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

Abstract Corporate cultures’ prevailing attitudes towards design have begun to shift. Financial companies and management consultancies now have design teams, and include “design” in their service portfolios. Large corporations are bolstering their in-house design capabilities, and appointing designers to executive roles. Venture capitalist firms and startups increasingly recognize the value of including designers in the early stages of business development. Even global organizations and international foundations now list design on their agendas. A paradigm shift is taking place in the field of design. This study examines some of the latest corporate investments in design, and reflects on what this phenomenon means for the wider field of design. The focus of this study is on the key trend indicators that are defining the current landscape of design, and its changing role in business and society.

“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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Introduction

An article in leading design magazine *Creative Review* rightfully points out that “it’s a great time for design.” Design has never been more valued as an economic force, nor has it been as culturally influential as it is now. All types of organizations, including once-conservative management consultancies, financial organizations, and banks, have begun to adopt “design thinking” as their guiding principle and are building their internal design competencies.

For more than 175 years, the field of design has followed developments in business, technology, and culture. Design’s adaptability in continuously evolving environments is what makes its practices relevant in times of change. In return, the continuing relevance of design has helped to redefine the profile and elevate status of designers in society today.

The education sector further supports the field by continuously developing and introducing new design schools around the world that offer programs at all levels, from technical certificates to PhD’s. This has contributed significantly towards the rise of the most widespread creative profession today – the designer. Design has become so popular that, according to some accounts, there are at least 2.1 million designers currently in training in China alone.

Design-Led Innovation

Design and business are intrinsically linked. Contemporary design emerged to address 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 were introduced to the profession because of their ability to contribute artistically or constructively to the industry’s need to develop products and advertising communications. Over time, as business models began to evolve, the field of design evolved as well: designers have shifted from being stylists to becoming professional “problem solvers.”

Over time, for many leading businesses, merely developing the same goods and services was no longer seen as enough to guarantee success in the highly competitive global market. As a result, a new stage of business innovation 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 now referred to as “disruptive innovation”: the revolutionary transformation in an existing market, product, or sector, by replacing complexity and high cost (of product development and supply chain management) with simplicity, convenience, accessibility, and affordability. In their pursuit of the next big disruption, many businesses began to consult the design process a source of inspiration. After several successful design-led innovations (e.g. Apple’s iPhone and Nintendo’s Wii game console), design quickly moved to 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.

The Changing Landscape of Design

The late twentieth and early twenty-first century has seen new economic developments that have altered the concentration of design capital, and subsequently the dynamics of the profession as well. The world was once 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 Asia. Centralized


2 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 to explain what it is and what it involves. The confusion stems mainly from the fact that different design disciplines use different methodologies, and due to this, there is no one universal way to “think” like a “designer.” However, one of the most commonly accepted definitions of 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.” See Tim Brown, “Our Approach: Design Thinking,” IDEO, accessed September 3, 2015, http://www.ideo.com/about/.


6 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:
production for the global market has also meant that once distinctive goods are now “standardized” to better suit the tastes of the masses. While this is economically beneficial for large manufacturing conglomerates, we have witnessed a number of ecological and social disadvantages associated with this business model. The lack of regulations and general disregard for environmental issues has caused alarming levels of pollution and waste in emerging economies. For established economies, the loss of production capacity turned them into consumerist societies. In addition, 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.9 As a result, in the past decade, we have witnessed an increase in independent “design thinking” consultancies, followed by a newfound interest in establishing corporate in-house design teams.10

The Rise of the Corporate Designer

With manufacturing largely moving to the East, and with the West moving toward a knowledge economy model focused on technology and services development, many product designers needed 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, was derived precisely out of this economic shift. Design methodologies once used to design products are now being used to design 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—IDEO being one of the leading examples of this trend.11

With the advance of digital technologies have come 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 seeing the rise of 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 communications were a one-way street. The content for these types of communications needed quarterly development, or perhaps more commonly, once a year. This meant that there was no need for designers 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, office buildings, window displays, and commercials are no longer the first thing they see when they choose to interact with a company. Neither is the company website. Rather, 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 team 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 analyzing documentary evidence. 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 which have been globally recognized by leading ranking lists, industry publications, and the general media. The reasoning 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 was once a field dominated by an array of independent design studios and large design agencies is now one that is increasingly corporatized and centralized. As big corporations begin to see design as a critical corporate asset, they also 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 overall corporate strategy, the need for confidentiality, and mounting concerns related to ownership of intellectual property, have meant that serious businesses can no longer outsource what has become a truly strategic resource. This is why major businesses – including many Fortune 500 companies – have started investing in their own design capabilities.

At the same time, designers have also become increasingly entrepreneurial. More and more designers are now getting involved with business development and growth. This entrepreneurial spirit marks a new era for both design and business. Going beyond design of products, spaces and communications, designers have ventured into a new field – design of businesses. With the growing reputation of design as a catalyst for business innovation, designers are being 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 examples of this emerging trend.

Since 1996, Ive has led the industrial design team at Apple. He progressed to Senior Vice President of Design in 2013, and in 2015 he was promoted to the newly created role of Chief Design Officer. Parker began his career at Nike as a footwear designer in 1979, and rose through the ranks to become the CEO of Nike in 2006. 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. 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. And these are not isolated examples. Other corporations to have introduced designers as executives include companies such as Johnson & Johnson, PepsiCo, Philips Electronics NV, and many more.

Apple, Inc.

Apple, the world’s most valuable company, went nearly bankrupt prior to embracing design as a driving philosophy in the late 1990s. The launch of the

17 Fabricant, “Rapidly Disappearing Business.”
iMac in 1998 was a defining point for the company: it was the first time 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 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 were dominating the personal computer market.20 Since then, design-led innovation has become the keystone of Apple’s success story. By using the same principles, they have reinvented the way people listen to music, changed the way we use our phones, launched new wearable technology – and it is now rumored that they are working on the development of both an electric and a driverless car.21 According to The Wall Street Journal, people who are familiar with the matter say that Apple have set a target ship date of 2019 for their electric car.22

As one article in Macworld points out, without their lead designer, Apple as the world knows it would not 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, for example by focusing on “high-level, grand-scale design projects like Apple headquarters, and perhaps even a car.”23

Steve Jobs, the Co-Founder & Chief Executive Officer of Apple, had 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.”24

Jobs’ statement intimates that Ive is held in such high regard at Apple not because he is a designer, but because he can think as a businessperson and as an innovator. While Apple is often lauded for their designs, this also implies that their success does not rely on design alone, but rather on how well design is integrated within the company.

If you visit Apple’s careers page and see the type of profiles they are seeking to hire, you will see that for Apple, designers represent only one of the sixteen profiles that make their corporate team.25 In their opening statement in the “careers” section they do not even explicitly mention design as being a part of the Apple “dream”: “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.”26

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.”27


Nike, Inc.

Since Mark Parker became Chief Executive in 2006, according to The Business of Fashion, Nike’s annual revenue is up 60 percent, profits have increased 57 percent, and its market cap has more than doubled. As they point out, Nike’s success can be credited to the way Parker embraced innovation and prioritized design. 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.

Even though Nike’s design and innovation ethos is centered on 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 is: “If you have a body, you are an athlete.” 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 consumers and the planet. They take risks. They sweat the details. They aim to design what people can’t even imagine today.”

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 difficult:

“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.”

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 at once specific enough to operate on a global level, and sufficiently flexible to be adapted to local conditions.

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.” Despite the brand power Coca-Cola commanded, the company lacked a uniform design approach, which meant that the brand message was
The Journal of Design, Economics, and Innovation

IBM Corporation

In 1973, 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 had 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.39 Then, for a while, design was lost from their agenda and the company entered a downward spiral. Now, after a period of stagnation, IBM has put design back in focus. 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 in the vicinity of US$100 million dollars.40 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.”41

In 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 business operations, which included the distribution system and the supply chain.36

What makes Butler different from 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.”37

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, then 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?”38

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**Design and Business**

The examples above show that having design embedded into 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, creating better User Experiences (UX) for their clients, and developing 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 highlight some of the benefits that these businesses perceive from building their in-house design capabilities.

**Bloomberg L.P.**

Founded in 1982, Bloomberg L.P. provides business software, financial information, data analytics, and insights to financial companies, business organizations, and government industries. They also deliver business and politics news across all forms of media, and offer media services in areas such as advertising and content services. The complexity and amount of data Bloomberg L.P. aggregates and generates requires new and innovative methods 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 recruited award-winning information designer Lisa Strausfeld to lead their design team.

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 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 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. 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. She left Bloomberg L.P. in 2015 to start her own design studio, InformationArt.

**PricewaterhouseCoopers (PwC)**

In 2010, the Australian branch of PricewaterhouseCoopers (PwC) acquired the boutique design firm The Difference in an attempt to diversify and expand their consultancy services. According to PwC, The Difference specializes in working with public and private organizations on complex issues that involve and affect multiple stakeholders. PwC describes their (now in-house) design team, The Difference, as “experts in the process of collaborative, creative problem solving.” 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.”
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 to our customers to give more immediate, personalized and collaborative experiences. Digital is now how we live day-to-day.”

By venturing into 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. Moreover, they are not the only ones in their sector that have chosen to go down this path.

**Deloitte**

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

According to Business Review Weekly (BRW), Deloitte claims that several of their big auditing successes in 2011 and 2012 came from applying design thinking to their audit methodology. 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.”

Following this, Deloitte continued to invest in its 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, 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.”

Furthermore, in addition to making design thinking a part of their financial consulting services, Deloitte now also has a branch called Deloitte Digital that acts as a full-service agency, offering digital design, strategy, social media, and digital development services related to emerging technologies. Pioneered in Australia, Deloitte Digital now operates out of 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.

**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. 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.”

**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. BCG describes their Digital Ventures outfit as “a digital innovation, product development, and commercialization firm.” According to their press release, their new firm’s vision is the following:

“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.”

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.”

**McKinsey & Company**

In 2013, according to Fast Company, the management consultancy McKinsey & Company approached Lunar, a mid-sized design firm of 75 people to discuss a possible acquisition. During the negotiations, the two companies discussed possible partnership models, and tested their compatibility through a few test projects. In 2015, an arrangement was made, and Lunar finally 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 McKinsey’s clients build their own internal design practices. 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.”

**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, comprising over 200 people. Over a number of years, Fidelity Investments have collaborated with Stanford University’s d.School to shore up their

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62 “Boston Consulting Group Launches BCG.”

63 “We Are Now BCG Digital Ventures.”


design thinking capabilities. According to Sean Belka, Senior Vice President & Director of the Fidelity Center for Applied Technology, Fidelity Investments are interested in hiring designers that can understand consumer behavior and are capable of co-designing solutions by iterating prototypes with their customers. 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.”

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 to market faster, and to have greater control over the creative process. All of this comes with “tremendous cost savings” to Fidelity Investments, while at same time allowing them to attract and retain top creative talent in-house. 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.

**Capital One**

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. Several months later, they acquired the UX design consultancy Adaptive Path in order to expand their design capabilities further.

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.

**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. 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. White has been involved in various strategic roles with Barclays since 2005 and has been working in the financial sector since 1996. However, unlike most of the other design executives, White did not come to this role from a traditional design background – neither in terms of his education, nor his professional background. Nevertheless, his new role signifies that Barclays are serious about their intention to position themselves as a design-led business focused on customer experience. Not only this, but Barclays are also adopting 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.”

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.”

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.”

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 are developing their platform to better align it with business companies such as Xero. Facebook are also interested in designing business UX solutions. They are developing their platform to better align it with business companies such as Xero. Facebook are also interested in designing business UX solutions. They are developing their platform to better align it with business companies such as Xero. Facebook are also interested in designing business UX solutions. They are developing their platform to better align it with business companies such as Xero.

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.” 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.  

Prior to joining Facebook, Stewart managed the UX Team at YouTube, where she oversaw the largest redesign in the company’s history. She came to YouTube after two years leading Search and Consumer Products UX at Google.

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 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. 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. 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. 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 from 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 “unparalleled support in design, engineering, recruiting, marketing, and more.”

Google Ventures introduced the position of Design Partner, and invited product designer Braden Kowitz to take the role. Prior to joining Google
Ventures, Kowitz had led design for several Google products including Gmail, Google Apps for Business, Google Spreadsheets, and Google Trends. In his article for Fast Company, Kowitz reflects on what kind of designers tech startup companies should be recruiting for their teams. He lists the following skills as 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 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 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.”

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 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. In 2014, Khosla Ventures hired Irene Au as a Design Operating Partner. Prior to this, Au, amongst other roles, had 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.

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...
Design for Social Innovation and Sustainability

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. 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. In 2010, the UN’s Institute for Disarmament Research (UNIDIR) brought design into the UN system by co-hosting the Conference on Strategic Design and Public Policy (June 9–11, 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, led by Derek B. Miller and Lisa Rudnick. SNAP was envisioned as an innovation project intended to assemble the first program design service within the UN intended to benefit peace, security, and develop field activities. One such project dealt with ex-combatant reintegration, helping them acquire civilian status and sustainable employment and income.

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 it allows for greater accountability, transparency and effectiveness — especially in the public sector. That is why the UN applies the same principle when it comes to design-based solutions. According to a 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.”

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, through their Environment Program (UNEP), the UN are advocating for design for sustainability that could lead to a Green Economy — “an 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.” Their strategy is not to coerce businesses and industry to apply sustainable production practices, but to promote the benefits that sustainability can provide to them. These benefits, according to the UNEP, include such things as improved corporate reputation, better profit margins, more efficient production capabilities, and new market opportunities.

It is worth noting that as a part of their sustainable design initiatives, the 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.

**The World Bank**

The World Bank is an international financing organization made up of 188 member countries. It is a vital source of financial and technical assistance to developing countries around the world. Its 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. One such initiative is the Consultative Group to Assist the Poor (CGAP) – a global partnership of 34 leading organizations.

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 to examine how financial services work for the poor has enabled them to generate a broad range of ideas about 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.107

**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. 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 to generate sustainable solutions not only for existing problems, but also to anticipate solutions to problems that we have 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 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."108

"Rebuild by Design" is one of the projects co-funded by the Rockefeller Foundation. Launched together with the U.S. Department of Housing and Urban Development, Rebuild by Design was a multi-stage design competition to develop innovative, implementable proposals to promote resilience in the New York region affected by 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 to develop locally-tailored solutions. The Rockefeller Foundation also provided support at the 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 US federal recovery money.109

**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 which innovation she thinks is changing the most lives in the developing world, 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."110

In 2009, the 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: the 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.” 111

**Clinton Foundation**

The Clinton Global Initiative (CGI) convenes global leaders to create and implement innovative solutions to the “world’s most pressing challenges,” including such issues 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.113 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 design new ideas and approaches to specific challenges.114 Session outcomes 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.”115

**Summary**

From a field of making and styling, design has evolved into one that embodies the idea of “problem solving” at its core. In recent times, things have continued to evolve, 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 chiefly the reason why designers are increasingly being recognized as new strategic leaders in business and policymakers in society.

Design is good for business; more and more businesses now recognize this to be true. Large businesses who are already well known for their design-led practices have started placing even more emphasis on the importance of design by introducing designers to executive roles, which clearly demonstrates their commitment to design-led innovation (e.g., Apple, Nike, Coca-Cola, IBM). However, it should 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.

In addition to this, we are also seeing a surge in the number of corporate in-house design teams at an array 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 before been viewed along such lines. Furthermore, a number of leading business consultancies have acquired well-known design consultancies, mainly to strengthen their own digital media capabilities, but also to add design 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 business models that provide innovative services (e.g., Facebook, AirBnB, Snapchat, Behance, Tumblr, Instagram). In fact, in many cases, we can see designers not only contributing to business development, but also acting as co-founders of successful startup businesses. The role that design can play during the development and launch of 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).

Design is now being recognized as a significant factor contributing to the overall success of social innovation and sustainability projects. A number of leading global organizations and foundations are placing design on their agendas, and 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 hallmarks of a megatrend. As with any megatrend, it is characterized by enormous social, economic, political, environmental, and technological change that is slow to emerge, but once in place, has the potential to influence a wide range of activities, processes and perceptions, both in government and society, and possibly for decades to come. However, since this megatrend is materializing presently, the question remains: What kind of developments we can expect to see in the coming years? All new developments of this kind typically cause disruptions in the ecosystem in which they exist. While trend forecasting is not an exact science, based on information gathered in this study there are several trend indicators that can be deduced thus far:

- The need for in-house design teams will continue to grow. As a result, large independent agencies will struggle to sustain their operations, as more and more of their biggest clients form their own design teams. In return, large agencies will need to diversify the nature of their business, start reaching out to a new pool of clients that may have been previously overlooked (e.g. governments, universities, and small- and medium-size clients), or scale back. There will likely still be opportunities for smaller, boutique design studios focused on providing niche services to in-house design teams or collaborating with smaller independent companies. However, as the more established, larger agencies start pursuing small or mid-sized clients in their attempts to branch out, many smaller design studios will naturally struggle to sustain themselves. Furthermore, as some design firms will not be able to sustain a large pool of full-time designers, they will likely resort to hiring freelancers on a project-by-project basis. Some freelance designers will still continue serving small and medium businesses that cannot afford the services of either boutique design studios or 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 not only 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 (everyday machine-to-machine communication), we will soon have 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 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 times to come.

Design is becoming increasingly multidisciplinary, and many new concepts in design are now being crowdsourced and co-designed by people who are not trained designers. This means that the role of the design leader will no longer be to develop unique creative solutions, but 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 an increasing number of people calling themselves “designers” even though they might never have studied design. The increased popularity design thinking has brought to the entire field has been valuable so far, but this might 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 the credibility of the design profession could be negatively affected in the long term.

As more designers shift to applying evidence-based design and HCD approaches in their work, their need to learn appropriate research skills will grow. Universities are already introducing research-driven design curriculums and 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 continually upgrade 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; it will be more financially beneficial for them to identify and anticipate problems before they occur. With design thinking being increasingly incorporated into areas such as auditing, risk assessment and business strategy, we can expect to see a stronger focus on strategic foresight, prototyping, and modeling before any significant investments are made.

The new reputation that design is gaining as an agent of social change and sustainability can create new opportunities for both designers and
businesses that are developing their own strategic design capabilities. As the world becomes increasingly complex, 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. Now, with the shift of the industrial economy toward Asia, and the emergence of the knowledge economy in Europe and the Americas, the role of the designer has changed again. The profiles of leading corporate designers today are very different to those 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 who are well attuned to the needs of their clients and end-users. Yet, this does not 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 Asia 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. This is why 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 form of a design brief — they seek to prevent problems occurring in the first place by developing design briefs 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 exist 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 these new skillsets and attitudes, designers are increasingly asserting themselves as opinion makers, critical thinkers, and strategic planners with a global influence.

This way of working has raised the rank of the designer to that of 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 planning processes that determine what kind of designs should be produced, for whom, and why; rather than just focusing on form and style, as was 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 the 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 governing the meaning of design has changed, and the word “design” now denotes an 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 time. The current state of design and its role in business and society is in a transitional period. The matter of which skills, education, and experience designers interested in working on this level need to possess is still open for discussion. Also, at this stage it appears that there is still no one unified idea of how the new corporate in-house teams should operate, and what kind of organizational structure they should have. Furthermore, it is still too early to say which of the existing models will prove successful, and which will not. Finally, there is still no general consensus as to 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:

- **Short-term:** Define a profile of an executive corporate designer. What kind of personal traits, credentials and background should these professionals have? At this stage, such research could be initiated by conducting in-depth interviews with current design executives at leading and emerging companies.

- **Mid-term:** Develop a model (or more likely, a set of models) for optimal organizational structure of corporate in-house design teams and outline the types of methodologies that these teams could use in their work. At an initial stage, this could be instigated via corporate surveys and case studies.

- **Long-term:** Explore 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 in order to establish success levels.

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