Beyond Blueprints and Basics: A Service Design Conference ReportKipum Lee

On October 29, 2010, the Service Design Network¹ held a one-day intensive Service Design Conference in Cambridge, MA. The conference was hosted by Microsoft at the New England Research and Development Center and organized by Shelley Evenson, Jamin Hegeman, Mark Jones, and Birgit Mager. One goal of the conference was to formally extend into the United States the conversation around service design that has been developing in Europe.² Another goal of the conference was to develop a community around service design by providing an opportunity for those practicing and interested in the subject to come together.

The roughly 110 participants included practicing professionals from a variety of fields—healthcare, hospitality, government, public services, software development, and design consultancies—as well as academics from design and management schools. The participants also came from all over the United States, Canada, Germany, and South Korea. Some identified themselves as service designers in their line of work or inquiry; others have only recently become interested in service design. The participants embraced this diversity and sought new ways to find connections and common ground during the gathering.

Although the conference did not have a specific title or theme, the nature of its content and speakers provides some insight into the issues that are of current importance, as well as the emergent issues in service design. The six presentation topics were "Service Design: An Organizational Challenge" by Oliver King, "The Behavior Chain: Linking the Tools and Methods of Service Design to Meaningful and Measurable Behavior Change" by Robert Fabricant, "Service Meets Social" by Shelley Evenson, "The Digital Service Experience" by Monica Bueno, "Architecting for Mass Collaboration: How Civic Hackers are Building Better City Services with Government" by Peter Corbett, and "Finding the Soul of Service Design" by Mark Jones. King emphasized the capability of service designers through the illustration of a successful project, Bueno provided heuristics for successful service design outcomes in the form of lessons, Corbett shared the experiences of civic hackers and the design of social technologies, and the other three presentations contained substance about the application of service design to social issues. In addition, a panel led by Lew McCreary had Chris McCarthy and Lorna Ross engage in a focused dialogue around services in healthcare innovation.

For more information, please see http:// service-design-network.org/ (accessed January 10, 2011).

² This was the fourth Service Design Conference organized by the Service Design Network and the first conference organized by this group in the United States. Historically, two other service design conferences were held in the United States in 2006 and 2007, organized by the Carnegie Mellon University School of Design. Thus, the Service Design Network's conference in Cambridge, MA, is the third service design conference in the United States.

One way to reflect on this content and discover a productive way to understand the relevant issues in service design is to consider the three major themes that were woven throughout the conference: service design and types of service products, service design and processes of innovation, and service design and wicked problems. These themes reflect some of the concerns and areas of controversy in the domain of service design today. More interestingly, they are likely to be areas of exploration in years to come.

The Expansion of Service Products

One major strand of inquiry concerned the new products made in the name of service design. During the conference in Cambridge, it was evident that the range of service products continues to grow. Such growth is one way to follow the progress of the discipline.

Perhaps of all the presentations, Peter Corbett's narrative of "Apps for Democracy"—a mash-up competition for developers—best illustrates one of the growing frontiers of service products. Corbett's work involves facilitating networks of ordinary citizens who take available open-source data and produce useful and meaningful products for public use. One service produced by "Apps for Democracy" is a mobile application that indicates levels of safety in different areas of Washington D.C. This app informs individuals and families making decisions about where to live in the nation's capital by providing statistics of crime incidents as well as a qualitative "threat meter." This work, which amplifies the role of the public as opposed to the traditional designer, illustrates a new type of subject matter that has become part of the service design discourse.³

Of course, public participation is not new in service design. The second Emergence conference, at Carnegie Mellon in 2007, began with a presentation about a public visualization platform by Fernanda Viégas and Martin Wattenberg, called "Many Eyes," that enables anyone on the Internet to take a data source, such as words from a political speech, visualize it, and share it with others. However, since 2007, more sophisticated technologies, especially mobile platforms, have expanded the opportunities for collective creation. In the context of these advancements, Corbett discussed service applications for local businesses, the public sector, and governments.

Such service applications and their development generate new controversies in this burgeoning field. Products from initiatives such as "Apps for Democracy" call for mass collaboration and the creation of communities; however, participation requires a working knowledge of how to manipulate the provided data. Thus, participation is still limited primarily to developers who are experts in some way. As the discipline of service design matures, answers to questions like "Who designs for services?" and "Who is being left out

³ For examples of open-source data, see the Obama Administration's Open Government Initiative, which has made government data available to the public through websites like http://data.gov, http://recovery.gov, http://USAspending.gov, and http://it.usaspending.gov (accessed January 10, 2011).

⁴ See http://www-958.ibm.com/software/ data/cognos/manyeyes/ (accessed January 10, 2011).

of the design process?" will dramatically affect the types of services being produced.

Service Design and Processes of Innovation

Another significant theme of the event was the idea that service design can provide a way to change an organization by contributing to a process of innovation. As more organizations see the value of service design work, a quiet optimism grows among designers that demonstrating the ability to design for services through new ways of thinking, doing, and making can alter the way organizations are managed. This possibility for change was articulated several times during the conference, and a good portion of the questions and feedback from the audience were in response to this issue.

For instance, Oliver King, from the service design firm Engine, shared some concrete examples of value-added services for the travel industry. In conjunction with these services, Engine's project members challenged the client to create a service management team that would develop and sustain the proposed services. King also shared a model showing different levels of engagement at which service design projects can serve as catalysts for organizational change.⁵ At the lower levels, small projects provide insights and commonly understood service design deliverables to clients.6 The middle level reflects a greater appetite for service design work and integrates design capability into an organization. The highest level activates service design at the system level, resulting in the remodeling of an entire organization. This theme of service design as a way to bring transformation to an organization challenges the notion that it is just a tactical tool to be exploited for competitive advantage. By engaging with organizations also at the middle and highest levels, service design as a discipline has opportunities to evolve and mature.

Although momentum appears to be moving service design in a direction that offers organizations a means to improve and innovate, there is no consensus yet on how this improvement or reorganization should be achieved in practice. The lack of agreement was evident in the opposing comments made during the conference. Some who were present argued that the role of service designers should include business competency; others responded with comments that the strategy of service designers ought to only include ways to successfully collaborate with management without necessarily integrating business understanding into the service design discipline. The difference is that one side argues that designers should also be managers while the other position argues that there should be designers with an appreciation for the management aspect of the work. Such deontic positions are statements about recommended courses of action and reveal a discipline that is still in the process of figuring out how it ought to deal with issues of managing and designing.7

⁵ Joe Heapy, "Make Yourself Useful," Touchpoint 1:3 (January 2010): 42–9.

⁶ Common service design deliverables currently include (among others) insights and findings from user research, storyboards, customer journey or experience maps, and service blueprint diagrams.

⁷ For development on the theme of managing as an activity of designing, see Richard J. Boland and Fred Collopy, eds., Managing as Designing (Stanford: Stanford University Press, 2004).

Service Design and Wicked Problems

The last theme of the conference explored a shift in the service design community's interest—from well-structured problems⁸ toward "wicked" types of complex social problems.⁹ This vivid way of describing radically indeterminate problems was introduced and explained by Horst Rittel, a design theorist, during the early 1970s. According to Rittel, wicked problems are found in the context of differing human and social perspectives, contested values, and conflicting interests.

Before he turned to a methodology for dealing with wicked problems, Rittel was initially preoccupied with a linear approach to planning and designing. He labeled this type of approach, which is appropriate for "tame" or well-structured problems, the first generation design method. ¹⁰ This method is usually characterized by sequences, steps, or phases, he asserted, and is closely related to the field of operations research. ¹¹ However, after Rittel began looking at wicked problems, he developed in his work a design methodology focusing on issues of planning, policy, and participatory design.

Like the first generation design method, service design has been compared to the field of operations research.¹² A significant amount of service design activity has thus far consisted of delivering insights and demonstrating innovative concepts resulting from linear research or linear product development processes.¹³ However, service designers are becoming more interested in a wide array of social problems and are shifting toward a new paradigm that focuses on wicked problems.

This transition from a focus on tame problems to a focus on wicked problems surfaced several times during the course of the conference. In the panel on healthcare innovation, Lorna Ross, a design educator and manager at the Center for Innovation at the Mayo Clinic, raised concerns about recalibrating service design in healthcare. In her experience, service design initially promised organizations too much while only providing quick fixes and solving simple problems. Planning for healthcare education and integrating design within organizations are wicked problems since there are essentially contested values at the core of both activities; hence, the way service design communicates and executes its value propositions needs to be reexamined. In the same panel, Chris McCarthy, from Kaiser Permanente, shared that the most pressing issue in contemporary healthcare is the need for radical reform over entire systems. In order to motivate caregivers to think about social issues, he and his team at Kaiser Permanente have been responsible for building an awareness of external conditions, that is, the situations and environments outside of commonly understood domains within the organization.¹⁴ For example, one issue is the fragility of healthcare systems in various countries. As decision makers enact policies around the world that continue to limit the access of health services

- 8 For an overview of well-structured problems, see Herbert A. Simon, "The Structure of III Structured Problems," Artificial Intelligence 4 (1973): 181–201, and W. R. Reitman, "Heuristic Decision Procedures, Open Constraints, and the Structure of III-defined Problems," In Human Judgments and Optimality, M. W. Shelley and G. L. Bryan, eds., (New York, NY: Wiley, 1964), 282–315.
- 9 See Richard Buchanan, "Wicked Problems in Design Thinking," *Design Issues* 8:2 (Spring 1992).
- 10 Rittel also refers to this traditional and scientific method as the first generation systems approach. It is to be contrasted with the second generation systems approach, which is characterized by principles of dealing with wicked, or planning, problems.
- 11 See Horst W. Rittel, "On the Planning Crisis: Systems Analysis of the 'First and Second Generations,'" *Bedrifts Økonomen*, 8: 390–6.
- 12 This is supported from the literature, where numerous topics around service design are published in journals such as *Production and Operations Management* and *Journal of Operations Management*. For example, see Susan M. Goldstein et al., "The Service Concept: The Missing Link in Service Design Research?" *Journal of Operations Management* 20 (2002): 121–34.
- 13 Chanpory Rith and Hugh Dubberly point out that most linear models of the design process trace their roots back to the Design Methods Movement, in Chanpory Rith and Hugh Dubberly, "Why Horst W. J. Rittel Matters," *Design Issues* 22:4 (Autumn 2006): 1. Bruce Hanington shares an example of this type of approach that has been used by Carnegie Mellon University, in Bruce M. Hanington, "Relevant and Rigorous: Human-Centered Research and Design Education," *Design Issues* 26:3 (Summer 2010): 21.

for people due to the decline of resources, governments and organizations face a significant challenge in maintaining services with less financial support. When the concerns of the internal organization include global issues such as this, service design has a role in stirring the passions of individuals and groups, and in actively seeking leaders within the organization who have the vision and wherewithall to champion programs and projects that align with needs of the greater society.

Robert Fabricant of frog design and Mark Jones of IDEO, both representing design agencies, also contributed to the theme of service design and wicked problems. Fabricant, who has successfully led a project that seeks to help HIV and AIDS patients in South Africa through a mobile technology and home-testing kit platform, introduced cybernetics and systems thinking as a possible way of grappling with the wicked problem of changing people's behaviors. Jones described the types of well-defined problems that preoccupy many designers and argued that the essence of service design might lie elsewhere—in the types of social problems that he described as being "hairy." 15

The points of the featured speakers were echoed by the voices of participants who asked whether service designers are properly using their skills to benefit the general public. One of Rittel's dilemmas after introducing the concept and reality of wicked problems was trying to decide whose values to use in determining what is best for society. How does one determine what is best for the larger, civic welfare? Service design must deal with "problems of equity that rising pluralism is provoking," and reconsider and reevaluate the idea of participation as it seeks to deal with wicked problems.

Conclusion

Although the conference provided a view of the state of service design today, it also showed how the conversation is changing. During the entire conference, for example, the terms, "service blueprint" and "touch point," were hardly used. In fact, one presentation suggested that the stabilized vocabulary of service design needs to be challenged because there have been significant changes in the way the subject is discussed and practiced. Using an appropriate vocabulary not only helps to capture some of the sophistication in service design today but may provide a way to project the hopes for where the discipline desires to be.

The community is also changing. As more services of higher quality are produced, as service design ideas become integrated into organizations, and as innovative plans and policies affect social problems, people will continue to contend with opposing ideas and discover opportunities for transformation at the locus of participation, and new participants will come forward. The argument

¹⁴ This echoes Peter Drucker's point that information outside of an organization may be the most important information available to workers and managers.

See Peter F. Drucker "The Information Executives Truly Need," Harvard Business Review (January–February 1995): 54–62, and Peter F. Drucker, with Joseph A. Maciariello, "Information Tools and Concepts," Management: Revised Edition (New York: HarperCollins Publishers, 2008), 341–55.

¹⁵ Others have also called wicked problem by other names. Russell Ackoff refers to wicked problems as "messy" problems, in Russell L. Ackoff, "Beyond Problem Solving," *General Systems* 19 (1974): 237–9, and Robert Horn prefers to call them "social messes," in Robert E. Horn, "Knowledge Mapping for Complex Social Messes" (paper presented to the Foundations in the Knowledge Economy at the David and Lucile Packard Foundation, July 16, 2001).

¹⁶ Horst W. Rittel and Melvin Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 (1973): 155–69.

is repeatedly being made that service design can play a role in improving our daily lives. The activity of designing for services is dynamic, and the pathways toward greater participation have yet to be explored.