Integrating Design Practitioners and Design Practices into Strategy Practice

Abstract

The purpose of this paper is to explore ways design practices are interacting with strategy practices and the role and value of designers in proximity to strategy practice. Despite the growing recognition of design thinking in the management literature, we still know little about how designers contribute to strategy and how design and strategy practices interact. To address these gaps, we draw upon findings from a qualitative study with 16 strategic designers and strategists. We use a grounded theory approach to share *emerging themes that outline the ways design practitioners and desig(ing) are featuring in strategy practice* and outline *the factors that enable and inhibit the integration of design practices into strategy practices*. Our analysis suggests that, first, design practices have influenced strategy formulation by integrating some of its specific characteristics into strategy practices. Second, that design in strategy practice is seen as a valuable extension to traditional practice in several ways. Third, as design practice is being integrated into strategy practice, there is a need to understand the placement of strategic design practitioners in strategy practice. We conclude the paper with a discussion of our findings and avenues for further research into the relationship of design practices in strategy practice.

Introduction

Traditional strategy formulation relies on analytic logic and is "regarded as a prevalently rational process: analytical, linear, and step-by-step" (Calabretta et al., 2017, p. 366). While analytic strategic practices have been useful in stable and predictable contexts, they have limitations when organizations operate in highly complex and ambiguous environments (Awati & Nikolova, 2022)

Increasingly, arguments have been made for traditional strategy formulation to seek more innovative and future-focused practices (Bühring & Liedtka, 2018; Simeone & D'Ippolito, 2022). Design approaches to strategy have gained increasing relevance as they provide an exploratory approach to strategy formulation (Martin, 2021). This is because design approaches are based on abductive reasoning for problems solving, where "we only know something about the nature of the outcome, the desired value we want to achieve" and therefore "how" [a pattern of relationships]" and "what" [elements] are clarified by testing the possibilities that could work to achieve this goal in "parallel" (Dorst, 2015, p. 49). Traditional strategy uses in contrast deductive or inductive reasoning to explicate a hypothesis from which a strategic direction is either proved or disproved (Martin, 2009). (See Figure 1 that compares these different logics in problem solving).
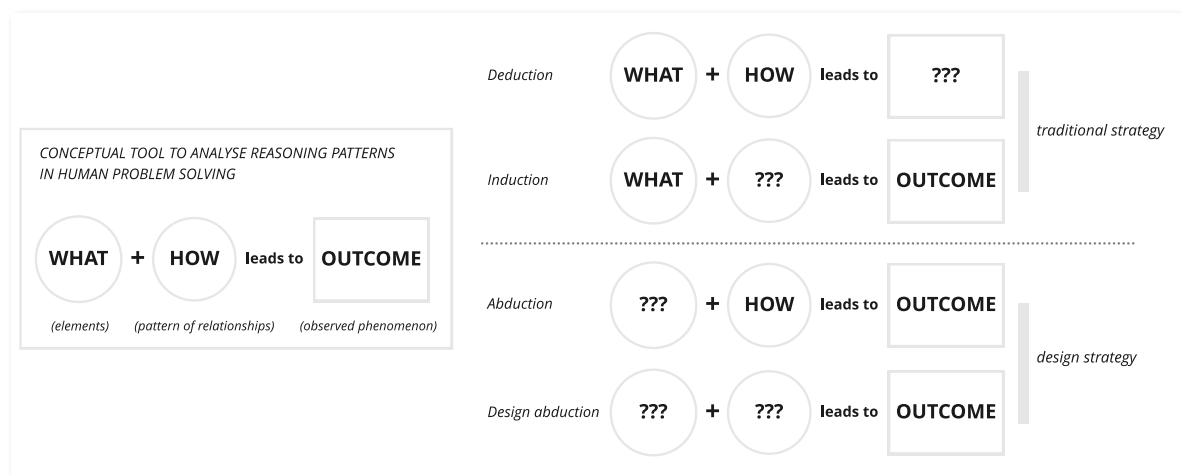

Figure 1- Four patterns of reasoning - adapted from Dorst, 2015 pp.44-49

Design practices have found their way into the business world over the last two decades through the proliferation of 'design thinking' (DT) (Brown & Katz, 2009; Camacho, 2016; Liedtka & Ogilvie, 2011; Roger. L. Martin, 2009). Today, DT practices have been recognized for their

contribution to fostering innovative strategies (Dell'Era & Verganti, 2010; Liedtka, 2000; Randhawa et al., 2021) enabling organizations to develop new products and services (Perks et al., 2005) and to remain competitive (Liedtka & Kaplan, 2019). As Calabretta and Kleinsmann outline (2017: 299), the role of design is growing "from being a tactical tool for improving product performance (value creation only during production) towards a strategic capability at the heart of business". This evolution has led to a change in how designers work as they increasingly "operate on a level that merges social sciences with business entrepreneurship… asserting themselves as opinion makers, critical thinkers, and strategic planners with a global influence" (Muratovski, 2015, p. 138). Many organizations have invested in building capabilities to foster DT practices (Eyers, 2015; Liedtka et al., 2013). Subsequently, designers have found roles in the upper echelons of organizations as Chief Design Officers and the emerging role of strategic designers (Calabretta et al., 2016; Calabretta & Gemser, 2017)

The proliferation of DT has inspired individuals who don't traditionally come from design practice to learn how to work in more designerly ways. The implication of this is that designers have found themselves placed in situations where they are asked to address management and strategy problems. This is a departure from disciplinary-based problem placements such as visual communication design, interior design, product design (Buchanan, 1992; Kimbell, 2011). All of which has led to an emergence of a new kind of design practice called 'strategic design' (Calabretta & Gemser, 2017).

Strategic design represents a collection of design practices that deliver insights to inform strategy (Holland & Lam, 2014; Jevnaker, 2000; Manzini & Vezzoli, 2003; Scaletsky & Costa, 2019).

While senior managers and strategists appear to be expanding their practices to incorporate design and designers are taking on strategic roles (Knight et al., 2020; Randhawa et al., 2021), many questions remain as to the ways these disciplinary practices integrate to add value (Johansson-Sköldberg et al., 2013). Traditionally, the focus of design tends to sit within the sphere of product and service innovation (e.g., Calabretta & Kleinsmann, 2017). However, DT research tends to focus on design approaches to enable product and service innovation, whereas strategy is about 'innovating directions' which requires different practices (Magistretti et al., 2021). DT research is also seen to occur in a 'vacuum' without rigorous examination of its relationship to other disciplinary theories and frameworks (Dell'Era et al., 2020), such as practices from the disciplinary fields of design (Fry, 2007; Irwin, 2015) including the emerging field of strategic design (Calabretta & Gemser, 2017; Gallego et al., 2020). The proliferation of design in management has not yet explained designers' role in shaping strategy in practice and how design may influence strategy (Carlopio, 2011; Knight et al., 2020). Moreover, researchers have argued that despite the fit between design and strategy, the integration is not straightforward and requires a reorientation of practice (Liedtka, 2000; Liedtka & Kaplan, 2019). Thus, in this paper we ask: What is the role of design for strategy and what are the factors that are enabling or inhibiting the alignment between these practices?

We propose that it is timely and necessary to explore the ways design practices are interacting with strategy practices and the role and value of designers in proximity to strategy practice. This paper reports emerging results from a study exploring the role of design in strategy from the perspectives of strategists and strategic designers. Our aim is to shed light on how strategic and

design practices intersect, the factors that enable or inhibit their integration and how designers add value to strategy. In doing so, we also seek to add insights towards research on strategy-as-practice, specifically in terms of how existing strategic practices are updated with new practices, and the factors that enable or inhibit such merging.

Theoretical Background

Strategy and design

Strategy is concerned with determining future opportunities and formulating plans by leveraging knowledge and capabilities (Clegg et al., 2017). In this way, strategy can be seen as a practice that comprises the actions (practices) as a flow of activities (praxis) undertaken by humans (practitioners) (Whittington, 2006). Strategy as Practice (SAP) is a field of study that investigates how strategy practitioners do their work (Whittington et al., 2003). It emphasises the human aspects of strategy as a complex interplay between people, context and the interactions involved in the strategy development (Jarzabkowski & Paul Spee, 2009).

Organisations today are developing strategies against the backdrop of highly complex global and societal challenges heightened by mass digital disruption (Nyberg et al., 2022; Pereira et al., 2022; Skog et al., 2018). Such pressures require organisations to seek innovation and adopt alternative practices to support transformations and strategy formulation (Cocchi et al., 2021; Liedtka, 2020). It is in this context that design is seen as a useful approach by strategy practitioners as its processes are: "participative, more dialogue-based and issue-driven rather than calendar-driven, conflict-using, rather than avoiding, all aimed at invention and learning, rather than control" (Liedtka, 2000, p. 28)

Predominantly, the concepts from design as they relate to management and strategy are discussed

as 'design thinking' (DT) (Gruber et al., 2015; Micheli et al., 2019). DT implies learning to

'think like a designer' or 'think through the lens of design', bringing innovatively geared and

human-centred practices to management (Cooper et al., 2009). DT discourse emphasises how

working and 'thinking like a designer' can solve complex problems in a manner that is not typical

of traditional management (Brown & Katz, 2009; Liedtka et al., 2013; Martin, 2009). DT

encourages divergent thinking through exploratory human-centred research and experimental

activities that foster collaboration, diversity of thought, prototyping and testing (Kelley, 2013).

Problems are framed more rigorously through research, and solutions are defined through testing

and refining, as opposed to relying on analytical approaches (Beckman, 2020; Beckman & Barry,

2007). What lies at the heart of design is a 'different' approach to problem solving based on an

abductive reasoning, a process that doesn't seek to assume answers in the beginning, but one that

moves toward discovering opportunities to reach a desired outcome in any number of ways

(Dorst, 2015). This contrasts with inductive and deductive reasoning, which drives more

analytical problem solving and is still the foundation of strategic problem solving (Calabretta et

al., 2017). DT is proposed as an alternative approach to problem solving because it balances

'intuitive thinking' with 'analytical/rational thinking' seeking new opportunities to solve

problems that do not yet exist (Calabretta et al., 2017; Martin, 2009).

Design thinking and strategic design

Design has been contributing to organisational performance for some time (Muratovski, 2015),

however, the purposeful extrapolation of design into non-design contexts is a relatively new

phenomenon (Micheli et al., 2019). The nomenclature of DT was established in traditional design studies across design disciplines. The earliest recorded account was by Archer (1965), who was concerned with explaining the way industrial design as a design practice could be viewed as a technology spanning across disciplinary fields. Rowe (1987) used DT to explain the opportunity of design for business through architectural practice. However, Buchanan's exploration of DT as liberal art of technology (Buchanan, 1992) proves to be the most all-encompassing idea of DT as a concept for all disciplines of design and one that has broader relevance.

As a concept and research interest, DT really took off in the late 2000's (Micheli et al., 2019), with a particular promise of providing organisations with the opportunity to innovate (Brown & Katz, 2009; Dunne & Martin, 2006; Nussbaum, 2004), design better strategy (Liedtka, 2000; Osterwalder & Pigneur, 2010) and develop more desirable products (Verganti, 2008). The application of design in this sense has urged managers to seek to understand users (user-centred design, human-centred design, empathy) to better define needs – a quality which has become a cornerstone of design in management studies (Liem & Sanders, 2011; van der Bijl-Brouwer & Dorst, 2017). Accordingly, there has been a surge of research interest in the role of design in the management field (Muratovski, 2015). To reflect developments that continue to expand the reach of design into management and strategy, popular frameworks of DT such as the UK Design Council's Double Diamond have been updated to better explain the DT process.

Increasingly, the concepts of design and DT have been explored by management scholars to improve strategic decision making and the practices of strategists (Bühring & Liedtka, 2018; Knight et al., 2020a; Liedtka, 2000; Liedtka & Ogilvie, 2011). The transfer of design practices

into management contexts has led to the emergence of a type of 'strategic design practice'.

Strategic design represents a collection of design practices that deliver insights to inform strategy,

moving design from producing artifacts as outcomes into shaping organisational direction

(Holland & Lam, 2014; Jevnaker, 2000; Norman, 2016; Scaletsky & Costa, 2019). Thus, we have

seen an increased merging between strategy and design practices where design practitioners are

specifically working on strategic problems or strategy formulation (Calabretta et al., 2016;

Holland & Lam, 2014) and non-traditional designers such as managers and strategists are using

'design thinking' practices (Brown & Katz, 2009; Martin, 2009). This merging can be attributed

to the proximity of design practice to management (Brown, 2019) and the placement of designers

in more senior management positions where they may co-determine strategy (Calabretta &

Gemser, 2017).

While design has received much praise in pursuit of product and service innovation (Liedtka,

2018), and researchers have proposed the potential applications of design in strategy practice

(Carlopio, 2010; Knight et al., 2020a; Liedtka, 2000), little is known about how it relates to

strategy to 'innovate directions' (Magistretti et al., 2021). Moreover, the impacts and implications

for practitioners working at the intersect of these disciplinary fields are not well understood and

the developing design skills and experiences applied to the practice of strategy are yet to be

clearly articulated (Carlopio, 2010; Magistretti et al., 2021). The work of strategic designers that

has been influencing organizational strategy at various levels, is absent from the discussions in

the management literature nor is it more broadly accepted as a strategic management practice.

Thus, there is a need to assess the relevance of design within strategy, considering contemporary

contributions that recognize the intention of design practices beyond DT in order to extend and

expand the debate. We argue the relevancy of design for strategy and utilize strategy as practice (SAP) perspectives to explain the various roles of design in strategy making. Our conceptualizations set the stage for proposing a future research agenda.

Methodology

Methods of analysis

This is a qualitative study following a Grounded Theory (GT) methodology (Birks & Mills, 2015; Charmaz, 2014; Corbin & Strauss, 2015). This paper reflects the initial data analysis and emerging concepts from semi-structured interviews with eight strategists and eights strategic designers. Strategists (n=8) are individuals who represent traditional management approaches to strategy. Our sample includes strategists, general managers, executives, analysts, consultants, decision makers and scholars in the field. Strategic designers (n=8), on the other hand, are individuals who represent design-led approaches to strategy. These participants have roles that imply they practice designerly ways of working in managing teams and shaping strategy (including but not limited to design thinking, for example). Our sample includes designers, managers, or consultants. Interviews took place face-to-face or virtually (due to Covid restrictions) and lasted approx. 60 min each. All interviews were transcribed verbatim and coded in Nvivo 12.

The findings presented in this paper are representative of the initial coding and analysis of data (Charmaz, 2014). Initially, five interviews were coded, comparing instances and actions, and then used to further analyse data and lead data generation as indicative of theoretical sampling (Birks & Mills, 2015; Corbin & Strauss, 2015). Initial coding activities involved Concept Coding using

'*In Vivo*' codes capturing the words of participants as codes, Process Coding looking for actions and labelling with gerunds ('-ing' words), and Metaphor Coding techniques as practitioners seek novel ways to articulate concepts of design and strategy (Saldaña, 2021). Subsequent interviews were coded to identify categories and their relative properties and dimensions (Birks & Mills, 2015, p. 11) which this early analysis and findings present. "Dancing with the data" (Hoare et al., 2012) in this way has generated initial categories which reveal paths for further inquiry as the study develops.

Memoing as a reflexive practice is adopted to create an 'audit trail' of emerging thoughts and analysis leading to concept development, and in support of the lead researcher's social constructivist approach to research (Birks & Mills, 2015, p. 37; Ward et al., 2015). The lead researcher accounts for their own experience working in and studying at the intersection of design and strategy – which informs a level of 'theoretical sensitivity' to this subject from the outset that has been reflexively accounted for in memos as appropriate for a GT approach. This achieves 'methodological congruence' as we seek to understand the actions and processes of strategists and strategic designers at the intersection between traditional strategy and design as an emerging field of practice.

As the study is ongoing, the findings discussed here are preliminary, but provide insights on the roles and value that designerly ways of thinking and working bring to strategy practice and how they inform or influence the strategic directions of organisations (or not as may be the case).

Main Findings

We present the findings in three broad themes: 1. Characteristics of design practice as it shows up in strategy practice. 2. The factors that appear to enable or inhibit the integration of design practices into strategy practices, and 3. The case for design in strategy practice as a valuable extension to traditional practice.

1.Emerging themes that outline the ways design practitioners and desig(ing) are featuring in strategy

Preliminary findings indicate that design practices appear to be integrated across the strategy formulation process to varying degrees. The four approaches presented here highlight the way that design practices emphasise different aspects of problem solving, inspire critical and divergent thinking, enable interaction and engagement with others (actors) in the strategy process, and support the creation of visual artefacts and the communication of strategy.

1. Framing the problem – driven by exploratory research

Strategic designers view their work as being grounded by research as it 'bring[s] that human centricity, grounding, and desirability' to strategy projects. Design-based research is used as a 'diagnostic' tool to understand the complexities of problems and shed to light on aspects that may not have been considered before. Specifically, design research is valued as qualitative research – often following an ethnographic approach where insights are sought from understanding the needs of people who are experiencing the problems firsthand. This approach is often described as 'human-centred design' and is applied to understanding the needs of customers, other stakeholders in the 'system', or to understand the needs and perspectives of staff within the

organisation that is seeking new strategic directions and change. Strategic designers seek to support the development of strategy so that it can be realised and implemented successfully. A' strategic designer' described design research as an enabler to 'understand the system that nobody else really ever gets to look at holistically and come up with a conceptual model for how that could change productively…then explain it back to people in a way that it can actually be implemented.'

Strategic design practitioners are driven to develop a deep understanding of the client/problem owners' needs and objectives as part of design research. In doing so prefer to establish strong collaborative working relationships with them to support this work. Strategy practitioners also seek to engage clients in deep conversations about their problems and needs. However, further research will be conducted to understand the ways these differ or relate across the two practice domains and what the implications are for strategy formulation.

The object of the research in strategic design practice is to look for complications in the detail of problems: 'Looking for nuances of things when seeking out the tensions.' These 'tensions' provide a focal point for strategic designers to uncover strategic possibilities: 'an essence' (subtle opportunities for design) **or a** 'pivot point' (place where a shift or small change might create a great impact). Sometimes by looking holistically across problems, strategic designers are able to locate 'bridges' or pathways to enable change.

Such perspectives in strategic design practice favour a 'system-view of the problem' – looking at the problem-set broadly – identifying all parts of the problems and therefore uncovering the areas

that may benefit from tweaking or changing so as to disrupt an organisation too much but find the 'levers' to improve it.

Design research for problem framing sets the stage for a different approach to traditional strategy. Traditional strategy favours an analytical approach or 'hypothesis method' in strategy formulation. In this way strategists seek to define opportunities for new directions early, whereas designers spend more time exploring the problem space first. One strategist explains that a design approach provides opportunity to reduce bias in problem solving: 'the problem with doing [hypothesis-driven problem solving is that] you come up with a point of view that makes sense, that everyone buys into. And then you're almost kind of …back filling the data and trying to figure out about how to kind of build up the case.' In this way the data is skewed to tell a certain story based on the hypothesis put forward. In contrast, however, design uncovers deep and focussed insights and creates opportunity to expand the way a problem is understood:

> 'Just sometimes how strategists approach it [as] what's that answer to this problem? Design intentionally diverges, we very early look for multiple answers, multiple possibilities, not yet knowing if any of them are any good, but we want more rather than less'.

Such an approach yields multiple opportunities that then need to be assessed for their validity. It is at this point where a problem is framed for an organisation and the strategy can then start to be designed in accordance with a clear view on which problem-sets need to be addressed and where these are placed across the system.

Further research will seek to explain the implications of different problem framing approach as they appear in strategy or design practice and how this influences strategy formulation.

2. Engagement with staff – challenging assumption and defining new opportunity pathways

"[design enables] powerful ways to engage"

Strategic designers seek to find new and experimental ways to engage staff and understand their problems. Some of these practices involve asking clients to participate in workshop activities to express their needs through making or engaging with material objects. In this way the focus is not 'on what they make' but to observe 'how they do this, and how they interpret it' – here, designers are looking for meaning, to understand the core set of needs and the problem at hand: 'what is the campfire we are gathering around?'. Such activities are designed to develop a 'clients trust' as much as it is about unveiling key insights. This is because strategy is seen as a 'an alignment rather than a roadmap' and by engaging internal stakeholders you are building a type of consensus that will enable a strategy to be realised because it is understood well and co-determined through engagement.

Workshops are often used to facilitate conversations with staff from the organisation that is seeking a new strategy – 'Getting people to imagine something different or changed'. We heard from participants that a key task in strategy development is to unravel tightly held beliefs about what might be possible for an organisation and to create room for imagining new possibilities. Possibilities might emerge from smaller groups of executive teams, or through mass-engagement with stakeholders. For example, developing interactive material artefacts that call for customers to 'come in and colour code and dot vote for what they liked, and leave comments.'

Workshops are designed to facilitate discussions that challenge assumptions –asking questions like 'what would need to be true for this to work?' as opposed to focusing on what is perceived to work based on what has been done in the past. This kind of group 'collaborative' and iterative 'interrogation' of the problem is seen to 'find ways to make things better' as a feature of good design practice. For designers, the object of a workshop is to foster critical thinking. 'They should ask the "what if?" not, "how might we?" They should challenge it, to really be like, "what are we going to be in five years?",'

It was noted that the Covid-19 pandemic impacted on this type of sharing and engagement in workshop settings, and that the physical act of facilitating conversations in a room with others is fundamental to facilitating a deeper level of engagement and discussion. This is opposed to online workshops that enable collaborative exchanges, but that could not emulate the same experience. One interviewee reflected that that there isa human quality to physical encounters that was diluted by online experiences in sharing ideas and discussing topics of strategy.

Continuing research will examine the practices undertaken with stakeholders in the strategy process and seek to understand the ways different strategy practices use staff engagement to support strategy formulation.

3. Enabling creative leaps through a 'space' created by design
When discussing DT with strategic designers we were met with a sense of inquisitiveness and dissonance. Some designers are curious to learn about DT to talk about the value of design: 'the design thinking approach of learning… is basically what I've been doing for the last fifteen years.

It's just finally there's words for it, I guess, getting ideas and in [the] thinking.' What is striking about this is that designers tend not associate their approach to problem solving as being DT. This is because DT has been refined into somewhat of 'a process': and 'the history of design thinking… is trying to create a process out of what shouldn't really be process-driven.' Rather, designers see it as a practice that enables 'creative leaps': the art of taking 'synthetic leaps between things' – 'you don't have to have an analytic route through things, you make leaps, and you take bold jumps, and then you see what happens within. That, you can pin down as creativity.'

Strategic designers see risks associated with the use of DT methods and tools in strategy without involvement of a designer. This is because 'design thinking tools are getting watered down [by non-designers] – so they need to have a more pointed reinvention, because they have become commonplace, rather than being *a thought exercise,* it has become a plug and play thing.' The approaches that designers take seek to validate possibilities. If this is not carried out properly (for example, if design practice in strategy appears through the lens of DT) then 'the result of it is that you remove any kind of sense of quality control at the end of that.' This is a cautionary note about the evolution of design into management and the unintended consequences of sharing an approach that is meant to support individuals to develop a new kind of practice. Further data generation will continue to explain the dimensions of these so called 'risks' and how manifest through in practice.

A strategic designer described designing as a type of 'craftwork' and that the type of approach that is adopted in any one project was dependent on the 'object' of design. (e.g., the problem

type, problem context, and strategic objective[s]). The 'craftwork' involves creating 'lists of components of things, and attributes of things, that that need to then get recombined in a different way. And made sense of, organized coherently. And then, and then reconstituted in different ways.' Strategists see the value of creative problem solving dependent on the nature of the problem. From here it is decided if a design approach is appropriate as something that is embedded in part or as a 'dominant approach' to strategy formulation. For strategists, design is seen as being mist useful for strategy problems that require 'novel' solutions or address complexity.

This raises questions about the nature of practice, the role of practitioners and when designerly approaches to strategy can be enabled. For a designer who is working on strategy, it is an inherent part of practice, but for strategists who have learned about design – it is not. It is seen as a set of tools that can be embedded in a strategy project in part. In other words, the integration of design practice is a 'conscious decision'. Further research may seek to unpick the relationship between practitioners and practice, the placement of designers in strategy work and the implications of DT in relation to strategy practice.

The practices described above are often facilitated by individuals work by themselves and informed by others (as inputs or data for consideration). This is distinct from co-design (a popular approach in design practice that favours co-developing possibilities in the majority with others affected by the problem at hand (Kleinsmann & Valkenburg, 2008). This is because the act of 'recomposition' and finding opportunities sometimes requires focused attention in making unexpected connections with features of the problem, which is harder to do with groups of

people. These 'creative leaps' or reconstituted opportunities can be presented back to stakeholders and discussed. In this way strategic options can be explored and discussed and further validated by strategy teams. These creative leaps act as an accelerant– or an amplifier in design-led strategy practice. Design is therefore seen as creating a 'safe space' to find opportunity for creative 'leaps' which create possibilities for new strategic directions.

4. Visualisation and material artefacts – bringing ideas to life; testing, refining, and sharing. Design is seen as being a *material activity* that involves creating *visual artefacts* (see also Knight et al., 2020). Designers' proximity to strategy from this perspective is associated with graphic design skills and an ability to make ideas tangible to interact with. Engagement depends on how a design perspective is integrated into strategy practices and if this is seen as adding value to the outcome. Design practices can enhance engagement with strategy, the communication of final ideas and strategic recommendations.

Materials are used in a number of ways: a) to engage clients and stakeholders in the strategy problem eliciting intentions for a new strategy and the dimensions that shape a current state situation for the organisation , b) to engage participants in strategy, shaping discussions and leveraging expertise – this may involve co-developing artefacts, creating prototypes and using artefacts as discussion prompts, c) developing final recommendations and artefacts that support the implementation of strategy associated initiatives, and d) to support an individual's own sense making and 'thinking'– taking moments to consider opportunities for design and taking creative 'leaps' [as outlined above].

On some level these material devices are used to support the communication of strategy – but on closer inspection they also appear to have more profound impacts. They help to facilitate constructive discussion and debate, support divergent thinking, build important interpersonal relationships between stakeholders and strategy teams (including developing 'trust'), and enable visibility of thinking to support critical thinking and review of ideas (by making thoughts tangible and something that others can engage with).

While both strategists and strategic designers use artefacts, the quality of production and way these are used to facilitate discourse differ. For example, strategic designers are readily associated with the production of complex customer journey maps using design tools and strategist for producing materials using PowerPoint and other mainstream word processing tools. There is more to understand about the impact of different levels of quality in production and the aesthetic qualities brought forward by design practice. Therefore, further data generation will seek to understand the nature of material objects and placement of professional design skills as it may relate to strategy practice.

Early coding and analysis indicate that design practices are present in strategy practice and feature as an approach to framing the problem; in support of engaging participants (actors) and challenge existing assumptions, enabling the discovery of new opportunities through creative 'leaps', and the creation of material artefacts to support strategy work. While strategic designers are sometimes attributed to these practices, others appear to occur in traditional strategy practices as well. Further research will seek to create a better description of how these experiences serve strategy formulation and explain the inclusions of others in shaping strategic directions.

2. Factors that enable and inhibit the integration of design practices into strategy practices.

While these findings are preliminary, it appears that the degree to which design practices are undertaken by strategy practitioners is dependent on the:

1. *Awareness and value of design:* this accounts for the influence of organisational cultures where the strategy work is being conducted (this might cover issues that relates to the organisation and its approach to strategy, leadership styles and preferences to strategy and a leader's personal interests). It appears that unless the settings are in favour of designerly ways of working, there is less chance that the practices will be adopted.

2. *Exposure of design practices and valuing these in strategy practice:* the experiences of strategy practitioners also determine the likelihood of design practices appearing in their work; whether they have been exposed to design practice and choose to engage with it and experiment with it as a different type of practice to traditional strategy. Therefore, design practices appear by the virtue of individual practitioners' experiences and tendencies to try new approaches.

3. *Familiarity, power, and influence:* senior managers or strategy directors influence practices. The dynamic interplay of managing client relationships (in strategy consulting) or senior members of strategy teams can lead to choosing a preferred method. Some senior managers are seen to not have 'tolerance' for design practice, or 'the ability to hold attention' in workshop settings or for particular types of participatory design activities. The decision to include a designerly approach is sometimes determined by the strategy teams conducting the work, as opposed to the client/senior managers overseeing the project. What is interesting about this is that the choice appears to be driven by a desire to appeal to client needs or preferences, rather than in favour of what will serve that strategy

problem best. However, this is not the case when leaders choose to engage with teams that are known for their design approach to strategy. When this occurs the idea of undertaken a design approach to strategy is the appeal from the outset. Similarly, to the points above, this relies on managers understanding the differences and value of a design practice from the outset.

4. *Willingness to experiment with design practices in strategy – infusing skills requires learning new ways of doing things:* There are elements of applying design practices to strategy that require strategy teams to be open to experimenting with new ways of working and finding ways to validate strategies in alignment to design practice. This brings up questions about how you can possibility test and validate a strategy with customers and other stakeholders while seeking retaining competitive advantage. Participants discussed how elements of strategy can be prototyped and tested and that each project contained its own set of considerations in relation to what could work and what might not. Strategy must deliver opportunities that are 'not easily replicable' and that 'builds unique capabilities. This means that strategic designers need to be able to integrate the rigour of design research as 'desirability' (bringing forward the customer or human needs that are underserved) but also balancing the business requirements to differentiate and create value in new and novel ways that are also 'feasible and viable'. This is different to traditional strategy approaches that are about "crunching the data and tell me the answer". There is a need to balance the tendencies of each approach to develop a quality and robust strategy

5. *Proximity of designers to strategy – capability dependencies*

There are a few different types of capability dependencies that we find lead to design practices appearing in strategy. These are as follows:

a. Whether strategists have learned designerly practices and had an opportunity to practice them in strategy work.

b. Degree to which design capabilities are developed and practices are integrated when strategic design practitioners are involved in strategy practice. If those resources leave a vacuum is created, and traditional practices are observed in the absence of this specific skillset. Therefore, access to designers leads to more confidence that a design approach will yield desired results and thus more likely to feature as part of a strategy project.

c. Ability of designers to influence strategic directions. As we know by now, designers are working at the intersect of strategy as strategic designers. However, designers are also working at the intersect of strategy by designing new communication tools, products, or services. When designers create new objects or 'things', they also generate strategic insight from their research and sometimes as an implication of the organisation needing to align to implement it. While designers work to an organisations pre-determined strategy, it appears that they can also influence it through more traditional design work. The dynamics of this kind of design capability as it relates to strategy practice requires further investigation.

d. design-led practitioners or consultancy specifically geared toward a designerly style of strategy (versus traditional strategy). Senior managers seek out a type of strategy consultancy that does not exist in their organisation.

3. The case for design in strategy practice as a valuable extension to traditional practice

Interviewees discussed how design practice can assist strategy into the future emphasizing the following key points:

a. *co-existence of methods as having an amplifying effect in strategy:* The infusion of design in strategy practice is seen as being a 'powerful' skillset. For example, strategists who possessed multiple types of skills like 'strategy, design and technology' are described as 'unicorn' strategists because they can work on any number of projects and understand the problem form multiple perspectives.

b. *Not developing an overreliance on secondary data sources and making broad assumptions about human-needs and evolving trends:* impacts of artificial intelligence shaping what kind of data is analysed and therefore in determining futures. Data collection was described by one strategist as a 'lost art' because of the databases available today. This has led to decreased reliance on primary data collection in strategy projects – which has also led to primary research being perceived as expensive and not entirely necessary.

c. *Design seen as a positive practice to support holistic or systemic change and address complex issues like global climate change:* Design can be used in strategy to expand the consideration-set beyond the primary concern of competition to address persisting social and community needs. We observe that some strategic designers and strategists are motivated to find ways to address environmental issues in strategy formulation. They are looking to create 'triple wins: business, consumer and planet' and extend their knowledge and skills by learning more about topics such as the Circular Economy and other ways to

create sustainable futures. They are seeing that what is created through strategy is a

'choice', and therefore purposefully seeking ways to create strategy that reduces impact

on the environment and that does not enable 'greenwashing'.

Further data generation will examine this phenomenon in more detail as another type of emerging

practice within the topic of design and strategy practice.

Discussion

Strategists are increasingly exposed to designerly ways of working through the popularisation of

DT in management practice. Yet as our preliminary analysis suggests, the prevalence of design

practices in strategy is dependent on capabilities. We see that this leads to developing a level of

confidence in undertaking a designerly approach for strategy formulation and therefore

determines if design practices are used in strategy practice. Senior managers have the power to

decide if a designerly approach to strategy is necessary or suitable. Our analysis suggests that an

individual's personal motivations, interests and experience will determine if design practices are

adopted or not. As the dominant approach to strategy favours more analytical (deductive and

inductive) approaches to strategy formulation (e.g. Calabretta et al., 2017; Martin, 2009), the

opportunity to engage design practices as an alternative approach to problem solving is less

likely, despite the benefits it appears to present traditional practice.

There is a need to better understand how strategy practices imbue design practices over time. For

example, examining conditions like; 1) provision of the time, space, and opportunity to develop

new skills, 2) dynamics of challenging existing ways of thinking and working that account for

biases toward analytical thinking, 3) the potential implications for strategy projects: optimal team configurations, (e.g., diverse skillsets including strategic design practitioners?), project timelines, participation of other actors as participants of strategy formulation, and cost implications.

The prominence of DT in management has led to designers obtaining more senior roles in organisations and the innovation of new products and services generating strategic implications (Calabretta & Gemser, 2017). This has led to an emerging practice of "strategic design", where designers are tasked with shaping strategy through design. The relationship of traditional designers and strategic designers is not clear – yet the objective of their work appears to be the same – to develop innovative strategies. The nature of these interrelated practices is important because they suggest that there are two ways to develop a strategy and that both have merit. However, they feature different styles of analysis and involve people in the process in different ways. There are questions about the impact of these different practices on the quality of the strategies developed. This paper outlines some conceptual themes from which to investigate these implications further.

Design studies have drawn attention the placement of designers in DT practice and the challenges present by a re- orientation of design practice towards solving business problems (Kimbell, 2011, 2012). This has prompted discussion about developing a scholarly field that seeks to address complications arising from the ideas of DT in relation to traditional design practice through the lens of *design-as-practice* (as inspired by strategy-as-practice – Whittington, 1996). This is set to focus attention on the way people practice design as opposed to focusing on what discipline they come from. *design-in-practice* is also proposed as a distinct domain to explicitly acknowledge a

designer's role in design*ing* and the placement of others in the production of design (Kimbell & Street, 2009). As the proximity of design practice is interrelating with strategy practice, we see this scholarly intersect with practice theory and strategy-as-practice a productive proposition for future research exploring the intersect of design and strategy practices.

In the preliminary findings presented, we expand earlier work on the need to update and enrich strategy practices with other related practices (e.g., Whittington et al., 2006). Our data shows that integrating design practices into strategy can create significant benefits toward how strategy is formulated and executed. Design practices bring a renewed focus on customers, experimenting and testing, and involving all key stakeholders in strategy processes. Yet, we also argue that this integration is not straightforward, and organizations need to consider a range of factors to foster it. We also contribute insights into the nature of the crafts skills required for strategizing (Whittington et al., 2006) as we discuss how design skills merge with traditional strategic thinking to create new ways of strategizing.

We see that design practices are valued in strategy because of the visual and communication qualities it brings to strategy. We know that the creation of material objects and visual representation of strategy is an essential activity in strategy practice (Knight et al., 2018). We propose that strategy practice would benefit from understanding more about the nature of material production and visualisation in strategy as it relates to design practices and the role of designers in supporting this practice.

Conclusion

The opportunities generated by the emergence of design practice in strategy practice shines a light on how strategy practice can benefit from learning about practices occurring in other disciplinary fields. We see organisations are looking to employ design capabilities explicitly to address strategic challenges that are complex, to seek innovative directions, and find different ways to understand strategic problems. Our research indicates that the field of strategy will benefit from further contributions that explore how design practices serve strategy practice and the ways these practices are integrated to deliver better strategic outcomes for organisations into the future.

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