THE ROLE OF DESIGN MANAGEMENT IN AN ORGANISATION IN A TURBULENT ENVIRONMENT

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Introduction/background: One of the strategic tools used by organisations is design management. In this approach, user needs are the major focus, which helps organisation face the changes resulting from turbulent conditions. In this article, the role of a conscious design perspective in a sample organisation was identified with regard to management, work model, and cooperation with end users.

Aim of the paper: The aim of the paper is to identify and define the role of design management in a selected organisation which adapts to changes resulting from turbulent circumstances.

Materials and methods: The paper has been prepared based on relevant literature and empirical research. The method of an individual case study has been applied.

Results and conclusions: Design management is still at the development stage. It fulfils various roles in organisations, depending on the implementation level. The research results suggest that the most important method of tackling challenges, whether those typical of turbulent environments or the so-called black swans (e.g. the Covid-19 pandemic), is to validate the company's vision in the light of user needs by means of user research. The influence of particular elements of design management on the organisation has been analysed as well. The example presented in the analysis confirms the results of the study, which indicates that the use of design enables companies to change limitations into opportunities.

Keywords: design management, user research, turbulent environment, design thinking.

Introduction

The times of social and economic instability trigger the search for non-standard solutions and innovations that allow companies to survive on the market. Challenges of particular significance occur as a result of the emergence of "black swans", i.e., events based on unpredictability (Taleb, 2014), which require people to think outside the box and find quick ways of overcoming the crisis. One of the strategic tools to achieve that, used by organisation with growing confidence and commitment, is design management. Design offers specific tools and makes organisations focus on the users' needs. As such, it is a good method of coping with

turbulent circumstances characterised by frequent and non-linear changes, which are difficult to predict (Masłyk-Musiał, Rakowska, & Krajewska-Bińczyk, 2012).

In the present article, the subject of design management in the situation of change is analysed. The goal of the analysis is to identify the role of design management in companies in turbulent times and to present the benefits of implementing design-oriented approach. The analysis is based on a case study. The study should possibly serve as a contribution to further research on design management in business.

The power of design in organisations

Competitive strategies based on price or even quality of the offered products and services are no longer relevant (Chen, 2019). Owing to the wide range of choices for consumers, companies need to predict, respond to, and even go beyond the consumers' expectations (Hands, 2018). Companies are becoming increasingly aware of the fact that to succeed, they need to implement a user-oriented approach. In this approach, it is essential to know the needs of product or service target users and to bear in mind that these needs undergo constant changes depending on the socio-economic situation.

The ability of interpreting social and consumer needs is a feature of management processes based on know-why rather than know-how (Celaschi, Celi, & García, 2011). This ability gives competitive advantage to companies, as it allows them to see the big image of the situation and to seek the most appropriate solutions in given circumstances, which is particularly important in the times of crisis. Forecasting upcoming turbulences is difficult and – as we have all learned through the Covid-19 pandemic – change is likely to surprise us. This is why detecting weak warning signals as early as possible is one of the crucial aspects of running a business (Sajdak, 2014). Design is a particularly useful tool when it comes to understanding the users' needs and finding innovative solutions. Long before the outbreak of Covid-19 and the subsequent global crisis, Rodriguez and Jacoby pointed out that the comprehensive search for innovation with the use of design is the best way for companies to be protected against "black swans" (Rodriguez, & Jacoby, 2007). The term "design" must be understood as a process here, in line with the concept of the Design Council, which defines "design" as a set of skills and a mindset combining critical thinking with creativity (Design Council, 2020). Nowadays, more and more organisations develop methods of operation aimed at including design and design tools in their management processes. The moment when a company shifts attention from their own vision and concentrates on the clients' needs is highlighted as a starting point in the process of design implementation and management (Tomczyk, & Spychalska-Wojtkiewicz, 2018).

The roles, functions, and benefits of implementing design in an organisation has been characterised in the following way by Borja de Mozota (2006):

1. Design as differentiator – design is a source of competitive advantage on the market through building the brand value, customer loyalty, prices, and customer-orientation.
2. Design as integrator – design facilitates the processes of developing new products and project management and it introduces user-oriented innovation models.
3. Design as transformer – design enables the creation of new business opportunities, improves the company's ability to cope with changes, and helps understand the circumstances and the market better.
4. Design as good business – design ensures increased sales and better margins and it makes it possible to enhance the brand value, reach further markets, and obtain better ROI.

The tasks of designers, traditionally understood as product and graphic design, have been supplemented with new competencies as a result of the decreasing importance of industrial production. Thanks to design, companies are able to implement innovative processes concerning new products, technologies, and workspaces as well as services, interactions, communications, and business models (Beckman & Barry, 2007). The designers' primary task is also to address the challenges related to sustainable development and climate change (Rojek-Adamek, 2016).

Designers are able to fulfil a variety of tasks thanks to working together in interdisciplinary teams and taking actual user needs into consideration in their design processes. Currently, carrying out research to analyse the needs of users of particular solutions, including employees in the design process, and creating adequate relationships between design and all the levels of an organisation have become the main tasks in organisations. This is the essence of design management, which is sometimes referred to as the missing link between management and design (Dziadkiewicz, 2012).

Design management – why is it necessary in turbulent times?

Nowadays, organisations function in typically turbulent environments. In such environments, changes are frequent, chaotic, tumultuous, and non-linear, which is why their course is difficult to foresee (Masłyk-Musiał, Rakowska, & Krajewska-Bińczyk, 2012). Globalisation, new groundbreaking technologies and forms of communication, disproportions in the distribution of goods, and exceeded limits of growth are the key factors which influence the constant changes (Ansell, Sørensen, & Torfing, 2020). Terrorist attacks, global warming, mass protests, political disturbances, and the Covid-19 pandemic which broke out in 2020 are all world-wide phenomena destabilising the existing systems and making it impossible to adopt universal, all-purpose solutions.

In these unstable times, only the enterprises which base their operation on innovation can thrive (Dziadkiewicz, 2012). This belief is often accentuated as the reason for design management success in Western Europe and in the US (Dziadkiewicz, 2012). Thanks to skilful design management, companies are able to manage their activities so that they not only survive in the changed circumstances but also stand out on the market and encourage the customers to buy a given product or service.

The notion of design management was first introduced in the 1960s in Great Britain. It was then used to define the cooperation between design studios and their clients, where the role of a design manager was to coordinate projects and take care of the relations with clients. The connection between the existence of the position of a design manager in a company and the company's benefits in a given sector was quickly noticeable. Currently, the position has evolved and the demand for design managers in companies has grown. The role of a design manager is primarily to create an environment which supports innovation and finding new solutions in the company. Today, design management means consistent, visionary leadership and communicating the company's vision in all its expressions: its actions, behaviours, identity, promotion, structure, and the ways in which it reacts to external factors.

Nowadays, the main emphasis in design management is placed on changing Taylor's hierarchical management model into a flat and flexible organisational structure, which favours creativity, independence, and risk-taking (Dziadkiewicz, & Maśloch, 2013). According to Kathryn Best, the author of numerous books and publications on design management, „[d]esign is a people-centred transformational process". She claims that the point of design management is to make use of design at all levels of a company and to include designers in various processes, from developing new products and services, to corporate identity, to defining the business goal tactics, business models, strategies, and the company's mission and vision (Best, 2015). The efficiency of design management can be measured both in financial and non-financial terms, accounting for the company's sales, costs of product modernisation, customer satisfaction, creativity, and innovation (Baran, & Bąk, 2017).

Design management understood this way will reinforce the organisation's potential. In a turbulent environment, it does not play a major part but it organises and harmonises the processes which are aimed at supporting development (including the processes of project management, designing as such, supply chain management, building the company's strategy, and decision-making). What is more, this is how the Design Management Institute understands its role, embracing current processes, decisions, and strategies which enable innovation and effective product, service, communication, environment, and brand design to improve the quality of people's lives and guarantee organisational success (DMI: Design Management Institute, 2017). In this understanding, both the successful effect of applying design management in an organisation and the social goals (improving the quality of life) are emphasised, the latter being especially important in the situation of crisis.

Multiple sources highlight the role of design in the creation of innovative solutions, while design management is frequently perceived as a process which effectively controls and exploits changes to transform them into opportunities (Best, 2015; Brown, 2013; PARP, 2015; Wicher-Baluta, 2013; Dziadkiewicz, & Maśloch, 2013). The design methods used in design management are focused on observing and discovering the needs of users. Hence, in crisis situations, the ability to instantly leave the previously applied methods and to quickly determine the variables facilitates the search for new opportunities, market outlets, and sales leads.

Method

In the current paper, the use of design management in turbulent environments is discussed. The study was focused on identifying the areas where design management could be applied and assessing its role in a selected organisation in a situation of turbulent changes. The following research questions were formed:

- What are the features of the design management process in the analysed organisation?
- In what areas of the organisation functioning is design management used and what is its role?
- What are the factors of successful design management in a turbulent environment?

In order to answer the above-mentioned questions, a literature review and empirical research was conducted. The method of a single case study, i.e., the basic qualitative research method, used mainly for descriptive research subjects, was applied. Thanks to the use of the case study method, it was possible to gather detailed information and to respond to the question of the origin of the studied phenomenon. As far as management science is concerned, a case study is a detailed description of an existing economic phenomenon, e.g. an organisation, its environment, a management process, or its elements, in order to formulate conclusions regarding its causes, effects, and course (Grzegorczyk, 2015). A case study includes a description of the subject and the process of problem-solving. It should help in understanding the situation and its stages in given conditions and explain the outcomes of particular decisions. It may be based on applied research (Czakon, 2011). In this method, various sources of data are used, such as interviews, observations, surveys, documents, online sources, and press sources.

The description of the functioning of a given organisation (or its elements) and of the objectives it has met may be used as a practical model for other organisations (Grzegorczyk, 2015). This was the basic premise of the research, taking various factors into account: the internal characteristics of the organisation, its environment, and the context. In the study, the assumption was made that a single case reflects a single set of circumstances and that the conclusions based on this case may be generalised and applied to other cases displaying similar characteristics and circumstances (Lee, 1989).

The case study was carried out based on a number of research tools. External sources were used, such as press releases concerning the industry and the analysed company, online articles and videos, and participant observation. The unstructured interviews, which provide the researcher with a free form of conversation, were conducted. The information collected via the interviews was qualitative in nature and provided insights concerning the attitudes and motivations of the respondents (Sztumski, 1999). In the interviews, the following themes were specified: the character of the organisation, the key elements of design management applied in the organisation, and the role of design management in a situation of change.

The choice of the organisation was arbitrary, resulting from its willingness to take part in the research and based on its core values.

Results

The case study presented here concerns the issue of design management in a social cooperative: Dinksy, a design and illustration studio founded in 2013. At the moment of the study, seven people were employed there. Dinksy create corporate identity systems for brands and products, illustrations, infographics, and storyboards, specialising in the visualisation of data, processes, and instructions. They also provide the services of visual thinking and visual notetaking. What is more, they have developed their own product: a tool aimed at improving communication in teams – "Otwarte Karty" ["Cards on the Table"]. Their studio is based in Cieszyn, Poland. They offer their services across the country and their clients usually come from large Polish cities.

According to Dinksy, they explain difficult content using simple illustrations. The idea behind starting their company was not to maximise financial profits but to create a workplace where each member could find an interesting position for themselves. They function as a teal organisation whose core values are time, care, communication, and openness to other people as well as focusing on the local, exerting influence on the social community, and taking care of the natural environment. The company is not based on a hierarchical structure: the main model is self-management and synergy.

The enterprise opened in 2013 under the name of Parostatek Social Cooperative, as part of a project of the Social Economy Support Centre (OWES) for the region of Bielsko-Biała, co-financed by the European Union (within the European Social Fund – Regional Operational Programme of the Voivodeship of Silesia 2014-2020). Initially, the activities of Parostatek comprised four areas: skills workshops, willow constructions, urban games and tours, and graphic design.

Since the very beginning, the members of the interdisciplinary team that concentrate on versatile activities have been the strongest asset of the company. The employees' openness to unconventional methods of operation has always been one of their main qualities. The design-related activities have invariably been a chief asset of the enterprise as well. One of the founding team members is a graphic designer, so design services were meant to function as a key component of their offer.

As a result of my research, it may be concluded that for Dinksy, design management is an internalised process. Several milestones related to the implementation of design management in the organisation were identified. The first milestone was inspiration: a meeting with a trendwatcher who spoke about management methods involving design tools, service design, and organisational life cycle. The team followed up the idea of design thinking as a tool of product and value delivery on the market. The team manager defines design as a way of thinking, a mindset whose essence lies in the correct reading and responding to clients' needs.

Parostatek's services used to be wide-ranging and non-specialised, therefore, they did not bring the desired results. The team's assumptions were verified by the business environment and they had to be modified. At that point, the company applied design methods. As a result, they entered into cooperation with an external expert, who ran a design thinking workshop for them. The design thinking methods encouraged the organisation to set their priorities, make use of their competitive advantage, and find their own niche on the market. That was the second milestone, which helped them organise their service offer and narrow it down to specialised graphic design under the banner of Dinksy.

Dinksy specialise in the visual thinking approach. The team members tested the functions of this type of designing on their own. In the times of turbulent changes, which forced them to develop new strategies and scenarios, the created plan, written down in charts, turned out to be difficult to understand and arrange for them. Thus, they turned it into an illustration – that form of visual thinking made the communication flow easier. That was the third milestone, which resulted in the use of the visual thinking technique as one of the company's key products and a crucial element of communication with clients.

Facilitating communication was an essential factor which had a considerable impact on the way the team worked. The process took two years and it involved a number of workshops and collaboration with a supervisor. As a consequence, the team members are now able to communicate in precise ways as well as to settle conflicts, find common values, make quick decisions, and face challenges together. The emphasis they have placed on good communication complies with the results of the study run by Knotten, Lædre, & Hansen (2017), according to which the most important success factors in design management implementation are a good design team and good communication.

Presently, various innovative management tools are used by Dinksy, including design, which is applied at various levels: offer, activities, structure, and strategy. Originally, the design-oriented approach was introduced in the company by external experts, but at the

moment, it is their main focus and the main tool of working and ideating, used and internalised by the team and the manager, although not always strictly defined.

According to the team manager, the greatest value of design is the focus on the users' needs. The continuing close relations with their clients and the regular monitoring of their needs are particularly important in the times of crisis. This approach is in accordance with the research results by Tomczyk, & Spychalska-Wojtkiewicz (2018), which show that user research is the beginning of conscious design management processes.

The emergence of a "black swan" in the form of the Covid-19 pandemic resulted in a crisis in the organisation. They lost access to direct contact with the clients and direct sales leads. In those circumstances, they promptly set to create a new vision, strategy, and remedy. They were able to diagnose their competencies immediately and to make a decision to cooperate with external experts who had necessary qualifications. Thanks to that, their activities take place online at present. Their offer was adapted and moved online alongside their distribution network and interactions with the clients. In their mindset, obtaining insights from their target groups is a fundamental element of work, which is why they decided to cooperate with an agency which specialises in such online processes. Based on the data they collected, the studio introduced modifications their flagship product – "Otwarte Karty" – and minimised the time of its implementation and launch. The product has been redesigned to respond to user needs, which has its direct effects in sales.

Table 1.
Elements of design management in an organisation and their impact on the organisation

Element of design management used in the organisation development	Impact on the organisation
Expert knowledge – expert designers	Inspiration Change in thinking about organisation and product management
Design thinking workshops	Introducing a user-oriented approach Narrowing the offer down Finding a niche on the market
Implementing user research	Designing a new offer Creating the need for the company's product on the market
Introducing design as a mindset at the process level and in the organisational structure	Introducing the teal organisation model Acquiring clients in the whole country, not only local ones Maintaining the office in a small town
Communication workshops for the team	An integrated, mutually understanding team, quickly reacting to changes
Testing their own products	Confirmation of the effectiveness of their own solutions Improving their products
Checking their own visions against the clients' vision	Minimising the risk of failure Creating products which respond to user needs
Building relationships with clients	Loyal clients who appreciate the company's core values and products
Comprehensive design of all the parameters of the product/service	Loyal clients who appreciate the company's core values and products

The author's own analysis based on the research results.

In the course of the study, the team manager compared design in a turbulent environment to a compass and a template for quick reactions. Thanks to having introduced design management in their organisation, Dinksy know what tools to use and what steps to take to adapt to the changing conditions. The most important aspect of their activities is listening to people and their needs, which is not always equivalent to simply responding to the needs people talk about.

Implementing design at all levels of an organisation requires a lot of courage. Dinksy believe that design is a compass which shows them the right direction in their path of development. Only strategies based on design provide them with access to loyal and satisfied clients from entire Poland and allow them to implement top-quality products and services. The design-oriented approach guarantees profits and helps Dinksy run an office in a small town and keep enjoying their work.

Discussion and conclusions

The main assumption behind the research was Hands's statement that design management is still developing and that we must all keep asking ourselves in what ways it can best serve organisations (Hands, 2018). The goal of the study was to find out what role design management and its elements play in organisations in the situation of change, in turbulent circumstances which require quick adaptation. Design management processes in a selected organisation and the areas in which the organisation applies them were analysed.

According to the research results, which conform to the model of Best (2015), design management in the analysed organisation is applied at the following levels:
1. Operational – designing new products, services, and communication.
2. Tactical – building systems and coherence for the company in various areas of its operation.
3. Strategic – appointing values and business strategies based on design.

The organisation has gone through various stages of design implementation, marked by several milestones. The first impulse which provoked the change in thinking about managing their own processes and organisation originated at a meeting with an expert designer. The growth of their knowledge about design and their firm resolution to implement it, accompanied by the belief in the efficacy of this tool, which grew alongside their first experiences with it, helped the organisation get through diverse turbulences unscathed. The problems they encountered were related to the confrontation of their offer with market demands, the need to find a niche for them, and their location in a small town with a low number of potential clients. The analysis of user needs was indicated as the most significant element of design management, which makes it possible to transform limitations into opportunities.

In fact, this is often underscored as a starting point for implementing design in companies, as confirmed by Tomczyk and Spychalska-Wojtkiewicz (2018).

Dinksy's experience suggests that adapting the company's services to user needs helps in surviving a crisis caused by changing conditions, even if they are as unpredictable as a pandemic outbreak. The example of Dinksy proves that factors such as the openness of managers, knowledge and skills connected with design thinking, and good communication among the team members determine the successful implementation of design management and lead to gaining a competitive advantage. The results of my study correspond with those described in relevant literature.

In the processes related to the use of design in companies, it is exceptionally important to translate the observed insights into a design vision and strategy. This can be understood as an extension of the language which reflects the company's business strategy. In the case of the analysed organisation, design has not become a part of a formal strategy, but it has been applied in the form of conscious values and the operational framework. The organisation is determined to use design management tools in the future. The research problem that arises here is the issue of maintaining balance between the organisation's business objectives and their willingness to fulfil the needs of the clients. The research results presented in this paper serve to provide insight into the process of design management implementation and its role in a turbulent environment. However, the study is restricted by the narrow spectrum of an individual case study. Further research should be conducted to embrace a larger number of companies, which could provide data for a comparison of various results and extend the scope of research questions, including those concerning the risk of delivering unique solutions on the market, resulting from the voiced and observed user needs but going beyond the company's potential. This study should be treated as a starting point for a further debate on the function of design management in turbulent environments.

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