Real-time ERP Agility from Plex Enables Rapid Global Expansion

About the Company:

Shape Corp. provides innovative engineering solutions with the discipline of flawless execution. The company is a full service, tier-one supplier that designs, engineers, tests and manufactures metal and plastic products. Process and material advancements position Shape as a pioneer in custom roll forming and injection molding, and the firm serves multiple industries in more than 15 countries including automotive, office furniture, medical, and agriculture. Founded in 1974, Shape remains a family and privately-owned company, employing more than 2,800 associates in the United States, China, Mexico, Europe, Japan, Korea and India.

Business Challenges:

- Too many upgrades and patches were required on multiple systems, which could have impeded the company's plans for growth.
- Wanted integrated systems instead of separate for preventive maintenance, production, gages, problem controls, and more.
- Mainstream ERP solutions were too broad and required too many add-ons for Shape's needs.
- Needed a single solution without a lot of integration or customization to allow the company to stay agile.

Solution Benefits:

- Replaced 12 disparate systems with the Plex Manufacturing Cloud for a single version of the truth.
- Able to add on new plants and get them running within two weeks.
- Partners can view raw material levels in real time, as jobs are completed.
- Models and plans capacity requirements several years ahead.

Full speed towards a vision for growth

As it grew throughout the 1980s and 1990s Shape added new IT systems to help run its operations and finances. By the early 2000s, the firm was running an unwieldy, expensive and labor-intensive ERP-based management platform that had been tactically linked together as evolving business needs dictated.

"In the months before we decided to search for a solution to our ERP challenges, we were experiencing a phase of concurrent patches and upgrades," explains Molly Hunting, Director of IT at Shape. "At the same time the business was setting ambitious plans for growth, setting up many new greenfield factory sites in North America and other countries."

The hunt for agility

"The truth was we had outgrown our best-of-breed solution, especially some of the core systems like EDI and peripheral ones like HR," she continues. "Our main ERP provider was also taking a different strategic direction to us, which really kick-started our search for a replacement solution."

In 2005 Shape's middle management bought into the need for a new ERP. Hunting collated 15 potential vendors and created a rigorous evaluation process that ensured all departments from plant floor operations to supply chain and business services, including finance and HR, could be serviced in one integrated solution.

Hunting elucidates: "We were surprisingly disappointed in the mainstream ERP vendors. Their approaches were too broad, which would have necessitated too many add-ons to give us the functionality we required. We were really looking for a solution that would give us the agility to pursue our expansion plans."

Why Plex? Simple brilliance

"A few factors shone out with the Plex solution," continues Hunting, "particularly the shop floor interface that was very similar to our home-grown version. We knew this would lead to easy and rapid user adoption, which is always a key component in any technology rollout."

At the time cloud was still a fairly new concept in production environments, but Hunting and the management team were impressed by the agility and flexibility this SaaS model would bring. And because all aspects of the software could be managed off-site, including deploying new functionality, Plex was well placed to help reduce IT costs and burden, dramatically!

Hunting again: "For us, Plex is by far the most impressive solution. It doesn't try to be all things to all men – it is designed for manufacturers with all the processes we'll probably ever require, built in. It's always evolving with customers' needs, as represented by the Plex User Community, which puts us in touch with peers who are successfully using the software. And that in turn gives us access to best practice and provides great peace of mind."

Driving a successful deployment

"We visited several customers of the vendors we were evaluating and were surprised that some had still not managed to implement the first part of their ERP after two years!" explains Hunting. "Accurately scoping out how our processes would work in Plex was therefore vital to the project's success."

Shape piloted Plex in its plastic molding injection business because it was a relatively contained experience with few raw materials, less than 100 parts and only 10 presses. With management involved, some highly experienced people on site, and software support from Plex, the pilot was undertaken with key users who were encouraged to stress test the system and feedback their findings. It was deemed a great success.

Shape rolled out the Plex Manufacturing Cloud capabilities across its entire operations beginning in June 2006, completing the process by January 2007 – impressive when you consider that the firm had 14 offices, 8 manufacturing facilities, two technical centers and a number of alliances to support.

One solution from shop floor to top floor

"The Plex Manufacturing Cloud offers a really comprehensive range of modules," states Hunting, "and we use most of them including HR job processes, time clocks, planning, manufacturing, quality management, preventive maintenance and financials. Anyone in the business with need to, can access data relating to these activities on a variety of devices."

PLEX®

Transformational impacts and benefits

Rapid growth

The beauty of Plex as a true cloud ERP is that it allows Shape to get new sites up and running with standard processes in just two weeks!

> "Now the timeline for go live is never an IT constraint, it's down to other operational factors."

With such speedy deployment timescales, Shape will never need to worry about being outpaced by its competitors. Key processes can be templated, with local exceptions implemented easily. This is a must-have feature for an organization with premises as far afield as China, the Czech Republic and Mexico.

Real-time visibility and automated reporting

Shape works with a number of alliance partners who complete final manufacturing tasks and distribute finished items locally. Some of these partners have Plex terminals, which allow Shape to view raw material levels in real time, as jobs are completed. In turn, shipping and finance reports can be automatically generated and because shipping data no longer needs to be manually entered, errors are reduced and processing time is increased. Shape can also make cost savings by not having to employ staff dedicated to these tasks.

Sales forecasting/production efficiency

With cross-operational data so readily available, Shape uses Plex as its sales forecasting tool, which enables the firm to model and plan its capacity requirements for several years ahead.

Labor efficiency

Shape has built a Daily Shift Report capability that provides accurate information about the efficiency of its shop floor employees. This data gets sent to production leaders and to plant floor leaders, which they can use to make staffing decisions, plan line availability and plot this against skills requirements.

Plex is very easy to integrate with other applications. For Shape Corp, this can be demonstrated through its focus on PLC. It has been able to integrate this custom application with Microsoft Active Directory, so that Plex automatically gives each new starter access to the network and all the resources they need.

Flexibility

"Plex provides us with infinite potential to improve our business throughout – and we can adapt processes rapidly and relatively simply," states Hunting.

"This was particularly important while we incorporated 4C production processes. With the Plex Manufacturing Cloud we are still able to grow in a very nimble way while relying on standardized processes."

Profitability

Finally, Shape's business teams use Plex to monitor profitability on an on-going basis.

"The Plex solution itself supports our profitability through lower TCO than an on-premise solution. We don't spend money on hardware, patching, security or other associated infrastructure, maintenance and personnel. However, and perhaps more interestingly, we can analyze our costing data for jobs and assess the profitability of each, and why they may have been more or less profitable than expected." This is one more way in which real-time visibility can support business success.

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"Working with Plex is a pleasure. As a team we appreciate their deep knowledge of both ERP and of manufacturing. But what we really love is the Plex User Community because never before have we experienced such a sense of solidarity and satisfaction," concludes Hunting. "It is here that Plex-enabled innovations are shared and essential learnings are derived, and where it is possible to see the future of manufacturing enabled!"

About Plex

Plex Systems, Inc.® delivers industry-leading ERP, MES, and Industrial IoT solutions to manufacturers across process and discrete industries. Plex pioneered cloud solutions for the production line, connecting suppliers, machines, people, systems, data, and customers with capabilities that are easy to configure, deliver continuous innovation, and reduce IT costs. With insight from the shop floor to the top floor®, the Plex Manufacturing Cloud® helps companies see and understand every aspect of their business ecosystems, enabling them to transform their businesses and lead with precision, efficiency, and agility in an ever-changing market. Learn more at **www.plex.com**.