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Design Expanding into Strategy: Evidence from Design Consulting Firms

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Abstract: The purpose of this paper is to examine how design works at the level of strategy. Through analyses of the practices of five design consulting firms in Denmark, it explores how designers become part of strategy formation in the first place, the types of strategic work they undertake, and what design skills and knowledge they utilize in the making of strategy. The findings suggest that designers engage in strategy-level work in multiple domains ranging from redefinition of existing strategies to building unique organizational competencies to setting corporate vision by developing future scenarios.

Keywords: strategic design; design consulting firms; design management

Introduction

Design is no longer concerned with giving form to products only. It has been expanding into corporate strategy formation and becoming a conceptual field. Buchanan (2001), for example, named four orders of design, the last two being what he called strategic planning and systemic integration. The expansion of design is also increasingly recognized by the corporate world: There is a growing enthusiasm over design's contribution to strategy formation. Organizations increasingly turn to design in order to gain competitive advantage (e.g., Brown 2009; Liedtka, King, & Bennett 2013; Ravasi & Lojacono 2005; Martin 2009). Many leading business schools around the world are now offering design-related courses in their degree programs. One can even talk about a confluence between firms in strategic management consulting and those in design consulting. This enthusiasm, however, does not seem to have a solid research base about design's supposed strategic impact. In spite of the growing acknowledgment of design's relevance to strategy, the mechanisms of design's strategy-level work are yet to be explored. This paper examines design's ways of engagement with strategy by analyzing the practices of five design consulting firms in

Denmark. Specifically, it explores how designers become part of strategy formation in the first place, the types of strategic work they undertake, and what design skills and knowledge they utilize in the making of strategy.

Strategic design

The idea of design as a strategic tool in organizations dates back to the 1950s, when prominent designers such Donald Deskey and Raymond Lowey argued that design is a high-level planning activity, essential for business competitiveness (see Heskett forthcoming). Even though their ideas generated some attention, they went largely unheeded in less than a decade. The role of designer as a strategic planner was not welcomed by corporate America either, ruled then by the elites of financial management—as it is today. While the relationship between design and strategy became a subject of scholarly interest in the 1980s, the work in this area has remained underdeveloped to this day. Design borrowed contemporary strategy theories to argue that design could be one source of strategic advantage (see Borja de Mozota 2011). For example, many were inspired by Porter's (1980) positioning approach, which views strategy as achieving and sustaining competitive advantage through establishing a favorable position in industry vis-à-vis competitors by differentiation or low-cost (e.g., Blaich & Blaich 1993; Kotler & Rath 1984; Lorenz 1986; Walsh, Roy, & Bruce 1988). They argued that by creating visually distinct products design achieves low cost and differentiation, and thus, competitive advantage. With the rise of the resource-based view (RBV) (e.g., Barney 1991; Wernerfelt 1984) and dynamic capabilities approach (DC) (e.g., Eisenhardt & Martin 2000; Teece, Pisano, & Shuen 1997), in which strategy is seen as building and reconfiguring firm-specific resources and capabilities, the ideas about design's strategic contribution changed as well. According to RBV and DC, design as a single, visually differentiated product is easy to imitate, and thus, can bring only a short-lived competitive advantage. Therefore, it can easily be dismissed as a source of strategy. The focus then shifted from design as creator of differentiated products to design as an organizational activity with its own systematic processes, routines and even its own attitude, which can be ingrained into organizations and can be reused. For example, many claimed that designers push for a fresh thinking about innovation throughout the organization by the priorities they hold and the tools they use (e.g., Borja de Mozota & Kim 2009; Jevnaker 1998; Svengren Holm 2011). It this sense, it was argued, design becomes an organizational competence that can lead to sustained innovation, as opposed to delivering one-time creative outputs. Indeed, RBV and DC offer a frame of exploration for design's strategic contribution that is broad enough to account for a wide range of design activities in an organization.

However, according to Heskett (forthcoming), this will give only a partial picture of design's relationship to strategy-- the reason being that design is largely neglected in existing management and economic theories. Particularly, the questions of how products and services are actually developed as well as how they are used beyond the point of sale, both of which are areas of concern for design, have either been ignored or addressed

inadequately. Further, the obsession of economics and management with the quantitative makes it difficult to deal with the tacit nature of some of the design knowledge, not to mention that it makes it blind to design's issues such as values, human and social benefit. Therefore, Heskett vehemently argued that design needed to establish its own theory of value creation which would take into consideration both the contribution of design to business success and its impact to society and individual lives at the same time. He acknowledged that such contribution will be at varying degrees and levels, depending on many factors including, but not limited to, industry, firm size, market structures, culture, etc. He even laid the foundation by offering a three-layered framework for design's functions within organizations (Figure
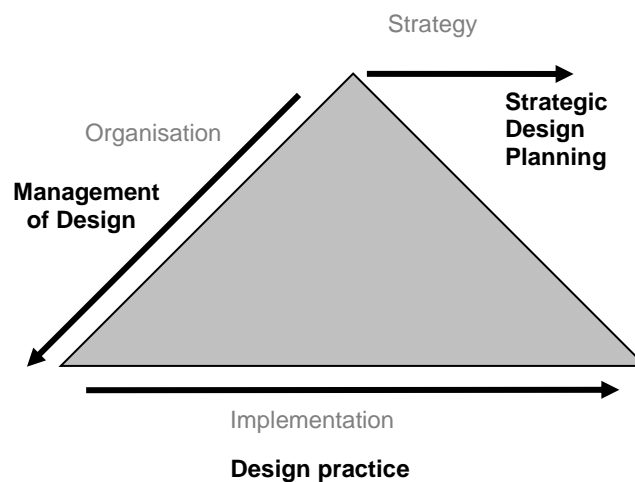
1)

Figure 1 Varied levels of design function in organizations (Heskett 2005).

Each layer denotes to one of the three basic levels at which any organization operates: (1) strategy sets out the direction of organization, its products and markets, (2) organization refers to the managerial structure responsible for the implementation of a strategy, and (3) implementation is responsible for the execution of strategy in terms of development and delivery of particular products or services**.** The most common design practice occurs at implementation level. Here design is part of product development teams, and it is mainly concerned with the application of technical skills. The management of design is concerned with the integration of design competencies in a firm. Finally, at the level of strategy, design is engaged with framing a vision of the future, giving a sense of coherence and direction to organization, and creating new value.

This three-layered model of the functions of design also received empirical support (e.g., Perks, Cooper, and Jones, 2005). Note that the three-level distinction in the model does not suggest a progression from one level to another. All three levels may exist simultaneously, even within the same organization. Different organizations utilize design at different levels, which Heskett (2003) classified as below (Figure 2).
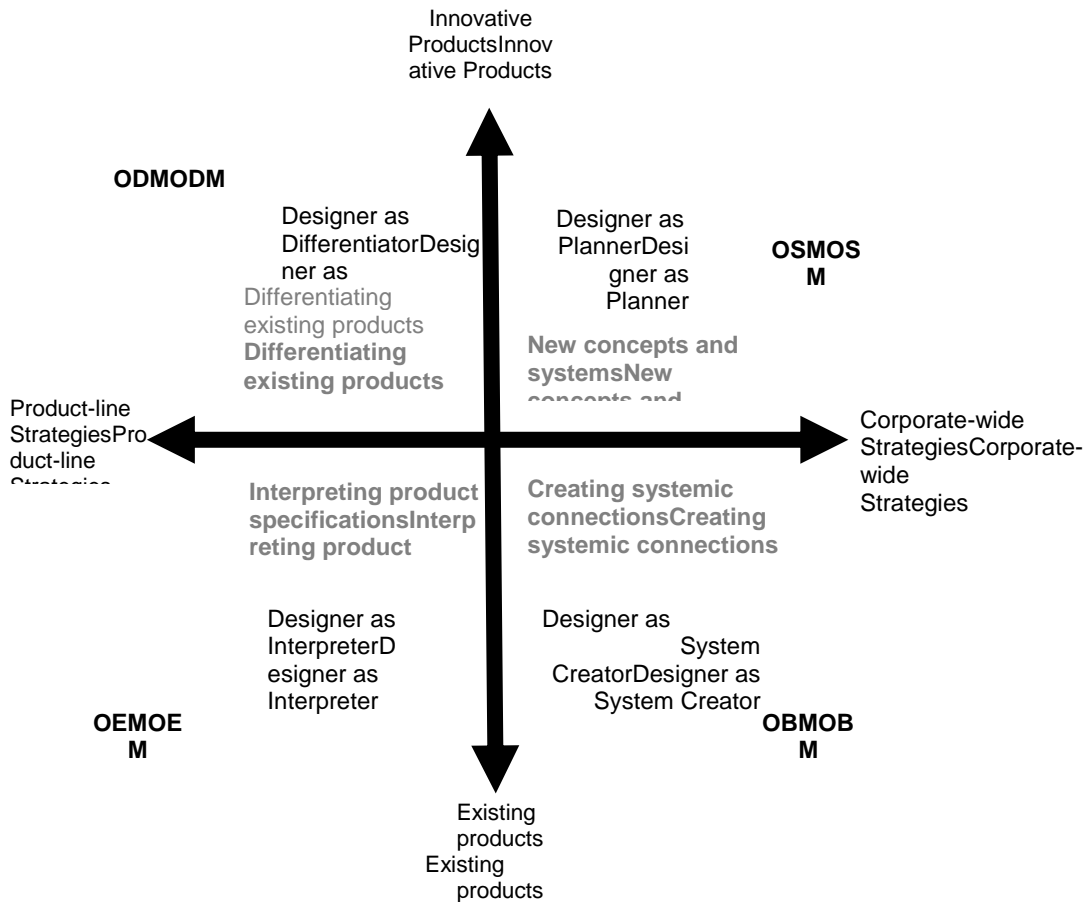
Figure 2 Design utilization in different organizational contexts (Heskett 2003, p. 11)

The horizontal axis identifies whether the organization's emphasis is on product-level or company-wide strategies. The vertical axis, on the other hand, is concerned with the degree of innovation, ranging from focus on existing products with incremental innovation to creation of new concepts. Accordingly, four types of organizational context are identified based on the role of designer: In the lower left quadrant, designers function as interpreters of existing products. They are typically engaged in superficial improvements of product line with little or no differentiation. Heskett called this executant role, as designers implement ideas generated by other functions in the company or clients—a situation commonly observed in Original Equipment Manufacturing (OEM) firms. In the upper left quadrant, designers' emphasis is on differentiation of products in a way that they create a distinct market position, which is typical of Original Design Manufacturing (ODM) firms. The lower right quadrant refers to the role of designers as system builders, which involves a managerial role. The focus is placed on systemically connecting the overall output of a company, which is part of Original Brand Management (OBM). Finally, the upper right quadrant corresponds to Original Strategy Management (OSM). Here designers get involved in the creation of innovative plans for the company as a whole. That is, they use design to set vision and direction for a company, as well as identify strategies for systemic innovations which are

harder for competitors to replicate and which can lead to long-term competitive advantage. As strategic planners, they offer tangible insights into future possibilities through a range of scenarios. Such scenarios can explore potential future experiences, new technologies, markets and products, and can provide the basis for assessing their desirability, feasibility and viability. Given the present state of high uncertainties for businesses, Heskett stressed that one of the key contributions of design at OSM is to act as a highly flexible tool for exploring possibilities and flexibly responding to new and unknown situations.

Even though the work of design at this level is not yet a pervasive phenomenon, it has already received some attention in the management research. There are even arguments that design has to be adopted by top management into their own practice (see Liedtka 2000; Martin 2009; Simon 1993). This idea was originally put forward by Simon (1993, 1996), who suggested that strategizing is designing—the reason being that any management activity aims to create a new state for organizations, markets and even industries, and design is precisely concerned with the creation of new future states. Consider the outcry in the management community for more originality, creativity and synthesis in strategy formation that started in the 1990s (e.g., Mintzberg 1994; Prahalad & Hamel 1990; Simon 1993). At the heart of those calls lied an observation that strategy formation processes fall short in generating original strategies and predicting the future in uncertain environments because of their heavy reliance on extensive quantitative analyses and elaborate choice making. It was precisely in this context that Simon proposed design as a model for strategy making. After all, alternative generation, creative thinking and synthesis are at the heart of design. That is, designers spend considerable effort on ideation and iteration in order to arrive at new solutions that are better than the existing ones. As with design, strategy making is abductive in nature. That is, it is concerned with envisioning a desired future state, and creating a blueprint for turning it into reality (Liedtka 2000). Also, the problems design and strategy deal with are of similar in nature: They are too sophisticated with multiple variables that cannot be resolved with statistical means alone. Design is known for its ability to deal with such problems (Buchanan 1992). It is a compelling factor that brings essential competencies to strategy table that could allow for a more creative and generative process, balancing out the efficiency-based approaches typically employed in strategy formation.

While these shared attributes between design and strategy making present a compelling argument for design's role in strategy creation, research is needed on what design has to offer to the making of strategy, and how it actually works at that level. The emergence of strategy-as-practice (SaP) approach (Jarzabkowski et al. 2007, Whittington et al. 2003) may provide a theoretical backdrop for such situated understanding of strategy work. In SaP, strategy is viewed as a locally constructed phenomenon through actions of organizational members. It is based on the premise that upper management is not the only place where strategy making occurs.

Method

The study involved case studies of five design consulting firms in Denmark. The participating companies ranged in size from 9 to 100+ employees. Three participants had offices outside Denmark. The services offered included graphic design, interaction design, advertising, manufacturing coordination, service design, user research, strategy design, and organizational processes design.

The primary data collection technique was a series of semi-structured interviews. Heskett's (2001) case study guidelines were adapted and used as a framework for the interviews. Initially, interviews focused on firm structure, clients, position, project management, services, etc. Then, they were directed to individual projects aiming to create a retrospective account of the whole project development process. The goal was to describe the participating consulting firm's structure, its position in the market and the industry, and the use of design/human-centered design at the levels of (1) strategy and planning, (2) management of design, and (3) implementation.

All interviews were conducted face-to-face on site. At least three interviews were conducted in each firm. The interviewees were partners, design managers, project managers, and/or designers, among others. Each interview lasted 2 to 3 hours, depending on the interviewee's availability. Additional data involved archival information such as company statistics, project documentations, media articles, and photos of products and of the workplace, etc. All interviews were tape-recorded and then transcribed. A total of 29 hours of interviews was recorded. The transcribed data was coded for categories, as identified in the guidelines. Specifically, I looked at how design functioned at execution, management and strategy levels. Next, patterns of practice across different cases were identified. The issues of how diverse user/market needs are addressed, how they are reconciled with other business requirements, how they are deployed in innovations, and how design is functioning at strategy level, including setting vision, distinctive market positioning, future plans, sustained company innovativeness were analyzed. Finally, based on the grounded descriptions of design practices and analyses, strategic practices and design functions of the participating consulting firms were identified.

Design's ways of engagement with strategy

Preliminary findings show that designers operate at multiple levels ranging from creating specific products to integrating innovations into systems and finally to strategy-level work. Any strategy-level work was characterized by the use of design knowledge, skills, processes and tools to help shape an organization's competitive positioning, devise future plans, or build capacity that will impact organizational innovativeness. I will specifically discuss here three ways in which design consulting firms were engaged in such work.

Strategy Redefinition

Design consulting firms were often viewed by their clients as mere implementers of existing strategies. However, they often challenged, reinterpreted, or even redefined those strategies. One way in which they did so was through their efforts to define the design problem they needed to solve. While clients typically approached design consulting firms with a problem already at hand—often manifested as a request for a product—the common assumption among designers was that the real nature of the problem is almost always veiled. Therefore, all participants were at some point engaged in problem redefinition and creation of the project brief. In so doing, they typically employed ethnographic or participative user research. For example, one partner reported that they included user research even if the client did not pay for it because "solving the right problem is more important than having a good solution to a wrong problem." While user research provided valuable input for the development of a brief for a specific product, they also often put into question higher-level organizational decisions. For example, a consultancy that was hired to develop a product for a medical company discovered from user research that in the eyes of the medical practitioners, the company had too many products, and that it was hard to distinguish which one was the best in a given situation. The project thus changed direction and resulted in several sub-projects, including streamlining the portfolio in light of the users' needs, creating educational packages for medical practitioners, and reorganizing some of the firm's structure and processes to deliver innovations taking into account users' experiences.

Another way in which strategy redefinition occurred was by giving it a tangible form. Strategies as devised by clients were often abstract statements. An important function of design was to translate those statements into tangible reality, giving them form and turning them to experiences that users would value. In so doing, designers relied heavily on visualizations. For example, they used storyboards, sketches and mockups to paint a picture of how those abstract statements could be turned into tangible futures. While they were not necessarily part of the end deliverables, clients often returned to those visuals as tangible representations of whats and whys of their strategies. In other words, visuals turned over time into a tangible organizational resource that different stakeholders could easily refer to. But it was not only the visuals created along the way that led to reinterpretation of strategy. The end products too served a similar function. For example, a grill manufacturer approached a design consulting firm with a desire to extend its sale season beyond the summer. Designers created a new range of products, which not only extended the brand's sale season but also took the brand inside the kitchen. The products projected a specific lifestyle image around grilling, which, in turn, guided later innovation initiatives within the company.

Capability Building

All consulting firms were involved in projects in which they contributed to building innovation capabilities in the client organization. Some of this capability building was carried

out explicitly as defined by the project brief. For example, under the threat of commoditization of its core product, an energy company turned to one of the participants to fuel innovation in different parts of the organization. Designers observed the work of the organization, conducted a series of interviews, and looked at the product development processes as prescribed by the management. They then developed custom processes as a roadmap to integrate design skills and methods into the organization's routines. Acting as process trainers, they engaged members from different divisions and ranks of the client organization in workshops in which participants experienced hands-on the design approach and tools. The idea was that the best way to understand design's approach to innovation is to be immersed in it. It was hoped that this approach would be a step toward changing the organizational attitude in favor of design. The designers then created tangible tools such as games, cards and templates that would supposedly encourage and support innovation within the client organization. These tools generated ways around which new organizational processes of idea generation and development could grow.

Most capability building occurred implicitly, in the form of a knowledge spill to the clients. Members from the client organization were typically included in the design team in whole or part of the project. This involvement inevitably created a familiarity with the design process. The client members were reported to pick the process and the tools, and apply it to other projects in their own organizations.

The participants believed that their knowledge brokering capability was one of the reasons they got hired by their clients. That is, by working with clients in multiple industries and different geographical areas, design consultancies transferred their knowledge about users, materials, technologies, trends, etc. to clients in new industries where such knowledge had no prior existence. This, in turn, allowed clients to get access to knowledge domains that they previously have regarded as not relevant.

Strategy Building

All design consulting firms were involved in projects related to competitive positioning, identifying new markets, future forecasting, or vision setting—i.e., the kind of work that they considered to be at the level of strategy. Of these, competitive positioning was seen as a prerequisite for any project as it was assumed that each new product should differentiate and favorably position their client. It is not the only way though. User behavior data too was used to identify opportunities for unique competitive positioning. For example, a user research on the notion of home in Scandinavia revealed that technology was not something people wanted to be central in their house. This kind of observations led to the idea of reframing technology as a cherished domestic object that enables comfort and coziness. As a result, the client, an electronics manufacturer, had to change not only its design language but also its strategy that had previously emphasized technological performance.

Design consulting firms were also directly involved with activities traditionally considered to be a cornerstone in strategy formation including new market identification, future forecasting and vision setting. Such work typically involved creation of vivid, tangible

scenarios of the future, constructed on the basis of a combination of user studies, trends and technology research and creative thinking. For example, one consulting firm was engaged in envisioning the future of health innovation within a 20-year period for a major pharmaceutical company with which it had a long-term engagement. The project involved both identifying new market creation opportunities and charting of a strategic direction. Trying to predict the future with such timespan may look like an effort in vain. In fact, the project attempted not just to predict what the future would be like, but also give it a specific direction by designing products, services and communications that would lead to that future—relying on observations, interviews and the best information available on trends in various other areas. Designers produced short- and long-term scenarios in the form of movies and posters for desired user experiences, new pharmaceutical business models, products and services. By doing this, they were able to visualize an abstract company direction and vision, and link it to the tangible reality of actual products. The products may never be realized, but they created a vivid image for the client of what the future might be like, and how the company could shape it. They also were intended to raise the company's awareness and preparedness in the face of a shift of focus from curing diseases to preventing them or helping patients manage and improve their lifestyles.

The path to strategy-level work

As it emerged from the data, design consulting firms get involved in strategy-level work in two distinct but related ways:

Repeated Client Engagements and Trust Building

As design consulting firms work with the same clients over and over again, they build client trust, as a result of which the complexity and strategic importance of their deliverables increase. This includes identifying innovation opportunities and even helping organizations develop their own innovation approach. Each new project is treated as part of a larger system of integrated products, processes, services, environments, etc. That is, they have "ongoing conversations" with their clients, in one partner's words. He noted, "the most important design works happen between projects." That is, the identification of future opportunities in fact takes place when the client is not actively seeking help from the consulting firm. Another participant called his firm's relationship to long-term clients strategic design partnership, emphasizing how integral their work is to clients' own strategic processes. Yet another one called this type of work a design program, explaining that what they do is basically about helping create an organizational design culture.

User-Centered Design

User research often serves as a stepping stone for design consulting firms to get involved with strategy-level work. It brings user needs, problems and opportunities into focus. These may have to be addressed at the level of product, but may also call for changes at organizational processes, structure or strategy. User research allows for an abstraction of

the problem presented by the client—the task changes from designing a product to solving a problem identified from users' standpoint. In other words, it allows for strategy-level discussion and solution seeking.

Expanded activity area

In parallel with an increase in the complexity of their work, design consulting firms have also expanded their activity areas over the years. Initially, they simply focused on one or two design areas, such as product design or graphic design. Over time, they offered a wider range of services, including communication design, service design, portfolio management, corporate design policy development, etc. This expansion was driven by clients' demand for complementing products as well as consultancies' own search for locking clients in through integrated offers. Some consultancies went through horizontal integration. That is, they included a diverse set of design services in the offering. Others expanded through vertical integration—they started to perform either upstream or downstream activities. For example, one consulting firm provided manufacturing and logistics in addition to design. Another one specifically focused on downstream activities of research marketing and planning.

Characteristics of design's strategy-level work

There were some patterns across design consulting firms in the way they perceived and organized their work at the level of strategy. Some of the characteristics of design's strategy-level work include the following:

Strategy as a Product. From designers' point of view, "strategy is just another product." Therefore, it should be a result of the same process used for designing physical products, interactive systems or services.

Transdisciplinary Work. The projects were executed by transdisciplinary teams, which, depending on the project, involved social scientists, engineers and designers, etc. But the consulting firms differed as to their approaches to how teams should be formed. They were experimenting and struggling with different ways of forming teams, and allocating and distributing their human resources.

Resetting Expectations. A great deal of attention was given to altering client expectations, identifying the problem, and setting up of the right brief. An assumption was that it is never possible to predict from the beginning of a project what exactly the problem is or what kind of offering will solve it.

User-Centered Design and Co-Creation. User-centered design was at the core of strategy-level work of the firms. This allowed for bringing into focus the questions of what to do. It also means a shift of emphasis from solving the perceived problem to identifying the problem. In addition to front-end user studies, co-creation was utilized in different stages of the projects.

Visualization. Visualization tools were used to describe and analyze complex situations, generate, improve and evaluate alternatives, and present solutions to clients. The clients, however, did not always welcome consulting firms' reliance on visual thinking. Several interviewees reported that clients often mistrusted anything that is not presented in numerical terms—particularly new clients.

Creative Thinking. All participants believed creative thinking was a significant asset that they owned. Many developed structured approaches to support it—each consultancy had its own processes and selected set of tools that fostered creative thinking. They were mostly related to idea generation and alternative development. However, the consulting firms differed in their preference over involving clients at ideation stage. While one participant explicitly included clients in idea generation and later handed them what they called an idea book containing all alternatives generated in the session, another one carefully kept clients away during this phase. The physical space in each firm was organized in a way to support creative work. Typically, the offices were set up as studios—characterized by toys, drawing materials and surfaces, various images, interesting objects and modeling materials.

Client Training. Innovation training, design workshops and similar activities were routinely carried out to build client capability. Transferring innovation knowledge to clients was not seen as a threat. This is partly because consultancies have built a somewhat complex set of competencies and interlinked services, which they believed would still be needed by their clients. The common belief was that the more clients knew the design approach the more they would involve design consultancies in strategy work.

Conclusion

This study provided some initial insights into design's ways of engagement with strategy formation. First, design's emphasis on users can help change the way companies strategize. It provides a way for addressing the key strategy question of what to do next. In tackling this issue, designers are driven by the insights generated about users and the idea that they could profoundly improve users' experiences. By keeping strategy development process grounded in user experiences, strategy can be formed in ways that would be meaningful from users' perspective. This, in turn, may alleviate some of the risks associated with uncertainty. Second, design's emphasis on creative thinking and alternative generation has the potential to create opportunities unknown to company, and, consequently, distinctive and more competitive strategies. Also, generating multiple alternatives supports a more effective strategic decision-making process in uncertain markets. Third, visuals and prototypes are a staple of fostering experimental and creative thinking—essential for building an organizational culture of innovation. Visualization and prototyping can help create a common language and an environment conducive to learning within the organization. Visualization makes strategy tangible and understandable. As for prototypes, they not only allow for quick testing but also provide feedback for the alternative being considered. By so doing, they push for making improvements and generating new ideas. Prototyping allows organizations to rapidly generate new knowledge about the current

situation, which, in certain cases, may compensate for the lack of up-front information about uncertain markets. Designers' strategic work seems to involve continuous innovation rather than single projects. The ability to weave them together as part of company direction, and to communicate and defend design ideas with clarity and conviction stand out. Also, design's engagement with strategy seems to be fostered by early involvement in client projects and long-term relationships with clients. However, more research is needed to fully uncover the dynamics of design's work at the level of strategy. Future research needs to investigate the effectiveness of the design factor, the internalization of design knowledge in organizations, the use of specific design tools and methods for strategic decision making, and the application of design in different organizational domains.

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