

Components of GIS

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Components of GIS



Components of GIS

▶ Hardware

▶ Software

▶ Data

▶ People

▶ Method

Hardware

- ▶ Hardware is the computer system on which a GIS operates.

Example -

- ▶ Computer or Workstations
- ▶ Plotter
- ▶ Scanner

Components of GIS

- ▶
- ▶ Software
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Software

- ▶ GIS software provides the functions and tools needed to store, analyze and display geographic information.
- ▶ Some GIS Software –
 - ▶ Arc GIS
 - ▶ Map Info
 - ▶ Arc View
 - ▶ GRASS
 - ▶ ILWIS

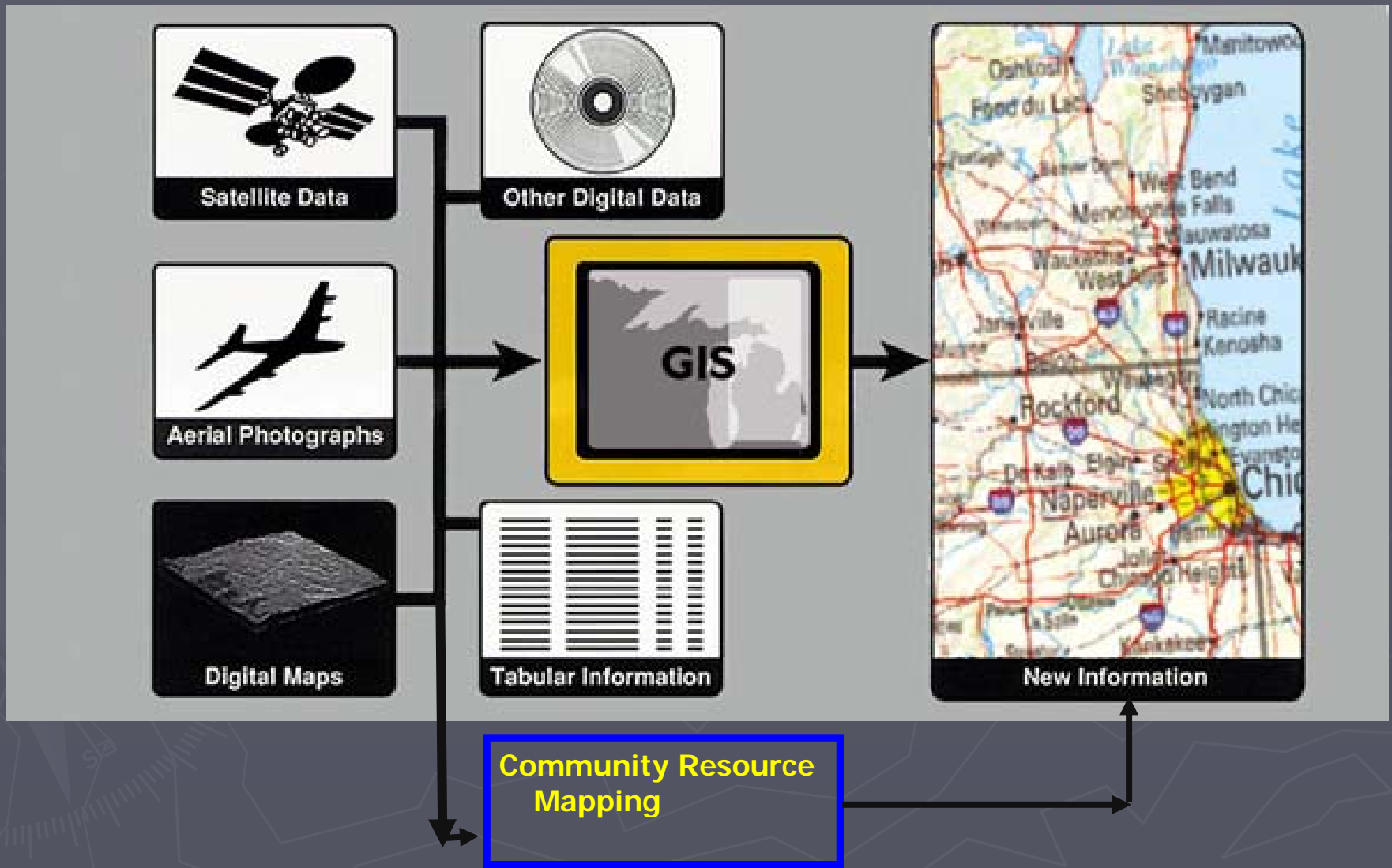
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- ▶ Hardware
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Data

- ▶ Most important component of GIS.
- ▶ GIS can integrate spatial data with non spatial data resources, often stored in a corporate DBMS.
- ▶ The integration of spatial data and non spatial data (tabular data) stored in a DBMS is a key functionality afforded by GIS.

DATA USED IN GIS



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People

- ▶ GIS technology is of limited value without the people who manage the system and develop plans for applying it to real world problems.
- ▶ Users are two types
 - ▶ Technical Specialist- who design and maintain the GIS – Software Professionals.
 - ▶ Users who use it in everyday works.

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- ▶ **Method**

Methods

- ▶ A successful GIS operates according to a well-designed implementation plan and business rules, which are the models and operating practices, unique to each organization.

Functions of GIS

- ▶ Display on the screen.
- ▶ Edit, Change, Transform.
- ▶ Measure distances, areas
- ▶ Combine maps of the same area together.
- ▶ Keep inventories of what is where.
- ▶ Judge the suitability of areas for different purposes.
- ▶ Help user make decisions about places, plan
- ▶ Make prediction about the future. etc.