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Thinking and Designing with Design Thinking

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Thinking and Designing with Design Thinking

Abstract

Design Thinking is a popular phrase especially for the last ten years penetrating into the discourse of management and design, business and academia in many ways. The contributions in the form of articles, commentaries and reviews in this MGDR Design Thinking Special Issue show us the examples, how and where we can use Design Thinking especially as an integral part of the design process. The area of design is expanding in diverse ways lately and sometimes it is causing the confusion such as Design Thinking is either a magical design tool, or another buzzword destined to go extinct after inevitable failures. We as the editors of this Special Issue do not have either totally negative, or totally positive opinions on Design Thinking. We just think we should organize the design process and use Design Thinking on it properly as a practical tool of guidance.

Keywords

Design Thinking, Industrial Design, Design Education, Entrepreneurship, Innovation

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THINKING AND DESIGNING WITH DESIGN THINKING

Introduction

“Design is to design a design to produce design”

John Heskett, 2005

When we were asked to be co-editors of this special issue of MGDR on “design thinking,” it was, and still is, the time when an already schizophrenic human related term “design” was combined with another human specific ability of “thinking” and turned out to raise expectations in the professional business circles as well as emerged as a critical subject of research in various academic disciplines covering the scope of this journal. The term “design thinking” emerged in the 1970’s and became a recognized area of design research after Peter G. Rowe’s book “Design Thinking” was published in 1987 (Rowe, 1987/1991). In the 2000’s, design thinking became known in the business world as a method of fostering creativity and innovation. Today, the idea of design thinking is very commonly used in the design industry, as design consultants often refer to this phrase as when promoting their business to customers, and a plethora of books on design thinking have been published and used in design education.

However, graphic designers such as Natasha Jen expressed doubts about design thinking (Design Indava, 2018), in the sense that designers in traditional areas of design such as graphic or product design, who often take on a more practical role tend to share Jen’s doubts. Clearly, the definition and interpretation of design thinking can vary significantly depending on who is using the term and upon the circumstances in which it is being used, to the point where arriving at a one-size-fits-all definition is difficult to achieve.

Articles in this Special Issue

Those who are into a comprehensive understanding of design thinking in a broader sense of creative industries will definitely find valuable insights in Onur Mengi’s article regarding how different spatial and non-spatial dimensions of knowledge ecosystems and knowledge management are influential on design thinking in terms of knowledge interaction (Mengi 2019). His findings on the influence of geographical proximity as a spatial driver, social network, institutional proximity, cognitive proximity and organizational proximity as non-spatial drivers seems as valuable

contribution to the body of knowledge in terms of design thinking and creative industries.

Professional design practitioner and researcher Can Güvenir and a distinguished scholar from İstanbul, Hümanur Bağlı contributed with an article focusing on the educational aspects of design thinking especially via learning objects (LOs) combining contemporary design and pedagogical approaches mainly within the framework of constructivist learning theories (Güvenir and Bağlı 2019). Bringing up a new insight to design thinking not only as thinking but also as learning in relation with the history of constructivist learning theories, Güvenir and Bağlı's article touches upon the educational aspects, providing tools and methods not only while learning but also while teaching as well.

The article by Yasufumi Morinaga, a design management researcher, attempts to clarify how design thinking applies at the stage of research and development (Morinaga 2019). Although the data is from 2008, it coincides with the time when the notion of design thinking began to become popular. Morinaga's comparison of the two contrasting design practitioners as well as the addition of his own qualitative commentary in the conclusion provide a detailed account of how the perception of design thinking evolved in the industry. According to Morinaga, the role of designers across the entire electronics industry still remains very conventional, as the degree to which they are engaged in projects and their utilization of design thinking is still quite low. Specifically, the involvement of designers in the subfield of electronic parts and devices is low, but in cases when they were used in research and development projects, there was a high probability that design thinking was employed. On the other hand, in the subfield of precision machinery, the situation is completely opposite, as designers are often consulted with projects, but their roles are rather traditional and the desire for them to rely on design thinking remains a low priority. Although neither electronic parts and devices nor precision machinery require a great deal of creativity or originality from their designers, the different purposes for which designers are involved in these subfields are fascinating. In short, those industries that often consult with designers tend to expect them to play a traditional role, with little opportunity for them to offer differing opinions or usability solutions based on design thinking. On the other hand, industries that rarely consult with designers tend to expect a participation and input based on design thinking when they do.

Finally, the fourth article of this special issue by Marinella Ferrara and Chiara Lecce shows that entrepreneurs expect design driven innovation. Ferrara and Lecce (2019) describes the general structure of a business and Design Thinking oriented training course under a European

H2020 Project called DfE-Design For Enterprises, with a special focus on the role of ADI, Associazione per il Disegno Industriale, the Italian association that since 1956 brings together designers, enterprises, schools, design historians and journalists, to focus on the topics of design: designing, producing, communicating, distributing, and training. Thanks to the authors not only for providing academic and professional insight in terms of design driven innovation, but also sharing a valuable and detailed know-how regarding the development of their training program. From the content of the training program, to the execution with a variety of case studies the article stands out as a comprehensive guide for a variety of people from academia to business circles, who want to benefit from the experiences of the authors throughout this unique experience.

Commentaries in this Special Issue

One of the practitioners who contributed to this Special Issue from Japan, Takehiko Yogo, is from a design company called GK Dynamics, which has been a historic contributor to the development of industrial design in Japan (Yogo 2019). GK group consists of a wide range of design companies, from consumer merchandising to environmental design. GK Group also belongs to a research group for Design Driven Management, organized by the Japanese Ministry of Industry and Information Technology (MIIT) and the Japan Patent Office. As a member company within GK Group, GK Dynamics engages mainly in motorcycle design, and their designers tend to take on a more traditional “productive” role. In his commentary, Yogo (2019) discusses some of the problems and possibilities of “design thinking” through an explanation of practical examples. Yogo insists that the revolutionary changes in the field of mobility design requires collaboration with various companies and creative teams in order to discover problems as “design thinkers,” present solutions as “practical designers” and consider the benefits to the “users.” However, the author also expresses his concern that “many people have misunderstood the importance of both the experience and the product, because their focus has primarily been on just the importance of experience (Yogo 2019 p.14),” which points to the risk of adopting a superficial process of simply considering the problem from the perspective of “design thinking” without utilizing the other important design skills of expression and realization.

Another Japanese practitioner, Tatsuyuki Mikami, is from the Design Center of Toshiba, one of the largest electronics companies in Japan that has in recent years shifted its main business area from consumer products to social infrastructure. The differing philosophies between GK Dynamics, which outsources the freelance design of emotionally-charged consumer

products for motorcycles, and Toshiba, which designs social services involving many stakeholders, is fascinating. Concerning Yogo's (2019) caution of the risks of superficially adopting "design thinking," Toshiba designers tried to incorporate "design thinking" into their design process, but were originally hindered by the top-down organization of Japanese electronics manufacturers and therefore unable to make any dramatic changes. However, Toshiba was able to eventually breakdown conventional barriers by considering "design thinking" as "customer value design" (Mikami 2019). Through the use of cross-functional teams (CFT) composed of experts in business, technology and creative thinking, collaboration began to focus on a co-creation of experiential, management, and social values from the perspective of customers. It was when Toshiba customized design thinking as "Customer Value Design" that they were able to break down conventions. According to the commentary by Mikami (2019), Cross-Functional Teams (CFTs) consisting of creative, business, and technology experts, from areas such as technical feasibility, management sustainability and those representing the interests of users, business, and society allowed for collaboration and co-creation from the customers' point of view. Mikami also insisted that introducing design thinking into conventional organizations required the creation of a foundation that could integrate and promote cooperation encompassing "process," "human resources" and "place." The contrasting situations expressed in the articles by Morinaga (2019) and commentaries by Yogo (2019) and Mikami (2019), suggest that more is being demanded of designers than ever before, but in order to be able to use their skills efficiently, designers must also be involved in organizational structure surrounding the design process.

Reviews in this Special Issue

Of the two reviews we in have included in this MGDR Special issue, one is almost the first classical reference book of Tim Brown's *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation* (2009) which sparked Design Thinking in business and management especially in terms of interdisciplinary character of design based business practices. Gönen's (2019) review of the book not only brings new and fresh insights into this classical text, but also gives a valuable description of both the outline and the content of the book.

Savasta's (2019) review of the book *Mismatch: How Inclusion Shapes Design* by Kat Holmes, with Foreword by John Maeda (2018) is a very recent text which gets an ever expanding attention on the inclusive design issue not only from a social perspective, focusing on the relations between so called artifacts and the people getting in contact with them, but

also on the future of almost declining human abilities in a digitally designed media of interaction in a variety of literal and metaphorical dimensions.

Conclusion

It was a really special experience for us as well, editing and enjoying these contributions before the readers of this special MGDR issue on design thinking. We hope that these compilation of ideas and insight will contribute to a very wide spectrum of readers of MGDR from management to design, and from scholars to practitioners. We want to thank everybody one by one who contributed to this special compilation with their articles, commentaries, and reviews on Design Thinking which is like a buzz word penetrating into the discourse of management and design, business and academia in many ways. They show us the examples, how and where we can use Design Thinking especially as an integral part of the design process. The area of design is expanding in diverse ways lately and sometimes it is causing the confusion such as Design Thinking is either a magical design tool, or another buzzword destined to go extinct after inevitable failures. We as the editors of this Special Issue do not have either totally negative, or totally positive opinions on Design Thinking. We just think we should organize the design process and use Design Thinking on it properly as a practical tool of guidance. After reading the insights we have brought together, you might still be designing and thinking separately, but definitely with a refreshed look on Design Thinking, like we do.

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