DESIGN; A BUSINESS CASE

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Design Management Excellence

The way that a discussion evolves over time to a certain degree depends on who defines the agenda. As for the quite dramatic evolution that design has been through during the last two decades, in particular, the agenda was set by everyone else - but designers. Clearly, scholars coming from various backgrounds and paying an interest in design have influenced the discourse through papers and books and conferences, but as the role of design was slowly latched up to topics like growth, innovation and competitiveness, it also captured the interest of policy makers and bureaucrats. While design previously appeared to be somewhat factional and of little interest in terms of economic growth and prosperity, latching design onto strategy as a vehicle, it was suddenly perceived as an instrument with other qualities than before.

Mapping design in organizations as aesthetics in organization theory

However, veiled by the enthusiasm of the how design could both co-exist with, be inspired by and enhance strategic objectives, some of the core qualities of design – such as aesthetics and tactility, and the importance of appearance – seemed to be somewhat oppressed. For quite some time during the first decade of the century, opening a discussion on design and aesthetics most often resulted in condescending comments indicating that design had moved on from there a long time ago.

More recently, the acknowledgement of the role of aesthetics as a strategically important factor has made it possible to discuss design as a much more diverse and multi-facetted concept, containing both tangible and measurable, as well as less palpable qualities. A former Danish minister of culture once said that,

Meaning can never come from rationality only. Rationality can show us the easiest way to a goal, but it can never tell us how to get there, where we are going. That's why art and architecture are important to our world. ¹

Just like there was little room for aesthetics during the hype of strategic design, design management lost out to the far catchier design thinking a decade later. While the concept of design management never really penetrated the membrane between the design research community and the real world, the concept of design thinking resonated with a number of agendas. One of its advocates, the Business Week editor, Bruce Nussbaum had little doubt;

I now believe that CEOs and managers must know Design Thinking to do their jobs. CEOs must be designers and use their methodologies to actually run companies. Let me be even more precise. Design Thinking is the new Management Methodology. ²

Less than four years later, he diagnosed that;

Design Thinking has given the design profession and society at large all the benefits it has to offer and is beginning to ossify and actually do harm.³

A number of things indicate that he was first right, and then wrong.

Design thinking wasn't dead at all. It has changed and matured, and it still takes on different masks, but the number of conferences and publications about design thinking is increasing, and the domains in which it is embraced and applied are constantly growing and increasingly diverse.

¹ Jelved (2014): From inaugural speech at the Venice Biennale in 2014, where the title of the Danish pavilion was 'Empowerment of Aesthetics'

² Nussbaum (2007): CEOs Must Be Designers, Not Just Hire Them. Think Steve Jobs And iPhone – The Economist, 28 June 2007

³ Nussbaum (2011): Design Thinking is a Failed Experiment. So, hat's Next? – CO.DESIGN, 4 May 2011

DM adds value through	Economic value (Aesthetics, Differentiation) Product value (Quality)	Process value Innovation (Coordination, Problem- solving)	Human value (Human and cultural transformation)	Strategic conversation value (Building skills Framing problems)
DM solves design problems relating to	All aspects of the company's artifacts	Managing innovation	Strategic diagnosis Changes in society, in politics	Cultural changes Digital transformation Design for all
DM develops and fuels design skills in the functions of	Direction Marketing Operations Communications	R&D Interdisciplinary innovation team	Finance Human resources	Every function in the company
Design leadership (design direction, artistic direction) helps the accomplishment of goals such as	Create a brand and an identity (coherence between design disciplines) Create profit for the company	Create new products and services Improve the innovation process and its efficiency	Make companies aware of design strategy Change for customer oriented and creative culture	Make a company sustainable in a globalized context of societal well- being
PERIOD	1965 - 1992	1993 - 2005	2005 - 2014	2015 - 2017

Fig. 1: Borja de Mozota (2018): Half a century of design management and design thinking

Design thinking seems to be here to stay – at least for a while, notwithstanding that some may argue that it suffers from the lack of a precise and unambiguous definition, while others see this as one of its unique assets.

Design Thinking in Business education

While not necessarily helping us defines the concept, one approach to forecasting its future role – thus framing it from a bottom-up perspective might be to map how it is dealt with in higher education. One recent study showed that;

Many universities were found to have programs where students were exposed to design thinking in classroom situations and workshops around problem-based issues. From the review of all data, four areas of categorization emerged; (i) Human Centered Design; (ii) Integrative Thinking, (iii) Design Management, and (iv) Design as Strategy. ⁴

So – design thinking is conceived as encompassing the principles of *Human Centred Design*; an emphatic approach to the people involved in or affected by a novelty or change, duly considering human needs, desires and intuition.

⁴ Matthews and Wrigley (2017): *Design and Design Thinking in Business and Management Higher Education* - Journal of Learning Design 2017 Vol. 10 No. 1 Special Issue: 45 Business Management

Today's human centered design is based on the use of techniques which communicate, interact, empathize and stimulate the people involved, obtaining an understanding of their needs, desires and experiences which often transcends that which the people themselves actually realized. Practiced in its most basic form, human centred design leads to products, systems and services which are physically, perceptually, cognitively and emotionally intuitive. ⁵

Furthermore, the concept encompasses *Integrative Thinking*, fronted amongst others by Roger Martin. He frames the concept by describing the core of how integrative thinkers work:

Integrative thinkers work to see the whole problem, embrace its multi-varied nature, and understand the complexity of its causal relationships. ⁶

And – latching it up onto design thinking;

Rather than perpetuating the past, the design thinker creates the future. 7

So – whether one prefers integrative thinking or systemic thinking, which seems to be referred to more often today, the core is the notion that no problem or challenge exists in isolation, and that solving it – not for its own good sake, but as a piece in the puzzle that creating the future is, requires an understanding of its context and cause. Then, interestingly enough, *Design Management* appears to be conceived as an integral element in design thinking. According to DMI – Design Management Institute;

Design management encompasses the on-going processes, business decisions, and strategies that enable innovation and create effectively designed products, services, communications, environments, and brands that enhance our quality of life and provide organizational success. On a deeper level, design management seeks to link design, innovation, technology, management and customers to provide competitive advantage across the triple bottom line: economic, social/cultural, and environmental factors. It is the art and science of empowering design to enhance collaboration and synergy between "design" and "business" to improve design effectiveness. ⁸

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⁵ Giacomin (2014): What is Human Centred Design? - Design Journal, 17(4): 606 - 623, (2014)

⁶ Martin (1999): The Art of Integrative Thinking – Rotman Management, Fall 1999

⁷ Martin (2009): The Design of Business – Why Design Thinking is the next Competitive Advantage – Harvard Business Press

⁸ www.dmi.org/?What is Design Management

While the first component focuses on the engagement in actual design activities and on undertaking the activities needed to understand the people involved, and the second component focuses on the analysis of the challenge at hand, its cause and context, this third component focuses on the structures and processes needed to organise and take advantage of the skills and knowledge brought into the project.

The final conceived component of design thinking is labelled *Design as Strategy*. Revisiting the Design Ladder, previously referred to, which was developed at the very beginning of the century to measure the various stages of design engagement that organisations have. The highest level of engagement is design for strategy, which was elaborated upon in a more recent article:

The designer works with the company's owners/management to rethink the business concept completely or in part. Here, the key focus is on the design process in relation to the company's business visions and its desired business areas and future role in the value chain. ⁹

The most significant difference between this last component and the three former is that while they refer to the development of products, services and systems – or to the integration and management of processes and structures, the latter relates to the organisation as a whole, to its visions and overruling strategies.

Design offers a different approach and suggests processes that are more widely participative, more dialogue-based, issue-rather than calendar-driven, conflict -using rather than conflict-avoiding, all aimed at invention and learning, rather than control. If we were to take design's lead, we would involve more members of the organization in two-way strategic conversations. We would view the process as one of iteration and experimentation and pay sequential attention to idea generation and evaluation in a way that attends first to possibilities before moving onto constraints. ¹⁰

Design leadership as "dancing with hierarchies" (Mary Parker Follett 1868-1933)

Mary Parker Follett introduced the idea of power as a framework for mutual understanding; as an energy that emanated from the circular response between people and ideas, so that power was non-hierarchical in the sense that it was not "power over another person" but rather "joint power over the situation". ¹¹

⁹ Danish Design Centre (2015): The Design Ladder: Four steps of design use

¹⁰ Liedtka (2003): Strategy as Design - http://www-2.rotman.utoronto.ca/pdf/rotman_mgmt_winter03.pdf

¹¹ Johansson & Woodilla (2010); COLLECTION 1. Design & Sociology - Dancing with hierarchies (Reprint Design Journal Sept 2008)

Translating this to the relation between design, designers and managers, it emphasizes the need for a circular understanding of the different roles and different contributions of design, design management and design thinking.

Organizations in order to take advantage of the specific competence of designers need to change their members hierarchical thinking and notion of power. ¹²

A jointly developed power becomes co-active, and not coercitive. For Follett, instead of trying to compete for power, the situation at hand – the one that we are in together – is turned into one characterized by joint ownership and joint aspiration. Hence, Mary Parker Follett's concept of power over the situation becomes an alternative to the competition and positioning often standing in the way for truly benefiting from design thinking in organisations. Follett sees the co-active power as what is needed for creative thinking and applied creativity to jointly develop integrative solutions. When "power-with "is more important than "power-over", potential conflicts can be handled creatively in order to find integrative solutions, rather than settling for non-ideal compromises or submissiveness to the domination of one party.

The design process is an iterative process, allowing for the paradoxical coexistence of chaos and structure, and also fragmenting traditional hierarchical patterns, by seamlessly moving between holism and the attention to detail – and back again – building the capacity to both form and dissolve structures

Being able to apply a holistic approach is crucial to successful collaboration between designers and other groups, such as marketers, engineers and the C-suite. While designers rarely pretend to be experts in marketing or engineering, in order to work with them, they need sufficient knowledge of the disciplines to understand their contribution to the whole. Such a relationship cannot be hierarchical, placing one discipline above the other. It depends on mutuality and collaboration within "the law of the situation", and power becomes the ability to make things happen ... to initiate change.

According to Tom Kelley, taking advantage of designers' competences in applying empathy without dominance is to find new paths out of the hierarchical prison.¹³

Others have re-framed the concept of design thinking under other names, such as "design leadership";

¹² Johansson & Woodilla (2010): COLLECTION 1, Design & Sociology - Dancing with hierarchies (Reprint Design Journal Sept 2008)

¹³ Kelley (2005): The Ten Faces of Innovation: IDEO's Strategies for Beating the Devil's Advocate and Driving Creativity Throughout Your Organization, Doubleday, NY, US

Design leadership helps define the future, design management provides the tools for getting there. 14

- however, without changing the gist of it all. However, if design thinking is both an approach to the development of products, services and systems, a mechanism to integrate and manage design into or alongside existing processes and structures, as well as a means of enhancing the strategic conversations in an organization – which seems almost all-encompassing – then what is design management that design thinking is not?

There is no unequivocal answer to that question. Design can be practised in ways, which are inspired by management, just as management can be practised in ways, which are inspired by design. Strategic design management leans itself closely up against and requires the presence of design thinking, while design thinking quite unremarkably opens the door to strategic design management.

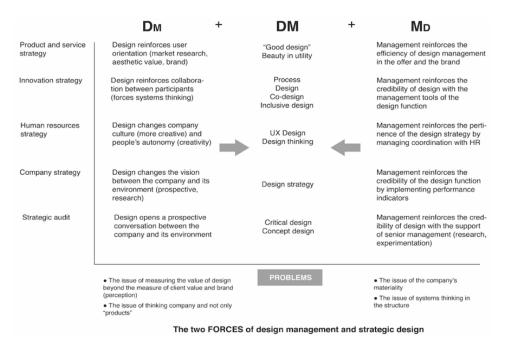


Fig. 2: Borja de Mozota (2018): The two forces of design management and strategic design

We just learned that design management is;

...the art and science of empowering design to enhance collaboration and synergy between "design" and "business" to improve design effectiveness. ¹⁵

 $^{^{14}\} Turner\ (2013): \textit{Design Leadership-Securing the Strategic Value of Design-Gower Publishing}, London$

¹⁵ www.dmi.org/?What is Design Management

Moreover, according to the Design Management Europe,

The concept of design management relates to certain management activities, methods and skills that are required to optimize and manage design processes. This is dictated by the highly complex nature of the design process. ¹⁶

Still keeping in mind Raymond Turner's definition, that design management provides the tools to getting to a future conceived though design leadership.

Finally, another two angles on design thinking and design management from two of the scholars, who have also been deeply engaged in the practice of both:

Design thinking is essentially a human-centered innovation process that emphasizes observation, collaboration, fast learning, and visualization of ideas, rapid concept prototyping, and concurrent business analysis, which ultimately influences innovation and business strategy. ¹⁷

and

Today the language of design management is changing – and design leadership is the new mantra instead of strategic design management. Design management is used to describe what we in the past called design project management, while the term design leadership is used to describe a more strategic level related to the vision for how design could be used within an organisation to achieve corporate goals. ¹⁸

¹⁶ Koostra (2009): The incorporation of design management in today's business practices; An analysis of design management practices in Europe - DME Survey 2009, Design Management Europe

 $^{^{17}\} Lockwood\ (2009): \textit{Design Thinking: Integrating Innovation, Customer Experience, and Brand\ Value-Allworth, New York}$

¹⁸ Gloppen (2008): Perspectives on Design Leadership and Design Thinking in the Service Industry - International DMI Education Conference, 14-15 April 2008, ESSEC Business School, Cergy-Pointoise, France

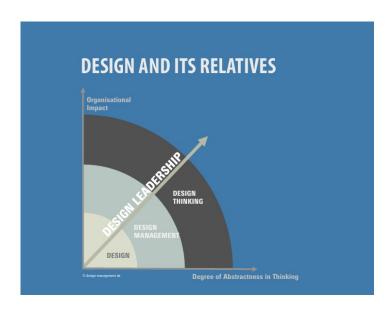


Fig. 3: Beuker (2011): Keynote, 1st Cambridge Design Management Conference

The "hierarchy" of design is envisaged in Ralf Beuker's model of design and its relatives, depicting the degree of organisational impact as well as the degree of abstractness in thinking. Design only rarely influences greatly on overall organisational strategies and is often focused on a fairly tangible output – even when not literally so. Design management has, as it relates to skills, methods and capabilities, as well as structures and processes, noticeably more influence on the organisation as such, and implies numerous operations on a rather abstract level, while design thinking per se is rather abstract, but with a significant degree of influence on overriding strategies and visions for the organization.

Revisiting the introductory chapter of the first of this series of seven articles, we argued that:

..., a more recent approach to design management is to consider it as a means of enhancing the ability of an organization to take up new knowledge and embrace creativity on a strategic level and as an integrated element of organizational or corporate culture, revealing its commonalities with concepts like design thinking and the emerging discipline of organizational design.

Building the convergence between Design Leadership and Design management

From this, one could deduct that *design thinking* – **primarily** – is an approach and strategic framework to rethink an organization's products and services, value chains and business models, as well as visions and readiness for change and innovation.

Design management is – **primarily** – the coordination of the means and methods, the skills and capabilities, as well as the allocation of the resources necessary to deal with the complexity of the design process, both on an operational, tactical and strategic level.

Hence, design management and design thinking are related on many levels and, despite originating in different scholarly environments, converges with regard to core findings and derived evidence. And yet, they are neither synonymous nor inter-changeable – for at least four very good reasons.

At the end of the day, the two concepts – however related and sometimes overlapping – are different in four distinct manners:

1: Design Management is the common space for managers and designers - design thinking is the common space for leadership and design

2: Design Thinking is meaningless if it's not firmly vested in and endorsed by senior management – design management can add value also when applied on managerial levels

3: Design Management requires process coordination and optimization skills, while design thinking requires visionary leadership

4: Design Thinking provides the vision and leadership (empowers), design management the business case (enables)

Design management is the common space for managers and designers – design thinking for leadership and design

We have already argued the role of the gap between design and business and their respective, and notoriously different worldviews. The extent to which these are vested in real differences as opposed to perception based on reciprocal biases is not for us to say, but the existence of both seems to be a mere fact. However, instead of dwelling with the differences, we believe that the search for common grounds; spaces, where the two meet is needed for the potential of both domains to be realized. The under-estimated value of design as such was already very clearly articulated by Kotler and Rath in 1984:

Design is a potent strategic tool that companies can use to gain a sustainable competitive advantage. Yet most companies neglect design as a strategy tool. What they don't realize is that good design can enhance products, environment, communications, and corporate identity.¹⁹

And, quite clearly, since then – over a period of more than 30 years – the proliferation of design has increased steadily – to a point, where a survey from 2016 showed that 58% of companies with more than 10

¹⁹ Kotler and Rath, (1984): Design: A Powerful but Neglected Strategic Tool, Journal of Business Strategy, Vol. 5 Issue: 2

employees in Denmark use design, which is a distinct, however not surprisingly massive, improvement from 2003, where a comparable analysis in Denmark showed that 48,9 % used design. ²⁰

ROI for design investments

What seems more surprising in light of the attention given to design – not only as a means to "enhance products, environment, communications, and corporate identity", but as an approach to business development, which has proven its transversal value across all conceivable sectors – is that out of the companies asked, which do not consciously use design, 86% do not see design as "relevant for them or their line of business." Especially seen in light of the quite extensive investments in design promotion and governmental support in all industrialized countries, even though the financial investments in such activities are not easily accounted for.

The general assumption, however is that "Today, practically all developed countries have some national initiatives in support of design, although with varying levels of maturity. ²²

Despite one might have thought that decades of European, national, regional and local design support and promotion programs would have brought about a more significant change of behavior and attitude vis-à-vis the role and value creation of design, there is still a long way to go.

And, while design is still considered of marginal or no importance at all by a rather significant portion of private sector organizations in Europe – as well as public sector ditto, without having been able to find reliable figures to support it – design has somehow found a space in the collective consciousness of professionals, whether as a craft, as a means to give form and shape to products or as a strategic tool, methodology or mindset, as often referred to when the discussion enters the domain of design thinking. Design management, on the other hand, is still struggling with being unrecognized or unheard of by most, which to some extent is quite puzzling, as it leans itself up against one of the most commonly practiced management disciplines; project management – however with exclusive focus on delivering on design processes and building design awareness and capacity within an organization.

Thus, design management as a common space for managers and designers and a key to a more constructive conversation between design managers and their colleagues with merely a different point of departure could

²⁰ Danish Design Centre and Federation of Danish Industries (2017): *Design Delivers*

²¹ National Agency for Enterprise and Housing (2003): The Economic Effects of Design

²² EU Commission (2009): Commission Staff Working Document; Design as a driver of user-centred innovation, p.32

be worth a closer look. In her book on design management, the design researcher, educator and author, Kathryn Best categorizes design management into three compartments; Managing the Design Strategy, Managing the Design Process and Managing the Design Implementation. ²³

As such, design management differs little from other forms of project management – or management as such, for that matter;

Managing a project is like the management of any activity. Two fundamental steps are involved in such management, namely, the making and implementation of decisions. There is a substantial body of knowledge regarding how decisions can be made—in particular how to consider the evaluation of risk and uncertainty in the potential use of resources committed through the decision process. ²⁴

One of the most obvious points of departure for this exploration, thus, would be to focus on the kinship between design managers and all of those, with whom the design manager needs to collaborate closely.

A project manager may not be responsible for the development of strategies, or even the underlying strategy for the project or projects he or she is asked to manage. But a fundamental responsibility is to ensure that the project or projects – branches, of you wish – are managed in alignment with their strategic stem. The same is most certainly also the case for the design manager – whether the objective of the process is a new product or service to enhance an already existing range or spark a new business venture, or a new visual identity to reflect a brand promise, or a new user interface to support a novel business model. None, of which makes any sense unless strategically embedded.

Likewise, the choice of process and methodology, resources and metrics throughout the project lifecycle is the responsibility of the project manager. As is the choice of tools to be applied, stakeholders to be engaged and prototyping techniques to be tapped into. Just as with any other process, those are choices not to be made lightly, as no strategy, no end-goal and no process leading thereto are ever exactly the same. The hallmark of good project management as well as design management is the effectiveness and smoothness with which the strategic goals are met or surpassed.

Implementation is often a sore spot. While the conception and development of any new or improved solution is often seen as projects isolated within the confines of an R&D, innovation or business development department – or something cooked up by the accounting, marketing or HR departments, the implementation

²³ Best (2006): Design Management: Managing Design Strategy, Process and Implementation – AVA Publishing, Lausanne, Switzerland

²⁴ Cleland (2006): Project Management: Strategic Design and Implementation, Fifth Edition - McGraw-Hill, New York

is the ultimate test of whether all relevant stakeholders have been engaged to the extent needed to embrace and give the novelty a chance or not. As earlier pointed out, there are seven proven, psychological motives to resist change, ranging from fear, alienation and infringement to guilt, focus on own needs, the feeling of being downright threatened or plain and simple uncertainty. Unless all of those have been addressed throughout the development phases, implementation can most certainly involve risks of rejection or resistance; both barriers to successful implementation.

Hence, whether the new and unknown can be categorized as a design project or any other kind of project, the challenges – from the business case stage through to successful implementation are very much the same – including what Porter claims to be one of the key activities when implementing a strategy; deciding what not to do.

Strategy is making trade-offs in competing. The essence of strategy is choosing what not to do. Positioning choices determine not only which activities a company will perform and how it will configure individual activities, but also how activities relate to one another. While operational effectiveness is about achieving excellence in individual activities and functions, strategy is about combining activities. ²⁵

One could start defining what goes into this common space for managers and designers and ask what they can learn from each other, and how their joint endeavors can contribute to a better end result, exploiting the kinship instead of looking for differences and what sets them apart. Both practitioners and scholars from both sides would tend to support the view that most designers would benefit from strengthening their business acumen, while business managers would benefit from adapting a more designerly ²⁶ approach to their projects.

And, just like there is an easily identifiable convergence between the role of managers and designers as seen through the lens of design management, the two concepts - design and leadership- are also closely related. Both design – regardless of whether one leans up against Simon's "devising courses of action aimed at changing existing situations into preferred ones" ²⁷, Schön's "explorative works" ²⁸ or Visser's "construction of representations" ²⁹, and leadership, as we know it from the literature; a leader innovates, is

²⁵ Porter (1998): What is Strategy? - in The Strategy Reader, edited by Susan Segal-Horn, Basic Blackwell

²⁶ Cross (2007): Designerly Ways of Knowing – Birkenhauser Architecture

²⁷ Simon (1969): The Sciences of the Artificial – Third Edition 1996

²⁸ Schön (1983): The reflective practitioner - how professionals think in action, Basic Books

²⁹ Visser (2006): Designing as Construction of Representations: A Dynamic Viewpoint in Cognitive Design Research - Human–Computer Interaction Vol. 21, Iss. 1, 2006

an original, develops, focuses on people, inspires trust, has a long-term perspective, asks what and why, has an eye on the horizon, originates, challenges status quo and does the right thing – as opposed to doing things right ³⁰ – revolves around creating something that doesn't already exist or around improving what does.

Design and leadership are all about vision and aspirations and of dreaming the future, while the role or the designer and the manager is to materialize visions, to gather aspirational momentum and to deliver on the dreams of the future. The bridge between the visions as interpreted through beyond state-of-the-art design solutions – and inspired by how they came to be – and the aspirations of great leaders as we know them from all walks of life, from companies, organizations and nations, is what we have come to know as design thinking – in all its shapes and shades. And – the concept of leadership most certainly also includes thought leadership.

Design management and design thinking are domains, where designers and managers, design and leadership play different, however closely related roles, but are all fueled by the same energy and the same ideals, and are fundamentally all vital forces in supporting the key elements of what Kaplan called the strategic management system; clarifying and translating vision and strategy, communicating and linking strategic objectives and measures, planning, setting targets and aligning strategic initiatives, and enhancing strategic feedback and learning, recognizing that;

Balanced Scorecard is a management system that can channel the energies, abilities, and specific knowledge held by people throughout the organization toward achieving long-term strategic goals. ³¹

Hence, underpinning exactly the same objectives as to those that design thinking and design management have proven to be invaluable.

Design Thinking is — at worst — meaningless if it's not firmly vested in and endorsed by senior management — design management can add value also when applied on managerial levels

For an organization to change its collective behavior, its ideas and its culture, leadership is needed, and an organization's journey towards new horizons without the endorsement of its ultimate decision makers will almost certainly be in vain. By many, design thinking has been presented as a smarter way of solving problems, of tapping into the creative capacity of an organization and of achieving better results through user focus and engagement.

³⁰ Bennis (1989): Extracted from and condensed by author; *On becoming a leader* - Addison Wesley, New York

³¹ Kaplan and Norton (1996): The Balanced Scorecard: Translating Strategy Into Action – Harvard Business Press

The value delivered by design thinking is almost always seen to be improvements in the creativity and usefulness of the solutions produced. ³²

Our postulate would be that design thinking – however without any doubt being used a tool for "improvements in the creativity and usefulness of the solutions produced" – is not effectively applied as something an organization takes on a project-to-project basis, or a tool that is tucked away when the project is over. In reality, the question is whether what is often referred to as design thinking might not more fittingly be labeled design management. It can most certainly benefit all kinds of product and service development projects, but to be truly valuable, it requires depth and immersion. But, as powerful and effective a mechanism for change it can be, it is also demanding, as in its slipstream comes transformation.

At its best, the design movement seeks to bring innovations – sometimes radical innovations – to organizations that have to adapt to new circumstances of economic competition, social expectation, and cultural understanding. ³³

While confidently stating the above, Richard Buchanan, in the same article also admits to the doubts and for challenges yet to be met;

Can design shape organizational culture so that the organization positively affects the thought and behavior of individuals? The true test will be the degree to which our efforts to introduce design thinking into the management of organizations embodies the fundamental principle of design.

Are organisations truly prepared to immerse themselves in such a potentially powerful force for transformation? Transformation, which not only exacts design thinking, but which also requires what we call "systemic thinking." It is a way of thinking that emphasizes connectedness and enables people to see the bigger picture; one in which owners, solvers, solutions, problem-solving methods and problem descriptions are portrayed as a whole system.³⁴ Design thinking embodies this immense potential, but again – only if it's truly embraced by an organization's senior management.

Design management is also powerful in its own right and can often be the fore-runner to the adoption of design as a more transversal force in an organisation, while in the meantime it can also stand on its own feet

³² Liedtka (2017): *Beyond Better Solutions: Design Thinking as a Social Technology* – Conference proceedings of the Design Management Academy Research Perspectives on Creative Intersections, Hong Kong

³³ Buchanan (2015): Worlds in the Making: Design, Management, and the Reform of Organizational Culture, She Ji: The Journal of Design, Economics, and Innovation

³⁴ Boardman and Sauser. (2013): Systemic Thinking: Building Maps for Worlds of Systems – Wiley, Hoboken, NJ.

from project to project. Studies have shown that the appreciation of design can successfully be built from the inside through the adoption of design in projects of limited scale and consequence and that companies with little or no prior design knowledge are more able to cope with designers and the challenges of absorbing new design knowledge if they themselves build up design management capabilities. ³⁵

However, while design management capacity can be acquired and benefitted from in different ways, through procurement, either as a separate or as part of a combined service or by the "Trojan Horse" approach as just described, and in many other combinations of internal and external forces, design thinking cannot be procured as a service or delegated to an arbitrary internal department or team. And, while design management can contribute to improved processes throughout and on any level in an organization, design thinking must be firmly vested in and endorsed at the very top of the organization, where the thought leadership of any organization rests.

Design Management requires process coordination and optimization skills, while design thinking requires visionary leadership - through the skills of designers

A third distinction between design thinking and design management can be found when taking a closer look at which competences and skills are needed to take the lead and responsibility for each one of the concepts. Quite a lot of literature exists already, discussing the variety of skills needed to design and manage design processes – for design practice and design management respectively, amongst others in the standard textbook about design management by one of the authors of this series of articles, referring to studies showing that the design management career path, which in general can be divided into five phases, all requiring different skills and competences, moving from design and development skills, via co-ordination skills, team management skills and general management skills to the skills needed to undertake strategic direction.³⁶

Often, however by no means always, design managers are originally trained as designers to gradually find the strategic dimensions of design management either as interesting as or more alluring than design making, thus using their professional design practice as a stepping stone to design management, and for some – further on to design leadership. In the book "Design Project Management", we find an attempt to capture the prerequisites for success as a design manager in two sentences;

³⁵ Acklin, Cruickshank and Evans (2013): Challenges of introducing new design and design management knowledge into the innovation activities of SMEs with little or no prior design experience – Proceedings from 10th European Academy of Design Conference – 'Crafting the Future' – Gothenburg, 17 – 19 April, 2013

³⁶ Borja de Mozota (2003): Design Management – Using Design to Build Brand Value and Corporate Innovation - DMI/Allworth

The successful design manager is likely to have experience of and/or qualifications in a creative/design background and is likely to combine this with pragmatic sensibilities and experience of and/or qualifications in business studies. Presentation and communication skills and information management skills are other essentials. ³⁷

Less unambiguous are the thoughts, reflections and observations on which skills are prerequisites for design thinking. Much of what has been written about design thinking as a concept refers to it as a way of working and thinking, which is inspired by the skills and processes ascribed to design professionals. Some of the more tangible reflections as such are Tim Brown's and Roger Martin's, as combined in the latter's book about the design of business;

Design thinking is a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity. ³⁸

- to which Roger Martin adds that;

A person or organization instilled with that discipline is constantly seeking a fruitful balance between reliability and validity, between art and science, between intuition and analytics, and between exploration and exploitation. The design-thinking organization applies the designer's most crucial tool to the problems of business. That tool is 'abductive reasoning'. ³⁹

Martin explains his point of view by juxtaposing the term to 'deductive reasoning – based on the logic of what must be, from the general to the specific, and to 'inductive reasoning – based on the logic of what is operative, from the specific to the general. 'Abductive reasoning, he explains, was introduced by the philosopher Charles Sanders Peirce, and is based – not on observations of what exists, but on wondering what could be. That is the hallmark of the designer, and if adopted by others, of the design thinker; to being able to work systematically with what could be – with what others call visions and long-term strategic goals, and by shaping the culture needed to undertake the journey. In other words what we otherwise associate with true leadership.

The deductive reasoning, provided the three foregoing assumptions are valid, is that the core of design thinking is to inspire a better vision and better leadership, while the core of design management is to enable

³⁷ Boyle (2003): Design Project Management – Ashgate, UK

³⁸ Brown (2008): *Design Thinking* – Harvard Business Review, June 2008

³⁹ Martin (2009): The Design of Business – Why Design Thinking is the Next Competitive Advantage – Havard Business Press

organizations and their design managers to deliver on the visions gouged out by their leaders. What, then, is new compared to all the existing literature on design management and design thinking? First and foremost, most of what already exists; both of scholarly and of more popular literature focuses on either design thinking *or* design management, while only few papers attempt at sorting out their internal correlations. One article, which has been of particular importance to differentiate between the two concepts, was brought in the DMI Review in 2009. In the article, the progression of design management and the changing role of design thinking are both described in detail. As for he sought-after distinction, the article sums it up in the following;

In regions, where design management has a tradition, academic research begins to inform these practices, complemented by professional reflections. However, the design thinking underlying these design management practices and research tends to remain product-centric. In turn, this begins to change in regions where design has been established as part of an organization. Here, we can see how design thinking is freeing itself from these previous traditions and emerging as a practice independent from the product. Instead, design thinking now focuses on the characteristics of a problem that needs solving. ⁴⁰

This view coincides nicely with the third quadrant of the 'Four Powers of Design' model, previously discussed; the power called; "Design as vision. Beyond "Advanced Design", including the following elements; Strategic value, Vision, Prospective, Change management, Empowerment, Knowledge learning process and Imagination. ⁴¹ An interesting key word here is 'empowerment', which – as a characteristic suggests qualities like giving the mandate to and leadership, matches its related 'enablement' – suggesting the supply of the means, knowledge or opportunity, making feasible or possible, and to provide the capacity to do something. Design thinking empowers, informs, creates an atmosphere for, inspires – makes it meaningful to allocate resources to problem finding, scoping, framing and reframing, to engage users, work with visualizations and prototyping, and to benefit from the value that design adds to products, services, environments, processes, communication, systems and structures.

One of the most iconic masters of European industrial design, Dieter Rams' ten principles of good design seems to be as true and valid today as when they were formulated almost 50 years ago. Good design;

- is innovative
- is useful

⁴⁰ Cooper, Junginger and Lockwood (2009): Design Thinking and Design Management: A Research and Practice Perspective – DMI Review Volume 20, Number 2, 2009

⁴¹ Borja de Mozota: (2002 – reprint in 2006) *The Four Powers of Design – A Value Model in Design Management,* Design Management Review Vol. 17 No. 2, 2006

- is aesthetic
- is understandable
- is unobtrusive
- is honest
- is long lasting
- is consistent down to the last detail
- is environmentally friendly
- is as little design as possible

These are not descriptive of one specific solution. They are transversal values; guiding principles on the basis of which any decision could be made, if 'good design' were only exchanged with 'good solutions' or 'good changes' – or even 'good leadership'.

Next Week: The Design Management Series, Article # 6: Achieving design excellence as core competency and knowledge capital