

The Development of Geographical Information Systems in Taiwan

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The technique of Geographical Information Systems (GIS) was firstly introduced to Taiwan in late 1980s. Since then, a great amount of base maps have been established and many application systems have been developed in various fields. Not only national and local governments are interested in the usefulness of GIS, but also investment from private sectors is increasing. The technique of GIS is integrated with or embedded in other information technologies, such as remote sensing, global positioning systems, virtual reality, mobile and ubiquitous computing. This article will examine the dynamics of GIS development from aspects of technology evolution, organizations in charge, policies, and interaction among governments, scholars and GIS consulting firms. Furthermore, this article will also discuss some of major issues of developing GIS in Taiwan nowadays. These issues include system and project integration, cooperation between public and private sectors, promoting new technology, such as open GIS, service oriented architecture, ontology, and grid computing. A disaster management information system will be illustrated as an example which is tackling these issues simultaneously.