



Hydro Polymers is part of Norsk Hydro ASA

## Hydro Polymers – Building a sustainable Management System with QualiWare Lifecycle Manager (QLM)

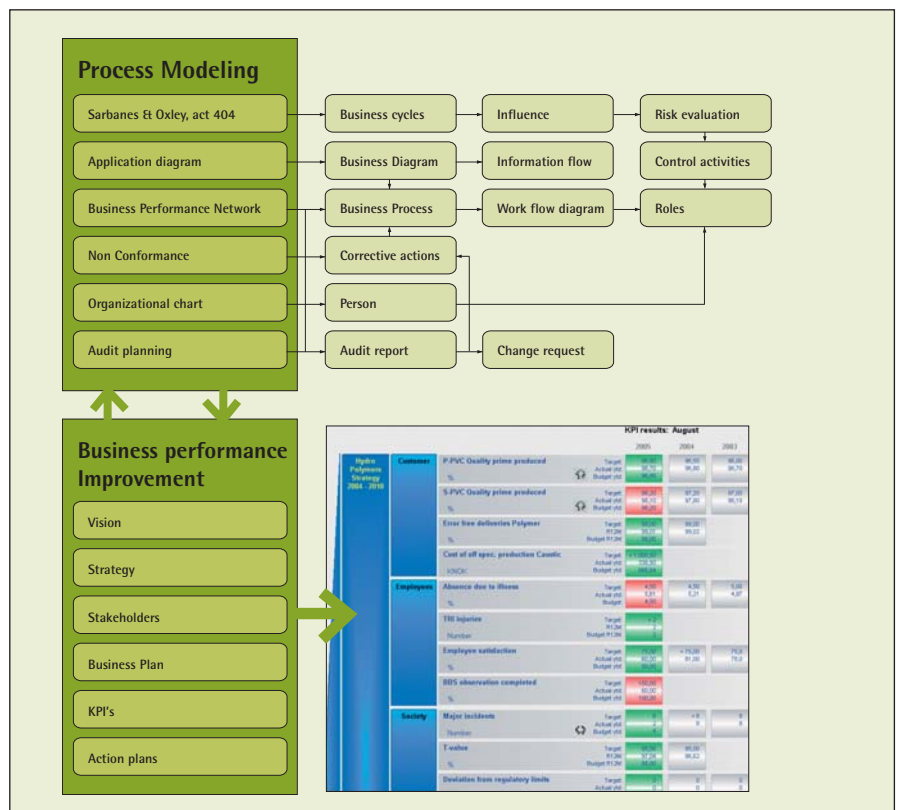
Hydro Polymers is one of Europe's major producers of PVC (Polyvinyl Chloride). From plants in Scandinavia and the UK, premium quality products are manufactured with optimum efficiency. Hydro Polymers is part of Norwegian-owned Norsk Hydro ASA, a Fortune 500 company and one of Europe's Top 100 enterprises.

In a market that grows tougher all the time, it is vital to continually improve cost, quality and performance. Hydro Polymers is driven to continually optimize its business processes by involving everyone to work more efficiently, innovating to distinguish itself from the competition, and investing in cutting-edge, world-class technology.

world in ways so gradual but subtle that most people are hardly aware of it. Hydro Polymers benefits from full enterprise integration, extending from the highest levels of the company down to the bottom of the supply chain. Plants in Norway, the UK, and Sweden coordinate production to foster the highly efficient conversion of raw materials into products that meet customers' needs.

Since its first commercial applications were discovered, PVC has changed our

Development of Hydro Polymers' Business Performance Management System





Hydro Polymers Rafnes Industrial site

Anders Hermansson, President of Hydro Polymers, sums up the company's ambition to recognize how "each of our stakeholders—our owners, our customers, our employees, our partners and suppliers, and society as a whole—all have different needs. We believe that by genuinely balancing these needs, we are moving towards true sustainability and becoming the PVC producer whom customers will prefer to do business with."

#### **Finding the right process modeling system**

The foundation of Hydro Polymers' current Business Performance Management System was laid with the implementation of the QualiWare Lifecycle Manager (QLM). QLM serves as the enterprise-wide tool for the standardized mapping of all major business processes, spanning the entire multi-site organization. Three key company requirements were satisfied in the selection of QLM as Hydro Polymers' modeling system:

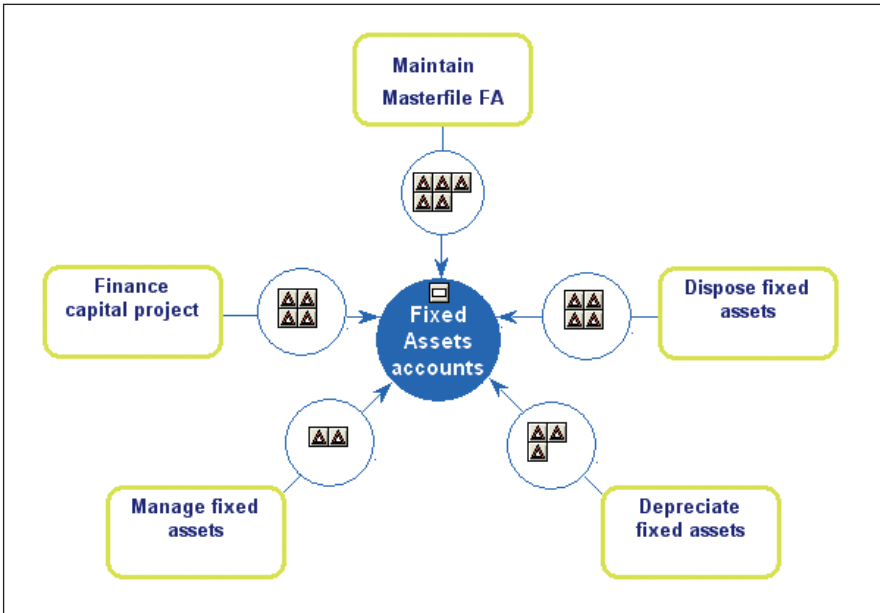
- The ability to create and maintain different business models;
- The existence of a relational, object-based repository;
- The ability to automatically publish repository content to the web.

#### **From process mapping to a Management System**

When Hydro Polymers recognized the necessity of developing a business management system encompassing the company's vision and values, strategic models, goals, and key business performance indicators, the QLM system stepped up to the challenge. Today, all company employees have access to the company's vision, strategies, stakeholders, goals, results, and action plans.

#### **"Best Practices" lead to implementation of SOX standards**

Hydro Polymers consistently aims to have a cutting edge management system that is available to all business units in Norway, the UK, and Sweden. Managers and employees at all levels also have access to the system. "Best practices" have led the way there, giving rise to the incorporation of Sarbanes-Oxley standards in the Hydro Polymers Management System.



SOX fixed assets business cycle with risk indicators

**Integration of Sarbanes-Oxley standards**

The flexibility and scalability of QLM has made it possible to build desired capabilities into the management system. All key processes have been evaluated according to Sarbanes-Oxley standards. Risks have been identified and described, and control activities implemented to mitigate risks. All this valuable information is stored in the QLM central repository, where it can be accessed through the Hydro Polymers intranet. Relationships between processes and financial accounts are visualized through graphical objects that also show the risks. QLM functionality has also reduced the cost of many tasks and solved frequent challenges related to documentation and maintenance during SOX implementation.

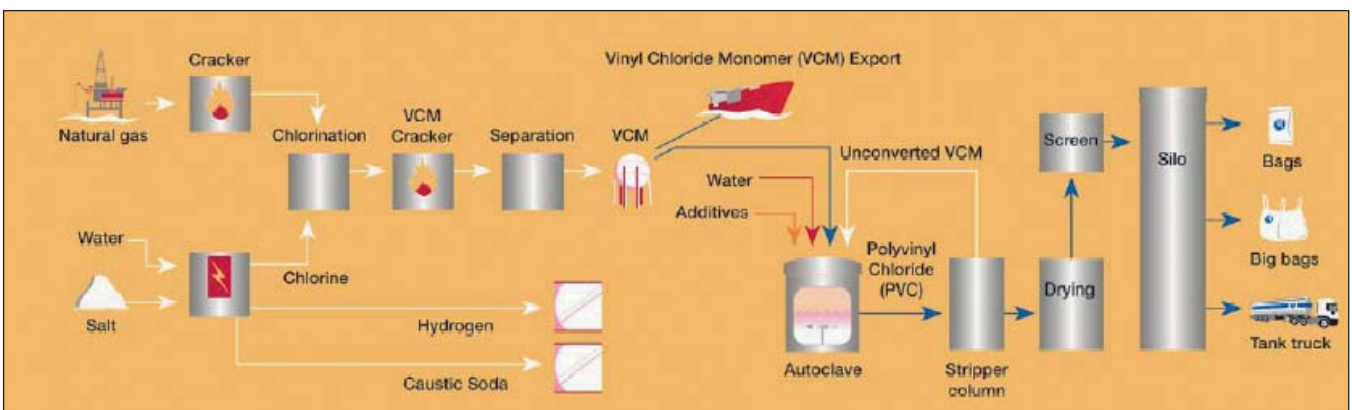
**Positive response from auditors**

Working with processes within QualiWare has created a new level of understanding for the possibilities and goals in the Hydro Polymers

Management System. Employees can offer positive feedback to management. They can also use the management system to report non-compliances and variances and propose improvements. Company auditors appreciate and have praised the new system.

**Living architecture is the target**

Based on the current results achieved with implementation of the QLM management system, Hydro Polymers has been able to establish further benchmarks for the company's future development. In line with "best practices" methodology, each of the elements in the Enterprise Architecture model will be evaluated for its ongoing relevance within the Hydro Polymers organization and integrated into the system. The goal is to have sustainable, living architecture able to assist the organization in becoming what it wants to be: the preferred business partner for PVC.



Product flow

### QualiWare Lifecycle Manager - a Danish quality product

QualiWare ApS was established in 1991 in Denmark and is now also represented in Brazil, Norway, Spain, Sweden, South Korea and the United States.

Our mission is to market tools and services for use in process development, quality management, environmental management, system development, risk management, and enterprise architecture modeling.

QualiWare Lifecycle Manager (QLM) makes it possible to develop model based and process oriented quality systems and to make the information accessible via an intranet and the Internet.

In 1998, QualiWare Consulting ApS was established, offering consulting services using process-centric analysis as the basis for the systematic development and improvement of enterprises. Through our involvement in a broad range of projects, we have gained considerable expertise, which we share with our customers through courses and consulting.

QualiWare customer size typically ranges from among the largest down to mid-size public and private companies, e.g.: AT&T, ATP, Coop Norden, DONG, Danmarks Radio, Foss Electric, HNG, H.S., Hydro Aluminium, Hydro Polymers, IBM Corporation, IFS, K.V.Tjellesen, LM Glasfiber, Lægemedelstyrelsen, NTNU, NCC, Norske Skog, PFA Pension, Posten Sverige, SAS Component, Sauer-Danfoss, SOS International, Sund & Bælt Holding, Schenker, Statens Vejevæsen, Statoil, Stavanger Universitetssjuehus, Sundhedsstyrelsen, Thales Communication, Volvo Aero, and Øresundskonsortiet.

### QualiWare software in Hydro Polymers

"Hydro Polymers uses QualiWare Total Quality Management (TQM) metamodels to develop and maintain the company's process architecture and the Management System. In addition, QualiSoft AS has developed customized metamodels to handle SOX and Business Performance requirements. The QualiWare Enterprise Integrator (QEI), an important component of the company's investment in QualiWare, measures performance and enables actions to improve performance, reports non-conformances, and automatically updates company websites."

"Hydro Polymers has structured its data in nine different repositories, which all are linked to each other with the remote repository functionality. One master repository includes all the corporate and generic data, while one repository exists for each business unit."

**Bjørn Hansen**  
Business Systems Manager

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