



THE PLEX CLOUD: WHERE SAAS MISCONCEPTIONS GO TO DIE

Data Source

In late 2012 and early 2013 Mint Jutras collected more than 475 qualified responses to an electronic survey for its ERP Solution Study. These were qualified by the participant's knowledge of and involvement in ERP implementations and responses were used to investigate ERP goals, challenges and status and also to benchmark performance of ERP implementations.

Survey respondents represented companies from many different industries. However for purposes of this report we included only manufacturers. This resulted in a sample size of 262 responses, 82 of which came from manufacturers running The Plex Cloud.

Additional data is referenced from a survey conducted in late 2012 for the purpose of determining levels of understanding, perceptions and preferences for enterprise applications deployed as SaaS.

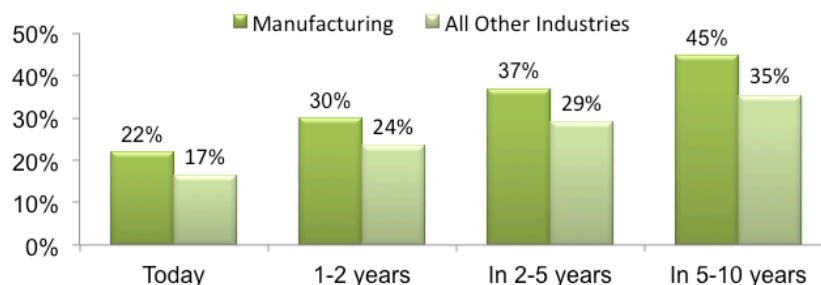
CLOUD ERP FOR MANUFACTURING

Manufacturers today strive for competitive advantage amidst challenging times. A recent Mint Jutras report outlined how Enterprise Resource Planning (ERP) delivered and deployed as Software as a Service (SaaS) helps manufacturers respond to those challenges. Yet because "cloud ERP" is a relatively recent "discovery" for many, the assumption is SaaS ERP for manufacturing is new. If it is new, therefore it must be lightweight and immature. Yet Plex Systems has been developing and offering its ERP solution exclusively for manufacturing and exclusively through a SaaS deployment model since 2001, making it anything but a newcomer and definitely not a lightweight solution. In fact, the Plex Cloud is the perfect antidote for many of the mistaken beliefs about SaaS ERP for manufacturing today.

MISCONCEPTION #1: MANUFACTURERS WON'T BUY SAAS

Sometimes manufacturing gets a bad rap and many assume it lags in understanding and utilizing technology to support the business. While it is true many would prefer to spend more of their technology budget automating their shop floors than supporting either front or back office processes, the Mint Jutras 2012 Understanding SaaS survey found manufacturers more (not less) savvy about SaaS than those in other industries. Figure 1 also shows manufacturers will lead in terms of bringing applications to the cloud. And it is possibly **because** they prefer to invest more in the engineering and production of product than in back office systems that they find SaaS appealing.

Figure 1: Percentage of Business Applications that are SaaS

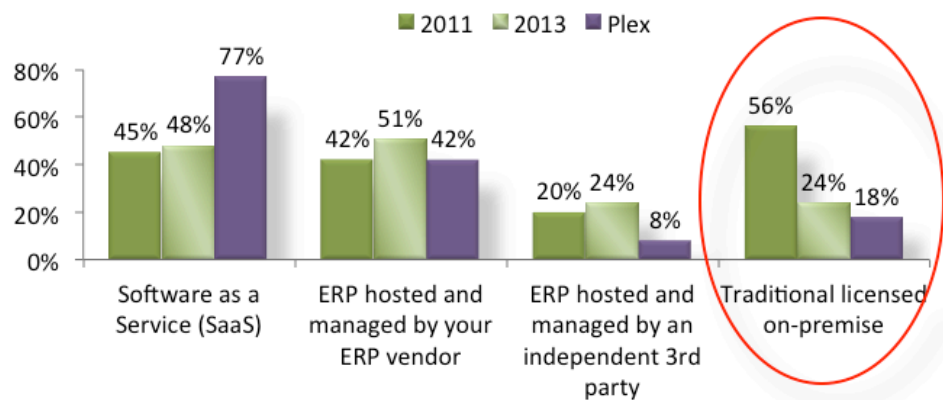


Source: Mint Jutras 2012 Understanding SaaS Study

Plex Systems has bet its business on manufacturers' willingness to consider SaaS. This was a risky bet in 2001. Manufacturers were not actively seeking alternative deployment options and most had never even heard of SaaS. The dot-com bubble had just burst and executives were wary of buying anything they couldn't see and touch. As a result, back then customers didn't buy from Plex **because** of SaaS, but rather, **in spite of** the fact that it was deployed and delivered through the cloud.

The world is much different today, and still changing. The Mint Jutras 2013 ERP Solution Study finds manufacturers favor SaaS for future deployment over traditional, licensed on-premise solutions by a factor of 2 to 1 (Figure 2). But Figure 2 also reinforces our suspicion that there is still a lot of confusion over terminology and deployment models, in spite of all the hype around cloud today. Notice that 77% of Plex customers surveyed would consider SaaS. And yet 100% operate under a SaaS model today. This is not an indication of dissatisfaction but rather confusion over terminology. Every single respondent that would **not** consider SaaS **would** consider ERP hosted by their ERP vendor. Also, a business user cares more about accessing the solution and deriving value than about how the software is bought and paid for.

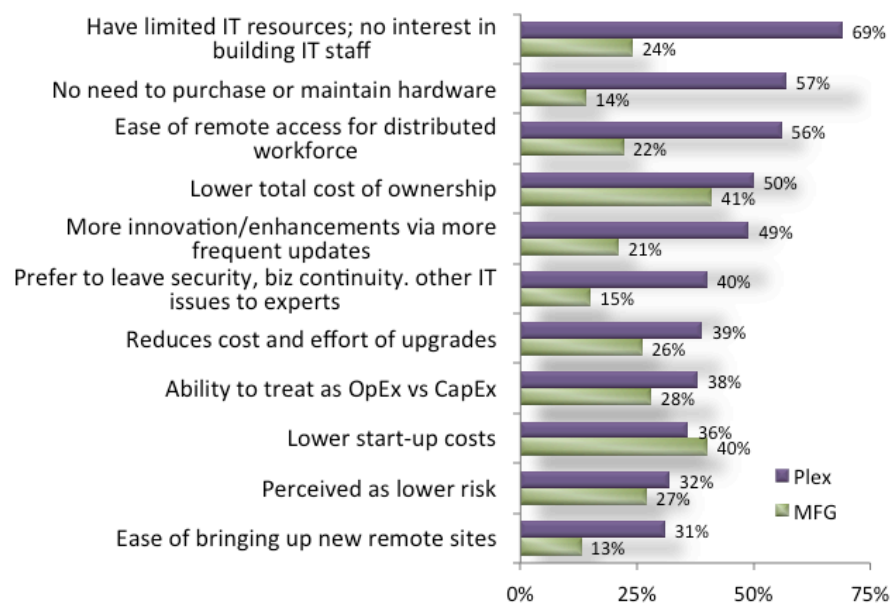
Figure 2: Which Deployment Options Will You Consider?



Source: Mint Jutras 2013 ERP Solution Study

One thing is clear, however: The vast majority of Plex customers have little interest in having the solution on premise, favoring instead a cloud deployment. Figure 3 shows us what they see that others might not in terms of the appeal of a SaaS solution. Respondents were allowed to check any or all reasons they found SaaS appealing. While typically we would limit a chart such as the one in Figure 3 to the top ranking selections, we didn't find any of these aspects trailing off in terms of popularity amongst Plex customers. While others tend to favor lower costs, Plex customers, having actually experienced the benefits of a SaaS solution, find many more reasons to favor it.

Figure 3: Which Aspects of SaaS Do You Find Appealing?



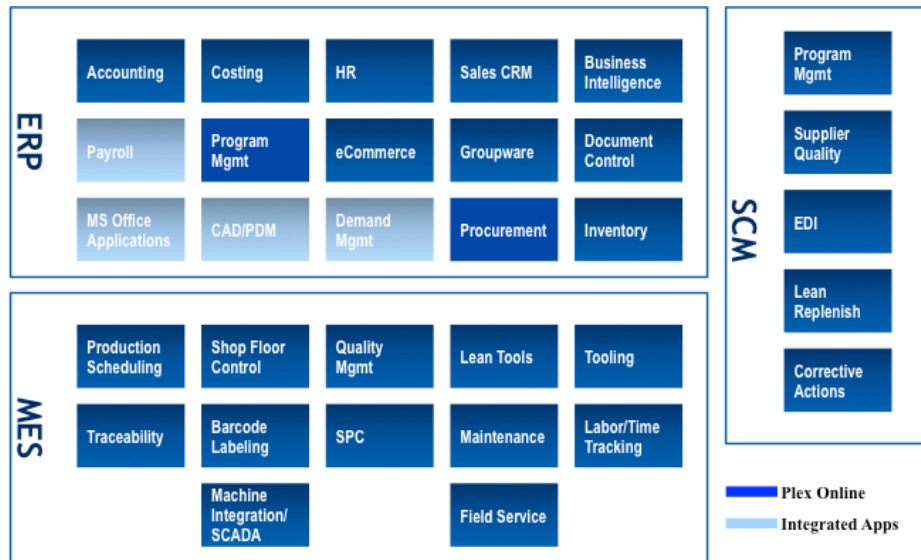
Source: Mint Jutras 2013 ERP Solution Study

MISCONCEPTION #2: SAAS ERP IS NEW AND INCOMPLETE

As noted above, 10-13 years ago nobody went looking for a SaaS solution. So a SaaS deployment model was a liability rather than a competitive differentiator. That meant the product had to stand on its own. Also, consider **why** Plex initially took the SaaS route. It was because the founders had developed technology and processes to rapidly create applications. SaaS was the only way they could deliver software as fast as they could develop it. They wanted to share new features and functions, as they were completed, not every 12 to 18 months. And the company has been doing that for the past 12+ years. That adds up to a lot of depth and breadth, hardly what you might consider lightweight or immature.

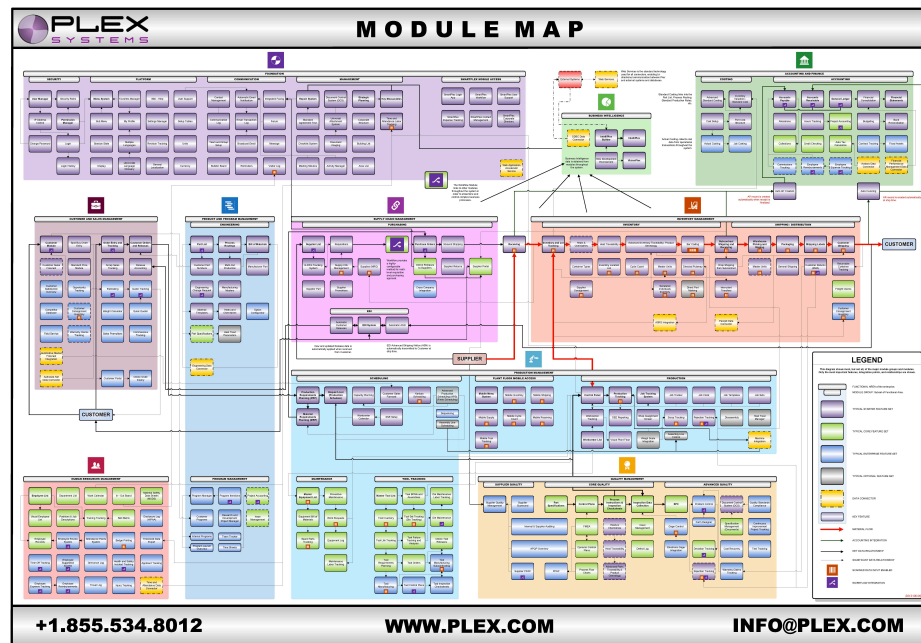
Figure 4 graphically depicts the broad solution footprint of the Plex Cloud as of 2009. Figure 5 shows its most recent Module Map. This is included for the sheer impact, in order to show how much the solution (already extensive in 2009) has grown, not only in breadth but also in depth. Even when expanded to fill an entire page, the print is still too small to see without zooming in. These two figures should leave no doubt in anyone's mind that SaaS ERP, when delivered in the Plex Cloud, is comprehensive and complete.

Figure 4: The Plex Cloud Footprint (previously known as Plex Online) 2009



Source: Plex Systems

Figure 5: The Plex Cloud Module Map 2013



Source: Plex Systems

Engineers and production managers don't object to software in the cloud because they can't touch and feel it, they only object when the software is fluffy like a cloud, adding no real value to the manufacturing process.

MISCONCEPTION #3: ENGINEERING AND PRODUCTION WON'T ENGAGE

In order for ERP to bring value across the entire business, it can't just stay in the domain of accounting and order management. For a manufacturer, that means it needs the attention and commitment from engineering and production. But these guys and gals like **things**, solid things they can touch and feel. Software isn't something you can touch and feel, so some might think the next best thing is that chunk of hardware it runs on. You can see it. You can touch it. But engineers and production managers are actually smarter than that. They don't object to software in the cloud because they can't touch and feel it, they only object when the software is fluffy like a cloud, adding no real value to the manufacturing process.

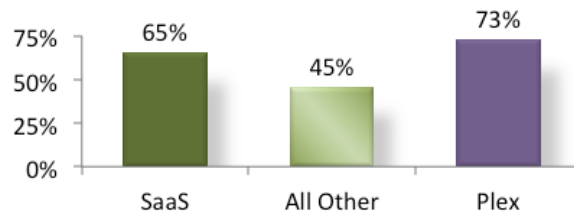
Mint Jutras defines ERP as the transactional system of record of your business. For years ERP provided basics such as general ledger, accounts payable, accounts receivable, inventory control and order management and more. But many implementations stopped right there. So it wasn't surprising to find engineering and production staff viewing it as a necessary evil, robbing them of budget to spend on things they really cared about. Of course ERP in manufacturing also included MRP, but with older technology, slow weekly MRP runs simply didn't provide the level of responsiveness needed to react effectively in a dynamic economy. Not only does newer technology bring improved speed and responsiveness, but also expanded footprints start to venture into the realm where the real engineering and production work gets done.

If global competition forces you to respond more quickly with reduced lead times and react quickly to changes, you will need to seriously consider modules such as forecasting and demand planning, supply chain planning, supplier collaboration and scheduling, and perhaps even distribution requirements planning. If you are capacity and capital constrained, finite scheduling, capacity requirements planning and enterprise asset management might be critical. If you must differentiate yourself with added services, an after-market service module may be a requirement. If you need to deliver more innovation faster, then engineering change management will be a plus.

In [Cloud ERP: Helping Manufacturers Keep Up With the Times](#) we posed the question, "Where are all the people?" Automation has cost us some manufacturing jobs, but it has also changed the profile of those working in manufacturing. Manufacturing workers are no longer "commodities." They are the knowledge workers, the decision-makers. They expect not only to record data in ERP, they expect to get information and knowledge out of it. This means expanding the implementation well beyond the basics.

The module map above is evidence that Plex Systems has responded to this challenge and in turn manufacturing employees are jumping into the fray. If it was just accounting and order management using the system, Plex could not boast the kind of penetration into its accounts that we see in Figure 6. The access anytime, access from anywhere characteristics of the cloud can be effective in connecting more employees to ERP in general. We find 65% of employees actively using SaaS ERP, compared to 45% in on-premise environments. But we see that percentage jump to 73% when the SaaS ERP is the Plex Cloud.

Figure 6: Percentage of Employees Actively Using ERP

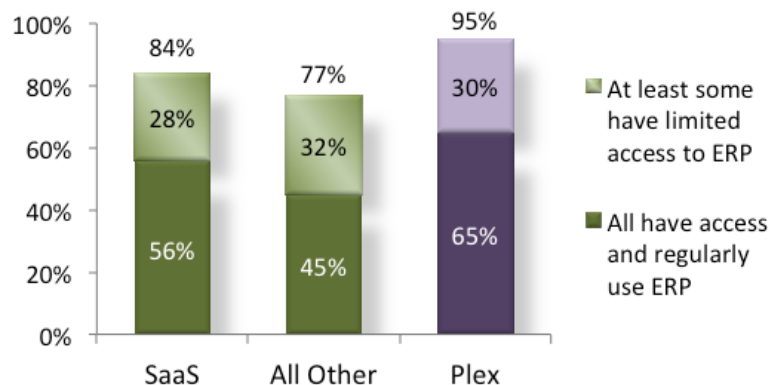


Source: Mint Jutras 2013 ERP Solution Study

And this distinction reaches into executive levels as well. While in the past it was rare for executives to actually put their hands on ERP, that is now changing. The pace of business, and the need for speedy, data-driven decisions has made those at the top impatient and unwilling to wait for intermediaries to come back with critical information.

Why shouldn't executives also reap the rewards of the access anytime, access from anywhere characteristics of the cloud? Executives with SaaS implementations are 24% more likely to regularly access ERP. Plex Systems differentiates itself further, with 95% of executives with at least some access to the Plex Cloud and 65% that have access and use it regularly (Figure 7).

Figure 7: Executive Access to ERP: Reaching Higher into the Enterprise



Source: Mint Jutras 2013 ERP Solution Study

Multi-tenant versus Single-tenant SaaS

Multi-tenant SaaS:

Multiple companies use the same instance of the software; configuration settings, company and role-based access personalize business processes and protect data security.

Single-tenant (or Multi-instance) SaaS:

Each company is given its own instance of the (hosted) software, but may share common services, such as an integration platform, and security.

MISCONCEPTION #4: SAAS MEANS PLAIN VANILLA

The perceived need for customization is often cited as a reason for not considering a SaaS solution, particularly one that is multi-tenant (see side-bar for definition). Since all customers must access the same version of the software, any invasive kind of customization is typically taboo. However, unlike most providers of multi-tenant SaaS solutions, Plex has always willingly “customized” the software. In fact customer-driven enhancements are a big reason why the Plex Cloud footprint has continued to expand at such an accelerated pace.

Yet while Plex delivered these modifications at the customer’s request, the enhanced software wasn’t custom for long (if at all). Plex always incorporated these enhancements into the product, but was careful to make them “opt-in” enhancements. This approach has been a win-win for both Plex and its customers. Customers get a steady stream of innovation and Plex gets funding for the development process. Where a customer or prospect has requested a certain enhancement, that company will be likely to “turn on” the modification immediately. Yet while a steady stream of enhancements are being delivered in the background, ready for consumption, most Plex customers will periodically review them and decide which to “turn on” at their own pace.

Of course, one down side of this approach is the complexity it adds to the development process and potentially to the product itself, although, thus far Plex has done an excellent job of managing this. Another down side is that it may prevent Plex from breaking into new markets. Existing customers might help Plex stretch the boundaries of industries in which it already participates; yet it is unlikely they will push Plex into entirely new verticals. While customers might require support of local markets as they expand globally, its installed base might never push Plex into entirely new geographies. As a growing company, Plex will not, and should not leave this kind of market expansion to chance.

As a result, Plex Systems has begun to look at customization requests a bit differently. First of all, it will not rely entirely on customer funding for new development. Yes it will still accept some level of customer driven enhancement requests but it will also fund some new development itself. With two new owners and an [infusion of capital](#) over the past year, this is entirely possible.

However, in addition, and perhaps more importantly for its customers, it simply doesn’t need to do as much customization as before. This is partly because of the maturity of the product. There are just that many fewer gaps in functionality today. Significant gaps means the product isn’t a good fit for the prospect and Plex seems willing to walk away from that business. The result: Plex will likely be more selective than it has in the past in taking on major

customization efforts. Customization used to consistently mean mucking around in source code, which builds barriers to moving forward with updates and upgrades. That was because in the past all the logic was “programmed” into that source code. This made business applications rigid and inflexible. Sure, there were always some configuration options, but those options were constrained by the logic embedded in the source code.

But customization doesn’t have to mean programming any more. Much of what used to require source code modifications now can be accomplished through personalization and configuration. The net result of this tailoring results in what many perceive as customization, but the important distinction is that configuration (versus customization) does not change the underlying shared application, an important aspect in terms of the shared code of a multi-tenant solution.

To this end, Plex has invested heavily in the ability to custom-configure the product without programming, particularly with its [VisionPlex](#) (for customizing look and feel) and [IntelliPlex \(business intelligence\)](#) products.

KEY TAKEAWAYS

While cloud ERP for manufacturing might seem to be a new concept to some, Plex Systems has been living and breathing SaaS for the past 12 years, and manufacturing for another five years on top of that. Many would describe manufacturing today as “old school,” conjuring up images of a smokestack economy. Some may even assume all manufacturers are stuck in the past and are slow to accept a cloud offering. A more apt description might be pragmatic, cost-conscious and conservative, which makes a SaaS-based solution all that much more appealing. Plex customers find the SaaS alternative appealing because:

- 69% have limited IT resources and no interest in building IT staff
- 57% have no desire to purchase or maintain hardware
- 56% find it easier to provide access to a remote workforce
- 50% think a SaaS solution affords a lower total cost of ownership
- 49% look forward to more innovation via frequent updates

And remember, in the Plex Cloud, the software is constantly being updated, relieving manufacturers of the burden and disruption of upgrades, yet all enhancements are “opt-in” allowing for a broad spectrum of choice.

Manufacturers are not seeking elegant technology in search of problems. They are looking for solutions to their own unique set of problems and answers to their own unique set of questions. In short, they want it their way. The Plex Cloud affords them the ability to custom configure, but if that doesn’t do the trick, there is always customer-driven enhancement.

Manufacturers are nothing if not practical and pragmatic. Which means sometimes they are too busy making and shipping product to worry about replacing or supporting back office and front office systems. Plex Systems would be more than happy to help.

About the author: *Cindy Jutras is a widely recognized expert in analyzing the impact of enterprise applications on business performance. Utilizing over 35 years of corporate experience and specific expertise in manufacturing, supply chain, customer service and business performance management, Cindy has spent the past 7 years benchmarking the performance of software solutions in the context of the business benefits of technology. In 2011 Cindy founded Mint Jutras LLC (www.mintjutras.com), specializing in analyzing and communicating the business value enterprise applications bring to the enterprise.*