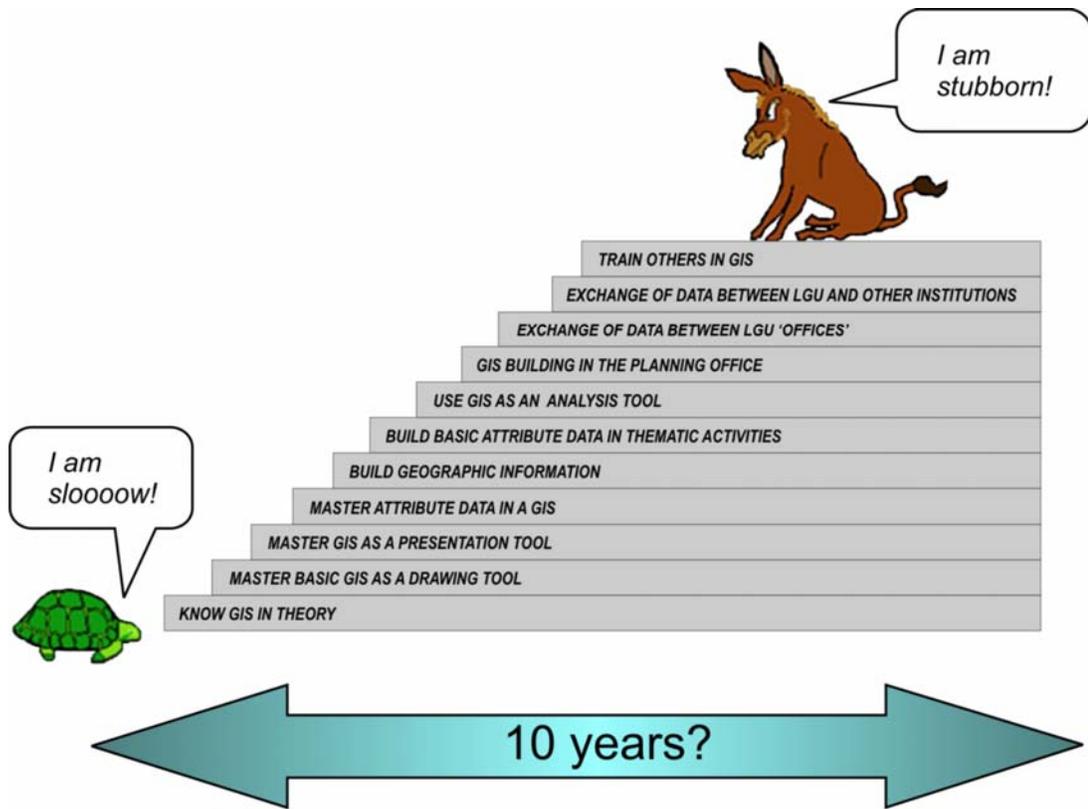


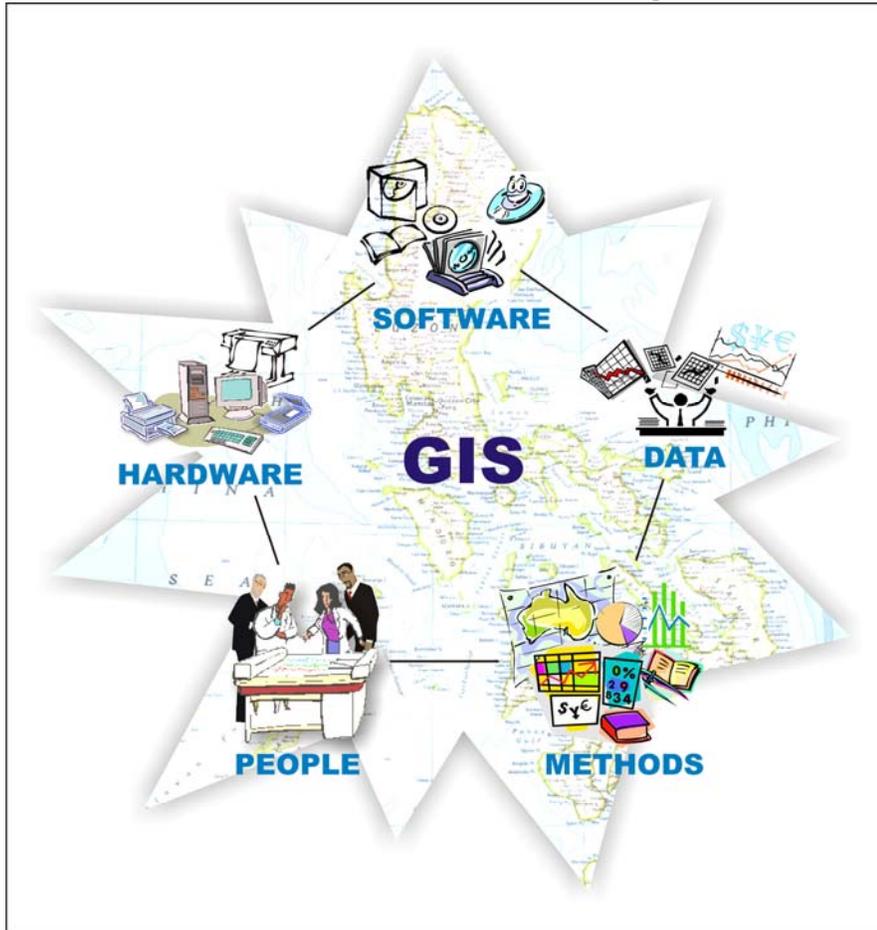
### 3.01 Introduction

#### 3.01.01 Think Big, Start Small

The most significant limitations and obstacles to the operational use of GIS are not of a technical nature. They are rather institutional, organizational, procedural, and information quality issues. To improve the situation, there is a need for a GIS management policy dealing with institutional mandates and linkages, technology strategies, human skills development and financial management. An organization's GIS capacity can be built up step-by-step while responding to the pressing needs for information on the environment. The first step is to define the information needs and priorities, and relate this to the state of existing information and capabilities of data producers and users.



### 3.01.02 The Cornerstones of a Functioning GIS



A Geographic Information System (GIS) is a computer-based tool for mapping and analyzing things that exist and events that happen in a given municipality / city. GIS technology integrates common database operations such as query and statistical analysis with the unique visualisation and geographic analysis benefits offered by maps. These abilities distinguish GIS from other information systems and make it valuable to a wide range of public and private enterprises for explaining events, predicting outcomes, and planning strategies.

The cornerstones of a functioning GIS are the following:

- ☑ People who are skilled and have been trained
- ☑ Spatial and attribute or descriptive data
- ☑ Analytical methods
- ☑ Computer Software
- ☑ Computer Hardware

A functioning GIS is the combination of all these which are all organized to automate, manage, and deliver information through geographic information.

It is a common mistake among GIS clients that after having seen GIS being presented by a salesperson and becoming impressed by the technique, they buy the GIS software and then think that the matter is solved.

Applying a strategy in which all five components are dealt with will result in a successful introduction to GIS. In the following chapters are the recommendations made for all the cornerstones of a functioning GIS in connection with the CLUP.