DATABASE-DRIVEN (HYDROGRAPHIC) MAP PRODUCTION

T-Kartor Sweden AB

T-Kartor was founded in 1985 in the southern Swedish town of Kristianstad. The company was started by a group of highly qualified people with wide experience and engagement in geography and, specifically, in cartography. Most of these are still with the company now, almost twenty years later. Due to its progressive attitude over the years, T-Kartor has managed to attract a number of key people from different parts of the world, all specialists in the field of database-driven cartography.

Besides mapmaking experience the employees had a strong interest in computers and modern information technology. This made it quite natural for T-Kartor to work with digital map production from day one. Soon, the most forward-thinking employees at T-Kartor realised the potential of even more rational and effective map production using modern database technology. Different CAD software was experimented with but it was found that within that sector there were obvious limitations that made the programs less suitable for managing complex geographical databases. T-Kartor thus ventured down the path of finding the 'perfect' production system for mapmaking. This was in general following the GIS industry at the end of the 1980s and in particular the founding of ESRI products.

Company employees were surprised by the large gap that existed (and partly still exists) between the GIS-industry and the cartographic world. The GIS world consists of systematic, analytical engineers with brilliant solutions for everything. Cartographers were (and are) more traditional, artistic and somewhat slower to implement new technology. On the other hand, cartographers are brilliant at visualising complex information and transforming it into something easy to read and interpret by the end user. As such, it was both a challenge and a fantastic opportunity for a small company specialising in the field of cartography to try and unite 'the best of two worlds'.

T-Kartor designed and developed a production system for creating print-ready map files and maintaining a geographical database entirely for in-house production. They were not driven by the technology itself (there was no specific software dependence), only by what the technology could offer in terms of quality control and effectiveness for in-house map production. T-Kartor wanted to refine and spread the concept to other producers in the form of a more generally applicable software program. Thus was born the Cartographic Production System (CPS).

In 1996 the company started to work in the hydrographic market, as we at that time had a project together with the Swedish Maritime Administration and the Finnish Maritime Administration. This project gave us a lot of knowledge of the needs involved in production tools for ENC and paper-chart production. Over the years, we also gained knowledge of the S-57 standard.

In 2001 T-Kartor arrived at a crossroads: should CPS be marketed as a complete production system on the broader market of map producers, or should the focus be upon developing further the in-house production department? Existing users of CPS were brought together for the first User Conference and the response was more than positive. There was also a clear trend towards greater maturity and interest among map producers for centralised database solutions, motivated by quality control aspects and the economic cost of having a large production department.

By the following year the CPS NG project had begun. New program modules, such as CPS NG PrePress to handle complex output masking and Workflow Manager for production line control, were created and incorporated into the CPS NG framework. As we had worked with hydrography since 1996, we placed the highest priority on developing a hydro version of CPS NG. The key concept from the regular CPS NG was transferred into the 'Hydro version'. This means that it is a single database solution and all products are derived from the same database, there is no conversion before printing etc. The S-57 model is implemented in the database.

Current Profile

The T-Kartor concern today has about one hundred employees with offices/subsidiaries in four countries: Sweden, Norway, the Czech Republic and the USA. The company is divided into three business areas: CPS NG/CPS NG Hydro, Professional Services and Internet Mapping. The CPS NG/CPS NG Hydro software development is concentrated at the main offices in Kristianstad, where 35 people currently work.

The company business concept is to 'create value for our clients through effective methods of database-driven cartography'. We believe in the effective environment that can be created if producers use a database-driven approach.

The main shareholder of the company is Sten Ravhed, who also founded the company in 1985 and is the present general manager. Some of the key people at the company own a minor volume of company shares.

Services

Internet Mapping

T-kartor offers an asp service, mainly in the Scandinavian countries. This service includes application and hosting of maps. The applets are then presented at the client WebPages. There are currently about 150,000 applications downloaded per day. About one hundred clients are connected to this service at the moment. Information can be found at www.Karthotellet.com.

Professional Services

T-Kartor offers production of maps, database updating, database design and collection information in the field. PS is also a resource used for training and implementation of CPS NG/ CPS NG Hydro, as well as giving feedback to the software-developing department.

CPS NG/CPS NG Hydro
These are the software products that the company develops and sells on the market. The concept behind the development is to provide a solution for a production environment. Single database solution is a fundamental thing in the software development. At the moment we are working on version 2.1, which is scheduled for release in October/ November.

Corporate Strategy
T-Kartor is growing. The strategy is to develop the existing business units. It seems that the combination of the three business areas is in our case successful. The combination of software development and production gives us a strong position. We plan to grow both as a software supplier and as a production resource for outsourcing.
The hydrographic market has in the last few years become more and more important for the company. We will continue to work hard in this market.
T-Kartor is constantly evolving and is without doubt well equipped to contribute technology and experience in the management of hydrographical information within the changing world of hydrography world. We will involve ourselves in IHO commissions as an industry partner to understand and to contribute more in this field. The question is whether the traditional organisations are ready to handle the change. Will completely new players/technologies emerge?