Omnichannel Innovation Lab: Incorporating Design Thinking into a Merchandising Course

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Introduction

Design thinking has received growing attention from both academia and businesses as an effective way to solve complex problems facing the world today (Kolko, 2015). Tim Brown, President and CEO of IDEO defines design thinking as "a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success." (Design thinking, n.d.).

The retail industry is going through disruptive changes and facing complex problems that need new innovative approaches to solve. Internet and other digital technologies have empowered consumers to define new ways to integrate retail channels and shape the new shopping experiences. On the other hand, retailers are lagging behind to keep up with evolving consumers and offering seamless shopping experiences (Accenture, 2016). National Retail Federation advocates the pivotal role design thinking can play in driving retail innovation (Cantrell, 2015).

Despite its potential benefits for merchandising students' future careers, the incorporation of design thinking in the merchandising curriculum has been scarce. To address this gap, the existing Omnichannel Apparel Merchandising course was converted to the 'Omnichannel Innovation Lab (OIL). The OIL incorporates the Human-Centered Design (HCD) approach (aka. design thinking) in the context of omnichannel retailing. In the OIL, HCD mindsets (Creative confidence, Empathy, Embrace ambiguity, Make it, Learn from failure, Iterate, iterate, iterate, Optimism) and collaboration are vital to learning design thinking and creating innovative solutions to complex problems following the design innovation process (Designkit.org, n.d.).

Omnichannel Innovation Lab (OIL)

By embracing the HCD mindsets, the OIL aimed not only to help unlock students' creativity but also to facilitate experiential learning. The five key learning objectives of the OIL included; (1) gain a deep understanding of omnichannel retailing, (2) develop ethnographic research skills to gain an empathetic understanding of consumer needs, (3) apply the design thinking process, (4) develop omnichannel innovations and (5) improve collaboration skills.

Using a hands-on design thinking workshop format, student teams engaged in a semester-long omnichannel innovation project. A grand challenge was to improve consumer/human experience in omnichannel retailing, and student teams identified a more specific problem they believed critical to solving (team design challenge). Following the design thinking principle, teams were made up of 5 students with as much diversity as possible based on demographics, academic background, interest, and personality (collected through student interest inventory).

Following the design innovation process, the OIL consisted of three main phases (INSPIRATION, IDEATION, and IMPLEMENTATION). During the INSPIRATION phase,

students engaged in both individual (e.g., mystery omnichannel shopping, empathy map, reflection journals, and online quizzes) and team (empathetic inquiry of consumer needs through fieldworks including interviews, observation, and immersion) activities. At the end of the INSPIRATION phase, student teams synthesized their learnings and brainstormed innovation ideas that address their design challenge following the brainstorming rules (e.g., defer judgment, go for quantities, build on ideas, and etc.). During the IDEATION phase, student teams first created a composite character profile to clearly understand people they were designing for and built low fidelity prototypes (rapid prototyping). By presenting their prototypes in class, teams gathered peer feedback and subsequently engaged in multiple iterations. Types of prototypes ranged from paper prototypes to 3-dimensional models to digital prototypes to skits. When ready, students conducted field research; tested refined prototypes with potential users, gained feedback, adapted-on-fly, and tested usability. During the IMPLEMENTATION phase, teams finalized their omnichannel innovation and develop the Business Model Canvas to take their innovation to market. The OIL concluded with final team innovation presentations, final portfolio compiling the entire design innovation process and individual reflection journal.

Student Learning Outcomes and Future Plans

Student learning outcomes were measured using in-class assessments, student reflection journals, and team innovation portfolios. Assessment of student learning outcomes demonstrated the strong positive impact of design thinking on students' accomplishments of course learning objectives. For example, responses to the three quantitative questions on a 5-point Likert scale reflected successful learning outcomes; "this course has helped me unlock my creativity (M=4.82, SD=.39)", "this course has facilitated my learning of how to work in teams more effectively" (M=4.99, SD=.50) and "I feel competent about applying the skill sets to other relevant contexts including my future career" (M=4.79, SD=.42).

Qualitative analyses further suggest impactful learning outcomes in terms of HCD mindsets. In particularly, creative confidence (confidence in one's own creativity), embracing ambiguity, and learn from failure were three transformative mindsets students reflected on having improved. With no exception, students reflected on successful teamwork experiences and commented on how beneficial it was to work in diverse teams. Both quantitative and qualitative assessments support the successful accomplishment of all learning objectives. Following the same design thinking principle, the OIL is considered a prototype that goes through on-going iterations. The OIL continues to be pilot tested and improved upon student feedback. A next step for the OIL is to encourage students to take their ideas for radical (vs. incremental) innovation by taking risks and tolerating failures.

References

Accenture (2016). Retail customers are shouting–are you adapting? Retrieved from
https://www.accenture.com/_acnmedia/PDF-7/Accenture-Adaptive-Retail-Research-Executive-Summary-V2.pdf

Cantrell, V. (2015). How "design thinking" can spark retail innovation. NRF.com. Retrieved
        from https://nrf.com/news/how-design-thinking-can-spark-retail-innovation
Designkit.org (n.d.). Mindsets. Retrieved from http://www.designkit.org/mindsets
Design thinking. (n.d.). Ideou.com. Retrieved from http://www.ideou.com/pages/design-thinking
Kolko, J. (2015). Design thinking comes of age. *Harvard Business Review, 93*, 66-71.