Mobility in the Manufacturing Workplace
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As any 15-year-old teenage girl can illustrate as she texts her BFF and updates her Facebook page before your desktop computer can even finish booting up, hand-held mobile devices have arrived. We are more connected now than ever before. But smartphones and tablets are no longer just for personal use. These power-packed devices have made a bold leap into the workplace and are redefining the way we function in the 21st century. Whether the device is employee purchased or company provided, hand-held mobile technology is shaping the way businesses are run.

Remember the tricorder devices in Star Trek that allowed you to scan, analyze and record data? Or the voice activated two-way communicators that allowed Kirk and the Enterprise to talk with the simple touch of a button? Once the farfetched dreams of science fiction writers, these mobile device imaginings are quickly becoming reality with the rapid advent and adoption of smartphones and tablets. Research numbers indicate that smartphones outsold personal computers in the last quarter of 2010* and more than 80 percent of companies on the Fortune 100 list are either using or testing the iPad.** The viability of mobility as a business tool is quickly proving itself.

Mobility in the workplace sounds all well and good for Fortune 100 companies, but what about in a small to mid-sized manufacturing plant? Can mobility redefine the way manufacturing companies run their businesses and increase their competitive advantage, while also creatively cutting costs? With the correct enterprise resource planning (ERP) software, the answer is a resounding “yes.” Some ERP software suites have developed new portable technology that allows plant floor personnel to get out from behind a desk and onto the shop floor with all the vital information they need at their fingertips.

With the right ERP mobile application, you should be able to access, create and share business information from your hand-held device with ease. Some companies saw a 44 percent increase in operational efficiency after they implemented mobile software in their workplace, according to the Aberdeen Group.† While most ERP software providers boast that they now offer exciting new access to one aspect of their software, like their customer relationship management (CRM) program, some innovative ERP providers have taken it many steps further and created an entire mobile program with access to the whole package: warehouse management, enterprise manufacturing intelligence, quality control and real time machine monitoring information. Picture what that means for you: Imagine your plant process engineer, hard at work managing his manufacturing cell. With his amazing hand-held mobile device, he can...
see a graphic representation of the performance of each work center, helping him to proactively address the stations that are lagging behind or trending out of specification before it is too late. With the swipe of a finger, he can view work center details like percentage complete, downtime and many other aspects of his project. Now picture your stock handler. He is using his tablet for detailed warehouse management as he scans the barcodes of recently delivered materials, prints labels for inventory control and stages his raw materials, all without leaving his forklift.

Finally, picture your quality manager, making his rounds with his trusty mobile device in hand. He is automatically collecting real time data for quick part inspections and quality audits. Through his mobile software, he is able to operate statistical process control on a part and then electronically approve his step in the workflow process for traceable, accurate quality assurance.

And you? You are at a lunch meeting with a potential client, but still completely in touch with your shop floor as you view all the activity above from your hand-held tablet and digitally grant approvals in real time, greatly accelerating the decision making process. Seem too good to be true? It shouldn’t.

Innovative ERP software companies should provide the extensive mobile functionality you see above into their ERP system, plus so much more! If your ERP software doesn’t offer a mobile application that allows you to track and manage more aspects of your business from anywhere, you are missing out on a critical and indispensible workplace tool. Here are eight must-have qualities a first-rate ERP software mobility solution should offer:

1. **Productivity Improvement:**
   Envision a tablet mounted to each work station on your plant floor. From that station’s tablet, your reliable plant personnel can view all the necessary project information (percentage complete, parts produced, downtime, etc.), log in and out of jobs at each station, access training videos and applicable job documentation and view real time SPC data analysis, making them more accountable for both their time and the quality of the product they produce. Knowing what your machines and labor are doing at all times, combined with emails or text alerts that are sent when problems arise, means less downtime, more accountability and the ability to be
proactive instead of reactive, making for a more efficient management of resources. According to the Aberdeen Group, employee productivity increased 45 percent in some companies after implementation of a mobile software initiative.† Mobility in the manufacturing workplace can eliminate waste and help businesses gain a competitive advantage with improved business productivity.

2. Full Integration into your ERP Software:
Most smartphones and tablets come equipped with a camera that can function as a scanner. But if the inventory barcode you scan into your tablet with your camera cannot be uploaded into your ERP software, then that functionality is useless. A good mobile application should offer full functionality and complete integration with your ERP software, offering you the critical data you need most, when you need it. It is one thing to have access to basic CRM on your hand-held mobile device and quite another to be able to access warehouse management, enterprise manufacturing intelligence, quality control, workflow approvals, data analysis, SPC charts and truly real time information. All in one functionality should come standard with a good mobile ERP software solution, not just the basics.

3. Real Time Access to Information:
The right ERP mobile solution should offer you real time access to all of your information. Glancing at your smartphone and seeing only information that is 12-plus hours old is not useful. Your mobile device should maintain a constant connection to your ERP software, with live updates and no lag time or batch transfers, so you can make accurate business decisions based on real time data. Quick inspections, inventory visibility, workflow approvals and production reporting and alerts, as well as who is logged into a machine and what machines are down, is all vital information necessary to make an informed decision. Good mobile technology should also offer real time access without compromise, allowing you to automatically capture data accurately.
4. Improved Sales and Customer Service:
Mobile technology on the tablet or smartphone allows you to take advantage of sales opportunities at any time. Whether at a trade show, client meeting or networking event, you can give quotes, access contact information and update prospect files from your customer relationship management module with ease. Improve responsiveness to your customers’ needs with timely communication and up to the minute information like prices, inventory availability, order and shipping status, credit history, unpaid invoices, pending items and payment history. An improved quality of service in a timely manner is key to maintaining valuable relationships in a competitive environment.

5. Flexibility:
An effective mobile ERP solution should be flexible over any platform: desktop computer, tablet or smartphone. Having a program that allows you to only work on one type of technology, such as the iPhone or iPad, can be restrictive. With so many competitive tablets and smartphones currently being released, your ERP solution should be device independent. Your ERP provider should be actively developing software for all the emerging platforms so you have the flexibility to run your business in the way that is best for you.

6. Security:
The Internet serves billions of users. While working in the cloud has its mobile benefits, it can leave a company less than secure. As more people start using mobile technology in the work place, valuable company data can potentially be transmitted over insecure networks, exposing sensitive information to enterprising hackers. The Aberdeen Group discovered that 76 percent of the businesses surveyed found mobile security concerns to be their top challenge. How can your IT department provide mobile users convenient access while ensuring that sensitive corporate data is protected? For example, what if an employee loses their phone? Has your IT department taken the necessary precautions to be able to disable the mobile device remotely? Your mobile solution should offer best practices for managing your wireless system to keep your device and network security in place.

7. Ease of Use:
There are some dissatisfactions in mobile technology that even a magic ERP software system can’t fix. Tiny screens, short battery life and a keyboard that is too small for normal fingers are just some of the common frustrations that mobile users
experience. But that doesn't mean your mobile ERP solution shouldn't be user friendly. Touch screens, easy to read and understand graphic interfaces, electronic signatures, drill down capability and uncomplicated sorting and searching functionality should come standard.

8. Current Technology:
Technology is constantly evolving. Remember when it was exciting to have 3G speed and a camera for your smartphone? Now mobile device providers are climbing over each other to be the first to offer the fastest speeds, the thinnest tablets or the lightest phones. Your mobile ERP system software developers should be on that same technology advancement bandwagon and updating your mobile application with features that can always take advantage of the newest technology.

Mobile technology is quickly becoming a welcome addition in the workplace, with the right mobile ERP solution keeping businesses competitive and increasing their productivity. If your ERP system is not offering a mobile application that streamlines communication, enhances workforce collaboration and optimizes workflow processes, maybe it is time to re-evaluate. When choosing a mobile solution for your company, make sure it is more than just the basics. A good mobile solution should be fully integrated into your ERP system, offer real time access to information, be user friendly and up to date on the newest technology. Mobile devices have evolved past the simple days of “Can you hear me now?” and into business enterprise tools that offer flexibility and improved productivity from anywhere in the world. Welcome to the future.
About IQMS
Since 1989, IQMS has been designing and developing ERP software for the repetitive, process and discrete manufacturing industries. Today, IQMS provides a comprehensive real-time MES and manufacturing ERP software solution to the automotive, medical, packing, consumer goods and other manufacturing markets. The innovative, single-database enterprise software solution, EnterpriseIQ, offers a scalable system designed to adeptly grow with the client and complete business functionality, including accounting, quality control, supply chain, CRM and eBusiness. With offices across North America, Europe and Asia, IQMS serves manufacturers around the world.

To learn more information about IQMS and its ERP software’s mobile offerings, scan this barcode using your mobile devices’ camera and barcode application:

Sources:
*http://www.telegraph.co.uk/technology/mobile-phones/8316143/Smartphones-outhsell-PCs.html
**http://www.macnn.com/articles/11/01/18/number.up.from.earliest.figure.of.50.percent/
†Aberdeen Group, November 2010