



**inholland**  
university of  
applied sciences

# What can Design Bring to Strategy? Designing Thinking as a Tool for Innovation and Change

Kathryn Best



# What can Design Bring to Strategy?

Designing Thinking as  
a Tool for Innovation  
and Change

Kathryn Best MA, MSc

Publication accompanying the inaugural address delivered by Kathryn Best MA, MSc for her accession to the office of lector at the Centre for Applied Research in Brand, Reputation and Design Management (CBRD) at Inholland University of Applied Research in Rotterdam on January 27, 2011.

Copyright © 2011 Kathryn Best and Inholland University of Applied Sciences

Alle rechten voorbehouden. Niets van deze uitgave mag worden vermenigvuldigd, opgeslagen in een geautomatiseerd gegevensbestand, of openbaar gemaakt, in enige vorm of op enige wijze, hetzij elektronisch, mechanisch, door fotokopieën, opname of op enige andere manier, zonder vooraf schriftelijke toestemming van de uitgever: Hogeschool Inholland.

Insofar as reproduction of this publication is permitted, based on art. 16b and 17 of the Dutch Copyright Act 1912, legal rights must be paid to Stichting Reprorecht, Postbus 882, 1180 AW Amstelveen. For the use of one or several parts of this publication for an anthology, a reader or other works of compilation the publisher must be contacted.

*All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, photocopying, recording or otherwise, without prior permission of the publisher.*

ISBN/EAN: 978-90-77812-33-4

# Content

<b>Introduction</b>	<b>7</b>
<b>1. Context</b>	<b>10</b>
1.1 Design, Business and Education	10
1.2 The External Context - Drivers of Change	11
1.3 The Creative Economy and The Creative Industries	12
1.4 Society and Well-Being	13
1.5 The Empathy Economy	14
1.6 Compassionate Capitalism	15
<b>2. Ways of Thinking</b>	<b>17</b>
2.1 Design Thinking	17
2.2 Systems Thinking	18
2.3 Integrative Thinking	19
<b>3. Design in Business and Strategy</b>	<b>21</b>
3.1 Design in Business	21
3.2 Design Management in Context	24
3.3 Strategy, Design and Innovation	27
<b>4. Approaches to Applied Research</b>	<b>30</b>
4.1 Applied Research in Context	30
4.2 The CBRD Approach to Research	31
4.3 CBRD Applied Research Projects	32
<b>5. Strategies for Growth and Development</b>	<b>37</b>
5.1 CBRD Applied Research Themes	37
5.2 Conclusions and Perspectives	40
<b>6. Selected References</b>	<b>43</b>



# Introduction

## May you live in interesting times.

Reputed to be the English translation of an ancient Chinese proverb, 'May you live in interesting times' is actually a curse intended to mean: 'May you experience much upheaval and trouble in your life'. The thought behind it is that 'uninteresting times', of peace and tranquility, are less life-enhancing.<sup>1</sup> The 'interesting times' we currently live in are ones in which there is an increased sense of community and responsibility towards the environment and society; an increased demand for more transparency and active participation in politics and the economy; and an increased familiarity with the use of the technological tools that enable people to connect, share, collaborate and communicate in new ways - and to have their voices heard.

These conditions are being triggered by significant changes in societal, technological, economic, environmental and political conditions that are challenging organisations at all levels - locally, regionally and internationally. There is simultaneously a growing demand to take a more holistic (systemic) approach to how commercial businesses and non-commercial organisations operate, and to ensure greater accountability and governance in terms of their cultural, environmental, political and societal impact. A systemic overhaul of many of our existing (and collapsing) infrastructures and institutions - institutions built on old world industrial economic models - is called for, so as to more suitably reflect the needs and aspirations of the knowledge economy and beyond. In effect, the ecosystem in which organisations exist has changed. In response, existing organisations are being forced to change, and alternative organisational systems and processes are emerging.

What has this all got to do with design? To design (verb) is to plan, to create or to devise. It is a process, a practice and a way of thinking. A design (noun) has form and function; it is the outcome of the process of designing. As a people-centred, problem-solving process, design has become fashionable as a strategic tool, and as a way to address challenges facing both public and private institutions and organisations. Governments are concerned about how to grow their creative economies and creative industries in general, and national design capabilities in specific<sup>2</sup>. By putting people at the core of how products, services and systems are designed, design as a

<sup>1</sup> <http://www.phrases.org.uk>

<sup>2</sup> Cambridge Academic Design Management Conference (CADMC) 2010 Conference Briefing.

methodology is well positioned as a way to bring 'fresh thinking' to current debates about whether to restore, redefine or redesign our systems - systems which ultimately define peoples' daily interactions and influence the quality of their life experience. But engaging design as a problem-solving process raises questions about the nature and scope of design, as identified by the philosopher Robert Grudin: 'How does design relate to its political and economic context? Is it a specialised pursuit or does it function in all our lives? To what extent can human interaction be designed along creative principles? Are (the qualities of) our lives subject to the design (decisions) of others?'<sup>3</sup>

Paraphrasing the review by Adair Turner (former head of the United Kingdom's pension commission) on the United Kingdom's pensions scheme, Pat Butler, Director at McKinsey & Company, summed up the current zeitgeist of austerity by suggesting that we need to 'work longer, save more, pay more tax - and expect less'.<sup>4</sup> Individuals, companies and organisations alike are looking for new ideas around the meaning of work and well-being, and novel ways to do more 'things' with less 'resources'. For example, Cognizant, the IT, Business Processing, Outsourcing and Services Consultancy, talks about 'creating new levels of efficiency through collaboration'. Identifying these opportunities to do 'more with less', effectively and creatively, will be what drives future strategies for growth and development - in companies and countries all over the world. One example from The Netherlands is Sintel, an independently produced short film initiated by The Blender Foundation as a means to further improve and validate Blender as a free/open source 3D creation suite. With initial funding provided by thousands of donations via the internet community and realised by an international team of artists and developers from all over the world, this 'open movie' has proved to be a viable development model for both open 3D technology and for independent animation. The concept behind open source and open content is increasingly accepted as an efficient investment in 'shared self-interest'.<sup>5</sup>

Taking a holistic view helps individuals to identify both broader opportunities and underlying connections available to 'do more with less', so empowering a more entrepreneurial approach to 'business as usual'. By acting as 'agents of change', new conversations and decision-making processes can be stimulated and facilitated across organisations and networks of enterprises. In effect, it is about how we can design long-term value, lifelong well-being and sustainable growth into our systems, services and behaviours.

<sup>3</sup> Grudin, R., 2010. *Design and Truth*. USA: Yale University Press.

<sup>4</sup> Butler, P., *The Future of Finance*, Presentation at IIBN London, Nov. 22 2010.

<sup>5</sup> The Blender Foundation Website, [www.blender.org](http://www.blender.org).



However, in the current recession-dominated economic climate, where businesses often perceive 'sustainable' as 'expensive', how can change be affected? Are present organisational frameworks meant to foster this development towards these more holistic and empowered decision-making processes and responsible behaviours? Could design thinking help to transform organisations and economies so they take into account quality of life and well-being, and allow for new ways of living and working? Are our systems shaping our behaviours? Is this changing how we feel about the authenticity of how individuals and organisations operate? Do we need entirely different economic, political, societal systems, or can the existing be restored, redefined or redesigned?

May you live in interesting times.

# 1. Context

## 1.1 Design, Business and Education

Design and business have their own distinct cultures: their own beliefs, values and assumptions about how they measure success and what matters to them. This can sometimes create a 'clash of cultures'. Historically, the role of design management was to address this 'two camps debate' – how design and business cultures could better work together through the mediator of 'the design manager'. The design manager was seen as a translator and negotiator, put in place to manage this 'culture clash'. However, through the influence of digital and real world convergence, customer experience design, and the rise of the 'experience economy', the resulting effect was that product and service development processes, as well as management strategy-setting and decision-making processes, became more integrative and customer-focused. The role of design management expanded to encompass that of the design leader, facilitator and mediator, advocating the role and value of design in the wider organisation and in the broader external context – as a creative, problem-solving response to change, and as a way to enable cross-functional collaboration and organisational change.

Like other industries, the creative industries are interconnected by nature. However, because of the historical 'silo' approach to both art and design education and business education, designers-in-training are often kept separate from interactions with business students – a separation that often continues into the professional world. According to Ackoff, 'the education system deeply affects the workplace, because of how people are taught to think, or not taught, in schools'.<sup>6</sup> It can be unusual for graduates in design and creativity to be aware of standard business and management processes and practices, and the dependent ways in which different enterprises relate and operate. Equally, business-trained people often lack an appreciation of design processes and practices, and their potential for enabling change.

One of the specific recommendations from the *Cox Review*<sup>7</sup> was to improve links between business, education and creativity, and design in particular. Many business cultures do not know how to quantify or measure the added value of design, and similarly, many design professionals do not know how to communicate or justify design equity. The lack of valuing the process of design, by both parties, devalues design – as a profession and as a skill. The opportunity inherent in

<sup>6</sup> Ackoff, R. *A Theory of a System for Educators and Managers*. Vol. 21 The Deming Library.

<sup>7</sup> *Cox Review of Creativity in Business: Building on the UK's Strengths*. 2005. UK: HM Treasury.

this problem is how to enable a better appreciation for specific tools and skills that could trigger a more interdisciplinary and integrated response to change. This is of particular interest to the CBRD research group as the combination of creativity and strategy is a unique selling point (USP) that appeals to Inholland students of Communication and Media. Equally, external organisations that engage CBRDs' research expertise are attracted to how the areas of design, business, brand, reputation and cross-media are unified under one interdisciplinary and integrated approach.

### 1.2 The External Context - Drivers of Change

Created by Arup Foresight and Innovation, 'Drivers of Change' is a toolkit for understanding significant trends and changing conditions in the external context. Once aware of the challenges and opportunities that exist, organisations can then explore possibilities and take action in how they develop new product, service and business ideas, and how they manage their brand, reputation and positioning. Table 1 describes some current trends directly impacting design and business.

*Table 1: Examples of Current STEEP Trends (adapted from Arup Foresight & Innovation)*

<b>Society</b>	<b>Technology</b>	<b>Environment</b>	<b>Economy</b>	<b>Politics</b>
Aging population	Connected communities	Disposable quality goods	Consumer debt	Ethical Investment
Holistic wellness	Smart dust	Travel	migration	Pensions
Population distribution	Energy infrastructure	Endangered species	Global trade	Surveillance society
Future households	Wearable computing	Energy & water use	Digital Currency	Global Governance
Education for all	Biomimetics	Urbanisation	Outsourcing	Trading blocs

Currently, there exists a growing awareness of the wider impact of how commercial businesses and non-commercial organisations operate, and a growing demand for a more holistic and systemic approach to management and decision-making processes - to ensure greater responsibility, accountability and governance. Technology is having a particularly strong influence on how individuals and organisations function, changing existing processes and practices, and enabling new relationships and new forms of interaction and engagement with new audiences. In politics, for example, technology is changing how we engage with politicians, democracy and local representation, and new political models are challenging 'top-down' traditions with

citizen-centred, bottom-up processes (such as 'crowd-sourcing'). Commercial companies such as Lego (Lego Factory: 'engaging whole communities with the company') and Nike (NIKEiD: 'your chance to be a Nike designer') are also using technology-enabled collaborative and co-creative processes in their developments.

Many global companies and global economies have gone through a shift from manufacturing and mass-production of tangible products to the production and supply of increasingly intangible services. The internet enables both manufacturing and service activities to be performed by sharing and distributing workloads between individuals, teams and functional units located anywhere in the world. This shift is reflected in design, moving debates beyond 'design as style and aesthetics', to design of the process, design of the experience, design as a catalyst for innovation, and design as an enabler of cultural and creative change.

### 1.3 The Creative Economy and The Creative Industries

The creative economy is described by John Howkins<sup>8</sup> as 'the fastest growing business in the world' and reflects the growing power of ideas – and how people make money from ideas. It is driven by the view that 'twenty-first century industries will depend increasingly on the generation of knowledge through creativity and innovation'.<sup>9</sup>

The creative economy is driven by the creative industries, that is, the range of economic activities which are concerned with the generation or exploitation of ideas, knowledge and information, and which are seen as becoming increasingly important to economic well-being – individually, locally and globally. The Nordic Region of Sweden, Norway, Finland, Denmark and Iceland, for example, sees the creative industries as a great asset and opportunity area: 'The greatest assets of any region are its people, their individual creativity, skill and talent... The creative industries create wealth and jobs through developing and exploiting intellectual property... This encapsulates the wider processes, products and services for which creativity is a central activity, and therefore plays a critical role in the economic competitiveness of the Nordic Region... by providing the added value required for a distinctive, high quality, knowledge-driven offer'.<sup>10</sup> In the United Kingdom (UK), the *Cox Review*<sup>11</sup> identified the creative industries as one of the fastest growing sectors in the world, and put creativity at the core of the UK's future global competitiveness. In fact, despite the current recession-dominated conditions, *effective creativity* is now particularly relevant to how we address, for example, concerns

<sup>8</sup>Howkins, J., 2001. *The Creative Economy*. London: Penguin.

<sup>9</sup>Landry, C. & Bianchini, F., 1995. *The Creative City*. London: Demos.

<sup>10</sup>A Creative Economy Green Paper for the Nordic Region, 2007. Nordic Innovation Centre.

<sup>11</sup>Cox Review of Creativity in Business: Building on the UK's Strengths, 2005. UK: HM Treasury.

over diminishing budgets and increasing efficiency and accountability.

The Creative Industries includes the areas and disciplines of design, arts and crafts, advertising, architecture, fashion, film, music, television, radio, performing arts, publishing and interactive software. In terms of Gross Domestic Product (GDP), the market value of the total goods and services produced in a country per year, the creative industries are one of the best ways to increase competitive advantage between countries (through growing a creative culture and economy) and commercial companies (through the provision of innovative products and services). In countries such as India and Korea, design policies are being written as a way to recognise and assess design capability in national economic policies. In the Netherlands in 2005, the contribution of designers to gross national product (GNP) was €2.6 billion, and for every €10 earned in the country, 7 cents was earned by Dutch design. Figures from 2001 demonstrate that, in terms of value added in the Dutch economy, the design industry (€2.6 billion) was on par with the petroleum industry (€2.1 billion) and air transport (€2.6 billion).<sup>12</sup> But the creative economy has benefits beyond economic and commercial advantages, benefits which extend into society.

#### 1.4 Society and Well Being

In *The Creative Class*, Richard Florida (2002) recognised the growing economic and sociological impact of creativity, and points out that:

- Creativity is revolutionizing the global economy.
- Human creativity is the ultimate economic resource.
- Having a vibrant creative class adds to a community's well being.

The Creative Class is an increasingly influential segment of society who draw their identity and values from 'creativity'. Members (such as scientists, engineers, architects, educators, writers and artists) are 'those whose economic function is to create new ideas, new technology, and new creative content'. Although they tend to share common characteristics such as being highly individual and high-achieving, they are also extremely influential on wider work and lifestyle issues. Florida calls for this class to 'grow up' to form a more responsible, more cohesive group interested in the common good.<sup>13</sup> This call for 'citizen-empowered responsibility' is increasingly widespread.

<sup>12</sup>Design in the Creative Economy, 2005. Netherlands Organisation for Applied Scientific Research.

<sup>13</sup>Florida, R., 2002. *The Rise of the Creative Class*. New York: Basic Books.

In the current economic climate, many corporate brands and reputations have been undermined, and many organisational

environments are unsustainable. The existence of traditional companies is based on maximizing returns to stakeholders and owners, such that the benefits to society are in their business ability to be a revenue-generating and job-creating entity. But, as Neumeier (2008) points out, 'when we look around and see today's companies and brands beset by distrustful customers, disengaged employers and communities suspicious of companies, we can link these problems to a legacy management style that lacks any real human dimension'.<sup>14</sup>

A move towards increased transparency, consultation, collaboration and shared decision-making can be seen in both companies and governments alike. Gilmore & Pine (2007)<sup>15</sup> have identified a growing desire for authenticity in organisations (where identity, image and action are aligned), and for real (as opposed to artificial) experiences. Commercial companies are 'taking account of society's values because if they do not, they may end up isolated from the values of customers'.<sup>16</sup> A recent issue of *The Economist*<sup>17</sup> asks, in light of the recession, should governments pursue happiness (GWB - General Well Being) rather than economic growth (GDP - Gross Domestic Product)? And in the UK, the central mission of the Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) is 'to foster good citizenship by closing the gap between our everyday behaviour and the future to which we aspire... To close this gap, contemporary society needs to be more resourceful: its citizens more engaged, self-reliant and collective in their striving'.<sup>18</sup>

### 1.5 The Empathy Economy

In a 2005 *Business Week* article titled 'The Empathy Economy',<sup>19</sup> Bruce Nussbaum used the term to describe the level of understanding, empathy and problem-solving abilities needed by businesses in order to successfully innovate in the future, and to 'design their company to generate products and services that would provide greater consumer experiences, top-line revenue growth, and fat profit margins'. His message to business was: 'Quality-management programs can't give you the kind of empathetic connection to consumers that increasingly is the key to opening up new business opportunities.

All the B-school-educated managers you hire won't automatically get you the outside-the-box thinking you need to build new brands - or create new experiences for old brands. The truth is we're moving from a knowledge economy that was dominated by technology into an experience economy controlled by consumers and the corporations who empathise with them.' With this article, Nussbaum referenced 'design thinking' as the way to 'create rewarding experiences for

<sup>14</sup> Neumeier, M., 2008. *The Designful Company*. *Design Management Review*, 19 (2).

<sup>15</sup> Gilmore, J.H. & Pine, B.J., *Authenticity*. 2007. Cambridge MA: Harvard Business School Press.

<sup>16</sup> Hartley, A. & Palmer, B., 2006. *The Business Environment*. McGraw Hill Higher Education.

<sup>17</sup> *The Economist*, November 25th 2010. *The Joyless or the Jobless*.

<sup>18</sup> Campbell, E., 2009. *Design as Resourcefulness and Self-Reliance*. London: RSA Projects

<sup>19</sup> *The Empathy Economy* [www.businessweek.com/bwdaily/dnflash/mar2005/nf2005037\\_4086.htm](http://www.businessweek.com/bwdaily/dnflash/mar2005/nf2005037_4086.htm)

consumers, a key to earnings growth and an edge that outsourcing can't beat'. He described a job advert for a conceptual designer from Ideo, a design and innovation firm: 'You bring...a holistic approach to process: formulating cultural and user insights, mapping opportunity spaces through strategic frameworks, and expressing compelling solutions'.<sup>20</sup> The appeal of design thinking (and companies like Ideo) to business was in how they were redefining good design by creating experiences - no longer just products - and changing the way companies innovate.

We are, literally, surrounded by design, in the culture of everyday life and in the communities, objects and spaces we come into contact with every day. The growth in the popularity of 'design thinking' is a natural evolution of the experience economy (Pine & Gilmore 1999)<sup>21</sup>, which describes the progression of economic value based on the shift in the economy from extracting commodities, to making goods, to delivering services, to staging experiences. Each successive offering increases in value because the customer finds each offer more relevant to what they truly want. A premium price is charged based on the distinctive value provided, not on the market price of the competition. The potential for the application of design thinking to business is in how it seeks to create new value - both externally (benefitting customers) and internally (benefitting organisational processes). Design can play a part by visually and conceptually inquiring into today's challenges, posing questions such as, how could design help to increase health awareness? Or reduce our growing fear of crime? How could we design wellness and trust into society? In terms of changing the way that organisations work, 'it is not about taking today's businesses and operations and doing better. It is about doing them fundamentally differently'.<sup>22</sup> Could design thinking help transform organisations and economies?

### 1.6 Compassionate Capitalism

We live in a consumer society. Consumerism is 'the theory that a progressively greater consumption of goods is economically beneficial; an attachment to materialistic values or possessions'.<sup>23</sup> The question being asked now is, how much is enough?

In 2009, French advertising tycoon Jacques Seguela commented that 'anyone who does not own a Rolex by the age of 50 is a failure'.<sup>24</sup> Such narrow definitions of success are being called into question, and although 'money' started out as a form of ritual gift that facilitated human relationships,<sup>25</sup> our market-led system has replaced human

<sup>20</sup> The Power of Design  
[www.businessweek.com/magazine/content/04\\_20/b3883001\\_mz001.htm](http://www.businessweek.com/magazine/content/04_20/b3883001_mz001.htm)

<sup>21</sup> Pine, B.J. & Gilmore, J.H., 1999. The Experience Economy. USA: Harvard Business School Press.

<sup>22</sup> Anthony, S., Transformative Innovation, Business Week, 3 March 2009

<sup>23</sup> American Heritage Dictionary of the English Language, 2000. USA: Houghton Mifflin Harcourt.

<sup>24</sup> [www.guardian.co.uk/world/2009/feb/22/sarkozy-strike-france](http://www.guardian.co.uk/world/2009/feb/22/sarkozy-strike-france)

<sup>25</sup> Boyle, D., 2003. The Little Money Book. London: Alastair Sawday/Fragile Earth.

relationships with monetary ones. In *The Culture of the New Capitalism*, Richard Sennett writes about the devaluation of human values, and how we value people in our society within the context of the 'new economy'.<sup>26</sup> There are numerous calls for taking a more responsible approach. 'The market economy has generated more real wealth, eliminated more poverty and liberated more human creativity than any other economic system. The fault is not with the market, but with the idea that the market alone is all we need. Markets don't guarantee equity, responsibility or integrity. They can maximize short term gain at the cost of long-term sustainability'.

Similarly, Tim Jackson (2009) claims that our 'debt-driven consumption has created an unstable economy, which has created the current financial crisis', and that 'a fundamentally flawed system has put jobs and livelihoods at risk, as well as damaging us psychologically and socially'. In 'Prosperity Without Growth' Jackson goes on to acknowledge the mounting evidence that increasing consumption adds little to human happiness and may even impede it. 'More urgently, it is now clear that the ecosystems that sustain our economies are collapsing under the impacts of rising consumption'.<sup>27</sup>

Architect Keith Bradley (2008) comments that the recession may force people to work out what really matters to them: 'These are times to reflect on how to more appropriately live our lives, with an emphasis on long rather than short term values. I don't think these are times to be more conservative, as some have suggested, or to reduce regulation and monitoring...These are times to be inventive, to create... for long-term benefit rather than short-term gain. With the current glut of expertise, we can reinvent ourselves and our approach...including the way (we) finance, design, procure, deliver and manage'.<sup>28</sup> New ways of thinking about our systems are emerging. In *The Age of Access*, where 'all of life is a paid-for experience', Jeremy Rifkin (2001) offers that 'in the new era, markets are making way for networks, and ownership is steadily being replaced by access. Many companies no longer sell things to one another but rather pool and share their collective resources creating vast supplier-user networks'.<sup>29</sup>

<sup>26</sup> Sennett, R., 2007. *The Culture of the New Capitalism*. USA: Yale University Press.

<sup>27</sup> Jackson, T., 2009. *Prosperity Without Growth: Economics for a Finite Planet*. London: Earthscan.

<sup>28</sup> Bradley, K., 2008. *Building for Life*. London: CABE.

<sup>29</sup> Rifkin, J., 2001. *The Age of Access: The New Culture of Hypercapitalism*. Tarcher.



# 2. Ways of Thinking

There is currently considerable interest in how organisations can work strategically with design and design thinking, however, it is worth also looking beyond the immediate context of design to the wider concepts of systems thinking and integrative thinking. These concepts are of particular interest to research groups (such as CBRD) that take an interdependent and interdisciplinary approach to the areas of cross-media, brand, reputation and design, and seek to develop methodologies appropriate to the specific research problem under investigation.

## 2.1 Design Thinking

The popularity of design thinking in the last few years is part of a wider debate about the role of design in business, and its place in business education. The reason for the surge in interest of the 'methodology' of design, is because of design's potential for enabling business - and cultural - transformation, through the application of design processes to other areas. Philips Design, Procter & Gamble and General Electric are experimenting with ways to embed design thinking in their organisational processes, and in using it as a company-wide innovation tool. In the UK, public services (such as healthcare) are engaging design skills and design thinking in their developments to enhance the quality of life for citizens through 'bottom-up' participatory design processes.

Design thinking as a 'method' explores different ways to solve problems, discover the best solutions and deeply understand customers. It is 'a process for practical, creative resolution of problems or issues that looks for an improved future result. There are no judgments in design thinking. This eliminates the fear of failure and encourages maximum input and participation... Thinking 'outside of the box' can lead to more creative solutions'.<sup>30</sup> Tim Brown, Chief Executive Officer (CEO) of Ideo defines the mission of design thinking as 'to translate observations into insights and insights into products and services that will improve our lives... Design thinking is 'a discipline that uses the designers sensibility and methods to match people's needs with what is technologically feasible and what a viable as a business strategy, so it can be converted into customer value and market opportunity'.<sup>31</sup>

<sup>30</sup> [http://www.athena-alliance.org/weblog/archives/2010/09/is\\_design\\_think\\_about\\_design.html](http://www.athena-alliance.org/weblog/archives/2010/09/is_design_think_about_design.html)

<sup>31</sup> Brown, T., 2009. *Change by Design*. New York: Harper Collins.

As an approach, design thinking can provide a way of dealing with the

complexity of a particular situation, handling problems that are not clearly defined and supporting early ideas before they are fully formed (for example through communicating these ideas visually). Because the process of design is suited to engaging many different types of stakeholders, design thinking then becomes a way to secure further support as it mediates between organisations, products and people, and challenges preconceptions and assumptions stakeholders may hold about possible solutions.

## 2.2 Systems Thinking

Systems thinking is about understanding the ways in which 'the parts' influence 'the whole'. Ackoff (1972) observed that 'a system is more than the sum of its parts; it is an indivisible whole. It loses its essential properties when it is taken apart'.<sup>32</sup> According to Meadows (2009), as our world continues to change rapidly and become more complex, Systems thinking will 'help us manage, adapt and see the wide range of choices we have before us. It is a way of thinking that gives us freedom to identify root causes of problems and see new opportunities'.<sup>33</sup>

Meadows identifies how a resistance to, and a recognition of, systems principles, comes from two kinds of human experience:

- Our tendency to analyse rationally, to trace paths from cause to effect, to look at things in small and understandable pieces, to solve problems by acting or controlling the world around us. We see the individual elements as the cause of our problems.
- Our ability to intuitively understand, without analysis, often without words, a practical understanding of how systems work and how to work with them. Every person we encounter, every organisation, is a complex system. Our own bodies are magnificent examples of integrated, interconnected, self-maintaining complexity.

Gharajedaghi (2006) comments that it is the combination of the analytical and holistic approach that is driving change in our method of inquiry and means of knowing. We need both 'holistic thinking (the art and science of handling interdependent sets of variables) along with analytical thinking (the science of dealing with independent sets of variables)'.<sup>34</sup> We also need synthesis (the ability to combine two or more things together to create something new) to understand why a system behaves the way it does'.<sup>35</sup>

Meadows makes an interesting comment about the relationship

<sup>32</sup> & <sup>35</sup>Ackoff, R., 1972.

On Purposeful Systems.  
Chicago: Aldine-Atherton.

<sup>33</sup> & <sup>36</sup> Meadows, D.H., 2009.

Thinking in Systems: a  
Primer. London: Earthscan

<sup>34</sup>Gharajedaghi, J., 2006.

Systems Thinking:  
Managing Chaos and  
Complexity, a Platform for  
Designing. Woburn, MA:  
Butterworth-Heinemann.

between systems, structures and behaviour, the implication being that, if we want to change our current systems and structures, we need to take into account how that will change the behaviour, and how it is possible to have a positive effect on the wider context of other systems such as economics, business and the environment. 'A system is a set of things interconnected in such a way that they produce their own pattern of behaviour over time... Once we see the relationship between structure and behaviour, we can begin to understand how systems work, what makes them produce poor results, and how to shift them into better behaviour patterns'.<sup>36</sup>

### 2.3 Integrative Thinking

Developed by Roger Martin at the Rotman School of Management, Integrative Thinking is a discipline and methodology for solving complex problems. It is 'the ability to constructively face the tensions of opposing models, and instead of choosing one at the expense of the other, generating a creative resolution of the tension in the form of a new model that contains elements of both models, but is superior to each.' It evolved out of an attempt to help decision-making by distilling the thinking approach of highly successful leaders into a number of common themes. Integrative thinkers are able to 'keep the big picture in mind while they work on the individual parts of the problem; and they find creative resolutions to the tensions inherent in the problem's architecture'.<sup>37</sup>

When making a decision, Martin (1999) found that people proceed through four steps:

- **Salience:** What do we choose to pay attention to, and what not?
- **Causality:** How do we make sense of what we see? What sort of relations do we believe exist between the various pieces of the puzzle?
- **Architecture:** Building an overall mental model based upon choices already made.
- **Resolution:** What will our decision be, based on our reasoning?

To Martin, Design thinking is 'balancing the oppositions of analytical thinking (using deductive and inductive logic; reliability; repetition) and intuitive thinking (using abductive logic; validity; creativity and innovation) in a dynamic way. The 'Knowledge Funnel'<sup>38</sup> model he developed from the principles of design thinking combines these two thinking modes into three stages of discovery and knowledge creation: (1) Mystery: a question, problem to be solved; (2) Heuristic: a rule of thumb that helps narrow the field of inquiry into a manageable size; and (3) Algorithm: a fixed formula, a tested method or procedure.

<sup>37</sup> Martin, R. & Austen, H., 1999. *The Art of Integrative Thinking*. Rotman Management Review (Fall).

<sup>38</sup> Martin, R., 2009. *The Design of Business: Why Design Thinking is the Next Competitive Advantage*. USA: Harvard Business Review Press.

Writing on 'sustainable innovation' Antti Hautamäki (2010) comments that Martin's interest in the application of design thinking to business is because of the over-reliance on analytical thinking. His starting point is the dichotomy of exploration and exploitation (from James March's classical article 'Exploration and Exploitation in Organizational Learning', *Organizational Science* 1991). 'Exploitation of existing knowledge is an affordable and non-risky way to try to find useful knowledge. But in the long run firms lose new business possibilities if they are not searching for new knowledge and innovation. In their knowledge strategies firms must find a balance between exploitation and exploration'.<sup>39</sup> When applied to strategic management, design thinking, it appears, could be used as a way to generate value via the connection between design and innovation: between the exploration of new ideas (design) and the exploitation of new ideas (innovation).

<sup>39</sup>Hautamaki, A, 2010. Sustainable Innovation. <http://sustainable-innovation.fi>

# 3. Design in Business and Strategy

## 3.1 Design in Business

From an organisational perspective, design does not operate in isolation, but in relation to a range of different disciplines, organisational units and functions (for example, marketing, engineering, finance, law, brand management). Depending on their level of 'design literacy', organisations tend to view design in one of several ways: in terms of aesthetics (look and feel); as a process; as a response to users needs; or (increasingly) as a strategic business component or tool. In *The Integrative Disciplines*<sup>40</sup>, Buchanan (1992) categorises design in relation to business in four ways:

- Design of symbolic and visual communications (graphic design, brand identity, corporate identity).
- Design of material objects (products, furniture, textiles).
- Design of activities and organised services (customer service).
- Design of complex systems or environments for living, working, playing and learning (interiors, architecture and urban development).

From a *customer-focused* point of view, the design process is useful as a method and tool for strategic change, because it takes a user-centred perspective in the development of new processes, products and services, as opposed to focusing on internal hierarchies or traditional core capacities of traditional business structures. Managing how design connects business objectives (strategically and operationally) with the customer experience, and then communicating the value added by design, is one of the key roles of design management. From an *organisational* point of view, design supports the brand and corporate communications by visibly and experientially connecting the internal workings of an organisation (vision, values, purpose) to the external world of audiences, stakeholders, consumers and users. Organisational identity is at the core of design strategy, brand management and reputation management. The increased attention to identity in relation to business strategy came into fashion in the 1990s; branding provided users with the clarity needed to differentiate one organisation, product or service from that of competing offers, and *brand equity* served as an indicator of the value held in the brand name.

<sup>40</sup>Buchanan, R., 1992. *Wicked Problems in Design Thinking*. Design Issues, 8 (2).

Organisations are continually looking for new business opportunities and new ways to generate ideas, add value and create equity. This

includes realising the potential of design and innovation as a way to 'establish corporate identities, to develop brands, and to differentiate products from competition.'<sup>41</sup> Indeed, the *Design Management Institute* (USA) advises organisations to become more 'design-minded' by integrating design into their overall business strategy.

The challenge for some organisations, however, is to see beyond design as aesthetics, look and feel. Non-design led firms are often not aware of the potential design can offer - seeing design as 'wasteful' styling or as an excessive cost, and not as a long-term investment for improving business performance.

<sup>41</sup> <http://design101.com/introduction.html>

<sup>42</sup> & <sup>43</sup> *The Value of Design Factfinder Report, 2007*. UK: The Design Council.

<sup>44</sup> Lewis, A., Mougnot, C., & Murphy, D., 2009. *Analysis of Design Management Practice: Cardiff Study*. European Commission: Pro Inno Europe.

Thomas Watson, CEO of International Business Machines (IBM) recognised in 1950 that 'Good design is good business'. Good design generates social and economic value, makes the world a better, more interesting place, and enhances the quality of our lives. To follow are some key facts around the application of design to business and the link to better business performance.

*Table 2: Overall Context - how businesses add value to their core offer.*<sup>42</sup>

1. Customer relationship	4. Physical services	7. Retail experience
2. Design of product or service	5. Online service	8. Partnerships
3. Brand	6. Product/service bundling	9. Finance operations

*Table 3: Most common areas for the contribution of design to business performance*<sup>43</sup>

Increased market share	Increased turnover
Development of new markets	Increased profit
Competitiveness	New products/services
Increased employment	Development of intellectual property

*Table 4: Common ways that European companies integrate design into their business strategies*<sup>44</sup>

Design for radical innovation	Design for improved product performance
Design for product identity	Branding
Service design	Design publishing
Design as a value added activity	Open source designing

*Table 5: The major roles played by design in the Dutch economy<sup>45</sup>*

<b>The design sector</b>	<b>Organisations with substantial number of designers</b>
Advertising agencies	– Publishers
Design consultancies	– Manufacturers of furniture and other goods
Architecture and interiors	– Wholesalers and trade information
Fashion designers and stylists	– Retailers and repairers of consumer goods
Sensory design (ambient, scent, sound)	– Architects, engineers, interior designers and other technical design, drawing and consultancy agencies
	– Real estate, rental and business services
	– Environmental services, culture, recreation, other services.
	– Film, television, sound engineering, mobile communications, ICT
	– Performing arts, dance, theatre, music, fashion

During a typical design process, designers will go through a problem-solving process of analysis, synthesis, creativity and execution as they think about, explore, test and decide how to translate the aspirations of the business proposal and the needs of the user into a final solution. Designers can envision people-centred solutions in both the product-service context and organisational context. They search for new creative possibilities and then visually communicate their findings through, for example, design proposals, user scenarios and other narrative storytelling techniques that communicate customer propositions (for example, how products and services fit into everyday life). Designers also produce design prototypes as a step towards defining the physical, functional and performance characteristics or specifications (so called F3 – Form, Fit, Function) that uniquely identify a component or device and determine its interchangeability in a system.<sup>46</sup>

Design is present in tangible form – in the people, the projects and the products and services with which we come into contact every day. These are referred to as the ‘touch points’ of design, and form an important part of how designers make decisions about how we experience an organisation or a brand. But design is also present intangibly, in the decisions made about the processes and relationships that are part of the integrative and interdisciplinary nature of design practice:

<sup>45</sup> Adapted from: *Design in the Creative Economy*, 2005. Netherlands Organisation for Applied Scientific Research.

<sup>46</sup> Bloomsbury Reference Titles: *Dictionary of Business*, 2005. London: Bloomsbury Publishing

- Deciding how we bring products and services to market - the linking of the systems, the places and the final delivery of a designed and managed customer experience.
- Deciding how we manage the relationships between people - the clients, the design consultancies, the stakeholders and end-users or customers.
- Deciding how we organise the teams, the processes and procedures of any design project.

There are benefits to designers taking a more responsible and accountable approach to decision-making processes. Taking a 'whole life cycle approach' (how materials are specified and products are disposed of at the end of their use) and a 'cradle to cradle' approach (where economic, societal and environmental benefits are designed into the product-service system) ensures the benefits are demonstrated in the bottom line - helping to readdress the common perception of 'sustainable = expensive'. This can contribute to raising awareness about 'design equity' (how design can add value in its own right) and stimulating debate about the relationship between design equity and brand equity (a measurement system that is already familiar to the world of business).

Taking a pro-active approach to 'doing more with less' is needed to intelligently address the drive towards outsourcing and bottom line-motivated budget-cutting exercises, and move decision-making processes from short term cost saving (efficiency) to long term investment (effectiveness). The application of design thinking tools and processes to whole systems (including production, distribution and consumption) could trigger creative responses to doing 'more' with limited resources, and help uncover unique opportunities for 'design-minded' value creation. Current 'design-minded' approaches include co-creation and participatory design (where users are included in the design process), inclusive/universal design (where the needs of a wider range of people are taken into account) and sustainability (where the long term impact is considered).

### 3.2 Design Management in Context

Deciding, managing, organising and facilitating how design can play a transformational role, how design processes can connect to business processes, and how design strategy can support business and organisational strategy, are some of the areas of competencies of design management.



Design management is about the management of design. The wide variety of perspectives that exist on Design management reflect the rich array of individuals, professionals and academics, and their associated contexts, involved. Peter Gorb (1990)<sup>47</sup> describes design management as ‘the effective deployment of the design resource available to the organisation in the pursuance of its corporate objectives.’ Bill Hollins (2004)<sup>48</sup> defines it as ‘the organisation of the processes for developing new products and services’, and for Rachel Cooper and Mike Press (1995)<sup>49</sup>, being a design manager is about ‘the response of individuals to the needs of their business and the contribution they can make to enable design to be used effectively’.

*Design Management: Managing Design Strategy, Process and Implementation* (Best 2006)<sup>50</sup> described the management of design in the corporate context, and was written in response to (1) the growing recognition design as a valuable means of achieving strategic goals and organisational objectives, and (2) the demand for greater awareness of design tools, methods and processes, and design management thinking, planning and implementation skills. Design management, by the very nature of how it brings different disciplines, professions and stakeholders together, tends to take a holistic view of how to facilitate and deliver the best possible solution for all parties involved. The process of managing design, illustrated in this book, took into account how to engage both in-house (the corporate design resource) and out of house (design consultancies and agencies) design expertise, and framed the subject around three stages:

- **Managing the Design Strategy:** Inspiring design thinking and projects, and conceiving design projects and initiatives. For example, identifying and creating the conditions in which design projects can be proposed, commissioned and promoted; engaging design thinking in an organisation’s strategy; identifying opportunities for design; interpreting the needs of customers; looking at how design contributes to the whole business.
- **Managing the Design Process:** Developing and leading design projects, agendas and possibilities. For example, demonstrating how strategy can be made visible and tangible through design; how to craft the presence and experience of an organisation; how to influence how the organisation is perceived; how to influence how the brand is perceived.
- **Managing the Design Implementation:** Managing and delivering design projects and outcomes. For example, the process and practice of managing projects; the decision-making

<sup>47</sup> Gorb, P., 1990. *Design Management: Papers from the London Business School*. London: ADT Press.

<sup>48</sup> Hollins, B., 2004. *Design Management Education, the UK Experience*. *DMI Journal*, 13 (3).

<sup>49</sup> Cooper, R. & Press, M., 1995. *The Design Agenda*. London: John Wiley & Sons.

<sup>50</sup> Best, K., 2006. *Design Management: Managing Design Strategy, Process and Implementation*. Lausanne: AVA.

processes involved in specifying materials, working relationships and responsibilities; developing design guidelines and manuals; maintenance; translating the design globally.

To relate design management to the organisational environment, Design Management (2006) also demonstrated how to engage design at three levels:

- Design at the corporate level (including vision, strategy, policy and mission).
- Design at the business unit level (including tactics, systems and processes).
- Design at the operational level (including project management, delivery, tangibles and touch).

The subsequent book, *The Fundamentals of Design Management* (Best 2010) reflected the growing shift to product-service systems and networks of enterprises (as opposed to the corporate organisation per se), and describes the concepts and principles that inform the management of design projects, teams and processes within the creative industries:

‘Design management is about the successful management of the people, projects, processes and procedures behind the design of our everyday products, services, environments and experiences. Design management is also about the management of the relationships between different disciplines (such as design, management, marketing and finance) and different roles (such as clients, designers, project teams and stakeholders).<sup>51</sup>

Bringing any product, service or experience to market often requires extensive input and support from a wide range of different people, with different areas of expertise, capabilities and skills. But the way in which the people, processes and projects are managed can have an enormous impact on the success, or failure, of the final outcome. Equally, the different planning processes require different approaches (for example, ‘first-to-market’ versus ‘just-in-time’ processes). It is the role of design management to locate all these professionals, projects and processes within an interdisciplinary and collaborative framework, and to be aware of the wider business, societal, political and environmental contexts, so as to support a coherent, financially viable and delightfully crafted experience.

<sup>51</sup> Best, K., 2010. *The Fundamentals of Design Management*. Lausanne: AVA.

One of the most valuable aspects of design management as an

approach is that it provides a framework for new processes to be implicitly integrated into existing approaches and methodologies. When design expertise is engaged as a problem-solving process, the actual design 'problem' is also a design 'opportunity' to redefine the problem itself and, if identified as a need, to propose a new approach or engage different stakeholders in finding a solution. Taking such a 'managed' approach to design increases the chances of delivering projects that demonstrate tangible, valuable outcomes, which:

- Are satisfying, value-adding and value-creating (for example, in terms of user-experience, financial profit, brand value or the growing area of 'design equity').
- Are inclusive and of maximum benefit to all stakeholders involved (from the sponsor to end user).
- Contribute positively, not impact negatively, on the future (environmental damage or community disengagement).

### 3.3 Design, Strategy and Innovation

A strategy is a course of action, including the specification of resources required, to achieve a specific objective.<sup>52</sup> Michael Porter (1985) describes strategy as a deliberate systematic analysis ('formulate a strategy and don't deviate'),<sup>53</sup> whereas Mintzberg and Waters (1985) states that strategies are either deliberate (structured, intentional), or emergent (fluid, unintentional).<sup>54</sup> For strategic business approaches that tend to rely on an analytical, intentional and structured understanding of market probabilities, then perhaps the value of design thinking processes is to generate and communicate new or intuitive insights and emergent possibilities inherent in market conditions.

According to Harvard Business Review,<sup>55</sup> there are two schools of thought when it comes to strategy in relation to value creation: 'One holds that the path to value creation lies in driving out the old-fashioned practice of gut instincts and replacing it with strategy based on rigorous, quantitative analysis. The other favors creativity and innovation. To the proponents of this philosophy, the creative instinct, unfettered by analytical thinking, is held up as the source of true innovation'. So when managing for innovation, are there processes that can help unlock/release innovation within organisations?

Broadly, there are three types of innovation (HBS, 2003):

- Incremental innovation, which exploits existing forms or technologies (for example, through small changes, improvements and reconfigurations based on established knowledge and existing organisational capabilities).

<sup>52</sup> Bloomsbury Reference Books, 2005. Dictionary of Business. London: Bloomsbury Publishing.

<sup>53</sup> Porter, M., 1985. Competitive Advantage: Creating and Sustaining Superior Performance. NY: Free Press.

<sup>54</sup> Mintzberg, H., and Waters, J. A., 1985. Of Strategies Deliberate and Emergent. Strategic Management Journal, 6, pp. 257-272

<sup>55</sup> Harvard Business Essentials, 2003. Managing Creativity and Innovation. Harvard Business Press.

- Modular innovation which, while still significant, is not radically transformative.
- Radical innovation (also known as breakthrough, discontinuous or transformational innovation) which departs from existing knowledge, capabilities or technologies to create something new in the world, perhaps triggered by new opportunities or capabilities that become obsolete.

The internet has opening up new capabilities for strategy and innovation, such as the ability to disrupt existing processes through technology (disruptive innovation), new business models (social innovation), and environmentally aware challenges (eco-innovation). Currently, design thinking is seen as a source of breakthrough innovation and competitive advantage.<sup>56</sup> David Kelley (2005) sees design thinking as 'a methodology to innovate routinely', and a way to 'help companies put the strategy in their vision'.<sup>57</sup> David Burney (2006) comments that design as 'an innovative problem-solving methodology that is fast becoming an imperative business strategy'. He also believes that design thinking is 'a way of thinking that produces transformative innovation', and 'open source, at its heart, is a design thinking process'.<sup>58</sup>

How creativity, design and innovation connect to strategy is currently a key area of debate. *The Cox Review*<sup>59</sup> set out a useful framework for the relationship between creativity, design and innovation. 'Creativity is the generation of new ideas - either a new way of looking at existing problems or the discovery of new opportunities. Innovation is the exploitation of new ideas. Design is what links creativity and innovation - it shapes the ideas so they become practical and attractive propositions for users and customers'.

Due to growing pressure for organisations to take a more holistic approach to the cultural, environmental, political and societal impact of how they operate, organisations are looking for new ways to realise business opportunities - and design is one of the 'tools' that can enable this. Scherfig (2007) asserts that: 'good design is created when a company is able to realise the functional, social, and economic potentials inherent in the use of design. It is particularly important for companies that are not able to compete on production costs to become aware of the huge potential of working strategically with design'. Roger Martin believes that, in relation to how design thinking could unlock value creation, 'the most successful businesses in the years to come will balance analytical mastery and intuitive originality

<sup>57</sup> Kelley, D., quoted by Nussbaum, B. (2005). *Get Creative: How to Build Innovative Companies*. Businessweek Magazine, August 5 2005 Issue.

<sup>58</sup> Burney, D., 2006. Introduction to Design Thinking. [www.redhat.com](http://www.redhat.com) (May 2006).

<sup>59</sup> Cox Review of Creativity in Business: Building on the UK's Strengths. 2005. UK: HM Treasury.

(design thinking) to create advances in both innovation and efficiency - a combination that produces powerful long-term competitive edge'.<sup>60</sup>

Clients approaching the management of design and creativity in a strategic way tend to take a more long-term view of how value is created, realised and sustained. They accept that design is no longer just about the aesthetics of things, and are more open to how design thinking and design management processes can help add and create value for their organisations, products and services. They are also asking the question, how can they apply the design process, with its empathetic, user-centred and experiential focus, to strategic management?

Currently organisations are increasingly looking for ways to employ the power of design:

- In product/service development - to develop differentiation or competitive advantage, address a problem, need or opportunity (design for new product and service offers and experiences).
- In everyday management processes - to affect and improve business performance (design thinking as a cross-functional working method for establishing common ground between departmental agendas and objectives, or as a method for engaging customers in a co-creative process).
- In the creative development of their companies - to influence and stimulate the company culture (design as catalyst for innovation and growth; design as facilitator of collaborative and participatory working processes).

Writing on 'Strategy as Innovative Design' (2010), Hatchuel et al. describe design as a tool to stimulate innovation, and that design activity focused on innovation can 'emphasise future strategies based on the creation of desirable unknowns'.<sup>61</sup> When managed, directed and valued, design can play a practical, strategic and inspiring role within and across organisations.

<sup>60</sup> & <sup>54</sup> Martin, R., 2009. The Knowledge Funnel: How Discovery Takes Shape-How Design Thinking Produces Innovation, Efficiency, and Long-Term Competitive Advantage (HBR Book Chapter).

<sup>61</sup> Hatchuel, A., Starkey, K., Tempest, S., Le Masson, P. (2010), Strategy as Innovative Design: An Emerging Perspective, in Professor Brian Silverman (ed.) The Globalization of Strategy Research (Advances in Strategic Management (Vol.27). Emerald Group Publishing.

# 4. Approaches to Applied Research

## 4.1 Applied Research in Context

To Inholland University of Applied Sciences, 'research is an important vehicle for acquiring knowledge and learning in higher education'.<sup>62</sup> The Inholland approach to research and learning secures the professional involvement of staff, students, the market and society as a whole 'community', in a way that develops both theoretical knowledge as well as practical and competency-based skills. Research connects education to the professional fields, and follows the Inholland goal of maximising the value of the four R's of research - rigour, relevance, renewal (innovation) and reputation - in a way that makes a valuable contribution to learning and to society at large.

Applied research in the creative industries can take many different forms, reflecting the diverse nature of the disciplines (design, arts and crafts, advertising, architecture, fashion, film, music, television, radio performing arts, publishing and interactive software) and academic contexts (art schools, business schools and universities) involved. Currently, in the context of design, the idea of an explicitly defined 'design research culture' is undergoing change, and in particular, how to more closely link design research in academia to design practice in industry. As Brigitte Wolf (2008) states, 'applied research in design is rather new and therefore all approaches to investigate the impact of design are very valuable steps towards the exploration of best practice for strategic imbedding of design into corporate philosophy, corporate strategy, corporate culture and business strategy'.<sup>63</sup> There is a growing move to establish design and design management as vital areas of academic research, in the same way that social sciences and management sciences have already developed. A strong history behind the growth of design research does exist (for example, Bruce Archer's work at the Royal College of Art in the 1960s on practice-based research and research through design). Buchanan (1992) identifies some of the challenges to defining an explicit design research culture, namely, that design remains a surprisingly flexible activity. 'No single definition of design, or branches of professionalised practice such as industrial or graphic design, adequately cover the diversity of ideas and methods gathered together under the label. Indeed, the variety of research reported in conference papers, journal articles, and books suggests that design continues to expand its meaning and connections, revealing unexpected dimensions in practice as well as understanding'.<sup>64</sup>

<sup>62</sup>Inholland University of Applied Sciences, 2009. Research School. Inholland Publication.

<sup>63</sup>Wolf, B. Prof. Dr., 2008. Attitude is Essential: Brand, Reputation and Design Management in Small to Medium Enterprises. Hogeschool Inholland.

<sup>64</sup>Buchanan, R., 1992. Wicked Problems in Design Thinking. Design Issues, 8 (2).

Design Management research and publications have typically emerged out of the academic design management research community, which is part of the broader design research community. The academic design management community and the research criteria they use are more closely linked to design research in academia than design practice in industry. The opportunity available is to take a more integrative approach to the research process, in a way that is invaluable as a method for facilitating different types of stakeholder conversations and cross-disciplinary investigations. The methods of enquiry used must be appropriate to the interdisciplinary and collaborative nature of the creative industries.

#### 4.2 The CBRD Approach to Research

The Centre for Cross-Media, Brand, Reputation and Design Management (CBRD) is a research group set up to conduct applied research into the management of brands, products, services and organisations.

The group helps organisations, enterprises and entrepreneurs find a recognisable image, identity and place in the market or industry in which they operate, by investigating the strategic and practical significance of cross-media, brand, reputation and design management. These investigations are based on real market needs. Externally (industry and government clients), CBRD helps organisations improve business performance and develop long-term competitive advantage through consultancy, projects, research studies and commercial training. Internally (Inholland clients, staff and students), CBRD helps embed the learning from research investigations into curriculum development and management, and into the process of professionalising academic staff.

The four areas of expertise of CBRD are:

- **Cross-Media:** The opportunities for cross-media integration in small and large-scale organisations.
- **Brand Management:** The competitive positioning of brands for short and long-term success.
- **Reputation Management:** Organisations and how to improve their identity, position and stakeholders relationships.
- **Design Management:** The potential for design in business and management.

The vision of the research group is the synergy between the four areas of expertise with a sharp focus on the strategic and practical role the

disciplines play for businesses and organisations. These subjects are often seen as separate from each other. CBRD take a more integrative and interdisciplinary approach, and believe that it is precisely the interaction between the areas that can leverage positive contributions for a business, and added value for its products and services.

The group engages both qualitative and quantitative research approaches, and develops and circulates knowledge through participating in research projects, publishing outputs (books, articles), supervising research students, organising guest lectures, seminars, master-classes and workshops and developing and taking part in professional and educational networks. Two recent projects are described: the first (DME) focuses on design management, and the second (DDFA) brings together the expertise of all four CBRD areas, in an integrated and interdisciplinary way.

#### 4.3 Research Project: Promoting Best Practices in Design Management (DME/CBRD)

Small and medium enterprises (SMEs), although the biggest contributor to the GDP of most economies, are often lacking the budget and the knowledge to use design effectively, and 'fear' investing more; they see design as a cost and not an investment. However, as many are family-run businesses, they do tend to take a more long term and sustainable view of their future, and do not have the intense pressure of maximising profitability/shareholder value typically associated with large organisations. Brigitte Wolf (2008) points out that there are different attitudes to decision-making about design, due to 'different levels of design awareness, different engagements to quality, different ideas of man and different value systems, which can explain why every enterprise has a different position in the market'.<sup>65</sup> There is a need for case studies, best practice examples, and recognised ways to benchmark the application of design management to different scales of enterprises.

Writing in the *Harvard Business Review*, Ron Ashenas (2010) describes why best practices are hard to practice, and asks the question, why do some organisations succeed at utilising processes and tools developed elsewhere while others fail? The key is in how practices are adapted and adopted. 'One of the characteristics of great companies is that they actively learn from others. But to be successful at doing this requires more than just identifying and borrowing best practices; it also requires adaptation to your culture and full adoption by your leadership'.<sup>66</sup>

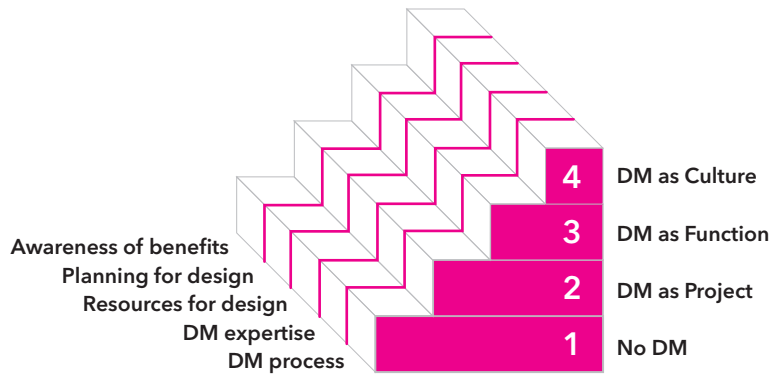
<sup>65</sup> Wolf, B. Prof. Dr., 2008. *Attitude is Essential: Brand, Reputation and Design Management in Small to Medium Enterprises*. Hogeschool Inholland. <sup>66</sup> <http://blogs.hbr.org/ashkenas/2010/11/why-best-practices-are-hard-to.html>



Design Management Europe (DME), a network of partners and agents that aim to demonstrate and promote to businesses the commercial benefits of good design management practices, is building such a resource of best practice cases (Inholland/CBRD is one of the partners). The project was originally funded by the European Commission Directorate General for Industry and Enterprise/PRO-INNO Europe initiative, as ADMIRE (Award for Design Management Innovating and Reinforcing Enterprises). The overarching objective of PRO-INNO Europe was to improve the conditions for an innovative Europe through policy development. Design, being one of Europe's greatest creative resources, is recognised by the European Commission as a key element of innovative and successful businesses. Design Management is considered by the European Commission as a facet of Innovation Management, a key subject of PRO-INNO Europe.

Developed by the ADMIRE research partners, the DME Survey researched the extent to which European companies use design in a conscious, systematic or strategic manner. The objectives were (1) to describe the current status of design management in the European SME sector; (2) to identify factors that stand in the way of company's effective management of design; (3) to develop a model and tool that could be used to assess a company's design management capability; and (4) to extend this capability by identifying future development opportunities and research directions.

To conduct this investigation, the Design Management Staircase model was created and used to establish and benchmark the design management capability of companies using a process maturity grid. It conveys a company's typical design management behaviour on 4 levels of maturity (no DM, and DM as project, function, culture) and around 5 factors: resources, planning, process, awareness of benefits and expertise. Through the DME network of partners and agents the survey collected 776 questionnaire responses from SME companies across Europe who currently practice design.



The Survey explores the strategies and investments that have the biggest payoffs. Does design really make a bottom-line difference? And what factors support it most effectively? The main findings of the survey were:

- Many companies using design fail to use it in a conscious, systematic or strategic manner.
- Experience does not always equate to improved design management skills.
- There is a link between design management capability and business performance; however the survey does not go far enough to provide causal proof.
- Design is still regarded to apply to only product development and less as a holistic approach to improve company competitiveness.

The outcomes are documented in a CBRD/Inholland research report<sup>67</sup> and an article in the *Design Management Review*.<sup>68</sup>

### Research Project: Market Research in Germany (DDFA/CBRD)

Dutch Design Fashion Architecture (DDFA) commissioned CBRD to carry out qualitative research on identifying the business opportunities for Dutch designers and design firms in the German market. The goal was to provide new insights for the three disciplines of design, fashion and architecture for business in the various German regions. The research team consisted of Research Professor Kathryn Best Head of the Research Group and four Research Fellows: Willy Geurts, Jaap van der Grinten, Helma Weijnand Schut and Cees van Wijk. In addition, graduates of Communication and Media & Entertainment Management (Asia Gajewska, Elyne van Rijn, Chantal Sandoval Veliz and Sana Laakioui), and five second-year pre-honour students were part of the team. The study was conducted in cooperation with the Department of Design Management at the University of Wuppertal,

<sup>67</sup> Kootstra, G., 2009. DME Survey Report: The Incorporation of Design Management in Today's Business Practices. CBRD/Inholland.

<sup>68</sup> Best, K. Kootstra, G. Murphy, D., 2010. Design Management and Business in Europe, a Closer Look. *Design Management Review*, 21 (2).

with Prof. Dr. Brigitte Wolf and Niki Zahn. This qualitative research investigation, conducted in both the Netherlands and Germany, built upon previous market research conducted by a United Kingdom agency and other industry associations. These existing results provided a broad and generic view of the creative sector in the German market. The value of CBRD's qualitative research was to add specialised knowledge and new insights to the existing research material, using a range of qualitative methodologies (desk and field research - focus groups, group discussions, individual interviews and storytelling) to uncover the answers to four research questions:

- What knowledge do Dutch DFA companies interested in being active in the German market actually need?
- What are the key success factors for doing business with Germany?
- What business opportunities can we determine for Dutch companies in the field of design, fashion and architecture, that can help build relationships with companies and agencies Germany?
- How can insights obtained in answering the first three research questions be used to provide practical and relevant guidance to the companies so that DDFA can improve the commercial opportunities in the various German markets?

The design of the research was broken down into four elements which focus on the main research questions (RQ 1-4).



In total, three focus group meetings and more than fifty individual expert interviews were conducted. In the Netherlands, mostly designers and representatives of agencies and companies were interviewed. In Germany, in addition to the designers and other experts interviewed, there were also journalists, founders of grants, researchers, potential clients and employees of business institutes and consulates. The interviews followed the same domain interview structure and were recorded on video or audio, from which narrative text was developed.

During the analysis phase of the study, the comparison of the interview results of fashion, design and architecture from both the Dutch and German results was emphasised. Five findings and four typologies of entrepreneurs were defined, and a 'Three Track Entry Model' was developed to help different types of DDFA entrepreneurs enter the German market. This model was designed to suit the associative and intuitive approach of designers, and it can be used by Dutch entrepreneurs independently, or as part of a workshop. The results are written up in a DDFA/CBRD Inholland Research Report, 'Entrepreneurship in Germany for the Sectors Dutch Design Fashion Architecture'.

# 5. Strategies for Growth and Development

## 5.1 CBRD Applied Research Themes

CBRD takes a strategic and practical approach to applied research, undertaking research investigations that are based on real market and industry needs. What are the opportunities for developing new research methods and competencies? How can existing knowledge and experience of practice-based research be revitalised? And how can engaging approaches to research be embedded within educational courses, at various stages of the student learning experience across the curriculum?

In industry, and in educational agendas globally, there is an increasing trend towards interdisciplinary approaches to industry practices, research and education. Taking a hybrid, cross-discipline approach is somewhat different from a 'silo' approach to research - typically the product of traditional departmental structures in industry and narrowly focused research centres in universities. CBRD embraces projects that are cross-disciplinary and integrative in nature; the specialist research approaches and abilities of each discipline (cross-media, brand, reputation and design management) are as valuable in combination as they are separately, in their own right. It is both the discipline-specific theories and models, and the interaction between the different disciplines, that can make positive contributions to both education and industry - through promoting the use of existing qualitative research methodologies, and through the development of new research tools and methodological processes. The dialog between the different disciplines can, and does, generate new knowledge.

In terms of enhancing the staff and student experience of learning about research competencies, several immediate opportunities are available:

- To refresh existing research methods and develop new research methods and competencies. Both the research theories and competencies of the specialist disciplines (cross-media, brand, reputation and design management) and combined/integrative theories and disciplines would be taken into account.
- To embed these methods and competencies into the Inholland curriculum at appropriate stages of academic courses and curriculums.

- To link specialist, integrative and collaborative approaches to multidimensional projects and areas of future research investigation.
- To mix design thinking tools and participatory processes with theories and models of design management, brand management and reputation management and cross-media/visual communications.

An integrative approach to developing new methods opens up opportunities for the Inholland educational curriculum - within and across the Schools and Domains of expertise. For example, curriculums could adopt new research methods that combine (1) scientific research methods (uncovering what is) and (2) design methods (envisioning what might be)<sup>69</sup>, and that combine quantitative research methods (such as statistics) with qualitative research methods (such as focus group meeting and storytelling).

The DDFA Research Project (described in 4.3) was the first CBRD 'multidimensional' project engaging all four areas of CBRD expertise in one single project. This project was also successfully embedded into the Inholland curriculum and student learning experience. Completion of the project led to several insights and specific competences about CBRD research abilities and offers:

- The practice of project management with different stakeholders: international participants, from the academic, business and governmental world, branch organisations, and the commissioners
- The organisation of the practice of qualitative explorative and iterative research
- The organisation of a multi-lingual research process and reports
- The method of storytelling as a way of collecting and presenting data
- The development of several models for identifying, analysing and describing the different patterns in the collected data.

In terms of developing new 'multidimensional' approaches, and with specific reference to the different ways of thinking (holistic, interdisciplinary, design, systemic and integrative), there are a number of starting points for exploration:

- There is currently a rethinking of the philosophical framework for management theory - and an attempt to create business models and systems more aligned with human-centred values and participatory processes.

<sup>69</sup>Rylander, A., 2009. Design Thinking as Knowledge Work. DMI Journal, 4 (1).

- Dev Patnaik (2009) offers that real value innovation is not in design or designers, but the gathering of multidisciplinary people: 'The secret isn't design thinking, its hybrid thinking: the conscious blending of different fields of through to discover and develop opportunities that were previously unseen by the status quo'.<sup>70</sup>
- Gharajedaghi (2006) reveals that a systems approach (the ability to synthesise separate findings into a coherent whole) may be more critically valuable than a multidisciplinary approach (the ability to generate information from different perspectives).<sup>71</sup>
- Meadows states that, in systems thinking (where the whole is considered to be greater than the sum of the different parts), it is often in the interconnections that real opportunities for competitive differentiation lie; therefore the design of the interconnections, interrelationships and interdependencies within a system must be carefully considered.<sup>72</sup>
- With reference to Gestalt theory (determining the intrinsic nature of the whole), and the explorations of Peter Senge (2005) on Presence (the ways in which the whole is entirely present in any of the parts), how could the worlds of business, education, government, and leadership - and design - be redefined in a broader context, to break us out of old, restrictive patterns of seeing and acting and to create awareness of the larger whole?<sup>73</sup>

Opportunities for CBRD Research directions are identified in each of the specialist expertise areas, although the integrative and interdisciplinary approach at the core of CBRD still exists.

- **Cross-Media:** How can an integrative approach to design, media and visual communications strengthen brand experiences, for example, cross-platform forms of engagement? Areas for investigation: visual communications; story-telling; visual knowledge building, media convergence and connections to marketing management; cross-platform expression; social media and crowd-sourcing.
- **Brand Management:** What is the impact of current local and global challenges on how branded products, services and organisations are positioned, for example, glocal versus global? Areas for investigation: new business and educational development in Brazil, Russia, India and China (BRIC); positioning, people and authenticity.
- **Reputation Management:** What new ways and tools are available for enhancing the reputation and stakeholder relationships through, for example, participatory design?

<sup>70</sup> Patnaik, D., 2009.

[Fastcompany.com/blog/dev-patnaik/innovation](http://Fastcompany.com/blog/dev-patnaik/innovation)

<sup>71</sup> Gharajedaghi, J., 2006. *Systems Thinking*. Woburn, MA: Butterworth-Heinemann.

<sup>72</sup> Meadows, D.H., 2009.

*Thinking in Systems: a Primer*. London: Earthscan.

<sup>73</sup> Senge, P. *Presence:*

*Exploring Profound Change in People, Organizations and Society* (2005). Boston: Nicholas Brealey

Areas for investigation: stakeholder engagement; new forms of engagement through participatory design processes; issues management.

- **Design Management:** How can design processes add value to business? What is the potential of design and design research as an enabler of innovation and change, for example through design thinking methods? Areas for investigation: the case for design equity; new methods of value creation through design; co-design, co-creation and collaborative design and facilitation processes; the application of design thinking skills to organisational development and innovation processes.

## 5.2 Conclusions and Perspectives

'Who are you? Where are you going? Why are you going there?'

*Kevin Cashman, Leadership from the Inside Out*

Strategy is about creating a course of action to achieve a specific objective within the limitations of defined resources. Strategy can be deliberate (structured, intentional) or emergent (fluid, unintentional). Currently, many organisational strategies tend to take a deliberate (analytical and structured) approach to understanding market probabilities, as they search for ways to do 'more with less' resources. But being more efficient with limited resources often comes at the expense of being more effective (and creative) with the use of these limited resources, and in imagining possibilities for doing things differently in the future. Perhaps the value of design thinking for organisations under pressure to do 'more with less' is to help them take a more emergent (fluid, practical, intuitive) approach to strategy, and to generate and communicate new insights. Organisations and brands would then have a 'strategic design framework' within which they could envision unique, viable, desirable and sustainable futures, claim new market positions, and identify people-centred solutions - ones 'unlocked' from within the opportunities inherent in the organisation, in the market and in the latent needs of users.

Today, there are increased opportunities available for designers, design managers brand managers and communications managers to creatively and effectively offer their services to business:

- As 'facilitators' and 'visual communicators' of other people's ideas and conversations (as Gharajedaghi (2006) points out, 'to think about anything requires an image or a concept of it').
- As 'design thinkers' taking a tangential problem-solving approach to the challenges faced by business, society,



education and the environment (and proposing solutions that are strategic, practical and inspirational).

- As ‘stimulators’ of brand, communication and design equity – the unique ways in which value can be generated in the process of product, service, system and organisational development – and beyond (through, for example, new interventions in value-chains designed to improve quality of life issues, reduce costs and increase service offers).

What are the limits to the nature and scope of design? Depending on their level of ‘design literacy’, organisations view design and design thinking in one or more ways: in terms of aesthetics (look and feel); as a creative process; as a problem-solving response to users’ needs; as a method for ensuring a whole life cycle approach to limited resources and to improved environmental, societal and economic well being; as a strategic business component or tool; as a source of breakthrough innovation and competitive advantage; as a catalyst for cross-functional working relationships and innovation processes; as a method of ensuring ‘routine innovation’ and ‘transformative innovation’; and as an ‘open-source’ approach to engaging stakeholders in creative and business development processes.

What are the possibilities for design? Design is a ‘surprisingly flexible activity’ that ‘continues to expand its meaning and connections, revealing unexpected dimensions in practice as well as understanding’ (Buchanan 1992). If we define design as ‘a people-centred, transformational process’ it can be applied to many current challenges and contexts. ‘Design for development’, for example, considers how design can play a part in the people-centred transformation of how we live, consume and function, in a less resource-intensive manner, and in a way that make it easier for people to live longer, healthier, happier lives. The tools of design thinking could help organisations to radically change their existing processes and practices, to create more sustainable products and services, to engage with people and places in better ways, and to adopt healthier lifestyle behaviours. Design could also provide the facilitation and communication tools needed to envision the positive motivations for more ethical business practices and consumption patterns (for example, recycling, renewable energy use, low-carbon-living and green job creation, as opposed to other more destructive patterns of behaviour).

In an increasingly interconnected world, government policies, business practices and human activities in one area have wider implications

- geographically, economically, politically ethically and morally. Environmentally harmful practices, for example, are being tackled by governments (green legislation), businesses (corporate governance) and society (social activism), and in the context of long-term sustainable development (the green economy), the agendas of the Rio Plus 20 Challenges calls for a need for the balanced integration of economic development, societal development and environmental protection. Alongside a holistic and 'whole life cycle' approach to designing for an interconnected world, the opportunity exists to take a 'macro-design' approach - to use the framework of design thinking as a transformational tool for enabling behavioural and systemic change, and encouraging a more sustainable future and a better quality of life - for all.

# 6. Selected References

- Ackoff, R. *A Theory of a System for Educators and Managers*. Vol. 21 The Deming Library.
- Ackoff, R., 1972. *On Purposeful Systems*. Aldine-Atherton.
- Best, K. Kootstra, G. Murphy, D., 2010. *Design Management and Business in Europe, a Closer Look*. Design Management Review, 21 (2).
- Best, K., 2006. *Design Management: Managing Design Strategy, Process and Implementation*. Lausanne: AVA.
- Best, K., 2010. *The Fundamentals of Design Management*. Lausanne: AVA.
- Brown, T., 2009. *Change by Design*. New York: Harper Collins.
- Buchanan, R., 1992. *Wicked Problems in Design Thinking*. Design Issues, 8 (2).
- Cooper, R. & Press, M., 1995. *The Design Agenda*. London: John Wiley & Sons.
- Gharajedaghi, J., 2006. *Systems Thinking: Managing Chaos and Complexity*. Butterworth-Heineman.
- Gorb, P., 1990. *Design Management: Papers from the London Business School*. London: ADT Press.
- Grudin, R., 2010. *Design and Truth*. USA: Yale University Press.
- Harvard Business Essentials, 2003. *Managing Creativity and Innovation*. Harvard Business Press.
- Hollins, B., 2004. *Design Management Education, the UK Experience*. DMI Journal, 13 (3).
- Howkins, J., 2001. *The Creative Economy*. London: Penguin.
- Jackson, T., 2009. *Prosperity Without Growth: Economics for a Finite Planet*. London: Earthscan.
- Kelley, D., quoted by Nussbaum, B., 2005. *Get Creative: How to Build Innovative Companies*. Businessweek Magazine, August 5 2005.
- Kootstra, G., 2009. DME Survey Report: *The Incorporation of Design Management in Today's Business Practices*. CBRD/Inholland.
- Landry, C. & Bianchini, F., 1995. *The Creative City*. London: Demos.
- Martin, R. & Austen, H., 1999. *The Art of Integrative Thinking*. Rotman Management Review (Fall).
- Martin, R., 2009. *The Design of Business: Why Design Thinking is the Next Competitive Advantage*. USA: Harvard Business Review Press.
- Martin, R., 2009. *The Knowledge Funnel: How Discovery Takes Shape-How Design Thinking Produces Innovation, Efficiency, and Long-Term Competitive Advantage* (HBR Book Chapter).
- Meadows, D.H., 2009. *Thinking in Systems: a Primer*. London: Earthscan.

- Mintzberg, H., & Waters, J., 1985. *Of Strategies Deliberate and Emergent*. Strategic Management Journal (6).
- Porter, M., 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*. NY: Free Press.
- Rifkin, J., 2001. *The Age of Access: The New Culture of Hypercapitalism*. Tarcher.
- Rylander, A., 2009. *Design Thinking as Knowledge Work*. DMI Journal, 4 (1).
- Senge, P., 2005. *Presence: Exploring Profound Change in People, Organizations and Society*. Boston: Nicholas Brealey.
- Sennett, R., 2007. *The Culture of the New Capitalism*. USA: Yale University Press.
- Wolf, B. Prof. Dr., 2008. *Attitude is Essential: Brand, Reputation and Design Management in Small to Medium Enterprises*. Hogeschool Inholland.







