

REMSOFT®

CASE STUDY

CASE STUDY HIGHLIGHTS



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Suzano Selects Remsoft to Help Improve Supply Chain and Boost Production

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For over 85 years, Brazilian-based Suzano Papel e Celulose has produced high-quality paper and pulp to businesses around the world. Suzano is one of the world's 10 largest pulp manufacturers, and it is the largest producer of eucalyptus pulp. In 2009, the company planted 73 million eucalyptus seedlings on its properties, and in 2010 it planted at a rate of approximately 400,000 trees a day. From a sustainability perspective, Suzano is a leader - its plantations capture 4.3 million tons of carbon each year, in comparison to the approximately one million tons of carbon it releases into the atmosphere.

THE BUSINESS CHALLENGE

PLANTING THE RIGHT SEEDLING IN THE RIGHT PLACE AT THE RIGHT TIME

Suzano's supply chain is incredibly complex, as the company must manage all aspects of its production operations, from seedling to the mill, along with contract partners. The company's goal is to have the right seedling planted at the right site at the right time, which must coincide with harvesting and manufacturing schedules. Ensuring the optimal seed is matched to the right site is integral to Suzano's operations because seedling performance varies depending upon soil composition and site climate. This requires Suzano to align nursery production schedules with harvest planning schedules to maximize seedling and tree clone performance.

Adding to the complexity of Suzano's business, sites available for planting can change from week to week; the company must manage company-owned and 3rd party nurseries; the lead time to produce a clone is approximately three months; and clones have different mortality rates once planted. Prior to implementing Remsoft's solutions, the company operated in silos – nursery, land management and production. Evaluating the factors that influence each area of the supply chain was often done manually with spreadsheets. This was not only painfully time consuming, it provided narrow views of the company's operations that did not allow management to consider all the cost variables.

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Suzano's research team saw that nursery production of seedlings did not always meet field requirements and there was opportunity to improve the management of its supply chain from greenhouse to production. The team believed better, more coordinated planning would improve pulp production by optimizing the allocation and assignment of the eucalyptus seedling stock to sites most conducive for that variety.

THE REMSOFT SOLUTION

Suzano worked with Savcor Forest Group of Sao Paulo to develop a solution that maximized plantation productivity by better aligning nursery production, silviculture, planting and harvesting activities.

The solution provided by Savcor, a Remsoft solution provider in Brazil, used its own Zenith Module for inventory management and Remsoft Advanced Analytics software to optimally allocate and schedule the planting of seedling varieties – including existing stock – with the goal of improving pulp output.

The Remsoft Spatial Planning System can be applied to any forest planning situation - inventory projections, long-term harvest schedules, land or silviculture investment queries, biodiversity and wildlife habitat evaluations, compliance certification standards and much more.

Suzano is using Remsoft to create real-world operations plans that incorporate collaborative input from across the company, then communicate information to managers and other stakeholders.

THE BENEFIT

POTENTIAL GAINS AND BETTER SUPPLY CHAIN VISIBILITY

Through the use of Remsoft's solutions, Suzano is better able to get the right seedling to the right site at the right time, which has resulted in denser trees and higher productivity from the same growth area. Suzano has gained approximately 5 to 10% in terms of productivity.

While the financial benefits are monumental, there are several softer benefits that impact Suzano's complex supply chain. These include the ability to improve communications between the nursery team, harvesting team and production team; the ability to evaluate and assess strategic business decisions such as whether to expand mill production or build a new mill; and the decision of whether to dispose of or acquire new land.

"We invest a great deal of time and money in our research and development to ensure that we create seedlings and clones that will yield the greatest amount of pulp. There are a plethora of variables that impact our production, but in the past we evaluated them in silos, rendering ourselves unable to communicate effectively across functional groups," said Sergio Ricardo Bentivenha, Forest Technology Division, Suzano Papel e Celulose. "Since we implemented Remsoft's solutions, we can optimize assets that were once managed in various spreadsheets. As a result, we have greater alignment and communication between divisions and our productivity gains have reached 5 to 10%."

Suzano has aggressive growth goals, which include two new mills coming online in the next several years. The company will continue to benefit from the Remsoft solution, whether it is matching the right seedling to the right soil, or evaluating whether an increase in nursery R&D is required to bring the two new mills up to capacity.