

Advanced Production Management: The New Prerequisite for Success

by Brad Mikes, Managing Partner IPE

Consumer expectations for fast order fulfillment and accurate, timely status updates have become the norm. We're accustomed to Amazon, Uber, Netflix and other digital platforms with their convenience, speed and access to real-time information, all with a quick tap or swipe on a mobile device.



We don't suddenly stop being consumers of technology when we don our professional hats. Those conditioned expectations stay with us. This applies to retailers, brands, OEMs, sourcing managers and other customers who come to your manufacturing business looking for production. It also influences internal team members, from machine operators to plant managers.

This is why advanced production management is so important. It's become a prerequisite for success, an essential competency on a manufacturer's checklist.

To be a contender, you need:

- » Good products
- » Excellent quality
- » Competitive price
- » Experienced management
- » Skilled operators
- » The right equipment for the job, in good repair
- » Compliance with labor laws and environmental regulations
- » Advanced production management for optimal efficiency, communication and visibility.

This last item on the checklist hasn't always been a prerequisite. It was a nice-to-have, not a must-have. But today, it's not enough to have a good product and to know how to manufacture something well. You also need to bring the right information and communications to the table. How quickly can you provide customers with visibility to order status? How long does it take to recognize a bottleneck? How fast can you spot unplanned off-standard events and lower-than-expected productivity by operation? How automated and easy is it to do any of these things? Enter advanced production management.

What Is Advanced Production Management?

Advanced production management refers to leveraging digital connectivity and communication across physical manufacturing resources. Imagine there is a mirror, and it's facing the factory floor, with all of its people, machines, processes, raw materials, work-in-process (WIP) and finished products. Advanced production management technology takes that view and shows users a meaningful, actionable reflection of what is happening within the plant, including key performance metrics (KPI). It also puts that data to work to ensure machine operators are paid accurately and fairly, machines are repaired and maintained promptly, and production lines remain in balance for optimal throughput.

Shop floor control (SFC) technology plays a key role in advanced production management. With real-time SFC, manufacturing information is captured



About the Author

Brad Mikes has spent the last 25 years solving manufacturing challenges through improved business processes and information technology. He focuses this expertise on sewn products, consumer goods, technical textiles, and other discrete manufacturers.

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at the machine workstation, quality checkpoint or other processing step. This is typically done when an associate scans a barcoded or QR-coded bundle. In some cases, data collection terminals automatically read RFID tags as materials and products pass through various steps. The SFC software tracks individual, team and plant productivity, order progress and both standard and off-standard events. All the while, it calculates incentive payroll based on the factory's performance-based pay standards and programs. For example, if a machine goes down, and an operator is waiting for a mechanic, that operator uses the production management solution to alert a supervisor of the problem, which triggers the supervisor to authorize off-standard time for the operator until the machine is up and running again. The SFC solution recognizes when the operator goes off-standard and returns to standard and calculates his or her pay rate accordingly.

Advanced production management enables manufacturers to offer stellar customer service, including not only excellent products but also superior communications, sharing insights to help their customers plan, react and respond to market dynamics. Just as sewn products manufacturers rely on automated sewing, cutting and CAD to replace inefficient or inconsistent manual product development and production methods, they invest in SFC to replace:

- » Needing manual checks to know what is happening within the factory
- » Asking supervisors to count WIP and finished products
- » Calling plant-level staff repeatedly for status updates
- » Waiting for reports to reveal productivity metrics and expose issues
- » Maintaining myriad spreadsheets to track standard piece rates
- » Measuring operator productivity and pay with notes and gum sheets requiring tabulation.

These activities hinder visibility, add costs, lower productivity and slow responsiveness. A recent Inbound Logistics article, "Precision Starts with Visibility," discusses the "unequivocally high" costs of failing to deliver supply chain speed and accuracy. "With such a clouded view into operations, manufacturers and suppliers have no way to know where problems lurk and what improvement is needed," the article stated. "Without knowing the problem, how can you possibly find a solution?"

How SFC Enhances Supply Chain Visibility



The COVID-19 pandemic exposed and continues to aggravate supply chain challenges. Retailers and manufacturers are grappling with shortages, delays and unexpected supply chain issues. In 2020, many businesses found creative new ways to communicate digitally to keep production and orders moving. Now, it's important to keep that momentum. It's time to invest in solutions and processes that make your business a connected, reliable link in the supply chain. Here are ways SFC technology helps.

Gain clearer visibility to operations:

SFC brings issues to the surface right away. If a machine is down and an operator is not able to produce, this issue is recognized immediately so that valuable time and money are not wasted waiting for the problem to be noticed and rectified. Likewise, managers can see at a glance the

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percentage of an order that is completed vs. still in process. They can relay precise updates to customers with minimal time and effort. If the quality control (QC) team flags some items, they can track the problem to the source before the problem proliferates. Also, the factory has a digital record of every machine operator's time worked, incentives earned and overall pay and can supply this documentation as part of compliance reviews.

Respond faster to issues and opportunities: With an advanced production management solution, manufacturers can quickly pinpoint issues impacting productivity or posing the potential to do so. This gives them the ability to address problems, keep customers apprised and meet delivery dates. For example, with real-time SFC, supervisors easily see risks for bottlenecks and can act quickly to rebalance lines. This same agility helps factories seize more orders and new business.

Know your actual costs and productivity rates: When bidding for new business, it's important to have accurate historical data about actual time and resources required to make a style or a similar product. SFC provides this information on actual costs, past productivity and current capacity so that

manufacturers can bid with confidence and accept orders knowing they can deliver profitably on what is promised.

Enable accurate, timely communications about production:

Today's digitally savvy customers, including B2B sourcing managers and buyers, are part of the always-connected, always-on economy. They need supply chain partners who understand the market pressures and give them both the product and information they need to compete. Your factory adds value when you can be a dependable partner for products and reliable, accurate data about your production.

Build resilience and consistency as a reliable source: Manufacturers pull off miracles now and then to save the day for customers or overcome crises. But no one wants miracle-working to be a strategy. Manufacturers need solutions that allow them to deliver repeat successful performances for customers. With SFC, because production information is captured and processed automatically, you're not fighting fires to figure out why orders are behind schedule. You are not scrambling to find answers about order status. Actionable information is always readily available to keep production on track.

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Advanced production management is a prerequisite for success today. Discover how IPE can help your manufacturing business digitize your plant floor, become a stronger supply chain partner and exceed your customers' expectations. Contact us today by visiting www.incentivepayroll.com, calling 864-498-1310 or emailing info@IncentivePayroll.com.