Mint Jutras

Making Enterprise Business Systems Pay Dividends

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IS YOUR ERP FOR MANUFACTURING NEARING END OF LIFE?

PLAN NOW FOR THE FUTURE

Data Source

In this report Mint Jutras references data collected from its 2019 Enterprise Solution Study. For years this annual study has investigated perceptions, goals, challenges and status of software used to run a business, as well as the impact of these solutions on the enterprise.

This year the study collected responses from 464 participants, from companies of all sizes from very small to very large, representing a wide range of industries. In this report we reference the data collected from 227 manufacturers.

For decades Enterprise Resource Planning (ERP) implementation in general, and more specifically ERP replacement, has been compared to brain surgery. You just don't do it unless the patient is dying. However, since 2012 Mint Jutras has instead suggested that rather than waiting until the patient (your current implementation) was dying, perhaps it was better to think of ERP replacements as you would joint replacements. You suffer with that bum knee or hip until you can't stand the pain any longer, or you simply can't function properly.

These analogies are even more relevant today, especially so if you've ignored our recommendation and now your solution is nearing its end of life. This happens to solutions based on old, outdated technology. The vendor has moved on to develop and support newer, modern solutions, but its customers have not.

Now those vendors and their customers face a conundrum. While vendors vowed never to sunset a product, nor would they force a migration, there comes a time when that makes less and less sense. Significant innovation stopped a long time ago, and eventually it becomes very costly to continue to maintain and support solutions that are essentially going nowhere. And in continuing support, are vendors doing a disservice to their customers, encouraging them to continue to run solutions that can't possibly meet their needs today, and charging "premium" prices for maintenance to boot?

Many of those vendors are now announcing dates in the future when these older solutions will no longer be supported. If you run one of these legacy solutions, while you may not think your implementation is dying, the solution you are using to run your business will be declared dead at some point. Whether that time of death is in three years, five years, or even ten years, now is the time to be planning for your next implementation, particularly if you are a multi-location, multi-national enterprise. There is no quick fix. Even if you are not changing vendors, you should approach this with careful thought and preparation. Don't let choices and decisions made long ago dictate where you can and will go in the future.

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HOW DID WE GET HERE?

Definition of ERP

Mint Jutras defines ERP as an integrated suite of modules that forms the operational and transactional system of record of your business. This is the minimal requirement to qualify as ERP. Most ERP solutions today do much more.

The evolution of ERP for manufacturing now spans at least four decades, starting with the first Material Requirements Planning (MRP) systems, expanding in functionality and eventually becoming the integrated suites of modules that form the operational and transactional system of record of your business, and much more. User interfaces have evolved from green screens to client/server to web-based. Closed, proprietary architectures have evolved to become true cloud architectures. Each change along the way was hard (for the vendor) and also met with resistance to change from the customer.

ERP used to be rigid, hard to implement and even harder to use. You got what you got and if you needed something else, you might put it on a wish list, but innovation was slow because of monolithic architectures. Every module (and therefore every department and function) had to move forward in lock step, slowing the innovation process. But this was the price you paid for an integrated solution. And therefore, you might customize, but that made it harder to keep up, even though the pace was slow.

Eventually you became stuck – either on an old version of a product that got rewritten or refactored, or your vendor may have written or acquired other products that became their strategic, go-forward products. Either way your product (or version) stagnated. You might have thought, if it's not broken, don't fix it. Now the vendor is defining a new kind of "broken."

WHAT SHOULD YOU DO?

Even if there is a newer, more modern version of the same product available, don't try to migrate. You will be dragging along decisions that were made when systems were much less feature-rich and technology-enabled.

First of all – here is what you should **not** do. Even if there is a newer, more modern version of the same product available, don't try to migrate. You will be dragging along decisions that were made when systems were much less feature-rich and technology-enabled. And chances are your business has also changed. Bite the bullet – this is (should be) a reimplementation.

This, of course, opens the door to a full evaluation, whether or not you intend to change vendors. Some may cringe at that thought, but it's worth it. Treat the evaluation as if it is the last one you will ever do (at least for this company). That may not have been possible in the past when the average shelf-life of an ERP solution was anywhere from five to ten years. But if you choose wisely, it certainly is possible today.

The average age of ERP implementations of those participating in the Mint Jutras 2019 Enterprise Solution Study is approximately 7.75 years, but of course, that includes some very new implementations as well as some that are very old. If your current ERP is nearing its declared end of life, it is safe to say that (unless you've recently changed jobs), you haven't evaluated solutions in a long time. And a lot has changed.

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WHAT SHOULD YOU LOOK FOR?

Whereas fit and functionality once drove most decisions, basic and even not so basic features and functions are table stakes today. While an 80% fit used to be acceptable, today's flexible and technology-enabled solutions should get you much closer to 100% than ever before, without the need for invasive customization. Of course, you still need to perform due diligence and confirm robust functionality, including industry-specific features and functions, but if you haven't looked around for a while, expect to be pleasantly surprised.

Yet while features and functions are indeed important, there is danger in making a decision solely based on what you need today, because it might not be what or all that you need in the future.

AGILITY

Last year our Enterprise Solution Study found 89% of manufacturers believe they face some level of risk in their businesses and/or industries being disrupted by new innovative products, new ways of selling or pricing existing products or services, entirely new business models, or some combination of all of the above. And don't forget all the traditional forms of disruption like expansion, reorganizations and regulatory issues. All this disruption can have a cascading impact on business application requirements, making agility - the ability to easily innovate, evolve and change - even more important than current functionality. For that you need the right approach to innovation and the right architecture and platform to support it. If you can't continue to adapt, you will eventually wind up here again.

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THE IMPORTANCE OF ARCHITECTURE AND PLATFORM

One of the reasons (perhaps the biggest reason) why so much has changed in terms of searching for a new ERP is the underlying technology. Today's component-based architectures and development platforms make solutions more extensible, providing you with the ability to add or change functionality with less disruption to the core. They provide the ability to configure, personalize and tailor your solution with little or no invasive code changes. The best platforms today allow you to add features with low code or even no code. And however much you might like your ERP solution to meet 100% of your needs, it is extremely rare for any manufacturer today to have only one enterprise application. And therefore, ease of integration is also extremely important.

Table 1 confirms that the majority of survey participants understand, at least to some extent, the importance of these platform capabilities. If you are evaluating solutions today, Mint Jutras would put all four of these capabilities in the "Must Have" category.

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Table 1: Importance of Platform Capabilities

	Critical/ Must Have	Important	Not important	Don't Know
Ability to add new features/functions without touching the core	38%	53%	6%	3%
Ability to tailor/personalize without needing programming skills	33%	50%	14%	4%
Ability to add new features with low code or no code	28%	59%	8%	4%
Easy integration through APIs	31%	46%	24%	6%

Source: Mint Jutras 2019 Enterprise Solution Study

While early ERP solutions were rigid, monolithic structures, today's modern solutions are more component-based. Every technologist in our audience knows a microservice architecture is defined as an architectural style that structures an application as a collection of loosely coupled services. For those nontechnical readers, think of it as constructing a solution from a set of Lego building blocks. This approach is how vendors are able to add new features and functions with minimal disruption to the core solution. It is also the key to delivering the "last mile" functionality that might be specific to a particular sector or industry, without the added complexity inherent in mature solutions built on older technology.

A good development platform allows ERP to be built in layers that are separate from the source code, protecting it from invasive customization. First and foremost, there will be a user interface layer. By removing this from the source code, you can easily tailor what the users see, and how they see it, without ever touching the underlying code. This is also how translations are much more easily delivered these days, allowing different users to interface with ERP in different languages.

Configuration (versus customization) does not require deep technical skills and is carried forward as the software is enhanced. In fact, with a good platform this type of configuration should be easy enough for a business user to do.

This means tailoring the look and feel is easy. It also means that configuration (versus customization) does not require deep technical skills and is carried forward as the software is enhanced. In fact, with a good platform this type of configuration should be easy enough for a business user to do. This is typical when the platform allows you to add features with low code or no code.

Modern platforms also facilitate easy integration, most typically today through RESTful Application Programming Interfaces (APIs). REST is short for representational state transfer, which probably means nothing to a nontechnical business user. In short, REST APIs allow you to connect different applications with very little programming code.

MORE TRADITIONAL CRITERIA

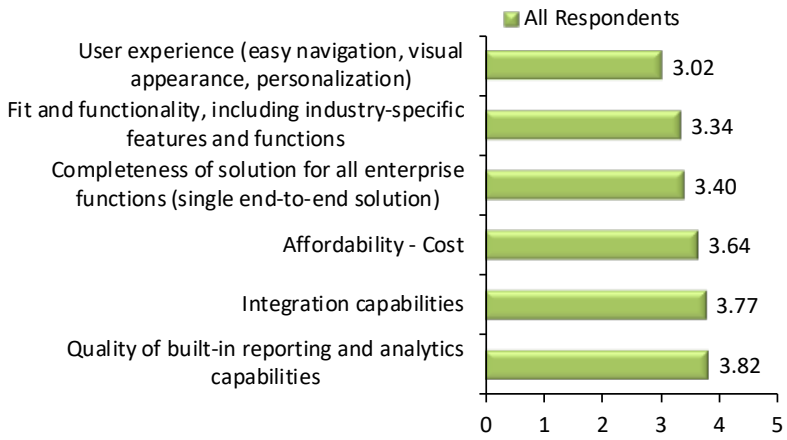
While it is very important to look under the covers of any new enterprise solution, we can't forget some of the more traditional criteria for evaluation. We asked our study participants to stack rank six of those more traditional

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evaluation criteria from most important to least important. Since number one was most important, the lower the number, the more important the factor. And therefore, we have our stack-ranked list in Figure 1.

For many years fit and functionality was clearly at the top of the list, but the user experience has been steadily rising in importance and this year it rose to claim the definitive top spot.

Figure 1: Stack Ranking Evaluation Criteria



Source: Mint Jutras 2019 Enterprise Solution Study

We are all spoiled by easy-to-use, intuitive consumer technology. Some of our millennial workers today have never used software that came with a user manual.

Today expect at least 40% of your employees to be regular ERP users and even more will have some access through self-service functions such as purchase requisitions, paid time off or expense reimbursement requests.

But there is another reason for this jump. In the early days of ERP very few of your employees ever put their hands directly on ERP. That privilege was reserved for data entry staff and select super users, who became a conduit (bottleneck?) to answers. Of course, the information technology (IT) staff also ran and distributed paper-based reports. Back then the look and feel had a more limited impact on your success.

Luckily those days are long gone. Today expect at least 40% of your employees to be regular ERP users and even more will have some access through self-service functions such as purchase requisitions, paid time off or expense reimbursement requests. And make no mistake, these self-service functions can be a significant source of productivity leakage if not well-supported with intuitive and easy-to-use software.

The best way to judge the user experience is to actually put your own hands on it. Those who demo software for a living can make anything look easy. You won't know how intuitive it is until you try to navigate through some functions. You probably won't use an app on your phone if you have to "figure it out." How much guidance do you need to walk yourself through a business process in ERP?

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Not only have user interfaces become more intuitive, making systems easier to use, some have even learned to "listen" and "speak." While this may not be a "Must Have" for all functions, think what this could do to help workers on the shop floor be hands-free. Also look for automation, as in robotic process automation (RPA). Sometimes the best user interface is no user interface at all.

DEPLOYMENT OPTIONS

You might think decisions about deployment could be deferred until after you have chosen a solution. But this must be considered up front because not all ERP solution providers offer the same (if any) choices of deployment options.

With almost every ERP software vendor hopping on the cloud bandwagon today and many of the largest claiming victory in the race to be the biggest and the best, we fear many business users are also hopping on that wagon without truly understanding the benefits. And without this kind of knowledge, choices are being made without full understanding and some of those benefits are being left on the table.

Many solutions that were once only available as traditional, licensed deployments (on your own computer or a trusted service provider's) now offer a choice. But some of these "cloud" choices are really hosted solutions, which contributes to the confusion. Other solutions that were born in the cloud may only be offered through SaaS. It is important to understand the difference between cloud and SaaS, as well as the different "flavors" of SaaS (multi-tenant and multi-instance).

The majority of consumers of ERP today recognize at least some of the potential for cost savings SaaS brings. And many are looking forward to being relieved of much of the burden of upgrades and maintenance. Whether you choose a solution that is multi-tenant or multi-instance, carefully evaluate the solution provider's approach and track record in terms of delivering innovation.

The access any time, from anywhere nature of a cloud solution is conducive to supporting distributed users and bringing up remote sites rapidly and easily. More and more are able to connect the dots in terms of the connectivity of the cloud as they expand globally. But many of the potential benefits remain unrecognized and under-valued.

The depth and breadth of choice between solutions and deployment options have never been greater. Look for these choices to continue to expand. But with more choice comes the requirement for better due diligence and good decisions. Don't be held back by pre-conceived notions and misperceptions about technology that is rapidly advancing. Understand what you are buying and how you will be paying for it. Not all deployment options are available from all ERP solution providers and not all SaaS ERP solutions are created

Cloud versus SaaS

Cloud *refers to access to computing, software, storage of data over a network (generally the Internet.) You may purchase a license for the software and install it on your own computers or those owned and managed by another company, but your access is through the Internet and therefore through the "cloud," whether private or public.*

SaaS *is exactly what is implied by what the acronym stands for: Software as a Service. Software is delivered only as a* ***service****. It is not delivered on a CD or other media to be loaded on your own (or another's) computer. It is accessed over the Internet and is generally paid for on a subscription basis.*

Using these definitions, we can confidently say ***all SaaS is cloud computing, but not all cloud computing is SaaS.***

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equal; don't treat them as a commodity. Make a careful choice that is right for your business.

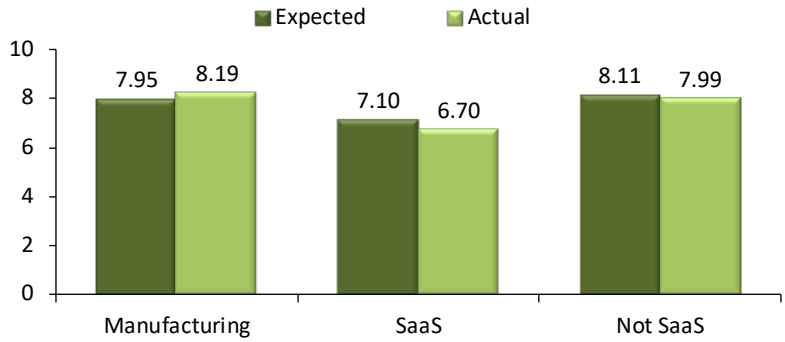
WHAT CAN YOU EXPECT?

In the early days of ERP, implementations typically took nine to twelve months before any type of "go live" event. Today we find the reality closer to the seven to ten-month range, with an average expected time of 7.95 months and the average actual just a bit higher at 8.19.

So, let's say you do decide to replace your current solution or remedy the lack thereof. What can you expect in terms of schedule and return on your investment (ROI)? In the early days of ERP, implementations typically took nine to twelve months before any type of "go live" event. Today we find the reality closer to the seven to ten-month range, with an average expected time of 7.95 months and the average actual just a bit higher at 8.19. We also find SaaS deployments trimming more than an additional month off those results (Figure 4).

Of course, keep in mind that what you accomplish, and how much you achieve in arriving at this first milestone can vary.

Figure 4: Time to Reaching First "Go Live" Milestone



Source: Mint Jutras 2019 Enterprise Solution Study

Some implementations go "big bang" with all functions going live at once. Others may approach it more incrementally. For smaller companies or those being divested from a larger corporation (on a tight timeline), it might represent their complete implementation. For large multi-nationals with many different legal entities and/or operating locations, this may be just the beginning. How long will it take to roll it out to all your divisions?

If your solution has a declared, projected, or rumored end of life years in the future, you might be tempted to wait. But think about how long it took for your current solution to become entrenched.

CONCLUSION AND RECOMMENDATIONS

Is your current ERP solution well past its prime? Perhaps it is highly customized, which has made it difficult to keep up with innovation delivered from your solution provider. Or perhaps your solution provider has shifted its attention to a more strategic product in its portfolio. While they still support you, they stopped innovating long ago. They promised never to sunset the

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product and you figured, it's not broken, so we don't have to fix it. Or perhaps you view replacement as brain surgery – you don't do it if the patient isn't dying.

Now, or very soon, you might be faced with a tough decision. More vendors today are indeed announcing the end of life for many of these older, outdated systems. If significant innovation stopped long ago, there may very well come a time when they will stop support. Whether they do or don't, that old solution can't possibly provide you with the features, functions and advanced technology you need to create any kind of competitive advantage today.

Any decision to upgrade or implement a new ERP is a big decision, which requires careful thought and justification. But, even if there is a newer, more modern version of the same product available, don't try to migrate. You will be dragging along decisions that were made when systems were much less feature-rich and technology-enabled. And chances are your business has also changed. Bite the bullet – this should be a reimplementation. This, of course, opens the door to a full evaluation, whether or not you intend to change vendors. Some may cringe at that thought, but it's worth it. Treat the evaluation as if it is the last one you will ever do.

If your current solution is nearing its end of life, your company has not gone through an evaluation for a very long time. Perhaps you have some new employees that have, but those that haven't might be in for quite a culture shock. A lot has changed.

While decisions in the past were largely based on features and functions, today you will need to dive deeper:

- ✓ Make sure any new solution is agile and can be adapted as business condition change.
- ✓ This requires a modern architecture and development platform.
- ✓ Explore the user experience. Don't just watch demos. Put your hands on the software.
- ✓ Carefully evaluate deployment options.

And finally, if you are faced with a declared or probable end of life, whether that timeline is in three years, five years or even ten years, now is the time to be planning for your next implementation, particularly if you are a multi-location, multi-national enterprise. Whether you view ERP replacement as brain surgery or joint replacement, there is no such thing as non-invasive surgery. Just like surgery, there will be some "recovery" time. But that doesn't mean your business stops during that recovery period. It just means you need to take extra care to ensure a full recovery, with the result being a healthy business that is able to function better than ever.

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About the author: *Cindy Jutras is a widely recognized expert in analyzing the impact of enterprise applications on business performance. Utilizing over 40 years of corporate experience and specific expertise in manufacturing, supply chain, customer service and business performance management, Cindy has spent the past 13+ years benchmarking the performance of software solutions in the context of the business benefits of technology. In 2011 Cindy founded Mint Jutras (www.mintjutras.com), specializing in analyzing and communicating the business value enterprise applications bring to the enterprise.*

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