

# Geographical interfacing, Mapping, and Demographics

## What is GIS?

Geography is a serious discipline with multibillion-dollar implications for businesses and governments. Choosing sites, targeting market segments, planning distribution networks, responding to emergencies, or redrawing country boundaries—all of these problems involve questions of geography.

Geography plays an important role in the decision making process for many organizations. Whether you are in the business of archaeology, agriculture, banking, education, energy, government, healthcare, retail, telecommunications, or transportation geography is critical to your growth and capacity planning process.

With a geographic information system (GIS), you can link information to location data, such as people to addresses, buildings to parcels, or streets within a network. You can then layer that information to give you a better understanding of how it all works together. You choose what layers to combine based on what questions you need to answer.

***"GIS is an integrated system of computer hardware, software, and trained personnel linking topographic, demographic, utility, facility, image and other resource data that is geographically referenced."*** NASA

GIS has already affected most of us in some way without us even realizing it. If you've ever using an Internet mapping program to find directions, congratulations, you've personally used GIS. The new supermarket chain on the corner was probably located using GIS to determine the most effective place to meet customer demand.

## Components of GIS

A working GIS integrates five key components: hardware, software, data, people, and methods.

### Hardware

Hardware is the computer on which a GIS operates. Today, GIS runs on a wide range of hardware types, from centralized computer servers to desktop computers used in stand-alone or networked configurations.

### Software

GIS software provides the functions and tools needed to store, analyze, and display geographic information.

- a database management system (DBMS)
- tools for the input and manipulation of geographic information
- tools that support geographic query, analysis, and visualization
- a graphical user interface (GUI) for easy access to tools

### Data

Maybe the most important component of a GIS is the data. Geographic data and related

tabular data can be collected in-house or bought from a commercial data provider. Most GISs employ a DBMS to create and maintain a database to help organize, manage, and document data.

## **People**

GIS technology is of limited value without the people who manage the system and to develop plans for applying it.

GIS users range from technical specialists who design and maintain the system to those who use it to help them do their everyday work.

## **Methods**

A successful GIS operates according to a well-designed plan and business rules, unique to each operation.

## **Why Innovaworks?**

Innovaworks has a proven track record developing and delivering high value cost effective GIS Solutions for their partners. Our customers are our business partners and ensuring their success is our mission.

Our breadth of experience enables us to provide domain expertise and helps us achieve faster more direct solutions to attain higher ROI for our partners. Whether it be in telecommunications, travel & leisure, not for profit or in the educational industries we have what it takes to deliver results.

We have hands on experience in delivering GIS Solutions for our customers. We have the necessary components to make any GIS implementation a success. We provide the hardware, software, people and methods and can identify the necessary sources of data to implement your GIS solution with ease. Our delivery methodology consists of detailed planning, knowledge transfer and high-end project management. These components coupled with requirements analysis, business strategy review, hardware and software assessments, conceptual application designs, feasibility analysis, cost-benefit analysis, business process reviews and consensus building services are what enable us to commit to our deliverables.

At Innovaworks we employ an onshore/offshore delivery model whereby our Project Managers drive the successful completion of projects using our results oriented Delivery Methodology. Our Project Managers use industry standard practices, from kickoff meetings to review and acceptance of deliverables. They understand technical and management issues and facilitate communication between clients and the technical team.

## **Customer Case Study: DecisionInsite**

Innovaworks has developed an online GIS Solution for DecisionInsite. DecisionInsite selected Innovaworks to develop their online decision support tools to provide strategic planning and forecasting data to Non-Profit Organizations and School Districts. The tools developed by Innovaworks helped DecisionInsite:

- Integrate a range of significant demographic data sources (such as census data, demographic updates, trends, and client supplied data) into usable information
- Spatially present data to create an easily understandable environment for viewing,

analyzing, and interpreting data

- Provide DecisionInsite clients with the insight required to intelligently plan for the future
- Provide skilled consulting expertise in information-driven strategic and facilities planning