



Chapter IV

Classifying Knowledge Maps: Typologies and Application Examples

Martin J. Eppler, University of Lugano (USI), Switzerland

Abstract

This chapter looks at graphic strategies to reference knowledge and how to make it more accessible through interactive knowledge maps. It discusses pragmatic ways of classifying knowledge maps to give an overview of their application contexts and formats. In the chapter, we show where and how the term knowledge map has been previously used and which criteria must be met in a sound and useful knowledge map classification that can support knowledge management (KM) processes and strategies. Various classification principles are presented and discussed. A table then matches map formats to knowledge management purposes and knowledge-related contents in order to serve as a selection and organizing framework. Examples of some of the main types of knowledge maps are presented to illustrate the variety of knowledge mapping present in the classification. The article concludes by discussing its limitations and future research questions in the area of knowledge mapping.

Introduction: Benefits of a Knowledge Map Classification

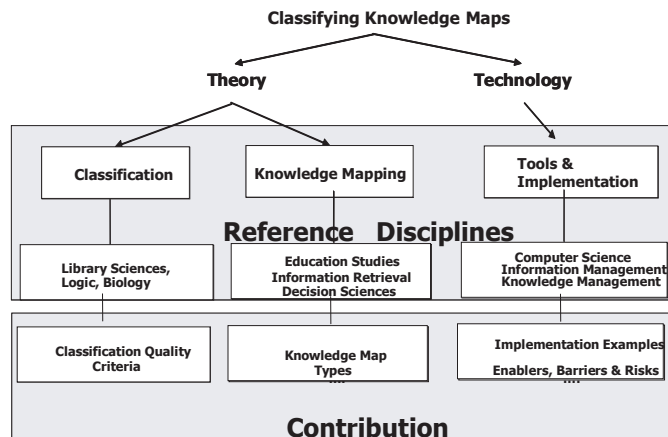
An early step toward understanding any set of phenomena is to learn what kinds of things there are in the set – to develop a taxonomy.

Herbert A. Simon

The main goal of this chapter is to provide an overview on the possible formats that exist to reference knowledge graphically or in other words to map it. In the chapter we assess knowledge maps as a useful tool for knowledge management (KM) and discuss various application parameters, benefits, and risks of using knowledge maps. We develop a systematic classification and show examples of various types of knowledge maps. This can help in assessing the potential of knowledge maps as useful elements of a comprehensive knowledge strategy. The following figure outlines the key components of this chapter and highlights its main contributions, namely eliciting quality criteria of a good classification, applying this approach to structure the realm of knowledge maps, and structuring implementation aspects of using knowledge mapping in knowledge management.

The advantages of visual representations for the field of knowledge management have long been recognized and discussed (Eppler, 2002, 2003; Newbern & Dansereau, 1995; Sparrow, 1998; Vail, 1999; Wexler, 2001; Wurman, 2001) and include a better *overview*, a faster *access*, and a more efficient and *memorable* representation and

Figure 1. Outline of the main topics of this chapter



25 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: www.igi-global.com/chapter/classifying-knowledge-maps/25020

Related Content

Impact of Knowledge Management Practices on Task Knowledge: An Individual Level Study

Shahnawaz Muhammed, William J. Doll and Xiaodong Deng (2011). *International Journal of Knowledge Management* (pp. 1-21).

www.irma-international.org/article/impact-knowledge-management-practices-task/59906

Total System Intervention for System Failure: Methodology and Its Application to ICT Systems

Takafumi Nakamura and Kyoich Kijima (2013). *Multidisciplinary Studies in Knowledge and Systems Science* (pp. 193-213).

www.irma-international.org/chapter/total-system-intervention-system-failure/76230

Governance of Generative Artificial Intelligence: A Contemporary and Institutional Perspective

A K M Kamrul Hasan (2025). *International Journal of Knowledge Management* (pp. 1-21).

www.irma-international.org/article/governance-of-generative-artificial-intelligence/383061

Effects of Knowledge Management Implementation in Hospitals: An Exploratory Study in Taiwan

Wen-Jang ("Kenny") Jih, Cheng-Hsui Chen and Ying-Hsiou Chen (2006). *International Journal of Knowledge Management* (pp. 1-20).

www.irma-international.org/article/effects-knowledge-management-implementation-hospitals/2684

Initial Results

Peter Busch (2008). *Tacit Knowledge in Organizational Learning* (pp. 194-203).

www.irma-international.org/chapter/initial-results/30035