EDITORIAL:

Bridging Strategy from Both Business Economics and Design Sciences – Influence · Management · Capital

Jörn Bühring
Brigitte Borja de Mozota
Patricia Moore

#design strategy

#strategic design

#capability building

#design value

#design performance

Introduction - Design Economy

The United Nations' 2030 Agenda for Sustainable Development (UNDP 2015) has brought into focus the wide scope of strategic decision-making across the economic, social, and environmental dimensions. Developments at this scale have prompted business leaders to become more forward-thinking, cultivating a more long-term, sustainable perspective towards an organization's strategic and creative capabilities (Gordon et al. 2019; Sardar 2010). Global industry leaders are responding to the zeitgeist that 'business as usual is no longer acceptable when faced with the many challenges in today's hyper-connected global economy (Gelles & Yaffe-Bellany 2019). In addition to this, a worldwide depression resulting from the novel coronavirus (COVID-19) pandemic and the wide-ranging economic impacts associated with the evolving climate crisis add to an already volatile business landscape. Meanwhile, scholars focused on thinking about the future are devoting more attention toward exploring the question of what constitutes effective organizational processes in the long term (Buchanan 2015; Buehring & Bishop 2020; Vaara & Whittington 2012). Such perspectives are especially relevant in areas where design strategy can be applied to the resolution of strategic organizational problems (Borja de Mozota & Wolff 2019; Gallego et al. 2020). Indeed, since 1980, the Design management literature offers evidence of the linkages between design and strategic management, evident in the examination of the role of design in organization growth and in building the competitive advantage of said companies (Borja de Mozota 2002), with reference to models such as The Design Ladder (Danish Design Center 2001) or *Designence™* (Borja de Mozota 2006).

Consensus on the impact of design on performance can be said to be evident at all three levels of decision-making in organizations: strategic, tactical, operational (Brunswicker et al. 2019; Gemser & Leenders 2001). This impact broadly assumes the following forms:

1. Design impact for strategy in action and customer experience

2. Design impact for business strategy, process, innovation, and performance

3. Design impact for cultural change and organization transformation

Despite these revelations, precious little guidance is found in the way of forming a holistic view of the *why* of design science, core capabilities, theories, and methods in business economics and the ultimate pertinence of the design function in any given organization. Similarly, the *how*, which would outline the ways in which these capacities could be built and coordinated towards the support of strategic design and forward-looking decision-making processes is at best assumed, yet very rarely articulated.

This issue includes both the papers from academia and professionals we received through our *Call*, as well as the results of a complementary survey conducted by the editors with Chief Design Officers. Our editorial foreword uses the model (*Figure* 1) as the framework for a synthesis, linking strategy in design science and strategy in business science:

Part I - The vertical axis of *Strategy* from Vision to Mission through Value: design strategy versus corporate strategy, and business economics in design-driven organizations.

Part II - The horizontal axis of Strategic Management and the *Strategic design* decision path. From design leadership and strategic positioning to business strategy and design management to strategy in action and design.
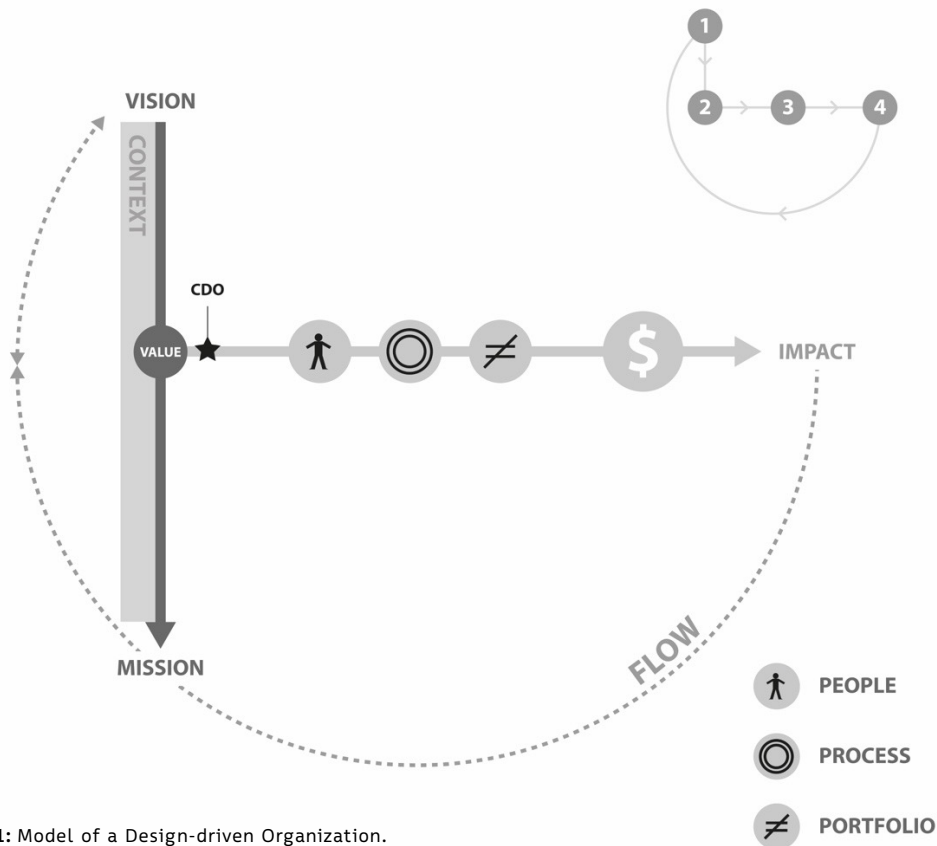
Figure 1: Model of a Design-driven Organization.
Illustration: Lo Ka Kin.

Part I – Design strategy and corporate strategy

Business economics and design flow

What is the design strategy driving change through design?

1. understanding how design values and knowledge fit into the organization

2. aligning design strategy with an organization's strategic goals and resources

Design science and practice can be treated as forms of energy. We see design science as a system (input/output and feedback loops), a system of energy flow (Grudin 2010), from the energy input of design as new knowledge to output of designed (embedded energy) artefacts for better performance. Strategic science on the part of any given organization is also a flow from the past to the future of the organization within the constraint of a *fil rouge* or common principles of survival and better efficiency. Both domains aim at change and for a *better* world. They look at the outside world and develop insights and ideas to invent a future that needs to be further adapted to the context of the organization, its leaders, stakeholders, and constituencies.

Behind every designer and every design project is a vision of a *better* world, an aspiration informed by processes of sensemaking, shared values and design principles. Design strategy is purpose-driven, intentional, and future-oriented, a *sensemaking* and dynamic activity. Design helps to optimize the allocation of resources and should thus be treated as economic activity in a literal sense. It is not a separate world from that of busi-

ness. If used strategically, it helps to define a new ecology of inputs and outputs, as exemplified in Gao and Hands (2021) strategic view of the impact of design on digital transformation.

Vision and design as knowledge

There are two models of strategic positioning in the field of design: the "innate" model where design and its values and methods are considered as a core competency of the organization from the very start (e.g., Braun, Alessi, Apple), which is also the model followed by designer-entrepreneurs, and the "experience" or "acquired" model that shows a progression of the valorization of design in business (e.g. Philips). The vision proposed by design deconstructs what is taken as normal, introducing a dissonance to the given. It creates through an "abductive" process, proceeding through a series of experiments. Constantly questioning boundaries, visionary designers see pathways of movement and openness where things appear closed. Visionary managers, in turn regard this refusal of closure as an opportunity for engaging in continuous conversations. So, what do strategic designers offer in terms of vision and strategic position?

The question of design strategy and business vision is a multiplicitous one (cf. Borja de Mozota 2002; Buehring & Liedtka 2018):

1. The traditional view of design and identity aesthetics treats design as a forward-looking orientation articulating an organization's purpose. Aesthetics denotes the capacity to produce beauty as a sign of power.

2. The rhetoric of strategic design, or strategy as language, provokes the formation of mental images of interpretive leaders, directly linked with company lead-

ership and its power. Corporate identity provides a set of signs that leaders can master. Corporate identity is also a set of visual elements through which the public recognizes the company and affirms its design expertise.

But there are now new pathways for design strategy, which see strategic designers inventing a vision and pushing organizational boundaries in accordance with design values and ethics. Corporate identity systems are entities that carry representations of the company. Often, the process of "sensemaking" is reflexive: there is no "look on the environment" which does not entail a corresponding "look at who is looking". Strategic design develops this cognitive approach into explicit strategy, unfolding in processes of: "inter-creation", the reciprocal construction of the organization by its environment and the environment by the organization.

Designing a vision is an inter-creation process between the organization and society at large. By redesigning the design strategy through the development of new design capabilities of the design function, a competency-based strategy is formulated. Similarly, an RBV (Resource-Based View) strategy welcomes the accumulation and allocation of resources. That is, any resource can be mobilized to generate a competitive advantage. Strategic design as knowledge is a resource for company success. At the same time, it can produce knowledge through fostering a collective learning process. Here, strategic design is seen as a building process of collaborative "sensemaking". Design capacities of "learning by doing" provide the context for conversations and the social construction of knowledge.

Consequently, strategic design is about creating new knowledge for the organization, but also functions as a builder of knowledge by increasing the knowledge value of other functions (R&D,

Marketing, HR, etc.) and by constructing unique relationships with the consumers of its products, services and experience propositions. This competence-based view of design input introduces a dynamic perspective. Resources are not intrinsically strategic, they become strategic when embedded in the strategy process. Design as a core competency gives access to a wide variety of markets, contributes to the benefits perceived by clients and thus is difficult to imitate.

Design Strategy

Design strategy participates in the strategic discourse through design values, design leadership, design attitude, design knowledge, and designer's profiles, each of which will be defined below.

- **Design values (and Ethics):** in design strategy, design values are strategic markers. They orient principles and provide touchstones for assessment. Design leaders make values explicit. They encourage leaders to discuss their values openly (Quayle 2017).

- **Design leadership** is grounded in a geographic and psychological place and in self-awareness of the environment that shapes the individual. It understands the dominant opposites and favours critical debates. Furthermore, it emphasizes edges and boundaries as places of richness for analysing ideas and not so obvious alternatives. Design leadership bridges gaps and makes connections: collaboration, as opposed to isolation, is encouraged. It thereby strengthens the connections between research and policy, theory and practice, public and private spaces. Effective design leadership involves the scaling of problems, balancing top-down and bottom-up processes while learning from natural systems and their interconnected processes. Equally, it is about connected thinking and doing while attending to patterns.

Therefore, design strategists have a different mindset. They acquire new knowledge at the strategic decision level (Calabretta et al. 2016; Calabretta & Kleinsmann 2017), such as:

1. Visioning to help organizations incorporate future-oriented and longer-term perspectives.

2. Research to diffuse new technologies and discover new user behavioural trends.

3. Coaching to help stakeholders think and act differently.

- **Design attitude refers to a certain set of core values to which the designer adheres,** such as accountability, effectiveness, elegance, and respect. Respect implies listening carefully and actively. Designers process values like resilience, diversity, learning, and meta-competencies such as multidisciplinary teamwork, research, self-directed continuous learningand analysing complexity (Lawson & Dorst 2013). It requires courage, the capacity to take risks as well as the ability to make decisions in an uncertain environment.

- **Design knowledge** is work in context, which is key for developing a strategic capability of designers - the capacity to see. Developing a sense of purpose is key for the development of a designer's vision, and this capacity is most useful in strategic ideation and positioning. This entails **the visualization of** complex problems, the drawing of futuristic artefacts or seeing invisible connections in eco-systems. Designers use visualization and materialization skills in a strategic direction (Calabretta et al. 2016).

- **Designer's Portfolio -** strategic designers have a variety of profiles (Yee et al. 2017).

As observed from previous studies, there is a difference between strategic design and design strategy (Holland & Lam 2014; Micheli 2019; Simeone 2020). While strategic design focuses on an organization's objectives during the design process, design strategy focuses on the application of design methods and values in developing a strategy (Anderson 2020; Brown 2019). However, when Brown (2019) addressed the difficulties in defining strategic design and design strategy, he would go on to arrive at the following definitions through experimentation and real life practice among his clients and students:

> *Strategic design is a design process that includes business considerations such as competitive positioning, pricing strategy, distribution strategy, and advertising strategy"* (Brown 2019, 42).

> *Design strategy is the process of designing for the purpose of strategic analysis and formulation* (Brown 2019 42).

The true value of design, as Brown (2019) concluded, is still obscure in the business domain as designers are forcibly removed from the doing of design, which he sees as being crucial to the identity of designers. Hence, an important question arises: When referring to the design strategy, how does design thinking factor in the design doing as a whole? Without the actual doing of design, designers are simply design thinkers and for designers to take up a strategic job, design doing is essential. In this context, it can be argued that strategy comprises of strategic thinking and design doing, instead of strategic thinking and design thinking. With design doing, designers bring value to the strategy through the empathy, consumer-centricity, visual representations, wide perspectives, problem analysis, and creative solutions which they contribute.

Furthermore, the Helsinki Design Lab defined strategic design as being more than creative thinking; it requires taking responsibility over whole concepts to preserve credibility throughout the design process. In this case, and during the transitional processes, designers must engage in the assessment, evaluation, and development of broader goals, such as sustainable or life-centric solutions (cf. Thackara 2006). This indicates that designers can bring more than design thinking to strategy, and the designer's involvement in the process can lead to a sustainable strategy. In summary, strategic design should correctly consider design strategy, focussing on both design thinking and design doing throughout the process (Anderson 2020; Boyer 2020; Brown 2019). That is, designers' strategic capacities support an inclusive "open" approach to strategy, embracing the use of 'soft skills' which organizations would do well to embrace in the development of a vision for a 'better world'.

Design strategy in corporate strategy

How does design strategy fit into emerging discourses on corporate strategy and the goals that these entail, as well as the call for solving the pressing global challenges involved in contemporary concepts such as Mission-driven Strategy, Systems-shifting Design, Sustainable Renewable Energy, Doughnut Economy, and Well-Being Economy (cf. Frigo 2003; Graham 2011; Østergaard et al. 2020; Raworth 2017; Szostak & Boughzala 2021)? Indeed, how does strategic design fit into the re-imagining of organizations as living systems (cf. Björklund et al. 2020)?

Going beyond "Design Thinking" as a tool to a design attitude

Here, a good example is the difference between "designerly ways of knowing" such as the creation of artefacts, reflexive practice, problem-solving activity, ways of making sense of things, creation of meaning (Sköldberg et al. 2013) and the

applied "Design Thinking" methods of the IDEO model: the way of working, as a necessary skill for managers, and part of management theory. In response to the the many critics of this IDEO vision of DT, scholars assume a more expansive view of design thinking, taking it beyond its focus on specific issues or problems and treating it in its ecological relationship to the environment and system in which it exists(cf. Beverland et al. 2015). This involves the recasting of design thinking as a meaningful and holistic whole, an attitude, a *gestalt* (cf. Vogel 2009) charged with more openness, more compassion, and more ability to disseminate design knowledge (Micheli 2019).

Design Ethics and sustainable strategy

The question of design ethics is widely discussed now that we need to give a direction to the future of all living systems on earth, a future which necessitates designing e.g., sustainable cities and "zero waste design" processes. Certainly, we can hardly forget that designers have also contributed to mass production, mass consumption and mass destruction of the planet resources. However, designers who engage in a wide range of 'user-centered', empathetic design methods are well versed in what Bruno Latour (1992) has described as a process of *moral delegation* or *the ethical made durable*.

Testifying to this is the newfound popularity of Victor Papanek's (1972) pioneering book *Design for the Real World*, which we consider a good example of strategic designers attitude and vision of the future. Design ethics often refers to professional codes of conduct or design morality. Included within design ethics are moral and legal obligations to make designs universally accessible and *inclusive*, concerns captured in rallying calls such as as *design for all*, *gender design*, *humanitarian design*, *social design,* and *design for care*. Empathy, compassion, and deep human understanding foster collaboration across functions and busi-

ness units, generating impetus toward developing a new vision of "enterprise design" (Fraser 2019). Thus, the first goal of design ethics and sustainable strategy formation is to develop a vision and to recover a sense of purpose (Tromp & Hekkert 2018).

Futuristic design and strategic foresight

Futuristic design is used to specify the designs of any period that make prominent reference to a vision of the future. Futuristic designs are greatly inspired by modern technological innovations in the fields of space travel, biosciences, science fiction, and virtual reality. Works developed by star designers all over the world adopt this futuristic imaginative position, and often organizations tend to work with such designers for a foresight view of their markets deploying concept design. Similarly, strategic design, foresight and futures studies (methodologies, methods, approaches) are increasingly adopted in university and design schools' research laboratories.

Examples in this direction range from design research in technology laboratories or design schools to exhibitions in design museums such as *FEAR & LOVE*, which was the opening exhibition of the new London design museum in 2016. Design is one of the forces driving and reflecting this fluid flow of change. Design makes change tangible. Design weaves into the many fears of our times: trust, privacy, resilience, security, survival. Exceptional visionary design works reach such heights that we are prepared to accept functional deficiencies. These designers, in taking unique risks, develop visionary artefacts which both delight and infuriate us while using them, and design capabilities assume a speculative form, disclosing fictive futures, telling stories and embodying critical thought (cf. Bühring 2021).

Issue contributions and perspectives

In this issue, we introduce several perspectives drawing from the fields of design science, business strategy and foresight. In her essay *Whole-being framework: the starting point for implementing workplace wellness programmes*, **Marea Saldarriaga Bueno** from Mexico speaks of a "whole-system" approach to developing emotional intelligence in people to pursue a meaningful way to thrive both in personal and professional lives. Her paper is aligned to the perspective of experiences, specifically addressing the role Design has in helping organizations understand what drives their employees, the ecological factors which affect their motivation and performance. In this context, a strategy must align to the human spirit, thus creating the ideal conditions for "whole-beings" to thrive, while self-awareness becomes equally essential for the system to work.

Elaborating upon the human dimension, **Rike Neuhoff** from Denmark presents an abstract titled *Meditation-inspired visioning: An experiential method to envision the future*, where she introduces an experiential, meditation-inspired visioning exercise that can aid in enhancing people's capacity to envision desirable and motivational futures. Derived from positive psychology, strategic foresight and futures thinking literature, this short introduction illuminates emerging design practices to help decision makers imagine and realize radically different, more desirable, and most importantly, more sustainable futures.

VALUE and Competitive Advantage

The value and influence of design on consumers have been recognized as important. Furthermore, management thinkers and practitioners have become alert to the importance of design for growth and the long-term sustainability of the organization. In this research (and with close reference to Figure 1), we sought to engage with design leaders to establish a platform from which to address internal and external issues through design, strategy, and foresight. Specifically, this short survey was intended to frame and encompass design team structures, responsibilities, approaches, and design value drivers in everyday practices. Insights gained from this study involving senior decision makers with design responsibilities within global brand icons, technology leaders, and start-up enterprises, will help explicate the linkages between design elements, strategies and outcomes related to the opportunity discovery and decision-making processes. Indeed, forty years of design management research is showing that design is getting up to C-Suite executive levels (Borja de Mozota & Wolff 2019); giving reasons for prompting new research to compare data of variables from 2002, and a present-day survey with our assumptions of a new variable *Design participates in the strategic decision process*. The *2022 Design Leader Survey* indeed generated new supporting insights from C-level Design decision makers (*n*=20) a decade on (Table 1), which corroborates with our findings in prior research (Bühring & Borja de Mozota 2021, forthcoming).

With a view towards how competitive forces function in an industry (cf. Borja de Mozota 2002), insights emerged as to how design creates strategic value across three distinct levels: (1) by optimizing the primary activities: Design action on the consumer perceived value; (2) by optimizing the coordination among functions and the support activities of the firm: Design as a new function in the structure that transforms the management process, and (3) by optimizing the external coordination of the firm in its environment generating a new vision for the industry (2002 p. 94). With the new design leader survey of 2022 building upon the same variables which characterize the value of design, the survey served to place further emphasis upon the visionary role design must play when it comes to the broader issues and challenges of

our time. Not surprisingly, the new variable in support of strategic decision making"registered highest score in the data matrix (cf. Table 1). Indeed, the most recent 'Design Economy 2021' report commissioned by the UK Design Council (Kimbell et al. 2021) signalled this shift in the focus on design. Its value now goes beyond the economic, its implications requiring the adoption of sociological approaches to analysing the social and environmental impact it generates.

With design now regarded as a catalyst for human capital, knowledge, cultural, and technology capital (Borja de Mozota & Kim 2009), we were particularly interested in our new design leader survey to seek first-hand accounts from Chief Design Officers (including VP, Head, Director levels) and Artistic Directors on the subject of the autonomy and power they enjoy (or do not enjoy) at the C-Suite executive level. To this end, the extracted data in the 2022 survey included participant quotations in addition to the quantitative findings from the survey questionnaire, and the authors' interpretive descriptions and summaries of results. In comparison to the 2002 study findings, a new value class emerged, which supports the assumptions of design in support of strategic decision making we introduced earlier. Comments obtained from design leader participants in this survey, by way of example, brings to light the evolving role of design as a strategic asset:

> *At Dassault, the design process is well described, and the organization recognizes its importance and capabilities of influencing business strategies. (Anne Asensio, Design Vice-President, Design).*

In a further related example, Lawrence Chu, Head of Product Design at Johnsons Controls Hitachi described the strategic value as

> *Design is a veneer, only skin deep; at Johnson Controls Hitachi, Design is a workshop where ideas are generated and are good for internal discussions.*

> *Design is an integral part of business strategy to a sustainable future and is part of everything we do".*

And, at LG,

> *"We aim to position design to be the core capabilities to forecast future business opportunities (Chul Bae Lee, Senior Vice President of Design).*

The strategic goal which is relevant to our present concerns is definedby different business scholars as gaining or sustaining a competitive advantage (Barney 1991; Christensen 2001; Mintzberg 1994; Porter 2008). In this 2022 survey research, we worked on the fundamental model of Michael Porter's value chain since there is a consensus among researchers in building a company's competitive advantage through strategic design (Borja de Mozota 1998b; Calabretta et al. 2016; Gemser & Leenders 2001; Holland & Lam 2014; Martin 2009).

To this end, strategic design is understood first in terms of its economic and financial impact on an organization's growth, sales and development of intangible assets. Design projects, when we speak of product design, packaging design, brand identity design have an impact on market share, price policy, and brand efficiency. In this context, strategic design is the organizational growth model, and its performance in this regard is evaluated in the paper by **Ian Parkman** entitled *How do we get paid for this? The Relationship between Strategic Design Management and Pricing Power*. In the paper, Parkman puts forward the following proposition: "What makes design strategic is seen as better performance on the market through premium pricing".

In another vein, the paper by **Taek-Kyun SHIN and Jieun KIM** perfectly illustrates value being generated through the strength of data visualization and the impact of design on Intellectual Property (IP). In *'Design is Everywhere but Nowhere in Analytics'*, Shin and Kim make the case that a data-driven

Table 1: Design Leader Survey variables from 2002, and 2022 with "design in support of strategic decision making" as a new value class. *Source: authors.*

Qs	Qs ID	Mean value 1-5 (1 = very important)	sample size: n=20	Value of Design as a strategic asset	Cluster	2022	2002	variance
1	SQ22	1.57	**Design in support of strategic decision making**	Vision / People	1	1	0	**NEW**
2	SQ1	1.57	Design as comptitive advantage	Mission / Performance	3	1	1	=
3	SQ3	1.67	Design as consumer experiences (benefits percieved)	Mission / Performance	3	2	3	=
4	SQ2	1.81	Design as a core competency	Vision / Mission	3	3	2	=
7	SQ4	1.95	Design changes the spirit of the firm	Vision-Mission / Process	1	7	4	🟢
6	SQ10	1.95	Design develops user-centre innovation management	Vision / People	2	8	10	🔻
5	SQ6	1.95	Design increases market share	Mission / Performance / Impact	3	6	6	=
8	SQ8	2	**Design Improves cooperation, strategy, marketing, and R&D**	Vision-Mission / Process	2	4	8	🔻
9	SQ7	2.05	Design allows brand premium pricing	Mission / Performance / Impact	3	10	7	🟢
10	SQ17	2.1	**Design improves the circulation of information in innovation.**	Vision / People	1	9	17	🔻
11	SQ13	2.24	Design accelerates the launch of new products	Vision-Mission / Process / Impact	2	12	13	=
12	SQ9	2.24	**Design is a know-how that transforms the activity processes**	Vision-Mission / Process	2	13	9	🟢
13	SQ16	2.29	**Design creates new markets**	Vision-Mission / Impact	1	5	16	🔻
14	SQ15	2.29	**Design develops project management of innovation**	Vision-Mission / Process	2	11	15	🔻
16	SQ19	2.38	Design is difficult to imitate by competitors	Vision / People	1	16	19	🔻
15	SQ14	2.38	Design improves coordination between production / marketing	Vision-Mission / Process	2	14	14	=
17	SQ12	2.43	Design gives access to a wide variety of markets	Vision / People / Impact	1	15	12	🟢
18	SQ18	2.48	Design means higher margin or cost reduction	Mission / Performance / Impact	3	17	18	=
19	SQ21	2.67	Design improves coop among agents	Vision-Mission / Process	2	18	21	🔻
20	SQ11	2.76	**Design generates TECH transfer**	Vision-Mission / Process	2	19	11	🟢
21	SQ5	2.9	**Design develops exports and internationalization**	Mission / Performance / Impact	3	20	5	🟢
22	SQ20	3	Design changes relations with suppliers	Vision / People	1	21	20	=

Cluster 1 Design in support of strategic decision making / PEOPLE
Cluster 2 Design as core competency / PROCESS
Cluster 3 Design as competitive advantage / PERFORMANCE

approach for design patents is an underutilized resource in design management and innovation research. In their study, they take Apple, Dyson, Samsung and LG as companies which engage in innovation activities with different trajectories and shapes, focussing upon product diversification strategies, collaboration patterns and design-technology pollination flows. Strategic design, in this case, highlights financial and intellectual capital performance value through patents, copyrights, licensing, and brands.

Part II Strategic Design Management

In this part of the editorial, we engage with the question of *How to build organisational capabilities in support of strategic design for the transformation of organisations?* Strategic design management is about shaping design decisions in action. What is important to illuminate, however, is how design capabilities penetrate the decision processes for implementing strategy. Pertinently, various strategy thinkers explain how the strategy direction penetrates the organizations' processes (Kaplan & Norton 2000; Kim & Mauborgne 1997; Vaara & Whittington 2012). Likewise, the same theoretical pattern is followed by strategic design management scholars (Holland & Lam 2014; Meroni 2008; Wolff & Amaral 2016). In this context, this sixth issue of CUBIC Journal produced three perspectives, which are following the strategic management path:

Perspective 1: The power dynamics of design principles in strategic design management

Managing by design (Gruber et al. 2015) involves bridging design principles, folding the attitude of design into the strategy discourse, from designing a corporate identity to sensemaking, systems thinking, purpose, and meaning. Here, the ques-

tions are: "How do leaders gain influence and establish their legitimacy and identity through strategic design? "How is design driving sustainable ecosystems towards regenerative organizations?" And "How are design attitude and skills as a core competency and long-term resource difficult to imitate?" The paper presented by **Mariana Fonseca Braga** from Lancaster, UK, illustrates this perspective: *The Fifth Order of Design: The Value of Design in Transition Times.* Although design strategy is seen as achieving better performance, the paper challenges the very notion of performance. Confronted with questions of sustainability, the very discourse of design needs to be addressed if the systemic problems that it generates are to be treated. Central to the paper is an argument for the value of design for business management, which is in dire need of a common-systems view to tackle the challenges of our time (Buchanan 2007, 2015; Manzini & Meroni 2007).

Perspective 2: Align strategy and customer-centricity and experience

Strategic design for customer-centricity in organizations brings forward several key considerations (cf. Meroni 2008), namely:

1. How does design leadership and design management transform and align seamless customer brand experiences?

2. How do UX designers transform organizations' marketing strategies through hybrid efficient, inclusive, digital performance?

3. How does Design Thinking drive cultural transformation of customer processes towards a Corporate Social Responsibility [CSR] enterprise, societal empathy, and the development of a mission-driven long-term strategy?

Possible solutions to these very questions are probed by **Michael Lai and Hsien-Hui Tang** from Shanghai in their paper *Shifting the Value of Experience: From Design to Strategy*. In their article, the authors compare and contrast the nature of experience design with experience strategy, exploring the ways in which they are delivered to close the gap between designers and strategists.

Perspective 3: Align strategic design with stakeholders' engagement

Human centricity becomes organizational in a progressive fashion, beginning with the creative design individual and leading to the designing of a creative culture shared by all in the organization. Here, it be hooves us to consider how design integration transforms human resources management, which in previous research has shown the power of design for collaborative innovation as an open model (Borja de Mozota 2002; Secundo et al. 2020). Indeed, are designers' skills integrated as strategic new soft skills for managers at all levels, thus leading to co-innovation management and the engagement of all stakeholders involved through user-oriented design management, co-design with users, experimentation, collaborative, and open innovation? How is strategic design lowering risk management and optimism in the face of chaotic situations?

Addressing this issue from a strategic design perspective which takes a multiplicity of stakeholders into account, **Geraldine Hatchuel's** paper entitled *Let's take care of the caregivers* focusses upon experience design strategies in healthcare institutions amidst the COVID-19 health crisis. In her paper, Hatchuel explores the capacity of design to devise new work solutions and strategies which improve the lives of caregivers.

Such human centricity, shared on all levels of the organisation, points towards different ways of understanding the value of design and its integration by different organizations. In this case, strategic design management is influenced by context and conversation. Hence, periodical change from a design and management perspective ought to be observed if a relationship between good design and good management is to be established. That is, as management and design practices advance (e.g., design-entrepreneurship; design-foresight), better representations of design management and design leadership are needed to ensure a closer alignment between design research and critical management representations (Borja de Mozota & Wolff 2019; Buehring & Liedtka 2018).

Conclusion

The world is changing, and so are the demands that these changes exert upon the design industry, on businesses and society as a whole. In this issue, we focused our attention on design as a strategic asset to the organization, one which can be harnessed as it responds to the external environment in an effort to identify opportunities for new design activities and outcomes. As our research demonstrates, design (in theory and practice) tends to elevate and enhance the role of the organization as a catalyst for change, influencing strategic decisions, producing clear visions, shared beliefs, and values which assume a more holistic conception of sustainable development. To make up for a shortcoming in our ability to gain a holistic view of design's core capabilities, theories, and methods in business economics, as well as the pertinence the design function and job position (e.g., design leadership) has in organizations, we introduced a conceptual model (see Figure 1) with the aim to synthesize the question of design strategy and business strategy and its relationship to achieving its goals when faced with the challenges of our time. In summary, we have reached consensus on two critical issues:

a. First, the need for a continuous "survey" process with Design industry stakeholders around the variables which make up the key performance indicators (KPI) of Design value.

b. Second, a more collaborative approach between research labs welcoming designers, academics, and strategy practitioners.

Bibliography

Anderson, Lee. *Strategic Design vs. Design Strategy,* 2020. Retrieved from https://medium.com/@lstarkweather/strategic-design-vs-design-strategy-1fd6c1530f01.

Barney, Jay. "Firm Resources and Sustained Competitive Advantage". *Journal of Management 17,* no.1(1991): 99-120.

Beverland, Michael B., Sarah JS Wilner, and Pietro Micheli. "Reconciling the tension between consistency and relevance: design thinking as a mechanism for brand ambidexterity." *Journal of the Academy of Marketing Science* 43, no. 5 (2015): 589-609.

Björklund, Tua, Hanna Maula, Sarah A. Soule, and Jesse Maula. "Integrating design into organizations: The coevolution of design capabilities." *California Management Review* 62, no. 2 (2020): 100-124.

Borja de Mozota, Brigitte. "Structuring strategic design management: Michael Porter's value chain". *Design Management Journal (Former Series) 9,* no.2 (1998a): 26-31.

Borja de Mozota, Brigitte. "Structuring Strategic Design Management: Michael Porter's Value Chain". *Design Management Journal 9,* no. 2 (1998b): 26–31. Retrieved from 10.1111/j.1948-7169.1998.tb00201.x

Borja de Mozota, Brigitte. "Design and competitive edge: A model for design management excellence in European SME's". *Design Management Journal Academic Review* 2:88–103 (2002).

Borja de Mozota, Brigitte . *A theoretical model for Design in Management science according to the paradigm shift of the Design profession: from management as a constraint to management science as an opportunity*. Paper presented at the 1st International Design Management Symposium D2B, 2002. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.426.9382&rep=rep1&type=pdf.

Borja De Mozota, Brigitte, and Fabiane Wolff. "Forty years of research in design management: a review of literature and directions for the future." *Strategic Design Research Journal 12*, no. 1 (2019): 4-26.

Boyer, Bryan. "Helsinki Design Lab Ten Years Later". *She Ji: The Journal of Design, Economics, and Innovation 6,* no. 3 (2020): 279–300. doi:10.1016/j.sheji.2020.07.001.

Brown, Travis J. "Strategic Design or Design Strategy? Effectively Positioning Designers as Strategists". *Design Management Institute 30,* no. 1 (2019):38–45. doi:https://doi.org/10.1111/drev.12160.

Brunswicker, Sabine, Esteve Almirall, Ann Majchrzak. "Optimizing and satisficing: The interplay between platform architecture and producers' design strategies for platform performance". *MIS quarterly 43,* no. 4 (2019): 1249-1277.

Buchanan, Richard. "The Four Orders of design." From proceedings of the 32nd International Design Management Conference (Thinking Ahead: The Changing Role of Design and Design Management in Businss"), Williamsburg, Virginia (2007).

Buchanan, Richard. "Worlds in the making: Design, management, and the reform of organizational culture". *She Ji: The Journal of Design, Economics, and Innovation 1,* no.1(2015): 5-21.

Buehring, Joern, and Peter C. Bishop. "Foresight and design: new support for strategic decision making." She Ji: *The Journal of Design, Economics, and Innovation* 6, no. 3 (2020): 408-432.

Buehring, Joern, and Jeanne Liedtka. "Embracing systematic futures thinking at the intersection of strategic planning, foresight and design". *Journal of Innovation Management 6* (2018): 134-152.

Buehring, Joern and Jeanne Liedtka. "Embracing systematic futures thinking at the intersection of Strategic Planning, Foresight and Design." *Journal of Innovation Management* 6, no. 3 (2018): 134-152.

Bühring, Jörn, and Brigitte Borja de Mozota (2022, forthcoming). "System driven Design Industry: the challenge towards a collective vision for all stakeholders in Design". In: Bruyns G., Wei H. (eds) Reinventing Design Modes: *Proceedings of the International Association of Societies of Design Research (IASDR) Conference*. 2021. Springer, Singapore

Bühring, Jörn H. *Private Banking and Wealth Management Futures 2030: Greater China Perspectives*. Springer Nature, 2021.

Calabretta, Giulia, Gerda Gemser, and Ingo Karpen. *Strategic Design - 8 Essential Practices Every Strategic Designer Must Master*. Amsterdam: BIS Publishers, 2016.

Calabretta, Giulia, and Maaike Kleinsmann. "Technology-driven evolution of design practices: envisioning the role of design in the digital era". *Journal of Marketing Management 33,* nos.3-4 (2017): 292-304.

Christensen, Clayton M. "Competitive advantage." *MITSloan Management Review 42*, no. 2 (2001): 105-109.

Fraser, Heather M. *Design works.* Toronto: University of Toronto Press, 2019.

Frigo, Mark L. Mission driven strategy. *Strategic Finance*, NA-NA, 2003.

Gallego, Carmenza, G. Mauricio Mejía, and Gregorio Calderón. "Strategic design: origins and contributions to intellectual capital in organizations." *Journal of Intellectual Capital* Vol. 21 No. 6, (2020): 873-891.

Gao, Zitong, and David Hands. "The Strategic Role of Design in Driving Digital Innovation: A Theoretical Foundation". *Journal of Technology Management & Innovation 16,* no. 1 (2021): 58-66.

Gelles, David, and David Yaffe-Bellany. "Shareholder value is no longer everything, top CEOs say". *The New York Times* (2019).

Gemser, Gerda, and Mark AAM Leenders. "How integrating industrial design in the product development process impacts on company performance". *Journal of Product Innovation Management: an International Publication of the Product Development & Management Association 18,* no. 1(2001): 28-38.

Gordon, Adam, René Rohrbeck, and Jan Oliver Schwarz. "Escaping the" faster horses" trap: bridging strategic foresight and design-based innovation." *Technology Innovation Management Review* 9, no. 8 (2019): 30-42.

Graham, Carol. *The pursuit of happiness: An economy of well-being*. Brookings Institution Press, Washington, DC (2011).

Gruber, Marc, Nick De Leon, Gerard George, and Paul Thompson. "Managing by design." *Academy of Management Journal* 58, no. 1 (2015): 1-7.

Grudin, Robert. *Design and truth.* Ann Harbor: Yale University Press, 2010.

Holland, Ray, and Busayawan Lam. *Managing Strategic Design*. UK: Palgrave Macmillan, 2014.

Johansson Sköldberg, U., Woodilla, J., & Çetinkaya, M. (2013). "Design thinking: past, present and possible futures". *Creativity and Innovation Management 22,* no.2 (2013): 121-146.

Kaplan, Robert S., & Norton, David P.. "Having trouble with your strategy?: Then map it". *2nd Edition, September-October 2000* (2000):50-62.

Kimbell, Lucy, Jocelyn Bailey, Christian Nold, Patrycja Kaszynska, Jonathan Todd, and Francesco Mazzarella. "Design Economy 2021–Introductory Paper". *Design Economy 2021* (2021): 1-36.

Kim, W. Chan, and Renée Mauborgne. "Value innovation: The strategic logic of high growth". *Harvard Business Review 75,* no. 1 (1997): 103-112.

Latour, Bruno. "Where are the missing masses? The sociology of a few mundane artifacts." *Shaping Technology/Building Society: Studies in Sociotechnical Change 1* (1992): 225-258.

Lawson, Bryan, and Kees Dorst. *Design Expertise*. London, Routledge, (2013).

Manzini, Ezio, and Anna Meroni. "Emerging user demands for sustainable solutions, EMUDE." In *Design Research Now*. Berlin, Boston: Birkhäuser, 2012: 157-179.

Martin, Roger, and Roger L. Martin. *The design of business: Why design thinking is the next competitive advantage*. Boston, Harvard Business Press, (2009).

Meroni, Anna. "Strategic design: where are we now? Reflection around the foundations of a recent discipline". *Strategic Design Research Journal 1,* no. 1(2008): 28-31.

Micheli, Pietro. "Elevating Design into Strategy 6 factors crucial to raising design to a strategic level", 2019. Retrieved from https://www.iedp.com/articles/elevating-design-into-strategy/.

Mintzberg, Henry. "The fall and rise of strategic planning". *Harvard Business Review 72,* no.1 (1994): 107-114.

Østergaard, Poul Alberg, Neven Duic, Younes Noorollahi, Hrvoje Mikulcic, and Soteris Kalogirou. "Sustainable development using renewable energy technology." *Renewable Energy* 146 (2020): 2430-2437.

Papanek, Victor, and R. Buckminster Fuller. *"Design for the real world"*. London, UK: Thames & Hudson Ltd (1972).

Porter, Michael E. (2008). The Five Competitive Forces That Shape Strategy. *Harvard Business Review, 86*(1), 25–41. Retrieved from https://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy

Quayle, Moura. *Design Leadership: Strategic Design method: Ask, Try, Do*. New York: Columbia University Press, 2017.

Raworth, Kate. *Doughnut Economics: Seven Ways To Think Like a 21st-Century Economist*. Vermont, USA: Chelsea Green Publishing, (2017).

Sardar, Ziauddin. "Welcome to postnormal times". *Futures 42,* no. 5 (2010): 435-444.

Secundo, Giustina, Pasquale Del Vecchio, Luca Simeone, and Giovanni Schiuma. "Creativity and stakeholders' engagement in open innovation: Design for knowledge translation in technology-intensive enterprises". *Journal of Business Research 119* (2020): 272-282.

Simeone, Luca. "Characterizing Strategic Design Processes in Relation to Definitions of Strategy from Military, Business and Management Studies". *The Design Journal 23,* no.4 (2020): 515–534. doi:10.1080/14606925.2020.1758472

Szostak, Bérangère L., and Yasmine Boughzala. "The role of design thinking in corporate social responsibility (CSR) strategy and its influence on innovation". *Journal of Innovation Economics Management 1* (2021):169-195.

Thackara, John. *In The Bubble: Designing In A Complex World*. Cambridge, MA, USA. MIT Press (2006).

Tromp, Nynke, and Paul Hekkert. *Designing for society: Products and services for a better world*. London, UK: Bloomsbury Publishing, (2018).

Vaara, Eero, and Richard Whittington. "Strategy-as-Practice: Taking Social Practices Seriously". *Academy of Management Annals 6,* no. 1(2012): 285-336. doi:10.5465/19416520.2012.672039.

Vogel, Craig M.. "Notes on the evolution of design thinking: A work in progress". *Design Management Review 20,* no. 2 (2009): 16-27.

Wolff, Fabiane, and Fernando Gonçalves Amaral. "Design Management competencies, process and strategy: A multidimensional approach to a Conceptual Model". *Strategic Design Research Journal 9,* no. 3 (2016): 145-154.

Yee, Joyce, Emma Jefferies, and Kamil Michlewski. *Transformations: 7 roles to drive change by design*. Amsterdam, NL: BIS Publishers, (2017).

Bio

Dr. Jörn Bühring is an research assistant professor at The Hong Kong Polytechnic University, School of Design. He earned a BA-equivalent degree in the field of Tourism Management (HH), an M.B.A. (VU) majoring in Entrepreneurship and Innovation, and a PhD in Consumer Engagement Innovation futures at Swinburne University of Technology (SWIN) in Australia. In his current position, he is developing a collaborative approach (Design Economy, Ignite Innovation Industry Collaboration Futures) that brings academia, designers, and business stakeholders together to develop high-impact design knowledge, concepts, and solutions. His research explores Design Foresight, Vision and Fiction techniques as emerging processes within Strategic Design and Innovation Management.

Dr. Brigitte Borja de Mozota is currently director and founder of Designence, a Design Management Think Tank (2011); an Associate Member of research laboratory Chaire Diament on design and mental health at Université UQAM (Montréal, Canada). She teaches Design Leadership and Management in Masters in innovation & MBA Managing by design (Strate Kedge) and runs international projects based on her value model for design - "Designence " (KCDM 2.0 Slovenia; Politecnico de Monterey Mexico). A pioneer in design management, Brigitte received her PhD in economics on Design value at Université Paris, Sorbonne in 1985. She created international research networks: Design Management Institute (1988), European Academy of Research (EAD 1993), Ateliers de la Recherche en Design (2006) and research journals (The Design Journal, Sciences du Design) & organized international design research conferences for EAD and DMI.

Dr. Patricia A. Moore is the president at MooreDesign Associates, and holds undergraduate degrees in Industrial Design, Rochester Institute of Technology, completion of Advanced Studies in Biomechanics, NY University's Medical School; graduate degrees in Psychology & Gerontology, Columbia University. Selected as one of The 40 Most Socially Conscious Designers in the world; featured as one of 50 Americans Defining the New Millennium (ABC World News). Named one of The 100 Most Important Women in America (2000), inducted into "INNOVATORS Hall of Fame" (2012), honored with the Cooper Hewitt's prestigious National Design Award in 2019; The Center for Health Design 2020 CHANGEMAKER Award.