

# **Global Information Systems Opportunities and Challenges: Seven Decision Points for Managers**

*Hossein Bidgoli, California State University-Bakersfield, [hbidgoli@csub.edu](mailto:hbidgoli@csub.edu)*

## **ABSTRACT**

This paper examines the opportunities and changes that global information systems (GISs) present. Then the paper introduces seven decision points for managers to review before the deployment of this fast growing IS application. The seven decision points include (1) defining a global information system, (2) defining the components of a global information system, (3) defining the requirements of a global information system, (4) defining the implementation process of a global information system, (5) defining the organizational structures of a global information system, (6) defining the obstacles to using a global information system, and (7) defining major beneficiaries of a global information system. If these decision points are followed they should increase the chances of success for those organizations that decide to deploy a GIS. At the same time these decision points might discourage certain organizations not to deploy this technology until they have a proper managerial and technical expertise in place first before the deployment process could take place.

## **INTRODUCTION AND BACKGROUND**

The global economy is creating customers who demand integrated worldwide services, and the expansion of global markets is a major factor in developing global information systems to handle these integrated services. To understand the need for integrated worldwide services, consider the example of a U.S.-based shoe company that procures leather and has the upper parts of its shoes produced in Italy because of the high quality of leather and the expertise in shoe stitching available there. The uppers are then shipped to China, where they are attached to soles, thereby taking advantage of the inexpensive manufacturing labor available in that country. The shoes are then shipped to Ireland for testing because of Ireland's high concentration of high-tech facilities. Finally, the shoes are shipped to a variety of retail outlets in the United States, where they are sold. The entire supply-chain logistics—from Italy to China to Ireland—must be managed and coordinated from the U.S. headquarters. This example shows why companies choose other countries for different manufacturing processes and how important integration is in making sure all these processes are coordinated. More importantly a sophisticated global information system must be in place in order to implement this integrated supply chain management system [4].

Many companies have become international. In 2010, for example, the Coca-Cola Company generated more than 75 percent of its revenue from outside the United States. Major corporations, such as Procter & Gamble, IBM, HP, McDonald's, Unilever, Nestle, and Motorola, have been prime users of global information systems. Because today's multinational corporations operate in a variety of markets and cultures, a clear understanding of factors such as customs, laws, technological issues, and local business needs and practices is a prerequisite to the success of a global information system.

Airline reservation systems are considered the first large-scale interactive global system; hotels, rental car companies, and credit card services also now require worldwide databases to serve their customers more efficiently and effectively [18]. Global products, which are products or services that have been standardized for all markets, are becoming increasingly important in international marketing efforts. In addition, a manufacturer might “regionalize” operations—that is, move them to another country—because of advantages available in certain regions. For example, raw materials might be less expensive in Indonesia than in Singapore, and specialized skills needed for production might be available in India but not in Brazil.

The growing trend toward global customers and products means globalization has also become an important factor in purchasing and the supply chain. Worldwide purchasing gives suppliers the incentive to consider foreign competition as well as domestic competition. Furthermore, large global organizations can reduce costs in purchasing, manufacturing, and distribution because they have access to cheaper labor and can sell products and services locally as well as internationally [9,23].

## **CONCLUSION**

Global information systems (GISs) offer numerous advantages and assist a company to tap into global customers and resources. At the same time there are a number of obstacles that have to be carefully examined before the deployment of these systems. The paper outlined seven decision points for managers to review before the deployment of this fast growing IS application. The seven decision points include (1) defining a global information system, (2) defining the components of a global information system, (3) defining the requirements of a global information system, (4) defining the implementation process of a global information system, (5) defining the organizational structures of a global information system, (6) defining the obstacles to using a global information system, and (7) defining major beneficiaries of a global information system. If these decision points are carefully examined they could increase the chances of success for those organizations that decide to deploy a GIS.

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