Chapter 5.13
Strategies for Virtual Learning and E-Entrepreneurship in Higher Education

Juha Kettunen
Turku Polytechnic, Finland

Mauri Kantola
Turku Polytechnic, Finland

ABSTRACT
This chapter presents the strategies of higher education institutions and how they can be described using the balanced scorecard approach. The pedagogical ICT strategy describes the virtual learning and e-entrepreneurship in higher education. Strategic themes are presented to describe what management believes must be done to succeed and achieve the desired outcomes in virtual learning and e-entrepreneurship. Strategy maps are used to describe the strategy in a graphical representation. In addition, the study presents an example of the cooperation between a higher education institution and a spin-off company. This chapter helps the educational administrators to better describe and implement strategies for virtual learning and e-entrepreneurship.

INTRODUCTION
Higher education institutions (HEI) usually try to adapt their strategies to the local community, to society as a whole, and to educational policy. HEIs are trying to ensure competitiveness and employability for their students. To a large extent, the competitiveness is based on good skills in information and communication technology (ICT). They are linked to entrepreneurship, which is seen by the local stakeholders and edu-
The primary purpose of this study is to explore the strategies for virtual learning and e-entrepreneurship in higher education. The pedagogical ICT strategy is a specific functional strategy, which describes the strategic outlines for virtual learning and e-entrepreneurship. The aim also is to explore the methods to communicate and implement the strategy in an understandable and efficient manner.

Strategic management is a matter of developing the organisation and its present activities to achieve the desired objectives in the future (Fidler, 2002; Davies & Ellison, 2003). The new strategies of HEIs typically reflect the existing strategies, which are tailored to meet the needs of the organisation and its stakeholders. The strategies are typically fairly stable, but they reflect the changes in society, economic development, and educational policy.

The strategies typically focus the activities on specific fields of education according to the needs of the local community or society. Another typical strategy is the operations excellence theme. HEIs usually try to improve their quality, achieve more, and reduce costs. These strategies also can be found in the business literature, where Porter (1990) has presented the strategies of focus and overall cost efficiency.

The balanced scorecard (BSC) approach developed by Kaplan and Norton (1992, 1993) is used in this study to describe a pedagogical ICT strategy. The strategy must be understood before it can be implemented. The balanced scorecard creates a shared understanding of the selected strategies because it translates the strategy into tangible objectives and balances them into four different objectives: customer and regional development; financing; internal processes and structures; and learning and growth. The significance of the present study is to show how the competitive strategies and the balanced scorecard can be applied in HEIs.

A qualitative study is made based on the concepts of strategic planning and the balanced scorecard approach. The focus on interpretation in how the participants make sense of these rather than numerical exactness is the strength of qualitative research. When a qualitative study is carried out, qualitative data are required to clarify and illustrate the meaning of findings. Typically, a relatively small number of cases is studied preserving the individuality of each of these in the analyses.

The overall strategy of Turku Polytechnic emphasises high-quality learning. The pedagogical strategy is a functional specific strategy, which provides outlines for the development of education to promote the overall strategy. The pedagogical ICT strategy focuses on the pedagogical strategy to the virtual learning and e-entrepreneurship. The strategies of the educational departments are aligned with the functional strategies. The balanced scorecard can be used to communicate and implement both the overall and specific strategies.

The establishment of new businesses is an effective way to transfer new knowledge from higher education to the local environment. The spin-off activities result from the transfer of people and know-how from the HEI. The transfer of the skills and tacit knowledge embodied in the human capital differentiate this technology and knowledge transfer mechanism from technology sale, licensing, joint ventures, and alliances (Davenport, Carr, & Bibby, 2002). The spin-off activities and e-entrepreneurship are means to implement the strategic plan of HEIs.

This chapter is organised in that the next section presents the overall strategic outlines of the HEI and presents how balanced scorecard can be used to communicate and implement the strategy. Then, the pedagogical ICT strategy is presented, including virtual learning and e-entrepreneurship. Strategic themes and strategy maps are used to describe the strategy. An example of a spin-off company and e-entrepreneurship are