Chapter XIII
A Knowledge-Based Urban Paradox: The Case of Delft

Ana María Fernández-Maldonado
Delft University of Technology, The Netherlands

Arie Romein
Delft University of Technology, The Netherlands

ABSTRACT

Despite its strong technological profile, the city of Delft has problems to improve its employment situation. What is more, Delft’s considerable knowledge base has not been sufficient to promote a sustainable type of urban development that could benefit all of its citizens. This case-study analyses Delft’s current business and people climates with the purpose to indicate directions for the adjustment of Delft’s local development strategy to improve its sustainability. The results point out that Delft has placed very much emphasis on improving its business climate, but not so much attention has been paid to its people climate. Delft Knowledge City strategy still has little to offer to creative and foreign knowledge workers and students. In terms of people climate, shortages in housing and cultural amenities diminish Delft’s capacity to attract creative people. Further, the strategy still remains divorced from the worries of common citizens and the non-knowledge economic sector.

INTRODUCTION

This chapter is about Delft, a historic city of 95,000 inhabitants, considered the second major technological node of The Netherlands. Delft has a strong technological profile, including the largest Dutch technological university, a good economic position, and good economic prospects at the national and international levels. Evidence of the local situation of Delft suggests, however,
that the relationship between the knowledge-based economy and sustainable urban growth is not as straightforward as it might generally be considered. To improve its economy after the decline of its once prosperous manufacturing sector, Delft has presented itself as a Knowledge City since the early 1990s. But after almost 15 years of economic policies to benefit from the knowledge sector, the main goal—improving the employment situation—has remained unfulfilled. Delft’s considerable knowledge base has not been sufficient to promote a type of urban development that benefits all of its citizens. In 2007, the share of population that lives from welfare benefits in Delft (2,500 people) is 8% above the national average (Doorduyn, 2007).

This chapter addresses the knowledge-based urban development of Delft from the perspective of sustainability. It explores the general question whether the presence of a solid knowledge base is a guarantee for a sustainable type of urban development. Its main objective is to indicate directions for the adjustment of Delft’s local development strategy to improve its sustainability. Provided this local scope, the study considers that a proper balance between a good business climate and a good people climate is the main determinant of a sustainable knowledge-based urban development.

As a consequence of this local scope, important dimensions of sustainable urban development, as environment quality, are left out of the present study because they are largely non-local, neither in their nature nor in their related policies.

A considerable part of this chapter consists of an analysis of the current business and people climates of Delft. This analysis is preceded by a brief general sketch of Delft as a knowledge city from a national and a local perspective. On the basis of these analyses, we build a matrix to identify the weaknesses of Delft’s current situation for each of the main social groups that use the city. From this matrix, we draw directions for the adjustment of the local development strategy. The chapter starts with a short conceptual background on the different views on knowledge-based urban development and the link to sustainable development.

CONCEPTUAL BACKGROUND

In a sense, knowledge creation and exchange have always been forces explaining city growth (Hall, 2000; Graham & Marvin, 1996). In the current economic context, however, the importance of knowledge in city growth has grown exponentially. Rapid technological advances in micro-electronics and telecommunications—and their eventual convergence into information and communication technologies (ICTs)—currently allow fast, cheap, and ubiquitous worldwide connectivity. This has led to profound changes for both home and work-related activities. Global connectivity in the spheres of work and production has produced the gradual transformation of the industrially oriented and spatially bounded economic organization into an increasingly complex, global, flexible, and knowledge-based economic organization.

The production, distribution, and management of information and knowledge have become main economic activities in the urban economy. As associated trends, Van Winden and van den Berg (2004) mention the volatile network character of the economic organization in terms of the ever-growing speed of diffusion of knowledge and the high rewards for entrepreneurship and innovation. Other frequently mentioned trends include the rise of research and development functions, the growing importance of education and training, and the polarization of groups able to benefit from the knowledge economy versus those excluded from its benefits.

The fundamental shift from tangible to intangible production has had obvious consequences for urban growth and development. An important group of regional economists claim that technology, organization, and territories are the “holy