

# Evolution of the GIS Industry

**Dr.-Ing. Holger SCHADE, General Manager,  
SICAD Geomatics GmbH & Co oHG**

## **Key words:**

## **SUMMARY**

20 years after the initial stages of the GIS, the industry has currently reached a consolidation stage. In this time frame software technology has undergone major changes and the systems which have been developed in this starting phase are increasingly difficult to maintain. The GIS need to make substantial investments to develop a next generation technology which allows to fulfil the end user needs for the coming 20 year life cycle. Similar investment requirements are seen in other IT niches like operating systems (change from DOS to Windows, move towards LINUX) and ERP systems (change from SAP R/2 to R/3 and mySAP technology). In this context, the presentation will highlight those requirements for a successful GI company, which could be the basis for the next product life cycle.

First, technological key success factors like Process Orientation, Interoperability, Scalability, Customisability and Extensibility of software products are discussed. These requirements are put into context to explicit user needs and specific examples are given.

Process orientation and Customisability are closely related. They help to reduce complexity in a GIS product and improve the possibility to automate user specific sub processes. In a process oriented software the training requirements for the end users are substantially reduced and the communication via the product user interface happens on the level of the user rather than on the level of the software vendor.

The other important technological aspects are interoperability and extensibility. The need to integrate GI systems into larger IT frameworks is obvious. To achieve this task, open interfaces and standard data exchange functions are of high relevance in a GIS. Several examples are shown where enterprise application integration (EAI) has been realized and a cost/benefit analysis has been performed.

Besides technological aspects two other “soft” aspects are of high relevance for a GI company. The ability to develop new business segments and the ability to network with partners with a different skill set. These two aspects will be discussed on the example of a few specific location based services. The services are described and how these services were realized in a partner network.

## **CONTACTS**

Dr.-Ing. Holger Schade, General Manager  
SICAD Geomatics GmbH & Co.oHG  
Postfach 82 07 54  
81707 München  
GERMANY  
Email: holger.schade@sicad.de