# Chapter 14 A Model to Integrate Concepts of Project Management with Innovation and Knowledge Management

João Carlos Araújo da Silva Neto Magnesita SA, Brazil

**Ítalo Coutinho** Saletto Engenharia de Serviços, Brazil

# ABSTRACT

In this chapter, the main objective is to show the reader the interaction between the innovation process and the project management process. In today's world, the great concern of large companies takes place in the process of ensuring that the knowledge gained remains within company boundaries. In this chapter, the authors show how a proposed model retains the knowledge gained during the project management process and company investments through innovation and the use of lessons learned methodologies. In addition, the reader has the opportunity to see the evaluation of the process of emerging technologies against the paper of the strategic planning process through the well-aligned process of knowledge management within the companies. The chapter is divided into three major sections: the first presents the main concepts in project management and also in innovation and technology. In the second section, the reader has the opportunity to learn about the process of project management and learning. Finally, the authors present the proposed integration model as a source of knowledge retention through innovation and technology.

### INTRODUCTION: PROJECT MANAGEMENT CONCEPTS

In recent times it has been accompanied by the method of implementation of corporate strategies in practice. It is interesting to note that most of the advances that have occurred in various fields of activities of the company were achieved through the use of known structures such as lessons learned from past projects which reflect that the current situation is not satisfying the demands of the analyzed area.

DOI: 10.4018/978-1-5225-0196-1.ch014

#### A Model to Integrate Concepts of Project Management

For Heldman (2006) a project is "a temporary endeavor, with start and end dates defined, which aims to create a unique product or service that is completed when its goals and objectives are met and approved by the stakeholders."

The guide of ICB-IPMA (1999) defines project as an effort in that financial, human and material resources are organized in a structured way to hold a defined scope of work, preliminary specifications, time constraints and cost-effectively, following a standardized lifecycle, in order to achieve beneficial change defined by quantitative and qualitative objectives.

According to PMBOK (2004) "A project is a temporary endeavor undertaken to achieve a particular goal, and on which the Project Management can be applied regardless of size, budget or schedule of implementation." A project involves a result in developing something that has not been done before in the organization, or a new product, service or an existing procedure different from all others in the company (VALERIANO, 2005). In figure 1, it's clear that at the beginning of the project planning, the level of uncertainty is very high because the lack of scope definition. As much as the scope is defined, the project unity increases.

This uniqueness characteristic of the projects gives them a degree of uncertainty. Because of this, projects are usually divided into phases to facilitate their management. The set of phases of a project is known as the project life cycle. This life cycle serves to define the technical work and the people involved in each of its phases. These settings can be general or very detailed and, in the case of the latter, are called Project Management methodology.

Valeriano (2005) states that the words "manage" and their derivatives, as a manager, management, and management refers to actions located at a specific level of the organization, such as production man-

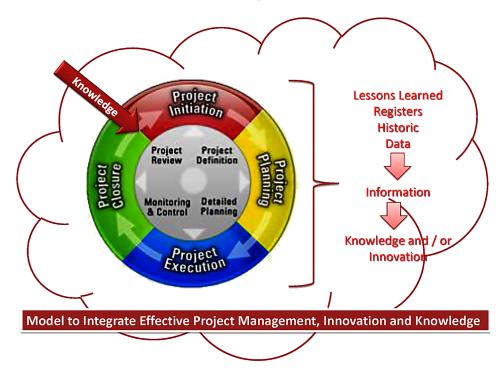


Figure 1. Relationship between uncertainty and uniqueness of projects

12 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <u>www.igi-global.com/chapter/a-model-to-integrate-concepts-of-project-</u> management-with-innovation-and-knowledge-management/155276

# **Related Content**

#### COVID-19 and the Tourism Industry: Effects, Analysis, and Policy Implications

Vikramaditya Kumar Tanejaand Pratap Chandra Mandal (2022). *International Journal of Applied Management Theory and Research (pp. 1-16).* www.irma-international.org/article/covid-19-and-the-tourism-industry/300344

# Modeling of an Inventory System with Variable Demands and Lead Times using a Fuzzy Approach

Vijay Kumarand Pravin Kumar (2016). Optimal Inventory Control and Management Techniques (pp. 133-151).

www.irma-international.org/chapter/modeling-of-an-inventory-system-with-variable-demands-and-lead-times-using-afuzzy-approach/146967

#### Determinants of Adoption of Location-Based Services in Bangladesh

Afrin Rifat, Mehree Iqbaland Nabila Nisha (2017). *Managerial Strategies and Solutions for Business Success in Asia (pp. 79-101).* 

www.irma-international.org/chapter/determinants-of-adoption-of-location-based-services-in-bangladesh/172334

#### The Post-COVID-19 Pandemic Economy of Ghana From the Consumer Perspective

Lydia Andoh-Quainooand Paul Adjei Onyina (2023). *Multidisciplinary Approaches to Organizational Governance During Health Crises (pp. 22-37).* 

www.irma-international.org/chapter/the-post-covid-19-pandemic-economy-of-ghana-from-the-consumerperspective/329284

#### The Effects of the Reformed C.A.P. to Cereal Crops

Theodoros Markopoulos, Sotirios Papadopoulos, Christos Karelakis, Konstantinos Galanopoulosand Konstadinos Mattas (2017). *International Journal of Food and Beverage Manufacturing and Business Models (pp. 1-12).* 

www.irma-international.org/article/the-effects-of-the-reformed-cap-to-cereal-crops/196167