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Where Does Design Thinking Leave Design? Snapshots of a conversation with the design community

Figure 1: Design Thinking conversation session introduction

Abstract

Design Thinking has gained recognition as an acclaimed process for generating innovative, human centred solutions at a social and business level. It has also gained notoriety amongst many designers, who claim that its success as an exported element of the design process has resulted in its commodification, and led to it becoming a diluted series of processes that lack criticality. This article describes the findings from a conversation session held at DRS2018 which posed the question: HAVE WE REACHED PEAK DESIGN THINKING? Participants were asked to identify with a range of positions on the topic and were then given three questions to provide a constructive debate. The findings point to a lack of a clear distinction between design and Design Thinking, a lack of consensus as to whether a designer is required in the process and also a lack of agreement as to its benefits. In order to prevent a continued backlash against Design

Thinking the findings point to the need for a framework that can outline the clear distinction between design and Design Thinking, whether the designers skills are required and the context and scale of a project that would require design or Design Thinking or both.

Key words: Design Thinking, design, design processes, design practice, design skills, non-design disciplines, human centred.

1. Research Context

This paper is premised on a robust reflection of the commercialization and commodification of Design Thinking, as the approach circulates more and more freely outside of the design disciplines and where Design Thinking workshops are run and facilitated by professions other than design, or perhaps at the margins of the discipline. Increasingly, corporations and professional services firms are working to create design-centric cultures as many products, services, and processes have become technologically complex. (Kolko 2015). Design Thinking has been seen as the solution to solving these issues. IDEO the company associated with popularising Design Thinking, see it as a human-centred approach to innovation that draws on the designers toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success (Brown 2011; Glen *et al.* 2014). Design Thinking can be described as a set of principles encompassing empathy with users, prototyping, and a tolerance for failure to create innovative solutions to business needs (Kolko 2015).

Design Thinking has never been so popular. The discipline has come so far over the past two decades, where a range of organisations now employ Design Thinking across many functions,

including NPD, marketing, branding, organisational change etc. (Liedtka 2011; Martin 2011; Liedtka 2014).

Much of the criticism associated with the popularised version of Design Thinking as advocated by the d school and IDEO (Brown 2009; Brown and Wyatt 2010) where a five step process, post-it notes, buzzwords, and practices associated with managerial culture, are at the core is that it lacks recognition of the history and depth of Design Thinking. As a result many complex ideas underpinning historical Design Thinking have been omitted and replaced by business jargon and a promise of innovation (Hernández-Ramírez 2018). Further studies (Badke-Schaub *et al.* 2010; Cross 2010; Dorst 2011; Kimbell 2011) have argued that many popular accounts of Design Thinking have ignored the extensive literature over several decades that has addressed how designers think and work.

While design thinking originated in the 1930s (Hernández-Ramírez 2018) Peter Rowe's book published in 1987 brought a focus to the topic. He observed that designers have episodic ways of working relying on hunches and presuppositions, along with facts. Further contributors to the topic are Cross (2001); Cross (2006); Cross (2011) who found that designers mode of working is solution focused as they tackled ill-defined problems and concluded that design was a creative discipline distinct from the sciences and the humanities. The concept of framing was introduced by Schön (1983) where designers 'reflect in action' as they work while the practice of designing in a context of multiple constraints was the focus of Lawson (1980). Lawson and Dorst (2013) describe "analysis through synthesis" where designers generate conjectures about possible solutions or partial solutions and use these conjectures as a way of exploring and defining the problem and the solution together. Burnette (2009) and Kiernan *et al.* (2019)

describe different kinds of thinking within the design process. These are only examples of the many studies conducted and Kimbell (2011) argues that while there has been a sustained effort to understand and describe design cognition this has not yet generated a definitive or historically-informed account of design thinking.

This perhaps has given rise to a growing concern amongst many in the design community about the term 'Design Thinking, its mixed interpretations and frequent misuse by those outside of the field of design (Jen 2017; Vinsel 2017). There is a belief that this is leading to the devaluing of design as a skilled practice (Vinsel 2017).

> "Design Thinking isn't about design. It's not about innovation in any meaningful sense. It's certainly not about 'social innovation' if that means significant social change. It's about COMMERCIALIZATION (Vinsel 2017).

Part of the disquiet around Design Thinking is due to its different forms which is creating confusion about what it is. As stated by Rylander (2009), it's hard enough understanding design and thinking, let alone Design Thinking. This is supported by Kroeter (2011) who states that "Design Thinking" is as problematic a term as "art thinking." As it is attempting to encapsulate the multiple and varied disciplines of design under one umbrella. He believes the term is imprecise and meaningless and can be described more as "muddled thinking".

Kolko (2018) states that there are two paths of design, diverging. Practitioners who partake in Design Thinking with the skills of doing, building and making which stems from a knowledge of the history of the craft. There are then people and firms practicing Design Thinking by thinking.

He believes that the former has intellectual depth because it has formal depth in that someone has given shape to an idea. He argues that in the latter instead of a view of design as a way of understanding culture and then shaping it through craft, it is a means of driving innovation through one linear methodology through the means of 'post-its', 'canvases', 'playbacks' and 'design sprints'. "Today's design thinkers lack craft, lack intellectual foundations, and can't make things." (Kolko 2018).

This is supported by (Jen 2017) who states that design is about learning by doing, building evidence, being open to critique and iteration to improve. It therefore needs to have designers involved to bring the skills of problem solving, sketching, building, making, exploring and doing that have been developed over time. Another backlash to Design Thinking is that it makes big claims and misuses the term 'innovation'. Common in the criticisms is a decoupling of design and design practice, or more specifically designers (Kimbell 2011). In this setting Design Thinking is regarded as a sales commodity that is so well designed, one might argue, that the designer themselves has become obsolete.

In his criticism of Design Thinking, Vinsel (2017) argues that Design Thinking courses do not give students a realistic view of the depth and scope of practicing design. He believes that such courses give their students power and creative confidence without the knowledge and skills of design. Jen (2017) sees Design Thinking as an over-simplification of a complex process in that it packages design methods for a non-designer audience by codifying their processes into a prescriptive, step by step approach, claiming that it can be applied by anyone to any problems. She does not accept that any single methodology can deal with every type of problem and context.

On one hand, rather than seeing the commodification as negative, it could be argued that non designers taking up the 'market making' activities and encouraging firms to use 'Design Thinking light' has benefited design and has raised its importance and use. Our hypothesis is that Design Thinking has reached a 'peak' in contemporary practice, and as the term 'design' is further adapted and conformed to suit a business function, Design Thinking and its positioning within design and non-design industries needs reframing. In developing this enquiry, an overarching question emerged; how can we use the success of Design Thinking as a catalyst for producing more and effective methodologies that can be applied and adapted by other disciplines?

2. Research Methodology

Utilising the Conversation format offered within the 2018 Design Research Society Annual Conference, a participatory research approach that generated qualitative responses from an informed audience was adopted. By establishing this platform for conversation at the DRS 2018 conference, we sought to engage a range of stakeholders from design practice, education and research in a critical exchange of thoughts on how Design Thinking may act as a catalyst for design research. Assembling representatives from each of these stakeholder groups as conversation participants provided the opportunity for various questions to be discussed. The conversation was structured into three parts, firstly enabling a personal position to be expressed on the subject, secondly facilitating group discussions responding to primer questions set by the convenors, and thirdly affording any closing positons on the subject to be captured.

The broad aims of the study were to:

• Investigate how Design Thinking continues to circulate amongst non-design disciplines.

• To examine the relationship between Design Thinking (tools), design language (talking) and design practice (doing) amongst Design Thinking users and facilitators.

• Generate research data from the conversation that can be analysed and used to form theory and frameworks for the future.

All conversation data and participant views were captured via audio recording and flipcharts or post-it notes generated as part of the group discussions. Following the conversation, the materials were then thematically analysed in line with the conversation's primer questions, with responses grouped, and common viewpoints or practices identified. It is anticipated that the analysis of data, for this and subsequent research studies, will inform the conceptualisation of enhanced methodological frameworks, aiming to better support innovation across divergent industry practices.

3. The DRS2018 Conversation session

The participants were asked to put their personal thoughts about Design Thinking on post-it notes and apply them to the wall at the beginning of the session. Statements representing a spectrum of opinion on Design Thinking were also displayed around the conversation venue, with participants asked to select the statement/s that best corresponded to their own views of the subject. This initial exercise enabled the participants to express their own immediate viewpoint and familiarise themselves with other views surrounding the subject.

To maximise the effectiveness of the time limited conversation, a semi-structured approach

was adopted, with a series of primer questions presented to the participants:

1. Should there be a designer involved in all Design Thinking processes or is everyone a

   designer?

2. What is the difference (or is there a difference) between design and Design Thinking?

3. When does Design Thinking not work?

The participants, as representatives of academic, researcher, and design practitioner

stakeholders, were situated in randomised groups across five tables within the conversation

venue, and asked to firstly discuss the question being asked amongst their group, making note

of their own responses, summarising their group's discussion, and then reporting back to the

other participants in the room. The resulting discussion explored the different agendas and

viewpoints between the participants for each question (Figure 2).

Figure 2: Peak Design Thinking conversation in action

3. The DRS2018 Conversation findings

3.1 Choose Your Position

A number of the session's participants used #peakdesignthinking to post initial comments at the start of the conversation, aligning to their starting viewpoint, and then throughout the conversation as the sub questions were discussed, with retweets and comments reaching beyond the immediate conversation participants. The twitter hashtag recorded 126 engagements on the topic during and after the conversation. The majority of the twitter comments reflected the views and discussions that emerged through the conversation, such as that "everyone can be a designer – it doesn't mean everyone is good at it" and that "often the context of commissioning design can limit the capacity to imagine better futures" and also raising views that ask "does it matter how we define and package Design Thinking or rather look on the impact of Design Thinking" as a priority. The range of comments highlight some of the polarities of opinion surrounding Design Thinking framed within the conversation proposal itself, and provided a useful 'sub-layer' of commentary to the live conversation.

A number of posters that highlight the existing polarity of opinions surrounding Design Thinking were positioned around the conversation venue itself, to act as prompts and help draw out audience opinion. The posters contained statements from design industry commentators, practitioners, academics and prominent design blog writers. Delegates were then asked to place a sticker on the poster with the statement they identified most with. The highest 'scoring' statements amongst the conversation participants were less reflective of the polarizing opinion that Design Thinking generates. Seven participants aligned to Gadi Amit's 2018 comment that "A six week course at Stanford won't make you a designer" (Quackenbush 2017) (Figure 3). The

other statement with 7 post-its was:

"Design Thinking is more about a mind-set that focuses on how to look at challenges

around us. Methodologies & processes are important, but these are mere tools."

(Kadam 2018).

These two statements are perhaps more measured and descriptive of the potential value a

Design Thinking methodology may offer within the design process. The selections may also be

reflective of the conversation audience, comprising a higher proportion of design researchers

and academics than design practitioners.

Figure 3: High-scoring participant poster statements

Participants' selections of other statements were very evenly spread reflecting both positive and negative viewpoints. Examples are;

> "Design Thinking packages a designer's way of working for a non-design audience by way of codifying design's processes into a prescriptive, step-by-step approach to creative problem solving — claiming that it can be applied by anyone to any problem."
>
> (Jen 2017)

And Gadi Amit's 2018 statement that "The great value of Design Thinking is it's way of improving communication across the entire organization." (Quackenbush 2017) (Figure 4 & 5).

Figure 4: Sample Statement Posters used for the conversation

Figure 5: placing stickers on the posters

3.2 The Conversation

In order to facilitate further discussion following the "choosing your position" introductory

phase of the conversation, participants were propositioned with three main questions that

investigated the designer's role in Design Thinking, the differences between design-doing and

design-thinking, and the functionality of Design Thinking.

Q1: Should there be a designer involved in all Design Thinking processes or is everyone a

designer?

This is a question which generated opposing views, with some people believing that the

designer is essential to the application of a design process. Participants commented strongly

that "everyone is not a designer" and that this ability "depends on your educational experience,

your practical experience, developing the craft of being a designer." Participants also strongly

believed that "a four week course in Design Thinking doesn't make you a designer", with the

designer contributing a critical lens within the process. Participants commented that "you do

need a designer in the process, but it depends on the stage of the process" and also questioned

the role that the designer adopts within the creative process. Some participants suggested that "if it's the very start of the process where you're trying to identify the problem, someone else can facilitate that" but essentially the designer would be there to witness and capture the various views, issues or emergent ideas. One participant contributed that:

"I look at the detail in the world and I don't think a lot of businesses look at details. I have worked in corporations where they don't see the small things, like I do. So I think they don't see the problems sometimes."

Other participants believed that it was not always necessary to have a designer on the project, and that "the non-designer may find loop holes that the designer is unaware of and will help facilitate solving the problem." However, the context and scale of the project was considered to be a contributing factor in determining the need for a designer's input, with participants expressing the view that "large projects should not spare on a designer." The conversation revealed a view that for some participants the term 'Design Thinking' assumed that a designer was not involved, and that it was a toolkit for non-designers. As one participant questioned, "Is Design Thinking not a way to 'tell' how design tools are to be used by non-designers?" The term 'designer' was also considered to be too broad, making it difficult to define the role and the skills that a designer can bring. Participants highlighted the view that "you can't categorise a designer as a designer or a design thinker" and that designers were not consistent in their processes and approaches to Design Thinking:

"Everyone does not think alike and even designers think subjectively" as "It depends on the nature of the project and the designer's own knowledge."

What was considered as being important to many participants was that the process had someone who could coach, lead and mentor the project with an understanding of design. Participants commented that "not every squad requires a formally trained designer on board, however each squad does require a coach to help them advance practice" and that "perhaps it's more necessary to have a person with some design understanding and a design mind-set involved." These points again emphasises the valuing of a critical mind-set, whether gained through design training or otherwise to provide questioning and interrogation.

Q2: What is the difference (or is there a difference) between design and Design Thinking?

In discussing this question there was a sense that the boundaries were very much blurred, but that design requires experience and skills learnt over time. There was a view amongst some participants that "design is a discipline and 'Design Thinking' (as posted by IDEO) are processes and design tools to be 'spread' and 'sold' in non-design contexts." Therefore "any creative individual can have the ability of Design Thinking, but designing requires experience, knowledge and an education in a design field." A further articulation of this view was that:

"Good designers do it intuitively, they may not even be able to articulate it or identify a process or tools but they practice it daily. Design Thinking tries to put tools and a

process to help others tap into what designers practice in different forms in varying

disciplines."

One group of participants summarized their response to this question as:

"design being more than just craftsmanship. There seems to be some intuitive problem

solving component, so intuitive problem solving plus craft, and then you get design."

Although they did emphasise that not all were in agreement on this view.

There was also a view that:

"Design Thinking is a co-creative strategic activity with an emphasis on sense making

practiced at the early stage of the innovation process."

While design was considered by some participants as more traditional and solution oriented,

requiring aesthetics and technical skill towards the production of 'crafted' outcomes. In

discussing how the emergence of design thinking influences employability amongst designers, it

was suggested that:

"they're not thinking about Design Thinking…they want someone to make a website

look good, the hirer of the designer doesn't think about Design Thinking when they're

hiring a designer…which I think causes some problems with the definition and tasks that should be undertaken by the designer."

Design was seen to be focused on artefacts while Design Thinking worked on organisations and systems. While such differences were verbalised by the participants, overlapping characteristics were also identified, that "both design and Design Thinking are ways to problem solve" and that:

> "design is thinking visualised in an object or physical thing, so thinking is part of the design process and therefore the designer is a thinker."

This useful formula emerged from one group's discussions, "Design Thinking = process. Design = result. Design Thinking leads to design." When discussing how Design Thinking should be used in companies, there was some debate on the correct use of context and role of the designer. One participant considered the application of user centred methods within the design process, suggesting that:

> "It always depends on the context. You've a graphic designer, you've an industrial designer, you've a service designer, you've a UX designer…there's so many different roles in design. It always depends on what the context of the problem is."

Another suggestion was that:

"The best way to sell design and/or Design Thinking within an organisation is not to talk about design. It's to talk about the outcome which typically is what we experience."

It was also expressed that whatever the focus of the design activity may be, "our goal as a designer…is to be able to listen to those emotional responses" and Design Thinking used as an enabler:

"To start to think about experience more deeply and give you the space as a designer to be able to practice your craft and be able to deliver that great experience."

Q3: When does Design Thinking not work?

Some participants flipped this question and gave examples of real life experiences where they believed Design Thinking was not used, but should have been used and tested to produce a better outcome. Overall the participants felt that Design Thinking did not work "when it's viewed as a rigid process and an absolute solution for all problems." Others suggested that "it could be too limited, patronising and creative oriented for certain kinds of complex local problems and some stakeholders." Other participants suggested that Design Thinking was not required, or would not work "when a challenge needs a quick answer…and the context is mighty regulated or structured" and also that:

"Design Thinking doesn't work when a company or (person) seeks immediate profit. Design Thinking needs more time. Design Thinking needs more money and the CEO doesn't want to pay for that."

Design Thinking was also believed not to work when there was a lack of skill and knowledge amongst those practicing it:

"When subtle differences matter a lot, lacking deep skills and experience makes it impossible to make certain decisions fast and effectively."

Additional barriers to the effective application of Design Thinking were identified as poor collaboration, and when it is imposed on unwilling players. It was also believed that Design Thinking did not necessarily work "when crossing cultures and bringing 'local' ways of Design Thinking to a new context." The conversation then generated some final thoughts eluding to a change of phrase by dropping the word 'design' from Design Thinking all-together, with some participants suggesting that "If we want to be the catalyst of positive change, in general, the 'design' should be dropped…maybe Design Thinking should be called 'problem-finding thinking' or something like that."

4. Discussion

As design disciplines and the role of designers continue to evolve, we need to reflect on Design Thinking's original context and understand its progression into a non-design world. This

conversation elicited a constructive debate on Design Thinking and its positioning within design and non-design industries. One of the clear messages that came from the conversation was the agreement that we have divided opinions on the use and scope of Design Thinking as a mind-set and process. Firstly the findings point to a lack of a clear distinction between design and Design Thinking however there was some agreement that design requires experience and skills learnt over time and involves both craft and technical skills while Design Thinking was seen as a process or toolkit that can be followed by anyone.

Secondly there was also a lack of consensus as to whether a designer is required in the process. It was noted that not all designers have the same skills and think the same way. The term 'designer' was considered to be too varied to define the role and the skills required for a project. However there was a belief that it was essential to have someone who could coach, lead and mentor the project with some understanding of design. The context and scale of the project was shown to be a criterion in deciding this.

Thirdly Design Thinking was considered not to be successful when it is applied to all projects, contexts and settings as a rigid and overprescribed process. The findings point to the need for those practicing it to have the appropriate skill and knowledge. It cannot also be forced on unwilling participants.

While Design Thinking has had success it is important to define a pathway forward for it to flourish. In order to mitigate the backlash against Design Thinking there is a need for a

framework that can outline the clear distinction between design and Design Thinking, their scope, their differences, how they can complement each other so that both can co-exist without damaging the other. It is important to recognise where designer's skills are required in terms of the context and scale of a project. This would enable us to recognise when a designer needs to be a part or even the leader of the Design Thinking process. Such a framework would then provide companies and educators with a means of determining the skills sets and disciplines when creating solutions for problems or opportunities.

Limitations and Future research

The conversation conducted was limited to a small stakeholder group of design researchers, academics and some practitioners. It did not address the views of those outside the discipline of design, and particularly those from the business community. However this provides clear opportunities for future work. There is scope to further pursue a number of the points raised within this conversation over a broader audience of contributors and across different territories, to reveal any discernible consistencies in viewpoint and practices. The next steps in developing further research within this topic will be, firstly to conduct a number of case studies with businesses of various sizes that are practicing Design Thinking, both with and without designers, secondly to deliver further conversation workshops at selected international academic design conferences. These activities will establish an evidence base of research data, provide a clearer understanding of the degree of success of design processes being practiced, and a better understanding of the role of the designer within those processes. The research will reveal the impact of applying Design Thinking methodologies across a range of contexts to

enable the development of a framework to guide businesses in the area of both design and

Design Thinking.

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