

## Chapter 89

# Innovating Elite Undergraduate Education through Quality Continuous Improvement: A Learning Enterprise's e-Transformation Perspective

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### ABSTRACT

*This chapter investigates a mechanism of organizational innovation serving to make sense of a maturing university community involving educational executives, academic staff, and students in the occasion of a new campus development, starting in the year 2009 and realizing in the year 2013, under the auspices of a national policy benefiting the long-term development of higher education in the Macau Special Administrative Region (Macau SAR) of China. It is understood that the university as a public institution should not be operated like a business enterprise, running on profit-making initiatives; yet, without the enterprising context, the transformation of the existing infrastructure could hardly be innovated effectively, especially regarding the productivity of its staff, both academic and administrative. As a university with a staff count of less than 1000 and a history of close to thirty years, the University of Macau (UM) is ready to steward an elite undergraduate education marked by a quality learning experience that could become her branding value in the immediate future. The question is how innovatively UM could scale up in this opportunistic growth to excel for the local community. This case study is aimed to investigate from the perspective of a learning enterprise, a reflective way of forward thinking to record the author's observation and interpretation of what is entailed in this process of upbringing a relatively young university in this age-old city, Macau, famous for its rich heritage of East (Chinese) meeting West (Europeans – Portuguese). Of specific interest is the proper context of open innovation in university governance for organizational transformation. The chapter examines the accountability framework for undergraduate curriculum reform and by treating the electronic transformation (e-transformation) as one of the open innovation strategies, the chapter explores the e-transformation of the university environment, based on holistic concerns of the campus community. The challenge is to identify the organizational context*

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*of innovation, which lies in the realm of electronic governance (e-governance), referring mainly to the decisions that define expectations, enable empowerment, and verify performance of the systems in support of community engagement and shared responsibilities in campus development, providing a sense-making perspective to interpret what is entailed in the organizational innovation of the university in this precious occasion of campus relocation. In practice, the lessons learned behind the e-transformation of the learning enterprise should benefit all walks of our local community, including the community of the small and medium sized enterprises (SMEs).*

## **INTRODUCTION**

In their book, *Engines of Innovation: The Entrepreneurial University in the Twenty-First Century*, Thorp and Goldstein (2010) makes an interesting point: “What is most exciting about innovation is that it begins with a problem; the bigger the problem, the more significant the innovation needed. From the very beginning of our work, we have been convinced that for research universities to realize their full potential, they must attack the world’s biggest problems, and this notion is increasingly being embraced throughout academia (p.2).” In this light, the University of Macau (UM), in its 10-year development plan from 2008 to 2017, aims to become a leading university in the country (China), and beyond. It aims to produce all-round graduates with the potential to become pillars of the Macau Special Administrative Region (SAR) serving beyond Macau in the mainland of China as well as in the global community.

This chapter is going to examine what quality concerns UM has put into her radar screen of continuous improvement to support the elite undergraduate education ideal, from the perspective of a learning enterprise, receiving financial support from both the SAR Government, and from donors in the local and global community. In particular, the study is looking into an innovation opportunity granted by the Central Government of China to the SAR Government and thus to the University in early 2009, to develop, to govern and to manage a new green-field campus (to be completed by 2013) twenty times the size of UM’s current campus in an island (Hengqin), just next to Macau, located

in the mainland of China, to be connected to the SAR through a dedicated channel for convenient transportation (see more from [http://www.umac.mo/new\\_campus\\_project/](http://www.umac.mo/new_campus_project/)).

In the future campus, the buildings there will house those who will create well-paying, sustainable jobs, and provide Macau (and China) with a sustainable competitive advantage in the global economy. And such buildings are most likely our research labs, classrooms of the future, and innovation centers, where big ideas are hatched and subsequently translated into reality. Indeed, as Thorp and Goldstein (2010, p.2) characterizes: “The superhighways that will change the world are not asphalt but electronic, and rather than connecting the world’s great cities, the new superhighways provide access to most of the world’s knowledge.” Thereby, UM sets off globally for a higher purpose in organizational innovation to connect the world’s knowledge in her new Hengqin campus.

Understandably, as this study involves the investigation of some innovative learning culture through e-transformation of organizational development in the learning enterprise, such as teaching, learning, research and assessment, in the context of SMEs, the same learning experience could actually be rendered as transferable means to accomplish such business initiatives as project management in research and development, as well as product innovation. Many an SME in advanced economies have been learning to use information and communication technology (ICT) to innovate and transform their processes, products, services and business models, significantly improving productivity and competitiveness (Hanna, 2010).

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