

BUSINESS BENEFITS SERIES

BUSINESS BENEFITS
SERIES HIGHLIGHTS

- Achieved 23% internal rate of return
- Achieved 200% increase in packaging and labeling labor output
- Eliminated delivery errors
- Shortened response times to customer by 40%
- Increased on-time deliveries by 50%
- On track to reduce inventory by 17%
- Projects 31% savings on warehouse costs
- Boosted productivity of purchasing team by 50%
- Reduced PO processing time 83%

COMPANY PROFILE



Soitec
Bernin, France
www.soitec.com

Founded in 1992, Soitec is the leading provider of advanced silicon-on-insulator (SOI) thin-film substrates and other engineered substrates for integrated circuit manufacturing. Having brought to market a unique technology called Smart Cut™, Soitec is now in successful high-volume production of a new generation of SOI wafers based on this proprietary, value-added process.

Annual Gross Revenue
€88.1 million (US\$105.7 million)

Employees
500 worldwide

Chief Executive Officer
André-Jacques Auberton-Hervé

Soitec Streamlines Supply Chain, Boosts Productivity with Oracle Applications, Projects IRR of 23%

EXECUTIVE SUMMARY

To satisfy rising demand for its ultra-thin silicon-on-insulated (SOI) wafers, Soitec restructured its supply chain and manufacturing operations by investing in Oracle E-Business Suite applications. An independent study by Shack & Tulloch established that the French nanotechnology pioneer reaped substantial operational and strategic benefits from the €3.3 million investment, including higher productivity, tighter packing and shipping schedules, reduced inventory and warehouse costs, faster processing time, lower production costs, and better relationships with customers and suppliers.

The study examined changes in processes specifically tied to manufacturing—Soitec’s core business. According to the study, Soitec is on track to achieve benefits of €0.86 million (net present value), equating to a 23% internal rate of return. The bulk of the savings will come from the IT system’s ability to support lean manufacturing processes, lower overhead and reduced staffing needs.

CREATING A LEAN ENTERPRISE

Founded by two researchers from CEA-LETI, one of Europe’s largest microelectronics research institutes, Soitec accelerated the international nanotechnologies race when it introduced its breakthrough SOI technology in 1992, then advanced it further four years later with Smart Cut™—a manufacturing technology referred to as an “atomic scalpel” that transfers fine layers of crystalline material onto silicon wafers. Soitec’s wafers are used by companies such as IBM, AMD, Motorola, Philips and Seiko Epson to produce semiconductor chips for a variety of applications, including high-performance computers, mobile computers and phones, watches, and automotive sensors.

For the last few years, Soitec has more than doubled its annual growth rate, and now commands an 80% market share with the largest production capacity of SOI wafers in the world. To assure success in the context of this extraordinary growth, Soitec replaced its existing enterprise resource planning (ERP) solution with an Oracle solution that had the added capability of monitoring electronics manufacturing on the shop floor. The study confirmed that the new system has directly contributed to Soitec’s top and bottom lines by increasing controls over production costs, decreasing inventory levels and warehouse costs, coordinating schedules across manufacturing facilities, and providing a consistent customer experience.

ORACLE PRODUCTS AND SERVICES

- Financials
- Manufacturing
- Order Management
- iProcurement
- Supply Chain Management
- Shop Floor Management
- Advanced Supply Chain Planning

EXECUTIVE PROFILE



Marc Buzenet joined Soitec in 2001 as Director of Information Systems. His responsibilities include overseeing operations, budgeting and short- and long-range planning for the company's computational and data network capabilities, as well as defining information system policy for the company to ensure strategic alignment with corporate goals.

Prior to joining Soitec, Buzenet served as project director at SAP, where he led the implementation of a range of strategic projects. His experience also includes three years with LECTRA Systems, where he was director of information systems, and six years with Thomson-CSF, where he was responsible for management for the information systems semiconductor subsidiary.

Buzenet holds a master's in economic statistics from the Ecole National de la Statistique et de l'Administration Economique (Paris) and a degree in information systems from the Ecole Nationale Supérieur des Telecommunications (Paris).

INVESTMENT IN ORACLE E-BUSINESS SUITE APPLICATIONS

Soitec sought an integrated solution that would free it from costly customizations and additional IT infrastructure investments with each growth spurt. "The key challenge was integrating our financial, logistical, and materiel flows onto a single, centralized, secure repository to manage our strong growth," said Marc Buzenet, director of information technology at Soitec.

Soitec's total investment in Oracle applications—including modules for accounting and finances, procurement, order management, manufacturing and shop-floor management, and supply chain planning—cost approximately €3.3 million in net present value terms. The new system came online in April 2003.

KEY BENEFITS

- **Productivity Gains**
By automating cumbersome manual processes and having access to real time information, Oracle Order Management delivered substantial productivity gains in Soitec's packaging and labeling operations, boosting labor output in this department by 200%. The company estimates it will be able to handle three or four times the product volume without adding more people. On the purchasing side, team productivity rose by 50%, a direct result efficiency gains from the new Oracle iProcurement system.
- **Better Order Management and Logistics Performance**
Oracle Order Management allows Soitec to input product descriptions, designs, and specifications into the system and then disseminate the information throughout the company, a systemic improvement that helped Soitec achieve a 50% increase in on time deliveries. In the process, the integrated, automated processes virtually eliminated delivery errors. Order Management helped Soitec shorten the time it takes to respond to customer requests for specific delivery dates by 40%—from five days previously to three days today. Soitec expects to shrink the response time 33% further with the addition of Oracle Advanced Supply Chain Planning module.
- **Leaner Supply Chain**
As a result of coordinated scheduling across its manufacturing facilities and tighter control of supply chain operations, Soitec is on track to reduce inventory from €22 million to €18.3 million, or 17%, which will lead to a decline in warehouse costs of about 31%—from €325,000 to €225,000. Soitec expects future cost benefits in manufacturing and finance from reducing waste and shrinking days sales outstanding (DSO). "One of Soitec's key goals is speeding up the supply cycle, which will translate into balance sheet and cash flow gains," said Phil Willson, supply chain manager for Soitec.

// With the information automatically available in the Order Management module, we will be able to handle three or four times the product volume without adding more people. //

Emmanuel Arene
 Director of Operations
 Soitec

ABOUT THE BUSINESS BENEFITS SERIES

This study is one of an ongoing series that investigates the costs and business returns of IT investments, with a primary focus on Oracle technology and applications. It is intended for business executives and senior managers evaluating technology investment options.

Oracle sponsored and developed this case study based on original research and analysis conducted by Shack & Tulloch, an independent consulting firm. Information contained in the publication has been obtained from sources considered reliable, but is not warranted by Shack & Tulloch or Oracle. Copyright © 2004 Oracle. All rights reserved.



BENEFITS SUMMARY

The study estimates Soitec will gain productivity and cost benefits totaling €4.1 million over the life of its investment. Minus investment costs of €3.2 million, the net present value of the benefits is estimated to be €0.86 million. Based on these projections, the study calculates Soitec's internal rate of return of 23%. The table below reviews key improvements to operations resulting from the implementation of Oracle E-Business Suite modules. The subsequent chart summarizes the benefits, costs, and net present value of Soitec's Oracle investment.

Key Performance Indicators			
Categories	Pre-Oracle	Post-Oracle	Change
CUSTOMER SERVICE AND DELIVERY			
Company response time	5 days	3 days ¹	40%
On time deliveries	60%	90% ²	+50%
INVENTORY			
Projected inventory reductions	€22,000,000	€18,300,000	17%
Projected warehouse cost reduction	€325,000	€225,000	-31%
PRODUCTIVITY AND QUALITY CONTROL			
Packaging and labeling labor output (indexed)	100	300	+200%
Packing and shipping delivery errors (per year)	4	0	-100%
PURCHASING			
Average PO processing cycle time	15 days	2.6 days	-83%
Purchasing personnel productivity (in FTE)	3	2	-33%

Notes:

1. Oracle Advanced Supply Chain Planning module expected to further decrease response time to 2 days
2. Oracle Advanced Supply Chain Planning module expected to further increase on-time deliveries to 95%

€0.86 MILLION IN NET PRESENT VALUE

