introspection (Mill 1891), inner speech (Peirce 1984), and reflection (Woolgar 1988). By simultaneously emphasizing the context though, this view distinguishes reflexivity from these other concepts and acknowledges its associations with broader sociological literature, in which reflexivity is a relational and cultural concept (Donati 2011; Mouzelis 2010). Even if studies on reflexivity based on institutional theory emphasize differences in the degree of reflexivity among individual actors, by acknowledging that only some people can remove their institutional blinders (Mutch 2007; Suddaby, Viale, and Gendron 2016), there remains little understanding of how reflexivity develops (Lawrence, Leca, and Zilber 2013) or can be built in practice (Ruebottom and Auster 2018).

Aligned with institutional theorists’ interest in reflexivity, research in service design proposes a novel view of service design methods as instruments of inquiry that augment the ability of designers to perceive situational facets that otherwise might remain hidden (Dalsgaard 2017). Service design methods help designers unlock tacit knowledge and support perceptions

of the context (Akama and Prendiville 2013). The use of such participatory, embodied methods can catalyze awareness of institutionalized social structures, inhabited by both the self and others (Vink et al. 2019; Wetter-Edman, Vink, and Blomkvist 2018). According to service design scholars, to achieve intentional, long-term change in social systems, service design must first build reflexivity (Vink et al. 2021). However, we lack a theoretical description of how using service design methods enables people to cultivate awareness of invisible, taken for granted, enduring structures.

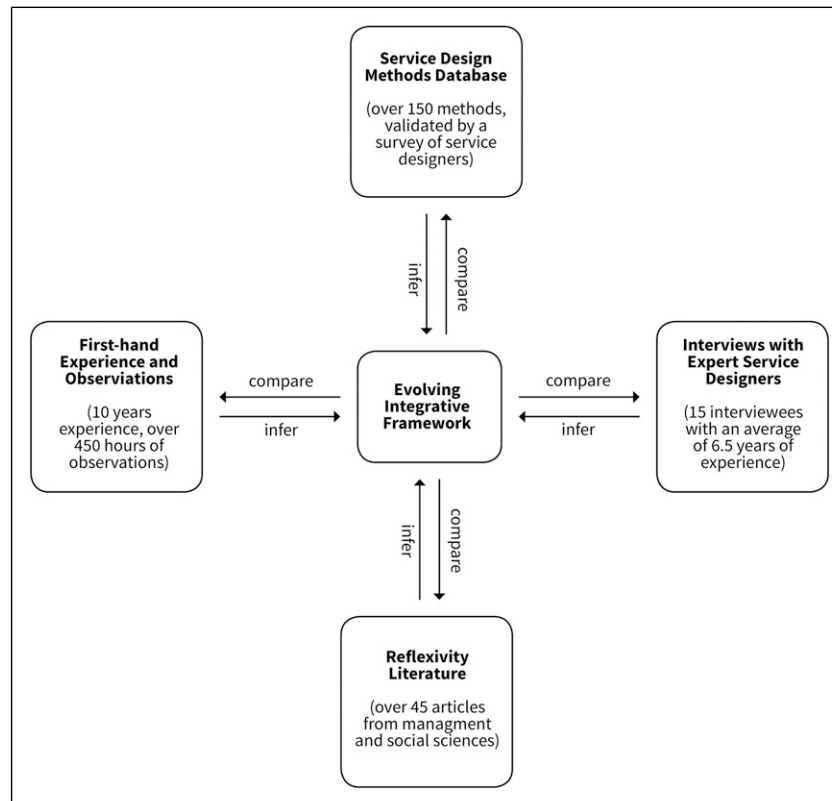
## Methodology

### *Abductive Approach With Multiple Sources of Input*

To enhance understanding of how employing service design methods helps people build reflexivity, we adopt an abductive approach that works between empirical and conceptual domains (Van Maanen, Sorensen, and Mitchell 2007). This approach is particularly appropriate for developing theory that is both novel and practical (Nenonen et al. 2017). Abduction involves a process of systematic combining, where the “researcher, by constantly going ‘back and forth’ from one type of research activity to another and between empirical observations and theory, is able to expand [their] understanding of both theory and empirical phenomena” (Dubois and Gadde 2002, p. 55). As Figure 1 details, to support the process of systematic combining, we used multiple sources of input, from which we derived inferences and compared findings while developing an integrative framework of how people can build reflexivity using service design methods. As we noted in the introductory section and detail next, these sources include first-hand experience and observations of uses of service design practice and its methods, a database of methods commonly used in service design practice, semi-structured interviews with service designers, and a review of literature on reflexivity in management and social sciences. With these diverse inputs, we achieve triangulation and a more comprehensive understanding of our study topics, including accounting for discrepancies and contradictions (Flick 2018).

First, this study leverages the first author’s professional experience as a service designer, who has employed service design methods for approximately 10 years in three different countries. The first author also engaged in more than 450 hours of observations over a nearly 4-year period at Experio Lab, a network of embedded groups that employ service design to catalyze change in the Swedish healthcare system. This practical experience with the use of service design methods, as well as up-close observations of their use by other service designers, informed inferences and interpretations of the empirical data, grounding these efforts in tacit knowledge and an in-depth understanding of actual applications of the methods in practice.

Second, to support a systematic analysis of the relationship between service design and reflexivity, we developed a database of commonly used methods, as reported in popular service design books available as of December 2017. The chosen books



**Figure 1.** Systematic combining to build an integrative framework with multiple sources of input.

explicitly focus on service design and offer a compilation of a wide array of methods; titles included *This Is Service Design Thinking: Basics, Tools, Cases* (Stickdorn and Schneider 2011), *Designing Services with Innovative Methods* (Miettinen and Koivisto 2009), and *Service Design: 250 Essential Methods* (Curedale 2013). Such texts significantly influence both the training and practice of service designers (Akama and Prendiville 2013). In an Excel spreadsheet, we gathered the names and descriptions of more than 150 unique service design methods, then eliminated duplicates (e.g., methods with different names that referred to the same process) and extremely similar versions. For example, we removed many brainstorming methods with slight differences and similar observation frameworks, retaining representative versions to capture the diversity of approaches.

To ensure the methods in this database reflected methods used in service design practice, we conducted a validation survey of service designers. Each method received ratings from 20 service designers with an average of 5.9 years' experience in service design. The sample pool for the survey was people with training related to service design and more than 2 years of service design practice experience. We asked each service designer to rate the extent to which each method reflects service design practice on a scale where 1 indicated "not at all reflective of service design" and 7 was "fully reflective of service design." Using these ratings, we classified the methods in the database into three categories: (1) core service design methods, with an

average a rating of 5 or more, which applied to 68 methods; (2) auxiliary service design methods, which scored between 5 and 4 on average, involving 54 methods; and (3) peripheral service design methods, which averaged ratings of less than 4 and included 27 methods. The survey enables us to exclude some methods that might have been mentioned in the books but are not really commonly used in service design practice. For example, the Fishbone diagram, a fishbone-shaped cause-and-effect diagram, is cited in some books but tends to be used more for quality improvement processes, not service design practice, as revealed by the survey. [Supplementary Table A](#) in the Online Appendix breaks down the service design methods in the database, along with descriptions and their ratings. The short descriptions come from the service design methods books, but the service designers also were encouraged to interpret them on the basis of their own experience. Focusing on the core and auxiliary service design methods defined by the survey helped ensure that we include methods that are relevant to and reflective of those commonly used in practice.

Third, we conducted 15 in-depth interviews to gain a deeper understanding of how designers use service design methods in practice. These interview participants averaged 6.5 years of experience practicing service design (for more details, see [Supplementary Table B](#) in the Online Appendix). At the time of the interviews, they were practicing in six countries (United States, Norway, Sweden, Canada, India, and United Kingdom). In addition to achieving theoretical saturation, in terms of



understanding the uses of the different methods, this sample size corresponds with general recommendations for interview studies, which call for 12–20 participants for maximum variation (Kuzel 1992). With a narrative inquiry approach (Chase 2005), we asked these expert service designers to tell five stories about using five different service design methods, describe why they used each method, and explain the results, according to their own awareness of the situation. We asked each designer to tell stories about different methods, reflecting five categories of methods that we had developed on the basis of the survey results and initial coding. The interview guide is available in Online Supplementary Appendix C. The interviews lasted 45 minutes on average, were conducted by the first author (in person or via Skype), and were audio-recorded and transcribed.

Fourth, we rely on literature on reflexivity as important theoretical inputs for our abductive process. We gathered over 45 articles for review (detailed in Online Appendix, Supplementary Table D), most of which came from management domains, particularly related to institutional theory in organizational studies. Others represent social sciences more generally, so we could ensure a deep and broad understanding. We used a snowball method (Wohlin 2014) to find new articles, starting with recent articles published in the previous 5 years in top organizational studies journals (e.g., *Organizational Studies*, *Academy of Management Review*) that explicitly focused on reflexivity, through an institutional theory lens (e.g., Ruebottom and Auster 2018; Suddaby, Viale, and Gendron 2016; Voronov and Yorks 2015). Using the references in these papers, we identified other relevant studies. To be included in this set, the article has to explicitly discuss reflexivity or focus on individual and collective awareness of social structures, which we determined by reading the abstract or full article, if needed. To ensure a comprehensive review, we sought feedback from institutional theory scholars who research reflexivity, and they suggested some additional articles to include.

### *Developing an Integrative Framework Through Systematic Combining*

Reflecting our abductive process, we did not complete the data collection and analysis in distinct phases but rather integrated them, oscillating throughout the research process as we worked toward developing an integrative framework that comprehensively reflects the different inputs (Dubois and Gadde 2002). We began with knowledge about the use of methods from service design practice and observations, as well as an understanding of reflexivity informed by institutional theory. With this theoretical and empirical knowledge as a basis, we conducted a manual cluster analysis by physically grouping printed descriptions of the service design methods, according to their similarities. The clustering process included reviews of the method descriptions, to ensure that the process codes (Corbin and Strauss 2008) reflected what actually was happening when designers employed each method, based on the first author's experience and how the action aligned with reflexivity. Two authors performed this cluster mapping exercise separately, then came together to

explore the similarities and work through differences. Strong agreement arose with regard to the general clusters (though they used different labels), but we identified disagreements about where to assign the methods, which we addressed by sharing assumptions about the methods based on our past experiences and clarifying the meaning of different clusters in relation to reflexivity. In seeking consensus, we came to the realization that many methods fit multiple clusters.

Ultimately, our extensive cluster analysis led to the identification and definition of four overarching codes for practices of reflexivity enabled by service design methods: exposing multiplicity, sharing the unshared, making the intangible tangible, and questioning the unquestioned. The first author then reviewed each of the 150 methods in the electronic database again and manually re-coded them according to these refined, mutually defined codes. This author also identified primary, secondary, tertiary, and quaternary practices of reflexivity enabled by each method, using the descriptions and personal experiences. The second author cross-checked and refined the list, again by asking questions, actively addressing any disagreement or uncertainty, and sharing perspectives. From this analysis, we developed the structure of the interview guide for the expert service designers, so that we could examine exemplary methods from each of the four initial categories, as well as one additional method that linked strongly to multiple initial codes.

Following the interviews, we manually coded the transcripts with elaborative coding, a procedure by which the text is analyzed to build on and refine previous findings (Auerbach and Silverstein 2003). Our focus was on service designers' stories about using the noted methods and the influences of those uses on participants' awareness of the situation. Therefore, we coded the interview transcripts with service design method names, codes from the cluster analysis, and inductive open codes that allowed new findings to emerge; this effort generated 34 new codes. The inductive codes include both process codes (generally, verbs) and descriptive codes that summarize the content (generally, nouns) (Saldaña, 2009). To guide the process, we developed a codebook that listed each code name, definitions, and key quotes.

After the first round of coding of prior literature on reflexivity, we conducted a second cycle of coding of the interview transcripts. This process relied on pattern coding (Miles and Huberman 1994), in which parsimonious categories label any emerging explanations. Thus, we identify four modes, or manners of expression, pertaining to reflexivity: corporeal, temporal, relational, and cognitive. With a surfacing technique, which entails searching for missing categories (Miles, Huberman, and Saldaña 2014), we added material and cultural reflexivity modes. Next, we compared the content associated with the six modes of reflexivity, including the initial open codes and stories from the interviews, to reveal distinct patterns across modes, linked systematically to the central idea of building reflexivity. This comparison indicated three core processes of building reflexivity through the use of service design methods, relevant across all modes: revealing hidden

structures, experiencing structural conflict, and recognizing structural malleability.

Both the pattern codes that highlight the six modes of reflexivity and the three core processes of building reflexivity have theoretical significance and offer comprehensive insights into how the use of service design methods builds reflexivity. By examining the co-occurrences of the modes and core processes, we can identify more specific service design processes, such as “remembering the forgotten” or “feeling the discomfort,” that support each core process by leveraging different modes.

The analysis of the use of specific methods made it clear that, though some methods had affordances for different modes of reflexivity, they often were adapted to support the core processes of building reflexivity. Therefore, using the refined list of modes from the analysis of the interviews, we returned to the service design database and revised the codes of the 54 core service methods and 68 auxiliary service design methods, according to the primary mode of reflexivity for which they had

affordances. This exercise was performed by the first author and cross-checked by the second; they then worked together to address any discrepancies. Ultimately, this multiphase, systematic combining process produced an integrative framework, supported by diverse sources of empirical and theoretical input, regarding how to build reflexivity through the use of service design methods.

## Findings

Figure 2 presents our integrative framework. It illustrates that the use of service design methods can help people build reflexivity by leveraging six different, interconnected *modes*: temporal, material, corporeal, relational, cultural, and cognitive. Each mode of reflexivity represents a distinct expression or quality of experience, in terms of how it informs people’s awareness of institutionalized social structures. The six modes of reflexivity are critical for fueling the three *core processes* by

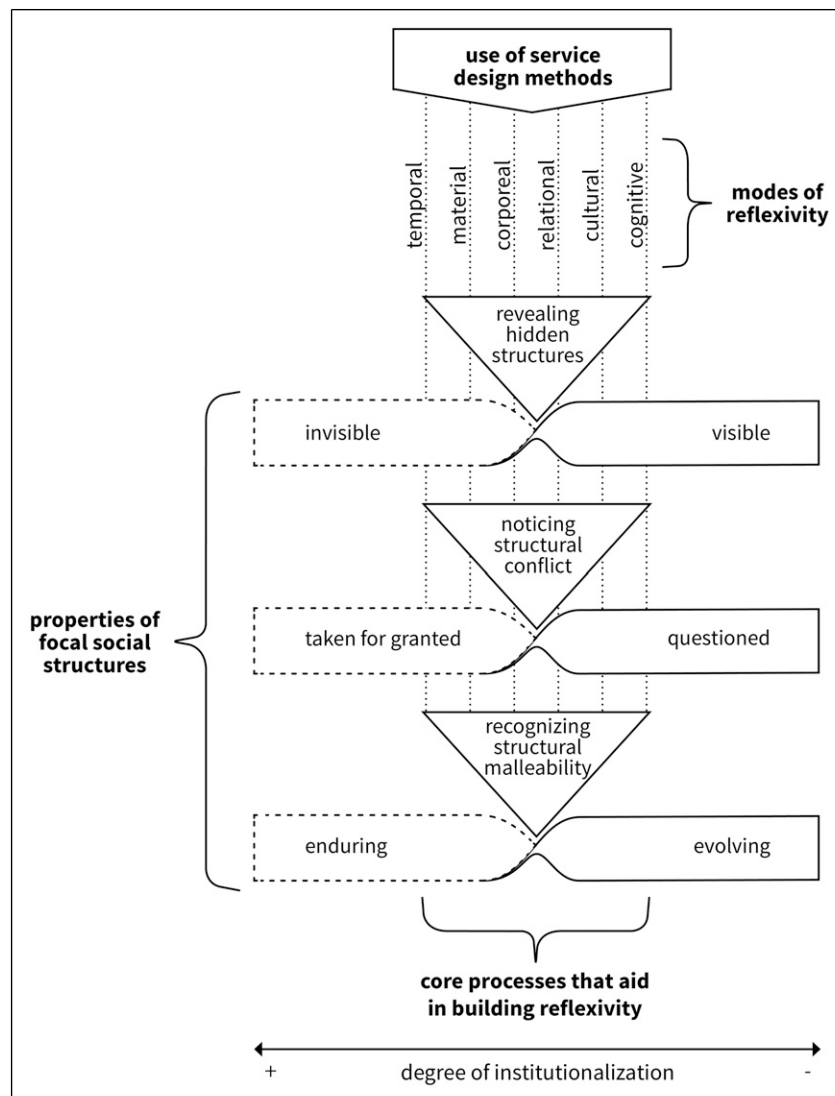


Figure 2. Integrative framework of the use of service design methods to build reflexivity.

which the use of service design methods builds reflexivity: revealing hidden structures, noticing structural conflict, and appreciating structural malleability. Each core process is essential to the development of people's awareness of hidden social structures. These processes contribute to eroding the institutionalization of social structures, by shifting them from invisible to visible, taken-for-granted to questioned, and enduring to evolving. In reducing the degree of institutionalization, they also enable the intentional shaping of social structures that previously had been hidden. In this section, we zoom in to the different focal points of the integrative framework and present supportive empirical evidence, from service design practice and theory, for the six modes of reflexivity and three core processes of building reflexivity using service design methods. Additional empirical evidence, beyond our focal discussion, is available in [Supplementary Table E](#) of the Online Appendix.

### Modes of Reflexivity Leveraged by Service Design Methods

The six modes of reflexivity in the framework show that people can build reflexivity through the use of service design methods in many ways. [Table 1](#) describes each of them, according to their core enabler, key constraints, particular service design methods that have primary affordances for them, and related insights from selected key literature references.

*Temporal Reflexivity:* The first mode implies an awareness of social structures through the experience of the duration between events. Emerging discussions in institutional theory studies suggest that people's reflexivity can be increased if they examine the history of institutionalized practices and ideas ([Suddaby and Foster 2017](#)). Therefore, the temporal reflexivity mode focuses on how social structures are historically constituted ([Berger and Luckmann 1967](#)) and have become institutionalized over time ([Jepperson 1991](#); [Zucker 1983](#)). The core enabler of reflexivity is contextual change over time.

In our empirical inputs, various methods include time as a central element, such as customer journey mapping, horizon scanning, design probes, and scenarios. For example, a service designer mentioned asking people from different stages of life to work together to design the front page of a newspaper, based on their perspectives on the local city's future housing situation (D12). With this generative research approach, people could explore how institutionalized practices in the housing market might evolve over time and the resulting implications.

For this temporal mode of reflexivity though, if the time duration is too short, little awareness about related social structures emerges. For example, a service designer mentioned that short journey maps of bank customers with outstanding loans led a bank's staff to dismiss the situation simply as some customers being financially savvy and others not. But when designers followed the journey of one bank customer over time, staff recognized how contextual changes created temporary

hardships for the customer and began to question institutionalized lending practices (D8).

*Material Reflexivity:* The second mode refers to discernment of social structures through engagement with visuals and physical artifacts. This mode is evident in recent research that demonstrates a material and visual turn in institutional theory (e.g., [Meyer et al. 2018](#)). People can use instantiations of social structures or artifacts to develop reflexivity ([Raviola and Norbäck 2013](#)), and the physical artifacts that prompt reflection on tacit knowledge enable reflexivity.

Common service design methods for supporting material reflexivity include make tools, mood boards, desktop walkthroughs, and card sorts. In describing mood boards for a first meeting with a client, one service designer explained a compilation of pictures of different possible solutions to the client's problem, which helped gauge the client's assumptions about what was needed and why (D6). The photos acted as a prompt, to draw out the client's tacit knowledge about institutionalized ways of working.

When working to catalyze this material mode of reflexivity, a key constraint relates to the formatting of the physical artifacts in use. Often, these physical artifacts appear as polished deliverables for clients or as highly structured. For example, one designer mentioned difficulties when presenting polished service blueprints or heavily templated, fill-in-the-blank style artifacts if the goal was to uncover participants' underlying beliefs (D14).

*Corporeal Reflexivity:* Corporeal reflexivity refers to perceptions of social structures through bodily experiences and emotions. Theoretically, it is prominent in recent discussions of the importance of emotions in reflexivity ([Creed et al., 2014](#); [Ruebottom and Auster 2018](#)) and the embodied ways people encounter social structures through aesthetics ([Creed, Taylor, and Hudson 2020](#)). The core enabler for this mode of reflexivity is a sensory experience, in an individual body, that challenges the person's habits or assumptions.

Common methods for supporting corporeal reflexivity include bodystorming, observation, empathy tools, and service staging. For example, a service designer working on software for an e-commerce platform for online stores sought greater design for accessibility and thus had team members blindfold themselves, then try and work through the website to perform a key task using its built-in accessibility features (D9). This process illuminated how online commerce often created barriers for users with visual limitations.

A key constraint related to corporeal reflexivity is the level of discomfort; if people experience too much discomfort, they cannot meaningfully participate. Thus, one designer mentioned the difficulty getting people to role-play in front of others when they were not sufficiently comfortable with the process (D1).

*Relational Reflexivity:* Relational reflexivity involves an appreciation of social structures through interactions among people. This mode appears in research into the role of communicative practices for reflexivity ([Hardy and Phillips 1999](#)). It also moves beyond discourse to include relative positions of power, which have effects on reflexivity ([Suddaby, Viale, and](#)

**Table 1.** Modes of Reflexivity Leveraged by Service Design Methods.

Mode of reflexivity	Description	Core enabler	Key constraints	Supportive service design methods (examples)	Key references	Related insights
<i>Temporal</i>	Awareness of social structures through experience of duration between events	Contextual changes over time	Too little time to show contextual change	Customer journey	Suddaby and Foster (2017)	Reflexivity can be aided by studying the history of institutionalized practices and ideas
				Horizon scanning Diary study Scenarios	Berger and Luckmann (1967)	Social structures are historically constituted
<i>Material</i>	Discernment of social structures through engagement with visuals and physical artifacts	Physical artifacts that prompt reflection on tacit knowledge	Too much focus on structure and deliverables	Make tools	Meyer et al. (2018)	Verbal and visual text have important roles in the institutionalization of social structures
				Mood board Desktop walkthrough Card sort	Raviola and Norbäck (2013)	Instantiations of social structures or artifacts can be used for people to develop their reflexivity
<i>Corporeal</i>	Perception of social structures through individual bodily experiences and emotions	Sensory experiences in an individual body that challenge habits or assumptions	Too much discomfort to meaningfully participate	Bodystorming	Creed, Taylor, and Hudson (2020)	Humans evaluate social structures through their sensory and embodied ways of encountering the world
				Observation	Ruebottom and Auster (2018)	Reflexivity involves overcoming emotional attachments to institutionalized social structures
<i>Relational</i>	Appreciation of social structures through interactions of people	People's interactions that enable learning about personal differences	Power dynamics between people are too extreme	Empathy tools Service staging	Creed et al. (2014)	Shame plays a strong role in people's reflexivity
				If I were you/ advocate	Hardy and Phillips (1999)	Communicative practices have an important role in reflexivity
				Personas	Suddaby, Viale, and Gendron (2016)	Relative positions of power between people influence the level of their reflexivity
<i>Cultural</i>	Interpretation of social structures through customs and social behaviors of a particular group of people	Difference in group culture	Lack of culturally appropriate methods	Dot voting Cocreation workshop	Archer (2013), Burkitt (2016)	Reflexivity occurs intermittently though emergent relational properties, joint actions, and interactive situations
				Ethnography	Thornton and Ocasio (2008)	Multiple institutional logics offer prescriptions for people and awareness of multiple action toolkits
				Service blueprint	Donati (2011)	Reflexivity is part of cultural collectives of differentiated subsystems or spheres of society, such as the family, state, and market
				Day in the life Cultural probe	Mouzelis (2010)	Different cultural contexts offer distinct ways of being reflexive

(continued)



Table 1. (continued)

Mode of reflexivity	Description	Core enabler	Key constraints	Supportive service design methods (examples)	Key references	Related insights
Cognitive	Comprehension of social structures through reflections on inner thoughts	People's thoughts that challenge or conflict	Ideas too abstract or too complex to grasp	Metaphors and analogies Brainstorming Six thinking hats  Five whys	Suddaby, Viale, and Gendron (2016)  Voronov and Yorks (2015)  Mutch (2007)	People's cognition is essential to understanding how they overcome the constraints of embedded agency through reflexivity  Individual mindsets evolve, influencing how people comprehend the existence of social structures  Internal conversations can lead to awareness of conflicts with existing social structures

Gendron 2016). This mode integrates the relational turn in reflexivity discussions, especially outside of institutional theory, that suggests that reflexivity occurs intermittently through emergent relational properties, joint actions, and interactive situations (Archer 2013; Burkitt 2016). The core enabler of relational reflexivity is interactions with other people, which enable actors to learn about personal differences.

Common service design methods related to relational reflexivity include “if I were you,” personas, dot voting, and cocreation workshops. A service designer working on tax software interviewed different users to develop different personas, related to how they do their taxes. Through this process, the designer derived insights into how different people work with and think about taxes. She then shared these insights with the team to encourage it to design the software with these personas in mind (D10).

A main constraint of relational reflexivity arises when the power dynamics are too extreme across groups of people. For example, one designer identified the challenges of collaborative ideation when a boss is in the room (D14), and another described a situation in which fellow designers used their power as facilitators to correct users during the research (D10).

*Cultural Reflexivity:* This mode refers to interpretations of social structures that are based on the customs and social behaviors of a particular group of people. In institutional theory, this mode emerges in discussions of people's interactions with multiple institutional logics and various “toolkits” of action that they offer (Thornton and Ocasio 2008). In addition, broader literature on reflexivity highlights that the cultural collective—defined as differentiated subsystems or spheres of society, such as the family, state, and market (Donati 2011)—and different cultural contexts (Mouzelis 2010) offer distinct ways of being reflexive. As such, the experience of a different group culture is the key enabler of cultural reflexivity.

In our empirical evidence, exemplary service design methods for catalyzing cultural reflexivity include ethnography, day-in-

the-life, cultural probes, and service blueprints. In a week-long ethnographic study of home help services in Sweden, one designer learned how frontline staff typically support their clients (D5). Ethnography more explicitly aims to capture culture, but other methods like service blueprints can illuminate differences across cultures implicitly. A blueprint featuring users in the frontstage and service providers in the backstage might be insightful for revealing their different cultures, for example.

The main constraint to cultural reflexivity arises because certain methods are not culturally appropriate to support engagement. In trying to conduct interviews in Thailand, one designer mentioned struggles because the work culture strongly discourages people from discussing any problems related to their employers (D1). Another designer cited the lack of fit between a typical business model canvas and activities in nonprofit sectors (D7).

*Cognitive Reflexivity:* The last mode refers to comprehension of social structures through reflections on inner thoughts. This mode is prominent in theoretical discussions on reflexivity (Creed, Taylor, and Hudson 2020). Existing research stresses the central role of cognition in reflexivity (Suddaby, Viale, and Gendron 2016) and particularly highlights the importance of evolving mindsets over a person's life (Voronov and Yorks 2015) and their internal reflections (Mutch 2007). A main enabler of cognitive reflexivity is the person's own thoughts, which challenge or conflict with other existing thoughts.

Common service design methods for supporting cognitive reflexivity include metaphors, brainstorming, six thinking hats, and five whys. For example, in a service design project focused on supporting caregivers for persons with dementia, the designer created multiple analogies for their experience, such as a ripple effect on the family tree and a shrinking social world (D4). These analogies helped the people supporting those caregivers crystalize and reframe their thoughts about caregiving.

A key constraint on cognitive reflexivity, mentioned by multiple designers, involves ideas that become too abstract or too complex to grasp. A designer mentioned how difficult it was to prioritize different ideas in a brainstorming process with competing values without clearly defined criteria, such that people struggled to sort through the ideas in their own minds (D5).

*Interplay of Different Modes of Reflexivity in Service Design Practice:* The modes of reflexivity reflect different manners of expression and enablers, yet they are not mutually exclusive within service design practice or the supporting methods. This point might be best illustrated with an example: A service designer cited efforts to “design a prenatal care service that increased women’s confidence in themselves and therefore, maybe, could alleviate a little bit of the dependency on the system” (D1). She describes a customer journey method, which included both “the emotional experience of pregnancy” and the “interaction touchpoints with the system.” As a result, she noticed two “lines going in opposite directions on the maps ... this inverse relationship where [prenatal staff] were least available at the earlier stages when you need support the most, and then their availability really increases midway through, when your confidence is really the highest” (D1). In this example, reflexivity resulted from an interplay of the material mode (artifact of the journey map and two lines), corporeal mode (focus on the emotional experience of pregnant women), temporal mode (contextual change over time through the journey), and even cultural mode, achieved by factoring in both the experience of women and more operational elements through the touchpoints.

### Core Processes by Which Service Design Methods Aid in Building Reflexivity

In the integrative framework in [Figure 2](#), all the modes of reflexivity fuel the three core processes that are essential for

cultivating people’s awareness of hidden social structures, through their use of service design methods. [Table 2](#) summarizes the core processes and the means by which they erode the institutional properties of focal social structures. Uses of service design methods can leverage any one, or multiple, of the modes to support the core processes, as we detail next, with supporting evidence from service design practice.

*Revealing Hidden Structures:* This core process entails introducing social structures that otherwise would remain tacit or unperceived into conscious awareness. It thus disrupts the *invisibility* of social structures, which is one of the central properties of institutionalization ([Greenwood et al. 2008](#); [Zucker 1983](#)). This core process of revealing hidden structures was clearly demonstrated by a service designer, engaged in space planning for a city building. As part of the project, she conducted in-depth interviews with staff working in the building, one of whom mentioned the importance of having her own office so that she could “have a private conversation with [her] students.” After some prompting and probing questions, along with quiet listening, the staff member eventually disclosed that a key reason for needing her own office was her experience of intestinal gas, a taboo topic. The designer thus acknowledged the need for enough silence and trust in the interview “for her to actually say, you know what, I just have gas.” By conducting interviews that feature both thoughtful prompts and sufficient silence, the designer could make institutionalized norms of office culture about flatulence and other bodily functions visible, whereas they often are taken for granted in space planning (D2).

The process of revealing hidden structures can be catalyzed with different modes of reflexivity. For example, tapping the temporal mode of reflexivity, several service designers rely on diary studies and design probes to track activities over time that normally would be forgotten. In so doing, they could identify social structures that otherwise would have been taken for granted. Designers also enable the process of revealing hidden

**Table 2.** Core Processes that Aid in Building Reflexivity Through the Use of Service Design Methods

Core process	Process description	Related institutionalized social structures and references	Means to erode institutional property
Revealing hidden structures	Bringing social structures that would otherwise remain tacit or unperceived into consciousness	<i>Invisibility:</i> people are not consciously aware of institutionalized social structures ( <a href="#">Greenwood et al. 2008</a> ; <a href="#">Zucker 1983</a> )	Expose previously unacknowledged social structures Appreciate the influence of the social structure
Noticing structural conflict	Recognizing social structures as overlapping and offering contradictory prescriptions for action	<i>Taken for grantedness:</i> people see institutionalized social structures as external, objective constraints with unthinkable alternatives ( <a href="#">Berger and Luckmann 1967</a> ; <a href="#">Jepperson 1991</a> ; <a href="#">Zucker 1983</a> )	Perceive multiple social structures Recognize social structures as conflicting
Appreciating structural malleability	Seeing social structures as impermanent and susceptible to change	<i>Endurance:</i> people perceive that institutionalized social structures remain unchanged over long time periods ( <a href="#">Giddens 1984</a> ; <a href="#">Scott 2005</a> )	Understand the limited applicability of social structures Interpret social structures as amenable to change

structures through material reflexivity, such as by drawing or using representative artifacts to make social structures that normally go unnoticed or unspoken more explicit through materialization or visualization. However, regardless of the mode of reflexivity, revealing hidden social structures entails exposing previously unacknowledged social structures and appreciating their influence, as a means to make the invisible visible.

*Noticing Structural Conflict:* This core process involves recognizing multiple social structures as overlapping and offering contradictory prescriptions for action. It thus helps erode the taken-for-grantedness of focal social structures (e.g., Jepperson 1991; Zucker 1983). During a service designer's experience prototyping a self-service kiosk for patients in a public hospital, a mother with five small children came up to use the kiosk. Its input device was chained to a low cable, and there were no chairs where she could sit. The mother thus ended up sitting on the floor of the hospital lobby to use the kiosk, with her five children running about, and found the resource she needed, despite the distractions. The designer acknowledged that "the experience of using it was really painful to watch." This example thus highlighted the difficult tension between the user's institutionalized role as a patient using the kiosk and her institutionalized role as a parent, which is real and pressing. In turn, the designer gained greater awareness of the multiple conflicting social structures that physically manifested in this situation of a mother "need[ing] to keep their eye in two places" (D1).

Noticing structural conflict can also be catalyzed by leveraging various modes of reflexivity. For example, service design methods might tap into corporeal reflexivity to encourage people to experience physical or emotional tension due to conflicting social structures. This process might be evoked by role-play or empathy tools that prompt participants to reflect on the physical sensations felt by others. Structural conflict also might be enabled by relational reflexivity, if people consider social structures from opposing perspectives, encouraged by service design methods that introduce or compare alternative stakeholder perspectives and interests (e.g., "if I were you," actor map). Regardless of the mode supporting the core process of noticing structural conflict, it involves perceiving multiple social structures and recognizing their conflicts, in order to shift from taking focal social structures for granted to questioning them.

*Appreciating Structural Malleability:* This last core process requires seeing social structures as impermanent and susceptible to change, which undermines the property of endurance that characterizes highly institutionalized social structures (Giddens 1984; Scott 2005). Expert designers carefully craft service design methods to support this core process. For example, one participant described her work in Tanzania to explore contraception options for young women, during which "Essentially ... we say, 'Meet this girl, she's so-and-so,' and then we give the whole context around the girl, and then we create a conundrum situation, where we get them in a 'hot state' to answer a question." By detaching the participants from direct

participation in the sensitive situation and asking them to judge someone else, they can start to "deduce the stable system gap" or identify when some institutionalized choices about contraception might shift. Through these scenarios, the service designer could clarify the limits of some institutionalized practices among young women in Tanzanian communities and find potential routes for them to change (D8).

Similar to the other two core processes, appreciating structural malleability can be enabled by any of the six modes of reflexivity leveraged by service design methods. For example, with cultural reflexivity, designers test the tipping points for particular shared behaviors within a group and what might change them, such as by using scenarios to prompt people to reflect on the limits of their adherence to different social structures. Other service design methods can leverage cognitive reflexivity for appreciating structural malleability, such as by asking participants to adopt different "thinking hats" to explore the limits and possibilities of changing thought patterns imposed by existing social structures or logics. In turn, appreciating structural malleability helps reveal the limitations of social structures' applicability and interprets them as amenable to change, a means to shift focal social structures from enduring to evolving.

## Discussion

We set out to enhance understanding of how the use of service design methods can aid in building people's reflexivity. In turn, we note some theoretical and practical implications of the proposed integrative framework, as well as some limitations and research opportunities stemming from it.

### Theoretical Implications

The integrative framework offers two main contributions. First, it delineates the multimodal means by which service design methods can support people in their efforts to build reflexivity. Second, it explicates three core processes, facilitated by the use of service design methods, that aid people in building reflexivity and in preparing institutionalized social structures as service design materials. These contributions in turn have implications for the evolving discourse of service design.

*Multimodal Means Aid in Building Reflexivity through Service Design:* Previous service design literature notes the connection between the use of service design methods and reflexivity (Akama and Prendiville 2013; Vink et al. 2019; Wetter-Edman, Vink, and Blomkvist 2018) but does not provide a comprehensive, theoretically grounded view of how using these methods can lead to reflexivity. By identifying and delineating six modes of reflexivity (temporal, material, corporeal, relational, cultural, and cognitive), we reveal a broad range of enablers, which service design practitioners can leverage to support transformative change. A more holistic view of the multimodal means by which using service design methods encourages reflexivity also helps contextualize previous accounts that highlight the importance of some modes, such as

**Table 3.** Categorization of Core Service Design Methods by Affordances for Modes of Reflexivity.

Modes of reflexivity	Description	Supportive core service design methods (primary affordances for each mode)
<i>Temporal</i>	Awareness of social structures through experience of duration between events	Customer journey maps Scenarios Design scenarios Customer lifecycle map Diary study Swim lanes Day experience method Mobile diary study
<i>Material</i>	Discernment of social structures through engagement with visual and physical material	Low fidelity prototyping Service ecology Storyboard Desktop walkthrough Generative research Drawing experiences Picture cards Dark horse prototype
<i>Corporeal</i>	Perception of social structures through an individual's bodily experiences and emotions	Service prototype Experience prototype Service role-play Service staging Empathy map Shadowing Emotional journey map Observation Service safaris Bodystorming Field experiment Empathy tools Behavioural map AEIOU (observation framework) Dramaturgy POEMS (observation framework) Wizard of Oz
<i>Relational</i>	Appreciation of social structures through interactions between people	Cocreation workshop Storytelling Empathy probes Customer needs matrix Interview Network map Actors map Extreme user interview Personas Expectation map Customer experience audit Stakeholder scope matrix Communication map Dot voting Desirability testing Talk out load protocol

(continued)

**Table 3.** (continued)

Modes of reflexivity	Description	Supportive core service design methods (primary affordances for each mode)
<i>Cultural</i>	Interpretation of social structures through the customs and social behaviors of a particular group of people	Service blueprints Contextual interviews Field study Design probes Context mapping Cultural probes Day in the life Activity analysis Guerrilla ethnography Cultural immersion Digital ethnography Camerall journal
<i>Cognitive</i>	Comprehension of social structures through reflections on inner thoughts	Idea generation What if... Brainstorming Wwwwwh Five whys Analogies and metaphors

their embodied and cognitive aspects (e.g., Vink et al. 2019; Wetter-Edman, Vink, and Blomkvist 2018).

By systematically identifying multimodal affordances of service design methods, this research also offers guidance for how to tap into the various enablers of reflexivity. We establish that different service design methods have affordances for different modes of reflexivity, an insight with significant resonance for service design research, because it suggests a novel way of thinking about the use of service design methods, compared with conventional phase-based models of the service design process (e.g., Costa et al. 2018; Patrício et al. 2018). Phase models that classify service design methods have been critiqued for reinforcing the importance of output, in relation to new service development, rather than the change that the methods can enable among participants (Holmlid, Wetter-Edman, and Edvardsson 2017). A categorization of service design methods based on their affordances for different modes of reflexivity, as shown in Table 3, instead emphasizes how the methods can be used to help build people's reflexivity.

This novel categorization also shifts away from an emphasis on goals, related to problem and solution development, which often lead to more narrow, myopic service concepts that conflict with the existing context (Stuart 1998). Instead, the proposed categorization encourages a more holistic, systemic understanding of the service context and the necessary contextual changes. In this way, our research addresses concerns about the historical "lack of critical engagement in examining and investigating the complex contexts that surround service design" (Akama 2009, p. 1). If they focus on building awareness of institutionalized social structures within a service context, service designers can work to shape the structures and bring about more thoughtful, strategic change.

*Core Processes That Prepare Institutionalized Social Structures as Service Design Materials:* Building reflexivity is supported by three core processes, facilitated by the use of the service design methods. Each process cultivates specific types of awareness that are essential for working with institutionalized social structures as service design materials. These processes also erode the institutional properties of focal social structures, thereby reducing their degree of institutionalization. In turn, people can work with these social structures more readily and intentionally shape them. This is analogous to how a carpenter must send a cut-down tree to a mill to process it into usable boards before being able to work with the wood to build furniture. By detailing these processes, this research provides a rationale for how service design methods can act as "a powerful transformative force that is capable of changing institutions" (Kurtmollaiev et al. 2018, p. 70), even when institutionalized social structures make intentional shaping difficult.

This insight into core processes represents a response to broader calls for a more practical understanding of how people become aware of institutionalized social structures (Ruebottom and Auster 2018). Aligned with service design, the wider service research field increasingly recognizes the central role of institutionalized social structures for a variety of service-related phenomena (Koskela-Huotari, Vink, and Edvardsson 2020). Our integrated framework complements efforts, such as the Actor Institutions Matrix (Baron et al. 2018), that seek to bridge abstract understandings of institutionalized social structures (Vargo and Lusch 2016) with practice. This research also positions service design as a valuable, practical starting place for other transformational processes, such as market shaping, service innovation, or policy change, all of which require intentional shaping of institutionalized social structures. Finally, this novel theoretical underpinning of the core



processes can enable greater intentionality in how people use service design methods to pursue transformative aims.

By understanding how the use of service design methods aids in building reflexivity and ultimately enables intentional shaping of institutionalized social structures, our research thus informs ongoing development of service design methods and the evolution of service design practice more broadly. Some service design scholars have warned about the detrimental effects of the rapid spread and superficial use of service design methods (Akama and Prendiville 2013); we provide a theoretical grounding for greater intentionality in their uses to support transformative aims. However, the transformation catalyzed by the use of service design methods is not inherently “good,” nor does it have only positive consequences for people in service contexts (Anderson and Ostrom 2015). The use of service design methods to erode the institutional properties of focal social structures carries important risks. That is, the institutionalized nature of such structures enables predictability and collaboration (Scott 2014; Vargo and Lusch 2016), so undermining them might inadvertently raise levels of uncertainty or decrease coordination and cooperation in society.

Service design methods are not neutral in how they create reflexivity either. As we noted in the findings pertaining to the cultural mode of reflexivity, not all service design methods are culturally appropriate in every service context. Service design methods act as carriers of particular social structures and guide the ways reflexivity gets enacted. For example, a customer journey method imposes institutionalized social structures related to the role of individual customers, reflecting a Western market logic. Its use thus might catalyze rational forms of reflexivity associated with that sphere of society but still keep people blind to certain structures embedded within the method itself. Furthermore, different cultures have various ways to enact reflexivity (Donati 2011; Mouzelis 2010). For example, using methods embedded within the social structures of Western, Euro-centric societies, and perhaps particularly market spheres (Kimbell and Bailey 2017), risks imposing certain types of reflexivity that may perpetuate colonization or cultural domination, amid growing calls for the decolonization of design (Schultz et al. 2018). Thus, we urge researchers to critically reflect on the appropriateness and impact of using various service design methods in diverse contexts.

The clarity that comes from explicating the core processes can inform the development of more context-specific, culturally appropriate ways to build reflexivity through service design. For example, rather than employ a customer journey method that reiterates a focus on the individual, service designers can use local approaches to reveal hidden structures that emphasize collectives, such as dance or street theater. Efforts to build reflexivity through culturally appropriate service design practices can also enable more autonomous designing within communities (Escobar 2018), in contrast to an emphasis on shaping institutionalized social structures toward particular outcomes, which tends to reinforce narrow, Western, Euro-centric notions of modernity (Fry 2017). With a focus on building reflexivity, service design can support organizations’

and communities’ ongoing efforts to shape institutionalized social structures toward their own desired goals, which can be contextualized and adapted over time.

### Practical Implications

Reflexivity is essential for practitioners interested in catalyzing transformation, including changes related to new service development, service innovation, or policy change. Without reflexivity, invisible aspects of the service context remain hidden, and thus service design efforts risk reproducing the status quo or pushing for changes that are incongruent with, and unsupported by, the context. The integrative framework in Figure 2 offers a useful roadmap for practitioners, to guide their uses of service design methods to build reflexivity. We specify three key implications for practitioners.

*Tap Different Modes of Reflexivity:* Practitioners can leverage different service design methods to evoke the six modes of reflexivity. Many designers we interviewed stressed their reliance on one mode over the others in their practices, but the categorization of methods in Table 3 might help them better appreciate the full spectrum of service design methods available. For example, if a design group relies primarily on dialogic or linguistic forms of reflection on the surrounding context, explicitly leveraging service design methods that tap into corporeal and material modes of reflexivity, such as body-storming or mood boards, could advance a more holistic view of the service context or reveal especially hidden social structures. Actively seeking different modes of reflexivity also can help practitioners recognize their own blindspots, gain a better understanding of the desired change in context and its interdependencies, and reduce undesirable, unintended consequences. In addition, practitioners should remember that each mode of reflexivity features key constraints that may limit awareness (Table 1). For example, to tap the temporal mode of reflexivity, the duration cannot be too short to allow the contextual change to emerge. Expanding the time frame explored will help practitioners see how social structures in the service context are always evolving and how they might influence those changes.

*Support Core Processes for Building Reflexivity:* To ensure institutionalized social structures are open to change, practitioners should try to catalyze all three core processes that aid in building reflexivity, not just one. It is not enough to make hidden social structures more visible; people also must recognize the conflicts among different social structures and appreciate that the structures are malleable. Accordingly, practitioners should choose specific methods or local approaches that help catalyze each core process. The list of service design methods in Supplementary Table A in the Online Appendix provides a starting point, along with references to service design books and websites. The inquiry also should encompass local methods already in use within a community or organization. For example, role-playing might help reveal hidden social structures, by unpacking the underlying norms, rules, and beliefs on display within a particular service encounter. Then, using an actor map, the service designer might encourage greater understanding of the different social structures and identify real or

**Table 4.** Future Research Agenda on Reflexivity in Service Design and Beyond.

Emerging research theme	Promising research questions
Advancing service design practice through a focus on building reflexivity	<p>What new or adapted methods could help people more effectively tap into the different modes of reflexivity?</p> <p>What critical and speculative service design methods could be developed and employed to thoughtfully challenge the reproduction of inequitable social structures?</p> <p>Which prevailing social structures are different service design methods reproducing and how should the appropriateness of their use within a context be assessed?</p> <p>How does tapping into different combinations of modes in various sequences within service design practices influence the core processes of reflexivity?</p> <p>How can the modes and core processes of reflexivity be used to inform measures for assessing the impact of service design processes?</p>
Expanding the understanding of reflexivity in service design research and beyond	<p>How is reflexivity being built in other domains, such as service innovation, market shaping and policy change?</p> <p>What other practical approaches contribute to building reflexivity, particularly in non-Western contexts?</p> <p>How can the integrative framework for building reflexivity through service design be refined based on knowledge about building reflexivity in more diverse contexts?</p> <p>What are the consequences of increased reflexivity on the intentional shaping of social structures in various contexts?</p> <p>What are the risks of increased reflexivity?</p> <p>How does increased reflexivity among people influence the dynamics of their communities?</p> <p>What other critical prerequisites of the intentional shaping of social structures exist in addition to people's reflexivity?</p>

potential conflicts that guide various actors and their actions. To reveal the malleability of social structures, people could try to build service prototypes that explicitly include changes to existing social structures. When engaged in all three core processes, people gain a stronger foundational awareness of the social structures in the relevant service context and can recognize their own agency for changing or maintaining them. Ultimately then, the core processes of reflexivity help make long-term, strategic change in a service context possible.

*Be Reflexive about the Use of Methods for Building Reflexivity:* Finally, service designers and other practitioners must be reflexive themselves and attend to the inherent biases in these methods, in terms of defining the focal social structures, guiding the development of reflexivity, and directing the intentional shaping of institutionalized social structures. Practitioners should critically examine their method choices and scrutinize whether the social structures embedded within them are appropriate for the specific context, or if local methods already in use might be more appropriate. For example, working with an Indigenous community to explore ways to strengthen the local food systems, a designer who chooses a service blueprint may impose binary, market-based social structures that separate the customer and service provider, in contrast with knowledge of food systems. Traditional local practices, such as talking circles, likely are more culturally appropriate and better aligned with oral traditions, allowing hidden social structures to emerge through a relational dialogue in which everyone gets to share their perspective, uninterrupted. Understanding the modes and core processes that can build reflexivity through service design can help practitioners identify or adapt relevant local approaches as needed.

### Limitations

It is important to note that this study is not without limitations. The books we include in the method database listed many overlapping service design methods, which are difficult to distinguish, even for professional designers. It was not our research goal to distinguish these methods, but their overlap might have created some inaccuracy in the ratings of the methods (Online Appendix, Supplemental Table A). Furthermore, our systematic review of service design methods, using three popular service design books to build a database of common service design methods, took place in late 2017 and early 2018. Some more recent service design methods introduced in academic literature, such as multilevel service design (Patricio et al. 2011), management and interaction design for service (Grenha Teixeira et al. 2017), inventive problem-solving (Chai, Zhang, and Tan 2005), “AT-ONE” touchpoint cards (Clatworthy 2011), service design for value networks (Patricio et al. 2018), and the trajectory touchpoint technique (Sudbury-Riley et al. 2020), might not be widely used in practice yet, but future research should consider their implications in relation to building reflexivity.

### Further Research Agenda

By identifying six modes and three core processes through which the use of service design methods aids in building reflexivity, this article offers a strong conceptual foundation for continued research on reflexivity in service design research and beyond. Table 4 summarizes the future research agenda stemming from this study by highlighting two emerging research themes and connected research questions.

*Advancing service design practice through a focus on building reflexivity:* Our findings suggest the need to develop new, adapted service design methods that explicitly focus on tapping into different modes of reflexivity to support the core processes. In analyzing how the existing methods are used in practice, we have identified both enablers and constraints connected with these modes, which are crucial for informing the development of new methods. Drawing on this knowledge-base, there is an important opportunity for future research to support the development of critical and speculative service design methods that could be employed to thoughtfully challenge the reproduction of inequitable social structures. Future research should also more thoroughly examine the ways in which different service design methods reproduce specific social structures and inform practitioners in relation to how they should assess the appropriateness of these methods for different contexts.

Continued research might also explore how different modes of reflexivity work in relation to one another and if their sequence within service design processes exerts distinct influences on the core processes of reflexivity. Furthermore, the modes and core processes that we present in our integrative framework can provide a starting point for developing new measurements and scales that can quantitatively assess the processes that aid in building reflexivity. In addition to enabling more influential use of service design methods, this effort might also lead into new ways of determining the impact of service design processes.

*Expanding the understanding of reflexivity in service design research and beyond:* Acknowledging the critical role of reflexivity in shaping institutionalized social structures, we call for future research that continues to expand the understanding of reflexivity by studying processes of building reflexivity in more diverse settings. By uncovering service design methods' affordances for building reflexivity, our findings highlight the inherent connection of service design with several other research streams that require the intentional shaping of social structures. Hence, we call for further research in studying the connections between service design and service innovation, market shaping and policy change, but also how these practices and processes might in their own way be cultivating people's reflexivity.

Our examination of how employing service design methods builds reflexivity reflects a Euro-centric understanding of service design methods; many other practical approaches in diverse service design practices, and beyond, could support this goal in different ways. Key questions remain about the generalizability and transferability of our proposed framework to other approaches for building reflexivity. Are other modes of reflexivity supported by different approaches and cultures that are not highlighted here? Do other core processes aid in building reflexivity beyond those that we identify? Should the modes or core processes be refined to apply to more general contexts, or should they be specified to reflect more particular contexts? Also in terms of general applicability, our study inputs come primarily, though not exclusively, from Western, Euro-centric

service design practices and literature. Further research is needed to explore if the framework should be adapted or rethought for non-Western contexts, considering that culture significantly influences people's reflexivity (Donati 2011; Mouzelis 2010).

As noted above, increased reflexivity also carries risks as eroding the institutional properties of focal social structures might raise the level of uncertainty or decrease coordination within a community. Future research needs to carefully examine these risks and gain further understanding of how increased reflexivity among people influences the dynamics of their communities. It is also not self-evident that increased reflexivity would necessarily lead to a desire to change the prevailing institutionalized social structures. Rather, seeing the multiplicity of social structures might also result in increased resistance to change and institutional maintenance (cf. Siltaloppi et al. 2016). Thus, future research should examine the consequences of increased reflexivity on the intentional shaping of social structures in various contexts. To support this effort, we encourage service design researchers to consult the emerging literature on reflexivity in institutional theory (e.g., Creed, et al., 2020; Ruebottom & Ellen R, 2018; Suddaby, Viale, and Gendron 2016) and ongoing discussions in the social sciences (e.g., Archer 2013; Donati 2011; Mouzelis 2010) in this effort. Likewise, this literature holds a lot of promise for uncovering additional critical prerequisites of the intentional shaping of social structures.

## Conclusion

Intentionally shaping institutionalized social structures is inherently challenging because such social structures are to human beings like water is to fish. Just as the surrounding water is invisible to fish, people have difficulty seeing the prevalent social structures that they have internalized, especially when they function among other people who share the same social structures. Our research provides theoretically grounded, practice-informed insights into how awareness of institutionalized social structures can be cultivated, through the use of service design methods. We offer a foundation for continued research into the important concept of reflexivity, as a prerequisite of intentional efforts to shape social structures. In turn, we call for the ongoing evolution of service design practice, toward a greater appreciation of context and a more thoughtful use of methods.

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## ORCID iDs

Josina Vink  <https://orcid.org/0000-0002-1068-6398>

Kaisa Koskela-Huotari  <https://orcid.org/0000-0002-2062-0931>

## Supplementary Material

Supplementary material for this article is available online.

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