

# HYPER-DESIGNER DESIGNER FIGURE AND PRACTICE IN ADVANCED BUSINESS CONTEXTS

Mario Bisson <sup>a</sup>, Luca Pizzolato <sup>b</sup>, Stefania Palmieri <sup>c</sup>

section	typology	DOI
DESIGN	ESSAYS & VIEWPOINT	10.19229/978-88-5509-055-1/2142019

## ABSTRACT

*This report claims to analyse and describe the way a professional designer's work is evolving, focusing on the liaison with industry. What company role do designers play and what skills do they master? What aims do they have? Modern technologies and a change in the socio-economical background have revolutionised enterprises. Design must now breach new and unexplored boundaries concerning both engineering and innovation. The rising professional figure, capable of dealing with these complexities, expert designer, skilled manager, coordinator of distinct aspects of knowledge, will fulfil the definition of Hyper-designer.*

## KEYWORDS

*working process innovation, operating methodology, industry 4.0, network, design thinking*

Industry must now face new and ever more complex challenges, based upon the competitiveness of global markets. What are the major challenges nowadays? Which tools and skills do companies need to stay competitive? Who do they address in order to innovate? Founding a company now means facing global competitors that aim to satisfy emerging needs tailoring their solutions, rather than providing more affordable alternatives to existing goods (Shani and Divyapriya, 2011). Seeking innovation then would appear to be the only and obvious way to generate value and manage to stay effectively competitive. The required skills, knowledge, and expertise change and, consequently, professionals and stakeholders must change as well. Everything is subject to revision and change of strategy, a strategy which needs, now more than ever, to evolve and update within a limited time-frame inconceivable up until a few years ago. Among all the others, a designer's work is called for an advancement in its interdisciplinary nature and its relation with costumers: supporting industry does not only mean designing an item and its functionality but its role must affect all operational levels (new materials, new markets, new purchase proceedings, new retail channels) which combined make the item attractive to the market. This report aims to prove how a modern designer's modus operandi is leading the innovation and development process working on several levels of the current socio-economic framework.

**Evolving companies** – Let us try to identify the company development within the

complex frame of the so-called Industrial Revolution 4.0. Within new social and technological backgrounds and due to several economical and financial crises, a new professional praxis, more capable to face needs and unknown financial factors, has come to life. Industry 4.0 does not simply mean using robots or softwares in order to boost production, but it also means combining the technological advancements with which science gifts us. A revolution based not on a single technology but on a set of converging ones. Every single company must realise how to best combine them, based on their unique features. In short, this is the goal of the so-called Digital Mass Production (Bianchi, 2017). However, this should not be the only distinctive feature of this new Industrial revolution. Technology remains a tool to manage the complex relation effectively and punctually between the rising demand and our responsiveness in terms of production. Several difficulties, which need to be tackled, originate from the very meaning of globalisation: the production of goods and services on a global scale is related to producers and consumers coming from vastly different social, economic, and cultural backgrounds.

The new production-management, based on interconnecting people and machines (Internet of Things<sup>1</sup>), and digitalised production, make high value transformations possible. For instance, limited series manufactured in a site responsible for both design and production. Implementing these technologies would consequently make moving production to cheaper countries where quality and flexibility are not guaranteed unnecessary. Basing design and production in the same place has proved to be instrumental to reach innovation. Company relocations, that took place within the last few decades, have caused European companies to undergo a process of professional impoverishment. Sometimes these companies are not capable of developing renovation projects, due to a lack of skills and resources, leading them to lose competitiveness and jeopardising their international role.

German designer Stephen Diez (2019), argues that companies are ever more incapable of developing internal innovation projects dealing with goods and goods production. A Design-Driven project (Verganti, 2009) must entail important innovation contents, he argues, and when the company cannot conceive them, a designer must take charge, for a designer's goal is that of providing smart and pragmatic solutions. An iconic example of how recent technologies have shaped design and entrepreneurship is rapid prototyping, a medium, now available to all sort of companies, which has revolutionised both design and production. A wise use of the afore mentioned medium can boost innovation: prototyping is useful to evaluate quickly and with relative low expenses new and perhaps extreme solutions. Fear to walk down unexplored paths in fact often leads to conservative choices, free from new costs and risks linked to the adoption of new machines and suppliers. Hence the importance of prototyping, an insurance to 'fail' quickly, if necessary, and evolve just as quickly, as theorised by Brown and Wyatt (2010). Innovation implies risk, foreseeing and minimising it allows for better developing innovation projects with less concern.

Digital transformation is pervasive and development processes, just as organizational structures must not lag. Production rate is nowadays essential to competitiveness, production must be organised in order to undergo continuous changes and the creation of close-knit teams is also key to not slow it down. It is therefore necessary to rely on figures of reference who are able to convey innovation also through the sharing of information and trigger an approach to participatory design<sup>2</sup> on all levels favorably oriented towards change and evolution. Another instrumental aspect is that of management's decision making. Managers are supported by several technological aids, a company needs however to be in the lead of by well-structured mindsets, proficient in providing 360° investment and partnership scenarios. The fact that technology itself is not enough to take successful choices proves once more the importance of methods such as Design Thinking<sup>3</sup>. Design plays a fundamental role in building efficient innovation strategies and designers are necessary to the evolution of Industry 4.0 which strongly demands specialised skills, tools and technology suited new and complex industrial circumstances.

**Design and Industry** – These two spheres are strictly and historically linked to each other by an evolving and dynamic relation. Design and industry are symbiotically bound, one's evolution causes the other to evolve as well. Thomas John Watson Jr<sup>4</sup> marked history when, giving a lecture at the University of Pennsylvania, he declared: «Good design is good business». Watson was an admirer of Olivetti's work, and tried to replicate the way the Italian conceived, developed and presented his products.

In Italy, the debate over the link between companies and design was born in the 1950's when, after the war, Italian industries became concerned with improving the quality of serially produced goods. According to Vittorio Gregotti<sup>5</sup> (1986), Italian design became crucial to conceal the structural and technological deficiencies companies were suffering. This debate was vital to the establishment of the award 'Compasso d'oro'. The idea was to reward the production of culturally significant goods and stimulate the growth of companies keen to develop quality production, thus making this award the first of its kind. Augusto Morello<sup>6</sup> (2009), one of the founding members of this award, argued that the relation between industry and design should be based on mutual curiosity, in other words, a productive encounter between the two can only take place when they are both able to understand the each other. In Italy, this relation has especially grown within the small framework of family-owned small and medium-sized enterprises (SMEs), which prompted the creation of a new, unique, and worldwide known profession, the designer. We live in a socio-economical context which does acknowledge the relevance of designers and requires them to develop higher quality design solutions.

Design Thinking methods are becoming, on various levels, increasingly common among company managers. This happens because design offers a way to combine analytical skills, often supported by quantitative methods, with problem solving strategies, which are more critical, creative and understanding towards human and social

factors (Hollanders and Cruysen, 2009). Design is key to providing solutions to inhomogeneous and complex circumstances. It would perhaps be interesting to point out that within the last ten years companies and enterprises like: Lunar Design and Veryday of McKinsey, Doblin and Flow Interactive of Deloitte, Intuity and Optimal Experience of PwC, Fjord e Reactive of Accenture have been hiring designers in order to change their production strategies.

In the modern day, society gives most credit to enterprises that no longer make any material items. Consistency, reliability, experience, and the ability to build an image of themselves are now more relevant features than quality. Several high-tech companies, in the last five years, have remarkably invested in redesigning their work praxis: IBM have changed the designer-developer ratio from 1-72 to 1-8, Dropbox from 1-10 to 1-6 (dell'Era, 2018). The Design-Driven method is also based on studying people's functional needs as well as their emotional and social ones. This attitude acquires even more relevance within heavily digitalised contexts, usually only meant to provide technical performances. Digital technologies have not only accelerated business proceedings, but also triggered and spread creativity. This implies, that widespread digitalization process of society and products, stimulated by IoT and other channels, encourages design-oriented strategies. Designers consequently must channel, organise, and foresee all the possible business scenarios that technology is likely to bring into the world.

**New context design** – As we have previously discussed, design must explore new and unexplored contexts, hence its need to keep evolving and seeking more suitable tools. Due to its changing nature and its deep relation with the monetary and social circumstances, we are not able to let design fall under a static theoretical definition. We shall then refer to the definition given by the World Design Organization (2015), and updated during the 29th general gathering in 2015: «Industrial Design is a strategic problem-solving process that drives innovation, builds business success, and leads to a better quality of life through innovative products, systems, services, and experiences. Industrial Design bridges the gap between what is and what's possible. It is a trans-disciplinary profession that harnesses creativity to resolve problems and co-create solutions with the intent of making a product, system, service, experience, or a business, better. At its heart, Industrial Design provides a more optimistic way of looking at the future by re-framing problems as opportunities. It links innovation, technology, research, business, and customers to provide new value and competitive advantage across economic, social, and environmental spheres. Industrial Designers place the human in the centre of the process. They acquire a deep understanding of user needs through empathy and apply a pragmatic, user-centric problem-solving process to design products, systems, services, and experiences. They are strategic stakeholders in the innovation process and are uniquely positioned to bridge varied professional disciplines and business interests. They value the economic, social, and environmental impact of their work and their contribution towards co-creating a better quality of life».

This declaration clearly states that design's ambition is to play the main character on the stage of innovation, managing and coordinating different sorts of knowledge, aiming not only towards financial success but also to social and environmental development (Fig. 1). Ezio Manzini's opinion summarises this thought very well. According to him society is made of people who need to design, individually and collectively in order to achieve their short and long-term life projects. This social stage is fertile for the growth of designers who function as social players capable of driving innovation on different scales (Manzini, 2015). The fact that all individuals have projects means all individuals need someone to help develop them, an expert who can master the cultural and practical tools which are in the hands of us all. Manzini also argues that what used to be called design has evolved, perhaps more quickly than the cultural context in which it was born. Design, on a professional and disciplinary level came to existence at the beginning of the last century, in connection to the changes lead by industrial development, resulting in a link between its original definition and the needs of the industry. The consequence was design being associated to industrial serial production. However, the recent social and industrial changes have linked design not only to goods production but also to services, organisations, and a growing number of everyday-life activities. Especially the latter are no longer conventionally performed (through the adaptation of 'the way it was always done' method) and need to be constantly re-designed. Therefore, evolved design must resemble an amalgamation of skills, accurate cultural tools that can solve all kinds of issues ranging from conceiving an item to co-creating social services and shaping new forms of democratic representation. A designer must be prepared to work under any sort of circumstances.

**Hyper-designer: who is and what is his praxis** – What has been discussed so far entails a reconsideration about the professional role of designers, their specialised skills, and peculiarities. A designer's contribution must be more advisory, strategic and leader of methodological and manufacturing innovation. All these aspects combined bring to life a real paradigmatic alteration which revolutionises a designer's work. Previously, a designer's profession was conducted vertically, now a Hyper-designer operates on multiple horizontal levels. The scientific and technological progress constantly fathers new specialised expertise. A designer, however, seeks a managerial role, which would not alter the integrity of existing projects and be instrumental in organising different opportunities, according to a company's limits and desires. A designer's vocational training is naturally multidisciplinary, and interdisciplinary by inclination, in other words a designer must aim to create cohesion between otherwise independent disciplines, for instance the technical and humanist spheres. Design contributes to providing strategies to analytical issues (cause analysis and problem-solving), semantic aspects (meaning allocation and storytelling), technicalities (choice of materials and specific project solutions), formal aspects (ratios, proportions, and operating interface) and finally company management, such as brand building and marketing (Fig. 2). Due to the

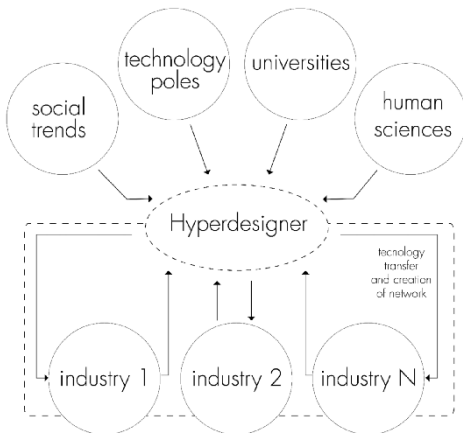
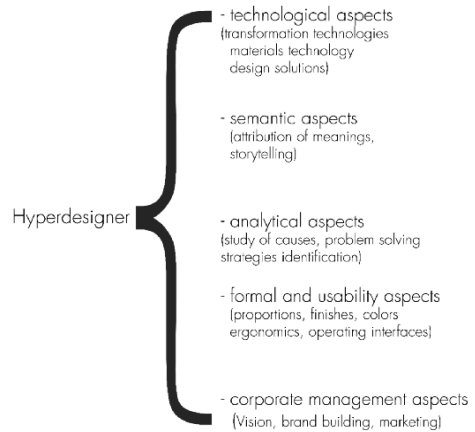
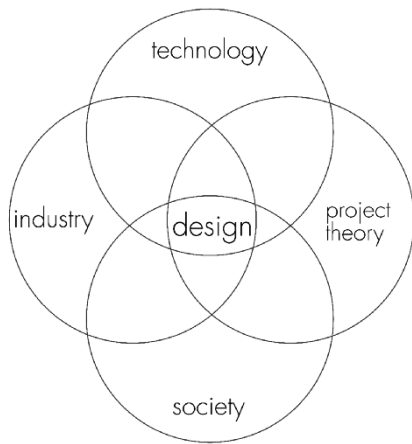


Fig. 1 - Design as a union and intersection of independent realities.

Fig. 2 - Hyperdesigner's contribution on different operational levels.

Fig. 3 - The central role of the designer for business innovation.

number of disciplines and skills designers needs to master, their work is often hard to define without ambiguities and can only be limited to the wider operating range of project making.

**The collaborative paradigm** – Just as in the previously mentioned case of the fertile partnership with Italian SMEs, the optimal operational paradigm for the Hyper-designer is to support companies through professional collaborations from outside the organization chart. The successfulness of this relation derives, on the one hand, from the independence accorded to designers which is key to gaining new skills and experiences and provides technological knowledge sharing. On the other, not belonging to the company's hierarchy allows the designer to operate within the company's network and decide if, where and how to take action and effectively establish links between company members and outsiders more freely. A hyper-designer is moreover capable of

‘revising’ a company’s innovation process. Nowadays, managers hire designers bearing in mind the innovative contribution they can bring, rather than simply having them ‘sign’ a product to gain visibility. This is further proven by the furnishing industry, naturally keen on style, whose managers are not hiring popular designers but are drawing long-term contracts with the goal of obtaining more accurate and effective results.

Hyper-designers then play a medium to long-term role and specifically meant for the one company that hired them. They establish connections between parties, open cooperation opportunities with new stakeholders, bring to companies well-structured and functioning business strategies, which are fundamental to gain a competitive edge. A hyper-designer is called to face evermore complex and unknown scenarios. From a professional point of view this implies constantly challenging and testing one’s own expertise. Only a deep and continuous social and technical analysis can be sure to obtain and maintain successfulness.

**Conclusion** – It would be hard to summarise every one of the far too many shifts and transitions that are taking place within the boundaries of global industry, design, and society. We have managed, however, to prove the necessity of having professionals who are capable of conceiving, coordinating, and developing strategic innovation processes. In light of the concepts expressed above, it is possible to identify a new virtuous and paradigmatic pattern which can trigger innovation and growth and is pragmatically and strategically embodied by Hyper-designers. (Fig. 3). Promoting and facilitating this dynamic pattern based on company networks, research and professional project making becomes more than ever crucial to spark cooperation and skill transfer. Companies that wish to address the innovation challenge must be open to technological development and support wide nets of strategies aimed to social, economic, and environmental evolution. Likewise, an evolved designer must seek to become increasingly Hyper if they strive to play the leading role on the stage of design, industry, and society.

## NOTES

- 1) Term coined by Kevin Ashton, of Procter & Gamble, later MIT’s Auto-ID Center, in 1999. Internet of Things (IoT) is the extension of Internet connectivity into physical devices and everyday objects.
- 2) Approach to design attempting to actively involve all stakeholders, originally born in 1970s in Scandinavia as co-operative design, and later evolved.
- 3) Managerial methodology developed and taught at Stanford University starting from 2005, oriented to the problem solving of complex problems through the integration of analytical and creative activities.
- 4) Thomas John Watson jr, historic CEO of IBM from 1952 to 1971.
- 5) Vittorio Gregotti, Italian architect, essayist and designer awarded the 2012 Milan Gold Medal for his career. For further details see: Gregotti, 1986.
- 6) Augusto Morello, design theorist trained in the field of industrial chemistry, business manager with Olivetti and La Rinascente, a lively promoter of Italian design, directed the magazine *Stileindustria* and held various institutional roles including that of President of the Milan Triennale and



ADI (Association for Industrial Design). For further details see: Morello, 2009.

## REFERENCES

- Bianchi, P. (2017), “Quarta rivoluzione industriale. E se a guidarla fosse la comunità scientifica?”, in *Industria Italiana*. [Online] Available at: <https://www.industriaitaliana.it/quarta-rivoluzione-industriale-se-a-guidarla-fosse-la-comunita-scientifica/> [Accessed 16 June 2017].
- Brown, T. and Wyatt, J. (2010), “Design Thinking for social innovation”, in *Stanford Social Innovation Review*, winter 2010, pp. 31-35.
- dell’Era, C. (2018), “Il Design Thinking mette la persona al centro dell’Innovazione”, in *il Sole 24ore*, daily paper of June 18. [Online] Available at: <https://www.ilsole24ore.com/art/il-design-thinking-mette-persona-centro-dell-innovazione-AEK6nFyE> [Accessed 20 June 2018].
- Gregotti, V. (1986), *Il disegno del prodotto industriale | Italia 1860-1980*, Electa, Milano.
- Hollanders, H. and van Cruysen, A. (2009), “Design, Creative and Innovation: A Scoreboard Approach”, in *INNO-Metrics Thematic Paper*, European Commission, Brussels, February.
- Manzini, E. (2015), *Designs, when everybody designs*, MIT Press Ltd, Cambridge.
- Morello, A. (2009), *Visioni della Modernità*, Triennale di Milano-Electa, Milano.
- Munari, B. (1971), *Artista e designer*, Laterza, Bari.
- Shani, N. and Divyapriya, P. (2011), “Developing Creative and Innovative Culture in Organization”, in *International Journal of Management (IJM)*, vol. 2, n. 1, pp. 52-57.
- Diez, S. (2019), *Designatlarge*, interview by Traldi, L. [Online] Available at: <http://www.designatlarge.it/stefan-diez-industrial-design/> [Accessed 28 January 2019].
- Verganti, R. (2009), *Design-driven innovation. Cambiare le regole della competizione innovando radicalmente il significato dei prodotti e dei servizi*, Rizzoli Etas, Milano.
- World Design Organization – The Professional Practice Committee (2015), *Renew definition of industrial design*, Report at the 29th General Assembly in Gwangju (South Korea). [Online] Available at: <https://wdo.org/about/definition/> [Accessed 28 January 2019].

<sup>a</sup> MARIO BISSON, Architect, Associate Professor at the Design Department of Politecnico di Milano (Italy), Scientific Director of the EDME interdepartmental laboratory of Politecnico di Milano, Scientific Director of Color laboratory Politecnico di Milano, founder and scientific director of MDA, member of the Polidesign board of directors scrl. Mob. +39 331/72.65.620. E-mail: [mario.bisson@polimi.it](mailto:mario.bisson@polimi.it)

<sup>b</sup> LUCA PIZZOLATO, product designer for innovation, carries out professional research in the field of product and service design. He is teaching assistant at the Politecnico di Milano (Italy). Mob. +39 347/63.05.903. E-mail: [luca.pizzolato@mail.polimi.it](mailto:luca.pizzolato@mail.polimi.it)

<sup>c</sup> STEFANIA PALMIERI, Architect, PhD in Industrial Design at the Design Department of the Politecnico di Milano (Italy), where she is a permanent researcher. She is responsible for relations with companies and professions for the School of Design. Its teaching, research and management activity aims to create a network of collaboration with the world of production at 360°, aimed at strengthening and stabilizing synergies between University and Enterprise for the creation of cultural and interchange networks. Mob. +39 335/67.59.314. E-mail: [stefania.palmieri@polimi.it](mailto:stefania.palmieri@polimi.it)