Design for transformation. Unlock competencies for coping complexity



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Abstract

After almost three years since the Covid outbreak, the structural damages the pandemic wreaked are finally becoming more evident than the death toll. A growing crisis that affects the public sector, families, and companies is anticipated by failed businesses and routines that have been disturbed by the fear of the invisible. The university enters this situation as a strategic place for research and a training ground for experts who will steer the transformation.

Grounded on a vision of design as a force of change, the Imagis Lab research group has investigated the different meanings of "design and transformation" since 2015, probing the transformative skills of distant professional worlds. The focus has been on understanding design's role in promoting change processes. So to know how to be a human and professional anchor capable of activating contemporary, sustainable and long-lasting organisational change.

The first part of the paper will provide a description of the main actions and insights from the Research Through Design approach. The research, started in 2018 and still ongoing, begins with an insight: digital transformation is human-driven. This a statement that prompted us to investigate the role that design, marketing and communication can play in organisational change processes. The second part of the paper is devoted to presenting the reflections on the transformative competencies inherent to the design practice, among which are: emotional agility (listening for self and others); leadership (motivation for self and others); creativity (breaking from automatism and identifying an actual solution); storytelling (insight and creation of new meanings).

As a result, we propose to look at the design(er) as a figure able to challenge contemporary complexity (strategy) through active listening and empathy (human-driven approach) for identifying contemporary solutions (marketing, product, and service) developed by sequencing seemingly distant dots (design) and conveyed through new meanings (storytelling).

Author keywords

Design for transformation; Design attitudes; Soft competencies; Emotional Agility; Leadership; Creativity; Storytelling.

Introduction

Almost three years have passed since the Covid outbreak, and the structural damage caused by the pandemic is now emerging clearly beyond the death toll. Failed businesses and routines disrupted by the fear of the invisible anticipate a progressive crisis that strains public administration, families and businesses. Into this scenario comes the university, which, on the one hand, stands as a privileged place for research; on the other hand, it prepares professional figures to lead the transformation (Stolze et al., 2018; World Economic Forum, 2020). In this technological, economic and social evolution context, digital transformation emerges as an increasingly relevant and unavoidable phenomenon in the business landscape (Kane et al., 2015). Suppose we understand Digital Transformation (henceforth DT) as a process enabling a major cultural transformation (Kraus et al., 2022). In that case, there emerges the need to understand how design, marketing and communication become crucial areas of a process that involves people first and foremost.

Our work aims to define how the practice of design emerges as an indispensable asset for developing cultural transformation within companies and what are the competencies of this new type of consultant: the designer for transformation.

Design (Manzini, 2015), marketing (Kotler & Keller, 2009) and communication (Jenkins et al., 2013) have historically been levers for reaching and engaging audiences. The difference from the past is that today, with the implementation of digital technology, they acquire a renewed ability to respond to audience needs. They become natural enablers in organisations' transformation processes because of their ability to collect and interpret data by understanding the target audience's needs and intervening directly in the relationship between supply and demand (Ronchi et al., 2020).

Main actions and insights coming from the Research Through Design

Grounded on a vision of design as a force of change (Design Council, 2021), the Imagis Lab research group has investigated the different meanings of "design and transformation" since 2015, probing the transformative competencies of distant professional worlds. The focus has been to understand the role of design in fields where the "know-how" connected

to a specific aim gives way to "knowing how to orient" in the unknown. So to know how to be a human and professional anchor capable of activating contemporary, sustainable and long-lasting organisational change.

Step 1 - Digital evolution pushes the transformation

In light of such premises, a scenario emerges in which the ubiquitous incorporation of the digital everywhere brings the entire market system facing an inevitable transformation. The consequence is that economic and social changes enormously alter the mediascape (Appadurai, 1990), pushing society toward a scenario in which relationship becomes a key element of communication and market innovation mechanisms, especially in its newer forms. In this sense, the shift from multichannel to omnichannel paradigm and digitization (Bloomberg, 2018; Mazzone, 2014; Rogers, 2016; Westerman et al., 2011) revolutionised outcomes and also work processes in many fields of application. Suppose we strive to read the contemporary in these terms. In that case, DT presents itself as a process of the evolution of business culture and a re-interpretation of the tools available to the enterprise.

These reflections prompted us in 2018 to investigate the role design, marketing, and communication can play in organisational change processes. The output of this first phase was a book that allowed us to focus on the insight that guided the research's development: DT is human-driven. Then, the main evidence was the understanding that to activate a DT, we must first activate a listening process. Therefore, figures who can listen, translate the needs gathered and mediate this information with the technology, and business aspects are needed.

From which a series of assumptions were then detailed:

- » DT is a process of identity evolution;
- » DT is a process of changing managerial culture;
- » DT is a reinterpretation of the tools available to the enterprise;
- » DT directly impacts people, and this determines the real revolution.
- » DT is NOT a simple implementation of digital technology within business enterprises.

Step 2 - Focusing on design opportunity

From these insights, we wondered what the role of design and designer could be within the DT processes that become value-driven and human-driven.

Then, in 2019 we started to investigate the characteristics of the designer who leads the transformation, with the identification of the design opportunity: what characteristics enable design(er) to activate and lead the transformation?

Therefore, we decided to conduct experiments carried out in collaboration with different companies, applying a Research through Design (RtD) approach (Frankel & Racine, 2010; Frayling, 1993) that involved the collaboration of different stakeholders: researchers, practitioners, companies and students from the School of Design were involved in educational and design experiences that applied co-design methods (Bjögvinsson et al., 2012; Sanders & Stappers, 2008) and open innovation (Chesbrough & Bogers, 2014).

All the experimentations allowed us to identify the design practice as an attitude to change. A design attitude, capable of fostering a cultural change and a new mindset that integrates design, techne, leadership and emotional intelligence: what we

identified as competencies for transformation, investigated in the next step.

Step 3 - Design competencies for transformation

In 2020-2021, we focused on understanding the competencies potentially stimulated by design education curricula and professional pathways, following the adoption of the knowledge, skills, and attitudes model (henceforth KSA's Model) (Bloom, 1956; Krathwohl et al., 1956) for mapping human competencies and supervising three Master's theses on the topic.

The pathway stems from an in-depth study of the digital transformation process of the Italian business unit ABB Sace, a leading multinational company in the technological sector, carried by the design agency *Twig* (www.twig.design) between 2016 and 2019. In 2020, Giulia Sormani and Marco Ronchi were interviewed several times by Professor Paola Caiozzo, co-founder of the Commercial Excellence Lab (CEL) at SDA Bocconi. They illustrate with which mindset the organisation of processes, roles, skills, tools and actions was rethought: it emerges how much design has been recognized by the sponsors of the transformation as a discipline with a high contribution to agility and complexity resolution. Several questions emerge from the debrief, including those related to the distinctiveness of design dealing with organisations' transformation:

- » What are the differences between a design-driven versus a technology-driven or economy-driven transformation?
- What competencies does design bring to make its contribution to transformation unique?

If we talk about design's authority:

- » How fully is design recognized as a discipline capable of managing a transformative process?
- » Why does the (Italian) market struggle to recognize the designer's governance of a transformative process, but more so its execution?

If we talk about design awareness:

- What prevents design from dialoguing at an equal strategic level with the (Italian) engineering, technology or business communities?
- » Are there moments of organised awareness within design education pathways that allow young designers to question the transformative capabilities of the discipline and the strategic-executive ones?

The connection of Imagis Lab with Paola Caiozzo confirms the importance of involving a scientific community external to design and intrinsically linked to management and business organisation. Of all the areas explored, what forms the basis for further study is the common need to understand what competencies made design peculiar to change in an organisation with a strong engineering culture.

The master's thesis of Alice Cassanmagnago (2020), deepened the previous reflections of Bartram and SHL Group's model "The Great Eight" (Bartram, 2005; Bartram et al., 2002) within a methodological and cultural excursus that 1) analyses the competencies of the designer through the eight domains presented in the model, 2) selects among the 112 listed competencies those most consistent with its figure, and 3) classifies them into:

» Core competencies: the "know-how" classically acknowledged to design;

- » Strategic competencies: the "knowing how to be," not yet fully recognized to design;
- » Transformational competencies: "knowing how to change," not recognized to design.

The mapping activity highlights significant areas of overlap with the disciplines historically devoted to business management, identifying planning, listening, and collaborative approach as the distinctive characteristics that form the basis for the subsequent investigation of design's "transformative attitudes." Not forgetting all those "know-how" skills already recognized.

Then, Marco Ronchi and Serena Ballabio continue the investigation by supervising two more theses, focusing the insights of the first investigation into areas of high transformative need:

- » The thesis of Filippo Collura (2020) investigates the role of the designer in sustainability-related processes using the framework previously developed by Alice Cassanmagnago (2020), and focusing on what skills can contribute to the adoption of effective circular economy processes. The dissertation 1) analyses models from The Circular Design Guide (The Circular Design Guide, n.d.), research from Delft University of Technology, and the Cyclon case study; 2) links insights from these sources with to the transformative skills identified in the previous dissertation; and 3) proposes a new tool aimed at design practitioners with an aptitude for sustainability. The result is a useful tool for navigating within circular economy processes and understanding how design skills can make an effective contribution to the development of circular economy processes: the Design(er) for Sustainability Framework.
- » The thesis of Giorgia Calloni (Calloni, 2021) investigates the needs of the third sector in Italy through a side-by-side journey with the Cooperativa Rapsoidea, committed to solving the educational emergency triggered by the first wave of the Covid-19 pandemic in the province of Bergamo, Italy. The cooperative's mission is to build co-design experiences with different stakeholders in the area, pushing young people to take charge of the territory's needs by exploiting and investigating the possibility that the discipline of design supports them in the construction of their "life project". In this case, the output is the ETS Partnership activation toolkit: a tool aiming at guiding social workers in engaging third-sector entities, engaging youth, gathering needs, forming a group for the related development of design responses, and using a design-driven approach.

Step 4 - Humans through transformation

At the end of 2021, the collaboration with Cooperativa Rapsoidea took a specific shape during the Final Design Studio in Communication Design involving design students, local youth and stakeholders from the province's social, cultural and productive fabric of Bergamo.

Twenty-five young designers were provided with the basis for investigating the transformative competencies previously identified in themselves. Then, after framing the concept of competency, the students were asked to step into the shoes of coaches and facilitators of 20 youth from the area (aged 16 to 19), guiding them in listening to the needs of stakehold-

ers and redesigning some symbolic places in the area:

- Stimulating in themselves the skills preparatory to activating, orienting and guiding a transformation process;
- Transmitting these competencies to youth who have never studied or heard of design, without directly contributing to the solution but exclusively transferring mindset and method (design thinking) to them.

At the end of the four-week course, students analysed their experience and skills through a questionnaire based on "The Great Eight" model to make them reflect:

- » Whether in their undergraduate design journey, they had ever been aware of or had ever been placed in the conscious condition to question the above transformative skills;
- Whether in their undergraduate design journey, they had ever been trained explicitly on the transformative skills that emerged;
- » Whether prior to the just-completed co-design experience, they felt that they were naturally predisposed to some of these skills;
- » Whether, after the just-concluded co-design experience, they felt that they had activated some of these previously dormant skills;
- Whether they had questioned the importance of one or more of these competencies for their professional future.

Future framework for contemporary transformation

Through our experiences in the field and analysis of data from open innovation in education, we have identified three key moments in the design process in which transformation is enabled:

- » Needs: design formalises the ultimate purpose of transformation (meaning), traces the processes to activate it (systemic vision) by placing human needs at the centre of inquiry (empathy);
- » Competencies: design identifies externally (designers) and internally within the organisation to be transformed (internal stakeholders) the competencies (knowledge, skills and attitudes) needed to initiate and guide the process;
- » Community: design creates moments of shared design (co-design) that enable designers to stimulate the transformative attitudes naturally present in internal stakeholders (engagement), transferring the design mindset (culture).

In particular, the area of "competencies" emerges as a moment to be further explored. Indeed, we understand that a better classification of competencies based on the continuous exchange and contribution from other fields can offer our discipline a different positioning towards managers who choose the path of transformation.

From this value proposition comes a new self-awareness framework dedicated to those who want to transform and those who want to support people that are getting things done. A tool based on four specific attitudes that design inherently promotes in the development of what we call "transformative courage," through:

» Listening to the self and the ecosystem as a whole (emotional agility) (David, 2017; Siegel, 2020), e.g. showing empathy and dealing with ambiguity;

- The search for purpose is what nowadays unites distant worlds (leadership) (Bruttini, 2007; Grant, 2013), e.g. making decision and motivating others;
- The breaking of automatisms and devising contemporary solutions (creativity) (Brown, 2019; Kelley & Kelley, 2015); such as analysing, evaluating information and thinking broadly;
- » Identifying and constructing new shared meanings (storytelling) (Hansen, 2020; Roche & Sadowsky, 2003) in terms of negotiation and proactive communication.

These four fundamental competencies can be used transversely in design-driven transformative processes. However, they emerge in different proportions depending on the design process stage and the designer's characteristics leading the process. Whenever a designer addresses a path of organisational transformation in which the impact of change is primarily about people and their involvement, it happens systemically.

We understand through empirical observation in the field that the moment the designer comes alongside the ultimate target of the transformation—the user who will experience the outcome—he or she can decree the commitment and evolution of the process itself.

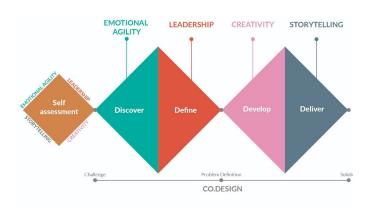


Figure 1. Visualisation of the 4 design attitudes across the double diamond in the design-driven transformative processes.

Final reflections

Historically, polytechnic culture has been credited with a multidisciplinary approach of intersections and tangencies between art, technology and humanistic culture, methods and technologies. Today, however, becoming a designer is not just about having acquired these skills and having gone through theoretical and design experiences: it is not (only) so much about "knowing how to do something better than others," but rather about "knowing how to stimulate in others what they have best to give," thus "knowing how to be without allowing for knowing how to do," interpreting contemporaneity and its scenarios, enabling the space and rhythm where others carry on the path according to their vision, while respecting their own identity and ability to contribute to the evolution of the ecosystem. The technical and tactical approach is fundamental. However, suppose we want to grow a new generation of designers "with transformative courage" to face the challenges of the contemporary world. In that case, we need to complement the technical skills with an expansion of the strategic ones that enables them to have a systemic vision by going beyond the strong pragmatism of Western culture (Morin, 2001).

In light of such premises, our purpose as a design research group is to propose the design(er) as a figure able to challenge contemporary complexity (strategy) through active listening and empathy (human-driven approach) for identifying contemporary solutions (marketing, product, and service) developed by sequencing seemingly distant dots (design) and conveyed through new meanings (storytelling). According to this, we must continue to promote and investigate these four aptitudes in the form of a framework.

To conclude, our goal for 2023 is to present and test the framework based on these four domains, which is useful 1) to design students as a pathway to self-awareness, 2) to business and public administration managers as a professional engagement tool, and 3) to designers themselves, to support the positioning of this new design attitude for transformation.

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