
Exploring Design Thinking Practices in Evaluation

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Background: Design thinking is the process by which the core principles of design are used to problem solve and identify innovative solutions that enhance user experience.

Purpose: The purpose of this article is to introduce the concept of design thinking and explore the basic principles of design thinking within the context of the evaluation.

Setting: The design thinking process has been used in various fields to enhance innovation and consumer experience. This article explores how the concepts of design thinking can enhance evaluation practice.

Intervention: This article did not require an intervention

Research Design: Not applicable

Data Collection and Analysis: Not applicable

Findings: We present ideas for adopting design thinking principles into everyday evaluation practice

Keywords: *design thinking; evaluation; client experience*

Exploring Design Thinking Practices in Evaluation

Design thinking has gained considerable attention in the past decade. Various disciplines have adopted design thinking to address complex problems and enhance user experience (Martin, 2009, Uehira & Kay, 2009 and Brooks, 2010). It has been used as a tool to foster creativity to address problems in health care, management, etc. Design thinking has also been discussed in the American Evaluation Association's blog, www.aea365.org, as a strategy that can be used in developmental evaluation (Norman, 2014). The linkages between design thinking and evaluation have also been described in other online blogposts (Norman, 2014, and Tran & Gopalakrishnan, 2013). However, there has been no paper to date that has examined design thinking practices and potential use for evaluators. This paper reviews literature from design thinking and design research to examine how design thinking can be used in the context of program evaluation.

The purpose of the paper is to look at what design thinking is and how it can be adopted within the context of program evaluation. Design thinking research is still relatively new and therefore in order to fully explore the topic this review includes works from design researchers, design thinking practitioners in management and design thinking consultants in service oriented fields. The paper is organized into two major sections: 1. What is design thinking? and, 2. How can evaluators implement design thinking principles in evaluation?

What is Design Thinking?

Most of the common definitions of design thinking combine elements of design thinking methods and sensibilities with business feasibility. Therefore it is important to understand the core design sensibilities that inform the design thinking process. Design thinking borrows two major sensibilities of the designing process—abductive reasoning and human centeredness.

1. Abductive reasoning: Designers think differently

Designers work on complex problems (Buchanan, 1992). Complex problems are characterized by high degrees of uncertainty, not having clear solutions and often having temporary solutions. In

social science literature, these problems are often described as wicked problems (Rittel and Webber, 1973). While scientists use inductive and deductive reasoning to think through the wicked problems, designers also use abductive reasoning to come up with solutions to the problems (Kolko, 2010). In order to understand abductive reasoning, it is important to understand the two common modes of reasoning—inductive and deductive. Inductive reasoning is the logic used to arrive at a conclusion based on structured experiences and observations. This reasoning is often used in the scientific inquiry process. Deductive reasoning is often used in mathematical proofs wherein a conclusion must be true if certain conditions are true. Abductive reasoning is “argument to the best explanation” (Kolko, 2010). Abductive reasoning allows designers to view a problem with the end goal of finding a solution (an argument) to it.

2. Human centeredness: Designers see things differently

Designer not only want to create viable and feasible solutions but also want create *desirable* solutions. Attention is paid to the user experience. Designers note the emotions and perceptions of the user as they use a product or service. Suri and Herndrix (2010) describe how designers view problems in a much broader context so that they can identify opportunities to enhance the user experience.

Designers also bring a critical eye, detecting and sometimes becoming offended at designs that don't work – where details have been overlooked or dismissed as unimportant and thus undermine more positive possibilities. Perhaps it's a product package whose form and material contradict the verbal message it is trying to convey about freshness or simplicity...Designers are able to reframe these misfires as opportunities to rethink the approach and carry through on a promise in a more effective, genuine way (Suri and Hendrix, 2010).

Long before design thinking, exploration and understanding of design sensibilities and the design process has been a part of design research (Rowe, 1987; Simon, 1969). However, the broader application of design sensibilities in other disciplines was only made in the late 1990's. In the late 1990's and early 2000's, the design discourse started to enter into the field of management

(Hassi and Laakso, 2011). Business firms and design consultants started to explore how the process of designing with the attitude and sensibilities of designers could be used to help foster creativity and innovation in businesses. This sparked the interest in using design methods beyond creation of products. The design inquiry process was used as an approach to bring human

centeredness to technology or organizational centered systems (Kimbell, 2011). So while modern design thinking has its roots in design, the practice of design thinking stemmed from business and management. The below figure from Hassi and Laakso (2011) illustrates the movement of design thinking from design to management.

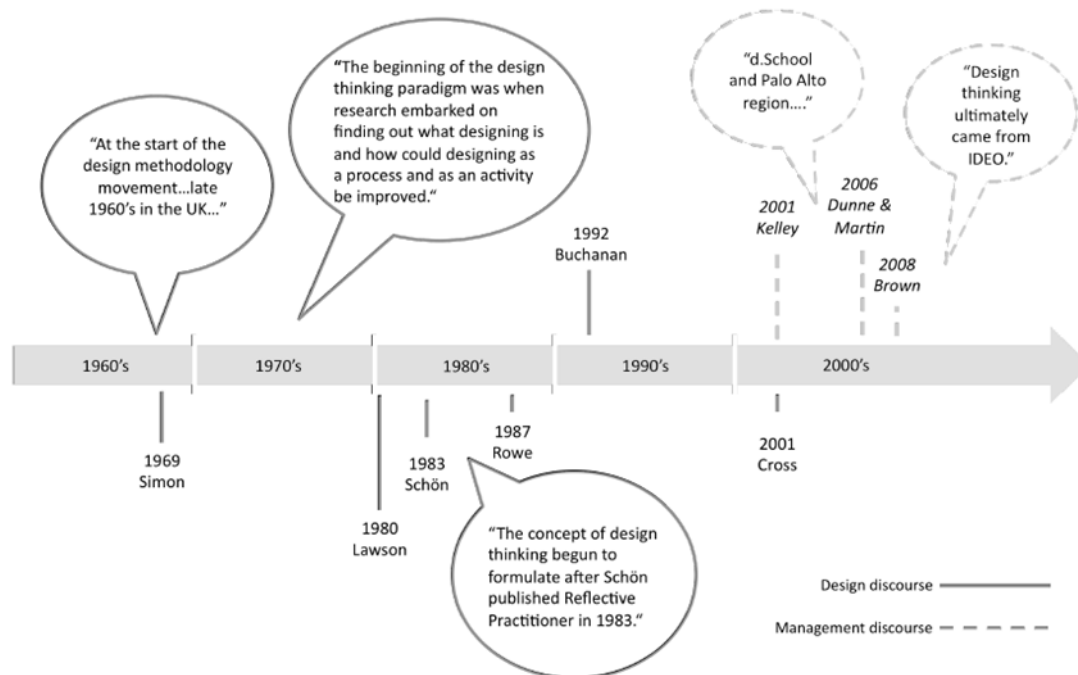


Figure 1. Roots of design thinking. From: Hassi, L., & Laakso, M. (2011) Design thinking in the management discourse: Defining the elements of the concept. In 18th international product development management conference, Innovate Through Design, The Netherlands.

Therefore the current definitions of design thinking combine the elements of designing sensibilities within a business context. Tim Brown's (2008) definition clearly expresses how design thinking is the byproduct of two seemingly distinct disciplines. Brown (2008) defines design thinking as "a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity."

How can evaluators implement design thinking principles in evaluation?

There are three common elements across all design thinking approaches—1) understanding the need and experience of the user (empathize and

define), 2) brainstorming and coming up with a broad range of possibilities (ideate), and 3) building and testing out concepts to select a solution to fit the user's problem (prototype) (Brown, 2009 and Martin, 2009). In order to think through how the above 3 concepts might fit into the context of program evaluation, we need to think about the offerings provided by evaluators. Evaluators offer products (reports and other deliverables) as well as services (working with stakeholders so that evaluation is used for program improvement). Often, it is hard to discern the value created by the tangible products (reports) and intangible parts (services) of an evaluation. This inseparability of tangible and intangible is the hallmark of a service (Kotler & Armstrong, 2006). Framing evaluation as a service allows evaluators to design an evaluation experience that promotes client engagement,

participation, and use of evaluation. The following paragraphs describe how the three common elements of design thinking can be incorporated within the context of evaluation service.

1) Understanding the need and experience of the user (empathize and define)

Most evaluators conduct some form of ‘needs assessment’ prior to conducting an evaluation. Design thinkers often use the same methods that evaluators use for understanding the needs of clients. The difference is not in the types of methods but how the methods are implemented and the results are used

Design thinkers use ‘empathic’ processes to understand the client’s needs and experiences. The rationale for this process is that the more empathetic a designer is, the more likely the design solution will meet the client’s need (Koskinen et. al., 2003). In order to understand the role of empathy in the service design framework, it is important to know the difference between empathy and sympathy as well as the psychological components of the feeling of empathy. Lauren Wispe’ (1986) noted, “the object of empathy is ‘to understand’ the other person. The object of sympathy is the other person’s ‘well being’” (p. 318). Broadly, an empathetic feeling has two components—*affective* and *cognitive*. The *affective* component is the feelings elicited by the user’s situation or need. The *cognitive* component includes understanding of the client’s perspective and taking on their role (Mead, 1934). By being cognizant of both components, designers create a solution that not only meets a need but also creates a more positive experience for the client.

Design thinking practitioners use varying approaches to tap into the ‘*affective*’ response to the problem and the *cognitive* reasoning that comes from understanding the client’s perspective. The approaches vary from contextual interviews with clients to more involved methods like observing the client (shadowing) or experiencing the problem first hand (Stickdorn & Schneider, 2011). Regardless of the approach, there are some strategies that can be incorporated to gain empathic understanding from the client. Kouprie and Visser (2009) describe four phases to any empathy discovery process. The phases include—*discovery*, *immersion*, *connection*, and *detachment*. Understanding these phases will help evaluators derive more meaning to the current ‘needs assessment’ methods. The phases will also help evaluators ‘step into’ and ‘out of’ the client’s world when needed.

Discovery is the phase in which the designer has a willingness to leave his/her comfort zone to understand the client’s world. Immersion is the phase in which the designer steps into the clients’ world. In an evaluation context, the immersion process will vary depending on the stakeholder. Immersion could include being an observer at program staff meetings or a site visit to schools/communities. Kouprie and Visser (2009) emphasize the importance of immersion in the client’s world without judgment. Evaluators sometimes use immersion activities as ways to collect ‘baseline’ data and the very exercise of data collection brings judgment to the process. In the connection phase, the designer shares his/her own feelings from the immersion process with the client and identifies ways to relate to the client’s understanding. Finally, the detachment phase involves stepping out of the client’s world to reflect on the experience and use professional expertise to enhance the client’s life (Kouprie & Visser, 2009).

As most evaluations involve multiple stakeholders; ranging from clients who commission the evaluation to stakeholders who are impacted by a program. Once the stakeholders are identified, the evaluators can choose the most appropriate method for each stakeholder group. Depending on the role of the stakeholder, evaluators can ‘step into’ and ‘out of’ their worlds at different times during the evaluation. For example, evaluators might have to use a more empathic process to understand the needs of the clients who commission the evaluation early on in the process to identify meaningful evaluation questions and develop products suited for their consumption and use. An empathic needs assessment will help evaluators understand the current perceptions and emotions stakeholders have regarding the evaluation process itself. Using the information gained from the empathic process, evaluators can design an evaluation that not only meets stakeholders’ need but also enhances their perception and use of evaluation.

2) Brainstorming and coming up with a broad range of possibilities (ideate)

Because evaluation is a service with tangible and intangible components, it is important to ideate for both the intangible (experience) and the tangible (reports and other deliverables). While there has been considerable research on creating evaluation plans that are useful (Patton, 2008), there is very little literature on creating and designing evaluation experiences. Ideating for service means creating and designing a

pleasurable experience for the client/user. Clark and Smith (2008) argue that ‘emotion drives action’ and therefore understanding client emotional experience is an essential part of any business. Bate and Robert (2006) describe how patient experiences can be used to create a health care experience that appeals to the user at an emotional and cognitive level.

When ideating for a service, design thinkers identify all the points of interaction between the client and the service as well as the client’s emotional experiences at the points of interaction (Bate & Robert, 2006). In order to enhance user experience of an evaluation, evaluators must identify the desired experiences between stakeholder groups and the evaluation at various points of the evaluation. It might also be helpful to visualize the experiences at each interaction. For example, during evaluation design phase, the desired experience could be excitement and interest in framing questions or including evaluation as a part of the program. Once the ideal experience is visualized and defined, evaluators should explore ways to elicit the experience. This may include exploring different formats of meeting styles, ways of engaging the client in evaluation conversations, or different formats of the same evaluation documents.

3) Building and testing out concepts to select a solution to fit the user’s problem (prototype)

A critical feature of design thinking is going through an iterative process of testing out ideas. While design thinkers focus on the emotional experience of the user, they often caution about having an emotional connection to an idea. In *Managing as Design*, Boland and Collopy (2004) very elegantly talk about the pitfalls of falling in love with ideas:

The human experience of love is fundamental to the creation and appreciation of designs. We do things because we love to, and we feel that design ideas are good ones because we fall in love with them. Humans often fall in love with the first good idea they develop and become blinded to other possibilities. A designer has to maintain a constant tension between loving an alternative he is exploring, so that he can approach it with true passion and resisting falling in love with an alternative until he has explored a sufficient number of them. (p. 273)

Design thinkers use prototyping to test concepts quickly. Prototyping allows people to rapidly test out ideas and learn by doing. Various approaches are used to create a desired service experience (e.g. agile development, co-creation, service prototyping, and service staging) (Stickdorn & Schneider, 2011). All of these approaches allow for creating, testing and reflecting on client experiences. Additionally, importance is placed on individuals and interactions rather than tools and processes (Stickdorn & Schneider, 2011). Tools and processes are adapted till the desired client experience is achieved.

Since evaluation includes some form of tangible product along with its service, the authors have found prototyping of a service and product to be a concurrent activity. For example, in a large scale multiple initiatives project, we used one of the initiatives as the ‘pilot’ to prototype products and service. In this project, format of evaluation meetings, agenda setting, types of documents used to collect information on project activities, and conversations to engage the clients were prototyped with the ‘pilot initiative’ for each phase of the evaluation. Based on the client reactions and interactions, the documents and the design of evaluation meetings for each phase were refined for other initiatives. It should be noted that prototyping involves client time and effort. So evaluators should not only be careful in who they chose to pilot but also ensuring that the testing phase is quick. Documentation of failed prototypes in identifying outcomes and retrospective reflection on why they failed helped us to identify gaps in perception, communication, and values between the evaluators and clients.

Summary

As a discipline, evaluation has paid considerable attention to how to design useful and actionable evaluations (Patton, 2008, and Davidson, 2013). But little attention has been paid to what it means to create an experience for the client and how we can leverage their experience to use evaluation findings. Design thinking provides a framework on how to plan an evaluation that enhances the client experiences and thereby increasing the likelihood of using evaluation findings. Hassi and Laakso (2011) emphasize that design thinking is a concept that should be practiced. As evaluators explore and use design thinking strategies, new ways of designing an evaluation will be identified. Therefore, the theoretical framework presented in the paper should be considered as the start of a

conversation and platform for evaluators to design an evaluation experience.

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