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DESIGN & INNOVATION

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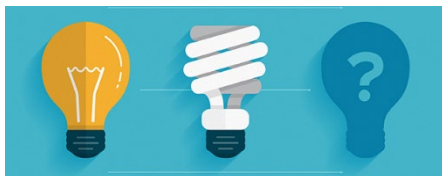
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DESIGN THINKING



Design thinking: 5 contrarian lessons for leaders

"Design thinking has helped my team reframe problem-solving to innovate for customers - but it hasn't always been smooth sailing. Consider these five lessons learned"

Source: The Enterprises Project

Design Thinking Continues When Imagination Workers Work Remotely

"Design thinking is not new. It's been in practice as "human-centered design" for years as organizations, particularly large enterprises, embarked on the journey of building innovative organizations. In the age of innovation, it's not just startups that can move at the speed of innovation. Many large organizations have figured out how to adapt swiftly to changes, manage large global teams around constant change, and capitalize on disruptions. This is all partially due to integrating "design thinking"."

Source: Forbes

INNOVATION



DESIGN INNOVATION



Clarifying the disruptive innovation puzzle: a critical review

"Disruptive innovation theory has attracted the interest of researchers and practitioners across many areas, resulting in the development of new business models and strategies. Despite the increasing scholarly attention, its definition has not yet been understood, the understanding of the term "disruptive" and the complex nature of this innovation has provoked some misinterpretations, and the meaning remains ambiguous."

Source: European Journal of Innovation Management

Smart systems of innovation for smart places: Challenges in deploying digital platforms for co-creation and data-intelligence

"We argue that the rise and interconnection of various types of intelligence (artificial, human, collective) could bring profound changes in the way smart places are being created and evolve. In this context, cyber-physical systems of innovation are deployed through multiple nodes acquiring digital companions, collaboration is deployed over physical, social, and digital spaces, and actors can use complex methods guided by

INNOVATION



Innovating from necessity: The business-building imperative in the current crisis

"The coronavirus crisis is a world-changing event. Here are early solutions and concrete steps leaders can consider as they plan and build new businesses for the next normal."

Source: McKinsey

How Innovators Are Adapting Existing Technologies to Fight COVID-19

"Engineers around the world are tweaking drones, robots and smart tools to help prevent the spread of the virus"

Source: Smithsonian

'Innovation is made, not born'

"Innovative companies need to be people-centric risk-takers if they want to be truly disruptive"

Source: Raconteur

How your company can innovate its way through the COVID-19 crisis

"The current global pandemic has triggered a need for more organisations to innovate their way to survival. We look at what it find the way forward"

Source: CMO

The ABCDs of Innovation – Leveraging Technology to Stay Connected

"Companies are adjusting their business models with dexterity, focus, and precision. At Broadridge, for example, we are seeing tremendous client interest and demand for Virtual Shareholder Meetings (VSM), which allows shareholders to view meetings, listen to management presentations and discussions, ask questions, and vote their shares – all with secure technology from the comfort of their home. When it comes to our associates, we are also relying on technology (e.g., Video conferencing, Webinars, Chat, Emails, etc.) to stay connected and in sync as many of us work from home."

Source: MarTechSeries

6 ways to optimize your innovation spend

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Source: MarTechSeries

Open Innovation in Medical Technology Will Save Lives

"Experts from the world's top engineering programs have come together to share knowledge about

software and get insights from data and analytics."

Source: Land Use Policy

A framework for data-driven design in a product innovation process: data analysis and visualisation for model-based decision making

"The paper presents a four-layer framework for the application of data-driven design in a product innovation process. The framework builds on the Knowledge Value Stream and on the Product Value Streams of a product innovation process and indicates how data-driven activities shall be structured and organised in relation to the different phases of a model-based decision process."

Source: International Journal of Product Development

Analysis of the Determinants of Innovation in the 21st Century

"The main aim of this empirical research is to distinguish the characteristics of innovative and non-innovative organisations."

Source: European Research Studies Journal

How to evaluate innovative ideas and concepts at the front-end?

"This paper investigates existing theoretical and new indicators in terms of their importance and practical applicability in the industry. This study follows a qualitative empirical research design, using a new dataset based on 32 interviews with experts conducted in six international automotive original equipment manufacturers (OEMs)."

Source: Journal of Business Research

Multiplex boundary work in innovation projects: the role of collaborative spaces for cross-functional and open innovation

"This study investigates the role of collaborative spaces as organizational support for internal innovation through cross-functional teams and for open innovation with external stakeholders. In particular, the study focuses on collaborative spaces as tools for multiplex (i.e., simultaneous internal and external boundary management in innovation projects)."

Source: European Journal of Innovation Management

DESIGN EDUCATION

medical technology, hoping to make life-saving treatments more widely available. Importantly, they're ensuring that patents, copyrights, and other legal restrictions don't get between that knowledge and the people who need it most."

Source: EFF

Inspire Innovation By Avoiding Decision-Making Traps

"Identify your company's purpose, and use that purpose to help decide which goals deserve your attention. The larger your company grows, the more opportunities you'll find to expand into new verticals or take on new competition. Some of those opportunities provide necessary growth; others only distract. By leaning on purpose, you can weed out the opportunities that don't fit your vision for your business."

Source: Entrepreneur

When The Unexpected Leads To Innovation

"How some customer support leaders are using the pressures of the Covid-19 era to establish a new gold standard for service."

Source: Forbes

How design is helping business leaders take innovation to the next level

"What used to be a means to connect with customers is becoming a top-down integrative discipline. A new report reveals how to capture its full power."

Source: Fast Company

For a Robust Recovery, Invest in Innovation

"Without federal investment, the current disruption could slow down U.S. economic growth for decades to come"

Source: Scientific American

ENTREPRENEURSHIP



Making the Leap to Entrepreneurship

"The leap. That exhilarating moment when you have a business idea, but committing full-time means taking on major risks. Getting a startup off the ground can leave you vulnerable — emotionally and financially — especially for those without a safety net. And, in this unsettling time of the COVID-19 crisis, we have to consider that economic conditions may not be favorable to those attempting to fund



Adaptive Learning



Open Education Resources



Gamification and Game-based Learning



Massive Open Online Courses



Digital Learning Innovation Trends

"The report is a systematic review of relevant data about core and emerging learning technologies that are being applied in the field and the potential impact on student success. It provides a summary of 10 of the most prominent trends in digital learning today."

Source: Online Learning Consortium

Instilling new ways of understanding the innovation process

"In the workplace, engineers face complex technological landscapes, critical and nuanced user needs and societal problems, and intense rivalry from competitors. To address these challenges, engineering programs have increasingly emphasized knowledge, skills, and mindsets related to innovation."

Source: The International journal of engineering education

The work of educational innovation

"In this paper, we explore this issue by asking: What perspectives are useful for bringing to the surface insights that come out of a specific case of innovating, and with these perspectives, what knowledge do we gain? The approach involved reflection conversations, an analysis of these conversations for critical moments, identifying perspectives that help to bring the critical moments into focus, and then clarifying specific insights associated with each perspective."

Source: The International journal of engineering education

Changing Design Education for the 21st Century

"In this article, we borrow from their experiences to recommend a course of action for design. It will not be easy: it will require a study group to make recommendations for a roster of design and educational practices that schools can use to build a curriculum that matches their goals and abilities. And then it will require a conscious effort to bootstrap the design profession toward both a robust practitioner community and an effective professoriate, capable together of fully realizing the value of design in the 21st century."

Source: She Ji: The Journal of Design, Economics, and Innovation

their business or transition from full-time employment."

Source: Harvard Business Review

What Is the Impact of COVID-19 on Entrepreneurship?

"In the face of the worldwide COVID-19 pandemic, Entrepreneurs have to face a new reality: that it is not only a huge sanitary and health crisis affecting million or even billion people in all over the world. This is also an unprecedented downturn on the global economy."

Source: Hospitality Net

Innovating a Large Design Education Program at a University of Technology

"In this paper we describe the development of this program within the broader disciplinary context of TU Delft, and how it brought together engineering, social sciences, and business studies in project-based education."

Source: She Ji: The Journal of Design, Economics, and Innovation

Certain Uncertainties and the Design of Design Education

"This article is about the design of design education. After a series of reflections on the design space of design education in relation to complexity, uncertainty, and change, the article is divided into two main parts."

Source: She Ji: The Journal of Design, Economics, and Innovation

Educating the Designer of 2025

"To some extent, the popularity of design thinking has demonstrated the value of a variety of thinking through making. Much of the conversation around design thinking assumes that the future of design is in the tackling of larger, more complex, and often immaterial tasks. While I embrace that, I wonder whether moves toward larger, more complex, often immaterial projects as the center of undergraduate training undermines the learning of the sort of skills we hope designers have."

Source: She Ji: The Journal of Design, Economics, and Innovation

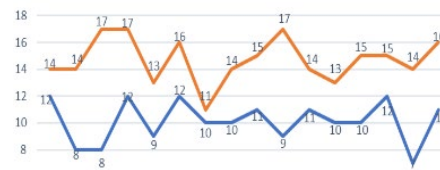
A Design-Based Learning Approach for Fostering Sustainability Competency in Engineering Education

"This paper provides and illustrates a design-based learning (DBL) approach for fostering individual sustainability competency in engineering education. We performed two studies with engineering students in typical educational activities. The first study helped students perform a topic-specific design task in the practicum unit of a sensor technology course, which compared the performance of the DBL approach and conventional passive learning approach. The second study guided students to develop innovative projects for participating in the "Internet Plus" Innovation and Entrepreneurship Competition (IPIEC). To validate the proposed approach, stakeholder questionnaires and performance evaluations were implemented. The results show that the DBL approach was viable for sustainability

competency teaching in terms of learning demand and teaching procedure."

Source: Sustainability

DESIGN THINKING

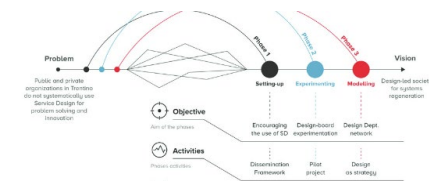


Performing Design Thinking Virtually – A Socio-Cognitive View on Virtual Design Thinking

"In order to prepare the foundation for a Virtual Design Thinking (VDT) approach, an in-depth examination of commonly analog-performed DT was conducted, and its underlying principles identified. The examinations on DT enabled to further investigate how the innovation development approach can be applied virtually."

Source: Jacobs University

DESIGN RESEARCH



The strategic decision making of entrepreneurs within small high innovator firms

"this paper presents the DRLab Dissemination Framework as an action-led research framework for a setting-up phase in a wider design knowledge transfer process. The three main cores of the framework are (i) discourses; (ii) publications; (iii) formats."

Source: Design Research Lab