

Chapter 23

Modern ICT Technologies In Business Administration: The Case Of The DERN Project for a Digital Enterprise Research Network

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ABSTRACT

In this chapter, we present the DERN project and discuss a set of complementary methodologies that have been used to promote intra-enterprise training in the area of modern business administration technologies and corporate capacity building.

INTRODUCTION

The issue of enterprise learning might be regarded as marginally relevant to the core topic of this book, namely this of Enterprise Information Systems in SMEs. Based on our experience, several success and quite many failure stories, we derived enough knowledge on the role of corporate learning in general and the importance of introducing scalable learning processes that extend the already existing business processes of the enterprise. Especially for SMEs that have traditionally limited access not only to financial, human and technology but also to intellectual capital resources, this issue takes a higher priority as it may act as a disabling factor for their growth and sustained development.

We draw our experiences from the DERN (Digital Enterprise Research Network) project that has aimed at building a research network among some of the most important academic, research and technological Bodies and Enterprises of Greece.

Background on the DERN Project

The central gravity of the DERN project has been set on the use of modern ICT technologies in **business administration**. From our perspective as an industrial partner, the main interest was in the different ways that can be employed in order to help corporate employees build new capacities or improve and extend existing ones.

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Table 1. Different categories of employee specialisation

1. Specialist	2. Generalist	3. Versatilist
<ul style="list-style-type: none"> • Deep skills • Narrow scope • Peer-recognised • Unknown outside domain 	<ul style="list-style-type: none"> • Broad scope • Shallow skills • Quick response • Others lack confidence 	<ul style="list-style-type: none"> • Deep skills • Wide scope of roles • Broad experience • Recognized in otherdomains

The project has been cofinanced by the General Secretariat of Research and Technology of Greece and was coordinated by the Department for **Business Administration** of the University of Macedonia. In the project there was an equal representation from the academia (Institute of Communication and Computer Systems, National Technical University of Athens - Information Management Unit, and the Athens University of Economics and Business - ELTRUN/OIS), and the industry with two major actors from the Greek ICT market, namely FORTHnet S.A. and ALTEC S.A. it is worth to mention that both ALTEC and FORTHnet operate a huge (at least for the Greek market reality) installed base of corporate customers all of which (at least at some more than 95% proportion) are SMEs. More information can be retrieved from the official site of the project <http://islab.uom.gr/dern/>.

It is difficult for an SME to recruit experts – usually cost matters are regarded as a barrier but the tougher reality relates to the rather naïve issue of which expert they should actually recruit? An expert for sales? Or for marketing? Or for supply chain management? Or for knowledge management? Or for human resources? Or for new product development? An LGE, again, can afford to recruit several experts from different domains to address needs of different departments, or, though less frequently, several experts from the same domain in order to create excellence in a selected field. But an SME is unable to compete with this unfavorable reality. This means that the only way for an SME to capture the fruits of an expert’s knowledge and expertise is by means of forming human networks for research and de-

velopment as well as training with organizations that are expected to exhibit a high concentration of experts. And as such are to be regarded both universities and research centres. In this respect the DERN network provides a role model organization for demonstrating how the acquisition of expert knowledge can take place within SMEs. In Table 1 below we present an attempt to classify levels and depth of knowledge according to three generally accepted knowledge worker categories (Gartner, 2005). It is easy to see that an SME usually needs to rely on workforce that belongs mainly to category 2 (generalist), while limiting the amount of category 1 employees to a minimum (related usually to their core business or core process). Category 3 is welcome not only for SMEs but also for LGEs – but according to our experience it is like work-in-progress and, from our perspective, the goal of any intra-enterprise learning initiative. You *cannot* teach people to become *specialists* if they are not. You *should not* teach people to become *generalists*. But definitely you *ought* to help people learn how to become *versatilists*.

The main idea in DERN is that educational bodies and productive enterprises cooperate for the formation of a human network of research and technological training. The academic bodies are the backbone of the Network. The productive enterprises are important factors of the national economy.

In the frame of this human network formation, five educational Training Programs will be held (one by each partner). The trainees may be University graduates, researchers, post-graduate students, scientists, business executives. Each

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