

MANAGE AND INTEGRATE OPERATIONS ACROSS THE ENTERPRISE

OPTIMIZE FOREST MANAGEMENT PLANNING AND EXECUTION ACTIVITIES

Paper and forest companies perform a diverse array of operational and logistical activities to secure fiber supplies, from forest management to mill wood purchasing. Together, SAP and TietoEnator Corporation provide robust software solutions to increase enterprise visibility and enable planning and execution functions.



Firms in the paper and forest industry face fiber-supply challenges from wood purchasing and storage logistics to strategic forest management. To address multifaceted operational demands, companies typically employ multiple applications for planning and execution functionality – resulting in high costs for customized solutions and interfaces. For example, they often perform finance processes with an enterprise resource planning application and control production with a manufacturing execution system. Sales and planning activities may be centralized or performed separately by individual mills – and other processes and data may be isolated and discontinuous, clouding visibility and cutting efficiency and effectiveness.

With the heterogeneous IT ecosystem that results, organizations large and small need to integrate and improve enterprise planning and execution functions. Companies like yours need an IT solution that sharpens operational visibility and improves these functions across the enterprise. Together, solutions from SAP and TietoEnator Corporation give you the information needed to control and optimize operations. These include:

- The SAP for Mill Products solution portfolio
- TietoEnator Wood Supply Solution

With these solutions, you'll reap business benefits and improve operational processes as follows:

- Improve wood purchase and service-contract management
- More accurately forecast short- and long-term fiber and timber availability

- Implement strategic goals, such as expanding with new mill locations
- Better coordinate deliveries for optimal transport speed and costs

Planning and Execution with SAP® and TietoEnator Solutions

Working together, the SAP® and TietoEnator solutions provide real-time operations management with planning, business operations, and production control functionality.

The TietoEnator solutions enable and streamline industry-specific activities, providing visibility and control over processes including harvest, wood measurement, transportation, storage, forest, nursery, and mill management.

SAP for Mill Products solutions facilitate a range of processes such as corporate planning; forest planning; and supplier, customer, and asset management. Together, the solutions give you data and process transparency across the enterprise, while improving critical operational processes. The solutions provide functionality that integrates with both SAP and non-SAP enterprise applications, maximizing process effectiveness while reducing implementation complexity, lowering total cost of ownership, and optimizing your IT investments.

The SAP and TietoEnator solutions address the needs of the following typical paper and forest business models:

- Purchase-only and wood storage operations
- Stumpage purchase operations
- Owned and leased lands and forests operations

Optimize Purchase-Only and Wood Storage Activities

Purchasing wood directly from the mill entails specific business activities. You need to streamline pulp wood weight and quality measurement, control equipment and processes for saw log measurement and sorting, outsource wood procurement, and manage raw-materials purchase contracts. With solutions from SAP and TietoEnator, you can integrate, manage, and optimize all purchase and storage activities along your supply chain.

Companies often operate multiple storage areas and purchase wood from different suppliers and reception points, with round wood and chip by-products stored at a number of locations. These delivery and storage variables necessitate several kinds of contracts – purchase, services, sales – with one supplier or many. Transportation involves a variety of methods: truck, rail, and ocean carrier. Taxes and prices for wood vary with location as well.

SAP and TietoEnator solutions let you manage all wood purchase, sales, and service-contract activities. You can coordinate the use of multiple storage areas with wood of different ages and origins and manage a high number of small, low-volume suppliers as well as ad hoc suppliers. You can control wood flow from various sources, maintaining a steady supply of wood to the mill – accounting for quality variation and managing exceptions that may occur. You can plan deliveries, forecast supply, and integrate wood measurement results within the organization. You can

manage wood costing and pricing activities, and coordinate delivery schedules and resource planning. In addition, you can share data with partners and other involved parties, improving communication and collaboration. The solutions enable the following functions:

- Harmonization of product offerings
- Delivery planning and supplier management
- Wood measurement and purchase
- Wood and service pricing and payments invoicing
- Sales and customer relationship management
- Transportation management
- Storage and cost control
- Mill yard and terminal management
- Integration with geographic information systems (GIS)

Facilitate Stumpage Purchase Processes

The software helps you manage stumpage purchase activities such as cutting rights, site evaluation, price setting, and logistics scheduling, as well as purchase-only functions discussed above. The solutions accommodate the added complexities of uneven product mixes and discontinued products, accounting for different wood types and qualities, different product varieties and sizes, and so forth.

The solutions support purchase-contract options for harvesting, transportation, and other services and handle tariff and wood-sales variations related to different harvesting site properties. You can measure wood quality and amounts at points across the extended supply chain: at the harvester, in trucks on the road, and at supply terminals and mill sites.



Working together, solutions from SAP and TietoEnator provide real-time operations management with planning, business operations, and production control functionality.

Customer relationship management functionality enables work with private forest owners and forest investment companies and facilitates communication and collaboration with contractors. You can use the software to perform scheduling, maintenance, and investment activities to optimize machinery and personnel. This functionality also helps you manage supplier delivery and wood-flow operations, and reconcile stumpage prices with actual mill prices. In addition, the solutions support the following functions:

- Harvesting and harvest block management

- Contractor and staff management
- Forest equipment maintenance

Manage Owned and Leased Lands and Forests

Firms that own and lease forestlands – from state-owned forests to plantations – need a solution with full forest and land management functionality. You must maximize sales of wood from owned forests and land, while ensuring that harvesting and other services are properly assigned to contractors or internal resources for maximum cost efficiency. Organizations owning land as well as processing facilities have to juggle multiple sets of activities, harvesting wood from enterprise-owned land and purchasing wood on the market.

With forest-area management functionality, these solutions help address issues related to legal, environmental, and area activity-level concerns. You can improve information management activities such as data collection, remote sensing, and growth estimation and take care of valuable infrastructure with road-planning and maintenance functionality. Work-sequence management tools help you manage lease-area contracts and plan and control forest management activities for the short and long term.

The solutions enable you to coordinate operational data and processes by location. GIS functionality facilitates on-line scheduling and operational follow-ups, planning and operations activities, growth models and simulation tools, and internal and external geographical material management. The solutions support the following activities:

- Enterprise strategic planning
- Forest strategic planning and lease management
- Forest-area and activities management
- Nursery management

Communities of Innovation: Industry Value Network

Communities of innovation at SAP play a key role in delivering timely and effective responses to business challenges. The SAP NetWeaver® technology platform enables SAP and its partners to compose new business processes using enterprise service-oriented architecture (enterprise SOA). These communities tap into phenomena such as “crowdsourcing” and collaborative innovation to raise, debate, and answer key business questions that help customers conquer challenges and capitalize on business opportunities.

The Industry Value Network group for forest and paper can help you maximize the value of your IT investment. Bringing together industry-leading customers, independent software vendors, system integrators, and SAP to collaborate and communicate, the group is focused on fulfilling the top-priority, high-value business and technology needs of the forest and paper industry.

Members of the Industry Value Network group for forest and paper work together to deliver preintegrated, standard, and complete solutions and services – based on a common technology platform – that address the following industry-wide business challenges:

Within a heterogeneous IT ecosystem, organizations need to integrate and improve planning and execution functions. You need an IT solution that sharpens operational visibility and improves these functions across the enterprise.

- Manufacturing scheduling and execution
- Preventive maintenance and shutdown planning
- Price and margin management
- Compliance management

Learn More

The Industry Value Network group comprises a select community of customers and partners invited to participate by SAP. For information about the program, visit www.sap.com/ecosystem/communities/ivn/index.epx. To learn more about communities of innovation at SAP, visit www.sap.com/ecosystem/communities/index.epx.

For more information about how SAP and TietoEnator can help your forest and paper organization, call your SAP representative today or visit us on the Web at www.sap.com/industries/millproducts.

Summary

Working together, SAP® and TietoEnator Corporation solutions provide real-time operations management with planning, business operations, and production control functionality – giving you data and process transparency while improving critical processes. Functionality integrates with both SAP and non-SAP enterprise applications, reducing implementation complexity and optimizing your IT investments.

Business Challenges

- Sharpen operational visibility and improve planning and execution within a heterogeneous IT environment
- Perform operational and logistical activities to secure fiber supplies, from forest management to mill wood purchasing
- Improve operational control across the enterprise

Supported Business Processes and Software Functions

- **Harmonization of product offerings** – Manage and control wood supplies of various quality and origins to ensure a consistent output product
- **Delivery planning and supplier management** – Coordinate delivery schedules, forecast supply, and manage wood flow from multiple suppliers
- **Wood measurement and purchase** – Integrate wood measurement results within the organization and manage costing and pricing activities
- **Pricing and payments invoicing** – Manage invoices for wood supplies and services
- **Sales and customer relationship management** – Streamline collaboration with forest owners, investment companies, and contractors
- **Transportation management** – Coordinate activities and expenses
- **Storage** – Streamline storage processes and reduce costs
- **Mill yard and terminal management** – Control wood-flow processes and other related activities
- **Integration with geographic information systems (GIS)** – Perform online scheduling and operational follow-ups, planning, and operations activities

Business Benefits

- **Improve wood purchase and service-contract management**
- **More accurately forecast** short- and long-term fiber and timber availability
- **Implement strategic goals**, such as expanding mill locations
- **Better coordinate** deliveries for optimal transport speed and costs

For More Information

Call your SAP representative today or visit us on the Web at www.sap.com/industries/millproducts.

TietoEnator^{TE}

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