Acumatica
The Cloud ERP

True Cloud vs. Fake Cloud: How Manufacturing Companies Can Tell the Difference

Section A

Synopsis

Your manufacturing firm needs real-time visibility into sales, order management, inventory, purchasing, production and services—and accounting information. Cloud solutions can help, but only if they're built the right way. Before you consider implementing a cloud manufacturing ERP solution, take the time to find out what constitutes a true cloud solution, and what distinguishes it from the many fake cloud solutions on the market. This whitepaper shows you how the cloud can enhance productivity for manufacturers and gives you eight reliable ways to identify true cloud manufacturing software.

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Why Mobile Devices Alone Can't Meet the Need for Real-Time Information

Section B

Manufacturing and the Cloud Delivery Model

When it comes to growing your manufacturing business, speed is the name of the game. Your bottom line depends on your ability to exploit new business opportunities before your competitors do—and to keep your sales, service, purchasing, production, and management teams moving so that your service levels remain high and your customers stay happy.

But it's hard to move more quickly when your business is becoming more complex each year. Your supply chain encompasses a staggering array of raw materials, and they're now coming from all corners of the globe. Due to unpredictable customer demands, your product shelf life is shrinking and you must keep innovating to protect your market share. And with skilled labor so hard to find, you may need to rely on a wide range of teams made up of employees who have varying levels of computer skills.

When technology capabilities increase, customer expectations tend to increase at an even faster rate. Customers now assume that key team members working anywhere will have complete project information at their fingertips.

Like any business, your company must keep close track of its finances. But every decision you make on the shop floor or in the field is closely tied to accounting—and every accounting decision requires heavy input from the shop floor, sales, and service. Wherever your employees are working, they need speedy access to all the information that's relevant to the decision at hand.

For decades, customers and suppliers understood that most decisions couldn't be made on the spot. After all, most manufacturers have operations in multiple time zones, with executives and shop floor staff working at different ends of the day. Any major decision would require a "huddle" at headquarters, and staff would have to wait for their marching orders. But with the advent of mobile devices, customer expectations in every industry have increased.

Customers and suppliers now assume that any member of a manufacturing organization will be able to get their hands on the

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True cloud software supports all mobile devices without requiring additional software. However, just being mobile doesn't provide the benefits you need to compete.

latest order status, production, and service data from anywhere. Mobile technology has certainly streamlined communication for manufacturers—but they still lack the real-time visibility they need to answer a question or make a critical decision, due to several key obstacles:

- Detailed data for most manufacturing companies still lives in a legacy MRP system. The most forward-thinking firms may have upgraded to a system with some online capabilities. But in either case, decision-makers can only access data by way of a standalone app.
- Legacy accounting systems may lack manufacturing-specific functionality. Manufacturing firms are forced to use point solutions to streamline and automate their most common business processes. Their customer relationship management (CRM), accounting, distribution, and manufacturing systems will only talk to each other by way of custom integrations that are cumbersome and expensive to maintain. Even in the best of scenarios, most business data will be difficult to access from the field.
- Manufacturing teams now have access to a wide range of apps that streamline tasks and deliver relevant information throughout manufacturing processes. These apps allow teams to optimize inventory, plan shift schedules, manage customer changes, and more from any location, inside or outside the organization. But the apps don't talk to each other, which means teams must log onto multiple apps every time there's a problem or question. Lacking a complete view of any business issue, teams must assemble the pieces of the puzzle.

In recent years, software vendors have attempted to address these challenges by offering hosted or cloud solutions. Cloud manufacturing solutions are installed in one central location and accessed by an extended team on desktop computers, laptops, or mobile devices. The cloud delivery model does lend itself well to meeting the needs of a manufacturing team that's dispersed across one or more shop floors. But before you try to solve your team's biggest productivity challenges in the cloud, you should know what distinguishes one cloud solution from another and which features and capabilities are most important.

Four Ways the Cloud Can Enhance Productivity for Manufacturing Companies

Section C

Enhance Productivity with the Cloud

Why does the cloud hold so much promise for manufacturers? Because when cloud technology is deployed to its fullest potential, it can remove the biggest obstacles to productivity at all stages of the business. The right cloud solution can do this in four ways.

1. Delivering broad and deep functionality

As we mentioned earlier, manufacturers are doing business in a highly complex environment. Yes, other businesses also must perform accounting functions, deliver cost estimates, manage their workforces, and so on. But manufacturing firms also need a wide range of specific functionality. This makes sense when you consider that most enterprise resource planning (ERP) vendors have to offer specialized versions of their products for manufacturers, and most manufacturing software firms don't sell their products to businesses in other industries.

The right cloud manufacturing solution will offer industry-specific features such as:

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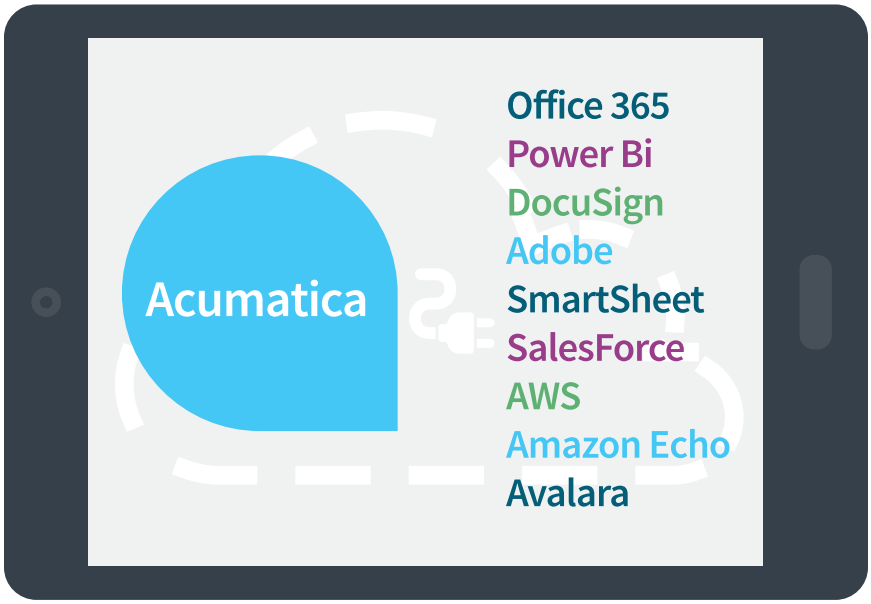
2. Streamlining integration

While it's technically possible to create one-to-one integrations for your various manufacturing applications, you can save a great deal of time and money by working in the cloud. When you choose the right cloud ERP system for a manufacturing company, that platform will serve as the hub for all your business applications, connecting your software, data services, and equipment. You can use the vendor's prebuilt integrations to connect most of your apps and systems, and then use your IT budget strategically to build any custom integrations you still need.

The right cloud ERP solution will offer integrations that can help you:

- Streamline order processing from every channel.
- View calculated material requirements and create schedules and work orders to meet demand.
- Manage and sign documents digitally.
- Streamline document management
- Implement warehouse automation.
- Support multi-carrier shipping and automate shipping rules.
- Automate transportation management and freight fulfillment processes.
- Manage human capital and payroll.



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3. Removing your security burden

Back in the file folder days, data security was a matter of locking your file cabinets and installing an alarm system at your headquarters. When manufacturing businesses began to adopt digital processes, the security challenge expanded to encompass password protection, virus scanning, malware protection, and so on. In today's increasingly mobile business environment, cybercriminals have seemingly limitless points at which to attack your network and steal your business data.

Even in light of the serious threats to your systems and data, avoiding mobile technology isn't an option. To do so would hamstring your competitiveness. But attempting to protect your systems using your own resources could be risky. Most manufacturers don't employ large IT staffs—and staying ahead of ever-evolving cyber threats requires constant vigilance.

A good cloud ERP solution for the manufacturing industry will provide you with the highest levels of data security. Think about it: no reputable cloud ERP vendor would skimp on security and risk being put out of business by a serious breach. It's in your vendor's best interests to make security a priority—and it's to your benefit to take advantage of this protection rather than try to build your own.

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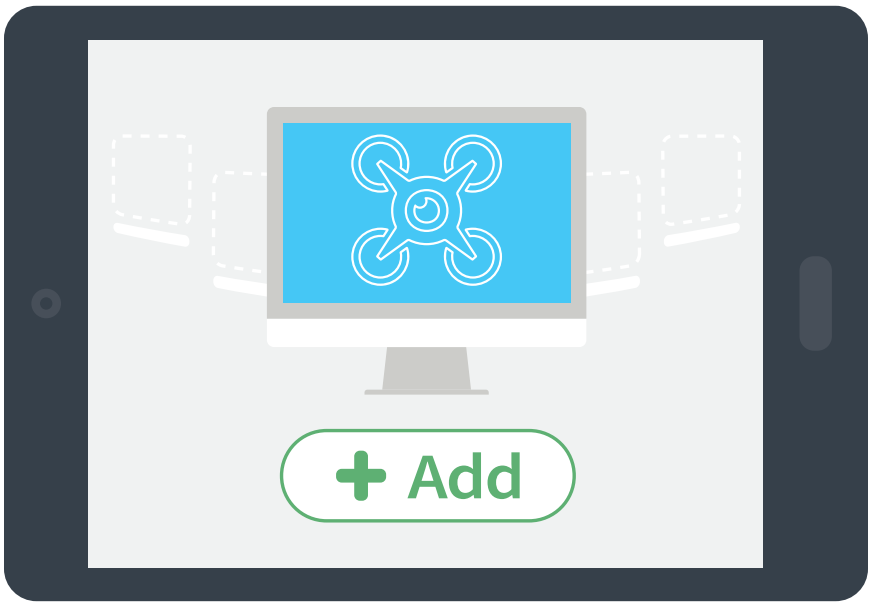
4. Making it easier to incorporate emerging technologies

What's next on the horizon for the manufacturing industry? Just about everything you could imagine. The Internet of Things (IoT) continues to take hold in every industry that uses machinery. Manufacturers are starting to see the value of connecting their machinery to computers—both to gather data that will help them optimize usage and to enable the predictive maintenance that prevents downtime. With IoT technology, virtually every aspect of manufacturing can be measured and reported upon.

Cloud ERP software can serve as the hub for collecting and analyzing this information. It can also serve as a hub for the increasing number of robots on the typical shop floor. Even growing manufacturers are now investing in robotic technology as a means of increasing productivity and reducing costs over the long term. The right cloud ERP system can help you track and report on the output and status of robotic devices.

Manufacturing innovation won't stop there. 3D printing continues to make inroads as a speedy way for manufacturers to create custom products. And global supply chains make it possible for manufacturers to get their hands on breakthrough materials that can help them increase product quality while reducing costs. A good cloud ERP system helps you monitor the movement of raw materials worldwide and connect your supply chain performance to your bottom line.



Not All "Clouds" Are Equal

Section D

Not All Clouds are Equal

At the birth of enterprise resource planning (ERP) in the late 1990s, many ERP vendors that are still around today began running their solutions on minicomputers. The next decade saw a movement from distributed minicomputers to a client/server model in which personal computers (PCs) communicated with separate servers. All of these platforms provided businesses with only limited access to their systems. Now that internet access has become commonplace, today's employees, customers, and suppliers expect to access their information anywhere at any time.

Fake cloud software occurs when legacy applications are adapted and hosted on the internet, but never truly designed to be delivered and used via the cloud.

But in the rush to meet this need, most legacy ERP vendors didn't update their applications to be true cloud solutions. In some cases, they moved their legacy software onto a server where they "host" it and provide access over the internet by way of adapter software. This is not true cloud software; it's fake cloud software.

These legacy applications were never designed to be delivered and used via the internet. Here are a few reasons:

- Some require specialized software for access, so the system has limited availability.
- The user interface cannot be personalized by each user. It requires the assistance of a trained programmer.
- The legacy solutions were written in tools and techniques that are not relevant today, and the expertise to modify them is becoming scarcer and more expensive.
- Legacy ERP software may use proprietary tools to integrate third-party applications, making it difficult to communicate with other applications.
- The systems often lack technology tools such as virtualization and load balancing to provide scalability. This restricts system performance.

For all these reasons and more, fake cloud solutions will increase long-term ownership costs and hinder business process improvements in the future.

Section E

True Cloud For Maximum ROI

Eight Ways to Identify True Cloud Manufacturing Software

Even after you've identified what seems to be a viable cloud ERP solution for your manufacturing company, be aware that not all cloud solutions are created equal. Many fall short by not offering a feature or characteristic that's easy to overlook.

Here are eight things your cloud ERP solution must offer:

1. Full functionality and reporting offered on common mobile devices as well as on the desktop.

Don't settle for one of the many solutions that only offer a scaled-down app for mobile users.

2. Personalization.

You should be free to customize your dashboards, reports, and workspaces to the needs and preferences of your workforce.

3. Full integration of spreadsheets, data services, apps, and equipment.

Your cloud ERP solution should "meet you where you're at" by allowing you to connect all your current tools to the system. Don't settle for a solution that will force you to rekey years of data before you move forward.

4. Software that was built using modern, commonly available tools and standards.

If the vendor is not clear about how the software was written, what tools were used, how it will be customized, and how it will be integrated with other cloud systems, then you can assume they're not using current techniques, software tools, and standards.

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5. The ability to pay by resource usage, not by the user.

Most ERP software vendors charge you extra for every user you add to the system. This is particularly unfair to manufacturing companies, which often need to add large numbers of occasional users to their systems. Look for a vendor that only charges for the computing power you actually use, regardless of your number of users.

6. Industry-standard security.

Your vendor must protect your data in a data center that meets the highest data and access security requirements. It should be a large, well-known facility that has the necessary resources for load balancing, backup and recovery, and security.

7. Deployment options.

For many manufacturers, deploying ERP in the cloud and letting their vendor host it is the most cost-effective and secure option. But your company may be different. If so, look for a vendor that also gives you the option of deploying on your own servers.

8. Easy upgrades.

Legacy software was painful and costly to upgrade because you had to rewrite all your customizations for the newest version of the software. A good cloud manufacturing solution will upgrade quickly and easily without disruption to your business. In fact, in a true cloud SaaS model, the software provider handles all of that for you.

See True Cloud Manufacturing Software in Action

Section F

Summary

As you evaluate cloud manufacturing solutions, consider what Acumatica Manufacturing Edition has to offer. This full-featured manufacturing ERP delivers the complete, real-time information you need to coordinate your labor, machines, and inventory in ways that optimize your business processes.

To get a custom demo from our manufacturing industry veterans, contact us today.