

# e-commerce, CRM and ERP underpin aggressive growth

*Following plastic components maker Moss Plastic Parts' implementation of an ERP system, the firm has moved to web-based product ordering and tracking*

**Keywords:** e-commerce CRM  
Business process re-engineering

## profile

**Company:** Moss Plastics  
**Sector:** Plastic components  
**Employees:** 430  
**Turnover:** £30 million

## benefits

### Challenge:

To gain pan-European manufacturing and stock visibility and to reduce transaction, manufacturing and logistics costs. Also to improve customer service

### Solution:

To implement an ERP system and integrate shop floor data collection, advanced planning and scheduling, and ultimately e-commerce and customer relationship management

### Cost:

£1.5m ERP; £0.5m upgrades

### Benefits:

New business generating 20% profit  
Factory visibility saves £100,000 pa  
Improved factory capacity: reduced overdue orders by £350,000  
Improved visibility of warehousing and distribution  
Reduced transaction costs  
Easily maintainable system  
Eliminated double handling  
Better reports and decision making  
Streamlined order processing  
Integrated, web customer service

**M**oss Plastic Parts, which makes industrial plastic protection components, is building on its 1997 enterprise (ERP) system to enhance customer service, improve its marketing and slash transaction costs. It's doing so by upgrading its SSA eBPCS ERP to include e-commerce and customer relationship management (CRM) – and providing a single, integrated customer front end with web access.

Founded in 1952, Moss is based at Kidlington; it has 430 employees and operates at 15 sites, including distribution centres, six across Europe. Manufacturing – injection moulding – is in Kidlington: it's low value, high volume stuff, with some 20,000 product types, 4,000 being mainstay made-to-stock, the rest engineer- and make-to-order, with design and project management on site. The firm serves the automotive, furniture, packaging and oil field supply industries as well as general engineering, and has 30,000 customers.

Sarah Cobb, business systems director, says that until 1997 the firm relied on heavily customised and relatively non-integrated Unix-based business and manufacturing systems at its HQ and some of the sites, while others had a mix of systems, including Pegasus and Sage, inherited from Moss' acquisitions.

In 1996, the management team decided it needed new ERP. Says Cobb, then project manager, "We

needed to be able to see across the departments and companies: we needed one system. If you like we were investing in pan-European visibility of stock and the rest. And we had Y2k and euro problems." With its very high transaction volumes, the firm also needed to cut costs in this area.

Moss fielded a team comprising managers from across the business, and shortlisted SAP's R/3 and SSA Acclaim's (as it was then) BPCS, eventually selecting BPCS on IBM AS/400 for its "functionality, the fit with our business and their people," says Cobb. "Relationships are very important with major projects. We weren't interested in leading edge IT: we wanted something that would let us get on with what we're





good at.”

The team went through a text book implementation. There was good education and training, detailed parallel testing and prototyping, a full conference room pilot and scrupulous data cleaning and transfer – the latter taking six months, with clearly defined rules for customer, component and product files.

Cobb describes the eventual go-live as “a biggish bang”. At the end of 1997 the firm first implemented sales order processing (SOP), stock replenishment, etc at its two biggest distribution sites. The real ‘big bang’ followed a few months later, with all modules (SOP, purchasing, billing, accounts, picking, shipping and production planning and scheduling) going live simultaneously. Says Cobb: “We implemented BPCS as vanilla as possible: we didn’t want custom.”

It’s obvious that this was a well thought out, inclusive implementation. Cobb took the unusual step of including shop floor data collection (SFDC). “SFDC was essential for us,” she says. Formerly, she explains, the factories operated with paper-based systems, but poor visibility and delays meant inefficiency and capacity limits. She says that putting in SFDC, based on Crown Computing’s equipment tightly integrated with BPCS, “cost about £120,000 – but that was less than 10% of the ERP, and it makes all the difference for us.” In fact, there’s a direct saving of some £100,000 per year and considerably more indirect.

SSA also got ST Point’s advanced planning and scheduling software, again linking direct into BPCS. Although it’s only used for finite capacity scheduling now, Cobb says she intends to move it on to bottleneck analysis soon. At less than £20,000 per seat (Moss bought two),

Cobb says this addition quickly paid for itself. Indeed, one useful measure, overdue orders, has been slashed from five days sales to half a day.

Other key additions were a rapid order entry package from CSP, and a forms and fax manipulation package on AS/400 from Interform. Cobb says the system has, for example, enabled Moss to eliminate double handling across its distributor network – with non-stock dealer orders being shipped direct from Kidlington but with local distributor paperwork.

After 18 months of consolidation, roll out across the European operations and Phase Two planning, Moss decided to go further. It wanted customer relationship management (CRM), e-business and better, faster order entry. Cobb: “Our competition are small companies who know their customers well: we were bigger and didn’t. We needed to streamline ordering processes and integrate credit control, complaints, all the customer-facing functions. And we wanted customers to be able to order from a web catalogue, view product inventory, order status and account balances over the web.”

In short, the firm needed a simple browser-based commercial front end to improve customer service and further reduce transaction costs – with the same system and business rules for customer self service over the web

and Moss internal sales staff.

So in October 1999, the firm set about expanding BPCS and implementing Mobile Sales Suite from software firm TSG for CRM, rapid order entry and e-commerce. “A good proportion is in BPCS,” says Cobb, “but the additional applications are in Lotus Domino, with the on-line catalogue running on IBM’s WebSphere Commerce Suite with a DB2 database.”

To get there meant upgrading from Moss’ original BPCS 6.02 ERP to eBPCS v6.1. SSA acted as project manager, and Cobb says that, extensive testing and documentation notwithstanding, the effort was less than 20% of the first implementation.

SSA and Moss completed the static catalogue marketing website, the new internal customer service applications – including rapid order entry, order and inventory status and account status and sales history, with all the business rules – and the eBPCS upgrade all in May 2000.

In September, Moss went on to pilot customer web order entry, with

## for more case studies

[www.dti.gov.uk](http://www.dti.gov.uk)  
[www.ukonlineforbusiness.gov.uk](http://www.ukonlineforbusiness.gov.uk)  
[www.fitforthefuture.org.uk](http://www.fitforthefuture.org.uk)

user authentication on-line and order placing direct into eBPCS – and has since rolled it out to provide web-accessible account, order and inventory status enquiries. It has also now achieved the rest of its internal application upgrades, including order maintenance for late customer changes integrated back into the rest of the system. Later this year, the firm expects to go live with the intelligent version of its web catalogue, with ‘search and select’ and decision tree-based product matching.

Cobb expects return on investment “within two to three years”. ■