Chapter 2
Building Successful Knowledge Cities in the Context of the Knowledge–Based Economy:
A Modern Strategic Framework

Emmanouil Ergazakis
National Technical University of Athens, Greece

Kostas Ergazakis
National Technical University of Athens, Greece

Kostas Metaxiotis
University of Piraeus, Greece

ABSTRACT

The topics of Knowledge-Based Development (KBD) and especially of Knowledge Cities (KCs) have attracted the interest of many researchers and practitioners during the last years. In a previous research work of the authors, a set of hypotheses for the design, development and operation of successful KCs had been proposed and validated through the analytical study of KCs cases' support to these hypotheses, resulting to a related Framework. However, the rapid changes in the field render more than necessary today to re-examine the elements which had leaded to the formulation of the Framework, so as to update it and conclude on a modern strategic framework. The methodology followed is based on the examination of the already identified KCs and the inclusion of five additional KCs cases. For the new set of KCs, the authors examine at which degree each case supports the hypotheses. Modifications in the set of hypotheses are proposed. The hypotheses that continue to be valid are considered as dominant, thus leading to the modern strategic Framework. Among the main findings is that all cities previously examined continue to actively support their KBD, through a series of strategies and appropriate actions. The majority of the hypotheses continue to be valid, while three of them need to slightly change so as to adapt to prevailing current conditions

INTRODUCTION

The theme of Knowledge Cities (KCs), as a sub-field of Knowledge-Based Development (KBD) has attracted the interest of researchers and practitioners during the last years. In this direction, back on 2005, the authors have proposed a set of hypotheses for the design, development and operation of successful KCs (Ergazakis et al., 2005; Ergazakis et al., 2006). They conducted an empirical evaluation of several successful KCs cases and assessed the support of each case to each hypothesis. The key findings of this assessment were the core for the formulation of a coherent framework for the development and operation of successful KCs.

However, it should be noted that this framework was produced in an era that the theme of KC had been recently introduced in the scientific community· it still was in its infancy. Since then, rapid and significant changes have taken place concerning KCs as well as KBD in general, thus formulating a new landscape. Currently there are many new methodologies, approaches and insights, new concepts & views, many new contributions from various scientific fields, new Information and Communication Technology (ICT) tools etc. These changes had impacts not only in the research community but also in the real-life approaches of KCs.

For all these reasons, it is understood that now it becomes more than relevant (if not necessary) to update the framework initially introduced: this can be accomplished by examining again the elements which had leaded to the formulation of the framework, through the examination of KCs' progress. In this respect, in this chapter:

- The progress of each already identified KC is examined and especially if it continues to be developed in knowledge–based ways and if it still can be considered as a KC. Potentially new KCs are also identified.

- For the new set of KCs, it is examined whether and at which degree theses cities continue to support or not the hypotheses that had leaded to the formulation of the framework.
- It is examined if the hypotheses themselves need any modifications / changes so as to better reflect the existing reality. In this way, an updated set of validated hypotheses which can be considered as dominant is concluded.
- The updated strategic framework for the design and development of KCs is settled down.

The proposed strategic framework in this chapter can be considered reliable and accurate enough, as its validity has been evaluated again after the major changes of latest years. This remaining part of the chapter is structured is as follows: Next section presents the progress of the already identified KCs and presents the case of another successful case (Singapore). The following section analytically examines the support of each case for each one of the hypotheses. A synthesis of the results of the previous analysis and the strategic framework are then presented. The last section proposes issues for further research and discusses the main conclusions.

CASE STUDIES: SUCCESSFUL KCS

Barcelona (Barcelona, 2005, 2008)

In Barcelona there are a number of key elements rendering the city a major knowledge economy centre. The city has eight universities, with one of the largest university communities in Europe· it hosts many R&D and technology centres and a scientific park network that is home to companies working in the technology and engineering fields. Telecommunications infrastructures

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