

# Creating a Knowledge Supply Chain for e-Tourism Curriculum Design: Integrating Knowledge Management and Supply Chain Management

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## ABSTRACT

*Higher education, as one of the most important knowledge providers and service suppliers to the society, is obliged to produce qualified intellectual products through the process of knowledge transfer and creation, which depends largely on the quality of knowledge and the way it is delivered within a curriculum. This research takes e-tourism, a relatively new discipline, as a case study, highlighting a knowledge supply chain is the potential solution to leverage the understanding of tourism industry needs and tourism curriculum provision. The paper begins with a competency gap analysis between knowledge demand and supply. It then applies the Supply Chain Operations Reference (SCOR) model to analyze the "as-is" situation of the present knowledge flow in curriculum design, and finally proposes a "to-be" conceptual framework by integrating tools and methods of knowledge management and supply chain management in a knowledge supply chain (KSC). This demonstrates that a KSC can help in achieving e-tourism requirements of higher education stakeholders at both industrial and academic levels.*

*Keywords: Curriculum Design, e-Tourism, Knowledge Management, Knowledge Management System, Knowledge Supply Chain, Supply Chain Management*

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## INTRODUCTION

There is an acute need to modify the design of curriculum in higher education in order to meet the requirements of a rapidly changing and increasingly knowledge-based society. A core aspect of curriculum is the identification, justification and management of knowledge, particularly in multidisciplinary subjects or industry-university collaborations. This paper argues that without effective knowledge management, the knowledge scoped and placed within a curriculum cannot encompass all business activities or phenomena in knowledge capture, supply and delivery, and therefore the objectives of a curriculum will not be efficiently met. The paper deconstructs the contents and process of curriculum design in the emerging interdisciplinary and technology-dependent subject of e-tourism, to show how knowledge management theories and tools can significantly enhance curriculum design and implementation. This paper utilizes a case study of e-tourism curriculum design in Thailand, and suggests that the requirement for effective curriculum design is particularly necessary in developing countries such as Thailand, where higher education and the e-tourism development are currently unable to match the globally distributed, technically advanced IT systems used within international tourist agencies (Sangpikul, 2009). As well as an overview of knowledge management and supply chain management in higher education, this research illustrates how the application of knowledge management to curriculum design is essential if higher education is to provide appropriate courses for today's knowledge-based economy.

## BACKGROUND AND LITERATURE

Since the 1990s, there has been a clear shift from an information-based to a knowledge-based economy (Lyman, 2001). This shift means economic futures will be determined by people's ability to wisely use knowledge, as

well as maintain and enhance their knowledge capital in order to innovate and improve their ability to learn and adapt (Psarras, 2006). This is reflected in the transformation and reconfiguration of higher education into competitive enterprise, which is focused on the creation of economic value via the forces of supply and demand as opposed to organizations whose core purpose is learning *per se* (Pathak & Pathak, 2010). This requires new ways to organize, develop and adapt higher education to meet the needs of the society it serves, and there is currently a gap between industrial needs and curriculum provision. Research in this paper suggests this could be addressed by integrating the tools of knowledge management (KM) and supply chain management (SCM) to create a knowledge supply chain (KSC). The current gap between curriculum provision and industrial needs is conceptualized in Figure 1, along with the proposed tools and solution presented in this research.

This research leverages a case study of e-tourism curriculum design within higher education in the Greater Mekong Sub-region (GMS), where tourism revenue is the crucial foreign exchange resource. Improving and increasing the skill of knowledge workers within the e-tourism industry is a key requirement for these developing countries. The case study in this paper shows why knowledge is required in this industry and more importantly, why knowledge management should be an essential component of e-tourism curriculum design. Before introducing e-tourism and the case study in more detail, there is a need to further define and understand knowledge management and supply chain management as they relate to higher education and curriculum design.

### The Changing Nature of Education and its Associated Challenges

Higher education as a service industry has undergone significant changes worldwide. The role of state-funded not-for-profit education is being replaced by a self-funded for-profit

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