

**IQMS**<sup>®</sup>  
Manufacturing Software

*becomes*

**DS DELMIAWORKS**



**3DEXPERIENCE**

# THE ULTIMATE GUIDE TO MANUFACTURING SOFTWARE INCREASE EFFICIENCY & PROFIT MARGINS

eBook

As of January 2019, IQMS is becoming DELMIAWORKS, joining the global manufacturing powerhouse Dassault Systèmes and its portfolio of innovative brands.

**DS** DASSAULT  
SYSTEMES

## **TABLE OF CONTENTS**

<b>INTRODUCTION.....</b>	<b>3</b>
<b>WHATS IS MANUFACTURING SOFTWARE?.....</b>	<b>4</b>
<b>WHY IS MANUFACTURING SOFTWARE SO HOT TODAY?.....</b>	<b>5</b>
<b>KEY MANUFACTURING SOFTWARE FEATURES.....</b>	<b>6</b>
<b>MAIN ADVANTAGES OF MANUFACTURING SOFTWARE.....</b>	<b>8</b>
<b>EVALUATING MANUFACTURING SOFTWARE’S ABILITY TO HELP YOU GROW.....</b>	<b>8</b>
<b>MANUFACTURING SOFTWARE PROVIDER NEEDS ASSESSMENT/REQUIREMENTS GATHERING.....</b>	<b>10</b>
<b>QUESTIONS TO ASK DURING MANUFACTURING SOFTWARE DEMOS.....</b>	<b>11</b>

## INTRODUCTION

Regardless of where you are in the process of selecting manufacturing software, *The Ultimate Guide To Manufacturing Software: Increase Efficiency & Profit Margins* provides you with insights into the key features, advantages, evaluation criteria you need to make the best decision for your business. One of the most valuable advantages manufacturing software brings to any business is the ability to reflect shop floor performance in financial results and reporting.

You'll also learn how to conduct an effective needs assessment, and requirements gathering phase and get insights into the best questions to ask during software demos to make sure the manufacturing software you're evaluating the best possible fit for your needs.

The goal of this guide is to help you find the ideal manufacturing software for your needs. You'll learn:

- What manufacturing software is and how it can help your business grow, better control and manage manufacturing costs and processes, improve product quality, on-time customer shipments and more.
- Key manufacturing features to keep in mind when evaluating the many alternative software available.
- Insights into the many advantages of manufacturing software today and in the future.
- How to evaluate manufacturing software including needs assessment and requirements gathering.
- The best questions to ask during manufacturing software demos to see how the systems you're evaluating can help your business.

Consider this guide a roadmap for your journey to finding the optimal manufacturing software for your needs, helping you to meet your cost, profit, production, and growth goals.

**Bottom line:** Selecting who you will buy manufacturing software from is, in reality, a search for the best possible growth partner for your business. As you use this Guide, evaluate vendors as potential business partners and their ability to contribute to your goals. Finding manufacturing software providers who understand how unique your business is and the challenges you face are key to success.



## WHAT IS MANUFACTURING SOFTWARE?

Best defined by its many benefits, manufacturing software provides real-time visibility into the details of a manufacturing operation. With greater visibility, manufacturers attain greater control of daily production, machine yield rates, supplier performance, quality, and ultimately, profit margins.

State-of-the-art manufacturing software interprets and analyzes real-time data from machines running on the shop floor, providing invaluable insights into daily operations. The best manufacturing software focuses on how modules in an integrated system can be orchestrated to improve efficiency, quality, and profits continually.

Look for manufacturing software providers whose main focus is on shop floor control and end-to-end visibility. These two factors are the fuel that enables manufacturing software systems to deliver benefits to your business, a few of which are listed below. They're achieved by having a manufacturing system that integrates accounting and finance, manufacturing operations, Manufacturing Execution System (MES), production management, and quality management and control all on the same platform.

- Eliminate unplanned downtime
- Prevent bottlenecks in the manufacturing process
- Operate with near 100% machine utilization
- Optimize scheduling and resource allocation regardless of the plant location
- Have complete unimpaired visibility and traceability of the entire manufacturing process from raw material, through customer delivery
- Comply with quality standards





## WHY IS MANUFACTURING SOFTWARE SO HOT TODAY?

- The global ERP software market is expected to grow from \$32.6B in 2017 to \$61.2B by 2025, achieving a Compound Annual Growth Rate (CAGR) of 8.27% during the forecast period.
- Gartner predicts the ERP market will increase from \$31.4B in 2017 to \$44.3B in 2022, growing at a CAGR of 7%.
- Spending on Manufacturing ERP software worldwide will increase from \$5.87B in 2017 to \$7.26B in 2022.

There's a combination of long-term trends continuing to nurture the growth of manufacturing software. Lead times are becoming shorter, quality and compliance requirements are becoming more complex, and automation is becoming more affordable. The need to compete globally is top of mind for many manufacturers. The long-term labor shortage is also motivating manufacturers to automate more of their operations. All of these factors contribute to manufacturing software growing in importance over the long-term.

A few of the many benefits manufacturing software is providing include the following:

### Audits And Compliance

- Audit every step of the production process and provide that data to customers and regulatory agencies by running a report instead of having to tabulate and format it manually.
- Increase the level of compliance through automated reporting.

### Customer Relationship Management

- Gain new customers by providing more complete, accurate quotes and delivery dates.
- Increase customer satisfaction by meeting delivery dates.
- Reduce order errors by building the right product & delivering on schedule.

### Manufacturing Execution System

- Assure every operator on the shop floor has up-to-date training and certifications.
- Better manage shop floor teams by assigning each team member to a process they are excellent at.
- Create and use work instructions that are tested and shared across the shop floor, reducing costly production errors.
- Increase production capacity with existing machines and staff as part of capacity planning.
- Increase the efficiency of shop floor operations and get more done.
- Measure Overall Equipment Effectiveness (OEE) to improve individual machinery performance.

### Supplier Quality Management

- Improve inbound supplier quality and measure how that improves production efficiency.
- Improve supplier quality levels, so production isn't delayed.
- Use supplier data to improve supplier selection and evaluate their performance to goals.
- Improve overall product quality.

### Production Scheduling

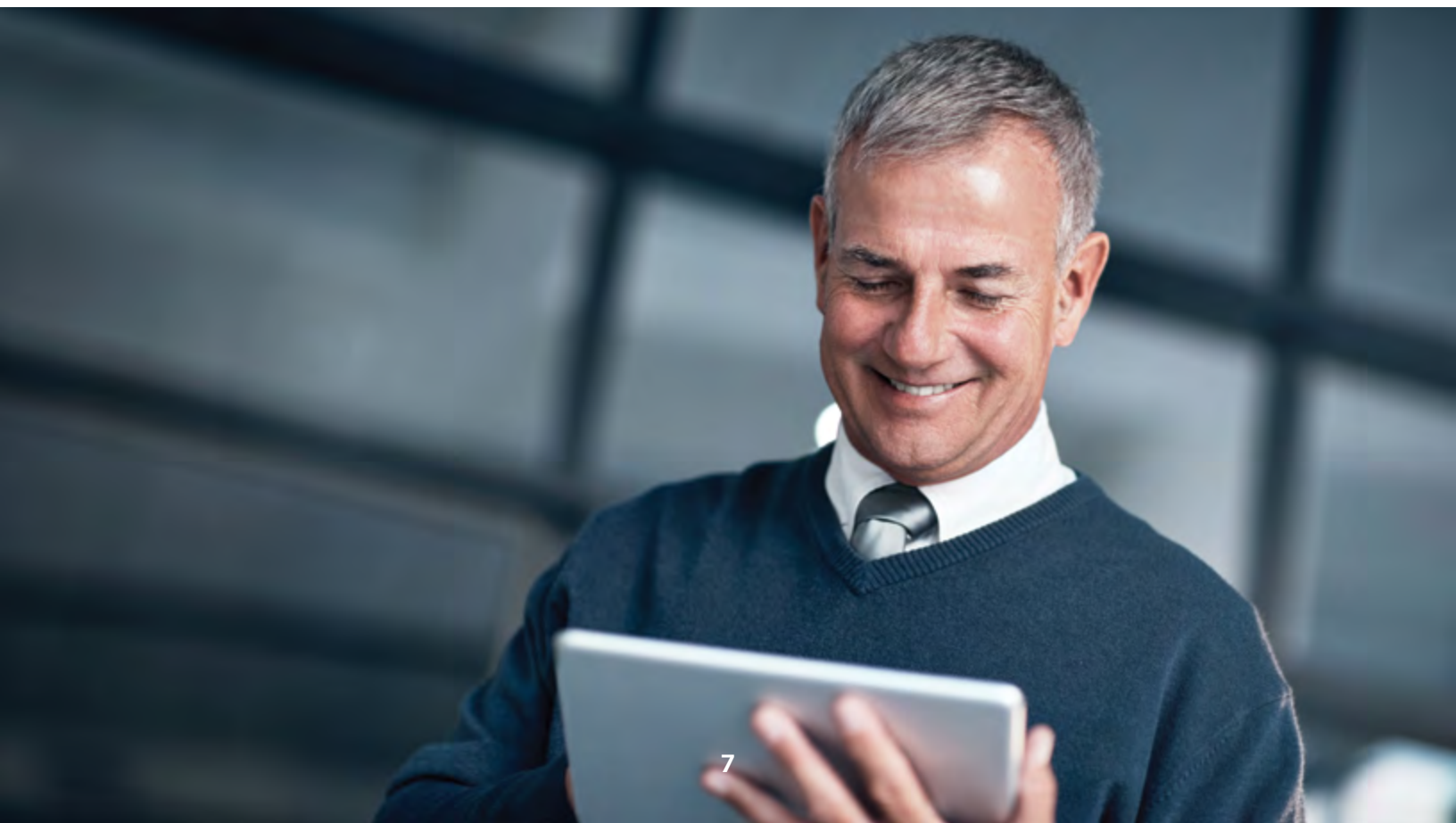
- Update production schedules in real-time instead of only a few times a week.
- Find out which areas of manufacturing operations need attention before a problem occurs.
- Improve inventory management and costs.

## KEY MANUFACTURING SOFTWARE FEATURES

Of the many features in manufacturing software, the following are among the most proven in delivering valuable results. When evaluating manufacturing software providers be sure to ask about each and for examples of how they've helped manufacturers like yours achieve their goals in each of these areas:

- **An integrated financial reporting system that provides a broad base of reporting that includes sourcing, production, inventory, and fulfillment costs while creating financial statements for senior management in real-time.** Not being able to see the financial impacts of their decisions on the supply chain, production and services costs is why the majority of manufacturers choose a new manufacturing software system. Many begin to see their internal accounting systems including QuickBooks become overwhelmed with the volume of transaction and manufacturing data produced. The best manufacturing software systems can track how changes in production scheduling, planning, supply chains, and production workflows impact financial performance. At a minimum the system needs to support cost allocations, job costing, Accounts Payable, Accounts Receivable, Payroll, bank reconciliation, and fixed asset accounting.
- **A Customer Relationship Management suite designed to capture, analyze and aggregate data from the many interactions channels, sales, service, and support have with prospects and customers daily.** Having in-depth records of every customer including what marketing campaigns led to their first purchase, products they own, sales history and key contacts are invaluable. Look for CRM suites that include comprehensive support for customer and prospect information, including the ability to see what products were purchased when. Pipeline Management is essential for managing sales strategies, and Marketing Campaign Management, for evaluating which marketing campaigns are the most effective. Many CRM suites also include Customer Service Management, enabling you to track open and closed support and service calls, call metrics and the ability to track services calls by problem or issue area.
- **Inventory Control and Management that can scale from a single to multi-site configuration quickly.** Managing inventory levels across a warehouse or entire supply network is an essential part of any production operation. At a minimum, the Inventory Control and Management module needs to support reorder point calculations and alerts configurable based on replenishment points and product order levels. Minimum features also include order quantity, lead demand, stock cover and order accuracy analytics.
- **A broad, industry-relevant Enterprise Resource Planning suite that delivers measurable benefits with little if any customization.** Manufacturing software providers often concentrate on a specific area of the broader manufacturing market, developing deep expertise solving problems specific to their customers. One of the areas this expertise is evident in manufacturing software providers is in how they approach Enterprise Resource Planning including Requirements Planning, Master Production Schedule (MPS), Capacity Planning, Bill of Materials, Shop Floor Control and Project Management. These are the core areas of a manufacturing software system and are integrated with Quality Management, Manufacturing Execution System (MES), Supply Chain Management (SCM) and most important, financials and accounting.
- **Manufacturing Execution System (MES) that excels at four foundational areas, delivering greater accuracy, agility, product quality, and scalability.** For an MES to deliver the performance a manufacturer needs it to, four foundational areas need to be present in the software. These include support for creating an accurate Bill of Manufacturing (BOM). Second, Planning and Scheduling, capacity and load analysis on equipment and labor, Finite Scheduling, and Demand Planning is needed. Third, look for Shop Floor Control System support including integration to the production planning system and Real-Time Production Monitoring. Fourth, an excellent MES will also provide entirely paperless production reporting, supports real-time reporting, shop data support, production reporting and Quality Management. Look for an MES that supports gauge calibration and integration, real-time Statistical Process Control (SPC), Document Control, Inspection Setup, and gauge integration and calibration. Many also have extensive audit capability as well.
- **Integrated Supply Chain Management (SCM) system that provides the ability to manage suppliers, improving inbound product quality while reducing order latency and improving customer satisfaction.** Supply chains and the suppliers that comprise them are the lifeblood of any manufacturing business. Managing them effectively takes a unique series of applications and insights to reach and attain excellent product quality and delivery accuracy. At a minimum any SCM system needs to support demand planning, logistics and transportation management, procurement and sourcing, supplier quality management, supply chain planning and have the flexibility of supporting a variety of fulfillment scenarios. Be sure to ask if the SCM system supports Electronic Data Interchange (EDI). In many areas of manufacturing including automotive, EDI is a prerequisite for doing business.

- **Analytics and Business Intelligence (BI) applications that integrate with production, financial and sales data to provide manufacturers a 360-degree, drill-down view of all operations.** Finding out which production areas will provide the greatest increase in product quality begins by analyzing incoming inspection, ongoing machinery yields, and audit outcomes. Analytics and BI applications integrated into a manufacturing software suite are gleaned actionable insights from all quality-related data daily. Manufacturers are creating and following quality roadmaps based on the insights gained. Analytics and BI applications are also actively being used to track and provide insights into how to improve Statistical Process Control (SPC), reduce inventory costs, improve Maintenance, Repair, and Overhaul (MRO) efficiency for production machinery, and alleviate production delays.
- **Provides a choice of deployment options that adapt, scale and support your business' ongoing operations.** Evaluate manufacturing software providers on the results their customers are achieving based on each deployment option they offer. Leading providers will offer manufacturing software on-premise, using hosted managed services or via Software-as-a-Service (SaaS). They're providing their software on these three platforms to give you the flexibility of choosing the best one for your specific requirements and goals. Check customer references on each platform to see the results manufacturers from your industry are getting.
- **Real-time monitoring provides the insights needed to improve shop floor productivity, improve product quality, to enable greater growth.** Discovering how a lights-out manufacturing shift can be accomplished with existing machinery and understanding why scrap rates are above average on a given production line are two of the many benefits real-time monitoring provides. According to a recent survey by Decision Analyst, ***Shop Floor Productivity Investments That Drive Manufacturing Growth*** plastics manufacturers have the highest real-time monitoring adoption rate at 74%. They're driven by the need to reduce scrap, increase yields and meet delivery dates. The survey also found that just over half of all manufacturers, 53%, are using real-time monitoring to improve production efficiency as measured by order cycle times. 51% are relying on real-time monitoring to track a variety of shop floor productivity metrics including yield rates by machine.
- **Proven expertise in your specific manufacturing industry and customer references willing to share experiences.** Third party review sites including Capterra, G2 Crowd, and others have reviews of manufacturing software from users who've implemented them. It's a good idea to go a step further and speak with customer references for the manufacturing software vendors you're interested in acquiring software from. If possible, attend a user conference and spend time talking with customers there. You'll get a very good sense of how well the manufacturing software you're looking at can scale to meet your specific needs.



## MAIN ADVANTAGES OF MANUFACTURING SOFTWARE

### Gain Greater Visibility and Control into the Financial Aspects of Manufacturing

One of the most valuable advantages manufacturing software brings to any business is the ability to reflect shop floor performance in financial results and reporting. Another advantage is the greater visibility and control into every area of manufacturing operations. Look for those manufacturing software applications that can provide insights into how shop floor operations influence financial results. Best-in-class manufacturing software will have accounting and financial modules integrated with master planning and scheduling, the Manufacturing Execution System (MES), supply chain, product quality, pricing, and other modules. Ideally, the manufacturing software needs to reside on a single database to enable the greatest visibility and control possible. A good manufacturing software system will have a strong set of financial reporting applications or features that integrate across all production operations, extending to Customer Relationship Management (CRM) modules and application integration points. Many manufacturers migrate away from QuickBooks to manufacturing software for the many financial reporting advantages manufacturing software provides.

### Improved Capacity Planning and Scheduling

When capacity planning and scheduling get too complex for Microsoft Excel spreadsheets and workbooks, it's time to consider manufacturing software. Achieving greater coordination, collaboration and communication across manufacturing is one of the many factors that drive manufacturers off of running their operations with Microsoft Excel and onto manufacturing software. Advanced manufacturers often use manufacturing software workflows to balance capacity planning and scheduling based on forecasts and orders. Balancing inbound customer demand and meeting order shipments dates makes capacity planning and scheduling a must-have in any manufacturing software system.

### Greater Pricing Accuracy and Profitability

By integrating cost-based and accrual-based accounting workflows into the core areas of a manufacturing software system, it's possible to see exactly how pricing decisions impact long-term profits and the ability to compete. When a manufacturing operation is running on Microsoft Excel, it's common for there to be limited if any visibility into how production decisions are impacting gross margins and profits.

### Improve Supplier Quality and Delivery Performance

When production operations are being run using Microsoft Excel or QuickBooks, Supplier Quality and Quality Management systems don't have the option of sharing their data and tracking the Costs of Quality. That's what makes using manufacturing software so effective in increasing efficiency and potentially reducing the costs of bad quality. When manufacturing software is integrated across production operations, it's much easier to see the impact of decisions on overall quality and compliance performance. An integrated manufacturing software system makes it possible to gain insights into quality and compliance and then propagate that knowledge and information across all departments, making quality a shared goal instead of just one department. Best-in-class manufacturing software systems can deliver these insights and galvanize a company around shared quality goals.

## EVALUATING MANUFACTURING SOFTWARE'S ABILITY TO HELP YOU GROW

Selecting the best possible manufacturing software for your company needs to begin with a roadmap of the features most valuable to you. Using the following list of 21 modules and their features, rank them from A to C with A being the highest priority. This is the beginning of your manufacturing software roadmap. Grouping your A, B and C selections provides you with a framework to begin evaluating manufacturing software providers.

There are several excellent reasons for doing this. When meeting with prospective manufacturing software business partners, you'll be able to clearly and efficiently explain what your specific expectations are. Second, manufacturing software providers can be quickly ranked based on their support for you're a, B and C priority requirements. Third, you'll get a sense of the level of spending you'll be looking at based on which modules are the most important to you. Fourth, you can save a lot of time on product demos from software providers by explaining how your unique set of priorities need to integrate to create a unified workflow – ideally on a single database. Let's get started building your manufacturing software roadmap:



<b>PRIORITY RANKING (A, B OR C)</b>	<b>ERP</b>	<b>FEATURE &amp; BENEFIT DETAILS</b>
	Financial Accounting	General ledger, fixed asset, payables receivables (cash application and collections), cash management, budgeting, costing
	Order Processing	Order entry, credit checking, pricing, available/capable to promise, forecasting, sales analysis
	Material Resource Planning	Production Planning, resource planning, scheduling, inventory control, purchasing
	Supply Chain Management	Planning, supplier scheduling, product configurator, purchasing, inventory, claim processing, warehousing
	Electronic Data Interchange (EDI)	Electronic interfaces for customer and suppliers, POs, shipping notification, invoices
	Warehouse Management	Receiving, put away, picking and packing
<b>MES</b>		<b>FEATURE &amp; BENEFIT DETAILS</b>
	Product Definitions	Version control and exchange master data focused on defining how to make a product
	Production Scheduling	Production schedule, work orders, production requirements, received from ERP to make optimal use of resources
	Production Dispatch and Execution	Distribution of batches, runs and work orders, adjustment to unanticipated conditions. Checks on resources and informing other systems about the progress of production processes
	Process Monitoring	Collection of process data, equipment status, material lot information and production logs in a data historian. Performance analysis of raw production data. WIP overviews, period production performance, overall equipment effectiveness or any other performance indicator. Track and trace. Registration and retrieval of information that presents a complete history of lots, orders and equipment parameters that can feed a statistical process control module
	Digitizing, Audit & Quality	Digitizing log data with edit lock, also pulling data from the supervisory control and data acquisition system into the common databank. Audit utilities to evaluate and document performance and events. Statistical quality control tools
<b>CRM</b>		<b>FEATURE &amp; BENEFIT DETAILS</b>
	Customer Information	Company and contact information, sales history, contact history, open and closed opportunities
	Prospect Information	Company and contact information, contact history, open and closed opportunities
	Pipeline Management	Ability to report the value and likelihood of open opportunities
	Marketing Campaigns	Ability to create and track email campaigns
	Customer Service Management	Company and contact information, open calls, closed calls, call metrics, ability to track service calls by issue type
<b>TECHNOLOGY PLATFORM</b>		<b>FEATURE &amp; BENEFIT DETAILS</b>
	Single Database	All sub-systems run from one database and one native body of code
	Real-Time	Information flows through the system in real time. There are no batch updates
	Ability to Manage Multiple Locations	Total cross-location visibility of all information in real time
	Business Intelligence Reporting & Dashboards	Standard reports, reporting writing, ad hoc queries, summary dashboards and alerts
	Ability to Scale Users	Ability to maintain performance within broad user, load and storage parameters

Congratulations! You have a framework or roadmap to guide your selection of the best manufacturing software for your business.

Use the features in the A group to start evaluating which providers are the best fit for you. As you meet with each of them, see how well each can scale to support your B and C priorities. Consider how you can create a roadmap from these priorities to share your long-term vision of what manufacturing software can do for your business across your organization.

## **MANUFACTURING SOFTWARE PROVIDER NEEDS ASSESSMENT/REQUIREMENTS GATHERING**

Every manufacturing business has a unique set of needs, so the first step in a software selection project is to create a checklist of what your company needs most from a manufacturing software system. There are hundreds of criteria to choose from, but the framework can be broken up into five main categories:

### **Integrated Financial and Operations Reporting**

Being able to track how production and manufacturing decisions impact the overall financial performance of a company is critical to staying profitable and growing. The most important needs assessment item manufacturing companies need to look at is how each manufacturing software vendor is providing financial reporting and analysis from the shop or production floor to the top floor. This involves taking the massive amount of data generated on the production floor daily, interpreting it and then generating financial metrics and key performance indicators (KPIs) that reflect the financial health of a manufacturing business. Specific features to look for in this area include Accounts Payable, Accounts Receivable, General Ledger, order entry, job costing, and support for credit card processing, support for multicurrency if your company is operating in multiple regions, and consolidated financial reporting. Also, the financial reporting aspects of any Manufacturing software needs to support EFT direct deposit, Payroll, Document Management, Fixed Asset Accounting and support for compliance and quality management support across workflows.

### **Integrated Master Production Schedules and Execution System**

Being able to track how individual orders are progressing through production, seeing how variations in order quantity and complexity impact production costs and modifying the relative resource loads by each production cell are all possible when Master Production Schedules and Manufacturing Execution Systems (MES) are integrated. By integrating these systems during system implementation, production teams will have the latest build plans, work instructions, and the latest production scheduling information down to the cell level in time to staff them with the best possible teams. Today the best-in-class manufacturing software systems have these two workflows integrated and based on a common database, further making data integration and reporting more streamlined and accurate.

### **Advanced, Flexible Role-based Workflow Designs**

Role-based workflows are the new normal in advanced manufacturing systems with many providing templates and guides for getting started. This is especially useful for manufacturers who are transitioning from legacy, home-grown ERP systems to the latest generation of manufacturing software systems and platforms. Being able to define and implement entirely new products into production, having quality assurance checkpoints throughout the process, and creating alerts and notifications unique to the processes most important to production is all possible with role-based workflow design.

### **Intuitive, Easily Learned and Customized User Interfaces**

Manufacturing software systems must be easy to use and configure to operators on the production floor, yet agile and intuitive enough to summarize metrics and KPIs to the senior management level. For operators, there's the need to have work instructions clearly and graphically communicated, so each step in the production process is clear and attainable. For senior management, the need for dashboards that scale to support current and future analytics, business intelligence, and key financial metrics are also essential. As manufacturing software companies serving multiple industries strive to improve the user experience and user interfaces of their applications, the most challenging moment for many of them is making the individualized screens make the person's using them job easier.



## QUESTIONS TO ASK DURING MANUFACTURING SOFTWARE DEMOS

### Where and how do I start my evaluation of manufacturing software providers?

The most important criteria for evaluating any manufacturing software provider is whether they have previous experience with your industry's specific requirements and unique needs. Be sure to ask for examples of customers who are live today using their software to solve comparable industry challenges. If at all possible, go and visit customer references and walk the factory floor to see how their specific implementation of a manufacturing software system is performing. Also, ask to see how the technicians working on the shop floor use the workflows and screens to complete tasks and move products on to the next cell or area of production. Based on all these activities a vendor should be able to produce a workflow that reflects how their customers are using their systems to streamline shop floor activity and reflect those gains on the financial statements of the company itself. All of these workflows should also be auditable and reflect transaction history over time.

### Can you provide an example of discrete, mixed mode and Engineer-To-Order (ETO) workflows all within the same manufacturing location?

Manufacturers are continually striving to create new projects into products, taking the unique and differentiated customized product configurations and turning them into product lines. At the same time, manufacturers need to support mixed-mode manufacturing strategies, all from the same plant floor. Ask to see workflows that provide for mixed mode and highly customized or Engineer-To-Order (ETO) production sequences using standard and non-standard inventory items. This will tell you how well the manufacturing software providers you are speaking with can scale across multiple manufacturing processes and strategies.

### How quickly can a new product be defined in your ERP system from the Bill of Materials level through work instructions?

For many manufacturers competing in complex, fast-moving markets, they need to quickly create new Bill of Manufacturing (BOM) and define workflows to the work instruction level. The greater the compliance in a given industry, for example, aerospace and defense, the more important this becomes. Ask to see how this workflow is handled for make-to-stock, mixed mode, and highly customized ETO-based products. In addition to finding out if the vendors you're speaking with can handle this level of unified workflow for defining products, it will also help to see how well the BOM functions are integrated across the entire production floor. While many manufacturing software providers are capable of doing this, it's interesting to see how easy or difficult the overall process is. Only by seeing a demo and asking these questions will that come out.

### How can the manufacturing teams make use of the data available within the manufacturing software system?

There are many uses of manufacturing software information across the production floor of a business. Look to see if the manufacturing software providers you are evaluating mention Bill of Materials (BOM) management, quality ratings by suppliers, inventory position by part, production scheduling, manufacturing execution system (MES) support and backlog management.

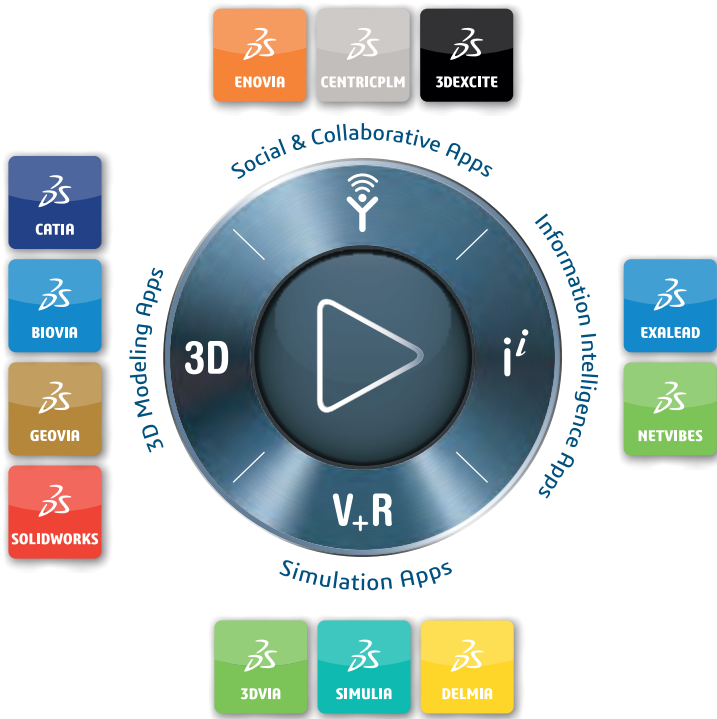
### How do you enable sales and service teams to see reports from your manufacturing system?

Sales and service can run reports to find out which customers' orders shipped, are in backlog and which are just getting done by production. Service can also provide Return Material Authorizations (RMA), track repairs, returns and see when backorders are going to be released, and more. Having this information at their fingertips enables sales and service to be more responsive to customers. It also makes upselling new products and services more efficient because sales and service teams can see what additional products customers may need. In advanced manufacturing software systems, sales management can see what pricing programs are working the best and also collaborate with marketing on new selling strategies, immediately seeing what's working or not.

### Will it grow with my business?

If you're investing in manufacturing software, you don't want it to be obsolete in a year. Plan to implement software that will last at least ten years. Manufacturing software needs to be scalable, and your relationship with the software provider more of a business partnership. Find out what the limitations are on the scale and reporting capability of your system so you can make an adequate decision about whether the software is right for you.





Our **3DEXPERIENCE®** platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3DEXPERIENCE®** Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 210,000 customers of all sizes in all industries in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).

**Americas**  
Dassault Systèmes  
175 Wyman Street  
Waltham, Massachusetts  
02451-1223  
USA

**Europe/Middle East/Africa**  
Dassault Systèmes  
10, rue Marcel Dassault  
CS 40501  
78946 Vélizy-Villacoublay Cedex  
France

**Asia-Pacific**  
Dassault Systèmes K.K.  
ThinkPark Tower  
2-1-1 Osaki, Shinagawa-ku,  
Tokyo 141-6020  
Japan

**DASSAULT SYSTEMES** | The **3DEXPERIENCE®** Company

For more information, please visit [www.iqms.com](http://www.iqms.com) or call 1.866.367.3772

© 2019 Dassault Systèmes. All rights reserved. **3DEXPERIENCE®** the Compass icon, the 3DS logo, CATIA, SOLIDWORKS, ENOVIA, DELMIA, SIMULIA, EXALEAD, 3D VIA, BIOVIA, NETVIBES, iVUE and 3DEXCITE are commercial trademarks or registered trademarks of Dassault Systèmes, its subsidiaries, its affiliates, or its licensors. Other trademarks are owned by their respective owners. Use of any Dassault Systèmes or its subsidiaries trademarks is subject to their express written approval.