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*Gjoko Muratovski has laid out a comprehensive framework for the changing role of design and its ability to create value and drive change. Muratovski delivers a compelling story on the rise of design as a strategy for growth—a must-read for you, your team and your company. With numerous inspirational examples from multinationals to startups and from the worlds of consulting, venture capital and sustainability, *Paradigm Shift*, should be mandatory reading for your entire team.*

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## **Paradigm Shift: Report on the New Role of Design in Business and Society**

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### **Abstract**

As leading businesses and global organizations started gaining new understanding of the value of design, their internal culture and attitude towards design began to change. Financial companies and management consultancies that have never before been associated with design are now creating their in-house design teams and including design in their portfolio of services. Large corporations that in the past used design in a limited capacity now rapidly increase their in-house design capabilities and appoint designers in executive roles. Venture capitalist firms and start-up companies also started recognizing the value that designers can bring to the business development stages of their investments. Even global organizations and international foundations started placing design on their agendas. All of this is causing a paradigm shift in the field of design. This study examines some of the latest corporate investments in design and reflects on what this means for the field of design. The focus of this study is on the key trend indicators that are defining the current landscape of design and its role in business and society.

### **Keywords**

Design, Business, Society, New Trends, UX, UI, Design Thinking, Human-Centered Design, Evidence-Based Design

## Paradigm Shift: Report on the New Role of Design in Business and Society

### Introduction

While reflecting on the newly found influence that design exhibits today, an article in the leading design magazine *Creative Review* rightfully points that ‘it’s great time for design’.<sup>1</sup> Design has never been more valued as an economic force or has been as culturally influential as it is now. All types of organizations, including once-conservative management consultancies, financial organizations and banks, started adopting ‘design thinking’<sup>2</sup> as their guiding principle and are now building their internal design competencies.<sup>3</sup>

In the course of over 175 years, the field of design has always followed the developments in business, technology and culture. The fields’ adaptability to a continuously evolving environment is what makes it relevant in times of change. In return, this ongoing relevance of design to business and to the wider community helped to elevate the role and the status of the designers in society today.

The education sector further supports the field by continuously developing and introducing new design schools around the world who offer study programs at all levels – from technical certificates to PhD’s. As a result, this has contributed significantly towards the rise of the most widespread creative profession today - the designer.<sup>4</sup> In return, design has become so popular, that according to some accounts, there are at least 2.1 million designers currently in training in China alone.<sup>5</sup>

### *Design-led innovation*

Design and business are intrinsically linked together. Contemporary design emerged out of the needs of the industrial economy in the mid-nineteenth century and design and business have been connected ever since. Early designers came from many backgrounds and they were introduced to the profession

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<sup>1</sup> John Rousseau, “The Case for Design Consulting,” *Creative Review* (blog), January 12, 2015 (9:49 a.m.), accessed June 21, 2015, <http://www.creativereview.co.uk/cr-blog/2015/january/case-for-design-consulting>.

<sup>2</sup> Even though the concept of design thinking is now a broadly accepted term, there is still a level of vagueness associated with it and many people (including many designers) may struggle explaining what this is and what this involves. The confusion comes mainly because different design disciplines use different methodologies and because of that there is no one universal way on how to ‘think’ like a ‘designer’. However, one the most commonly referred definitions on design thinking is the one by Tim Brown, the President & Chief Executive Officer at IDEO: “Design thinking is a human-centered approach to innovation that draws from the designer’s toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success.” Tim Brown, “Our Approach: Design Thinking,” *IDEO*, accessed September 3, 2015, <http://www.ideo.com/about/>.

<sup>3</sup> John Rousseau, “The Case for Design Consulting,” *Creative Review* (blog), January 12, 2015 (9:49 a.m.), accessed June 21, 2015, <http://www.creativereview.co.uk/cr-blog/2015/january/case-for-design-consulting>.

<sup>4</sup> *XXIT. The Concept: 21<sup>st</sup> Century. Design After Design* (Milan: XXI Triennale International Exhibition, 2016), exhibition catalog.

<sup>5</sup> Cees de Bont, “Lessons from China: A Paradise or Graveyard for Designers” (keynote address presented at the 2015 International Research Conference *Design for Business*, Melbourne International Design Week, Melbourne, Australia, May 12-13, 2015).

because of their ability to contribute artistically or constructively to the industry's needs for the development of products and advertising communications. Over time, as business models began to evolve, the field of design evolved as well. Designers moved from being stylists, to becoming professional 'problem solvers'.<sup>6</sup>

With time, for many leading businesses, simply developing goods and services was no longer seen as enough in a highly competitive global market. As a result, the new stage of business innovation was focused on creating experiences and developing systems for living, working and entertaining. This called for new currents of thinking that would challenge existing business models by using an approach, which is now referred to as 'disruptive innovation' - an innovation that can transform and revolutionize an existing market, product or a sector, by replacing complexity and high cost with simplicity, convenience, accessibility, and affordability.<sup>7</sup> In their pursuit for disruptive innovation, many businesses started looking at the process of design as a source of inspiration. After several successful design-led innovations (e.g. Apple's iPhone and Nintendo's Wii game console), design quickly emerged on the top of the corporate agenda - but with one crucial point of difference: design is now seen as a field of thinking, rather than making.<sup>8</sup>

#### *The changing landscape of design*

In the late twentieth and early twenty-first century, new economic developments have changed the concentration of the design capital, and subsequently the dynamics of the profession as well. The world was divided into one part that designs (the West) and the other that manufactures (the East). Under the pressure of increased international competition, entire production systems were dismantled and outsourced to companies in the Far East. Centralized production for a global market also meant that goods that were once distinctive are now 'standardized' to be better suited for the taste of the mass market. While this is economically beneficial for large manufacturing conglomerates, we have witnessed a number of ecological and social disadvantages associated with this business model. For emerging economies with new manufacturing capabilities, the lack of regulations and general disregard for environmental issues have caused alarming levels of pollution and waste. For established economies, the loss of their production capacity turned them into consumerist societies. In addition to this, the collapse of the American and European financial systems brought further into question the previous division of roles and labor. Yet, at the same time, all of these changes have enabled design-led innovation to grow and evolve further.<sup>9</sup> As a result, in the past decade we have witnessed an increase in

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<sup>6</sup> Gjoko Muratovski, "In Pursuit of New Knowledge: A Need for a Shift From Multidisciplinary to Transdisciplinary Model of Doctoral Design Education and Research," in Proceedings of the 2011 Doctoral Education in Design Conference (Hong Kong Polytechnic University, Hong Kong, China, 2011), 1. Available at <http://www.sd.polyu.edu.hk/DocEduDesign2011/proceeding.php>.

<sup>7</sup> Clayton M. Christensen, *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*, (Boston, MA: Harvard Business School Press, 1997).

<sup>8</sup> Gjoko Muratovski, "Design and Design Research: The Conflicts Between the Principles in Design Education and Practices in Industry," *Design Principles and Practices: An International Journal* 4, no. 2 (2010): 377-386.

<sup>9</sup> *XXIT. The Concept: 21<sup>st</sup> Century. Design After Design* (Milan: XXI Triennale International Exhibition, 2016), exhibition catalog.

independent design thinking consultancies, followed by a newly found interest in establishing corporate in-house design teams.<sup>10</sup>

### *The rise of the corporate designer*

With manufacturing largely moving to the East, and with the West moving to a knowledge economy model focused on services and technology development, many product designers found themselves in a situation where they had to reinvent themselves and apply their skills in other industries in order to remain relevant. The concept of design thinking, which is now widely accepted in a range of business and social contexts, derived precisely out of this economic shift. A design methodology, once used for designing products, is now used for designing systems, processes, services, digital interfaces, entertainment, communications and other kinds of human-centered activities. In return, some product design firms have repositioned themselves as design and innovation consultancies – with IDEO being one of the leading examples of this trend.<sup>11</sup>

With the advancement of digital technologies, we have witnessed further changes in the design landscape. While in the past it was mainly manufacturers who had in-house design teams working on product design and development, now we are increasingly seeing a rise of many corporate in-house design teams working on service design and digital design. Prior to the emergence of the digital era, or even prior to the introduction of smartphones and social media, many companies were dependent on print publications or TV to communicate their message to their clients and the broader community. This was a time when corporate communication was a one-way form of communication. The content for this type of communication needed development quarterly, or in most cases, once a year. This meant that there was no need for designers working on these aspects of the work to be continuously employed by the company. Instead, they could be outsourced and contracted only when necessary. However, corporate communications today are different. For most people, the office building, the window displays, and the commercials are no longer the first thing they see when they choose to interact with a company. It is not even the company website that comes across as the first point of contact; it is the social media profile of the company followed by their digital interface as seen on a handheld device. With the Internet dominating our lives, businesses have no choice but to communicate in real time with their stakeholders, in a forum defined by ever-changing digital technologies. The rise of the corporate in-house design teams comes primarily out of this necessity.

### **Methodology**

This report is a case study that examines the role of design in business and society based on current trend indicators observed across a variety of sectors such as financial management companies, multinational corporations, venture capital enterprises, and global not-for-profit organizations. The research approach here can be labeled as phenomenon-oriented and is based on gathering and

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<sup>10</sup> Robert Fabricant, “The Rapidly Disappearing Business of Design,” *WIRED*, December 28, 2014, accessed June 15, 2015, <http://www.wired.com/2014/12/disappearing-business-of-design/>.

<sup>11</sup> Tim Brown, “Design Thinking,” *Harvard Business Review*, June 2008, 86.

analyzing documentary evidence.<sup>12</sup> The information gathered for this article has been obtained from public records and sources such as newspaper and magazine articles, interviews, corporate websites, press releases, personal blogs and social network profiles. The study has been narrowed down to include only highly prominent organizations and businesses, globally recognized by leading ranking lists, industry publications, and the general media. The reason behind this selection is that these enterprises and organizations are often perceived as being the leaders in their fields and as such they have the ability to influence or set global trends.

### **Design as a strategic business resource**

As design is increasingly being recognized as a strategic resource, the sphere of influence that designers' have in business and society is changing. What used to be a field dominated by an array of independent design studios and large design agencies is now increasingly becoming one that is corporatized and centralized. As big corporations started to see design as a critical corporate asset, they also began to understand that design is not something that should be delegated to third-party design firms on an on-going basis. The growing trend for integrating design into the overall corporate strategy, the need for confidentiality, and the concern of issues related to the ownership of the intellectual property, means that serious businesses can no longer outsource something that is seen as a strategic resource. That is why major businesses - including many of the Fortune 500 companies - started investing in their own design capabilities.<sup>13</sup>

At the same time, designers have also become increasingly entrepreneurial. More and more designers are now being involved with developing and growing businesses. This entrepreneurial spirit marks a new era for both design and business. From design of products, spaces and communications, designers have ventured into a new area - design of businesses. With the growing reputation of design as a catalyst for business innovation, designers are now also invited to take on executive roles. Jonathan Ive (Apple, Inc.), Mark Parker (Nike, Inc.), David Butler (The Coca-Cola Company), and Todd Simmons (IBM Corporation) are perhaps the most notable example of this emerging trend.

Starting from 1996, Ive has been responsible for leading an industrial design team at Apple. He progressed to Senior Vice President of Design by 2013, and in 2015 he was promoted to the newly created role of Chief Design Officer.<sup>14</sup> Parker began his career at Nike as a footwear designer in 1979

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<sup>12</sup> Jane Stokes, *How to Do Media and Cultural Studies*, 2nd ed. (London: SAGE Publications, 2013), 108-109.

<sup>13</sup> Thomas Lockwood, "Why Are Design Firms Stagnating?" *Fast Company Co.Design*, July 7, 2015, accessed July 13, 2015, <http://www.fastcodesign.com/3048192/why-are-design-firms-stagnating>.

<sup>14</sup> "Apple Press Info: Jonathan Ive," accessed July 13, 2015, <https://www.apple.com/nz/pr/bios/jonathan-ive.html>; Victor Luckerson, "Apple's Design Guru Just Got a Big Promotion," *Fortune*, May 25, 2015, accessed June 26, 2015, <http://fortune.com/2015/05/25/apple-jonathan-ive-tim-cook/>; Alex Hern, "Jony Ive Promoted to Chief Design Officer at Apple," *The Guardian*, May 26, 2015, accessed June 26, 2015, <http://www.theguardian.com/technology/2015/may/26/jony-ive-promoted-chief-design-officer-apple>.

and rose through the ranks to become the CEO of Nike in 2006.<sup>15</sup> In 2004, Butler joined Coca-Cola as Vice President of Global Design and in 2012 he took on a new role within the company as the Vice President of Innovation & Entrepreneurship.<sup>16</sup> Prior to taking the role of Vice President for Brand Experience & Design at IBM in 2014, Simmons was Principle & Head of Design at one of the leading international branding agencies - Wolff Olins.<sup>17</sup> And these are not isolated examples. Other corporations that have introduced designers as executives include companies such as Johnson & Johnson, PepsiCo, Philips Electronics NV, and more.<sup>18</sup>

#### *Apple, Inc.*

Apple, the world's most valuable company, went nearly bankrupt prior to embracing design as a driving philosophy in the late 1990s.<sup>19</sup> The launch of the iMac in 1998 was a defining point for the company. This was the first time when Apple used design instead of technology to startle the industry in which they were competing. The iMac was unlike anything else on the market at the time. Its bold colors, organic form, user-friendly set-up, and its compactness, enabled Apple to create a unique look that was never before seen in the computer industry. As a result, Apple sold 800,000 units in less than five months. In a reasonably short time afterwards they started dominating the personal computer market.<sup>20</sup> Since then, design-led innovation has become a part of Apple's success story. By using the same principles, they reinvented the way people listen to music; they changed the way we use our phones; they have launched new wearable technology - and it is now rumored that they are working on the development of both an electric and a driverless car.<sup>21</sup> According to *The Wall Street Journal*,

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<sup>15</sup> "Mark G. Parker: Executive Profile & Biography," accessed June 25, 2015,

<http://www.bloomberg.com/research/stocks/people/person.asp?personId=292013&ticker=NKE>.

<sup>16</sup> "David Butler," accessed June 25, 2015, <https://www.linkedin.com/in/davidbutlercocacola>.

<sup>17</sup> Robert Fabricant, "The Rapidly Disappearing Business of Design," *WIRED*, December 28, 2014, accessed June 15, 2015, <http://www.wired.com/2014/12/disappearing-business-of-design/>.

<sup>18</sup> Michelle Stuhl, "What is Behind the Rise of the Chief Design Officer?" *Forbes*, last modified November 11, 2014 (9:16 a.m.), accessed July 4, 2015,

<http://www.forbes.com/sites/grouptthink/2014/11/11/what-is-behind-the-rise-of-the-chief-design-officer/>.

<sup>19</sup> Philip Elmer-DeWitt, "How Steve Jobs Saved Apple," *Fortune*, August 25, 2011, accessed May 30, 2015, <http://fortune.com/2011/08/25/how-steve-jobs-saved-apple/>.

<sup>20</sup> "Remembering Steve Jobs, the Man Who Saved Apple," *MacWorld*, last modified October 5, 2011 (4:49 p.m.), accessed May 30, 2015,

<http://www.macworld.com/article/1162763/remembering-steve-jobs-the-man-who-saved-apple.html>

<sup>21</sup> Daisuke Wakabayashi and Mike Ramsey, "Apple Gears Up to Challenge Tesla in Electric Cars," *The Wall Street Journal*, February 13, 2015, accessed May 30, 2015, <http://www.wsj.com/articles/apples-titan-car-project-to-challenge-tesla-1423868072>; Tim Higgins, "Apple Wants to Start Producing Cars as Soon as 2020," *Bloomberg*, last modified February 21, 2015 (10:59 a.m.), accessed May 30, 2015, <http://www.bloomberg.com/news/articles/2015-02-19/apple-said-to-be-targeting-car-production-as-soon-as-2020?hootPostID=9f3917f4905f086a568d81c5d794101a>; Lisa Eadicicco, "New Details Leak about Apple's Secretive Electric Car Project," *Business Insider Australia*, last modified March 14, 2015 (12:56 a.m.), accessed May 30, 2015, <http://www.businessinsider.com.au/apple-electric-car-project-detail-2015-3>.

people who are familiar with the matter say that Apple have set a target shipping date for 2019 for their electric car.<sup>22</sup>

As one article in *Macworld* points out, without their lead designer - Jonathan Ive - Apple as the world knows it wouldn't exist. Ive was instrumental in establishing a 'signature look' for Apple's core device line up, and in his new role as a Chief Design Officer, he is expected to take design at Apple even further, such as focusing on "high-level, grand-scale design projects like Apple headquarters, and perhaps even a car".<sup>23</sup>

Steve Jobs, the Co-Founder & Chief Executive Officer of Apple, had a great respect for Ive. In an interview with Walter Isaacson, Jobs made the following comments:

The difference that Jony [Jonathan Ive] has made, not only at Apple but in the world, is huge. (...) He understands business concepts, marketing concepts. (...) He understands what we do at our core better than anyone. If I had a spiritual partner at Apple, it's Jony. Jony and I think up most of the products together (...) He gets the big picture as well as the most infinitesimal details about each product. And he understands that Apple is a product company. He's not just a designer. That's why he works directly for me. He has more operational power than anyone else at Apple except me.<sup>24</sup>

As it can be sensed from Jobs' statement, Ive is held in such a high regard at Apple not because he is a designer, but because he can think as a businessperson and an innovator. While Apple is often heralded for their designs, this also implies that their success doesn't rely on design alone. It relies on how well design is integrated within the company.

If you visit Apple's careers page and see the type of profiles they are hiring, you will see that for Apple, designers represent only one of the sixteen profiles that make their corporate team.<sup>25</sup> In their opening statement at the careers section they do not even explicitly mention design as being a part of the Apple 'dream':

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<sup>22</sup> Daisuke Wakabayashi, "Apple Targets Electric-Car Shipping Date for 2019," *The Wall Street Journal*, September 21, 2015, accessed September 24, 2015, <http://www.wsj.com/articles/apple-speeds-up-electric-car-work-1442857105>.

<sup>23</sup> Caitlin McGarry, "What Jony Ive's New Job Means for Apple Design," *MacWorld*, last modified May 26, 2015 (9:42 a.m.), accessed July 30, 2015, <http://www.macworld.com/article/2926556/what-jony-ives-new-job-means-for-apple-design.html>.

<sup>24</sup> Cited in Walter Isaacson, *Steve Jobs* (New York: Simon and Schuster, 2011), 342.

<sup>25</sup> Gjoko Muratovski, "The Role of Design in Business," in *Design for Business, Vol.3*, ed. Gjoko Muratovski (Bristol: Intellect Books / Chicago: University of Chicago Press, 2015), 12.

This is where we dream up what's next for Apple - from hardware to software to the customer experience that goes with it - and where we do everything necessary to make it happen.<sup>26</sup>

However, in the design jobs section there is a clearer description on the role that design plays at Apple:

Our products are known not only for their extraordinary technology but also for their outstanding design. In fact, design is in everything we do - from sleek hardware profiles to highly intuitive user interfaces to strong graphic standards. Composed of some of the smartest, most dedicated people on the planet, our world-class design teams ensure that all visual and tactile consumer experiences live up to the Apple standard of excellence.<sup>27</sup>

*Nike, Inc.*

Since Mark Parker became Chief Executive in 2006, according to *The Business of Fashion*, Nike's annual revenue is up by 60 percent, profits have increased by 57 percent, and its market cap has more than doubled. As they point out, Nike's success can be accredited to the way Parker embraced innovation and prioritized design.<sup>28</sup> This is also the reason why *Fast Company* named Parker as 'The World's Most Creative CEO' on the cover of their September 2010 issue.<sup>29</sup>

Even though Nike's design and innovation ethos is centered around enabling star athletes, its business model is built upon a sophisticated global marketing machine that sells aspiration and empowerment to masses of consumers around the world. The underlying sales message that Nike uses to do this is: "If you have a body, you are an athlete."<sup>30</sup> The notion of sport as a culture is something that is embedded in every aspect of their business – and this includes the way they approach design. If you visit Nike's Design Careers section on their website, you will come across the following statement:

The emotion of sport, insights from the world's greatest athletes and a relentless curiosity drive Nike designers to create products that push human potential. From the initial spark of an idea to the finished product, the diverse team of apparel, footwear and graphic designers, color experts, material designers and others in Nike Design help take innovative product from concept to commerce. And just as athletes pursue faster times, higher leaps and stronger swings, Nike designers persistently strive for ways to make better products for

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<sup>26</sup> "Jobs at Apple: Corporate," accessed April 28, 2014, <https://www.apple.com/jobs/us/index.html>.

<sup>27</sup> "Jobs at Apple: Design," accessed April 28, 2014, <https://www.apple.com/jobs/us/corporate.html#design>.

<sup>28</sup> Imran Amed, "Decoding Nike: Mark Parker, Chief Executive Officer, Nike," *The Business of Fashion*, September 29, 2014, accessed July 13, 2015, <http://www.businessoffashion.com/articles/ceo-talk/decoding-nike>.

<sup>29</sup> Ellen McGirt, "How Nike's CEO Shook Up the Shoe Industry," (cover title "The World's Most Creative CEO"), *Fast Company*, September 2010.

<sup>30</sup> Imran Amed, "Decoding Nike: Mark Parker, Chief Executive Officer, Nike," *The Business of Fashion*, September 29, 2014, accessed July 13, 2015, <http://www.businessoffashion.com/articles/ceo-talk/decoding-nike>.

consumers and the planet. They take risks. They sweat the details. They aim to design what people can't even imagine today.<sup>31</sup>

Nevertheless, according to Parker, design and business must work together. Parker's advice to designers is to avoid separating themselves from the business side of things, even when this may appear to be hard at times:

Try to avoid that feeling that it's an 'us and them' world. I do think that the power of design is amplified when it learns how to connect with the business side in a way that actually enables design to be executed at the highest level. Now that doesn't always happen. There are many situations where business might not be an enabler; it might be a detractor; it might be a hurdle. But the more that design can appreciate the power of combining creativity with the power of scaling a business, it will only empower design in the end. It will only help design achieve even more. It's convenient here at Nike because we've always embraced design, so it's easy for me to say and easy for us to embrace that. At many companies, that may not be the case.<sup>32</sup>

#### *The Coca-Cola Company*

The Coca-Cola Company owns 450 brands and operates in 200 countries. The company has 20,000 retailers selling 1.6 billion servings of Coke products per day. As a Vice President of Global Design, between 2004 and 2012, David Butler managed an in-house team of 50 designers and worked with some 300 agencies worldwide. The key challenge for Butler as a design executive was to develop a central design apparatus that is at once specific enough to operate on a global level and sufficiently flexible to be adapted to local conditions.<sup>33</sup>

When Butler joined the company in 2004, his mandate was to help the company "develop a vision, strategy and approach to ensure it was getting the most value out of design."<sup>34</sup> Despite the brand power Coca-Cola commanded, the company lacked a uniform design approach, which meant that the brand message was often disconnected when it came to delivering a complete experience to their customers. According to Butler:

All these little disconnects were starting to make the company's brands feel old and outdated when compared with other fast-moving customer brands like Apple and Nike. (...) As a

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<sup>31</sup> "Nike Design Careers," accessed July 13, 2015, <http://jobs.nike.com/careers/design-jobs>.

<sup>32</sup> Cited in Imran Amed, "Decoding Nike: Mark Parker, Chief Executive Officer, Nike," *The Business of Fashion*, September 29, 2014, accessed July 13, 2015, <http://www.businessoffashion.com/articles/ceo-talk/decoding-nike>.

<sup>33</sup> Linda Tischler, "Pop Artist: David Butler," *Fast Company*, September 10, 2009, accessed May 30, 2015, <http://www.fastcompany.com/570/masters-of-design/pop-artist-david-butler>.

<sup>34</sup> Andrew Cave, "How Coca-Cola Turned Its Ship Around," *Forbes*, last modified February 10, 2015, accessed May 30, 2015, <http://www.forbes.com/sites/andrewcave/2015/02/10/how-coca-cola-turned-its-ship-around-and-how-your-business-can-too/>.

company, Coca-Cola was designing at massive scale but a lot of the things weren't connected to each other. That made it very difficult to drive the company's growth strategy. The way Coca-Cola was actually designing was actually working against its own interests.<sup>35</sup>

In his pursuit for inspiration, Butler looked at other leading companies that used design strategically. He studied McDonald's for their organizational integration; Apple for their competitive advantage; Nike for their capacity to build reputation; and Volkswagen for their ability to create a 'cult-like' corporate culture. Over time he developed a systems-based approach to design that provided both the consistency to design at scale and the agility to quickly adapt to social, cultural or economic changes. He first started working in branding and communications, moved to packaging and equipment, then to retail experiences, and finally into the business operations which included the distribution system and the supply chain.<sup>36</sup>

What makes Butler different to a typical designer (in a classical sense) is his ability to integrate design at every level of the business, and to communicate the value that design adds in a way that business leaders can understand. Coca-Cola's Chief Marketing & Commercial Officer, Joe Tripodi makes a particular reference to this: "It's great that when David [Butler] speaks, he doesn't speak in the language of design. (...) [Instead, he says], here's what I'm going to do to help you sell more stuff."<sup>37</sup>

According to Butler, the word 'design' is not important to the top echelons of the company if it cannot show results at the point of sale. In corporate terms, if design cannot deliver more sales, than it has no value. "I read all the journals. I love design theory. I'm a junkie for that stuff. But that's at home," he says. "At work, I don't use the phrase 'design thinking'. Here, it's about creating more value. How do we sell more of something? How do we improve the experience to make more money and create a sustainable planet?"<sup>38</sup>

#### *IBM Corporation*

In 1973, the Chief Executive of IBM, Thomas J. Watson Jr. proudly declared, "good design is good business". Watson Jr. made this comment while reflecting on two decades of investment in creative talent by the company. Since the 1950s, IBM commissioned legendary designers and architects such as Eliot Noyes, Ludwig Mies van der Rohe, Eero Saarinen, Charles and Ray Eames, and Paul Rand to design their corporate headquarters, their promotional materials, their visual identity, and more.<sup>39</sup> Then, for a while, design was lost from their agenda and the company entered a downward spiral. Now, after

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<sup>35</sup> Cited *ibid*.

<sup>36</sup> Andrew Cave, "How Coca-Cola Turned Its Ship Around," *Forbes*, last modified February 10, 2015, accessed May 30, 2015, <http://www.forbes.com/sites/andrewcave/2015/02/10/how-coca-cola-turned-its-ship-around-and-how-your-business-can-too/>.

<sup>37</sup> Cited in Linda Tischler, "Pop Artist: David Butler," *Fast Company*, September 10, 2009, accessed May 30, 2015, <http://www.fastcompany.com/570/masters-of-design/pop-artist-david-butler>.

<sup>38</sup> Cited *ibid*.

<sup>39</sup> "From Features-first to User-first," accessed June 21, 2015, [http://www.ibm.com/smarterplanet/us/en/innovation\\_explanations/article/phil\\_gilbert.html](http://www.ibm.com/smarterplanet/us/en/innovation_explanations/article/phil_gilbert.html).

a period of stagnation, IBM has placed design back on the agenda. The company hired Todd Simmons as their Vice President for Brand Experience & Design and started building, to some accounts, the largest in-house design team in the world - consisting of over 1000 designers. Their current investment in this area is estimated at the vicinity of US\$100 million dollars.<sup>40</sup> Where IBM is heading, in terms of design, can be sensed from the statement made by their design team on their corporate webpage: “At IBM Design, we don’t just make great products. We painstakingly craft experiences that delight our users and shape the future.”<sup>41</sup>

### **Design and Business**

The examples above show that having design embedded into the corporate culture can certainly make a difference to the bottom line. That is why even well established, conservative financial businesses that have never before been associated with design are now building their own design teams and recruiting designers as executives. They do so in order to remain competitive in the marketplace by integrating design thinking capabilities within their organization, create better User Experiences (UX) for their clients, and develop better User Interfaces (UI) for their products. What is more, emerging financial businesses are also embedding strategic design in their operations and design of new business software is becoming more important than ever. In the following section I will present a range of business strategies by outlining their corporate design acquisitions and I by highlighting some of the perceived benefits that these businesses see in obtaining in-house design capabilities.

#### *Bloomberg L.P.*

Founded in 1982, Bloomberg L.P. is a company that provides business software, financial information, data analytics and insights to financial companies, business organizations, and government industries. They also deliver business and politics news through all forms of media and offer media services in areas such as advertising and content service.<sup>42</sup> The complexity and the amount of data Bloomberg L.P. aggregates and generates, requires new and innovative ways of analysis and dissemination. In order to improve the visual quality of the data and the experience of their clients, the company formed an in-house visual design team and they recruited Lisa Strausfeld – an award-winning information designer – to lead their design team.<sup>43</sup>

Strausfeld joined Bloomberg L.P. in 2012, first as Global Head of Data Visualization and then as Creative Director of Bloomberg View (the editorial division of Bloomberg News). She was

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<sup>40</sup> Robert Fabricant, “The Rapidly Disappearing Business of Design,” *WIRED*, December 28, 2014, accessed June 15, 2015, <http://www.wired.com/2014/12/disappearing-business-of-design/>; Mark Wilson, “IBM Invests \$100 Million to Expand Design Business,” *Fast Company Co.Design*, March 27, 2014, accessed June 21, 2015, <http://www.fastcodesign.com/3028271/ibm-invests-100-million-to-expand-design-business>.

<sup>41</sup> “IBM Design,” accessed July 10, 2015, <http://www.ibm.com/design/>.

<sup>42</sup> “Bloomberg L.P.: Private Company Information,” accessed July 12, 2015, <http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=160210>.

<sup>43</sup> Gjoko Muratovski, “A Conversation with Lisa Strausfeld,” (presented at the 2015 International Research Conference *Design for Business*, Melbourne International Design Week, Melbourne, Australia, May 12-13, 2015).

instrumental in building and leading Bloomberg's first data visualization and news infographics team, Bloomberg Visual Data, which is dedicated to creating a new genre of editorially driven interactive data products.

Prior to working at Bloomberg, she was a partner at the design firm Pentagram (2002 - 2011) where she built a practice around interactive design projects including the design of large-scale media installations, software prototypes and user interfaces, signage and websites.<sup>44</sup> Some of her other experience in this area includes working as a senior scientist and data visualization consultant at the Gallup Organization – the management consulting firm known for its public opinion polls.<sup>45</sup> She left Bloomberg L.P. in 2015 to start her own design studio, InformationArt.<sup>46</sup>

#### *PricewaterhouseCoopers (PwC)*

In 2010, the Australian branch of the business consultancy, PwC, acquired the boutique design firm The Difference in an attempt to diversify and expand their consultancy services. According to PwC, The Difference is a consultancy that specializes in working with public and private organizations on complex issues that involve and affect multiple stakeholders.<sup>47</sup> PwC describes their now in-house design team, The Difference, as “experts in the process of collaborative, creative problem solving.”<sup>48</sup> Their main role is to facilitate idea generation and decision-making sessions for clients in order to “explore ideas, develop solutions and capitalize on opportunities in unique and powerful ways.”<sup>49</sup>

The New Zealand branch of PwC acquired the UX design consultancy Optimal Experience in 2014 in order to grow the digital side of its consulting practice. New Zealand's Chief Executive Officer of PwC, Bruce Hassall, says:

Our acquisition of Optimal Experience places us in a unique position to offer customer experience and digital consulting services from strategy development right through to execution.

Digital is no longer just about technology, and instead, it has become shorthand for ‘the world has changed’. It has brought about a new mindset to doing business, bringing us closer

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<sup>44</sup> “Lisa Strausfeld [profile],” accessed July 13, 2015, <http://ideasondesign.net/speakers/speakers/lisa-strausfeld/>.

<sup>45</sup> Reena Jana, “The Relentless Lisa Strausfeld,” *Bloomberg*, last modified July 30, 2007, accessed July 13, 2015, <http://www.bloomberg.com/bw/stories/2007-07-30/the-relentless-lisa-strausfeldbusinessweek-business-news-stock-market-and-financial-advice>.

<sup>46</sup> Gjoko Muratovski, “A Conversation with Lisa Strausfeld,” (presented at the 2015 International Research Conference *Design for Business*, Melbourne International Design Week, Melbourne, Australia, May 12-13, 2015).

<sup>47</sup> “PwC History,” accessed May 31, 2015, <http://www.pwc.com.au/about-us/history.htm#PricewaterhouseCoopers>.

<sup>48</sup> “The Difference: Who We Are,” accessed May 31, 2015, <http://www.pwc.com.au/consulting/the-difference/who-we-are.htm>.

<sup>49</sup> Cited *ibid*.

to our customers to give more immediate, personalized and collaborative experiences. Digital is now how we live day-to-day.<sup>50</sup>

By venturing in this area, PwC - once a traditional business consultancy - have entered in direct competition with design studios and agencies that provide design thinking and digital design services. What is more, they are not the only ones in their sector that have chosen to go on this path.

#### *Deloitte*

In 2011, the financial, risk management, tax and auditing services consultancy, Deloitte, have acquired the Australian boutique design firm Aqua Media.<sup>51</sup> Shortly after, in 2012, they recruited the principal from the Australian design consultancy Second Road, Maureen Thurston, to lead their in-house design thinking team.<sup>52</sup>

According to *Business Review Weekly (BRW)*, Deloitte claims that several of their big auditing successes in 2011 and 2012 are a result of applying design thinking to their audit methodology.<sup>53</sup> The main benefit from utilizing design thinking in their industry, as Deloitte sees it, is changing the way financial services are experienced. According to their Chief Marketing Officer, David Redhill: “In commoditized markets, like audit and tax, experiences are increasingly the currency of differentiation.”<sup>54</sup>

Following this, Deloitte continued to invest in design and strategy capabilities. In January 2013 they acquired Monitor, one of the world’s leading strategy consulting firms, together with their design-led innovation unit - Doblin.<sup>55</sup> Doblin, now part of Deloitte Consulting LLP, has offices in London, Chicago, New York and Toronto, and is made up of a broad range of professionals, including design strategists, design researchers and design consultants who are interested in bringing “user-centered design to business in a rigorous, disciplined manner”.<sup>56</sup>

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<sup>50</sup> “PwC New Zealand Acquires User Experience Design Consultancy Optimal Experience,” last modified June 23, 2014, accessed May 31, 2015, <http://www.pwc.co.nz/news-releases/pwc-new-zealand-acquires-optimal-experience/>.

<sup>51</sup> Agnes King, “Creative Thinking Gives Deloitte an Edge,” *Business Review Weekly*, September 19, 2012, accessed May 30, 2015, [http://www.brw.com.au/p/national/creative\\_thinking\\_gives\\_deloitte\\_ai8Hkhio5u2XldJ40w53rI](http://www.brw.com.au/p/national/creative_thinking_gives_deloitte_ai8Hkhio5u2XldJ40w53rI).

<sup>52</sup> “FutureNow, Vol. 22,” page 1, last modified October 2014, accessed May 30, 2015, <http://www2.deloitte.com/content/dam/Deloitte/au/Documents/about-deloitte/deloitte-au-futurenow-report-october-2014.pdf>.

<sup>53</sup> Agnes King, “Creative Thinking Gives Deloitte an Edge,” *Business Review Weekly*, September 19, 2012, accessed May 30, 2015, [http://www.brw.com.au/p/national/creative\\_thinking\\_gives\\_deloitte\\_ai8Hkhio5u2XldJ40w53rI](http://www.brw.com.au/p/national/creative_thinking_gives_deloitte_ai8Hkhio5u2XldJ40w53rI).

<sup>54</sup> Cited *ibid*.

<sup>55</sup> “Deloitte Has Acquired Substantially All of the Business of Monitor, including Doblin,” accessed September 3, 2015, <http://news.doblin.com/post/40478187290/deloitte-has-acquired-substantially-all-of-the>.

<sup>56</sup> “Join the Doblin Team,” accessed September 3, 2015, <http://news.doblin.com/post/67791517231/join-the-doblin-team>.

Furthermore, in addition to making design thinking a part of their financial consultancy services, Deloitte now also has a branch called Deloitte Digital that acts as a full-service agency that offers digital design, strategy, social media and digital development services related to emerging technologies. Pioneered in Australia, Deloitte Digital now operates through 20 studios spread across the United States, Canada, Europe, Japan, India, South Africa, Southeast Asia and New Zealand. Their team includes creative designers, channel strategists, engineers, architects and product specialists.<sup>57</sup>

#### *Accenture*

The management and technology services consultancy, Accenture, are also represented in the digital design market through their branch Accenture Digital and their subdivision Accenture Interactive.<sup>58</sup> In order to expand its digital and marketing capabilities, in 2013 Accenture acquired Fjord, a global service design consultancy that specializes in creating wide-ranging digital experiences and services for consumers. With this acquisition, Accenture obtained expertise in developing new models of E-commerce and gained better ways to communicate and collaborate online. Now, with Fjord's expertise on board, they are also exploring new and innovative ways to manage their business across a range of digital platforms including smart devices, tablets and PCs. Brian Whipple, the Global Managing Director of Accenture Interactive, elaborates further on this:

Adding Fjord's mobility and design capabilities to the services provided by Accenture Interactive will allow us to deliver engaging and relevant customer experiences powered by scalable, industrialized marketing technology and operations. (...) In today's environment of digital disruption and heightened consumer expectations, the battle is for consumer engagement, and Accenture and Fjord together will offer a deep blend of skills and expertise to help clients deliver innovative experiences that bridge marketing, commerce and service.<sup>59</sup>

#### *Boston Consulting Group (BCG)*

Following the same corporate trend, in 2014, the management consultancy BCG acquired the design consultancy Strategic & Creative (S&C). S&C is now the founding team behind BCG's new branch that is called BCG Digital Ventures with initial offices in San Francisco, Seattle, Boston and London.<sup>60</sup> BCG describes their Digital Ventures outfit as "a digital innovation, product development, and commercialization firm."<sup>61</sup> According to their press release, their new firm's vision is the following:

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<sup>57</sup> "About Us," accessed June 26, 2015, <http://www.deloittedigital.com/au/about-us>.

<sup>58</sup> "Accenture Digital," accessed May 30, 2015, <http://www.accenture.com/us-en/digital/Pages/digital-index.aspx>.

<sup>59</sup> "Accenture Completes Acquisition of Fjord, Expanding Digital and Marketing Capabilities," last modified May 22, 2013, accessed May 30, 2015, <http://newsroom.accenture.com/news/accenture-completes-acquisition-of-fjord-expanding-digital-and-marketing-capabilities.htm>.

<sup>60</sup> "We are now BCG Digital Ventures," accessed May 30, 2015, <http://strategicandcreative.com/>.

<sup>61</sup> "The Boston Consulting Group Launches BCG Digital Ventures, a Digital Innovation, Product Development, and Commercialization Firm," last modified January 15, 2014, accessed June 26, 2015, <http://www.bcg.com/news/press/15jan2014-bcg-launches-digital-ventures.aspx>.

BCG Digital Ventures goes beyond providing consulting, design, and technology services to form strategic venture teams with its clients in order to rapidly develop, launch, and grow transformational digital products, platforms, and businesses.<sup>62</sup>

And according to a statement by the S&C design team, they plan to achieve this in the following way:

BCG Digital Ventures creates business, not just ideas. We re-imagine how people experience products and services, to disrupt and make markets, and create new sources of competitive advantage.<sup>63</sup>

#### *McKinsey & Company*

In 2013, according to *Fast Company*, the management consultancy McKinsey & Company approached Lunar, a mid-sized design firm with 75 people to discuss possible acquisition. During the negotiations stage, the two companies discussed possible partnership models, while testing their compatibility through few test projects. Finally, an arrangement was made in 2015 and Lunar joined McKinsey. As a part of their agreement, Lunar's four offices in San Francisco, Chicago, Munich, and Hong Kong will continue to operate as usual and serve their existing clients. In addition to this, Lunar will also take on McKinsey's client projects, be a part of McKinsey's consultation practices, and even help their clients build their own internal design practices.<sup>64</sup> Reflecting on the acquisition by McKinsey, Lunar's President John Edson says: "They are hoping to bring design forward to strategy, because it's such an essential tool to create competitive advantage these days."<sup>65</sup>

#### *Fidelity Investments*

Fidelity Investments - one of the world's largest providers of financial services with assets under administration of US\$4.7 trillion – are building their own in-house design team with over 200 people.<sup>66</sup> Over a number of years, Fidelity Investments have collaborated with Stanford University's d.School on building their design thinking capabilities. According to Sean Belka, Senior Vice President & Director

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<sup>62</sup> Ibid.

<sup>63</sup> "We are now BCG Digital Ventures," accessed May 30, 2015, <http://strategicandcreative.com/>.

<sup>64</sup> Mark Wilson, "McKinsey & Company Acquires Lunar, One of Silicon Valley's Oldest Design Firms," *Fast Company Co.Design*, May 14, 2015, accessed June 26, 2015, <http://www.fastcodesign.com/3046260/mckinsey-company-acquires-lunar-one-of-silicon-valleys-oldest-design-firms>; Kyle Vanhemert, "Consulting Giant McKinsey Buys itself a Top Design Firm," *WIRED*, May 14, 2015, accessed June 21, 2015, <http://www.wired.com/2015/05/consulting-giant-mckinsey-bought-top-design-firm/>.

<sup>65</sup> Cited in Mark Wilson, "McKinsey & Company Acquires Lunar, One of Silicon Valley's Oldest Design Firms," *Fast Company Co.Design*, May 14, 2015, accessed June 26, 2015, <http://www.fastcodesign.com/3046260/mckinsey-company-acquires-lunar-one-of-silicon-valleys-oldest-design-firms>.

<sup>66</sup> John Dix, "Driving innovation at Fidelity Investments: A Q&A with the Head of Fidelity Labs," *Network World*, last modified March 27, 2014 (10:37 a.m.), accessed May 15, 2015, <http://www.networkworld.com/article/2175601/wireless/driving-innovation-at-fidelity-investments.html>; Robert Fabricant, "The Rapidly Disappearing Business of Design," *WIRED*, December 28, 2014, accessed June 15, 2015, <http://www.wired.com/2014/12/disappearing-business-of-design/>.

of the Fidelity Center for Applied Technology, Fidelity Investments are interested in hiring designers that can understand consumer behavior and that are capable of co-designing solutions by iterating prototypes with their customers.<sup>67</sup> Their design thinking philosophy is better explained by Fidelity's Chief Customer Experience Officer, Frederick S. Leichter, in his article for the *Harvard Business Review*:

Design thinking is rooted in the principle that to design a great product or service, one must develop empathy for and deep insight into the customer's behaviors and needs. Teams spend time with customers from the beginning of the development process, asking questions, rapidly generating multiple ideas and testing them. The point is not to validate or prove an idea "right," but to get instant, unfiltered reaction. Design thinking promotes a culture of prototyping and a bias toward action. These "low resolution" prototypes can be as rough as a napkin sketch or a model built with pipe-cleaners. Some of the greatest design thinking successes begin with a concept that fails to resonate with customers, leading the team to ask why and to use that insight to generate new and better ideas.<sup>68</sup>

Development of an in-house creative team is not a new thing for Fidelity Investments. As early as 1987 they had an in-house communications and advertising agency capable of providing everything from media buying and planning, to creative advertising development in all types of media, branding, trade shows, sponsorships, and creative and media strategy development. According to their Executive Vice President & Chief Executive Officer, Jim Speros, having an in-house team allows Fidelity Investments to get things faster to the market and to have a greater control over the creative process. All of this comes with "tremendous cost savings" to Fidelity Investments, while at same time it allows them to attract and retain the top creative talent in-house.<sup>69</sup> At this stage Fidelity Investments are primarily looking at hiring designers who were either trained at the d.School or have a strong design thinking profile.<sup>70</sup>

### *Capital One*

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<sup>67</sup> John Dix, "Driving innovation at Fidelity Investments: A Q&A with the Head of Fidelity Labs," *Network World*, last modified March 27, 2014 (10:37 a.m.), accessed May 15, 2015, <http://www.networkworld.com/article/2175601/wireless/driving-innovation-at-fidelity-investments.html>.

<sup>68</sup> Frederick S. Leichter, "How Fidelity Used Design Thinking to Perfect Its Website," *Harvard Business Review*, May 9, 2011, accessed June 15, 2015, <https://hbr.org/2011/05/how-fidelity-used-design-think>.

<sup>69</sup> Cited in Jennifer Rooney, "'The Rise Of The In-House Agency': CMOs, Industry Respond To ANA Report," *Forbes*, last modified October 21, 2013 (3:57 p.m.), accessed June 15, 2015, <http://www.forbes.com/sites/jenniferrooney/2013/10/21/the-rise-of-the-in-house-agency-cmos-industry-respond-to-ana-report/>.

<sup>70</sup> John Dix, "Driving innovation at Fidelity Investments: A Q&A with the Head of Fidelity Labs," *Network World*, last modified March 27, 2014 (10:37 a.m.), accessed May 15, 2015, <http://www.networkworld.com/article/2175601/wireless/driving-innovation-at-fidelity-investments.html>.

In July 2014, the American retail bank and credit card issuer, Capital One, established an in-house design thinking studio in San Francisco and hired Dan Makoski - a designer formerly working for Google - as its new Vice President of Design.<sup>71</sup> Several months later they acquired the UX design consultancy Adaptive Path in order to expand their design capabilities further.<sup>72</sup>

According to *American Banker*, the hiring of Makoski and the acquisition of Adaptive Path is linked to Capital One's ambitions to become a digital banking leader. And this is only one of the several tech acquisitions the bank has made in recent years. This move underscores the growing importance of UX design in the banking sector - especially since bank customers now have an increasing number of options for obtaining financial products and services.<sup>73</sup> According to Tatiana Stead, the spokesperson for Capital One:

There are few spaces as ripe for technology-led disruption as how people relate to their money. (...) The acquisition of Adaptive Path is a logical next step for Capital One in focusing on delivering innovative, easy-to-use mobile and online tools and resources for our customers.<sup>74</sup>

### *Barclays*

The British multinational banking and financial services company, Barclays has also been building its in-house design capabilities. Their Head of Design, Rob Brown, developed the design team for Barclays from nine designers working solely in the retail business in November 2012, to 67 designers working globally in every business unit, across all disciplines by December 2013.<sup>75</sup> They also introduced the role of Chief Design & Digital Officer to which they appointed Derek White, who prior to this was their Chief Customer Experience Officer.<sup>76</sup> White has been involved in various strategic roles with Barclays since 2005 and has experience working in the financial sector since 1996. However, unlike most of the other design executives, White didn't come to this role from a traditional design background – neither in terms of education or professional background.<sup>77</sup> Nevertheless, his new

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<sup>71</sup> Dan Makoski, "Goodbye Google. Hello Capital One!" *Dan Makoski* (blog), July 2, 2014, accessed June 15, 2015, <http://blog.danmakoski.com/post/90544000810/goodbye-google-hello-capital-one>.

<sup>72</sup> Mary Wisniewski, "Capital One Seeks Creative Spark with Purchase of Design Firm," *American Banker*, last modified October 6, 2014 (2:45 p.m.), accessed June 15, 2015, [http://www.americanbanker.com/issues/179\\_193/capital-one-seeks-creative-spark-with-purchase-of-design-firm-1070379-1.html](http://www.americanbanker.com/issues/179_193/capital-one-seeks-creative-spark-with-purchase-of-design-firm-1070379-1.html); Mat Honan, "Adaptive Path and the Death Rattle of the Web 2.0 Era," *WIRED*, October 3, 2014, accessed June 15, 2015, <http://www.wired.com/2014/10/adaptive-path-end-of-the-web-2-0-era/>.

<sup>73</sup> Mary Wisniewski, "Capital One Seeks Creative Spark with Purchase of Design Firm," *American Banker*, last modified October 6, 2014 (2:45 p.m.), accessed June 15, 2015, [http://www.americanbanker.com/issues/179\\_193/capital-one-seeks-creative-spark-with-purchase-of-design-firm-1070379-1.html](http://www.americanbanker.com/issues/179_193/capital-one-seeks-creative-spark-with-purchase-of-design-firm-1070379-1.html).

<sup>74</sup> Cited *ibid*.

<sup>75</sup> "Rob Brown: Head of Design at Barclays," accessed June 21, 2015, <http://designauthority.org/advocates/rob-brown/>.

<sup>76</sup> "Design Case: Barclays," accessed July 8, 2015, <http://www.thecreativeindustries.co.uk/industries/design/design-case-studies/design-case-barclays>.

<sup>77</sup> "Derek White," accessed July 8, 2015, <https://www.linkedin.com/pub/derek-white/b/25a/998>.

role signifies that Barclays are serious about their intentions of positioning themselves as a design-led business focused on customer experience. What is more, in addition to this, Barclays are also adapting entrepreneurship as their guiding principle. According to White:

The thing that sets Barclays apart at the moment is, all the way to the top, to the CEO, [people are] embracing the entrepreneur start-up approach in which design plays a fundamental role. Such support is demonstrated through active engagement in projects.<sup>78</sup>

### *Xero*

A particularly notable example of a design-led startup that became a successful business enterprise is Xero - an accounting software and online bookkeeping company founded in 2006 in New Zealand. In the case of Xero, design has proven to be not only a powerful market differentiator, but also a catalyst for business innovation. They were so successful with their new business concept that in 2015, *Forbes* listed them as the No.1 'Most Innovative Growth Company in the World'.<sup>79</sup> According to Philip Fierlinger, Xero's Co-Founder & Head of Design, this is what sets Xero apart as a company:

Xero is not a software company, but a UX company. (...) In contrast, our competitors try to solve problems by giving people more software and technology, which ends up making the experience more frustrating and confusing. (...) [T]he key to great design is not about making software look pretty but getting the technology and software out of the way as fast as possible.<sup>80</sup>

### *Facebook, Inc.*

Developing well-designed business software is not only a priority of financial companies such as Xero. Facebook are also interested in designing business UX solutions. They also work on developing their social network platform to be better aligned with business interests. This is why in 2012 they hired Margaret Stewart to lead their Business Design team as Director of Product Design.<sup>81</sup> In order to build their in-house design capabilities further, Facebook acquired the design agency Hot Studio, the software design company Sofa, and the user-centered design firm Bolt | Peters.<sup>82</sup>

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<sup>78</sup> Cited in "Design Case: Barclays," accessed July 8, 2015,

<http://www.thecreativeindustries.co.uk/industries/design/design-case-studies/design-case-barclays>.

<sup>79</sup> "The World's Most Innovative Growth Companies List, 2015 Ranking," accessed May 30, 2015, <http://www.forbes.com/growth-companies/list/>.

<sup>80</sup> Cited in "Take a Peak inside Design at Xero," *Xero* (blog), 2014, accessed May 30, 2015, <http://www.xero.com/blog/2014/05/look-inside-design-xero/>.

<sup>81</sup> Margaret G. Stewart, "What My Grandfather's Drill Can Teach Us About Designing Business Software," *Fountly* by Margaret Gould Stewart (blog), April 21, 2015, accessed July 8, 2015, <http://www.fountly.com/musings/2015/4/21/what-my-grandfathers-drill-can-teach-us-about-designing-business-software>.

<sup>82</sup> Jackie Cohen, "Facebook Acquires Sofa Design Team, Not Its Products," *AdWeek: Social Times* (blog), June 10, 2011 (12:15 p.m.), accessed June 21, 2015, <http://www.adweek.com/socialtimes/facebook-acquires-sofa-design-team-not-its-products/349713>; "About B|P," accessed June 21, 2015, <http://boltpeters.com/>; Robert Fabricant, "The Rapidly

Reflecting on their design acquisitions, Stewart states that Facebook acquires designers that can “(...) build amazing tools that help the brands and businesses that use Facebook.”<sup>83</sup> In her personal blog, Stewart expands further on the issues that need addressing in business software design:

Unlike widely popular consumer products like Facebook, Instagram, YouTube, and Google, only a small percentage of the human population ever use business software, yet their use affects nearly everyone’s lives. They are used to manage budgets and human resources, procure goods and manage the bidding of contracts, transport goods and services, track the progress of students and patients, and help businesses plan and run marketing campaigns to connect their businesses, brands, products, and services to people around the world. Given the impact of these tools on our lives, it is all the more concerning that they are often very difficult to use.

It’s easy to assume that the experience of using these products is bad because there aren’t good designers working on them, but this is not necessarily the case. There are often passionate, talented designers who want to launch great products just as much as those working in consumer-oriented industries. Unfortunately, many things conspire to deliver poor user experiences.

Sometimes the companies developing business software are insufficiently staffed with design resources. Sometimes they don’t conduct enough user research to truly internalize the needs of their core users. Sometimes they have legacy backend systems that make it incredibly difficult to improve the UI, even in obvious ways. And sometimes the leadership in these companies has not adopted a design-led philosophy that prioritizes end-user experience. These influential but poorly designed products live in the shadows, where design quality is often not an imperative. Consequently, they can be bloated with features, suffer from complex and inefficient navigation, and fail to support core use cases. The resulting experiences are too often inefficient, ineffective, and disempowering.<sup>84</sup>

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Disappearing Business of Design,” *WIRED*, December 28, 2014, accessed June 15, 2015, <http://www.wired.com/2014/12/disappearing-business-of-design/>.

<sup>83</sup> “Welcoming the Talented Team Behind Hot Studio,” last modified March 14, 2013 (12:59 p.m.), accessed June 21, 2015, <https://www.facebook.com/notes/facebook-design/welcoming-the-talented-team-behind-hot-studio/10151320205982793>.

<sup>84</sup> Margaret G. Stewart, “What My Grandfather’s Drill Can Teach Us About Designing Business Software,” *Fountly* by Margaret Gould Stewart (blog), April 21, 2015, accessed July 8, 2015, <http://www.fountly.com/musings/2015/4/21/what-my-grandfathers-drill-can-teach-us-about-designing-business-software>.

Prior to joining Facebook, Stewart managed the UX Team for YouTube, where she oversaw the largest redesign in the company's history. She came to YouTube after two years leading Search & Consumer Products UX at Google.<sup>85</sup>

### **Design Entrepreneurship**

The corporate sector is not the only domain where we can see the trend of 'designers as business leaders' emerging. This trend is increasingly gaining a momentum within the startup sector as well - especially with businesses dealing with digital technologies. The value that designers add to emerging businesses is evident by the fact that in the period between 2010 and 2015, at least 27 digital startups co-founded by designers have been acquired by leading tech companies. This includes social media startups such as AirBnB, Snapchat, Behance, Tumblr and Instagram.<sup>86</sup> This trend has positive outcomes for designers in two ways: (1) venture capital companies now actively engage designers as partners or consultants to help them grow their investments, and (2) startup companies are now willing to trade a part of their equity for access to design services.<sup>87</sup> Compared to engineers, designers are now hired by tech startups at the rate of 1 to 4. In the past this ratio was close to 1 to 15 or even 1 to 30.<sup>88</sup> This means more opportunities for designers who operate on the intersection of design, business and technology.

#### *Google Ventures*

Google Ventures – the venture capital arm of Google, Inc. - was launched in 2009. The enterprise operates independently of Google and provides venture capital funding to more than 300 companies, including Uber, Nest, Slack, Foundation Medicine, Flatiron Health, and One Medical Group. According to their corporate website, Google Ventures provides these companies with “unparalleled support in design, engineering, recruiting, marketing, and more.”<sup>89</sup>

Google Ventures introduced the position of Design Partner and they enlisted the product designer Braden Kowitz to the job. Prior to joining Google Ventures, Kowitz led design for several Google Products, including Gmail, Google Apps for Business, Google Spreadsheets, and Google Trends.<sup>90</sup> In his article for *Fast Company*, Kowitz reflects on what kind of designers tech startup companies should be recruiting in their teams. He lists the following skills as being the most critical in a successful design team: customer and user research, copywriting, product design, interaction design, visual design, and UI development. However, finding a single designer that has all of these skills is impossible, says

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<sup>85</sup> “Margaret Gould Stewart [profile],” accessed July 8, 2015,

[https://www.ted.com/speakers/margaret\\_stewart](https://www.ted.com/speakers/margaret_stewart).

<sup>86</sup> John Maeda, “Design in Tech Report 2015,” *Kleiner Perkins Caufield & Byers*, last modified March 15, 2015, accessed June 21, 2015, <http://www.kpcb.com/blog/design-in-tech-report-2015>.

<sup>87</sup> Robert Fabricant, “The Rapidly Disappearing Business of Design,” *WIRED*, December 28, 2014, accessed June 15, 2015, <http://www.wired.com/2014/12/disappearing-business-of-design/>.

<sup>88</sup> John Brownlee, “4 Reasons Why Design Is Taking Over Silicon Valley,” *Fast Company Co.Design*, March 17, 2015, accessed June 21, 2015, <http://www.fastcodesign.com/3043740/4-reasons-why-design-is-taking-over-silicon-valley>.

<sup>89</sup> “About Google Ventures,” accessed July 4, 2015, <https://www.gv.com/about>.

<sup>90</sup> “Braden Kowitz: Design Partner,” accessed June 21, 2015, <https://www.gv.com/team/braden-kowitz>.

Kowitz. That is why startups need to be looking at forming design and engineering teams that can bring these skills together. Also, Kowitz points out that the field of a UX is not clearly defined yet and UX designers they can come from many backgrounds:

The field of UX design is still young. And because it has grown so fast, practitioners have largely immigrated from neighboring fields. A given designer's background might be rooted in ethnography, journalism, art, cognitive psychology, engineering, or other disciplines. You might find one designer who can illustrate with ease, while another can barely manage a stick figure, but both are competent UX designers. The same dramatic differences can be found in any number of other skill areas. The group of people who call themselves "designers" is remarkably diverse.<sup>91</sup>

### *Khosla Ventures*

The venture capital firm, Khosla Ventures, focuses their investments on next-generation energy projects, new materials, mobility, the Internet and silicon technology. Unlike some other companies, they do not plan to create their own in-house design team. Instead, they have hired a design executive to work with their portfolio of startup companies and help them become self-sustainable and scalable in the future.<sup>92</sup> In 2014, Khosla Ventures hired Irene Au as a Design Operating Partner. Prior to this, Au, amongst other roles, held several positions at Yahoo - including Vice President of UX, followed by the post of Head of UX at Google. Upon joining Khosla Ventures, Au posted the following statement on her personal website:

As part of my new role, I will help portfolio companies build design-centric organizations, recruit the world's best design talent, and lead them through a process towards great design. Helping companies create well-designed products and services goes deeper than people and process; design is a manifestation of the company's vision, values, strategy, scope, and ability to execute—to that end I expect to work with founders and CEOs on all of these challenges.

As a design leader at Google, Yahoo!, Udacity, and Netscape, I've initiated, developed to scale, and managed some of the largest design organizations at world class technology companies. I've worked with the most senior executives at these companies to create conditions that result in well-designed experiences. I'm eager to share what I can offer toward new endeavors and the startup community.

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<sup>91</sup> Braden Kowitz, "From Google Ventures: How to Hire the Best Designer for Your Team," *Fast Company Co.Design*, July 29, 2013, accessed July 11, 2015, <http://www.fastcodesign.com/1673110/what-to-look-for-when-hiring-a-designer>.

<sup>92</sup> "Irene Au," accessed June 21, 2015, <http://www.khoslaventures.com/team/irene-au>; Ryan Lawler, "Former Google and Yahoo UX Lead Irene Au Joins Khosla Ventures as Design Operating Partner," *TechCrunch*, last modified April 22, 2014, accessed July 4, 2015, <http://techcrunch.com/2014/04/22/irene-au-khosla-ventures/>.

I am especially excited to join Khosla Ventures for several reasons. Vinod [Khosla – the founder of Khosla Ventures] has assembled a team with deep operating experience. Second, Khosla Ventures aims to invest in solving problems that matter, as reflected by the diverse companies in its portfolio. Third, Vinod and the broader team care deeply about design. Beyond being a competitive advantage for startups or a marketable service for potential portfolio companies, we simply want to see better design in the world, and we recognize that design needs an advocate and advisor at the highest levels of the company for it to be successful.<sup>93</sup>

### *Coca-Cola Founders*

With David Butler in the role of Vice President of Innovation & Entrepreneurship, The Coca-Cola Company is also exploring design-led venture capital opportunities. In 2013, soon after he took over the post, Butler introduced Coca-Cola Founders - a new venturing platform designed to create seed-stage startups by opening up Coca-Cola's assets to a global network of proven founders. The strategy behind this platform is the following: Coca-Cola first identifies particular problems or opportunities within their core business, and then they outsource the task of dealing with these things to brand new or emerging startups. They explore everything from new models of supply and delivery in emerging economies, to new mobile networks that can allow them to communicate better with tech-savvy teenagers. Once a startup team validates its business model and is ready to scale, Coca-Cola converts its investment to a minority equity share based on market valuation.<sup>94</sup> This is a platform that enables Coca-Cola to leverage its assets through new technologies and business models in order to co-create high-growth startups and reach their own market targets. According to Butler, Coca-Cola's goal is "to create new startups, rather than find existing startups to invest in". In line with this, he adds the following:

We invest in people first and ideas second. We give founders the time and attention required to truly validate a problem, design the best solution, identify the right market and find a business model to create a sustainable company.<sup>95</sup>

### **Design for Social Innovation and Sustainability**

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<sup>93</sup> Irene Au, "I'm Joining Khosla Ventures!" *Irene Au* (blog), April 22, 2014 (2:33 a.m.), accessed July 11, 2015, <http://ireneau.com/2014/04/22/im-joining-khosla-ventures/>.

<sup>94</sup> Jay Moye, "Creating a Win-Win: Inside Coke's New Startup Model," *The Coca-Cola Company*, last modified October 16, 2014, accessed May 30, 2015, <http://www.coca-colacompany.com/stories/creating-a-win-win-inside-cokes-new-startup-model>; David Butler, "Design to Grow, from Startups to Scale-ups" (presentation at *Better by Design* CEO Summit, Auckland, New Zealand, March 10-11, 2015). Recording available at <http://www.betterbydesign.org.nz/learning-experiences/ceo-summit/ceo-summit-2015/> and <https://www.youtube.com/watch?v=Bdt42Nf6Yrw#t=1235>

<sup>95</sup> Cited in Jay Moye, "Creating a Win-Win: Inside Coke's New Startup Model," *The Coca-Cola Company*, last modified October 16, 2014, accessed May 30, 2015, <http://www.coca-colacompany.com/stories/creating-a-win-win-inside-cokes-new-startup-model>.

The role of design as a strategic resource goes beyond the corporate sector. Contemporary problems associated with globalization, terrorism, epidemics, overpopulation, environmental issues, multiculturalism and financial stability demand new solutions and unconventional approaches, and design is increasingly being seen as an agent of positive change.<sup>96</sup> Some of the most influential global organizations such as the United Nations and the World Bank, and leading foundations such as the Rockefeller Foundation, Bill & Melinda Gates Foundation, and the Clinton Foundation are already placing design in the context of global politics. As the summaries below will show, these organizations are using design in the context of social innovation, sustainability and international development.

#### *United Nations (UN)*

Founded in 1945, the UN is an international organization with 193 member states.<sup>97</sup> In 2010, UN's Institute for Disarmament Research (UNIDIR) brought design into the UN system by co-hosting the Conference on Strategic Design and Public Policy (9-11 June 2010) together with the University of Washington and the University of Oxford. The event was initiated by the Security Needs Assessment Protocol (SNAP) project team at UNIDIR, lead by Derek B. Miller and Lisa Rudnick. SNAP was envisioned as an innovation project, aimed at building the first program design service within the UN for the benefit of peace, security and development field activities.<sup>98</sup> One area where this was applied by UNIDIR is in the area of reintegration of ex-combatants into the society by helping them acquire civilian status and sustainable employment and income.<sup>99</sup>

The approach that UN takes towards problem resolution is 'evidence-based'. Evidence-based programming is an approach that many organizations, both within and outside UN see as a guiding principle. This way of working is regularly applied in fields such as transportation, education, and public health, because this approach allows for greater accountability, transparency and effectiveness –

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<sup>96</sup> Gjoko Muratovski, "Design and Design Research: The Conflicts Between the Principles in Design Education and Practices in Industry," *Design Principles and Practices: An International Journal* 4, no. 2 (2010): 378.

<sup>97</sup> "About the UN," accessed July 13, 2015, <http://www.un.org/en/about-un/index.html>.

<sup>98</sup> United Nations Institute for Disarmament Research, Center for Local Strategies Research, University of Washington, and Saïd Business School, University of Oxford. Conference Report: The Glen Cove Conference on Strategic Design and Public Policy, prepared by Derek B. Miller et al. (UNIDIR, University of Washington, and University of Oxford, August 3, 2010), accessed July 25, 2015, [https://www.academia.edu/832839/Strategic\\_Design\\_and\\_Public\\_Policy\\_-\\_Conference\\_Report](https://www.academia.edu/832839/Strategic_Design_and_Public_Policy_-_Conference_Report).

<sup>99</sup> United Nations Institute for Disarmament Research, a Framework Document for Evidence-Based Programme Design on Reintegration, prepared by Derek B. Miller and Lisa Rudnick (United Nations, 2012), accessed July 25, 2015, <http://www.unidir.org/files/publications/pdfs/a-framework-document-for-evidence-based-programme-design-on-reintegration-396.pdf>; United Nations Institute for Disarmament Research, a Prototype for Evidence-Based Programme Design for Reintegration, prepared by Derek B. Miller and Lisa Rudnick (United Nations, 2014): 3, accessed July 25, 2015, [https://www.academia.edu/7456216/A\\_Prototype\\_for\\_Evidence-Based\\_Programme\\_Design\\_for\\_Reintegration](https://www.academia.edu/7456216/A_Prototype_for_Evidence-Based_Programme_Design_for_Reintegration).

especially in the public sector.<sup>100</sup> That is why UN applies the same principle when it comes to design-based solutions. According to an UNIDIR framework document:

The role of evidence in this approach, then, is not to demonstrate the impact of past action. Rather, it is to create, evaluate and defend claims, either for or against, the relative value of proposed future actions with a view to creating effective programming for local contexts. In simpler language, it helps answer the question, “What makes us think this is a good idea?” While the language may be simple, the question is extremely serious.<sup>101</sup>

In addition to maintaining international peace and stability, protecting human rights, upholding international law and delivering humanitarian aid, the UN are also committed to promoting sustainable development. In line with this, they see design as an important factor that could contribute to the implementation of sustainable business practices. As a part of these efforts, UN through their Environment Programme (UNEP) are advocating for design for sustainability that could lead towards a Green Economy - “economy [...] whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.”<sup>102</sup> Their strategy is not to coerce businesses and industry to apply sustainable production practices, but to promote the benefits that sustainably can provide to them. These benefits, according to UNEP, include things such as improved corporate reputation, better profit margins, more efficient production capabilities, and new market opportunities.<sup>103</sup>

Also, it is worth noting that as a part of their sustainable design initiatives, UNEP are also endorsing the DESIS Network (Design for Social Innovation towards Sustainability). DESIS is a network of design labs, based in design schools and design-oriented universities from around the world that are actively involved in promoting and supporting sustainable change. The DESIS Network uses design thinking and design knowledge to develop socially relevant scenarios, solutions and communication programs that support everything from sustainable food production to sustainable ways of living.<sup>104</sup>

*The World Bank*

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<sup>100</sup> United Nations Institute for Disarmament Research, a Framework Document for Evidence-Based Programme Design on Reintegration, prepared by Derek B. Miller and Lisa Rudnick (United Nations, 2012): 12, accessed July 25, 2015, <http://www.unidir.org/files/publications/pdfs/a-framework-document-for-evidence-based-programme-design-on-reintegration-396.pdf>.

<sup>101</sup> Ibid: 16.

<sup>102</sup> “Green Economy: About GEI,” accessed June 25, 2015, <http://www.unep.org/greeneconomy/AboutGEI/WhatIsGEI/tabid/29784/Default.aspx>.

<sup>103</sup> “Working with Business & Industry,” accessed June 25, 2015, <http://www.unep.org/resourceefficiency/Business/WorkingwithBusinessIndustry/tabid/129577/Default.aspx>; “Design for Sustainability,” accessed June 25, 2015, <http://www.unep.org/resourceefficiency/Business/SustainableProducts/DesignforSustainability/tabid/78845/Default.aspx>.

<sup>104</sup> “About Us,” accessed June 25, 2015, <http://www.desis-network.org/content/about-us>.

The World Bank is an international financing organization made up of 188 member countries. They are a vital source of financial and technical assistance to developing countries around the world. Their main goals are reducing poverty and supporting development by providing low-interest loans, zero-to-low interest credits, and grants to developing countries. These funds support a number of investments in areas ranging from health and education, to agriculture and natural resource management. The World Bank also manages initiatives that address various needs across a variety of sectors and developing regions.<sup>105</sup> One such initiative is the Consultative Group to Assist the Poor (CGAP) – a global partnership of 34 leading organizations.<sup>106</sup>

CGAP, which is housed at the World Bank, has explored how Human-Centered Design (HCD) can enable financial inclusion for low-income individuals. CGAP experimented with seven HCD projects focused on digital financial services, in eight countries. As a part of their HCD initiative, they have invited leading design firms to work with banks, telecom providers and an insurance intermediary. As a result, they have developed 175 financial product concepts and 30 prototypes. According to them, using HCD as a method for examining how financial services work for the poor enabled them to generate a broad range of ideas how to combine the best of informal financial services with what they know to be the strengths of mobile money. Throughout this process they have also learned that even the most customer-centric and innovative concepts can fail without an ecosystem designed around the needs of customers.<sup>107</sup>

#### *The Rockefeller Foundation*

The Rockefeller Foundation, a philanthropic organization and private foundation established by the Rockefeller family in 1913, is also engaged with a number of design-centric projects framed around supporting a range of initiatives. Design for social innovation, for example, is increasingly gaining importance with The Rockefeller Foundation.

As the world faces new challenges, the Rockefeller Foundation is turning to design for social innovation for generating sustainable solutions for existing problems, but also for foreseeing solutions to problems that we are yet to encounter. According to Amira Bliss, Senior Program Associate at The Rockefeller Foundation:

To tackle these complex, systemic challenges, we need as many powerful tools in our arsenal as possible. We need new approaches to design novel and useful solutions. We need to engage stakeholders from different sectors, geographies, and elements of the system, and

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<sup>105</sup> “What We Do,” accessed July 13, 2015, <http://www.worldbank.org/en/about/what-we-do>.

<sup>106</sup> “Member Organizations,” accessed July 13, 2015, <http://www.cgap.org/member-organizations>.

<sup>107</sup> Yanina Seltzer and Claudia McKay, “What Human-Centered Design Means for Financial Inclusion,” *Consultative Group to Assist the Poor*, last modified October 16, 2014, accessed June 25, 2015, <http://www.cgap.org/publications/what-human-centered-design-means-financial-inclusion>.

empower them to co-design or co-create solutions. We need to experiment, prototype, test, fail and iterate. And we need to do it quickly.<sup>108</sup>

‘Rebuild by Design’ is one of the projects that have been co-funded by The Rockefeller Foundation. Launched together with the U.S. Department of Housing and Urban Development, the ‘Rebuild by Design’ was a multi-stage design competition to develop innovative, implementable proposals to promote resilience in the New York region affected by the superstorm Sandy in 2012. From 148 international applicants, ten interdisciplinary teams of engineers, architects, urban planners, and social scientists were selected to work closely with communities in developing locally tailored solutions. The Rockefeller Foundation also provided support at an analysis stage and during the design process. According to the Rockefeller Foundation, their US\$3 million support for the competition was intended to leverage a ‘smarter’ use of nearly US\$1 billion of dollars of USA federal recovery money.<sup>109</sup>

#### *Bill & Melinda Gates Foundation*

The Bill & Melinda Gates Foundation, the largest private foundation in the world, has similar notions when it comes to the role of design in society. When asked at an interview, what innovation does she think is changing the most lives in the developing world, the co-founder Melinda Gates replied:

Human-centered design. Meeting people where they are and really taking their needs and feedback into account. When you let people participate in the design process, you find that they often have ingenious ideas about what would really help them. And it’s not a onetime thing; it’s an iterative process.<sup>110</sup>

In 2009, Bill & Melinda Gates Foundation together with the International Development Enterprise (IDE) engaged the global design consultancy IDEO to aid social enterprises and non-government organizations (NGOs) worldwide by developing a free innovation guide - HCD Toolkit. The purpose of the Toolkit was to help international staff and volunteers “understand a community’s needs in new ways, find innovative solutions to meet those needs, and deliver solutions with financial sustainability in mind.”<sup>111</sup>

#### *The Clinton Foundation*

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<sup>108</sup> Amira Bliss, “How Social Innovation Labs Design And Scale Impact,” *The Rockefeller Foundation* (blog), March 5, 2014, accessed June 25, 2015, <http://www.rockefellerfoundation.org/blog/how-social-innovation-labs-design-scale/>.

<sup>109</sup> “Rebuild by Design,” accessed June 25, 2015, <https://www.rockefellerfoundation.org/our-work/initiatives/rebuild-by-design/>.

<sup>110</sup> Cited in Caitlin Roper, “The Human Element: Melinda Gates and Paul Farmer on Designing Global Health,” *WIRED*, November 12, 2013, accessed June 25, 2015, <http://www.wired.com/2013/11/2112gatefarmers/>.

<sup>111</sup> “Design Kit: The Field Guide to Human-Centered Design,” accessed June 25, 2015, <http://www.ideo.com/work/human-centered-design-toolkit/>.

The Clinton Global Initiative (CGI), an initiative of the Clinton Foundation, convenes global leaders to create and implement innovative solutions to the ‘world’s most pressing challenges.’<sup>112</sup> This includes issues such as economic development, climate change, health and wellness, and empowering girls and women in developing countries by providing them access to education, economic opportunities, and health care.<sup>113</sup> In their quest for innovative solutions to world problems, CGI are also looking at design for guidance. As a part of their annual meetings, CGI members have the chance to participate in ‘Designing Ideas’ breakout sessions. In each session, members are expected to bring their individual experience to the table and to design new ideas and approaches to specific challenges.<sup>114</sup> The outcomes of these sessions are then developed into workable design-led initiatives. For example, in 2012, the American Institute of Architects made a CGI Commitment to Action for the purpose of establishing a new design-led initiative, the ‘Decade of Design: Global Urban Solutions Challenge’. As stated by the CEO of the American Institute of Architects, Robert A. Ivy, ‘The Decade of Design’ reflects their commitment to “find solutions for the built environment in the interest of public health, with appropriate methods to document the facts, analyze the data and envision healthful solutions with ways to implement them.”<sup>115</sup>

## Summary

From a field of making and styling, design has evolved into one that embodies the idea of ‘problem solving’ at its core, and has went beyond that. In recent times, things have continued to evolve further and the next stage for design is increasingly being defined as one that deals with ‘problem finding’. As a result, the role of design in business and society is changing. In many cases we can see designers successfully contributing to a range of organizations on a strategic level by being involved in decision-making processes and strategic planning. This is mainly the reason why designers are increasingly being recognizes as new strategic leaders in business and policy-makers in society.

Design is good for business and more and more businesses now recognize this to be true. Large businesses that are well known for their design-led approach to business started placing even more emphasis on the importance of design and started introducing designers to executive roles in order to demonstrate their commitment to design-led innovation (e.g. Apple, Nike, Coca-Cola, IBM, etc.). However, it has to be noted that these designers have been promoted to executive roles not simply because they are designers, but because of their ability to align design with business interests, and to communicate in business terms how design can add value.

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<sup>112</sup> “The Mission of the Clinton Global Initiative is to Turn Ideas Into Action,” accessed June 25, 2015, <https://www.clintonfoundation.org/clinton-global-initiative/about-us/cgi-mission>.

<sup>113</sup> “Girls and Women,” accessed September 4, 2015, <https://www.clintonfoundation.org/our-work/by-topic/girls-and-women>.

<sup>114</sup> Clinton Global Initiative Editorial Team, “Join CGI Members in Designing a Better Future,” *Clinton Foundation* (blog), September 19, 2014, accessed June 25, 2015, <https://www.clintonfoundation.org/blog/2014/09/19/join-cgi-members-designing-better-future>.

<sup>115</sup> Robert A. Ivy, “The Decade of Design: The Global Urban Solutions Challenge,” *Clinton Foundation* (blog), September 25, 2013, accessed June 25, 2015, <https://www.clintonfoundation.org/blog/2013/09/25/decade-design-global-urban-solutions-challenge>.

In addition to this, we are also seeing a surge in interest in developing corporate in-house design teams within a range of financial management businesses (e.g. Bloomberg, PwC, Deloitte, Accenture, BCG, McKinsey, Fidelity Investments, Capital One, Barclays, Xero, etc.). These businesses now see design as a catalyst for innovation in sectors where design has never been seen in such a capacity before. In line with this, a number of leading business consultancies have acquired well-known design consultancies, mainly for strengthening their own digital media capabilities, but also for adding design consulting services to their portfolios (e.g. The Difference, Optimal Experience, Aqua Media, Fjord, Strategic & Creative, Lunar, Adaptive Path, etc.).

Design has also proven itself valuable to new types of businesses that offer services that never before existed (e.g. Facebook, AirBnB, Snapchat, Behance, Tumblr, Instagram, etc.). In fact, in many cases we can see designers not only contributing to the business development, but also acting as co-founders of successful startup businesses. The role that design can play when launching or developing new businesses has also been recognized by a range of venture capital firms who now use designers to work with their portfolio of clients (e.g. Google Ventures, Khosla Ventures, Coca-Cola Founders, etc.).

In addition to this, design is now recognized as an important factor that could contribute to social innovation and sustainability. A number of leading global organizations and foundations are placing design on their agendas and are launching design-led initiatives in a range of contexts (e.g. United Nations, The World Bank, The Rockefeller Foundation, Bill & Melinda Gates Foundation, The Clinton Foundation, etc.). All of this is placing design in a unique position, never before seen in its history.

### **Possible implications**

The emergence of design as a strategic resource for business and social innovation has all the characteristics of a megatrend.<sup>116</sup> As any megatrend, this one is also characterized with a large, social, economic, political, environmental and technological change that is slow to form, but once in place, it has the potential to influence a wide range of activities, processes and perceptions, both in government and society, and possibly for decades to come.<sup>117</sup> However, as this megatrend is just emerging, the question is what kind of developments we can expect to see in the coming years. As it is usually the case, all new developments of this kind cause disruptions in the ecosystem in which they exist. Trend forecasting is not an exact science, but based on the gathered information in this study, there are several trend indicators that can be deduced so far:

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<sup>116</sup> Megatrends results from the confluence of a variety of underlying trends. Megatrend analysis relies on deductive reasoning which is based on a broad range of ‘difficult-to-generalize’ empirical evidence. This process is based on applying ‘directional foresight’ and as such, it is not an exact science. Nevertheless, the identification of megatrends is valuable in terms of providing a ‘foundation, scenarios and guidance that can be used in decision-making regarding future development and investment.’ “Megatrends: A Wave of Change Impacting the Future,” (Paris: Alcatel-Lucent, 2012), 1-3.

<sup>117</sup> “Megatrends: Definitions and Categories,” accessed July 13, 2015, <http://ssl.csg.org/Trends/Megatrends%20Definitions%20and%20Categories.pdf>.

- The need for in-house design teams will continue to grow. As a result, big independent agencies will struggle to sustain themselves as more and more of their large clients will form their own design teams. In return large agencies will need to diversify the nature of their business, start reaching out to new pool of clients that may have been previously overlooked (e.g. government departments, universities, and small and medium size clients), or scale back. There will still be opportunities for independent design studios, but it is very likely that this would be narrowed down to small boutique design studios focused on providing niche services to in-house design teams or collaborating with smaller independent companies. However, as more established large agencies start pursuing small and medium size clients in their attempt to reach out to new clients, many smaller design studios will struggle to sustain themselves. Furthermore, as some design firms will not be able to sustain employing a large pool of full time designers, they will likely resort to hiring freelance designers on a project-per-project basis. Independently of that, freelance designers will still continue serving small and medium businesses that cannot afford the services of neither boutique design studios nor agencies.
- The emergence of 'Big Data' (large and complex data sets generated by multiple sources) is becoming increasingly relevant to many large businesses and governments for analytical purposes, but also for the purpose of communicating complex data with the general public in an easy-to-understand ways. With the rise of the 'Internet of Things' (machine-to-machine communication), we will soon have an access to an unprecedented amount of new data and information. As a result, the need for Information Architects who deal with data visualization will continue to grow.
- Despite the strong emergence and influence of digital design, print design will not disappear. Its influence, however, will be significantly reduced - at least in the corporate sector - and the print production of corporate communications will be narrowed down to limited edition, boutique publications. In terms of product development, digital design is already shifting from 'responsive' to 'modular' - from design for desktops and phones, digital design now includes design for integrated use of wearable devices, cars, home appliances, and more. As in the case of Big Data, the Internet of Things will also drive the new development of modular digital technology.
- As development of new digital products and new digital media channels is becoming the norm for many businesses, UI/UX designers are likely to become the largest design sector in the time to come.
- Design is becoming increasingly multidisciplinary and many new concepts in design are now being crowd-sourced and co-designed by people that are not trained as designers. This means that the role of the design leader will change from that of developing unique creative solutions

to one that revolves around facilitating ideas. Also, as concepts such as design thinking are increasingly gaining acceptance at all levels in business and society, we will see increasing number of people calling themselves ‘designers’ even though they might never have been trained as such. The increased popularity that design thinking has brought to the field of design has been valuable so far, but this can also start working against the field, if more and more people (misleadingly) believe that they do not need any qualifications or proper training to ‘think’ like designers – as many design thinking workshops imply. The danger here is that this can severely impact the credibility of the design profession in the long term.

- As more designers shift to applying evidence-based design and HCD approach in their work, the need for learning appropriate research skills will grow. Universities are already introducing research-driven design curriculums and they are reducing design programs that focus solely on technical design skills. PhD programs in design will continue to grow, as the need for designers who are proficient in various research methodologies and capable of working on large and complex projects will increase in demand. Designers with technical skills will still be needed, but in order for them to be competitive they will need to continue upgrading their skills. In return, Masters Degrees in Design are likely to become the new standard in the field of design. In addition to this, there is also an opportunity for universities to develop Professional Doctorates in Design aimed at professional designers and business executives. Professional Doctorates in Design could be competing with Executive MBAs, or could be promoted as the next step for executives that are interested in applying design thinking and innovation in their businesses. These types of degrees could be developed in conjunction with business schools.
- The way businesses and designers operate will continue to evolve. Their focus will shift from ‘problem solving’ to ‘problem finding’. It will no longer be enough for businesses to deal with problems as they emerge. As businesses begin to dominate more and more areas of our lives, it will be financially more beneficial for them to identify and anticipate problems before they occur. With design thinking being increasingly incorporated into areas such as auditing, risk assessments and business strategies, we can expect to see a stronger focus on strategic foresight, prototyping and modeling before any significant investments are made in the first place.
- The new reputation that design is gaining as an agent of social change and sustainability can create new opportunities for both designers and for businesses that are developing their own strategic design capabilities. As the world is becoming an increasingly complex place, governments will likely emerge as major new clients of design services. In the first instance, they will resort to commissioning design consultants that are experienced in social innovation and sustainability, and it is very likely that they will also start developing their own in-house

design departments. Examples of this can already be found across the world, and this trend will likely intensify in the near future.

## **Conclusion**

Design is a field that constantly evolves and every few decades we are witnessing a new change. Now, with the shift of the industrial economy to the East and the emergence of the knowledge economy in the West, the role of the designer has changed again. The profile of the leading corporate designers today is very different to that of the 'design gurus' who dominated the 1990s. Designers are no longer seen as eccentric creative visionaries who operate on the fringes of industry and society. Instead, they are seen as strategic leaders that can help define the world we live in today. By the same token, corporate designers do not see themselves as 'authors' of creative work produced purely to satisfy their personal needs for creative self-exploration. Instead, they see themselves as service providers that are well attuned to the needs of their clients and the end-users. Yet, this doesn't mean that they are any less creative than their counterparts; it means that they apply creative thinking on a new level and for a different purpose. Then again, as the East develops its own knowledge economy, the field of design will change again and new opportunities will continue to emerge.

In the meantime, one thing is clear. Design today is no longer about designing objects, visuals or spaces; it is about designing systems, strategies and experiences. It is because of this way of working that design is now largely recognized as a vehicle for corporate innovation and accepted as an agent for social change. What makes designers working on this level different to traditional designers is that they are no longer trying to resolve problems provided to them in a design brief, they are trying to prevent problems occurring in the first place by developing the design brief themselves.

While the need for designers with traditional technical and artistic skills is still constant within the design industry, more and more designers are acquiring a new set of skills that come outside the field of design. By gaining knowledge in everything from ethnographic research to business development, designers now operate on a level that merges social sciences with business entrepreneurship. Armed with a new set of skills and attitudes, designers are increasingly asserting themselves as opinion makers, critical thinkers and strategic planners with a global influence.

This way of working has brought forward the role of the designer as a business leader at the highest corporate echelons; has led the establishment of a new genre of in-house design teams; and has helped introduce design as a key factor in global politics. All of this has enabled a new generation of designers to actively participate in the strategy planning processes that determine what kind of designs should be produced, for whom, and why; rather than just focusing on investigating form and style - as it has been the case in the past.

Finally, the examples highlighted in this study imply that the world today needs designers that are not only aesthetically sensitive, but also culturally aware, inquisitive, and able to think both vertically

(logical thinking) and laterally (intuitive thinking). In addition to this, designers need to be conceptual thinkers capable of engaging with a broad range of stakeholders and communicating with clarity and conviction via visual, verbal and written means. They also need to have an ability to analyze problems and organize information related to how people interact with information, technology, knowledge, cultures, environments, objects, and society. Their work should be centered on designing purposefully for specific people and situations, rather than producing self-initiated artistic endeavors. They should be curious about the needs of other people, and not only about themselves. All of this suggests that the social construct of the meaning of design has changed and the word 'design' now denotes evidence-based, human-centric approach whose purpose is to help businesses, communities, and individuals.

### **Opportunities for further research**

The rise of the designer as a business executive and the growth of the corporate in-house design teams is a new trend that needs further exploration over a course of time. The current state of design and its role in business and society is in a transitional period. The type of skills, education and experience designers interested in working on this level need to poses, are still open for discussion. Also, at this stage it appears that there is still no one unified idea on how the new corporate in-house teams should operate and what kind of organizational structure they should have. Furthermore, it is still early to say which of the existing models will prove to be successful, and which will not. Finally, there is still no general consensus on how these new developments should be addressed in terms of design education. In line with this, I would like to recommend three areas of further study:

1. Short-term study opportunity: Defining a profile of an executive corporate designer. What kind of personal traits, credentials and background should these professionals have? At this stage, this study could be initiated by conducting in-depth interviews with current design executives at leading and emerging companies.
2. Mid-term study opportunity: Developing a model (or more likely, a set of models) of an optimal organizational structure for corporate in-house design teams and outlining the type of methodologies that these teams could use in their work. At an initial stage, this could be instigated via corporate surveys and case studies.
3. Long-term study opportunity: Exploring how design education will need to change in order to address these new developments in the field of design. This could be achieved by piloting new design curriculums that reflect these trends, and using measurable outcomes such as graduate employment statistics supported by industry feedback for establishing the level of success.

### **Acknowledgements**

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### **References**

Accenture. "Accenture Completes Acquisition of Fjord, Expanding Digital and Marketing Capabilities." Last modified May 22, 2013. Accessed May 30, 2015. <http://newsroom.accenture.com/news/accenture-completes-acquisition-of-fjord-expanding-digital-and-marketing-capabilities.htm>.

Accenture. "Accenture Digital." Accessed May 30, 2015. <http://www.accenture.com/us-en/digital/Pages/digital-index.aspx>.

Alcatel-Lucent. "Megatrends: A Wave of Change Impacting the Future". Accessed September 4, 2015. <http://www2.alcatel-lucent.com/knowledge-center/megatrends/>.

Amed, Imran. "Decoding Nike: Mark Parker, Chief Executive Officer, Nike". *The Business of Fashion*. September 29, 2014. Accessed July 13, 2015. <http://www.businessoffashion.com/articles/ceo-talk/decoding-nike>.

Apple. "Jobs at Apple: Corporate." Accessed April 28, 2014. <https://www.apple.com/jobs/us/index.html>.

Apple. "Jobs at Apple: Design." Accessed April 28, 2014. <https://www.apple.com/jobs/us/corporate.html#design>.

Apple. "Apple Press Info: Jonathan Ive." Accessed July 13, 2015. <https://www.apple.com/nz/pr/bios/jonathan-ive.html>.

Au, Irene. "I'm Joining Khosla Ventures!" *Irene Au* (blog), April 22, 2014. Accessed July 11, 2015. <http://ireneau.com/2014/04/22/im-joining-khosla-ventures/>.

Bliss, Amira. "How Social Innovation Labs Design And Scale Impact." *The Rockefeller Foundation* (blog), March 5, 2014. Accessed June 25, 2015. <http://www.rockefellerfoundation.org/blog/how-social-innovation-labs-design-scale/>.

Bloomberg. "Mark G. Parker: Executive Profile & Biography." Accessed June 25, 2015. <http://www.bloomberg.com/research/stocks/people/person.asp?personId=292013&ticker=NKE>.

Bloomberg. "Bloomberg L.P.: Private Company Information." Accessed July 12, 2015. <http://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapId=160210>.

Bolt | Peters. "About B|P." Accessed June 21, 2015. <http://boltpeters.com/>.

Boston Consulting Group. "The Boston Consulting Group Launches BCG Digital Ventures, a Digital Innovation, Product Development, and Commercialization Firm." Last modified January 15, 2014. Accessed June 26, 2015. <http://www.bcg.com/news/press/15jan2014-bcg-launches-digital-ventures.aspx>

Brown, Tim. "Design Thinking." *Harvard Business Review*, June 2008, 84-92.

Brown, Tim. "Our Approach: Design Thinking," *IDEO*, Accessed September 3, 2015. <http://www.ideo.com/about/>.

Brownlee, John. "4 Reasons Why Design Is Taking over Silicon Valley." *Fast Company Co.Design*, March 17, 2015. Accessed June 21, 2015. <http://www.fastcodesign.com/3043740/4-reasons-why-design-is-taking-over-silicon-valley>.

Butler, David. "Design to Grow, from Startups to Scale-ups." Presentation at *Better by Design* CEO Summit, Auckland, New Zealand, March 10-11, 2015. Recording available at

- <http://www.betterbydesign.org.nz/learning-experiences/ceo-summit/ceo-summit-2015/> and <https://www.youtube.com/watch?v=Bdt42Nf6Yrw#t=1235>.
- Cave, Andrew. "How Coca-Cola Turned Its Ship Around." *Forbes*. Last modified February 10, 2015. Accessed May 30, 2015. <http://www.forbes.com/sites/andrewcave/2015/02/10/how-coca-cola-turned-its-ship-around-and-how-your-business-can-too/>.
- Christensen, Clayton M. *The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail*. Boston, MA: Harvard Business School Press, 1997.
- Clinton Global Initiative. "The Mission of the Clinton Global Initiative is to Turn Ideas Into Action." Accessed June 25, 2015. <https://www.clintonfoundation.org/clinton-global-initiative/about-us/cgi-mission>.
- Clinton Global Initiative. "Girls and Women." Accessed September 4, 2015. <https://www.clintonfoundation.org/our-work/by-topic/girls-and-women>.
- Clinton Global Initiative Editorial Team. "Join CGI Members in Designing a Better Future." *Clinton Foundation* (blog), September 19, 2014. Accessed June 25, 2015. <https://www.clintonfoundation.org/blog/2014/09/19/join-cgi-members-designing-better-future>.
- Cohen, Jackie. "Facebook Acquires Sofa Design Team, Not Its Products." *AdWeek: Social Times* (blog), June 10, 2011 (12:15 p.m.). Accessed June 21, 2015. <http://www.adweek.com/socialtimes/facebook-acquires-sofa-design-team-not-its-products/349713>.
- Consultative Group to Assist the Poor. "Member Organizations." Accessed July 13, 2015. <http://www.cgap.org/member-organizations>.
- Council of State Governments. "Megatrends: Definitions and Categories." Accessed July 13, 2015. <http://ssl.csg.org/Trends/Megatrends%20Definitions%20and%20Categories.pdf>.
- Creative Industries. "Design Case: Barclays." Accessed July 8, 2015. <http://www.thecreativeindustries.co.uk/industries/design/design-case-studies/design-case-barclays>.
- de Bont, Cees. "Lessons from China: A Paradise or Graveyard for Designers." Keynote address presented at the 2015 International Research Conference *Design for Business*, Melbourne International Design Week, Melbourne, Australia, May 12-13, 2015.
- Deloitte. "FutureNow, Vol. 22." Last modified October 2014. Accessed May 30, 2015. <http://www2.deloitte.com/content/dam/Deloitte/au/Documents/about-deloitte/deloitte-au-futurenow-report-october-2014.pdf>.
- Deloitte Digital. "About Us." Accessed June 26, 2015. <http://www.deloittedigital.com/au/about-us>.
- Design Authority. "Rob Brown: Head of Design at Barclays." Accessed June 21, 2015. <http://designauthority.org/advocates/rob-brown/>.
- DESIS Network. "About Us." Accessed June 25, 2015. <http://www.desis-network.org/content/about-us>.
- Dix, John. "Driving innovation at Fidelity Investments: A Q&A with the Head of Fidelity Labs." *Network World*. Last modified March 27, 2014 (10:37 a.m.). Accessed May 15, 2015. <http://www.networkworld.com/article/2175601/wireless/driving-innovation-at-fidelity-investments.html>.

Doblin. "Deloitte Has Acquired Substantially All of the business of Monitor, including Doblin". Accessed September 3, 2015. <http://news.doblin.com/post/40478187290/deloitte-has-acquired-substantially-all-of-the>.

Doblin. "Join the Doblin Team". Accessed September 3, 2015. <http://news.doblin.com/post/67791517231/join-the-doblin-team>.

Eadicicco, Lisa. "New Details Leak about Apple's Secretive Electric Car Project." *Business Insider Australia*. Last modified March 14, 2015 (12:56 a.m.). Accessed May 30, 2015. <http://www.businessinsider.com.au/apple-electric-car-project-detail-2015-3>.

Elmer-DeWitt, Philip. "How Steve Jobs Saved Apple." *Fortune*, August 25, 2011. Accessed May 30, 2015. <http://fortune.com/2011/08/25/how-steve-jobs-saved-apple/>.

Fabricant, Robert. "The Rapidly Disappearing Business of Design." *WIRED*, December 28, 2014. Accessed June 15, 2015. <http://www.wired.com/2014/12/disappearing-business-of-design/>.

Facebook. "Welcoming the Talented Team Behind Hot Studio". Last modified March 14, 2013 (12:59 p.m.). Accessed June 21, 2015. <https://www.facebook.com/notes/facebook-design/welcoming-the-talented-team-behind-hot-studio/10151320205982793>.

Forbes. "The World's Most Innovative Growth Companies List, 2015 Ranking." Accessed May 30, 2015. <http://www.forbes.com/growth-companies/list/>.

Google Ventures. "About." Accessed July 4, 2015. <https://www.gv.com/about>.

Google Ventures. "Braden Kowitz: Design Partner." Accessed June 21, 2015. <https://www.gv.com/team/braden-kowitz>.

Hern, Alex. "Jony Ive Promoted to Chief Design Officer at Apple." *The Guardian*, May 26, 2015. Accessed June 26, 2015. <http://www.theguardian.com/technology/2015/may/26/jony-ive-promoted-chief-design-officer-apple>.

Higgins, Tim. "Apple Wants to Start Producing Cars as Soon as 2020." *Bloomberg*. Last updated February 21, 2015 (10:59 a.m.). Accessed May 30, 2015. <http://www.bloomberg.com/news/articles/2015-02-19/apple-said-to-be-targeting-car-production-as-soon-as-2020?hootPostID=9f3917f4905f086a568d81c5d794101a>.

Honan, Mat. "Adaptive Path and the Death Rattle of the Web 2.0 Era." *WIRED*, October 3, 2014. Accessed June 15, 2015. <http://www.wired.com/2014/10/adaptive-path-end-of-the-web-2-0-era/>.

IBM. "From Features-first to User-first." Accessed June 21, 2015. [http://www.ibm.com/smarterplanet/us/en/innovation\\_explanations/article/phil\\_gilbert.html](http://www.ibm.com/smarterplanet/us/en/innovation_explanations/article/phil_gilbert.html).

IBM. "IBM Design." Accessed July 10, 2015. <http://www.ibm.com/design/>.

Ideas on Design. "Lisa Strausfeld [profile]." Accessed July 13, 2015. <http://ideasondesign.net/speakers/speakers/lisa-strausfeld/>.

IDEO. "Design Kit: The Field Guide to Human-Centered Design." Accessed June 25, 2015. <http://www.ideo.com/work/human-centered-design-toolkit/>.

Isaacson, Walter. *Steve Jobs*. New York: Simon and Schuster, 2011.

Ivy, Robert A. "The Decade of Design: The Global Urban Solutions Challenge." *Clinton Foundation* (blog), September 25, 2013. Accessed June 25, 2015.

- <https://www.clintonfoundation.org/blog/2013/09/25/decade-design-global-urban-solutions-challenge>.
- Jana, Reena. "The Relentless Lisa Strausfeld." *Bloomberg*. Last modified July 30, 2007. Accessed July 13, 2015. <http://www.bloomberg.com/bw/stories/2007-07-30/the-relentless-lisa-strausfeldbusinessweek-business-news-stock-market-and-financial-advice>.
- Khosla Ventures. "Irene Au." Accessed June 21, 2015. <http://www.khoslaventures.com/team/irene-au>.
- King, Agnes. "Creative Thinking Gives Deloitte an Edge." *Business Review Weekly*, September 19, 2012. Accessed May 30, 2015. [http://www.brw.com.au/p/national/creative\\_thinking\\_gives\\_deloitte\\_ai8Hkhio5u2XldJ40w53rI](http://www.brw.com.au/p/national/creative_thinking_gives_deloitte_ai8Hkhio5u2XldJ40w53rI).
- Kowitz, Braden. "From Google Ventures: How to Hire the Best Designer for Your Team." *Fast Company Co.Design*, July 29, 2013. Accessed July 11, 2015. <http://www.fastcodesign.com/1673110/what-to-look-for-when-hiring-a-designer>.
- Lawler, Ryan. "Former Google and Yahoo UX Lead Irene Au Joins Khosla Ventures as Design Operating Partner." *TechCrunch*. Last modified April 22, 2014. Accessed July 4, 2015. <http://techcrunch.com/2014/04/22/irene-au-khosla-ventures/>.
- Leichter, Frederick S. "How Fidelity Used Design Thinking to Perfect Its Website." *Harvard Business Review*, May 9, 2011. Accessed June 15, 2015. <https://hbr.org/2011/05/how-fidelity-used-design-think>.
- LinkedIn. "David Butler." Accessed June 25, 2015. <https://www.linkedin.com/in/davidbutlercocacola>.
- LinkedIn. "Derek White." Accessed July 8, 2015. <https://www.linkedin.com/pub/derek-white/b/25a/998>.
- Lockwood, Thomas. "Why Are Design Firms Stagnating?" *Fast Company Co.Design*, July 7, 2015. Accessed July 13, 2015. <http://www.fastcodesign.com/3048192/why-are-design-firms-stagnating>.
- Luckerson, Victor. "Apple's Design Guru Just Got a Big Promotion." *Fortune*, May 25, 2015. Accessed June 26, 2015. <http://fortune.com/2015/05/25/apple-jonathan-ive-tim-cook/>.
- MacWorld Staff. "Remembering Steve Jobs, the Man Who Saved Apple." *MacWorld*. Last modified October 5, 2011 (4:49 p.m.). Accessed May 30, 2015. <http://www.macworld.com/article/1162763/remembering-steve-jobs-the-man-who-saved-apple.html>.
- Maeda, John. "Design in Tech Report 2015." *Kleiner Perkins Caufield & Byers*. Last modified March 15, 2015. Accessed June 21, 2015. <http://www.kpcb.com/blog/design-in-tech-report-2015>.
- Makoski, Dan. "Goodbye Google. Hello Capital One!" *Dan Makoski* (blog), July 2, 2014. Accessed June 15, 2015. <http://blog.danmakoski.com/post/90544000810/goodbye-google-hello-capital-one>.
- McGarry, Caitlin. "What Jony Ive's New Job Means for Apple Design," *MacWorld*. Last modified May 26, 2015 (9:42 a.m.). Accessed July 30, 2015, <http://www.macworld.com/article/2926556/what-jony-ives-new-job-means-for-apple-design.html>.
- McGirt, Ellen. "How Nike's CEO Shook Up the Shoe Industry," (cover title "The World's Most Creative CEO"). *Fast Company*, September 2010.

- Moye, Jay. "Creating a Win-Win: Inside Coke's New Startup Model." *The Coca-Cola Company*. Last modified October 16, 2014. Accessed May 30, 2015. <http://www.coca-colacompany.com/stories/creating-a-win-win-inside-cokes-new-startup-model>.
- Muratovski, Gjoko. "Design and Design Research: The Conflicts Between the Principles in Design Education and Practices in Industry." *Design Principles and Practices: An International Journal* 4, no. 2 (2010): 377-386.
- Muratovski, Gjoko. "In Pursuit of New Knowledge: A Need for a Shift From Multidisciplinary to Transdisciplinary Model of Doctoral Design Education and Research." In Proceedings of the 2011 Doctoral Education in Design Conference. Hong Kong Polytechnic University, Hong Kong, China, 2011. Available at <http://www.sd.polyu.edu.hk/DocEduDesign2011/proceeding.php>.
- Muratovski, Gjoko. "The Role of Design in Business." In *Design for Business, Vol.3*, edited by Gjoko Muratovski, 10-19. Bristol: Intellect Books / Chicago: University of Chicago Press, 2015.
- Muratovski, Gjoko. "A Conversation with Lisa Strausfeld." Presented at the 2015 International Research Conference *Design for Business*, Melbourne International Design Week, Melbourne, Australia, May 12-13, 2015.
- Nike. "Nike Design Careers." Accessed July 13, 2015. <http://jobs.nike.com/careers/design-jobs>.
- PwC Australia. "PwC History." Accessed May 31, 2015. <http://www.pwc.com.au/about-us/history.htm#PricewaterhouseCoopers>.
- PwC Australia. "The Difference: Who We Are." Accessed May 31, 2015. <http://www.pwc.com.au/consulting/the-difference/who-we-are.htm>.
- PwC New Zealand. "PwC New Zealand Acquires User Experience Design Consultancy Optimal Experience." Last modified June 23, 2014. Accessed May 31, 2015. <http://www.pwc.co.nz/news-releases/pwc-new-zealand-acquires-optimal-experience/>.
- Rockefeller Foundation. "Rebuild by Design." Accessed June 25, 2015. <https://www.rockefellerfoundation.org/our-work/initiatives/rebuild-by-design/>.
- Rooney, Jennifer. "'The Rise Of The In-House Agency': CMOs, Industry Respond To ANA Report." *Forbes*. Last modified October 21, 2013 (3:57 p.m.). Accessed June 15, 2015. <http://www.forbes.com/sites/jenniferrooney/2013/10/21/the-rise-of-the-in-house-agency-cmos-industry-respond-to-ana-report/>.
- Roper, Caitlin. "The Human Element: Melinda Gates and Paul Farmer on Designing Global Health." *WIRED*, November 12, 2013. Accessed June 25, 2015. <http://www.wired.com/2013/11/2112gatefarmers/>.
- Rousseau, John. "The Case for Design Consulting." *Creative Review* (blog), January 12, 2015 (9:49 a.m.). Accessed June 21, 2015. <http://www.creativereview.co.uk/cr-blog/2015/january/case-for-design-consulting>.
- Seltzer, Yanina, and Claudia McKay. "What Human-Centered Design Means for Financial Inclusion." *Consultative Group to Assist the Poor*. Last modified October 16, 2014. Accessed June 25, 2015. <http://www.cgap.org/publications/what-human-centered-design-means-financial-inclusion>.
- Stewart, Margaret G. "What My Grandfather's Drill Can Teach Us About Designing Business Software." *Fountly by Margaret Gould Stewart* (blog), April 21, 2015. Accessed July 8, 2015.

- <http://www.fountly.com/musings/2015/4/21/what-my-grandfathers-drill-can-teach-us-about-designing-business-software>.
- Stokes, Jane. *How to Do Media and Cultural Studies*. 2nd ed. London: SAGE Publications, 2013.
- Strategic & Creative. "We are now BCG Digital Ventures." Accessed May 30, 2015. <http://strategicandcreative.com/>.
- Stuhl, Michelle. "What is Behind the Rise of the Chief Design Officer?" *Forbes*. Last modified November 11, 2014 (9:16 a.m.). Accessed July 4, 2015. <http://www.forbes.com/sites/grouptthink/2014/11/11/what-is-behind-the-rise-of-the-chief-design-officer/>.
- TED. "Margaret Gould Stewart [profile]." Accessed July 8, 2015. [https://www.ted.com/speakers/margaret\\_stewart](https://www.ted.com/speakers/margaret_stewart).
- Tischler, Linda. "Pop Artist: David Butler." *Fast Company*, September 10, 2009. Accessed May 30, 2015. <http://www.fastcompany.com/570/masters-of-design/pop-artist-david-butler>.
- United Nations. "About the UN." Accessed July 13, 2015. <http://www.un.org/en/about-un/index.html>.
- United Nations Environment Programme. "Green Economy: About GEI." Accessed June 25, 2015. <http://www.unep.org/greeneconomy/AboutGEI/WhatisGEI/tabid/29784/Default.aspx>.
- United Nations Environment Programme. "Working with Business & Industry." Accessed June 25, 2015. <http://www.unep.org/resourceefficiency/Business/WorkingwithBusinessIndustry/tabid/129577/Default.aspx>.
- United Nations Environment Programme. "Design for Sustainability." Accessed June 25, 2015. <http://www.unep.org/resourceefficiency/Business/SustainableProducts/DesignforSustainability/tabid/78845/Default.aspx>.
- United Nations Institute for Disarmament Research. A Framework Document for Evidence-Based Programme Design on Reintegration, prepared by Miller, Derek B., and Lisa Rudnick. United Nations, 2012. Accessed July 25, 2015. <http://www.unidir.org/files/publications/pdfs/a-framework-document-for-evidence-based-programme-design-on-reintegration-396.pdf>.
- United Nations Institute for Disarmament Research. A Prototype for Evidence-Based Programme Design for Reintegration, prepared by Miller, Derek B., and Lisa Rudnick. United Nations, 2014. Accessed July 25, 2015. [https://www.academia.edu/7456216/A\\_Prototype\\_for\\_Evidence-Based\\_Programme\\_Design\\_for\\_Reintegration](https://www.academia.edu/7456216/A_Prototype_for_Evidence-Based_Programme_Design_for_Reintegration).
- United Nations Institute for Disarmament Research, Center for Local Strategies Research, University of Washington, and Saïd Business School, University of Oxford. Conference Report: The Glen Cove Conference on Strategic Design and Public Policy, prepared by Miller, Derek B., Lisa Rudnick, Lucy Kimbell, and Gerry Philipsen. UNIDIR, University of Washington, and University of Oxford, August 3, 2010. Accessed July 25, 2015. [https://www.academia.edu/832839/Strategic\\_Design\\_and\\_Public\\_Policy\\_-\\_Conference\\_Report](https://www.academia.edu/832839/Strategic_Design_and_Public_Policy_-_Conference_Report).
- Vanhemert, Kyle. "Consulting Giant McKinsey Buys itself a Top Design Firm." *WIRED*, May 14, 2015. Accessed June 21, 2015. <http://www.wired.com/2015/05/consulting-giant-mckinsey-bought-top-design-firm/>.

- Wakabayashi, Daisuke, and Mike Ramsey. "Apple Gears Up to Challenge Tesla in Electric Cars." *The Wall Street Journal*, February 13, 2015. Accessed May 30, 2015. <http://www.wsj.com/articles/apples-titan-car-project-to-challenge-tesla-1423868072>.
- Wakabayashi, Daisuke. "Apple Targets Electric-Car Shipping Date for 2019," *The Wall Street Journal*, September 21, 2015. Accessed September 24, 2015. <http://www.wsj.com/articles/apple-speeds-up-electric-car-work-1442857105>.
- Wilson, Mark. "IBM Invests \$100 Million to Expand Design Business." *Fast Company Co.Design*, March 27, 2014. Accessed June 21, 2015. <http://www.fastcodesign.com/3028271/ibm-invests-100-million-to-expand-design-business>.
- Wilson, Mark. "McKinsey & Company Acquires Lunar, One of Silicon Valley's Oldest Design Firms." *Fast Company Co.Design*, May 14, 2015. Accessed June 26, 2015. <http://www.fastcodesign.com/3046260/mckinsey-company-acquires-lunar-one-of-silicon-valleys-oldest-design-firms>.
- Wisniewski, Mary. "Capital One Seeks Creative Spark with Purchase of Design Firm." *American Banker*. Last modified October 6, 2014 (2:45 p.m.). Accessed June 15, 2015. [http://www.americanbanker.com/issues/179\\_193/capital-one-seeks-creative-spark-with-purchase-of-design-firm-1070379-1.html](http://www.americanbanker.com/issues/179_193/capital-one-seeks-creative-spark-with-purchase-of-design-firm-1070379-1.html).
- World Bank. "What We Do." Accessed July 13, 2015. <http://www.worldbank.org/en/about/what-we-do>.
- XXIT. *The Concept: 21<sup>st</sup> Century. Design After Design*. Milan: XXI Triennale International Exhibition 2016. Exhibition catalog.
- Xero. "Take a Peak inside Design at Xero." *Xero* (blog), 2014. Accessed May 30, 2015. <https://www.xero.com/blog/2014/05/look-inside-design-xero/>.

### **Author Bio**

Gjoko Muratovski has over 20 years of international design and branding experience. Over the years he has been working with a broad range of corporate, government and not-for-profit organizations from around the world. This includes Deloitte, Toyota, Greenpeace, NASA Johnson Space Center, UNESCO World Cultural Heritage, World Health Organization, United Nations Association of Australia, Department of Premier and Cabinet of South Australia, Auckland Council of New Zealand, and many others. In addition to this, he is regularly retained as an advisor by various design firms and advertising agencies on issues ranging from strategic design to brand development strategies.