TIETO
DEVELOPING A SUPPLY CHAIN OPTIMIZATION TOOL

Challenges

End client one of top 3 pulp and paper companies worldwide

Complex supply chain gave rise to high costs

Large scale and complexity precluded accurate scenario modeling

Client required assistance due to project complexity and tight schedule

Solution

Solution optimises supply chain management

We developed and support the web user interface

Access to key data now available to all appropriate sites and business units

We enhanced the functionality of Websphere portal

Result

Our full-scale project involvement in just three weeks

Solution substantially increased end client's competitiveness

Solution informs negotiations and business-critical decisions

Project delivered on time and on budget

Client

Tieto is one of the leading IT service companies in Northern Europe, with approximately 16,000 experts providing IT, R&D and consulting services to large and medium-sized companies globally. Tieto is the world's leading independent IT systems provider to the forest industry, its Forest practice employing more than 1,200 people in seven European countries as well as in the USA, Canada, Singapore, Indonesia, China and Malaysia.

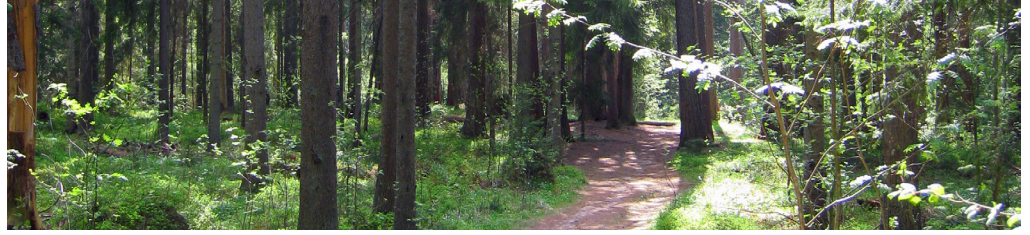The end client is one of the top 3 pulp and paper companies in the world.

" It was a rewarding experience to work with the Reksoft software development team; they didn't just offer top quality work and a set of complementary skills but also tremendous dedication to Tieto as a customer, always ready to meet our organizational and cultural needs. We have been working with Reksoft for three years and look forward to continuing this cooperation in the future."

Heimo Kontula
Director,
Tieto Forest

Challenge

The Northern European pulp and paper industry has among the highest wood delivery costs in the world, mainly due to high wages and challenging terrain. Operations tend to be spread out geographically, with facilities often located in remote areas, making efficient supply chain management a critical aspect of company performance.

As one of the top three pulp and paper companies in the world, Tieto's end client faced a significant challenge in terms of strategic planning because of the large scale and complexity of its operations.

Technology

IBM WebSphere Portal, J2EE, Oracle DB, Crystal Reports.

Type of service

Requirement engineering, UI design, development, testing, integration, support, maintenance

Scale

5 man-years

Timeframe

2006 – 2007

About Reksoft

Since 1991, Reksoft has been building great teams to develop, migrate or maintain complex, mission-critical software.

We have mastered the dynamics of distributed software engineering, developing a workflow and methodology that improves our performance on every key customer metric, including product quality, time to market, budget adherence, project transparency and issue resolution.

That's why over 97% of our clients come back for more.

Reksoft. Software engineering. Delivered.

Challenge (continued)

Accurate quantitative modeling of various scenarios was practically impossible due to the sheer quantity of variables and high sensitivity of the model to fluctuating market conditions such as wages and fuel costs. To address this issue, the end client required a software engineering partner to develop a pioneering supply chain planning and optimisation tool Due to complex requirements and a tight schedule that included accumulated delays, Tieto was looking for a partner that could very quickly assume responsibility for a substantial part of this innovative project.

Solution

Our solution optimises wood deliveries between sources and destination points, both internal (sites and business units) and external (suppliers and customers).

The supply chain tool was developed by us in partnership with Tieto. Tieto developed the core tool based on the ILOG linear optimization model. The scope of our part of the project, which was carried out with direct reporting to the end client, included end-to-end engineering of the web user interface, integration with the End Client's Intranet environment (IBM WebSphere Portal) and subsequent maintenance.

The web user interface allows users from different sites and business units to input data either manually into a fast and convenient web-based spreadsheet (with rich functionality similar to Microsoft Excel), or by importing xml files. Integration with the corporate portal environment ensures seamless access rights management and synchronization of product catalogues. We also created the database that stores input and output data, as well as the interfaces for data import/export and exchange with the optimization engine.

We were able to provide features not offered by WebSphere Portal by using innovative technology for portal navigation and markup. The result is a flexible and intuitive interface that can manage large amounts of complex data effectively.

Result

The optimisation tool, the first of its kind in the pulp and paper industry, helps the end client stay competitive in a global market by increasing efficiency, despite relatively high external cost factors. Indeed, it is likely that, as a result, the end client has the most efficient wood supply chain management system in the world. The tool is also valuable during trade union negotiations and in deciding whether to close or upgrade mills.

We agreed to work on a fixed cost basis and reached full scale project involvement within only three weeks of the first contact with Tieto. Our commitment from day one compensated for accumulated delays and allowed Tieto to deliver the required results to the end client on time and within budget.