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Chapter I
Economic Development: Government's Cutting Edge in IT

Gerald A. Merwin Jr.
Valdosta State University, USA

J. Scott McDonald
University of Texas El Paso, USA

Levy C. Odera
University of Florida, USA

ABSTRACT

This chapter explores the interface between information technology (IT) and economic development. The impacts of three IT innovations are assessed in terms of how they contributed to the development of economic development practice: database management systems (DBMS), geographic information systems (GIS), and the evolution of Web sites. With regard to the close relationship between IT and economic development, the chapter primarily focuses on current and future issues in this area. The chapter is organized into the following sections: it begins with an introductory section, a second section delves into the history of economic development and its relationship with IT; a third section introduces the three IT revolutions in economic development; the fourth, fifth and sixth sections each address a key development in economic development/IT relationship: DBMS, GIS, and Web site development, respectively. Section seven provides examples of IT in practice with descriptions of three excellent economic development Web sites. The chapter concludes by providing a glimpse of what might be expected in the future and some recommendations for future research on this topic.

SCOPE AND OVERVIEW

This chapter explores the interface between information technology (IT) and economic development. The intent is not to construct a comprehensive overview; rather, this chapter presents the key issues, especially those likely to expand in importance, resulting in a yet closer marriage of IT and economic development. The discussion encompasses a wide spectrum of local U.S. governments. The focus on the U.S. is reflective of that country's leadership in the merged domains of economic development and IT. For the most part, U.S. economic development is largely a local function with the national

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government playing support roles, while in most other countries, the responsibility for economic development rests firmly on the shoulders of a national government. The advantage of focusing on U.S. local governments is that with tens of thousands of these governments, considerable diversity of economic development and IT exists. While the primary focus of this chapter is on current and future issues, the chapter begins with a review of some key historic elements in the development of economic development practice. This is necessary to provide both definition to the broad area of public policy encompassed by economic development, and to establish context for discussion of current and future issues and trends. Wherever possible, emphasis is placed on an application, that is, real world perspectives rather than theoretical orientations.

This chapter will make every effort to avoid redundancy with other chapters in this volume or with the extensive literatures on economic development and IT. The principle focus of this chapter is the highly important yet under-explored issue of the identification and elaboration of the critical interfaces between economic development and IT. Specifically, this chapter looks at three key IT innovations as they impact economic development: database management systems (DBMS), geographic information systems (GIS), and the evolution of Web sites.

The chapter is organized into nine sections. Following this introductory section, the second section, delves into the history of economic development and its relationship with IT. This section focuses on key definitions and the difficulty of delineating between economic development and other areas of public policy and private activity. The second section broadly elaborates the relationships between government economic development policy and IT policy/actions. The third section introduces the three IT revolutions in economic developments. And the following fourth, fifth, sixth sections each address one key development in the economic development/IT relationship: DBMS, GIS, and Web site development, respectively. Each of these developments is treated as revolutionary because they shifted the paradigm of how practitioners approached the implementation of programming, and, when taken together, have changed the practice of economic development in ways unimaginable just a short time earlier. The seventh section provides examples of IT in practice with descriptions of three excellent economic development Web sites. Section eight and nine focus on the future with predictions for ways economic development can further utilize IT and suggestions for future research.

ECONOMIC DEVELOPMENT: INFORMATION TECHNOLOGY INTERFACE

Economic Development Defined

Economic development has been variously defined. Practitioners and scholars have produced countless case studies and meta-studies, of the role of economic development in a community, and an almost endless collection of recipes for success. One issue is clear from this plethora of study; there is no single, widely accepted definition. Definitions tend to fall into two categories—narrow and broad. Narrow definitions focus exclusively on economic impacts of policy, almost always jobs. Broad definitions meld economic measures and social measures, such as community ambiance and quality of life. Unfortunately, the same term—economic development—is used to convey both narrow and broad concepts. Practitioners and scholars must take care to monitor the context within which the term is being used in order to understand the scope of the discussion at hand. The broader definition (economic plus social) is more accurately referred to as *community development*. It is not uncommon for two highly knowledgeable professionals, either academics or practitioners to suffer confusion regarding definition.

At a minimum, *economic development* focuses on growth, in other words, is the economy growing (narrow definition)? *Community development* is focused on growth and change, economic growth in the economy, and positive change in non-economic, socially important factors (e.g., quality of life, diversity, improved physical environment).

For a majority of communities, including states, regional organizations, cities, and counties, eco-

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