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THE COMPETENCE OF A SUCCESSFUL DESIGNER

NIINA TURTOLA, PROF EMERITA KAARINA MÄÄTTÄ

Abstract:

The designer's practice is subject to ever-increasing demands in the accelerating transformations and complexities of our time. A designer's competence requires continuous renewal and realignment, yet it contains several permanent qualities. The purpose of this article is to create a holistic picture of the competence of a successful designer. This article shows how a designer's competence is constructed of four factors: cognitive, social, emotional, and functional. Cognitive factors include several characteristics required for design thinking, especially creativity, and the ability to produce new insights and the ability to cope with uncertainty. Design is a social process, where interaction skills and the ability to collaborate are crucial in a co-design approach to collective creativity. The designer's positive feelings, attitudes and enthusiasm promote design thinking, problem-solving and innovation. Functional factors, such as good knowledge and skills, are essential tools for the development of the design. These promote the designer's work satisfaction and well-being. The success of a designer requires multi-faceted competence, and success does not only depend on personal characteristics. Success is influenced by the environment in which the designer works. A good atmosphere of the work community, support and encouragement promotes success for all parties involved in the design process.

Keywords:

designer, competence, success, skills

JEL Classification: J24

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1 Introduction

Friedman and Stolterman (2017) have noted that the contemporary times we live in set new types of challenges for designers. These challenges cannot be solely approached through design practices with a focus on individual experience and personal development, hence analytic and synthetic planning skills are needed. The world has become more and more unpredictable and complex to be interpreted and understood. This development has a clear impact also on the profession of a designer (e.g., Lawson 2005, p. 113). For Ken Friedman (2003) being a designer means continuous learning, problem-solving, and application of the knowledge generated working as a designer. The audience, which is a targeted group of people a particular design is meant to be used by or engaged with, is generally predetermined. Therefore, specific designs are meant for certain framed groups of people.

Friedman (2003) emphasizes the nonlinear nature of the design process where solution and problem emerge cohesively. With the challenges posed by the current era, designing requires ever-increasing know-how from the designer. As the potential of design impact increases, also the challenges increase. As such this is seen as an enabler for innovation.

The purpose of this article is to capture a general perspective on what is meant by the competence of a successful designer today. The purpose is to review the set of knowledge required of a designer. Before this, we consider the challenges and multidimensionality of the concept of design and the essence of the term competence.

2 Definition of design

Finding a comprehensive definition for the term 'design' is complicated and manifold. Following Friedman and Stolterman (2017, p. ix) design "is the entire process across the full range of domains required any given outcome". All goods and services are designed, and the need to design dates to human ancestors. Design is a process, it is linked to services, it is a profession, and exists to serve human needs. (Friedman and Stolterman 2017, p. ix) Herbert Simon (1982, p. 189) stated famously that: "Everyone designs who devises courses of action aimed at changing existing situations into preferred ones". Manzini (2015, p. 35) challenges Simon's definition by envisioning design not as problem-solving, but as a proactive collaboration process of the social construction of meaning. Manzini (2015, p. 3) proposes a division of design into diffuse design, where everyone is a designer, and expert design, where designers are trained professionals. Following Papanek (2019, p. 3) we are all designers and design is a basic human activity, whereas for Friedman (2003, p. 508) the process of design is systematic, and goal driven.

Diverse definitions open potential few new approaches, yet today's designers and organisations can no longer ignore the "wide-ranging systemic, social, economic, political, and environmental challenges we face" (Staszowski and Tassinari, 2021, p. vii-x). Staszowski and Tassinari (2021) state that modes of thought (models, concepts, and arguments) should not be separated from courses of action (scenarios, strategies, proposals, and works). Staszowski and Tassinari (2021) suggest that both the micro level of local knowledge and the macro level of universal knowledge

must be acknowledged. Challenging the boundaries between design and design thinking means that diversity of design and innovative thinking is bound to emerge. Pluralism in design is not a new concept and it simply means “willingness to accept that there are plenty of ways of doing design” (Poynor 2015, p. 8). There is no such thing as one ‘we’ or one universal way to design or see the world, hence there are multiple ways of seeing, designing and creating things in the world (Turtola, 2021). Bonsiepe (2006) has reminded designers that there is an absence of questioning activities linked to design production.

The terms ‘design’ and ‘designer’ have in recent years penetrated the vocabulary and activities of people beyond the designer community that is generally accredited for design work. Many people behave and think like designers today in different situations and different ways. The democratisation of the terminology has blurred the meaning of ‘design’ amongst designers. At the same time, an increasing number of people discuss aspects of design. (Manzini, 2015). Almost all the processes and products that people have designed, drawn, built, assembled, and manufactured to shape our living environment, are part of the discipline of design. (Parsons 2015). The concept of design has developed over time and gained different focuses throughout history (Lamminpää, 2021). The essence and ontology of design can be viewed as coexistence between several factors, the most important of which conventionally are the designed product, the users, and the design process (Uotila, 2003; Ryttilahti, 2020). Design thinking offers a space where to develop sustainable approaches; the design discipline is by nature interdisciplinary and integrative (Friedman 2003, p. 508). With interdisciplinary approaches in research and design practices, the complexities we face can be addressed, and this is more important today than ever (Friedman, 2018).

2.1 Product

A product can be viewed from several criteria, which also guide the designer's process of designing. A product and service created as an intended outcome of a design process can be viewed from several vantage points. Quality, rarity and aesthetics of a product are seen as contributing factors (Ryttilahti, 2008). The ability to enjoy the product and or service in a multisensory manner is important (Ryttilahti, 2020, p. 24). Ecology (Van der Ryn and Cowan, 2013) and sustainability are becoming predominant factors also in the evaluation of design products (O’Connor and Cox 2005; Margolin, 1998).

Friedman (2003, p. 514) connects designed products to disciplines of science, engineering, and technology due to the industrial production of these products and the predictable aims of design. Following Friedman (2003, p. 514) designers are not artisans. Industrially produced artefacts are born of predetermined design processes and these products exist nearly everywhere around us. (Friedman 2003, p. 514) Contrary to this Papanek (2019, p. 3) notes that composing a poem, writing a concerto, and painting a masterpiece belong also to the discipline of design.

2.2 User

The use of the products, services, and the user itself affects the designed outcomes. It is essential to acknowledge the expectations and interpretations the users have of products and services.

Knowing the interpretations of the recipient is important. Listening to the user's voice and involving the user in the process is essential in design development and research. Design shapes how we perceive reality (Turtola, 2021).

The use of design and customer behaviour can be seen as the consumption of design (Rytilahti, 2020). Lakoff and Johnson (1999) describe five factors that define design consumption: 1. resources, 2. the use of the resource, 3. the purpose or goal of the user, 4. the value of the resource and 5. the value of the goal. The user wants to achieve a goal and the goal requires a certain number of resources that the user acquires. Using the resource, the user achieves the value of his or her goal. Different consumption metaphors emerge from these five factors that define design consumption. (Lakoff and Johnson, 1999).

Differences between users are a widely researched area (e.g., Kotro 2005; Leadbeater and Miller, 2004; von Hippel, 2006). Kotro (2005) wonders, how and when the areas of producing design and using design intersect the design practice. Designers form their perceptions of the users to whom they produce and aim to sell their products. Therefore, Rytilahti (2020, p. 163) notes that users of design can also be considered producers of design and at least co-developers. The interaction between the user and audience and the product varies by the designer's attitude and approach to design and strategic objectives.

User-centred design has been of increasing interest to researchers (Frascara, 2002; Sanders, 2002). As a result, special concepts related to the use of design have emerged such as ergonomics of design, sportswear design (Bramel, 2005), and healthcare-related design (Alhonsuo, 2021; Rowe, Knox, and Harvey, 2020). Manzini (2015, p. 13) suggests that producer and user roles overlap when users participate in something what they need, but also, what they like.

Consumed goods have a direct connection to the economy (Appadurai 1986, p. 8–9), humane well-being (Lakoff and Johnson 1999, p. 291) and sustainability (McLennan, 2004; Thackara, 2006). Today several designers are more and more interested in co-design approaches and participatory design where the purpose of design is to be beneficial to society, not merely benefit the economies of production.

There are diverse opportunities for engagement with the user as discussed above. Redström (2017, p. 50) writes that conventionally Scandinavian design is about 'form' and 'user' and that these two words define how design is understood on a general level. In simple terms, design is about giving a form to concepts that then reach a defined user (Redström 2017, p. 49). Dorst (2019) offers a radically different approach as he takes the complex nature of the problem as a situational starting point, and then reframes the task of design as a system of transformation, rather than the creation of a solution. The user is anyone who is exposed to designed objects for Turtola (2021). The outcome of the user interaction is the potential of an individual to solve societally challenging riddles provided as typographic prints. The potential for dialogue therefore lies within the individual user as a citizen to act. Design, following the thinking of Dorst (2019), has the potential for the user to engage in a process of societal transformation.

2.3 Design process

We have discussed aspects of the product and the user now moving on to the actual process of design. Andrew Pressman (2018, p. 4) defines design thinking into five parts: “1) A process that results in a plan of action to improve a situation, 2) A skill that incorporates situational awareness and empathy into idea generation, 3) A tool that invokes analytical as well as creative thought to solve problems that consider context, stakeholder requirements and preferences, logistical issues, and cost, 4) A mindset in which ideas are triggered from diverse, even discrepant, sources, and then built upon to inform progressively better solutions to challenges, and 5) A series of actions and an accumulation of provisional inputs that are structured by a loop in which problems are defined, research and analysis are conducted, and ideas are proposed and then subjected to critical feedback and modification, which in turn leads to repeating parts of the loop to further refine the ideas”.

Central to the design process is design thinking, the essence and progression of which have been extensively studied. Sanders and Stappers (2008) describe the design process with its fussy front-end phase to showcase its intricacy. One of the most common ways to depict the design process is The Double-Diamond model of design that divides research and design phases into four stages: Discover, Define, Develop and Deliver. The British Design Council popularised this model in 2005 and Don Norman (2013, p. 220) proposes that designers start to design by questioning the problem statement received. For example, Alhonsuo (2021, p. 221) uses this model in her healthcare-related service design doctoral research.

Moving to the systematic design process in more detail, Pressman (2018, p. 5-6) defines design as a problem-solving process and writes that design thinking is a learnable, progressive, and iterative process which starts with *information gathering* where the context and stakeholders are identified. To begin with, the process is to lay a thorough understanding of all scenarios and possible conflicts that surround the problem statement. Historical perspectives need to be analysed. A range of precedents that might apply to the problem must be identified. Interviews and mini-ethnographic scope must be established. Key stakeholders are to be involved early in the process to deepen the understanding of the problem area. Data generated at this stage informs the whole design process and it may trigger new investigative ideas. (Pressman 2018, p. 5-6)

The process continues with rigorous *problem analysis and definition* where the status quo is established and questioned, and the most salient problem is defined. Assumptions are questioned and problems are reframed. The analysis is a platform for brainstorming and envisioning with the intent to arrive at a clear and organized problem statement having several vantage points. This phase is followed by idea generation with a focus on brainstorming and envisioning aiming at generating and testing as many ideas as possible, good, bad, and silly ideas are all taken into consideration. This phase is informed by previously gathered data in that is in conjunction with the problem analysis. The outcome from this phase can be a diagrammatic concept. (Pressman 2018, p. 5-6)

Synthesis through modelling is how the process proceeds. Here the most successful ideas are scrutinised in detail and prototypes are created, models are built and drafts for solutions are

generated. Multiple simulations of possible scenarios and outcomes are generated. Play, manipulation and experimentation are important to this phase and learning and discovery is the most important part of the synthesis. Pressman (2018) ends the process with a *critical evaluation* which means model testing, iterating, and improving. Critical appraisal is received from stakeholders, colleagues, and objective outsiders. Feedback collected from stakeholders enables revisioning. Constructive criticism, iteration, and development of the model enable retesting to take place to ensure the criticality of the project.

Seeing design practice as systematic problem-solving is only one approach to design, as stated before. Creative thinking is for Pallasmaa (2017, p. 74) the actual praxis of design, hence the actual work of designing something. Creativity is something that is learned through practice and experience. Creativity is not something that emerges unexpectedly or suddenly. Accepting uncertainty as part of a design process stimulates a designer's curiosity. Designing is a journey of discovery towards unknown territories. Designing is a process of waiting, listening, collaboration and dialogue, not a mere cognitive process. (Pallasmaa 2017, p. 74-75) Pallasmaa (2017, p. 76) sees that architecture is on the verge of deadly uniformity and on the other hand, it is drifting towards rootless anarchy of self-expression – if the resistance of tradition and the wisdom it offers are not accepted.

Jan van Toorn (2009) identifies similar vagueness in the discipline of visual communication design and argues that designers should bring theory and prevailing social realities into their work, and acknowledge subjectivity and conflicts in the designs, instead of smoothing them over. Heskett (2017, p. 52) argues that since design means diverse things, its diversity must be acknowledged. (2017, p. 179) continues that the value of design must be calculated based on the benefits it brings to life in its multiple and diverse dimensions and that design must not be limited to pursuing the “narrowly defined economic aims measured by profit”. Following Heskett (2017) Joanna Boehnert (2018, p. 356) reminds us that the “design of sustainable living must be accelerated”.

As discussed above, design, designed products, user and design process are complex and diverse, therefore it is useful to take into consideration Heskett (2017, p. 52) as he emphasises the importance of being specific in communicating about the nature and value of design when designers engage in activities in design.

3 Competence

Arriving to discuss the designer's competence Le Deist and Winterton (2005) note that it is an extremely multifaceted concept. Hodkinson and Issitt (1995, p. 149) offer a holistic approach to the concept of competence from the care profession perspective. They argue that knowledge, values, and skills are integrated within the practitioner as an individual. Cheetham and Chivers (1996) developed a holistic model where five sets and dimensions of professional competence are integrated:

- (1) “Knowledge (know-that),
- (2) Skills or know-how,

- (3) Know how to behave,
- (4) The possession of appropriate personal and professional values and the ability to make sound judgements based upon these in work-related situations, and
- (5) meta-competencies, concerned with the ability to cope with uncertainty, as well as with learning and reflection”.

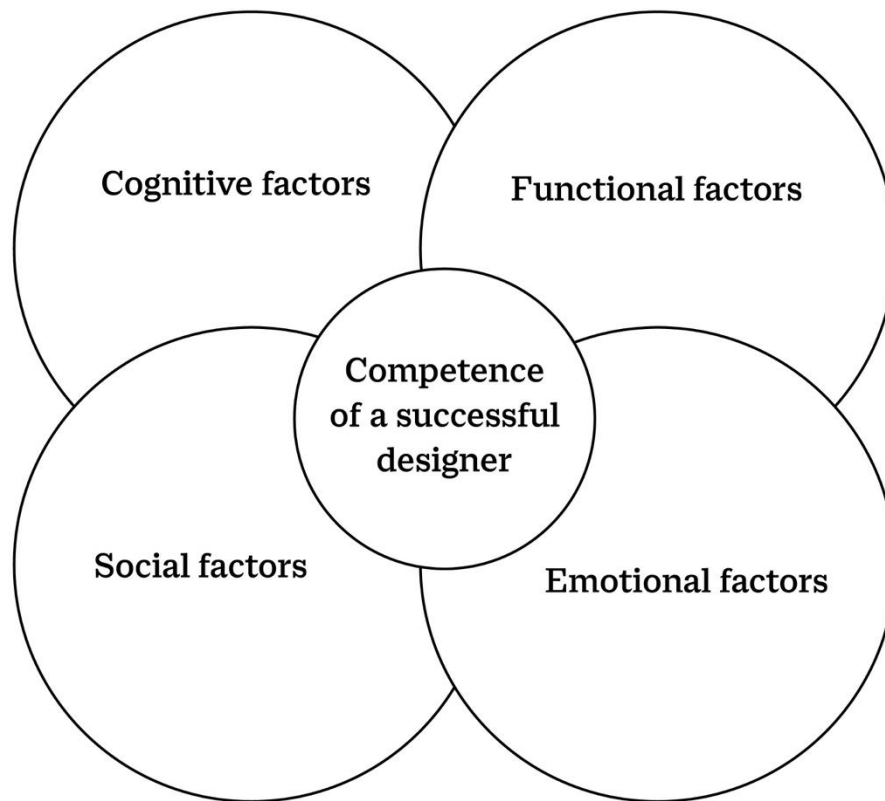
The Cheetham and Chivers model depict meta-competencies that connect the key components of professional competencies, such as communication, creativity, analysis, self-development, ability to learn continuously etc.

Kaslow et al. (2007) describe professional competence in a comprehensive manner. Competence includes the “Habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served” (Epstein and Hundert, 2002, p. 226). Such attributes as “habits of mind, critical thinking and analysis, professional judgment in assessing situations and ascertaining appropriate responses, and evaluating and modifying decisions via reflective practice” (Epstein and Hundert, 2002, p. 227) are listed as part of competence.

Following Mentkowski and Associates (2000) the multifaceted nature of competencies exhibits integrated knowledge, skills and abilities including the following features: “behaviours, strategies, attitudes, beliefs, values, dispositions, personal characteristics, self-perceptions, and motivations”. All of these enable performance on a task level with a myriad of potential outcomes (Marrelli, 1998). Competencies are holistically linked to being a human being, and therefore being a designer, and competencies are “teachable, observable, containable, practical, derived by experts, flexible” (Marrelli, 1998). Furthermore, competencies are transferable, they exist to reach performance that is proficient, competencies are associated with performance, they are evaluated against certain specific standards, they can and should be refined through training, and competencies must be re-evaluated (Parry, 1996).

4 Factors of competence of a successful designer

Based on the research on design, the practice of design and the designer’s process of designing, we define the designer's competence as a combination of four factors. (See Figure 1). These factors are a platform and a resource for positive and successful development (Uusiautti and Määttä, 2014). The successful competence of a designer realizes cognitive, social, emotional, and functional factors. Next, we will look at these factors in more detail.

Figure 1: Factors of the competence of a successful designer

Source: Turtola and Määttä research findings.

4.1 Cognitive factors

The cognitive factors include design thinking, knowledge and skills, and various design tactics and strategies (Cross, 2006). In this framework, the product's shape, format, materiality, characteristics, and compositional aspects are considered. The development of technologies and application of technologies has changed in course of the time. Societal needs and users' needs guide the design process and define goals set for the designed products. Understanding the time, era, and different contexts we live in is crucial. Designers must continuously accumulate and renew their knowledge. Designers must be able to apply theoretical and technical knowledge to their practice. Similarly, tacit knowledge, procedural knowledge of finances or projects, and contextual knowledge of geography or technology influence designer work.

Cross, Christiaans, and Dorst (1994) identify four emerging traits as cognitive characteristics of the designer: "1) the ability to think creatively and ability to produce new and unexpected solutions and concepts, 2) the ability to tolerate uncertainty, work with incomplete information, 3) the use of imagination and constructive thought, and 4) the use of drawings and other modelling media as means of problem-solving". Cognitive factors are of importance to several other researchers. For

example, the ability to produce new and unexpected solutions, and the ability to cope with a limited amount of information and uncertainty, are elevated as crucial cognitive traits of a designer (Martin, 2010; Nigel, 2018; Pressman, 2019).

Creative thinking as a designer means having the ability to analyse critically, establish valid introductory and conclusive legitimisation, differentiate between objective facts and subjective opinions, distinguish credible information and references, conceptual clarification, and identification of conditions. Designers must possess qualities such as: "independence of thought, fairness, perspicacity in personal and social level, humility, spiritual courage, integrity, perseverance, self-confidence, interest for research and curiosity" (Papathanasiou et al., 2014, p. 284). The ability to think critically thinking ensures safe, efficient, and skillful practice (Papathanasiou et al., 2014). All this also demands the ability to reflect (Mezirow, 1998).

Uusiautti and Määttä (2014) emphasize cognitive features such as self-regulation and self-control, self-respect, inner motivation and self-esteem, and willpower. These are resources that then further support and promote individual flourishing and enable opportunities for positive feedback on activities and simultaneously raise self-esteem.

4.2 Social factors

Social factors are interaction skills such as empathy, social intelligence, flexibility, patience, and caring. These factors enable creating and maintaining good and reciprocal relationships. Miettinen, Rontti, Kuure and Lindström (2012) establish collaboration and integrative thinking, optimism, and experimentalism. The area where especially service designers act is wide and the service designers must seek to transfer this mindset to other stakeholders and participants, as well. Design can, and should be seen, as a social process that emerges through shared understanding and shared practices (Reckwitz, 2002). Design promotes social interaction, for example, by developing digital platforms where users are invited to participate (e.g., Ludvigsen, 2005). Socially engaged design is also a rather new concept and phenomenon, which is associated with social entrepreneurship, social innovation and design activism (Koskinen and Hush 2016, p. 65-68).

In the process of design, social aspects, and cooperation, appear as fairly new design phenomena. The most known definition is probably co-design. Co-design is defined as the "collective creativity of designers and people not trained in design working together in the design development process" (Sanders and Stappers, 2007, p. 6). Co-design gives a voice to people who have not been part of collaborative work previously. The thinking behind co-design is that everybody is creative in the correct environment. Creativity requires creative initiative from teams, which include researchers, designers, and other important stakeholders (Alhonsuo, 2021, p. 53). It is "any act of collective creativity. Co-design is effective in the exploration of users' knowledge (Trischler, Dietrich, and Rundle-Thiele, 2019). The process of co-design integrates the local and practical experiences of services (Kuure, 2020).

The value of socially integrated collaboration work has become a central part of concepts such as participatory design (Sanders, 2002; Simonsen and Robertson, 2013), people-centred design

(Frascara, 2002), user-oriented design (Sanders, 2002), user-centred design, contextual design, design for all (Rytilahti, Miettinen and Vuontisjärvi, 2015), and end-user knowledge (Aula et al., 2004).

4.3 Emotional factors

Designers need to be aware of, know, and be able to identify and manage diverse emotional factors. Especially positive feelings and attitudes are important (Hyvärinen, Äärelä and Uusiautti, 2022). Fredrickson and Kurt (2011, p. 36) created a theory of broaden-and-build theory of positive emotions. According to this theory, broadening and building positive emotions enables the expansion of an individual's consciousness and thinking, perseverance and the ability to find new action ideas even in the face of adversity. Positive emotions enhance design thinking, Intellectual thinking, and problem-solving skills, whilst they decrease the defence action and attitudes, and they deliberate and improve memory (Uusiautti and Määttä, 2014).

Mariluz Soto (2021) emphasizes that emotions are strongly present in the design process, but they have not been studied in their connection to the designers themselves. Research carried out in diverse scientific fields elucidates the multiple meaning of emotions. Emotions have been identified as a force for social change (Doetsch-Kidder, 2012), as a visible expression of facial gestures (Ekman, 2013) and as breathing intensity via their interaction with product design (Desmet, 2002). Emotions are an intrinsic part of the design process from the designer; hence emotions reflect the users' attitude towards designed products respectively.

One of the key components in the designer's work is to create a positive emotional climate. Through inclusivity every human being, be it the user or stakeholder participates in co-creation of mutual trust that their opinions will be heard, valued and taken into account. Emotions form part of the designer's practice and process. Emotional factors also reflect users' attitudes towards designed products. Working as a service designer, it is central to be able to create a positive emotional climate and all the stakeholders and users who are involved must have a strong trust in being heard, and that their opinions are valued and taken into consideration in the co-creative process (Soto, 2021, p. 23). Positive emotions contribute to creativity and build a commitment with enthusiasm and a perception of well-being in collaborative creation. Emotional factors can increase the personal competence of the designer. Hence, the ability to adopt appropriate behaviours in work-related situations is important e.g., self-confidence, control of emotions, listening, objectivity, collegiality, sensitivity to peers, conformity to professional norms etc.

Enthusiasm is an emotionally pertinent factor that drives a designer's creative practice. It advances motivation and efficiency (Wenström, 2020). Enthusiasm is defined as a positive affective state associated with a high degree of arousal (Bakker and Leiter, 2017). Enthusiasm is connected to perceived meaningfulness, satisfaction, humour, energetic movement and especially commitment to work (Harter, Schmidt and Hayes, 2002).

4.4 Functional factors

According to Lalounis (2018), design requires learned skills to adapt design frameworks and processes to different environments. Lawson (2012), on the other hand, writes about different design skills that determine approaches to face situations and problems to be solved. He distinguishes two areas in design skills: general and sector-specific skills. General design skills apply to all designs, regardless of the design field. Next to them, there are design-specific ones for different sectors of design. The combination of these (balance of skills) is important in design. Several researchers emphasize the diversity of design skills, which is influenced by different assumptions and choices regarding the design situation, as well as the subjective characteristics of the designer (Cross, 2006; Dorst, 2006).

According to Lalounis (2018) design requires learned skills to be able to adapt design frameworks and processes to different environments. Lawson (2012) on the other hand, talks about diverse design skills that define approaches to understanding situations and problems. Lawson (2012) distinguishes two areas in design skills: general and specific. General design skills apply to all design disciplines, regardless of the design field. Next to them, there are design discipline-specific skills. Combining these two leads to a balance of skills. Several researchers enhance the diversity of design skills, which is influenced by the various assumptions and choices regarding the design situation as well as the subjective characteristics of the designer (Cross, 2006; Dorst, 2006).

Challenges and demands in the design practice are often specific to knowledge generation and skill requirements, such as information system management, marketing aspects and other various systems. Designer's practice is versatile and varied, however, it is also increasingly demanding and wide-ranging due to digitalization. Digital design (Schaaf, 2021) brings new methods and skill requirements into design. Design methods are strongly embedded in our time.

At its best, functional factors offer an opportunity to find joy in the design work, generate a sense of meaning and enhance the experience of flow when people are riveted by tasks where they have the possibility to develop toward the limits of their talents. The ability to perform a range of work-based tasks effectively produces specific outcomes which are the functional factors of design.

5 Results

In this paper, we have outlined how a successful designer's competence is constructed of four factors which are cognitive, social, emotional, and functional. We set out with parameters that design cannot be solely approached through design practices where the focus is on individual experience and personal development, hence analytic and synthetic planning skills are needed. We have discussed the complex and multifaceted definitions of design, product, user and design processes. We have discussed and evidenced types of design projects and research that, have faced complexities faced by the time and era we live in. To Friedman (2018) continuous dialogue across disciplines happens only through interdisciplinary approaches, and this is needed to be successful on an organizational and societal level.

Designers that have the above-described competence of a successful designer are needed now more than ever. Organizations need to align themselves to offer designers an opportunity to

develop themselves in the practice of everyday work lives, to be able to contribute to sustainability and design beyond design thinking. Technological innovations drive people's private lives, societies, and organisations. Yet, when the employment market for designers is focused on technological needs (Dziobczenski, Person and Meriläinen 2018), we are not working towards the design mode but rather a conventional and limited mode of design.

To conclude, Norman and Klemmer (2014) write that previously, designers were trained and mostly concerned with form, its function, materials, and aesthetics. Today definitions are changing, and culture and emotion are brought into focus. Designers need to become cognisant of societal issues, techniques of subtle rhetorical persuasion, and all the intricacies of complex, interdependent systems we live in, and this is an integral part of the work of a designer. (Norman and Klemmer, 2014).

The success of a designer requires multi-level competence. Designers who have the competence proposed in this article, the cognitive, the social, the emotional and the social factors in place, can also answer to the demands of this time in an amicable way and move forward in the new design mode proposed by Manzini (2015) and be innovative beyond convention. Due to the social nature of the design process, interaction skills and the ability to collaborate are crucial in a co-design approach to create collective and social value.

The success of a designer is not only dependent on personal characteristics; hence it is always influenced by the environment in which the person works. The designer's positive feelings, attitudes and enthusiasm promote design thinking, problem-solving and innovation. Berscheid (2003) postulates that a person's greatest strength is other people. If a person receives support and encouragement and their skills are trusted, their opportunities to develop, create and innovate are favorable. Uusiautti (2006) emphasizes how the good atmosphere of the work community, support and encouragement, and empathy promote success.

Ultimately, success is the combined effect of many factors. Designers' success or failure can progress linearly, as Driver (1985) describes career development. The success of some may be the result of events, challenges, and coincidences in working life. Still, the success of designers is excellence, competence, and success in their own work, as well as the inclination to do things well. Although the external community is important in success, success is also a personal inner feeling that outsiders may not recognize (Quinn, 2015).

Communities are not successful without individual success and well-being. Therefore, the support and encouragement of the community is paramount. People thrive and succeed in a good and positive work community and organization. For both individuals and communities, success means results that exceed expectations.

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