The Semantics of Design and Why They Matter

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Understanding the value of design in industry is a contemporary issue both in academia and industry. Many studies have been conducted using historical data, macro-level indicators, questionnaire-based tools, and abstracted post-hoc accounts of the value of design. However, very little research attempts to uncover direct insights from real-world practical experiences of designers in industry and how they negotiate the design-value space. This study uncovers rich qualitative, pragmatic considerations of how the value of design is operationalized in situ by design practitioners in industry through a series of 6 in-depth interviews. Initial results indicate that different designers undertake a series of different context-dependent strategies: these range from changing the narrative of the contribution of design based on the KPIs of the audience, to taking a non-action stance allowing for consequences and pressure from external stakeholders to help drive design in practice, as well as performing “designer-ly” activities under a different alias.

Keywords: Design, Value, Value of Design

Introduction

Over the years there have been several attempts to understand, measure and communicate the value of design to business in both industry and academia. Even though this is a contemporary topic, little progress has been made, as the mechanisms of operationalizing and mobilizing the value of design are still widely under-researched (Braga, 2016). Existing literature in this space comes from a variety of fragmented fields including design studies, design management research, economics, management, marketing, engineering, human computer interaction and information technology. A majority of the work that has been done in this space focuses on empirical studies that rely on questionnaire based tools, study macro-level indicators, and reflect on abstracted post hoc accounts of the value of design. To complicate matters further, there is no consensus on the semantics of design, its definition and how it manifests in organization (Heskett, 2005). Many design practitioners still struggle to explain their roles and justify their value within the organization (Heskett, 2005, 2017; Preece, Rogers, & Sharp, 2015) to corporate executives and management. There has been some shift in how design is perceived in organizations with even C-suite positions such as the Chief Design Officer, and design verticals being created. This focus however comes off as tokenistic to most wider organization audiences, who still do not fully understand the value of design and associate it with their own understanding of what design means to them, which can mean a multitude of things. Instead of evaluating the value of design by imposing a priori definitions and concepts of measurement as done in previous studies, this study aims to understand emergent behaviours and strategies adopted by design practitioners in situ to operationalize, mobilize and communicate the value of design to their daily work. We attempt to uncover deeper insight into how the design-value space is currently being negotiated and traversed, and how we as a community can look to learn from and rethink our approach to measuring and communicating the value design.

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Attempts to measure and understand the value of design in academia date as far back as three decades (Dumas & Mintzberg, 1989; Hart, Service, & Baker, 1989; Walsh, Roy, & Bruce, 1988) but to this point have been unable to make a lasting impact on mainstream industry and practice. In industry leading business consultant firms today continue to publish reports that try to explain the business value of design (Warwick Business School & Design Council, 2014; PricewaterhouseCoopers, 2017; Accenture Strategy, 2016; Design Council, 2018; McKinsey Design, 2018). The widespread promotion of ‘design thinking’ as a strategic tool in industry has spearheaded a revival of the role of design in business (Dunne & Martin, 2006; Johansson-Skölberg, Woodilla, & Çetinkaya, 2013). This has gained significant traction through the help of evangelism of firms such as IDEO, and the establishment of institutions such as Stanford’s d.school and Hasso Plattner Institute (Brown, 2009; Camacho, 2016; Johansson-Skölberg et al., 2013; Kelley, 2001). Design has been widely acknowledged by its evangelists as a competitive instrument (D’Ippolito, 2014; Hertenstein, Platt, & Veryzer, 2013; Heskett, 2009, 2017; Roy & Riedel, 1997; Verganti, 2003). Design management literature primarily focuses on the role of designers within organizations (de Mozota, 2003; Verganti, 2003)and how design can drive radical innovation in industry (Norman & Verganti, 2014; Verganti, 2008; Verganti & Dell’Era, 2009). However even with all the positive sentiment attributed to design there are still many challenges faced when attempting to convince conservative business management of its value as a necessity and not merely a nice-to-have luxury.

Defining design

One of the biggest challenges with trying to measure and communicate the value of design is that there is no universal consensus on its definition. It means different things to different people in various contexts (Heskett, 2005; Love, 2002). Designers therefore seem to find it difficult to explain what it is that they do to people outside their field. There also seems to be an unspoken, unwritten expectation, that all designers understand design, therefore whenever someone is talking about design they should be talking about the same thing. So one could consider that designers never really have to explain to each other what design is, therefore they are not practiced enough to deal with the outside world when it comes to explaining themselves. Many competing attempts have been undertaken to define design (Ralph & Wand, 2009) but the field remains far from adopting any of these definitions with consensus. A persistent difficulty relates to the fact that no definition circumscribes all of ways that the term is employed in vernacular use. Heskett (2005) suggests that “design sits uncomfortably between [...] two extremes. As a word it is common enough, but full of incongruities, has innumerable manifestations, and lacks boundaries that give clarity and definition. As a practice, design generates vast quantities of material, much of it ephemeral, only a small proportion of which has enduring quality.” As there are a multitude of manifestations of design, there will be many who are interested in the term but little agreement to what it actually may mean. So design may be defined by the very popular, almost canonical definition of “Devising courses of action aimed at changing existing situations into preferred ones” (Simon, 1968) or as abstractly as “The performing of a very complicated act of faith” (Jones, 1966). Studies exploring the definition of design cover over 42, very unique definitions of the term, all meaningful in their own way (Jones, 1992; Ralph & Wand, 2009).

The semantics of design

There are a number of related difficulties with design as a subject matter for research that we can discern.
Basic Semantics

A unique challenge that comes with the word design is how it can be used as so many different parts of speech, all grammatically correct, yet conceptually distinct. Heskett, (2005) illustrates this complexity with his very famously quoted, seemingly non-sensical but grammatically sound sentence “Design is to design a design to produce a design.” Design (noun), the concept or field, is to design (verb) the action or process, to design (another noun) the concept or proposal, to produce a design (yet another noun), the final product or realized output. In order to know what in particular is being called out by use of the word “design”, we need to be mindful of the many ways it can appear in parts of speech, and to which of those senses it is currently being employed.

Family resemblance | process variance

There is also variance in manifestations of design as a process, which is similar to the notion of ‘family resemblance’ concept discussed in ‘Philosophical Investigations’ (Wittgenstein, 1968). While any two design processes may share one or more manifestations, there is no single or determinate set of manifestations that would be common to all design processes (Walker, 1989). Our ordinary language criteria for applying the word “design” to any particular case is not predicated on there being a particular characteristic of that case that demands (or licenses) our use of that term (see Figure 2). If design is a family resemblance concept, this means that every attempt that has been made to define, or draw a sharp boundary around, our use of the term cannot both include all cases in which design would ordinarily apply, and exclude all cases where it would not. Definitions such as Simon’s (1968) while clear, appear to include any human conceptual problem solving activity (including e.g. solving maths puzzles), and appear to exclude any design project in which designers do not have to deliberate new “courses of action” in order to bring about a new product or system.

Qualifiers

Similarly adding an adjective to design i.e. a prefix, a moderator – significantly changes what the term design might be doing or referring to. So while Industrial design is very different from textile design or interaction design, each of which may still have some semblance of commonality on some specific aspects, but wide divergences in other respects. Beyond different disciplines or domains of design, though, design has innumerable other modifiers as well. For instance, many different kinds of things can be designed: physical design, process design, service design, experience design, application design, event design etc. While some disciplines have particular emphases on some of these “objects” (in the grammatical sense) of design, e.g. industrial design traditionally emphasizes the physical, material, or tactile, there is no doubt that industrial designers are also engaged in designing experiences through products and systems.

Output variance

Additionally, there is further complexity even within the same sense of design on account of the fact that no two iterations of design processes which have been run following the exact same procedures will result in the same output. Nelson & Stolterman, (2003) have discussed this aspect of design as the “ultimate particular”—that in many cases the point of design approaches, and one of their distinguishing characteristics, is that they result in novelty, not the reproduction of identical results. Furthermore, the outcome of one design process may result in more innovative solutions that can lead to an increase in user satisfaction; or on the flip side it may lead to cost savings. However both conditions may be mutually exclusive, and do not always intersect. The point is that we cannot use any predetermined outcomes of a design process as a means of identifying that process as design.

Popular culture

There are often certain narrow characteristics of design that as a result of popular culture or media have become more widely attributed to design such as aesthetics or graphics, which somewhat permeates what the concept as a whole entails, particularly when it is being discussed with those who are not very familiar with the field of design. This is something we encountered in our study.
Abject breadth of design

Heskett, (2005) comments on how it is interesting that design can operate as something very inconsequential and banal, but at the same time be very profound and meaningful. He sees this as an inherent characteristic of design, unlike many other concepts.

Needless to say, for reasons such as these design is challenging to study systematically, and it can be difficult or ill-advised to extrapolate measures or “findings” from one study to another. This is because simply any particular aspects of the multi-faceted phenomena of design that have been chosen to be brought into focus in any one study are selective, and rarely consistent across studies. While this study is not intended to act as a semantic analysis of how design is used in language, nor a genealogical exploration of the term over the years, it is important to understand how practitioners and industry understand it, to trace some of the many ways the value of design has been understood. Therefore it is argued that the semantics of design are important to understand, in order to comprehend how the design-value question has been addressed and answered in practice and research.

Figure 2 An illustration of the family resemblance concept w.r.t. the manifestations of design characteristics over multiple iterations of the same projects

Measuring design

Existing studies have attempted to create a wide range of measures of the value of design, but the range of these approaches is evidence of the disputed nature of the phenomenon. Practitioners themselves also struggle to explain what it is that they do, and what value that they bring to most of the organization. This raises a number of questions. Were the efforts in the previous studies made to explain and understand the value of design both in academia and industry insufficient? Is the impact that design makes to organizational performance not evident / visible? Is there something unique and distinct about design as a function, area of expertise that requires for it to find new and more convincing arguments for existence? Are design skills so overtly generic and non-specialized that just about anyone can be a ‘designer’, therefore there is no need to have a title ascribed to the practitioner of the field? Are the indicators used to measure design not representative of its presence? Or is it that designers are just terrible at communicating what it is that they do, and so are unable to convince anyone of what value they bring?

The value of design often manifests in ways that are tacit, intangible, and subjective – in turn making it difficult to measure (Dorst & Cross, 2001). Concepts such as gross value added (GVA), triple-bottom line, as well as service usability index have all been used to measure the design in action (Løvlie, Downs, & Reason, 2008) with the argument that as there is no direct financial metric relationship to quantify design, the context and actors dictate what is meaningful for measurement. Other studies have attempted to develop scorecards that can be used to gauge the value of design (Beltagui et al., 2008; Moultrie & Livesey, 2009; Westcott et al., 2013). That said the transient nature of design and its complexities are unable to be meaningfully positioned and captured in studies that analyse macro-level indicators and industry trends which are distilled into simple abstractions of value, such as for every “£1 invested in design you get £4 profit” (Design Council, 2007). If we look at design through the lens of the family resemblance concept (Wittgenstein, 1968), where any two design processes may share one or more manifestations, there is no single or determinate set of manifestations that would be common to all design processes; using the same tools (metrics, questionnaire-based instruments, pre-populated categorizations etc.) would be inadequate to measure the complexity of design. Good design of
physical artefacts is generally invisible to us, in that we mainly notice breaches in our expectations of how things should work as highlighted by Heidegger via Winograd, Flores, & Flores, (1986). The same holds true for intangible aspects of designer-ly actions such as well considered design processes, practices and actions. In the same light, if good executions of design become harder for us to locate and observe, they also become harder to measure. It is therefore asserted that the identification of design as a phenomenon is a problem of a wicked nature (Rittel & Webber, 1973).

Design disclaimers

When studying the value of design, there are two very important caveats to be cognizant of: i) Not all designers are the same, there are different types of designers, who understand and practice design differently. Having the label of the designer does not necessarily entail that one is in essence performative of designer-ly actions. This can be attributed to a multitude of reasons, ranging from everything from formal education in this space, practical experience, to others just adopting the label and taking on the mantle of a ‘designer’ for political expediency. ii) not all design is equal. Just because a thorough design process has been conducted does not mean that anything has necessarily improved, or value has been added. Naturally, there is a great deal of ‘bad design’ in existence. Design as a practice, even with all the potential benefits it may bring to organizations, is not the be all end all of improving business performance. Design is messy, it is practical, and it resides outside of the polished models and frameworks that project it as a simple process with predictable (and guaranteed) outcomes.

The social construction of the value of design

Design is seen as a social phenomenon (Bucciarelli, 1994; D’Ippolito, 2014; Suchman, 1987), that is situated within a given context and whose meanings are derived from the interaction with the space and actors – it thrives through social interactions (Petroski, 1985)

Therefore it is imperative for us to explore how the value of design is constructed within the political, practical, and social landscape, between design practitioners and other actors in the workplace, and not just reduce the value to purely quantitative indicators. Therefore this study takes a slightly different approach to current attempts, and tries to uncover social conventions, behaviours and actions of designers in practice as evidence of how the value of their contributions to design are articulated and understood. This is based on the idea that if we as researchers have access to the rich and full complexity of design in action, why rely on historical data to attempt to explain what we can be observed in the present? i.e. the present is the best representation of itself (Dreyfus, 2002); and can provide us with a surfeit of rich contextual data that can help us construct meaning. This approach does not in any way attempt to take away from the body of work in existing literature that looks at understanding the value of design using historical, post-hoc data, but instead tries to further it, by trying to uncover the rich layer of contextual, social, practical considerations that are in place in situ by real world practitioners. Adopting this approach to study the value of design gives insight into previously unexplored spaces, and may help further extend our understanding in ways previous models were unable to.

Study Design

This study takes an empirical approach to understand how the design-value space is negotiated by practitioners - exploring how the value of design is understood, communicated and operationalized in industry. This orientation to the study design as a socially situated construct borrows from Mills’s (1940) treatment of motive in his paper “Situated actions and vocabularies of motive.” We consciously move away from the a priori understanding of constructs of design, instead focus on a socially situated, practiced, and observable design that may be interpreted and analyzed in light of the conditions it exists in. A series of 6 semi-structured, one-to-one interviews was conducted, with a purposeful convenience sample of participants who self-identify as design practitioners. On average the interviews lasted 37 minutes, with an open-ended discussion between the researcher and participants. There was no particular order to the discussion but guiding questions were asked to scaffold the discussion and prompt discussion. Questions started by trying to explore how the participants associated to design itself, What kind of design title if any do you associate with yourself? This was followed by exploring aspects of How is design generally understood within the organization? Leading into some of the more interesting probing questions of how the value proposition of design is operationalized based on audience, asking How do you describe design to another designer? and How
do you describe design to a non-designer? This then circled back into how the value of design is communicated within the organization and what challenges if any are faced in doing so? The idea behind the questions as a whole was to provoke discussion on how the value of design is understood, defined and communicated by participants within industry and explore what is the prevalent contemporary role of design within an organizational setting. This would also provide a window into how practitioners negotiate this discussion in their daily practice, as well as give insight into any emergent behaviour, actions and strategies that are used.

Table 1: Participant Information

<table>
<thead>
<tr>
<th>#</th>
<th>Self-identified design title</th>
<th>Response to “Describe design to a non-designer”</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>User Experience Designer</td>
<td>Design is what make makes [the best] sense of things</td>
</tr>
<tr>
<td>B</td>
<td>Graphic / User Experience Designer</td>
<td>Well what kind of design do you mean?...I think of it as something was designed a certain way so someone found a problem and created a solution for it and that is what design is I guess</td>
</tr>
<tr>
<td>C</td>
<td>Product Designer</td>
<td>I make products easy for people to use... that’s easy for them. So I don’t tell them it’s graphic. I just say if you use an app, I make it easy for you to use, more relevant for you, more easy for you to use. So I just make it simpler. I know it covers the usability part of it but that’s the easiest way I could find to explain to them because if I go in more detail they assume its graphic related. So I really struggle at that point. So in layman terms I am unable to describe what I do...</td>
</tr>
<tr>
<td>D</td>
<td>Front-end Web Designer</td>
<td>[design is] ...making things look pretty but not just for the sake of looking pretty... it’s like usable - I read a quote the other day “don’t make something unless it is both necessary and useful, but if it is both necessary and useful don’t hesitate to make it pretty.”</td>
</tr>
<tr>
<td>E</td>
<td>User Experience Designer</td>
<td>To me it’s more just solving problems. Users have a problem with their application and it’s your job to bring them a solution. It’s a very abstract way of thinking about it, [but] it’s the only way you can capture what design is.</td>
</tr>
<tr>
<td>F</td>
<td>User Experience Designer</td>
<td>Design to a non-designer... I think design is always misunderstood as just making things look nice but design is how sort of how things work how a product feels in somebody else’s hand and just everything that comes with a product or an idea and experiences around that I think.</td>
</tr>
</tbody>
</table>

Findings

This section presents results from the interview sessions, covering how designers adopt different strategies to position themselves and situate their work in relation to the organizational context. The findings are clustered into broad themes and excerpts from the participant responses are used to supplement the discussion.

You say it best, when you say nothing at all.

There are quite a few varied positions on how design value is mobilized for different participants. Participant A comments that there is no need to communicate the value of design, as no matter what effort is put into design work, at the end of the day it is the decision maker’s prerogative of whether integration of the design
recommendations will make sense for the organization. Participant A comments “Well to be honest, I won’t [communicate the value of design], heh. They can listen to you but they won’t agree with you...[imitating the decision-maker: This is what I want! I want - what I want.. [pause] Okay I have listened to you.. You have good recommendations and all that - but no. Thanks, but no thanks’ Heh... So I learnt... there is no point in communicating the value of design” It is instead argued that customers or clients can act as external actors who advocate the value of design – as more often than not the requests made by the customers are in line with the recommendations of the design team. This adds additional pressure on management to take design seriously – whereas management and designers are able to establish value through a passive positioning. This seemingly non-confrontational approach stems from the belief that “Design is a creative process... It’s a creative spontaneous process... Just like making a painting. So and if someone is calling [the] shots on your painting then it is not art anymore.” So it dislocates itself from the actual control of the bureaucratic environment it is situated in – and creates pockets of freedom following an unconstrained design process, in the hopes that influence from outside the organization can nudge decision makers to take notice of their contribution and suggestions. It is a very passive position for the designers.

**Design is still design**

Another interesting finding was how buzzword-compliance may be used as a strategic tool when used in line with the organizational lexicon. Participant C used the term ‘UX’ interchangeably with the word ‘design’ during the interview discussion. When probed as to why, it was indicated that when design was introduced to their organization it was done so from a top-down approach i.e. management had come across the idea and wanted capabilities built within the organization. This participant was part of the first recruits that were hired into the organization to form the design team, and was trained by a third party design consultancy for six months in order to become equipped with the knowledge of design and thereby become the so called ‘design’ expert within the organization. This however meant that their team was the sole propagator and advocate of design within the organization from an informed, trained perspective. However given the rest of the organization was not privy to the perceived benefits of using design within the organization setting, wrote it off being as arbitrary based on their own limited understanding and exposure to it. Participant C says “We didn’t pitch it as design, we pitched it as UX. we didn’t even say UX design, because the way they were thinking of design was different. Y’know design is more graphical related, but when we pitched it as UX - user experience they didn’t see the design, they saw it as improving the whole product portfolio, getting more customer retention and improving the customer experience.” This approach had two consequences – it disassociated design from all the baggage that comes with the term itself, and at the same time allowed the type of work it performs to become relevant, in-fashion, contemporary expertise for the organization. This decision was not planned but the benefits of taking this approach were soon realized “It was initially not conscious because it was supposed to be UX design and then people started to talk about UX! UX! UX! UX!... later [at] some point [we] realized that it makes sense to talk to people who did not understand what design is.. Because...at that point the buzzword UX was spreading throughout the company so we were supposed to be the advocates for UX and the buzzword of UX was spreading so we wanted to ride that wagon - that hype wagon. At that point we realized that if we add design that it would lead to confusion and people would think what is UX what is design and we would start from scratch” Dropping the alias of ‘design’ and adopting UX instead allowed the team to cash in on the opportunity of taking advantage of the popularity of UX, which had been making rounds as a buzzword within the industry and the organization. Disassociating from design also allowed for the team to be taken more seriously across the organization.

**It’s not [about] me, it’s [about] you!**

When communicating the value of design to stakeholders, it was also seen imperative for design to be positioned in terms of the key performance indicators (KPIs) of the stakeholder that was being addressed. This is seen as being cognizant of the transient nature of the value of design and how it is able to take on different output manifestations such as act as a ‘cost-saver’ or ‘complaint-reducer’ to ‘sales driver’ based on the project, context and stakeholder.

Participant B highlights how communicating the value of design is very difficult to peers who are unaware of the ethos behind it. They further add that they took a top-down approach to circumvent existing hurdles and barriers to adoption within the organization, based on cultures with high power distance e.g. convincing the boss/management of the value in terms of their KPIs and having that order being mandated on all staff in lower branches of the organizational structure. “[the organization] was very hierarchical - so I didn’t have to
I just had to go to the top person and they just tell the people what to do - so I didn’t try to tell [my peers].” This again is seen as an active position / stance on how the value of design is communicated and dealt with within an organizational setting. Whenever the discussion of the value of the work of design within the organization was brought up, it was done so in the terms of the KPIs of who was being spoken to within the organization.

There are a few assumptions that were seen from the interviews as well. Most participants assumed that if they were talking about design to a designer – they were talking about the same thing; or that they shifted the type of design based on what the designer they thought they were talking to was referring to e.g. a UX designer would talk to a graphic designer in more visual aesthetic terms than to another UX designer. The above examples are placed to showcase the varied rich contextual nature of how the design-value paradox is negotiated by designers within industry.

Figure 3: Different social conventions and strategies to operationalize design value by practitioners in industry

Discussion

The patterns of behaviour and emergent practices of designers that have been uncovered through this study are intended to act as exemplars of the possibility of a variety of different actions that design practitioners take as part of their daily work-lives. These are clearly not an exhaustive set of strategies or social conventions that are in place in the workplace today, but give insight into how different practices have emerged as a result of trying to address the design value question. Even with the limited scope of this study, We already start to uncover a window into the disparity in practical approaches to valuing design within organisations to what is conventionally being studied in literature. We hope this allows us to spur discussion and reflexive practice into what this means in terms of how we can re-evaluate and position our efforts in trying to negotiate the design-value space. We are also able to see how the multitude of strategies through which design value can be operationalized. This shows us the diversity of forms and roles that design is able take on to create an impact within the organisation. This highlights the transient, transferrable nature of design – where it permeates and transcends pre-prescribed functional boundaries.

Further work needs to be done in this space to fully appreciate the complexity of design in action. It can be asserted that we can advance in this work more meaningfully if we take a more anthropological approach, using ethnographic studies, or designing self-documenting tools that allow for design to be traced within the organization. Another consideration to think of is that there is a distinction between work that is labelled as
design in contrast to that which is ‘designer-ly’. This distinction may not matter in most cases, where there is significant intersection, but at the same time there may be instances where designer-ly activities reside outside of the design-labelled boundaries of the workplace. Using immersive study techniques and tools will help bridge our understanding of how design can be meaningfully positioned, operationalized and mobilized to make greater impact to the industry. The three strategies that are presented in the findings embody the idea of design being a social construct, and here we see that it in essence is very dependent on the context (Bucciarelli, 1994; D’Ippolito, 2014; Suchman, 1987). Similarly taking on actions such as deciding to take on an alias in lieu of design, or re-appropriating the benefits of the work performed by design to another’s KPIs as well as the political position of relying on external actors to influence propagation of design are all derivatives of interactions within the space and actors (Petroski, 1985).

Further investigation into different types of design fields may result in different strategies; organizations that have design as the core competency such as a design consultancy might have different permutations of strategies in place, versus ones where appreciation for design is still in a nascent state. Furthermore the duration of the experience of designers in industry may also act as a contributing factor to the strategies that are adopted. This study merely scratches the surface of what possible strategies and social conventions are in place in regards to understanding and communicating the value of design. There is scope for a lot more research to be conducted in this space.

Conclusion

The findings of this study present three distinct approaches to channeling the value of design from a practitioner’s point of view to the wider organization. They touch upon some very distinct and interesting behaviours that are a product of the environment and context. Even with all the challenges that come with the semantics of design, as well as its nature, we see that from a practical perspective, designers are making decisions daily of how to best represent their work. The indisputable identification of design as a phenomenon, is only the first wicked problem in the thesis of this paper: this is a practical problem that today’s practitioners are constantly attempting to resolve in the course of their work. Similarly the measurement of its value, however value is ultimately defined based on future studies, is also a distinct but cognate wicked problem in its own right. To this point we have begun to uncover some of the ways in which design is being operationalized and how its corresponding value is being articulated. Further explorations in this regard will help design practitioners explain and communicate the utility of design on an organizational front, and allow us to better trace how design lives within an organization. Design has often been portrayed as a strategic tool, a competitive instrument, a way of problem solving – but understanding how it is used by practitioners in industry, and how they use different arguments to socially construct the value it offers is of great benefit. This will open up a secondary stream of work exploring the value of design to industry, and uncovering rich, contextual, pragmatic ways to understand the value of design in organisations. This may also allow researchers to obviate methodological approaches that rely on a priori definitions of phenomena as a means of encapsulating something as dynamic and malleable as design.

References


