Infusing User Empathy and Passion into Information Systems Education: Integrating Design Thinking with Mobile Development Curriculum

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Abstract

In today's globalized economy, technology not only plays a more and more important strategic role in the overall business, but also is well positioned to create competitive advantage through inventing new markets or new business models. At the same time, online review platforms such as Amazon and Yelp have never made customers' voice heard louder and clearer. This calls for student talents who are capable of developing innovative technology solutions that deliver superior user experience as well as business value. Design Thinking as a team based learning process holds a lot of potential for infusing empathy, passion, and creativity into traditional development curriculum. This talk intends to bridge the gap between conceptual process of Design Thinking and its practical implementation in the context of public higher education.

Despite the various advantages that Design Thinking potentially provide, besides featured in certain MBA classes, it is rarely adopted in the mainstream undergraduate business education. The proposed curriculum focuses on the creative design, prototype, development, and evaluation of mobile technologies that enable new business processes to better connect employees, customers, and products. First, the Design Thinking methodology is introduced to facilitate the design of mobile strategy and solutions. Second, a cloud based enterprise mobile development platform is taught to help student prototype and develop their mobile solutions. Last, students are required to document and present group projects that feature design, prototype, and development of app ideas to address practical problems of personal, business, environmental, civic, or social significance. All project entries will be evaluated by a panel of industry experts.

This talk also presents a research model to illustrate the effectiveness of integrating Design Thinking in the Information System's Mobile Development curriculum in an urban public university. In order to verify the effectiveness of the Design Thinking integration in the proposed mobile curriculum, a survey instrument is developed for assessing the perceived learning outcomes, user empathy, ownership and control over software project, and positive emotions associated with Design Thinking. The data analysis of student assessment indicates that incorporating ideation, design, and prototyping as part of the Information Systems development curriculum significantly contributes to students' learning experience, and positively impact the learning outcome of the curriculum. The purpose of this talk is to provide a guideline for those who seek to incorporate Design Thinking method in the Information Systems curriculum.