CHAOS SYSTEMS

Nationwide to Worldwide

Chaos Systems is a private company mainly focused on developing calculation software for mapping, survey, GIS and design, and document and drawing management for large construction projects. The company also works as a consultant.

Chaos Systems was established in Stockholm in November 1993 and is still headquartered in the Swedish capital. Its first assignment was computer co-ordination for the Northern Link in Stockholm, a large construction project, and led to software development for the management of drawings and documents in construction projects. Called Topodoc, construction bidders used this software to facilitate the collection of data. It also helped contractors use metadata as a search function for different kinds of documents before the huge success of the internet. Topodoc was the first software to collect and show data stored on CD-ROM. The need for easier plotting and working with drawings resulted in the development of Chaos Junior, a document-and-drawing-file management system for office computers and/or network.

Product Development

Chaos Junior was first successfully used in infrastructure projects. In 1997 the Swedish National Road Administration tendered for a server-based system for the storage of design data for the tunnel and highway project Southern Link. We won the tender, which resulted in Chaos Server, one of the first project server systems and one that is still being used in many hundreds of infrastructure projects by thousands of users who have created hundreds of thousands of files in it. Applications changed over the years: Topodoc went into the archive as servers came increasingly into use, and in 2001 Chaos Junior became Chaos Desktop. But before all of that, in January 1995 we released Topocad, a CAD software system for survey and civil engineering. In continual development, it has been sold and installed in more than eighty countries. Today there are more than twelve thousand active licences for Topocad, with an estimated eighteen thousand users. Twelve languages are currently supported.

Markets

Employing 25 people working in sales, development and concurrent engineering, Chaos Systems clients are mainly survey-engineering companies, engineering consultants, land surveyors, civil and railroad engineers, road and construction contractors, and infrastructure consultants. Although Sweden is our most important marketplace, our products are sold all over the world, most in Norway, Russia, Great Britain and the Netherlands. We also have a number of partners and collaborate with others in the survey industry. Our partnership with ESRI gives us access to a worldwide network, and in 2006 ESRI named us "New Partner of the Year". Many doors to the European market were opened in 2002 when Sokkia Europe started selling Topocad under the name Mapsuite+. Over the years we have built up a network of dealers and resellers all over the world, except in North America. Continual expansion has resulted in a second office in Göteborg. To cover the expanding Chinese market an office was opened in Beijing. With the existing markets working well, we are keen to discover new market areas. In Europe, Russia is particularly interesting, and we are confident too of exploiting the North American market because language support is on the ground and the software can cope with the 'imperial' metric system. Although the market is competitive, comprising local software systems and international companies, our prices are lower than those of many American competitors.

Consulting

From the start we have worked as consultants, but we have also undertaken assignments for calculations in CAD and surveying. By being involved in computer co-ordination on several larger construction projects, including Southern Link, Northern Link, and E4 Uppsala-Mehedeby, we were part of some of the largest road-construction projects that have taken place in Stockholm over recent years. Our ambition is to participate in client productivity through training courses and consultancy. On the consultancy side we might act as a traditional consultant or focus on special developments as an adaptation of the existing product. This helps clients to do the job themselves and solve any problem on their own. Recent economic upswing in relation to personnel shortage requires routines that fit the specific client.

Consolidation

Successful expansion towards becoming a larger company requires collaboration with strong investors. The number of companies in the mapping industry is on the decrease and partnerships have become important for survival, especially for smaller companies. The whole survey industry shows consolidation: two of our largest competitors have been taken over by giants. The effects of such take-overs may be both positive and negative: the buyer of one of our competitors is one of our partners, which might lead to competition within the partnership and uncertain consequences. On the positive side, the take-over of another competitor by a giant has resulted in change of focus, an advantage for us.

Future

We will continue selling software systems for mapping and survey. Over the next five-plus years the Swedish market will become saturated, as many municipalities and companies will have purchased calculation software systems. By then we will be focusing more on our consultancy role. As regards regional economic developments, we will move from chasing new clients and selling new licences and upgrades to preserving existing clients' maintenance agreements. Longstanding relationships are beneficial for both client and vendor and

bring in more stable revenue to small companies. They also build good reputation. In our fourteen years of existence we have built up a large clientele and will focus more on these in the future, as well as on further developments for the international market. We are also making a technological movement towards GIS with ISM and Arc, for providing a link between map and survey is no longer sufficient; maps need to be editable. As an ESRI partner we have integrated into our produtcs the Arc connection for GIS compatibility.