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DESIGN & INNOVATION

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DESIGN THINKING



How To Use Design Thinking To Overcome The Financial Crisis

"Covid-19 has caused an economic crisis. According to a Mckinsey study, more than 20.5 million jobs have been lost in the United States since the start of the pandemic. In some cases, however, a crisis can present new opportunities. Design thinking can help you develop a disruption mindset."

Source: Forbes

'Design thinking' strategy drives IBM solutions to increase business productivity

"The COVID-19 pandemic brought several challenges for enterprises and their employees, as business aims to keep productivity high while working from home. "Design Thinking" is one strategy IBM is using to figure out solutions to these problems, according to Arin Bhowmick (pictured), global vice president and chief design officer, IBM Cloud, data, and AI platforms at IBM."

Source: Silicon Angle

How to Do Design Thinking Better

"Design thinking has, perhaps, reached peak popularity. Businesses in every industry talk about ideating and iterating, a linguistic nod to the creative process made famous by design and consulting firm IDEO."

Source: Kellogg Insight

INNOVATION



To Engage or Not to Engage: The Case of an Emerging Innovation Ecosystem in Sweden

"The purpose of this study is to explore the engagement in an innovation ecosystem for knowledge co-creation. It aims at exploring the various aspects of ecosystems, innovation, and knowledge which can drive or hinder actors to engage in collaboration in an innovation ecosystem."

Source: Halmstad University

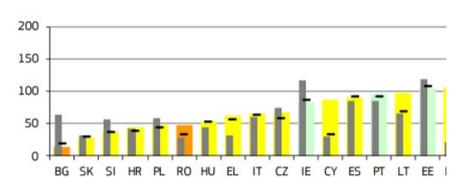
The past, present and future of open innovation

"The paper identified nine thematic areas explored in existing research: (1) context-dependency of OI, (2) collaborative frameworks, (3) organizational dimensions of OI, (4) performance and OI, (5) external search for OI, (6) OI in small and medium-sized enterprises, (7) OI in the pharmaceutical industry, (8) OI and intellectual property rights, and (9) technology. The analysis of the most recent papers belonging to the more investigated areas offers suitable suggestions for future research avenues."

Source: European Journal of Innovation Management

Problem-driven innovation models for emerging technologies

INNOVATION



European innovation scoreboard 2020

"The European innovation scoreboard provides a comparative analysis of innovation performance in EU countries, other European countries, and regional neighbours. It assesses relative strengths and weaknesses of national innovation systems and helps countries identify areas they need to address. The European innovation scoreboard 2020 was released on 23 June 2020."

Source: European Commission

The Most Innovative Companies 2020: The Serial Innovation Imperative

"When we began the research for this 14th edition of BCG's Most Innovative Companies report, COVID-19 had not yet emerged. As we explored the data and interacted with clients, however, it became clear that this year's core findings—about the advantages of scale and the imperative for serial innovation—may be even more relevant today as innovation leaders need to adapt to rapidly shifting patterns of supply, demand, consumer behavior, and ways of doing business."

Source: Boston Consulting Group

Research and Innovation Performance report: Enabling

DESIGN EDUCATION



Thinking Like a Designer in Uncertain Times

"In times of crisis like today, colleges should think quite differently than they do in a traditional strategic planning process and consider six basic principles, argues David P. Haney."

Source: InsideHigherEd

INNOVATION



"Companies that outperform don't dabble in innovation at the edges"

"John Edson, who was president of LUNAR at the time of the acquisition, spent four years as a McKinsey partner, but is now independent and consults for companies who want to improve their product designs. He is still working to pull design and innovation out of the sidelines and into the mainstream of business. Here's how he believes companies should think about design in a time of crisis"

Source: Sifted

An innovation plan to beat Covid-19

"MIT economist Pierre Azoulay outlines a roadmap for scientific success against the virus."

Source: MIT News

An exploration of 'How Innovation Works'

"Generally speaking, an innovation is more than an idea and more than an invention. Yet beyond that, things get confusing. We live in a moment when we're barraged by new stuff every day — new phones, new foods, new surgical techniques. In the pandemic, we're confronted, too, with new medical tests and pharmaceutical treatments. But which of these are true innovations and which are novel variations on old products? And while we're at this game, is innovation limited to just technology, or might we include new additions to our culture, like a radical work of literature, art or film?"

Source: Washington Post

Why Innovation's Future Isn't (Just) Open

"This paper exemplifies how different elements of a problem-first approach to innovation can be graphically represented within a system, in order to provide insights into the processes that support real-world impact for new technologies. By providing a more refined description of the needed innovation methodology, it is hoped that these models can drive a more evidence-based and empirical mindset within the field to ultimately drive valuable innovations with increased efficiency."

Source: Health and Technology

Inclusive innovation in telehealth

"We call for a new era of inclusive innovation, a term proposed in this publication to describe accessible technological design for all. The next 30 years of the ADA leading to year 2050, should reflect a new era of access, whereby digital health surmounts geographic, social, and economic barriers toward an inclusive virtual society."

Source: Digital Medicine

Innovation in Public Service Design: Developing a co-creation tool for public service innovation journeys

"this paper presents a prototype that is designed to enhance the online innovation journey for public services. The main strategy explored is that of online public-service co-creation, allowing innovators to combine online and offline efforts. The outcome of this research is a prototype of an online co-creation tool."

Source: The 21st Annual International Conference on Digital Government

A Preliminary Study on the Methods of Product Innovation and Entrepreneurship for College Students

"With the development of national economy, based on innovative entrepreneurial project popularize more and more, the innovative products and innovative entrepreneurial approach is particularly important, the creative method based on innovative products, design new products, find new innovations in contemporary people's life demand, in order to improve the quality of people's living standard, Chinese college students' innovative undertaking vision, guide the correct direction of the business. To explore the innovation and entrepreneurship methods of college students based on innovative products, to stimulate the interest and passion of entrepreneurs in innovation and entrepreneurship, and to

Europe to lead the green and digital transition

"The Commission released today its latest report on the EU's Science, Research and Innovation Performance, through which it analyses how Europe performs in the global context. It highlights the need for research and innovation (R&I) to support sustainable and inclusive growth of companies, regions and countries, making sure that no one is left behind in the quest for strengthening innovation systems, especially in less-developed regions."

Source: European Commission

"Most companies, our research suggests, should rethink their innovation systems and develop portfolios with a balance of innovation sources. They must treat external innovation as a way of broadening their portfolios, not as a substitute for internal innovation. Only then will they be able to execute the transformations that will allow them to win the digital future."

Source: MIT Sloan

Why Now Is the Time for "Open Innovation"

"The recent burst of open innovation, however, reminds us of the massive potential that open innovation comes with — whether you're in a crisis or not. Open innovation has the potential to widen the space for value creation: It allows for many more ways to create value, be it through new partners with complementary skills or by unlocking hidden potential in long-lasting relationships. In a crisis, open innovation can help organizations find new ways to solve pressing problems and at the same time build a positive reputation. Most importantly it can serve as a foundation for future collaboration — in line with sociological research demonstrating that trust develops when partners voluntarily go the extra mile, providing unexpected favors to each other."

Source: Harvard Business Review

ENTREPRENEURSHIP



Looking to Boost Innovation? Partner with a Startup.

"Finding the right partner can supercharge your company's innovation. Sopra Steria, an IT consultancy specializing in digital transformation based in Paris, estimated that their efforts through Sopra Steria Scale up, an ecosystem-based innovation initiative (headed by one of the authors of this article, Tobias Studer Andersson), produced three times the innovation they developed internally one year."

Source: Harvard Business Review

innovate new and practical products."

Source: The Theory and Practice of Innovation and Entrepreneurship

DESIGN EDUCATION



From Bauhaus To Design Thinking And Beyond: A Comparison Of Two Design Educational Schools

"This paper compares two pioneering design educational approaches: the historic Bauhaus school founded in 1919 in Germany, and contemporary design thinking education, based on the example of the "HPI School of Design Thinking". We compare both approaches according to six emerging categories: (1) curriculum, (2) multi-disciplinarity, (3) mind-set and culture, (4) study environment, (5) conditions for innovation, and (6) socio-economic context. We outline differences and similarities and discuss the possible impact for future design education."

Source: Cambridge University Press

Measuring The Value Of Systems Thinking For Design-Centric Engineering Education

"Systems thinking, design thinking and strategic thinking have been identified as important competencies for future engineers. Many institutions have introduced these subjects into their engineering courses. However, there is need for a deeper appreciation of the underlying assumptions behind these strands of thinking and ways to measure their impact. This paper draws on a four-year experience in implementing systems thinking in a design-centric engineering program in India. It presents the approach adopted and a complexity-based measure to track development in systems thinking competence."

Source: Cambridge University Press

Contributions of technology to cooperative work for university innovation with Design Thinking

"This article focuses on testing the contributions of the Slack technology to university teachers' cooperative work immersed in educational innovation processes with Design Thinking methodology. Another aim was to verify students' accomplishment with this methodology. Eleven teachers from three academic disciplines at the

University of Seville took part in the experience."

Source: Pixel-BIT Revista de Medios y Educación

Collaborative Learning for Innovation Education

"This paper describes a study on collaborative learning during a month-long innovation project course offered to a group of engineering, technology, and innovation students in the summer of 2019. We present survey data aimed at understanding student attitudes and team performance dynamics, including the biggest challenges faced by students, the evolution of student confidence levels throughout the course, and the students' self-organization and team dynamics."

Source: IEEE

Design Thinking in Pharmacy Education: The Future of Classroom Preparation

"Design thinking is on the rise as a novel method for creative problem solving in healthcare professional programs. This article will focus on implementation of the concepts of design thinking in the classroom, its utility in pharmacy education, and the advantages it provides from both the faculty and students' perspectives within the practice-ready pharmacy curriculum."

Source: New Directions for Teaching & Learning

Design Inquiry Learning: Using Design Thinking Methods As Scaffolding In Problem-Based Learning

"Often when design methodology and design thinking are discussed in educational settings, the focus is on skills related to innovation and to generate creative solutions. An important point we want to make here, however, is that such processes can also serve as means of gaining understanding and knowledge of the complex problem domains being explored. In the paper we specifically discuss the role of empathizing, framing of wicked problems, and visual thinking."

Source: Södertörn University

Design thinking as the environment for disruptive innovation in education

"Often when design methodology and design thinking are discussed in educational settings, the focus is on skills related to innovation and to generate creative solutions. An important point we want to make here, however, is that such processes can also serve as means of gaining understanding and knowledge of the complex problem domains being explored. In the paper we specifically discuss the role of empathizing,

develop and implement technology designs that not only function but, as well, address wellbeing of individuals, societies and environments. Technologies that students develop and implement are research and negotiated actions to help overcome harms they perceive in relationships among fields of science & technology and societies & environments (STSE)."

Source: SCHOOL SCIENCE - UNIVERSITY PARTNERSHIPS TOWARDS CRITICAL & ALTRUISTIC CIVIC ACTIONS /

The Impact of Design Thinking on Innovation

"The aim of this paper is to show how design thinking affects Product, Process and Organizational Innovation. The objective of design thinking is to involve consumers, designers and businesspeople in an integrative process which can be applied to product, service or even business design. Based on the information and literature, the conceptual framework of the research was designed and hypotheses were developed."

Source: Journal of Design Thinking

The Infographic Model Of Design Thinking Process

"Creativity as an outcome of our thoughts and actions is a controversial concept that has been discussed by many disciplines in different ways. In the light of cognitive research on creativity, this study aims to deal with the components of the idea generation process specific to interior design education. Based on the study conducted in the interior design studio, this paper introduces the infographic model of design thinking. the main purpose of the model is to summarize how design students initiate the design process, create their own design ideas, and also how they lead design thinking for a spatial solution."

Source: ICONARP

Creativity and Critique as Formative Processes in Design Thinking

"This issue of JDFL primarily focuses on design education and the design process and are examined as models for application in other fields. As such, the various aspects of design thinking are explored with their relationship to developing creativity."

Source: Journal of Formative Design in Learning