



Klabin: Raising Plant Productivity and Operational and Financial Efficiency with SAP® MII

With 17 industrial units in Brazil and Argentina, Klabin S.A. is Brazil's largest producer and exporter of paper. To optimize its asset use, reduce waste, and improve quality and production control, Klabin selected the SAP® Manufacturing Integration and Intelligence application to **automate its continuous improvement process.**

Executive overview

Company

Klabin S.A.

Headquarters

São Paulo, SP, Brazil

Industry

Mill products

Products and Services

Packaging paper and board, corrugated boxes, industrial sacks, and timber in logs

Employees

>14,000 direct and indirect employees

Revenue

R\$4.0 billion (US\$1.9 billion)

Web Site

www.klabin.com.br

BUSINESS TRANSFORMATION

The company's top objectives

- Accelerate continuous improvement and total productive maintenance (TPM) processes
- Maximize asset use
- Standardize production plant processes to implement best practices

The resolution

- Redesign of all processes for adoption of the SAP® Manufacturing Integration and Intelligence (SAP MII) application
- Integration of the SAP ERP application, SAP BusinessObjects™ business intelligence solutions, and manufacturing execution systems
- Web access to SAP MII established
- Internal staff trained to execute rollouts at other plants

The key benefits

- Maximization of asset use, along with significant waste reduction
- TPM Award won
- Reduction in development and maintenance time needed for applications
- IT cost savings

[Read more ▶](#)

“The benefits of intelligent control throughout our manufacturing system using SAP MII exceeded our expectations and placed us at a whole new level to compete in the global market.”

Lorival Verillo, IT Manager, Klabin S.A.



TOP BENEFITS ACHIEVED

-20%

Production breakdown in paper plants

+30%

Improvement cases studied by the company

+6.5%

Improvement in final product quality

[See more metrics ▶](#)

Executive overview

Company objectives

Resolution

Business transformation

Future plans

Searching for production excellence

With more than 110 years of history, Klabin has 16 industrial units in Brazil and one in Argentina, as well as sales offices in nine states, a U.S. subsidiary, and an agent in Europe. Organized into three business units – Forestry, Papers (cardboard and kraft paper), and Conversion (corrugated boxes and industrial sacks) – the company maintains three forest units that supply the production process and three timber hubs in Paraná, Santa Catarina, and São Paulo.

To deal with this complex scenario, tight margins, and the need to optimize assets and reduce waste, Klabin decided to modernize its entire production chain process. Klabin has used SAP software since 1999, but even with SAP ERP, the company based the management of this process on spreadsheets

and nonintegrated local databases. Because of this, it had limited analytical capacity, a lack of manufacturing control, and low reliability, all of which impacted the performance of the entire business.

Klabin chose to modernize its IT infrastructure to maximize its production quality, increase operational efficiency, optimize costs at the plants, and facilitate expected business growth. The company aimed to adapt and optimize its processes for continuous improvement and total productive maintenance (TPM), implementing best market practices in its production process as well.

“We were only able to launch improvement cases once a year. Today, with total chain visibility, we generate new cases every three months, covering the whole plant and with a greater level of detail.”

Oseias Bueno, Business Analyst responsible for SAP MII, Klabin S.A.



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Optimizing plant integration and intelligence

Faced with the challenge of maximizing its quality and production efficiency and deploying continuous improvement and TPM processes, Klabin opted to adopt SAP MII.

The TPM methodology covers the entire lifecycle of the production system and builds a system capable of managing losses and optimizing a company's use of assets to increase its competitiveness. Once the methodology is established, companies may enter to win the TPM Award given by the Japanese Institute of Plant Maintenance, which certifies the correct adoption of best practices and effective results.

With the implementation of SAP MII, Klabin began optimizing the configuration of master data and transactional processes for data entry, allowing better information integration with SAP ERP and other

operating environments within the company. In addition, SAP MII was configured so it can be accessed via the Web.

“The improvement of processes linked to SAP MII enables quick and efficient data analysis, allowing correct decision making and immediate solutions to problems.”

Francisco Antonio Fernandes, IT Coordinator, Klabin S.A.

The software implementation began at the most complex of the Klabin plants, in Telemaco Borba in Paraná state. The project was completed in five months. Since then the company has trained internal staff to execute rollouts at other production plants, and the solution has been replicated at the four paper mills as well as industrial sack plants and the unit in Argentina.



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Savings and quality gains, capped by a TPM Award

With SAP MII, Klabin has reduced the number of systems in operation and cut costs related to system interfaces. Automatic generation of reports has raised factory team productivity by 8%.

Plant managers can now more easily monitor bottlenecks, equipment configurations, and quality indicators. The quality rate of finished products has increased by 6.5%, reaching a level of 99%.

Machinery adjustments at Klabin’s plants are much less frequent, and production breakdowns at the paper plants have decreased by 20%. Waste has been reduced by 700 tons per year, increasing total income from manufacturing by 1%. Increased availability of information means any problems can be identified earlier and resolved faster.

Overall, optimizing processes along the production chain has provided Klabin with savings reaching hundreds of thousands of dollars per year. And the success of the project was topped off when the Telemaco Borba factory won the TPM Award.

KEY BENEFITS

-20%

Production breakdown in paper plants

+30%

Improvement cases studied by the company

+6.5%

Improvement in final product quality

+1%

Total manufacturing income

+16.6%

Overall equipment effectiveness

+8%

Productivity of factory employees



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Supporting new capabilities with SAP MII

Automating the process of continuous improvement, along with monitoring of manufacturing, was the starting point on the road to operational excellence for Klabin. The company plans to expand the use of SAP MII through development of new applications and by enlarging the scope of work for monitoring quality tests for paper and control indicators.

