Executive Brief

Five levels of manufacturing collaboration

How to plan and build an effective collaboration platform for the stringent demands of manufacturing

Highlights

Manufacturers benefit from collaboration when:

- It provides a clear business focus that consumer social platforms lack
- The collaboration system also serves as a knowledge management platform
- It captures transactional data, resources, and assets, as well as social interactions
Why manufacturing collaboration is different

In manufacturing, collaboration is nothing new—it’s always been the norm. Group problem-solving, trouble-shooting, and idea generation serve as many top manufacturers’ most successful sources for generating new opportunities. Today, as manufacturers struggle with shortages of highly skilled personnel, while simultaneously attempting to grow without expanding head-count, the value of shared dialogue and effective collaboration is greater than ever. Workers may need to share tasks, mentor recruits, or take on entirely new roles. In these cases, communication within the workforce increases in importance.

Many people have expressed hope that the booming popularity of new social media platforms would bring enormous value to manufacturers. Unfortunately, consumer-oriented social platforms lack the depth and power suitable to today’s complex, fast-moving manufacturing environment.

The qualities that lead to success in manufacturing revolve around rapid mastery of highly sophisticated processes combining human judgment, precision engineering, and financial accuracy, all united in a highly synchronized framework focused on business goals. The most important collaborative functions include the engineering and design processes, business process integration, real-time financial reporting and analytics, and fully connected manufacturing execution capabilities. A competitive manufacturing company needs constant optimization to retain peak performance and support long term success.

Above all, consumer social media platforms specialize in fundamentally insignificant information. If social media information gets lost, corrupted, distorted, or misdirected, nobody gets hurt or loses money. In manufacturing, risks are real and mistakes cost dearly. Social media’s lack of focus on accuracy, security, and continuity can’t be tolerated in a manufacturing environment.

Top manufacturing executives recognize the value of effective collaboration. In a recent study, The Aberdeen Group found that 43% of manufacturers surveyed expect improved collaboration to yield shorter time-to-market for new products; 29% aim for a better innovation process; and 26% expect collaboration to reduce operational costs.1

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1 The Aberdeen Group, Collaboration in Manufacturing: Making the Remote Expert Local, January 2013

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There’s no substitute for having the right collaborative tool to match manufacturing requirements. The collaboration process needs to be integral to the overall workflow—not an afterthought. The kind of collaboration system that’s most likely to help manufacturers succeed offers a combination of breadth and power so that the entire process is supported, while retaining enough flexibility to allow the business to respond freely to new situations.

Collaboration as a process

Just as a successful manufacturing organization grows systematically over time, the best way to build a complete framework for successful manufacturing collaboration is through a pragmatic, goal-focused approach. Each type of collaboration has its own tools and priorities, and the implementation of each aspect needs enough attention to deliver expected benefits before the implementation team moves on to the next goal.

The most effective strategy for building a successful manufacturing collaboration platform can be approached as a five part process:

1. Collaboration between employees. This is the baseline level of collaboration, the phase most people would call social business. Social business gets ample attention today, due largely to the influence of social media among consumers. For organizations outside the manufacturing industry, especially those whose functions are purely financial or administrative, this level might be all the collaboration they need. But effective manufacturing collaboration requires more than a medium for conversation—you need to structure conversations around business activity and incorporate business transaction information. Otherwise, your collaboration system distracts from business activity instead of advancing your work.
A manufacturing organization is a living organism, with its own institutional knowledge and memory. Much of that knowledge and memory walks out the door at the end of every shift. To make matters worse, some 10,000 baby-boom generation workers retire every business day in the US. While much of that knowledge gets passed along informally over time, informal information sharing has limits. Just as in the well-known “telephone game,” where a whispered message changes completely from the first telling to the fifth or sixth, your key institutional knowledge can stray greatly from its original meaning if it’s not structured and stored.

With Infor® Ming.le™, you get collaboration that’s woven into your business process. Your employee collaboration gets pulled together with information from your ERP system, so that human collaboration functions as a unified whole with your transactional activity. By starting with a business-first approach to social collaboration, you build a foundation for more effective business collaboration later on.

With conversations occurring within the structure of your business system, the content is in context, relevant to the issue at hand, and ready to give you real-time data, so you can react faster. In addition, the integration to the ERP allows broader information sharing along with the ability to store knowledge.

An integrated collaboration system that captures and stores conversations within context of your business processes adds an even higher level of strategic benefit. It allows you to reference information later, add it to account or product files, and pass it along to new employees for training—a valuable capability in light of today’s manufacturing skill gap.

Conversations between workers on personal phones, by texting, or other consumer tools eventually get lost, along with the expertise they contain. In contrast, when you make every conversation part of the ERP framework, you can track, save, share, and catalog it for future reference.

2. Collaboration between systems, resources, and things. Your information systems should collaborate as efficiently as your workers do, using industry standard interfaces that enrich and accelerate your overall business process. That requires a framework for connecting the assortment of different systems, resources, and things you need to keep manufacturing smoothly and consistently. With Infor ION, you get support for integration services, cloud services, mobile services, and advanced reporting services within a single, unified framework. You can incorporate information from business systems and the other resources that are required to conduct business. That includes more than people—it encompasses meeting facilities, critical equipment, and other capital assets in the collaboration process, too. As a result, you get the benefit of running manufacturing-specific software solutions, while gaining the ability to treat your whole collection of systems as a single source of information, addressing all aspects of your business.

3. Design and engineering collaboration. Innovative product development demands an unusually sophisticated level of collaboration, incorporating far greater complexity than shared social conversations. You can get that with an advanced product lifecycle management (PLM) solution. An advanced PLM solution will support the intricate collaborative process you need to successfully manage and plan your entire range of product lifecycle management tasks, including complex engineering information, CAD documents, product structures, change orders, and more. Because Infor PLM solutions function as an integral part of your manufacturing collaboration network, you gain both foresight and insight about how you can manufacture current products more economically, create new products more rapidly, and be sure that your entire product line is succeeding in the marketplace.

4. Vendor and customer collaboration. Efficient vendor partnerships can make or break your business. Just-in-time inventory methods and overnight global delivery schedules require that the channels of communication with your vendors remain open and active at all times. With Infor ERP systems, you get web-enabled vendor self-service portals, so that you and your vendors will know where you stand as you progress toward your

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common goals, while saving time and money. What’s more important, you and your trusted suppliers will be able to compete as a single team and serve your customers better.

In the same way, the customer self-service portals and e-commerce capabilities in Infor manufacturing solutions streamline your sales process and help you satisfy your customers sooner. Above all, Infor ION delivers deep integration between your customer portals, vendor portals, and your manufacturing ERP system, which allows you to match production to demand more efficiently.

5. Collaborative reporting and analytics. You need to build strategy on sound decision making, drawing on information from many different sources. Without a unified, collaborative reporting and analytics framework, you’re likely to spend more time assembling decision-making information than you spend making the decision.

You need sophisticated reports, analyses, and key performance indicators (KPIs) for rapid return of value. You get that with Infor business intelligence solutions, which combine pre-built integrations with pre-configured content and easy ad-hoc report building. In addition, because all the parts of your Infor business intelligence portfolio integrate with each other and with your business systems, you can generate deeper, more valuable reports and analyses than ever before.

As a result, you’ll be ready to transform your entire approach to managing strategic business information. With a fully integrated, end-to-end information solution with industry-specific focus at your disposal, you can turn the data you already collect into a powerful tool for competitive advantage and improved performance.

Pulling it all together

All manufacturers need a richer, broader collaboration architecture that incorporates deeper business functions than newly popular social collaboration tools usually provide. You get a path to the next level of teamwork, a level at which you’ve combined human ingenuity, powerful analysis, and the means to execute strategy rapidly enough to succeed in a rapidly changing business environment with Infor integration and collaboration technologies.