A Theoretical Framework for Studying Service Design Practices: First Steps to a Mature Field

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Service design is a young discipline that began in the 1990s, when a certain group of informed scholars in Italy, the United States, the United Kingdom, and Germany (Buchanan, 1992; Erlhoff, Mager, and Manzini, 1997; Hollins and Hollins, 1991; Manzini, 1993) started to describe it as a new design agenda. Around 2000, service design emerged as a profession, with the first studios (Livework and Engine) opening in London. Since then, interest in this field has grown across the international design research, education, and professional community. In the United Kingdom, the number of studios working in the area of services has increased, setting a precedent for the international community, but still accounting for only one percent of the national design industry (Design Council, 2010).

Initial research into service design has explored motivations for the emergence of this field (Pacenti, 1998; Sangiorgi, 2004). Further research has experimented with individual service design methods (Clatworthy, 2011; Morelli, 2002) or with approaches such as co-design (Kankainen, Vaajakallio, Kantola, and Mattelmäki, 2011; Steen, Manschott, and De Koning, 2011). Other studies have looked into specific dimensions of service design, such as service system design (Patrício, Fisk, Cunha, and Constantine, 2011), service interaction design (Holmlid, 2007), and service experience design (Bate and Robert, 2007), or into specific typologies of services, such as collaborative or relational services (Cipolla and Manzini, 2009; Meroni, 2007).

However, systematic studies on how service design agencies operate in practice and how they contribute to service innovation are limited. Examples of research work into service design practices are mostly focused on the commercial sector (Kimbell, 2011; Stigliani and Fayard, 2010; Zomerdijk and Voss, 2010). These studies have described service design as adopting a

constructivist approach to service innovation (Kimbell, 2011) and as centered around the practice of understanding, mapping, and communicating customer experiences (Stigliani and Fayard, 2010). With a wider perspective, Meroni and Sangiorgi (2011) have mapped application areas and approaches of service design based on a collection of 17 case studies.

Fewer researchers have investigated the implementation and impact of service design projects. Significant exceptions are the studies on the implementation and impact of experience-based codesign methodology in healthcare (Bate and Robert, 2006, 2007; Tsianakas et al., 2012). Isolated research has also reported on the processes and challenges of embedding design capabilities within public-sector organizations (Bailey, 2012; Junginger, 2014). Freire and Sangiorgi (2009) have discussed the successes and limitations of four service design projects in the application of the coproduction principles in healthcare in the United Kingdom.

Recently, designers have been critiqued for their supposed lack of attention to economics—ensuring that ideas are cost-effective—and lack of attention to organizational issues and cultures (Mulgan, 2014). The Design Commission (2013) report also states how designers need to "uplift and upscale if they are to deliver design-led innovation effectively to public sector clients" (p. 19). An Arts & Humanities Research Council

(AHRC)—funded networking project (www.servicedesignresearch.com/uk) into service design research in the United Kingdom has similarly suggested the need to conduct research into how service design projects can be better implemented, embedded, measured, or scaled up. There is agreement that, to survive and develop, service design as a discipline needs to develop legitimacy, meaning that it needs acceptance of the technical competence of the profession and the spread of knowledge about it and a culture of assessment (Foglieni, Maffei, and Villari, 2014).

Finally, the growth of service design into a mature field of research and practice also requires a comparison and positioning within existing studies of service innovation, new service development, and the wider international and multidisciplinary field of service science and service research. "Enhancing service design" has been mentioned as one of the research priorities for the science of services (Ostrom et al., 2010), with an emphasis on the need to integrate design thinking and performing and visual arts into service innovation.

Notwithstanding this recognition, very few interdisciplinary research collaborations are developing within service research with a common aim to legitimate and position service design's contribution, that is, comparing service-dominant logic with design thinking and service design (Wetter-Edman, 2009;

Wetter-Edman et al., 2013) or the conceptualization of user involvement in service design and service management (Wetter-Edman, 2011). Interest in design also comes from the new service development literature, aiming to understand how to better integrate customer experience (Edvardsson, Tronvoll, and Gruber, 2011), but demonstrating a still-limited understanding of design practices and approaches.

Drawing on literature from three main perspectives on innovation, service, and design—perspectives on service innovation (service innovation and new service development studies), perspectives on service (service science and service research frameworks), and perspectives on design (design anthropology)—this paper presents a theoretical framework and the related research questions to systematically study, position, and interpret service design practices and outcomes. The framework has been developed as part of a six-month AHRC-funded study into the contribution of design to service innovation and development. The creation of the initial theoretical framework drawn from the literature has informed the case study methodology to guide the data collection of six UK case studies from the public, commercial, and digital sectors, leading to and supporting the development of a complementary survey study of service design innovation practices from a wider sample of design studios and designers

working in the United Kingdom and internationally.

Perspectives on service innovation

Research that originally focused on new product development started to look closely at the development of services and what general principles and factors enhance success (Edgett, 1994; Zomerdijk and Voss, 2010). Within these studies, service design is generally described as a phase within new service development (NSD) characterized by a set of activities, tools, and competencies (Goldstein, Johnston, Duffy, and Rao, 2002; Johnson, Menor, Roth, and Chase, 2000). The term service design has been introduced and described as "a form of architecture that involves processes rather than bricks and mortar" (Edvardsson, 1997, p. 31). This study is instead focusing primarily on service design as a professional practice to position it within existing innovation and organizational service design practices.

In an initial comparison between NSD studies and service design research, Yu and Sangiorgi (2014) distinguish three main research areas relative to service design: research into NSD processes (where and how service design practitioners contribute to NSD processes and practices), research into NSD objects and outcomes (what is the focus and object of service design professional practice), and research into the facilitators of effective and successful NSD (ways in which service design

professionals facilitate service innovation and development).

The NSD process has been described using different kinds of models, initially following a structure similar to that of new product development—that is, a linear sequence of steps from strategy development to commercialization (Booz, Allen, & Hamilton, 1982). Recently, more open and iterative models have been suggested, representing the recursive nature of service innovation, not necessarily happening within traditional research and development (R&D) offices, but as part of the day-to-day activities involved in service development and improvement. In particular, Johnson et al. (2000) proposed an iterative, cyclic, and nonlinear NSD process model consisting of four basic phases -design, analysis, development, and launch—that embrace diverse subphases proposed by other models.

NSD objects relate to the development of the "prerequisites" that can be planned and designed to increase the potential for quality in the final service delivery (Edvardsson and Olsson, 1996). Following the phases of NSD, Yu and Sangiorgi (2014) identify two main elements: service concept and service delivery system. Service design is considered as developing service concepts that should provide all the necessary information to inform the development of the service idea into a business and an effective service performance. Clark, Johnston, and

Shulver (2000) describe the service concept as made of key components: value, form and function, experience, and outcomes. For its part, the service delivery system is built upon the service concept and specifications. This has been summarized in Yu and Sangiorgi (2014) in three main aspects: the structure (physical, technical, and environmental resources), the infrastructure (people), and processes (a set of activities that use the structural and infrastructural resources to deliver services; Goldstein et al., 2002; Roth and Menor, 2003). Finally, NSD is enhanced by facilitators such as methods and tools, staff and user engagement, and organizational dimensions (culture, structures, and communication flows; Yu and Sangiorgi, 2014).

When investigating the contribution of design for service innovation and development, the study of service design agencies and their practices can be positioned against these NSD dimensions (see Table 1).

Defining service innovation

Generally, innovation is described as (1) doing something new and (2) developing this "new" so that it becomes accepted and applied in an organization, in a market, or in society (National Audit Office, 2006). Studies into the specificities of service innovation are recent, moving away from an initial consideration of service organizations as laggards and

NSD phases	NSD object	NSD facilitators
Design Analysis Development Launch	Concept (form, value, function, experience, and outcome) Service delivery system (structure, infrastructure, processes)	Methods and tools Staff and user engagement Organizational dimensions (organizational culture, structures, and communication flows)
Where and how did service design agencies contribute within the overall NSD process? What were the main phases, activities, and events?	What were the main design "objects" and key outputs of designers' work?	What were the main NSD methods and tools used? Who was engaged along the process, when, and why? What were the key drivers of and barriers to the NSD process? What are the organization's history, current structure, mission, and offering?

Table 1. NSD dimensions and related research questions.

appliers of manufacturing innovation. The journey from a manufacturingcentered approach to recent accounts on services is reflected in the emergence of four perspectives generally described as technologist, assimilation, demarcation, and synthesis (Droege, Hildebrand, and Forcada, 2009). A technologist approach focuses on the introduction and use of technology (e.g., the purchase of technological equipment) as a main source of innovation in the processes and practices of service provision and a reverse cycle to traditional manufacturing innovation (Barras, 1986). As with the technologist approach, assimilation considers service innovation using manufacturing models and metrics, not acknowledging how most service innovations are nontechnological in their forms and sources (Gallouj and Weinstein, 1997). The demarcation approach highlights the idiosyncrasies of service innovation activities, acknowledging,

for example, the interactive character of service innovation (Gallouj and Weinstein, 1997, p. 135). Finally, the synthesis approach recognizes how the learning from studying service companies can illuminate aspects and dimensions of innovation happening within manufacturing that have been mostly neglected and not measured as yet.

This scoping study will adopt an extended understanding of innovation and aims to recognize both the hard (traditional technology-driven innovation practices) and soft dimensions of innovation, acknowledging how in services "innovation is more likely to be linked to change in dis-embodied, non-technological innovative processes, organisational arrangements and markets" (Howells, 2007, p. 11). What is generally defined as nontechnological innovation includes many other forms of innovation, for example, "social innovations, organisational

innovations, methodological innovations, marketing innovations, innovations involving intangible products or services" (Djellal and Gallouj, 2010, p. 7). Furthermore, we recognize the "multidimensional character of innovation" and the difficulty to artificially separate goods from services, considering how increasingly organizations are developing "bundling of services and manufactured goods into 'solutions" (Howells, 2007, p. 15). Also, organizations often work in complex networks, as part of "a set of interrelated activities" (p. 15).

As mentioned above, innovation within service organizations has been qualified for its "interactive character" (Djellal and Gallouj, 2010) and for what has been called "invisible innovation": This is a kind of innovation that is not captured by traditional innovation metrics focusing on scientific and technological innovation happening mostly in R&D departments. Gallouj and Weinstein (1997, p. 549), for example, report: "Ad hoc innovation can be defined in general terms as the interactive (social) construction of a solution to a particular problem posed by a given client." In contrast with a common understanding of innovation as something intentional that can be replicated, ad hoc innovation describes an emergent process that can lead to more consolidated practices and new knowledge.

Similarly, Fuglsang (2010) describes different levels of

innovation practices considering their level of intentionality: (1) innovation as an intentional activity (e.g., as a result of a new policy), (2) innovation as a semi-intentional activity (e.g., a project team working on an emergent problem), and (3) innovation as "bricolage" (as conducted by staff to adjust to emerging problematic situations).

As summarized by Droege et al. (2009), there have been different proposals of service innovation frameworks that point to different innovation dimensions, classifying where innovation happens in services.

Djellal and Gallouj (2010) consider four main dimensions: (1) product/service innovation (both tangible and intangible), (2) process innovation (e.g., technical systems or consultants methods), (3) (internal) organizational innovation (structure in which activities take place), and (4) external relational innovation. In this paper, though, we agree with Den Hertog (2000) regarding the interrelated character of innovation in services, where change in one dimension (e.g., new technology) will necessarily affect other aspects of service (e.g., new knowledge, skills, and processes); while it is useful to identify a dominant innovation dimension, it is also useful to look at innovation as a combination of different changes.

To acknowledge the multidimensional nature of service innovation and to go beyond a distinction between manufacturing and service organizations, we consider the Gallouj and Weinstein (1997) description of innovation as the combination of changes in factors such as service characteristics, service provider competencies, service provider technology (tangible or intangible, such as models), and client competencies (including coproduction abilities). In addition, De Vries (2006) also recognizes the increasing role of providers' networks and clients themselves, which, with their own competencies and technologies, contribute to the co-creation of the final solution. The combination of changes in these factors can generate different kinds and levels of innovation described as radical, incremental. improvement, combinatory (architectural), formalizing, and ad hoc (De Vries, 2006; Gallouj and Weinstein, 1997).

When reflecting on issues of measurement and performance in

services, Djellal and Gallouj (2010) debate how performance cannot be just measured in terms of productivity because service performance can be related in terms of its multiple dimensions, for example, "technical performance, commercial performance, civic performance (equity, equal treatment, social cohesion, respect for the environment...), and relational performance (interpersonal relations, empathy, trust, etc.)" (p. 10).

The study of service design agencies' work for service innovation and development can also be related to and positioned against these service innovation dimensions, as summarized in Table 2.

Knowledge-intensive business services

This research project is also looking at another kind of service innovation

Service changes: Types	Service changes: Levels	Service changes: Outcomes
External relational innovation (service network and interfaces) Product/service innovation (offerings) Process innovation (process and technology) Organizational innovation (structure and culture)	Radical Incremental Improvement Combinatory Formalizing Ad hoc	Technical performance Commercial performance Civic performance Relational performance
Which changes were required by the solution? Where did the innovation manifest?	Has the solution been implemented? How and by whom? How was it adopted and evolved?	Were there any metrics to evaluate designers' work and the innovation achieved (agreed upon or not)? What were the recognized outcomes and impact of the project?

Table 2. Service innovation dimensions and related research questions.

called "innovation through services," which describes the work of Knowledge-Intensive Business Services (KIBS) for and with their clients (Den Hertog, 2000). Service design agencies are a particular kind of KIBS, associated with what Miles. Kastrinos, Bilverbeek, and Den Hertog (1995) call "design consultancy services." KIBS are described as service organizations that are heavily based on professional knowledge, that are the direct source of knowledge (e.g., training), or that create intermediary products using their own knowledge (e.g., design services) for their clients (Miles et al., 1995).

There is recognition that KIBS "function as facilitator, carrier or source of innovation, and through their almost symbiotic relationship with client firms, some KIBS function as co-producers of innovation" (Den Hertog, 2000, p. 491). The quality of this coproduction relies heavily on the quality of interaction between the KIBS and their client, which generates reciprocal learning (interactive learning). In this research project, we suggest how looking at the dynamic nature of knowledge conversion processes (from tacit to

explicit and disembodied to embodied, tangible or intangible) facilitated by design agencies could unveil fundamental roles played by these consultancies (see Nonaka and Takeuchi, 1995).

The understanding of designers' contribution to design for service innovation and development also needs to consider the interaction dynamics suggested in Table 3.

Perspectives on service

Previous sections have looked at service innovation research by studying its characteristics, dimensions, and processes; this section takes a higher perspective, considering what we actually mean by "service" and how this understanding has changed and developed. Using and discussing this meta-level framework can inform the nature and future development of designing for service itself.

According to Edvardsson, Gustafsson, and Roos (2005), there are essentially two approaches to service research (see Tables 4 and 5): One perceives service as a "category of market offerings," whereas the other describes service as a "perspective on value creation" (p. 118). Furthermore, Grönroos (2008) suggests a third

approach, which describes service as a
"perspective on the provider's activities
(business logic)" (p. 300). The first
perspective has been guiding so-called
"demarcation" studies aiming to look
at the specific properties of services
and service organizations in terms of
their key differences from physical
goods and manufacturing. The second
and third perspectives are instead
adopting a synthesis or "integrative"
perspective focusing more on value
creation and less on physical goods or
services; this view is the result of a
general shift in the conception of value
from considering value as embedded in
tangible goods toward conceiving of
value as co-created among various
economic and social actors (Vargo and
Lusch, 2004), reviving original studies
of customers as coproducers. In this
growing perspective, value is not in the
object or person, but "resides in the
actions and interactions which the
acquired resource makes possible or
supports" (Vargo and Lusch, 2004,
p. 51). Value is described as co-created
in social contexts through customers'
value-creating practices or even indi-
vidually created by the customer (Ed-
vardsson et al., 2011).
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Following this consideration, if value is associated with use and context, the focus necessarily shifts from the units of output to the interactions. A service, therefore, represents "the process of doing something beneficial for and in conjunction with some entity, rather than units of outputs—immaterial goods—as implied by the plural

Interaction quality	Learning	Knowledge conversion
Who did you interact with in the organization and how far along the process (email, workshops, meetings, etc.)?	What did you learn across the process and how?	How was knowledge exchanged? What were the main sources of information, ideas, and innovation?

Table 3. Innovation coproduction and related research questions.

Services as market offerings	Services as business logic	
What was the original scope and focus of the project? What was the original brief, and how was it presented/developed?	Did the original brief change afterwards, and if so, how and why? What was the original understanding of innovation and change within organizations? Has this changed during the project, and if so, how?	

Table 4. Perspectives on service and related research questions.

Design as assemblage	Services as entangled	Innovation as local learning and specific to context
Where does service innovation happen? Who is generally involved (dedicated department) in your organization? When? What was the original scope and focus of the project (impetus, justification)? Who has been involved during this process? When and why? What was their contribution to the project?	Is there any formalized service innovation process (for new service development)? What is the value of the proposed solution (to the organization, the final user, the stakeholder)? Which changes were required by the solution? How was the solution itself changed in order to be implemented?	What were the main sources for ideas and innovation? Any example of recent innovation projects or relevant service changes? How were they were initiated and developed? What was the designers' contribution to the project? How was it different from that of other disciplines? Where do you see complementarities and where did they overlap?

Table 5. Anthropology of service and innovation and related research questions.

'services'" (Vargo and Lusch, 2004, p. 26). Goods become aids to the service provision (Norman and Ramirez, 1989), whereas a service is considered as the common denominator in exchange and not as some special form of exchange (Vargo and Lusch, 2004). As Gummesson (1995) describes it, "activities render service; things render service" (p. 250).

As a result of these considerations, services are then proposed as "a conceptual framework within which to think in a different way of value creation and does not entail a distinct set of activities" (Ramirez, 1999, p. 54). The original dichotomy between products and services is resolved by proposing a higher-order concept of "service" (singular). Vargo and Lusch (2004) describe this shift with the concept of a service-dominant logic as opposed to a goods-dominant logic that focuses on tangible goods and resources, embedded value, and discrete transactions. Key

elements of the service-dominant logic paradigm are resources, in particular actant resources (people and their competencies), and the integration of available resources in specific value co-creation activities and contexts, within service systems, which are the entity in which value creation takes place. Grönroos (2008) further elaborates this paradigm, describing a supplier service logic (as distinguished from a customer service logic) as "a perspective on how, by adopting a service approach, firms can adjust their business strategies and marketing to customers' service consumption-based value creation" (p. 302). In this sense, the focus is not on what the firm produces as an output but rather on how it can better serve customers and support their own value-generating processes (Lusch, Vargo, and O'Brien, 2007).

When aiming to position service design research and practice within the service logic paradigm, there have been questions of what designers are actually doing when designing for services. Wetter-Edman (2011) has suggested how "design practice using designerly tools and methods might be a way to realize a service logic for the organization" (p. 100). Sangiorgi (2012) has similarly suggested how designers can apply a service logic "to support organizations to explore, understand and work with more relational and softer aspects of a service, helping them to reframe their businesses and provision around customers' own processes of value

co-creation" (p. 103). These new perspectives on service suggest that there can be two ways of conceiving and applying designers' work for organizations: one that considers services as discrete objects of design, distinct from how organizations innovate and think, and that designers shape and specify, and another that perceives service as a way of approaching innovation and doing business that organizations can learn and develop while collaborating with designers.

Perspectives on design(ing)

To assist in the theoretical framing to evaluate service design practices, in this section two anthropology perspectives are presented: the emerging area that is design anthropology and the proposal by Blomberg and Darrah (2014) of an "anthropology of services." As the concept of design expands to areas such as service design, a field that is extending its methods and practices to the ideation of new service configurations, business models, and organizational and social change, the frame for evaluating service innovation also needs to expand. For the purpose of this research, an anthropological focus on the human and contextual nature of innovation situates it within a social and cultural lens that seeks to capture and illuminate the incidental and embodied practices that can easily be overlooked in innovation discourses. Design anthropology also provides a frame for considering the

institutionalization of insights and how they are made tangible as well as how deliverables are mapped (Rabinow and Marcus, 2008). According to Gunn and Donovan (2012), design anthropology focuses on different ways of designing and different ways of thinking about designing.

Literature from design anthropology offers the potential for new insights to frame and evaluate service design's role in service innovation. For Lenskjold (2011), design anthropology has something more to offer than the already-familiar ethnographic methods subsumed into design practice and design's role of going beyond the future with its imaginings. Here "design provocations offer a mediation of ethnographic accounts and anthropological knowledge to broaden the scope of the design process" (Lenskjold, 2011, p. 7). Petersen, Sterschneider, and Kjaersgaard (2001) define design anthropology as a "piecing together" or a "bricolage of its own" to explain the relationship between anthropology and design. Their focus is anthropology in design, where its purpose is to make sense of what is there and with remaking what is there into something new (Petersen et al., 2001, p. 41).

From an institutional perspective, Jacoby (1990, cited in Gunn and Donovan, 2012, p. 71) distinguishes between exogenous and endogenous institutions. "Exogenous are those institutions that affect people and organisations from outside, external

bodies such as government that enforce laws and regulations" (Gunn and Donovan, 2012, p. 71). In contrast, endogenous institutions more commonly "affect and evolve within communities." Endogenous institutions are the "local procedures and traditions—the 'how we do things round here' approach" (Gunn and Donovan, 2012, p. 72). The authors also note how endogenous institutions may also change as a result of learning within the communities and how they also respond to exogenous institutions. For Gunn and Donovan (2012), the tendency to explore innovation practice from a science and technology and innovation mode means that the role of local learning is not typically captured in these formal variables (p. 72).

Blomberg and Darrah (2014) propose an anthropology of services that has lessons for service design and service science. Noting the challenges facing service design through their characteristics of uncertainty in outcome and "the limits of intentionality in design," the paper presents services from a broader anthropological perspective, one that is intrinsic to the human condition that has existed since long before the arrival of formal services. Most importantly, Blomberg and Darrah (2014) make the connection between the human condition and the way in which humans adapt by providing services to one another. For these authors, services are never bounded because they are entangled in social institutions and

broader practices of society that can be difficult to distinguish; social systems have always been material and immaterial and are therefore entangled by their very nature.

This messier view of services raises questions regarding the current conceptualization of service value and the overly neat way in which services are conceptualized; there is an appreciation for the need of the service systems metaphor to suggest that services can be engineered, but equally this omits "the openness and emergent quality of social life." Instead, the anthropology of services presents directions to improve service design and service innovation that are based on a longer-term, more historical view of services as part of the human condition. Furthermore, the paper identifies the need for anthropologists to focus on the work processes of the designer—not just about the people whom they are designing for but also the institutional and relational structures that support the designing of services. Most importantly, Blomberg and Darrah (2014) suggest that the conceptualization of service value, from a business and information technology perspective, limits the focus of design, predetermines the skills and knowledge considered necessary for the design of services, and fails to acknowledge the costs and benefits that are distributed and absorbed by different members of society.

This section presents the emerging discussions on anthropology's role within service design and service innovation. Challenging the more common conceptualization of services and opening up the dialogue for a messier, more human, and socially framed view of service innovation, this expansion of service design considers Blomberg and Darrah's (2014) view of services as "less designed and more assembled from fragments of practices, institutions, life-styles and networks" (p. 127).

These considerations help to question and add layers of interpretations to the general descriptions of NSD and service innovation to expand the focus of study: from the study of designers' individual actions and contributions to their developing interactions with the project environments and preexisting practices, from the focus on designers' project time to the longer and ongoing change processes.

Theoretical framework

This study conducted six case studies into service design agencies working in the United Kingdom. The unit of analysis for each of the case studies has been a service design project chosen by the agency that best represents its approach to delivering and implementing a client project. To support the data collection and analysis, a theoretical framework is introduced here as emerging from the literature review that guided the semi-structured interviews with the service design agencies and their client organizations. Collection and analysis of design materials and evidence from design processes and

outcomes have also been used to complement the qualitative interviews.¹

The previous sections have summarized perspectives on service innovation, service, and design as a background for the development of this theoretical framework. These three levels of research (see Figure 1) have been chosen to consider different levels of data gathering: (1) innovation processes and activities, (2) innovation dimensions and patterns, (3) interpretation of service(s), and (4) interpretation of design(ing). As discussed earlier, these levels inform different kinds of questions and address the two main aims of our research work:

- 1. Positioning design for service and development. This scoping study aims to position service design practice within existing theories of NSD and service innovation to initiate and facilitate a dialogue across disciplines; this meant investigating service design case studies looking at innovation processes, dimensions, interaction dynamics, and outcomes to identify and discuss designers' contributions, qualities, and limitations.
- Reconceptualizing design for service innovation and development.
 On another level, our aim is to

¹More information about the DeSID (Design for Service Innovation and Development) project can be found at this web address: http://www.de-sid.info/.

Position SD

NEW SERVICE DEVELOPMENT	NSD process	NSD object	NSD facilitators
SERVICE	Service Changes:	Service Changes:	Service Changes:
INNOVATION	Kinds	Levels	Outcomes
KNOWLEDGE-INTENSIVE	Interaction	Interactive	Knowledge
BUSINESS SERVICES	Quality	Learning	Conversion

Reconceptualize SD

SERVICE	Services as Market		Service as a Business
LOGIC	Offerings		Logic
DESIGN ANTHROPOLOGY	Design as Assemblage	Service as Entangled	Innovation as Local Learning & Context Specific

Figure 1. Initial theoretical framework to inform study of design for service innovation and development.

reinterpret these innovation practices acknowledging recent theorizations of design and services. These theories suggest an expanded understanding of both design (interpreted as an assemblage) and service, described more as a business (i.e., service marketing) perspective or as a socially and culturally framed human activity (i.e., seen from an anthropological perspective) than as a market category.

Conclusion

When aiming to position and discuss design's role and contribution within and for service innovation and new service development theories, there are inevitable contradictions that lie at the core of studies of service innovation and of service itself. The aim to measure and classify service innovation as well as to describe and formalize its processes contrasts with the awareness of its interactive and intangible nature that can emerge from intentional as well as unintentional and ad hoc processes, which are often the result of evolution, revolution, disappearance, appearance, and association mechanisms (Gallouj and Weinstein, 1997). Similarly, the need to capture the specific role of designers for and within service innovation practices is now contrasted with a general

reflection on a wider understanding of service and design itself.

We note that most of the studies of service innovation are strongly anchored in traditional organizational settings, whereas service design projects might navigate beyond organizational boundaries (e.g., social-change projects), generating different kinds of innovations and innovation practices that do require a different language for their description or classification.

In order to acknowledge these contradictions and study requirements, we have decided to integrate different perspectives (i.e., service logic, design anthropology, service innovation classification, and NSD processes) within the same framework and to use different lenses when collecting and interpreting case study data. We will then use emerging contradictions and synergies across these perspectives as material for reflection to inform, question, and develop our understanding and reconceptualization of design for service innovation and development. This initial framework will be further refined and developed considering its fit for purpose and the contextual specificities of each innovation project.

References

Bailey, S. G. (2012). "Embedding Service Design: The Long and the Short of It." In Proceedings, 3rd ServDes. Conference on Service Design and Service Innovation, pp. 31–41.

- Barras, R. (1986). "Towards a Theory of Innovation in Services." *Research Policy*, 15, pp. 161–173.
- Bate, P., Robert, G. (2006). "Experience-Based Design: From Redesigning the System Around the Patient to Codesigning Services with the Patient."

 Quality and Safety in Health Care, 15, pp. 307–310.
- Bate, P., Robert, G. (2007). Bringing User Experience to Healthcare Improvement: The Concepts, Methods and Practices of Experience-Based Design. Oxford, UK: Radcliffe.
- Blomberg, J., Darrah, C. (2014). "Towards an Anthropology of Services." In Proceedings, 4th ServDes. Conference on Service Design and Service Innovation, pp. 122–132.
- Booz, Allen, Hamilton. (1982). New Products Management for the 1980s. New York: Author.
- Buchanan, R. (1992). "Wicked Problems in Design Thinking." *Design Issues*, 8(2), pp. 5–21.
- Cipolla, C., Manzini, E. (2009). "Relational Services." *Knowledge, Technology & Policy*, 22, pp. 45–50.
- Clark, G., Johnston, R., Shulver, M. (2000). "Exploiting the Service Concept for Service Design and Development." In J. Fitzsimmons, M. Fitzsimmons (Eds.), New Service Development: Creating Memorable Experiences (pp. 71–91). London: Sage.
- Clatworthy, S. (2011). "Service Innovation through Touch-Points: Development of an Innovation Toolkit for the First Stages of New Service Development." *International Journal of Design*, 5(2), pp. 15–28.
- Den Hertog, P. (2000). "Knowledge-Intensive Business Services as Co-Producers of Innovation."

- International Journal of Innovation Management, 4(4), pp. 491–528.
- Design Commission. (2013). Restarting Britain 2: Design and Public Services. London: Design Commission.
- Design Council. (2010). Design Industry Research 2010. London: Design Council.
- De Vries, E. (2006). "Innovation in Services in Networks of Organizations and in the Distribution of Services." *Research Policy*, 35(7), pp. 1037–1051.
- Djellal, F., Gallouj, F. (2010). "Services, Innovation and Performance: General Presentation." *Journal of Innovation Economics*, 5(1), pp. 5–15.
- Droege, H., Hildebrand, D., Forcada, M. (2009). "Innovation in Services: Present Findings, and Future Pathways." *Journal of Service Management*, 20(2), pp. 131–155.
- Edgett, S. (1994). "The Traits of Successful New Service Development."

 Journal of Services Marketing, 8(3),
 pp. 40–49.
- Edvardsson, B. (1997). "Quality in New Service Development: Key Concepts and a Frame of Reference." *International Journal of Production Economics*, 52(1), pp. 31–46.
- Edvardsson, B., Gustafsson, A., Roos, I. (2005). "Service Portraits in Service Research: A Critical Review." International Journal of Service Industry Management, 16, pp. 107–121.
- Edvardsson, B., Olsson, J. (1996). "Key Concepts for New Service Development." Service Industries Journal, 16(2), pp. 140–164.
- Edvardsson, B., Tronvoll, B., Gruber, T. (2011). "Expanding Understanding of Service Exchange and Value Co-cre-

- ation." Journal of the Academy of Marketing Sciences, 39, pp. 327–339.
- Erlhoff, M., Mager, B., Manzini, E. (1997). Dienstleistung braucht Design, Professioneller Produkt-und Markenauftritt fur Serviceanbieter. Herausgeber, Germany: Hermann Luchterhand Verlag.
- Foglieni, F., Maffei, S., Villari, B. (2014). "A Research Framework for Service Evaluation." In *Proceedings, 4th Serv-Des. Conference on Service Design and Innovation*, pp. 423–428.
- Freire, K., Sangiorgi, D. (2009). "Service Design and Healthcare Innovation: From Consumption to Co-production to Co-creation." In Proceedings, 2nd ServDes. Conference on Service Design and Service Innovation, pp. 39–49.
- Fuglsang, L. (2010). "Bricolage and Invisible Innovation in Public Service." *Journal of Innovation Economics*, 1(5), pp. 67–87.
- Gallouj, F., Weinstein, O. (1997).
 "Innovation in Services." Research Policy, 2, pp. 537–556.
- Goldstein, S. M., Johnston, R., Duffy, J., Rao, J. (2002). "The Service Concept: The Missing Link in Service Design Research?" Journal of Operations Management, 20(2), pp. 121–134.
- Grönroos, C. (2008). "Service Logic Revisited: Who Creates Value? And Who Co-creates?" European Business Review, 20(4), pp. 298–314.
- Gummesson, E. (1995). "Relationship Marketing: Its Role in the Service Economy." In W. J. Glynn, J. G. Barnes (Eds.), Understanding Services Management (pp. 244–268). New York: Wiley.
- Gunn, W., Donovan, J. (2012). Design and Anthropology. London: Ashgate.

- Hollins, G., Hollins, B. (1991). Total Design: Managing the Design Process in the Service Sector. London: Financial Times Prentice Hall.
- Holmlid, S. (2007). "Interaction Design and Service Design: Expanding a Comparison of Design Disciplines." Nordic Design Research Conference, Stockholm, Sweden.
- Howells, J. (2007). Fostering Innovation in Services: A Report of the Expert Group on Innovation in Services.
 Brussels, Belgium: Commission of the European Union.
- Johnson, S. P., Menor, L. J., Roth, A. V., Chase, R. B. (2000). "A Critical Evaluation of the New Service Development Process." In J. Fitzsimmons, M. Fitzsimmons (Eds.), New Service Development: Creating Memorable Experiences (pp. 1–32). London: Sage.
- Junginger, S. (2014). "Design Legacies: Why Service Designers Are Not Able to Embed Design in the Organisation." In Proceedings, 4th ServDes. Conference on Service Design and Innovation, pp. 164–172.
- Kankainen, A., Vaajakallio, K., Kantola, V., Mattelmäki, T. (2011). "Storytelling Group—A Codesign Method for Service Design." *Behaviour & Information Technology*, 31(3), pp. 221–230.
- Kimbell, L. (2011). "Designing for Service as One Way of Designing Services." *International Journal of Design*, 5(2), pp. 41–52.
- Lenskjold, T. (2011). "Accounts of a Critical Artefacts Approach to Design Anthropology." Nordic Design Research Conference, Stockholm, Sweden.
- Lusch, R., Vargo, S., O'Brien, M. (2007). "Competing through Service: Insights

- from Service Dominant Logic." *Journal of Retailing*, 83(1), pp. 5–18.
- Manzini, E. (1993). "Il design dei servizi. La progettazione del prodotto-servizio." *Design Management, 4,* pp. 7–12.
- Meroni, A. (Ed.). (2007). Creative Communities: People Inventing Sustainable Ways of Living. Milan, Italy: Edizioni Polidesign.
- Meroni, A., Sangiorgi, D. (2011). Design for Services. London: Gower.
- Miles, I., Kastrinos, N., Bilderbeek, R.,
 Den Hertog, P. (1995). KnowledgeIntensive Business Services: Their Role
 as Users, Carriers and Sources of
 Innovation. Report to the EC DG
 XIII Luxembourg: Sprint EIMS
 Programme.
- Morelli, N. (2002). "Designing Product/ Service Systems: A Methodological Exploration." *Design Issues*, 18(3), pp. 3–17.
- Mulgan, G. (2014). Design in Public and Social Innovation. London: NESTA.
- National Audit Office. (2006). Achieving Innovation in Central Government Organizations. London: National Audit Office.
- Nonaka, I., Takeuchi, H. (1995). The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation. Oxford, UK: Oxford University Press.
- Ostrom, A., Bitner, M., Brown, S., Burkhard, K., Goul, M., Smith-Daniels, V., et al. (2010). "Moving Forward and Making a Difference: Research Priorities for the Science of Service." *Journal of Service Research*, 13(1), pp. 4–36.
- Pacenti, E. (1998). Il progetto dell' interazione nei servizi. Un contributo al tema della progettazione dei servizi.

- PhD thesis in industrial design, Politecnico di Milano, Milan, Italy.
- Patrício, L., Fisk, R., Cunha, J., Constantine, L. (2011). "Multilevel Service Design: From Customer Value Constellation to Service Experience Blueprinting." *Journal of Service Research*, 14(2), pp. 180–200.
- Petersen, G., Sperschneider, W., Kjaersgaard, M. (2001). "Design Anthropology: When Opposites Attract." In Proceedings, 1st Danish Human Computer Interaction Research Symposium, pp. 41–43.
- Rabinow, P., Marcus, G. (2008). *Designs* for an Anthropology of the Contemporary. Durham, NC: Duke University Press.
- Ramirez, R. (1999). "Value Co-production: Intellectual Origins and Implications for Practice and Research." Strategic Management Journal, 20(1), pp. 49–65.
- Roth, A., Menor, L. J. (2003). "Insights into Service Operations Management: a Research Agenda." *Production and Operations Management, 12*(2), pp. 145–164.
- Sangiorgi, D. (2004). Il Design dei servizi come Design dei Sistemi di Attività. La Teoria dell'Attività applicata alla progettazione dei servizi. PhD thesis, Politecnico di Milano, Milan, Italy.
- Sangiorgi, D. (2012). Value Co-creation in Design for Service. In S. Miettinen and A. Valtonen (eds.), Service Design with Theory. Vantaa, Finland: Lapland University Press, pp. 97–106.
- Steen, M., Manschot, M., De Koning, N. (2011). "Benefits of Co-design in Service Design Projects." *International Journal of Design*, 5(2), pp. 53–60.
- Stigliani, I., Fayard, A. (2010). "Designing New Customer Experiences:

- A Study of Socio-Material Practices in Service Design." Working paper, Imperial College, London.
- Tsianakas, V., Maben, J., Robert, G., Richardson, A., Dale, C., Wiseman, T. (2012). "Implementing Patient-Centred Cancer Care: Using Experience-Based Co-design to Improve Patient Experience in Breast and Lung Cancer Services." Support Care Cancer, 20, pp. 2639–2647.
- Vargo, S., Lusch, R. (2004). "Evolving to a New Dominant Logic." *Journal of Marketing*, 68, pp. 1–17.
- Wetter-Edman, K. (2009). "Exploring Overlaps and Differences in Service Dominant Logic and Design Thinking." In Proceedings, 1st Nordic Conference on Service Design and Service Innovation, pp. 201–212.
- Wetter-Edman, K. (2011). "Service Design: A Conceptualization of an Emerging Practice." Licentiate thesis, University of Gothenburg, Gothenburg, Sweden.
- Wetter-Edman, K., Sangiorgi, D., Edvardsson, B., Holmlid, S., Grönroos, C., Mattelmaki, T. (2013). Design for Service Comes to Service Logic. Naples Forum on Service, Naples, Italy.

- Yu, E., Sangiorgi, D. (2014). "Service Design as an Approach to New Service Development: Reflections and Future Studies." In *Proceedings, 4th* ServDes. Conference on Service Design and Service Innovation, pp. 194–204.
- Zomerdijk, L., Voss, C. (2010). "NSD Processes and Practices in Experiential Services." Journal of Product Innovation Management, 28(1), pp. 63–80.