

Sage ERP | White Paper

Collaboration Drives Growth for Discrete Manufacturers: For Sage



Table of Contents

Sage ERP

Strategies for Growth	3
Collaboration	4
Suppliers and Partners	4
Customers	4
Colleagues	4
Customer Focus	5
Innovation	6
Supply Chain Excellence	6
Collaborate for Growth	8

*Cambashi Inc. – Collaboration Drives
Growth for Discrete Manufacturers*

Cambashi has used a wide variety of sources that represent the best information available to Cambashi for this paper. This report includes our interpretation of information in the public domain or released by responsible officers in relevant organizations. Some information is from sources we cannot verify. We survey judgement samples, and results are not statistically significant unless so stated. Cambashi cannot guarantee that the report is accurate or complete. Information changes with time. The analysis, opinions, and estimates in this report reflect our judgements as of writing but are subject to change without notice. Cambashi shall not be liable for any loss or injury resulting from use of this information. All trademarks are the property of their respective owners. Cambashi may have a consulting relationship with a company being reported on. It is not an offer to sell or a solicitation of an offer to buy any securities. Cambashi, its staff, their families, and associates may or may not have a position in or with respect to any securities mentioned herein.

Strategies for Growth

As the economy returns to growth, the companies that prepare for today's challenges will take the lion's share of the available opportunity. The question is, which business initiatives will improve competitive position and take advantage of these new opportunities?

While every discrete manufacturer may have a different path to emerge from the global recession, the key is to define a strong market position and be able to defend it. In global terms, defensible positions reflect one or more of the three strategies in Treacy and Wiersema's classic business book, *The Discipline of Market Leaders*:¹ customer intimacy, product leadership, and operational excellence. To achieve a competitive stance with each of those strategies today is not quite what it was when the book was published. Now, companies are more sophisticated and interdependent, so success will likely require a level of collaboration both inside the company and with trading partners that many discrete manufacturers may not find routine.

Discrete manufacturers produce a wide range of products, from building materials and metal products to electronics and sports equipment. Some of the discrete manufacturing sectors will need to take account of fashion and changing consumer tastes; others must adapt to new, stringent environmental or safety regulations. Supply chains are increasingly complex, with raw materials and parts coming from all over the world. Manufacturers in low-cost economies can often take on outsource contracts or compete at a low cost. The emerging economies are also where much of the demand growth is occurring. For companies to grow, they must take advantage of these opportunities, often leading to more complexity.

During the recession, most discrete manufacturers faced reduced demand, shrinking margins, increased global competition, and volatile prices for fuel, energy, and in some cases, raw materials. In addition to these challenges, many manufacturers responded to the downturn by reducing manufacturing capacity or transferring capacity to outsource partners.

As countries try to export their way to growth, there are likely to be fluctuations in the global exchange rates. Currency price wars are almost inevitable, despite G20 promises to the contrary. With the global nature of many supply chains, this will lead to changes in raw material and component prices, as well as competitors' pricing to customers. Companies will need to be prepared to manage these currency risks proactively.

Now, emerging markets are growing strongly and developed countries are slowly increasing their own demand. Margin squeeze, strong global competition, currency fluctuations, and price volatility have continued beyond the economic crisis itself. Will the reduced global manufacturing capacity cope with the increased demand as the world exits the recession? Is the information at hand to make profitable decisions? Can employees and managers of diverse functions collaborate among themselves and with others for real-time decision making? Are the systems in place to cope with fluctuating raw material and fuel costs? Can they cope with changes in both supplier prices and product prices, as exchange rates fluctuate?

Companies with an integrated company-wide business management system (or enterprise resource planning ([ERP] system) are likely to have more and more accurate information readily accessible. Companies that have already implemented well-managed processes to deal with inventory, receivables, payables, and managing the supply chain are more likely to be in a relatively strong cash position. Those manufacturers can invest to differentiate themselves from their competition. What investments are needed? An enterprise system that can fully address volatility, help speed new offerings to market, and support collaborative decision-making. These are the new challenges that discrete manufacturers must address.

This paper examines some of the requirements for collaboration in the context of those three major strategic initiatives:

- **Customer focus**, to thoroughly understand the needs and execute to deliver products and services that will keep customers happy.

¹ © 1995, Michael Treacy, Fred Wiersema, CSC Index ISBN 0-201-407-191

- **Innovation** to differentiate what the company offers and fend off competitors, even in fast-changing market conditions.
- **Supply chain excellence** to reliably deliver perfect orders in a timely fashion at a reasonable cost leveraging the best trading partners around the world.

Individually and in combination these can move a company into a defensible market position. They all require special aspects of collaboration that many companies do not regularly perform today.

Collaboration

Improved collaboration with suppliers, partners, customers, and colleagues has a positive impact on many areas of business. For manufacturers, making collaboration easy is a core component of why customers and suppliers might want to collaborate. Thus, it can lead to competitive advantage.

Suppliers and Partners

Improved collaboration with the supply and partner network allows manufacturers to respond more quickly to demand volatility as well as supply, product change, or regulatory issues. Collaborative contracts in which partners share both risk and reward can help to minimize the impact of exchange rate fluctuations on all parties within the supply chain.

New emerging markets may demand new partners and suppliers. Systems that make it easy to integrate with partners and suppliers allow manufacturers to quickly respond to changing market dynamics. This can entail closer communication with current suppliers as well as enabling adding new suppliers quickly.

Customers

Close collaboration with customers gives manufacturers increased ability to truly satisfy customers. Integrated CRM systems allow salespeople to promise deliveries based on actual capacity while ensuring that each deal is profitable. Today, some systems also allow salespeople to access the system from their mobile devices, ensuring that they capture customer needs and get answers for customers immediately. Management can track the sales funnel dynamically and make decisions accordingly, too.

Integrated product configurators allow customers to order special versions of products without requiring time from the engineering department for every sale. Rather than invest in time-consuming and expensive iterations, these configurators indicate valid product options, so the order is sure to satisfy the customer's needs during the first pass.

Close collaboration with customers can lead to better visibility of demand quantities, mix, and timing as well. Demand planning and forecasting systems will get better data as the foundation. Collaboration with colleagues and suppliers can allow manufacturing planning to respond to demand changes more quickly. With advanced visibility, schedulers are able to take account of changes to orders more easily.

Colleagues

Having all your key staff connected together on one system can make a big difference to the efficiency of an organization. For a manufacturer, it means that everyone has visibility of the data they need, when they need it. Production staff members are aware of the new orders and expected orders, salespeople know about supply chain issues, and managers have an overall view of the entire organization from shop floor to top floor and from order to cash.

Integrated sales and product configurators allow sales and production teams to understand what is possible and what needs scheduling. They also communicate product feature and option rules during the sales cycle, leveraging product engineering knowledge but not their time.

Integrated business intelligence tools allow management to make better decisions based on the latest data. One of the major opportunities with analytics is to see each department's data in a larger context and to make decisions for the good of the overall business.

In fact, all of these elements of collaboration can be addressed by some of today's business systems. Figure 1 shows some of the supporting characteristics of an enterprise system for each of the three major initiatives.

Customer Focus

Faced by increased competition, companies will need to improve their service and added value to retain customers. This requires an intimate knowledge of the customer's business and challenges. Companies will try to differentiate themselves from the competition by offering tailored products or product/service offerings—in effect bringing the customer into the New Product Innovation cycle. Visibility and collaboration both within the company—including the mobile sales and delivery teams—and throughout the supply chain will be important for success.

Enterprise Solution Requirements
Support for Customer Focus
Integrated systems covering the entire enterprise from sales and marketing to manufacturing and product design teams
Close integration with customer systems to share demand trend data
Integral business intelligence to gain insight from consumer or customer demand data
Supplier sourcing linked to engineering changes to support customers' supplier certification policies
Support for Innovation
Part management and engineering change management shared across the company for precise timing of changeovers
Tracking progress of redesigned products and assemblies through prototyping and testing to ensure compliant versions of products work as previous models
Ability to integrate or share data with customers and suppliers
Enterprisewide systems integrating all departments for close internal collaboration
Sales and product configurators
Support for Supply Chain Excellence
Supplier relationship management
Open architecture to enable fast integration to new suppliers
Demand management capability ideally with multiple inputs
Alerts and updates of material obsolescence and supply or demand problems or changes
Complete track and trace through lot and serial numbers at every level of BOM
BOM and supplier filters to ensure only approved components and suppliers

Figure 1: Enterprise solutions need specific capabilities to support customer focus, innovation, and supply chain excellence.

Many discrete manufacturers are somewhere in the middle of a manufacturing supply chain, providing parts and components to companies facing similar pressures as themselves (B2B manufacturers). Others produce goods for the consumer market and face very different pressures (B2C manufacturers).

In both situations, however, it is important for manufacturers to focus their efforts on providing the goods and services that customers really need and want. B2B manufacturers need to work closely with customers in collaborative partnerships, where it is important that the manufacturer's systems are closely integrated with its customers' systems. The ability to quickly and easily integrate to new systems will therefore be a key differentiator in the ability to win new business.

B2C manufacturers need to keep up to date with the latest trends and fashions, bringing out new products with popular characteristics at precisely the right time. Close cooperation with retailers, where the partners share demand and supply data, helps to keep both partners up to date. For manufacturers, this data can be crucial for spotting consumer trends in time to respond with new products. Marketing teams must keep abreast of the trends themselves with consumer panels and other research. New product introduction teams need timely access to this data to direct their development efforts. Systems that integrate across all areas of the enterprise can have significant advantages.

Both B2B and B2C manufacturers need to analyze the demand data they receive in order to extract the information that new product introduction teams need. Integrated business intelligence solutions can help professionals spot the customer trends that might lead to a new product breakthrough. These solutions can also help manufacturers manage their product portfolios in a way that ensures they provide the customers with what they want, without maintaining obsolete products.

Innovation

Product and service innovation will become a vital way for companies to discriminate their offerings. Coupled with tighter collaboration with customers, this becomes a strong source of competitive advantage. Increasingly, companies must leverage knowledge beyond the product development disciplines and work with suppliers and distributors who can not only support, but increase successful innovation.

In highly competitive markets, companies need to find a way to differentiate themselves from the competition. In the increasingly globalized markets that discrete manufacturers operate in, the most profitable method for differentiating is innovation. This might mean new products to stay ahead of the competition; new processes to bring products to market more quickly, cheaply, or reliably; or new service lines to make your offering more compelling.

Effective, secure customer collaboration is important for new product introduction (NPI), in order to get user feedback into the innovation process. Customer panels help to stay abreast of requirements and trends, but this input is only truly effective if there are efficient systems to incorporate the feedback.

Companies can use modular design to help the customer create a product with precisely the features and options they need. A sales configurator can then guide the customer through the possible product configurations to ensure the product ordered is the best to meet the customer's needs. This process brings the customer into the innovation process, albeit at a late stage.

Cross-functional design teams can produce a shortened innovation time-scale. If production, procurement, sales, and engineering are all involved, then the initial designs are more likely to meet customer expectations, while being easy to make but technically innovative. Systems that can help to bring these teams together in a dynamic fashion will help to speed up the NPI process. It is important that the NPI process is tightly integrated with the demand, operations, and logistics planning processes.

In a similar way, it is worth gaining the input of suppliers and potential suppliers during the NPI process. If a new product requires a new type of raw material, then existing suppliers must source it or new suppliers need to be found. This process will require a secure collaboration environment to enable the manufacturer and supplier to discuss technical specifications, share engineering details and maybe even disclose CAD drawings. Sometimes, the best approach is to co-innovate with partners to get a new product to market much quicker.

Redesigned products and assemblies need to be tracked through prototyping and testing to ensure that compliant versions of products work as the previous models, in order to retain regulatory compliance. Again, multiple disciplines and partners may need to collaborate closely to execute the change at minimum cost and time to market.

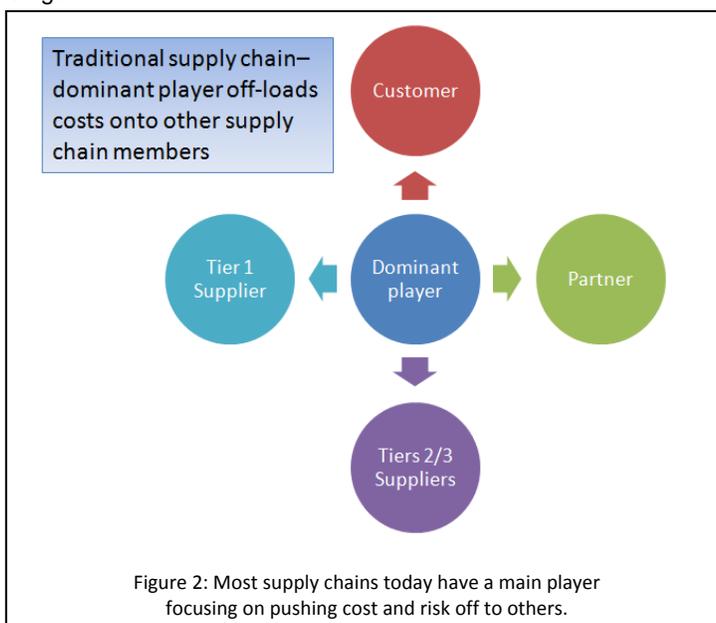
Supply Chain Excellence

Coping with complex, ever-changing supply chains will become the critical operational capability for discrete manufacturers. Improved visibility along the supply chain, closer relationships with suppliers, and better demand planning will enable companies to weather the vagaries of the market. Improvements in the efficiency of the supply chain will bring cost savings that may enable

price reductions or investments in innovation. To compete as a supply chain rather than a single company, lines of communication and collaboration must be strong among partners.

Today's globalized supply chains are extremely complex. As competitive pressures lead manufacturers to find lower-cost suppliers or to offshore more production, supply chains will become even more complex. Companies that can successfully manage those complex supply chains across many different countries will have an advantage over their competitors. On-time delivery to customers at the right price point is an important supply chain metric in highly competitive markets, such as discrete manufacturing.

Enterprise software has so far focused on optimizing the enterprise. Systems are focused to ensure that the company is as efficient as possible, while pushing risk and costs onto other parts of the supply chain, as Figure 2 shows. For the supply chain leader—the dominant player—that strategy has paid off handsomely. For example, the large retailers have continually increased their own profits even as consumer prices come down by squeezing their suppliers. Those price pressures on manufacturers have been systematically pushed along the supply chain at each stage.

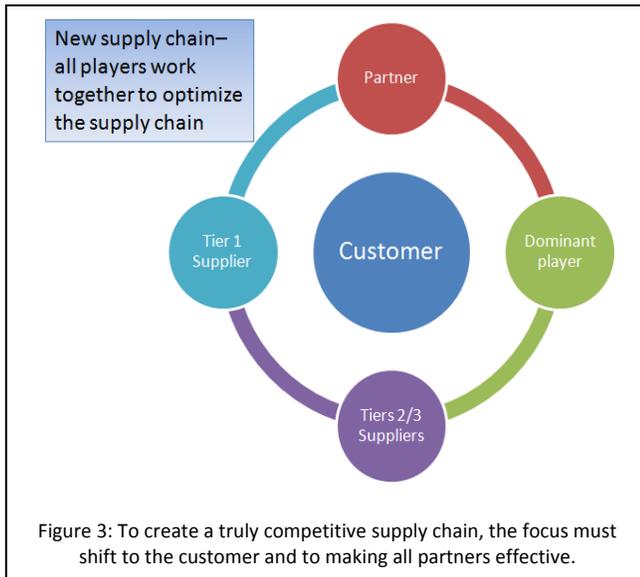


The most efficient strategy is to optimize the entire chain, as suggested in Figure 3. That way, efficiency savings are shared among the supply chain partners, enabling even greater benefit to each. Such a strategy can only truly be effective with close collaboration and cooperation between supply chain partners. Some integration of enterprise systems is required, so that data can flow quickly up and down the chain, allowing each partner to make the right decisions at the right time.

Supply chain excellence comprises key elements:

- Effective integration with suppliers and partners that is quick and easy to set up. As markets change and demand fluctuates, companies need to pass information up and down the supply chain quickly and securely. This flow of data allows demand planners across the supply chain to plan more accurately and respond to changes more quickly. If a new supplier is required, then companies need to be able to set up the supply chain integration quickly and easily.
- Planners receive alerts and updates that allow them to keep the manufacturing facilities running at maximum efficiency. These keep planners abreast of material obsolescence, supply problems, and demand changes. If those alerts can be delivered to mobile devices, then planners do not have to be at their desks to get important updates.
- Collaboration techniques that ensure the manufacturing process runs smoothly throughout the supply chain. For example, product data management and product lifecycle management systems that manage the change management processes can be integrated into the enterprise systems, so that engineering changeovers can be precisely timed and planned accordingly. Some systems provide supplier filters to ensure only

approved suppliers are used in the product innovation process. This ensures that those partner integrations work at their optimum.



Collaborate for Growth

No department competes alone—and increasingly, no single company competes without its partner. So no matter what strategy or combination of initiatives a discrete manufacturer chooses to grow with the economy, they will need to collaborate effectively to succeed. Collaboration must clearly be strong both within the enterprise and with suppliers and customers. That collaboration needs to give all partners an improved view of the demand and supply chains in order to cope with increasingly complex markets. It will also need to provide a true understanding of what customers want and need—and how product innovations can deliver to those needs.

Companies with disconnected or piecemeal systems are at a severe disadvantage. They may not be able to quickly get a grasp of the true situation. Those with ERP systems have a better chance for success. However, those with both ERP systems that support a culture focused on interconnected data and collaboration among disciplines and partners are likely to have an easier time gaining a competitive advantage.

Today's market for products is global, fast-paced, and subject to volatility based on demand, supply, political and natural events, and new competitors and technologies. It offers challenges, but also opportunities to gain traction in emerging markets and new segments. As the market begins to grow, those companies with a clear strategy plus the right ERP systems in place to take advantage of the new opportunities will be able to grow more quickly than their less-prepared competitors.

About Sage North America

Sage North America is part of The Sage Group plc, a leading global supplier of business management software and services. At Sage, we live and breathe business every day. We are passionate about helping our customers achieve their ambitions. Our range of business software and services is continually evolving as we innovate to answer our customers' needs. Our solutions support accounting, operations, customer relationship management, human resources, time tracking, merchant services, and the specialized needs of the construction, distribution, healthcare, manufacturing, nonprofit, and real estate industries. Sage North America employs 4,000 people and supports nearly 3.1 million small and medium-size business customers. The Sage Group plc, formed in 1981, was floated on the London Stock Exchange in 1989 and now employs 13,100 people and supports 6.2 million customers worldwide. For more information, please visit the website at www.SageNorthAmerica.com or call 866-308-2378.

About Cambashi

Cambashi, based in Cambridge UK and Cummaguid, MA, USA provides independent research and analysis of the business reasons to use of IT in industry worldwide. Its specialist fields include Engineering, Enterprise, Plant, and Supply Chain applications and the infrastructure to enable industrial firms to use IT effectively. Cambashi publishes market-size estimates in the Engineering Applications Market Observatory and multi-client studies in Cambashi's Industry Directions. Its clients vary in size from small to large and include most of the leading software vendors and many pioneering IT users. Cambashi is a member of CATN, an international association of consultants. www.cambashi.com

The information contained in this material represents the views of Sage on the issues discussed herein current as of the date of publication. As market conditions are always subject to change, the information contained herein shall not be interpreted as any commitment from Sage. This material is for informational purposes only and Sage make no warranties, expressed or implied.

Sage
6561 Irvine Center Drive
Irvine, CA 92618
Telephone: 866-530-7243
www.SageERPSolutions.com



©2011 Sage Software, Inc. All rights reserved. Sage, the Sage logos, and the Sage product and service names mentioned herein are registered trademarks or trademarks of Sage Software, Inc., or its affiliated entities. All other trademarks are the property of their respective owners.