Case Studies Introduction: Case Studies from the Frontlines of Design Innovation Management

FRY Aaron and RANDALL Mark

The New School, USA

When we initially proposed a case study track to Erik Bohemia, the ADIM's 2019 conference chair in London, it was a speculative exercise to ascertain whether an alternate form to the academic paper and the workshop could enrich discourse in the management design community. We are both business-design educators at Parsons School of Design in New York City. Our institution maintains its industry connections principally through our teaching faculty who are drawn from agencies, consultancies and in-house innovation teams globally. Based on our own experience with industry/academic hybridity and through our teaching approach, we developed a hunch that there may be a wide interest in, and applicability [with] this form and we're gratified for the high level of engagement in this initiative, exemplified by the inaugural set of cases in this volume.

We encouraged each case author to use plain descriptive English and empirical observation anchored by specific examples to contribute to applied knowledge in the emergent area of design management and design strategy. We hoped these cases would illuminate for the reader how tools, methods, practices and approaches have performed "on the ground" across cultures and sectors and within diverse organizational and institutional environments. The domain of practical application and integration is one that challenges us as educators and practitioners, we were therefore curious about whether these cases, in the aggregate, may begin to generate new knowledge through a heuristic approach.

The original business case study was developed at Harvard Business School around 1924 and it had a pedagogical function: business cases supported students' [vicarious] experience as they learned lessons from business concepts-in-action. These were (and still are) typically very distilled accounts that can run to fewer than 1000 words and may be three pages or less. Their intention is to provoke debate on the actions taken in the case. In this sense, a business case does not advance an argument, rather it is a simulation; a problem or context for action, an intervention and a reflection on lessons learned. Today business cases may be used internally within companies to sharpen employee engagement with the problems of the organization. Our cases are generally slightly longer in duration and we suggested a three-part structure for each case: i. context and problem/opportunity, ii. the narrative (or what happened) and iii. key learnings. Additionally, we encouraged authors to show rather than tell, through illustrating their cases with visual examples of the specific issues discussed.

The following case studies from the frontlines of design innovation management bring together twenty-six cases with authors from thirteen countries and engage with contexts as diverse as homelessness in Oakland, California, government land surveying practice in Portugal and clinical joint replacement procedures in an Australian hospital. The diverse range of each case found common ground in the application of design thinking and strategy to each.

We have grouped the twenty-seven cases twice into themes or domains of inquiry, these will determine the organization of the proceedings' structure. The following are the themes that were developed by us for the conference after the cases had been submitted through an open call:

- Transformations in methodologies and practices;
- transformations in healthcare/wellness/harm reduction;
- transformations in community empowerment;
- transformations in corporate management and innovation.

Transformations in methodologies and practices

Integrating Business Design through Experiential Learning (New Zealand), explores the challenges and opportunities of a business school educator's application of design into her classroom and culture. The iterative nature of student assessment is highlighted as holding great potential in business education while the challenges of instilling a studio-oriented culture into the conceptual and physical spaces of the business school is also detailed. *Design Thinking in Law School: A Case Study of SoloSuit* (USA), presents a design school-law school collaboration engaging the question of how to redesign a digital legal product to better serve the needs of many of its economically marginalized users. This project highlights how design innovation may support social justice through enhancing literacy and access within specialized legal languages and processes. *Thinking-through-making; physical model-making as a business model education strategy* (USA), discusses a specific example of a student's response to a class project that required her to create a business model or a strategy tool in three-dimensional physical form. The case explores this student's application of the tool she created into client interactions within her consultancy. *Breaking Boundaries: A Unique Inter-University Program Addressing the 21st Century Skills Gap* (USA), discusses an extracurricular program offered to university students from a diverse array of institutions and majors. This program introduced these cohorts to design and business innovation methods. The authors discuss the challenge of measuring results from this experience, and scaling it across comparable programs. *Design Thinking Mindset: Exploring the role of mindsets in building design consulting capability* (Australia), tests the relative utility and value of nine previously-developed design thinking mindset attributes—through interviews and surveys—with several consultancies. The authors share insights gained from this exercise in asserting that mindset may be of greater importance than method in both their own pedagogy and, potentially, in some industry contexts.

Transformations in healthcare/wellness/harm reduction

Community Based Naloxone Kits: Using design methods to transform complex user needs (Canada) details the authors' design-clinical healthcare collaboration to improve the uptake and effectiveness of freely distributed kits to save the lives of those overdosing from opiate drugs. The case demonstrates and tests how innovation in user experience design and communication design of these kits makes them more effective in emergency situations. *Development of JIT patient-specific implants: design-led approach to healthcare and manufacturing transformation in an Australian context* (Australia), examines how human-centered design can improve both patient experience and clinical outcomes in a hospital setting. The case explores how design innovation can streamline the organizational complexities surrounding the use of a JIT (just in time) process to 3D print joint replacement implants. *Discovery – co-designing the software requirements for use in Community Dental Services in the NHS* (UK), details the complex process of transitioning a legacy (paper-based) dental record-keeping system to centralized open-source digital record-keeping. This transition provided an opportunity for the author and her team to involve stakeholders in participatory processes to redesign aspects of the form; enhancing accuracy, salience and the value of data collected. In *Managing Vulnerability and Uncertainty: Developing design competencies within an American healthcare non-profit* (USA), the founder of an American healthcare not-for-profit organization describes how she has used design innovation to train and evaluate her staff. Ensuring consistency, quality and fit are imperative to her service-based organization in which her "product" are facilitators within a system who work closely with the families and caregivers of those suffering from Parkinson's Disease. *Empowering seniors' mobility to maintain a healthy lifestyle: a case study* (Netherlands), explains a plug-in designed for a popular app in the Netherlands. This plug-in facilitates senior citizens to locate like-minded companions and to undertake travel within the country. The case leverages an existing, widely-adopted, platform to support wellness amongst a, sometimes isolated and less physically mobile, population. *System Design for People Dealing with the Liminal Space* (Israel), describes the case of how service design tools and methods were applied to a system that could be implemented between Israeli inter healthcare agencies. This system is designed to support families and caregivers of terminally ill people. The author defines the role of case-facilitator, a type of doula who would assist the person's caregiver(s) to navigate the logistical and emotional pain-points of the journey through a terminal illness, describing the case-

facilitator's function across its liminal space. *Equity Listening and the Transference of Power* (USA), details the class project run through a design strategy consultancy with the American Heart Association as client. The case describes two contexts in which the group worked with a framework (developed with the consultancy), to listen with empathy and agency, to stakeholders experiencing health problems associated with complex systemic issues preventing access to healthcare or discouraging of healthy practices.

Transformations in community empowerment

Designing and Developing Entrepreneurial Culture for a Small UK Based University (UK) presents University of Dundee's work around design innovation management and the development of an outward-facing more networked entreprenurial culture in their city. With a goal of using design to promote cultural change, the University identified and leveraged strategic local cultural and economic resources. *Applying Equity Design to Address Oakland's Homelessness Human Rights Crisis* (USA) describes the work of Reflex Design Collective, an experimental social equity design consultancy based in Oakland, California who facilitated a co-design innovation summit where unhoused Oakland residents led collaborative efforts to alleviate the challenges of homelessness. Their design facilitation approach they propose, will provide managers and designers with an alternative mindset aimed to amplify the voices of marginalized groups and stakeholders. *Design + Social Impact: a Workshop in Cairo* (USA) describes how the case authors were invited by the US Embassy in Cairo, Egypt to give an intensive, five-day workshop on critical areas for those interested in taking a design-strategy approach for entrepreneurial or intrapreneurial ventures addressing complex social challenges. The case outlines their process and insights working with twenty-five Egyptian creative professionals from diverse backgrounds. *Causing a Stir: Co-creating a Crowd-voted Grants Platform for Creative Entrepreneurs* (Australia), presents an overview of the methodology and process used for a crowd-voted grants platform aimed at supporting creative youth in the early stages of their entrepreneurial journey. The author places specific emphasis on the characteristics of programs that target creative youth in Canberra, Australia. *We Need an Internet Connection* (Sweden) outlines a co-design approach addressing the digital transformation of Small-to-Medium Enterprises (SME'S) in the Jönköping region in southern Sweden. The authors describe the tension between proposal-level goals, operation-level goals and the design process which was operatively approached as a co-design activity involving multiple stakeholder groups. *A Design Contribution to the Entrepreneurial Experience* (Colombia) investigates the entrepreneurial environment of Medellín, Colombia. This ecosystem is experiencing recognition and growth but lacks qualitative analysis to fully understand the landscape and how it impacts perceptions and awareness and agency. The author proposes a number of concepts for the local government to improve the experience of establishing a startup in Medellín. *Project Kapıdağ: Locality of Production: A case of research for social design in complex collaboration* (Turkey) addresses the friction between industrialization and localized traditional production in rural Kapıdağ, Turkey. The authors along with a team of students from İstanbul Bilgi University Faculty of Architecture, identified the assets through a range of research methods for the collective wellbeing of the region. Their work revealed potential opportunities to promote and sustain the artisinal practices and traditions of Kapıdağ. *Designing a Coherent Land Registration System for Rural Portugal* (Portugal) presents the work of Lisbon-based "With Company," engaged by the Portuguese government after the launch of a digital platform to address the challenge of their centuries-old problem of rural land registration. The authors executed field research to better understand owners' relationships with their land, map their struggles with the platform and prototype ways to improve the service. In *Applying Design to Gender Equality Programming* (USA), the authors describe their application of design methodologies to the area of women's rights programming and feminist grant making. Working with the "Fund for Gender Equality," a grant-making mechanism of the United Nations Entity for Gender Equality and the Empowerment of Women the case presents proposals for a range of women-led civil society organizations.

Transformations in corporate management and innovation

Business as Unusual: Creative Industries and International Trade in the Era of Brexit (UK) is a survey of "Baltic Creative," a commercial space for creative and digital industries, housing almost 100 SMEs (small and medium sized enterprises). Policy-makers in the UK are concerned that the creative industries are not sufficiently engaged in global markets, however the authors discover that these industries—at least at Baltic Creative— are already very engaged in global markets; the key concern is now around the impact of Brexit on these markets. *Designing a Business Unit and Creating the First Ever Responsive Kitchen* presents a collaboration between Tipic an Italian strategy firm and Marmo Arredo a leading company in quartz surface production. The case outlines the design of a new business unit devoted to the development of innovative products which lead to Tulér, a stone work surface with fully integrated, gesture activated, kitchen technology. *Design Innovation Practices in a Global Supply Chain: A Fung Group case study* (Hong Kong), describes how the Fung Group—a leading Hong Kong-based company whose core businesses operates across the consumer goods global supply

chain—empowers and involves a wide range of stakeholders in in the co-creation of strategies involving absorptive, collaborative, and adaptive practices that aim to challenge or disrupt current company practices. *Towards an Interdisciplinary Knowledge Exchange Model: Uniandes design school helps to transform Avianca into a design driven company in the flight industry* (Colombia), presents a partnership between Design School of Universidad de los Andes and Avianca, the leading airline of Colombia. Students and faculty from the University collaborated with Avianca employees to introduce them to the methodologies of design-driven innovation. Explorations around the traveler experience lead to testing a range of prototypes at Bogotá's international airport. *Transitioning Business for a Circular Economy* (Hong Kong) describes the author's work with Lane Crawford, a retail company with specialty stores selling luxury goods in Hong Kong and Mainland China. Drawing on both academic and professional practice the case explores strategic business opportunities for the company to transition to a circular economy, which in turn can contribute to a regenerative society.In terms of theme, in this round, we were surprised not to have encountered cases from Financial Technology/Cryptocurrencies and banking and finance in general. We also did not see cases dealing with AI and automation technologies or with algorithm design. Just one case (*Empowering seniors' mobility to maintain a healthy lifestyle: a case study*) explicitly addressed aging and retirement, although several implied the existence of an aging population in a public health context. It will be interesting whether we will see these emergent sectors in future case study forums.

Additional to the themes, we discerned several frameworks—or conceptual groupings—that emerged as common threads. The first, using design to optimize or improve project management, outcomes and engagement united cases as diverse as *Equity Listening and the Transference of Power* (USA), *Design Thinking Mindset: Exploring the role of mindsets in building design consulting capability* (Australia) and *A design contribution to the entrepreneurial ecosystem* (Colombia). While Empowering communities through involvement in co-design or other kinds of "bottom-up" input were not exclusively confined to the "Transformations in community empowerment theme," and could be identified in many of the cases presented in the theme we identified as "Transformations in healthcare/wellness/harm reduction." The Application of design innovation to new or underexplored contexts unites any of the cases that may introduce unexpected contexts for intervention such as *Designing a coherent land registration system for rural* Portugal (Portugal), while Mindsets and practices informing new methods, tools and approaches may connect cases clustered in "Transformations in methodologies and practices" with cases nested in other themes that utilize any new or innovate methods of engagement and testing such as *Design + Social Impact: a Workshop in Cairo.*

Finally, we offer our sincere thanks to each of the authors represented here, you have an open invitation to submit cases to future proceedings and to spread the word amongst your colleagues in academia and industry.

We hope you enjoy reading these as much as we did in gathering them up and listening to the presentations.