Chapter 6
How Knowledge, Technology, and Project Management Processes in Brazilian Universities Help Innovation in Industry

Patrícia Pellegrino de Souza
Associação Wylinka, Brazil

Ana Carolina Calçado Lopes Martins
Associação Wylinka, Brazil

Tina Stutzman
ECOVEC, Brazil

Danilo Cançado Peixoto Pires
Associação Wylinka, Brazil

Elimar Pires Vasconcellos Renato da Silva Lacerda
Associação Wylinka, Brazil

Renato Ferreira Rodrigues de Macedo
Associação Wylinka, Brazil

Luz América Castiblanco
Associação Wylinka, Brazil

ABSTRACT

Knowledge is the act of having a concept of something. It includes descriptions, assumptions, and theories. Knowledge Management is about making the right knowledge available to the right people. A Brazilian university made its own pathway to manage the knowledge generated inside the academia favoring the market needs, showing that an organization can learn and use its knowledge in businesses applications, creating competitive advantage, regarding innovation, for the productive sector. An understanding of the market and society's demands enabled the development of products, technologies, and services with high added-value in line with solutions to challenges faced by businesses. A Brazilian startup made the "interaction" between market and academia allowing interest increase of productive sector in performing projects in partnership with research and technology institutes. Both successful cases in this chapter ensure the importance of knowledge, project, and technology management processes conferring innovative technological and market advantages to small companies and big industries.

INTRODUCTION

Knowledge is the act or fact of knowing; it is to have an idea or concept of something. It is the wisdom, the education and the information. It also includes descriptions, assumptions, concepts, theories, principles and procedures.

In order to speak about knowledge, it is necessary to talk about data, which is a mixture of codes and information. As the result of the manipulation of data processing, the knowledge can be considered information presenting utility (Figure 1).

Knowledge can be divided into a number of categories: sensory knowledge that is common knowledge between humans and animals; intellectual knowledge that is the reasoning, thinking of the human being; popular knowledge that is the form of knowledge of a particular culture; scientific knowledge that are evidence-based analysis and philosophical knowledge which is linked to the construction of concepts and ideas (Stanley, 2002).

Procedures to organize and relate scientific knowledge with ideas and perceptions of the

course of the events would give rise to a field called Knowledge management. This term has been used in both academic and business areas since it was first thought up in the 1980s. Interest has increased rapidly during the new century and shows no signs of decline. The current state of the knowledge management field is that it encompasses four overlapping areas: Managing knowledge (creating/acquiring, sharing, retaining, storing, using, updating, retiring), organizational learning, Intellectual capital and Knowledge economics. Within (and across) these, knowledge management has to address issues relating to technology, people, culture and systems.

Technology is a Greek word derived from the fusion of two words: *techne* (meaning art) and logos (meaning logic or science). Thus, technology means the art of logic or the art of scientific discipline. Technology can include both tangible products, such as the computer, and knowledge about processes and methods, such as the technology of mass production introduced by Henry Ford, for example. One interesting definition about technology was quoted by Michael Bigwood

Figure 1. Information vs. Knowledge
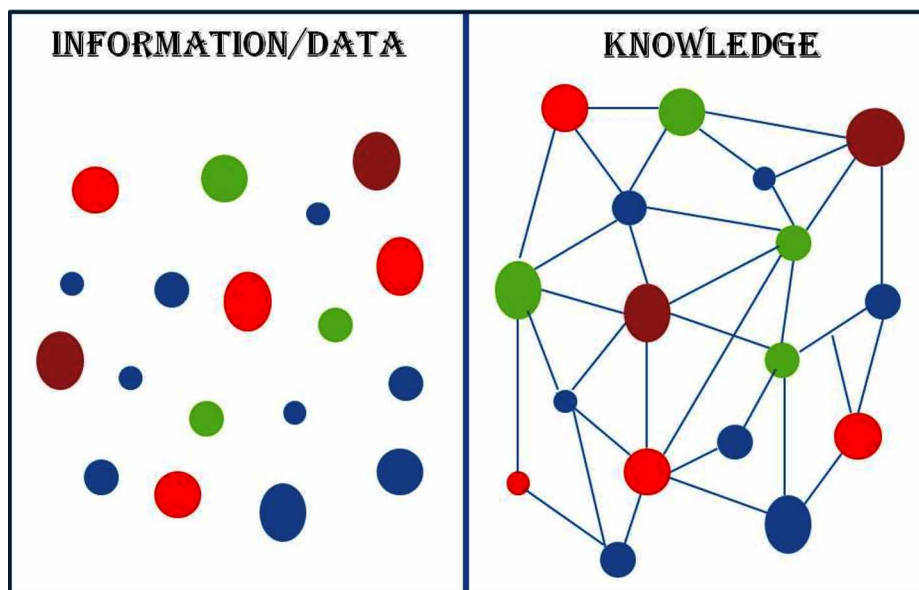
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