

The transformation of numerous and often disparate data sources into knowledge to support critical decisions in a timely manner is essential in today's fast-growing market. Information sharing among organizations can help achieve important public benefits such as increased productivity, improved policy-making, and integrated public services (Dawes, 1996). A large number of disparate data sources are available in organizations, in a variety of formats such as word processing files, flat text files, mail messages, scanned images, spatial data files, audio/voice files, video clips, spreadsheet files, databases, graphics and CAD files. All these data can be derived from different sources either in one organization or across multiple organizations.

The use of multiple data sources for enterprise-level planning and decision making has become increasingly important. In the public sector, it is especially important to integrate the different types and forms of knowledge, and to relate them to the mission of the organization (Dingwall [1], 1998). In today's global economy, enterprises need to better use their information resources to operate more efficiently and effectively. For example, government like business is "in the midst of a trend towards an economy and society based increasingly on knowledge and services" (Dingwall [2], 1998, p14). This requires improved access to timely, accurate, and consistent data that can be easily shared among team members, decision-makers, and business partners (Van Den Hoven, 1998). The collection and organization of information outside an enterprise will become more important and urgent for top management (Drucker, 1998). Enterprise-level planning can help a corporation establish an information system plan to model the primary business sub-systems and applications (Fuhs, 1997). Strategic planning can actively determine the nature or character of the organization and guide its direction. It identifies the mission of the organization and establishes strategies for fulfilling its purposes (Planning Manual, Institutional Research & Planning, 1998). The effectiveness of decision making can be defined by time needed to make decisions, explicitness of decisions, identification and clarification of conflicts, and communication and interpretation of information (Wiggins and French, 1991).

This paper reviews uses of multiple data sources for enterprise-level planning and decision making. It identifies current research and practical experience in the use of multiple data sources to support performance measurement, strategic planning, and interorganizational business processes. The information was derived from journal articles and Internet sources. A series of cases are examined, and the benefits, issues, methods, and results of efforts that involve the integration of different data sources in the same organization and across multiple organizations are identified and compared. The purpose of this paper is to take the first steps towards the development of a methodology for integrating multiple data sources.