

How Visonic Group

Improved Customer Response and Service Levels

An Integrated SAP ERP Platform
Enables Supply Chain Flexibility

by **David Hannon**, Features Editor



With a supply chain flexible enough to respond quickly to customer requests for slightly different versions of standard products, manufacturers can win new business or deepen existing customer relationships. But getting that customized product designed, put into production, and shipped in a timely manner is a challenge that requires all the links in the supply chain to be well connected.

Home security products manufacturer Visonic Group knows this well. Over the years, Visonic's ability to receive and successfully execute customers' requests for product changes came to be viewed as a competitive differentiator for the company, which sells primarily to distributors and installers. But as Visonic established this reputation, the range of its customers' demands was also growing rapidly.

"Our large customers have a wide variety of requests in terms of product functionality as well as process requirements," explains Aharon Zagory, CIO of Visonic. Even service levels and manufacturing strategies vary by customer and contract, as Visonic builds some product to stock for customers that make longer commitments and then makes product to order for other customers.

As the mix of requests for product variations continued to expand for Visonic, it became clear in 2005 that the business's homegrown legacy IT systems — separate sales, engineering, and production systems — were reaching their limitations. Defining a customer's original change request, for example, was only possible in a text format, which limited the detail possible in the description. And while each of the individual systems was still performing its desired task (thanks to the IT organization's building functionality add-ons), the lack of integration between systems was increasingly viewed as a hindrance. Completing changes in product manufacturing processes required information to be re-entered from one system into the next, which often caused delays.

Without integrated systems, the status of certain projects was not easily visible to the other parts of the supply chain. For example, the bill of materials (BOM) for a new product configuration was not visible to procurement until it was moved from the engineering system to the logistics system. That extra step delayed the sourcing process and reduced the all-important order turnaround time.

"There was a lack of visibility, risk of data entry error, and loss of time, but the main issue was that there was no integrated process," says Zagory.

So, when it came time to upgrade its legacy systems, Visonic decided it would be more cost-effective to implement an entirely new platform that would help the company execute on product variability more efficiently.



Evaluating and Implementing a New ERP System

In deciding what type of new system would best suit Visonic's business, the IT organization started by defining the following three priorities for the software.

First, there was the question of functionality, which came down to the "best of breed" vs. ERP debate. "In my opinion, the more niche requirements you have, the more you'd tend toward the best-of-breed system," says Zagory. "And when we analyzed our company, we realized we don't have any unique, niche requirements in terms of functionality of the leading ERP systems."

The second priority for the new system was scalability. Visonic had been growing consistently after its initial public offering and was seeking an IT platform that would expand with the company in both depth and breadth.

Third, it was important that the system score high marks for integration. "Our business processes were increasingly cross-department," says Zagory. "And having accurate, integrated, and streamlined processes was important not only from an IT perspective, but from the business aspect to meet customer demand."

With those priorities established, Visonic selected SAP ERP and began implementation work in mid-2005. The initial implementation wave focused on Visonic's operations in Israel, where its headquarters and manufacturing plant are located. In terms of deploying the SAP ERP software, Visonic took a broad approach, implementing functionality

for financials, controlling, production planning, materials management, warehouse management, quality management, sales and distribution, document management, engineering, and more.

A year and a half after go-live, the SAP implementation expanded to other regions and subsidiaries, so customer orders can now be brought into the ERP system directly from locations around the world.

Supply Chain Benefits Emerge

In the five years since go-live, Visonic has realized a number of benefits from its SAP ERP implementation (see sidebar for a summary). Perhaps the biggest benefit the manufacturer has seen is the improved ability to process and execute customized orders.

Customization can vary from adding new functionality to an existing kit, to attaching an accessory like an additional detector, to adding a complete module. For example, customers lacking a land-line telephone need to modify their system by adding a Global Systems for Mobile (GSM) module, which transmits through a GSM terminal that operates on all major cellular frequencies.

"Because our company's strategy is to be flexible and responsive to customer demand, R&D and production require a very intensive link," says Zagory.

And the integration brought about by the SAP ERP implementation has deepened that link. For example, when

Visonic receives a one-time customized order from a customer today, the salesperson simply provides a text-based description of the requirement and then enters a special order type. The workflow mechanism within SAP ERP then automatically recognizes and routes the order to the engineering department and creates a special, one-time-order BOM in the system for that order. The work order can also include specific documents from the product lifecycle management (PLM) system, which expedites production.

"As the workflow gets approved by the responsible people, it becomes a regular order with a BOM that is reflected in the material requirements planning (MRP) system," says Zagory.

The stock is then consumed in accordance with the order BOM, and when the BOM is modified, all the parties who need to approve it or will be impacted by that change see the very same object. Additionally, the new

Benefits Snapshot: Key Supply Chain Rewards at Visonic

Customer-Facing Benefits:

- Greater ability to process customization requests
- Improved on-time delivery
- Customer notifications by e-mail

Internal Benefits:

- Lower inventories
- Improved product turn-around time
- Better cross-functional business processes and support for multiple business models

functionality releases future product BOM versions to the procurement and MRP departments to alert them to start procuring the specific components for the orders.

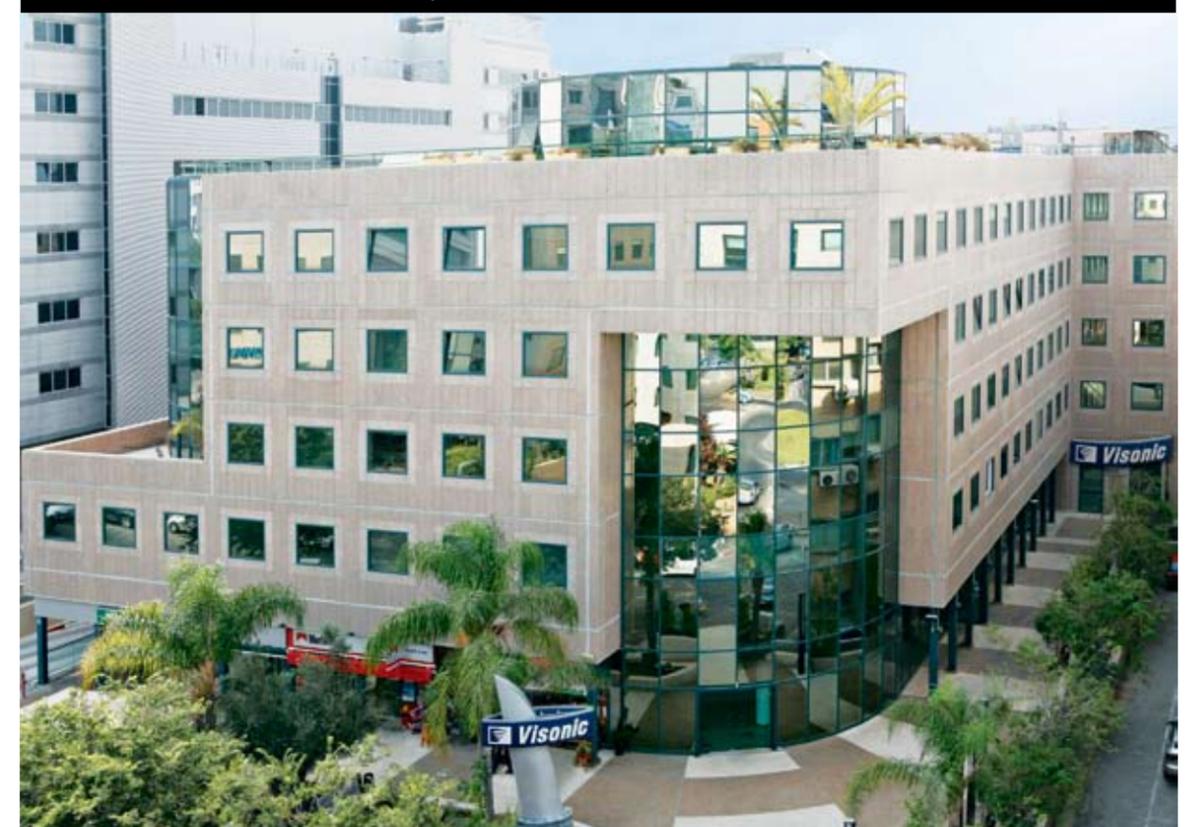
The automated workflow and use of a single object streamlines the entire process and eliminates the risk of data entry errors. As a result, Visonic today can process more custom orders and releases upwards of 300 new products each year.

"Our ability to promise a due date and meet that commitment was significantly improved by the new system — all with a lower level of inventory," says Zagory. "We have become more efficient in inventory planning by enhancing the system's standard planning

mechanism with a few control reports in order to reach a relatively low stock level that matches our demand."

And the benefits extend even further. Prior to its SAP ERP implementation, Visonic had implemented lean

VISONIC GROUP HEADQUARTERS IN TEL AVIV, ISRAEL





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At a Glance

Visonic Group

Headquarters: Tel Aviv, Israel

Industry: Home security systems

Revenue: \$80 million

Employees: 500

Company details:

- Established in 1973 by Moshe and Yaacov Kotlicki
- Went public in 2004 (Tel Aviv Stock Exchange ticker: VSC)
- Manufactures products in Kiryat Gat, Israel
- Sells products in about 100 countries through a network of subsidiaries, distributors, and sales representatives
- Has 112 registered patents and 24+ applications currently under examination

SAP solutions:

- SAP NetWeaver BW
- SAP ERP 6.0

manufacturing and just-in-time inventory strategies — but, according to Zagory, the new ERP system actually furthered these strategies by providing the ability to manage the lean method’s visual process management (or kanban) system, which uses physical cards to cue the manufacturing floor about what, when, and how much to produce.

“We now can calculate the kanban size and quantity and manage the stock movements by scanning the cards,” he says. “We didn’t have that ability prior to the ERP system. Also, now we can invoke a production order by scanning a card for semi and/or final assembly materials.”

There are customer-facing benefits to the new system as well. Visonic can now send automatic notification to customers by e-mail and provide electronic invoices, packing lists, and back-order status when processing orders in the system — streamlining the “order, delivery, invoice” process.

Lessons Learned Along the Way

Zagory says two of the most critical decisions in implementing an ERP system is deciding which functionality your company truly needs and when your system is “ready enough” for go-live.

“Users will present a long list of requirements, and you have to evaluate what functionality and reporting is essential for users and what can be postponed until after go-live,” he says. “It’s a delicate issue because doing everything users ask for could waste time and resources, especially if you realize later it’s something users don’t actually need. The other extreme — not putting enough functionality in place — creates a different set of issues.”

Zagory says one somewhat unexpected benefit of the ERP implementation is that his team has a better knowledge of how their business works. “To successfully implement an integrated system, you must understand the full process and know how all of the systems could affect the processes,” he says. “With an integrated ERP system, the activities of one department directly influence the other departments. For example, processes in production affect finance.”

In fact, Visonic’s IT organization is now set up slightly differently to better support the new SAP ERP environment. In the past, IT staff members were dedicated to a specific functionality or system. But now the structure is more business function-oriented, with SAP experts within each business unit. SAP experts also work in a more “integrated” way than in the past, by thinking about how their work will affect other parts of the organization.

“Overall, this SAP project helped our business differentiate its products, but it also brought flexibility to our supply chain and improved our customer response and service levels,” Zagory says. ■