JOURNAL OF BUSINESS MODELS

Experimenting with the Design, Pedagogy and Practice of Business Design at one B-School

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Abstract:

This paper examines the posturing, positioning and practice of Business Design (BD) at Rotman School of Management, University of Toronto, exploring its evolution since the late 1990s to today. It outlines BD's introduction as a design thinking-lite approach to strategy innovation and its evolution to an experimental design-driven innovation pedagogy for MBA students. A triangulated theoretical foundation combines design principles, innovation theory and management education with the aim to teach and study BD as an innovation management learning construct. The resulting Business Design Method is examined with early findings of its impact, however offers more of a provocation rather than proof of a successful design curriculum for b-schools.

Introduction

Management education aims to prepare students to lead others inside small to large enterprises. Innovation management education aims to prepare students to navigate and lead others through the volatile, uncertain, complex and ambiguous (VUCA) journey of new product or service development and diffusion. Traditionally, most MBA students learn how to manage and decision-make through the

revered case study method (Garvin, 2003). While case-based learning enables rich discussion and critical thinking, it is not designed to situate learners into the real, messy and complex construct of innovation making and managing (Shugan, 2006). In response, some business schools have experimented with experiential instructional methods that situate students into real scenarios with no existing datasets (Roth & Smith, 2009: Pasricha, 2016). This

Keywords: business design, innovation management, management education

Please cite this paper as: Beausoleil, A. M. (2024), Experimenting with the Design, Pedagogy and Practice of Business Design at one B-School, Journal of Business Models, Vol. 12, No. 1, pp. 60-70

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essay outlines an insider's perspective on how Rotman School of Management, University of Toronto, introduced and experimented with *Business Design* as a design-thinking infused experiential learning method, with the aim to influence MBAs to develop a mindset, skillset and confidence to creatively and effectively manage business innovation initiatives.

From business cases to business designs

Case method teaching typically offer well-crafted scenarios where students practice analytical thinking within constraints and presets of past, place and protagonists directly influenced by real organizations. These business cases play an important role in building skills of case-based observation, analysis, and summarization (Barnes et al, 1994; Wasserman, 1994). Their value is further derived from a cohort's shared understanding and exploration of key events leading to generalizable recommendations – which are facilitated by the academic case authors. While the case method offers management students ways to develop analytical and critical thinking skills, alternative teaching methods are required to develop the creative and innovative thinking skills.

In 1998, the University of Toronto's Rotman School of Management welcomed a new dean who guestioned the relevancy of traditional management theories, academic-authored cases and business models dominated by analytical thinking frameworks. Roger Martin, the Harvard University MBA graduate and industry consultant, proposed that business leaders should think and act like designers. Martin was deeply influenced by design agencies and architectural firms, particularly their methods of thinking, making and working. In 2009, he articulated his findings as 'business design interventions' in his influential The Design of Business book. In it, he highlighted successful design-influenced strategy and business model innovation methods practiced on Procter & Gamble and MacDonald's, to name a few. His management thesis was further articulated in his second book, The Opposable Mind (Martin, 2009b), where he argued that designers practice abductive reasoning (as a form of design thinking) and when combined with analytical thinking, an 'integrative thinking' approach would enable organizational leaders to creatively solve problems, secure a competitive market advantage, innovate and win (Martin, 2009a). Abductive reasoning generally involves observation, root cause inference analysis, pattern recognition and thematic sensemaking (Paul, 1993; Walton, 2014). Fittingly, Martin was practicing abductive reasoning (as a form of creative and imaginative logic) to propose new ways for business leaders to think of and propose innovative business designs.

During Martin's tenure at Rotman (1998-2013), teaching abductive reasoning skills was offered primarily through two courses, one taught by himself and another by his industry colleague - both packaged into a Business Design major for MBA students. The first course was Integrative thinking which combined design thinking with analytical thinking frameworks to devise and generate new and innovative strategies for established firms. Martin's design thinking was constructed from observing designers and appreciating management literature focused on 'designerly ways of thinking' (Buchanan, 1992). His reference for design thinking did not borrow from the notable design agency IDEO's 3-step design methodology (inspiration, ideation and implementation) (Brown, 2009) nor from Stanford's five steps (empathize, define, understand, prototype and test) (Kelley, 2009). The other course, entitled Business Design Practicum, offered an experiential consulting project with the intent to design business strategies for an industry-client sponsor. Developed by former advertising executive Heather Fraser (2009), this course introduced students to her three gears of 'business design' that involved (1) empathy building, (2) concepting/prototyping and (3) strategy generation (Fraser, 2012). Fraser integrated three of Stanford's five design thinking steps (empathize, prototype and test) into her method and course design. The Integrative Thinking and Business Design courses signaled a new era of management education at Rotman. Although new in title, both courses borrowed generously from established methods that included Edward de Bono's Lateral thinking model (1970), Peter Drucker's innovation management principles (1985) and Faste's design thinking and creative problem-solving techniques (1994).

From 2009 to 2017, Rotman benefitted from attracting both domestic and international MBA students curious about its Business Design (BD) courses, singularly focused on strategy innovation and distinct from business model design origins (Revaz & Pigneur, 1998) and design thinking origins (Faste, 1994). Dean Martin's competitive strategy was working and generated demand for the Business Design specialization. However, once enrolled, the MBA students raised concerns about the lack of supply (and choices) of BD-related courses. To mitigate the lack of educational programming, the school invested in a small design studio, branded DesignWorks, with the goal of extending the learning experience of three gears of business design post-graduation. Originally an experimental strategic design process introduced at Procter and Gamble, Rotman's DesignWorks would become a practice studio (selfdescribed as a design finishing school) where a hand selected group of students (12-16) would work on strategy innovation-related projects for companies such as Samsung, L'Oréal and Telus.

From practice to pedagogy

As demand for BD at Rotman grew, so did the students' expectations particularly with developing the key competencies and marketable skills for emerging management jobs in service design, strategic design, and customer experience design. Unfortunately, the school's business design courses had no academic scholarship to support them, nor did they align with industry design practice, resulting in few direct placements of Rotman MBAs into design management roles upon graduation. In response to student demands, the school created a new teaching-stream professorship charged with developing a full curriculum for the BD specialization. Between 2018 and 2023, the Business Design/practicum course evolved from design thinking-light for business strategy workshops (as tools-based training) to design competency-based courses (mindset development from knowledge and practice) delivered through studio-based teaching methods.

The teaching professor's goal was to develop a pedagogical structure that combined theoretical constructs for mindset shifts (design principles) with skills training (techniques practice). Critical

theoretical constructs borrowed from design (human-centred, form and function), innovation development (new product adoption), and active learning methods (studio-based teaching). The triangulated pedagogical framework comprised: (1) Everett Rogers' innovation development process theory (1993-2010); (2) Argyris' double-loop learning theory (1977); and, (3) UK Design Council's double-diamond design process theory (2005) (Figure 1). Roger's theory provided an evidence-based and multi-stage organizational innovation development process of how an idea or invention moves toward market adoption or innovation diffusion. Argyris' educational theory provided an approach to thinking more deeply about one's own assumptions and beliefs through two loops of learning, aligning well with design as both the process of designing (loop 1) and the things being designed (loop 2). The Design Council's double-diamond design model provided a synthesis of centuries of design making through visual thinking modes required to think divergently (generate choices and ideas) and convergently (made decisions), moving from defining the right problem to solve, through to designing an effective solution that would solve the problem.

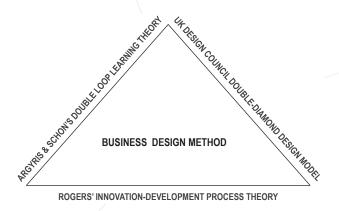


Figure 1: Triangulated pedagogical framework for Business Design Model.

The aim of this combined theoretical and practical construct was to introduce and equip the non-designer MBA student with a deeper understanding of the whys, hows and ways of design thinking for business innovation managing. A select suite of techniques would provide students with a shared vocabulary and practice that better aligned with design management careers. The design techniques

BUSINESS DESIGN METHOD > FOUR KEY STAGES OF INNOVATION MANAGEMENT

INTENTION INVESTIGATION INTEGRATION **IMPLEMENTATION** activities associated activities focused on activities focused on activities focused on with starting a design idea generation, the commercialization research, developing a or innovation project research plan and guides, prototyping, testing, of the new product or and co-crafting a data analysis for product development or service, including brief and problem manufacturing systems packaging, marketing, hypothesis testing, and hypothesis problem articulation engineering pricing and distribution

TIME

Figure 2: Proposed Business Design Method for Innovation Management education

included empathy interviews and mapping, qualitative data sorting, problem statement hypothesis generation, how might we question generation, prototyping, and feedback gathering. The techniques offered divergent thinking and visual thinking devices that could improve the utility of familiar business frameworks such as the SWOT analysis, affinity mapping, new product roadmapping and business model canvas.

Between 2018 and 2021, several educational experiments were completed with full-time, part-time and executive MBAs, involving multiple prototyping and student feedback collection cycles. The resulting pedagogical structure would differ greatly from Martin's Integrative Thinking and Fraser's 3-gears of Business Design models, and establish a foundation for design-infused business management courses at Rotman. The structure was labeled the Business Design Method (BDM) and reflected a stage-based learning method that follows the four critical stages of organizational innovation: (1) initiation, (2) investigation, (3) integration, and (4) implementation (Figure 2). Initiation involves activities associated with starting a design or innovation project and co-crafting a brief and problem hypothesis. Investigation involves activities focused on research, developing a research plan and guides, data analysis for hypothesis testing, and problem articulation. Integration involves activities focused on idea generation, prototyping, testing,

product development or manufacturing systems engineering. *Implementation* involves activities focused on the commercialization of the new product or service, including packaging, marketing, pricing and distribution (Beausoleil, 2016; Beausoleil, 2023). The BDM proposed a best practice framework to move collaboratively, creatively and strategically from initiation through to implementation. It was also designed to be flexible and modular, prompting the learner (as innovation manager) to reflect and engage in each stage, and consider the organizational context for decision-making – for example, skipping ahead to the implementation stage if the prototype demonstrated strong market demand, or returning to the initiation stage if the problem hypothesis was unclear.

Architecting a pedagogical structure with learning 'levels' was instrumental in charting and facilitating new BD-related course development, with the goal of laddering design-driven innovation management knowledge and practice. The new courses offered to all MBAs included: Business Design Fundamentals, Design Research and Data Storytelling, Creativity for Business Innovation, Futures Thinking, and Service Design (first initiated as Independent Study Projects (ISPs) (Figure 3). The evolved BD Major program aimed to guide students to develop their design thinking, doing and leading skills through studio-learning experiences and customer-centred design business models and strategies (Figure 4).

Students earn deep practice and understanding of Business Design and innovation theories and tools.

MBA: Business Design Major (Specialization)

Students have intermediate practice with Business Design and innovation theories and tools.

RSM254: Business Design Practicum
RSM2516: Design Research and Data Storytelling
RSM2517: Futures Thinking: Developing Business Insight
RSM2518: Service Design
RSM2530: Creativity for Business Innovation

YEAR 2/ LEVEL 2

Students have a broad practice and understanding of Business Design and innovation theories and tools.

RSM2907: Global Practicum
RSM2700: BD Independent Study Program

Students have a foundational understanding of the most practiced design methods and models for business innovation.

RSM2523: Business Design Fundamentals

ONBOARDING

Students have a basic awareness of Business Design.

Figure 3. Proposed Business Design Major learning ladder.

BUSINESS DESIGN METHOD > SAMPLE KNOWLEDGE AND PRACTICE ELEMENTS

INTENTION

activities associated with starting a design or innovation project and co-crafting a brief and problem hypothesis.

INVESTIGATION

activities focused on research, developing a research plan and guides, data analysis for hypothesis testing, and problem articulation.

INTEGRATION

activities focused on idea generation, prototyping, testing, product development or manufacturing systems engineering.

IMPLEMENTATION

activities focused on the commercialization of the new product or service, including packaging, marketing, pricing and distribution.

Knowledge:

- Business Innovation
- Innovation Process
- Design Methods
- Design Techniques

Practice:

- Design Brief Crafting
- Divergent Thinking
- Problem Hypothesis
- Reflecting

Knowledge:

- · Ethnographic Research
- Market Research
- Trend Research
- Competitive Analysis
- Data Analysis

Practice:

- Need Finding
- Problem Finding
- Fact Finding
- Convergent Thinking
- Empathy Building

Knowledge:

- Idea Generation
- Prototyping
- Testing
- Requirements Gathering

Practice:

- Divergent Thinking
- Convergent Thinking
- Visual Thinking
- Problem Framing
- Storytelling

Knowledge

- Operations
- Marketing
- Stakeholder Management
- · Performance Measurement

Practice:

- Roadmapping
- Problem Solving
- Evaluating
- Metrics Generation
- Reflecting

TIME

Figure 4. Proposed Business Design Major competency list (knowledge and practice).

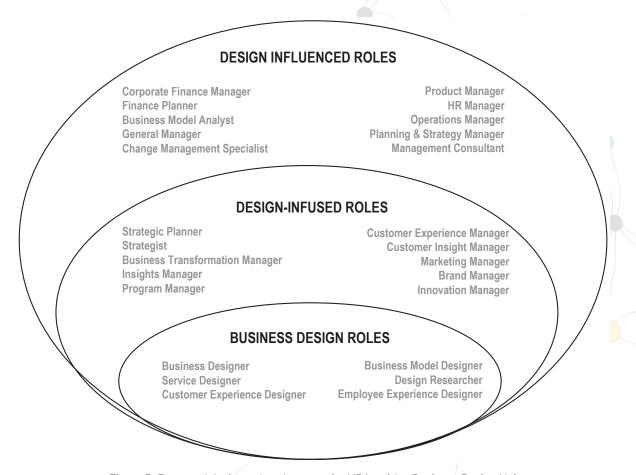


Figure 5: Proposed design-related careers for MBAs with a Business Design Major.

With deeper knowledge and practice of design and innovation topics and methods, the hypothesis for this new curriculum design was to facilitate direct career placements into business design roles, design-infused roles or design influenced roles upon graduation (Figure 5). Qualitative data observed and coded from the multi-year action research studies were analyzed, synthesized, peer reviewed and published in academic books and journals (Meisiek et al, 2021; Beausoleil, 2022; Miesiek et al, 2023), signaling early scholarship of business design as a 'design thinking variant" in management education.

Discussion

Business design (BD) has been broadly discussed across multidisciplinary literature: as an innovation development and management construct (Van de Ven, 1986; Slywotzky & Linthicum, 1997; Beausoleil, 2022); as systems and organizational design (Dietz, 1993);

an approach to market-driven innovation management (Drucker, 1995; Ungaretti et al, 2009; Verganti, 2009; Slywotzky & Euchner, 2015); a strategy innovation method (Martin, 2009a and 2009b; Fraser, 2013); design thinking for business (Dunne and Martin, 2006; Brown, 2008); a device for entrepreneurship and new venture design (Turner, 2000; Beausoleil, 2022); and, the result of value-creation business modelling (Osterwilder & Pigneur, 2005; Massa et al, 2017). As such, BD as a topic, practice or discipline remains largely understudied. From 2005 to 2023, BD at Rotman evolved from a consultant's strategy generation tool, into a general approach to design-driven innovation — applying design principles and practices to new business models, new processes, new products, new services, and new strategies (Figure 6). Further research examining BD's role with developing a designerly way of thinking and working (as a design mindset for sustainable innovation) for MBA students, is required.

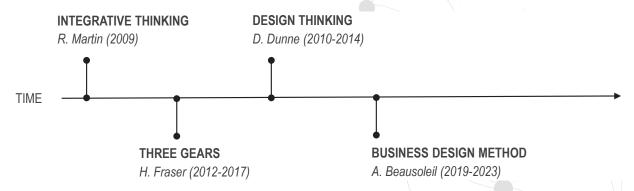


Figure 6. A timeline of Business Design experiments at the Rotman School of Management

Conclusion

This essay examined the prototyping and practice of Business Design (BD) as a construct at a highly ranked Canadian business school. Although pedagogically constructed and tested, Rotman's BDM remains an unstudied and unproven approach within management education. Data collected from enrollment and placement statistics shows some positive impact. For example, Rotman MBA admissions data collected between 2017–2023 showed a year over year increase in demand for the BD specialization, representing between 10–15% of annual cohort recruits. Concurrently, MBA career services department reported a 200% growth in 'business'

design-related' management positions secured from BD-course graduates.

In summary, this paper provides one perspective on how business design was 'designed' at one business school. It suggests that BD has the potential to evolve into a discipline within innovation management where the BMD guides learner-managers to architect new and improved strategies, processes, customer experiences and business models that truly deliver value, meaning and impact. It also serves as an invitation and provocation for more discussion and research on business design inside management education.

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