December 2016

THE VALUE OF AGILITY IN ERP DURING DISRUPTIVE TIMES

Data Source

In this report, Mint Jutras references data collected from its 2016 Enterprise Solution Study, investigating goals, challenges and status and also benchmarked performance of software used to run a business.

Over 525 responses have been collected in total, from companies across a broad range of industries, including companies of all sizes, ranging from very small to very large enterprises.

Fit and functionality has always been the linchpin in selecting software that runs your business. When companies are asked to stack rank the priority of selection criteria for Enterprise Resource Planning (ERP) solutions, this is clearly at the top of the leader board, followed closely by completeness of solution. While features and functions are indeed important, there is danger in making a decision solely on what you need today, because it might not be what or all that you need in the future.

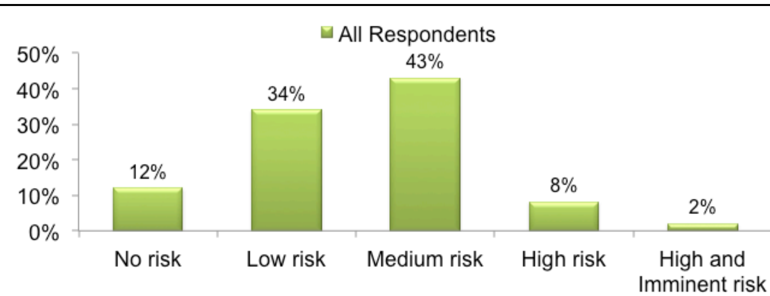
The 2016 Mint Jutras Enterprise Solution Study found 88% of companies believe they face some level of risk in their businesses and/or industries being disrupted by new innovative products, new ways of selling or pricing existing products or services, entirely new business models, or some combination of all of the above. And then of course there are still the more traditional disruptive factors like expansion and growth, organizational restructuring and regulatory changes, just to name a few.

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. How well prepared are you for the unpredictable, yet inevitable disruptive forces of the digital economy? After all, we live in very disruptive times.

DISRUPTION? WHAT DISRUPTION?

We asked survey participants in our 2016 Mint Jutras Enterprise Solution Study to estimate the level of risk they face in their industry (and therefore their business) being disrupted (Figure 1).

Figure 1: How much risk do you face in your industry being disrupted?



Source: Mint Jutras 2016 Enterprise Solution Study

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How do you think the taxi industry might have assessed the threat of disruption on the eve of the launch of Uber? Do you think the hotel industry anticipated Airbnb? Did Block Buster foresee the devastating impact Netflix would have on its business? What kind of disruption is lurking out there for you?

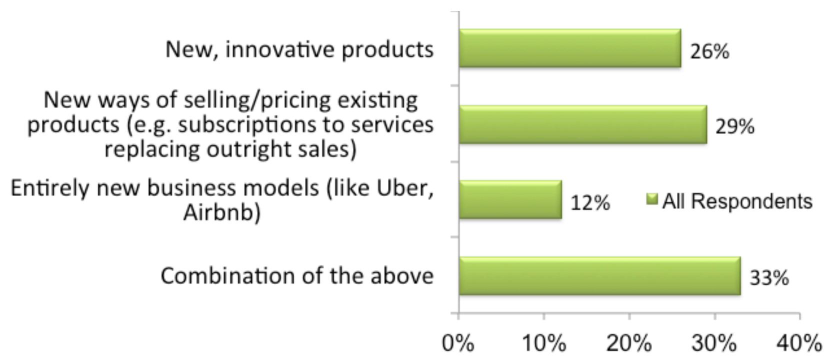
While only 10% felt that risk was high and/or imminent, most (88%) do understand the risk is real. While about one in three (34%) feel the risk is low, we have to ask: How do you think the taxi industry might have answered this question on the eve of the launch of Uber? Do you think the hotel industry anticipated Airbnb? Did Block Buster foresee the devastating impact Netflix would have on its business? What kind of disruption is lurking out there for you?

DIGITAL DISRUPTION

The Internet and the digital economy made all of these disruptions possible and none were decades in the making. Compared to slow, evolutionary changes of the past, they literally happened almost overnight.

This type of disruption might come from a variety of sources. We asked survey participants to select the single most likely cause of potential disruption (Figure 2).

Figure 2: What is most likely to cause this disruption?



Source: Mint Jutras 2016 Enterprise Solution Study

While the threat from new, innovative products may have the lesser disruptive impact on business processes and business models, it does require companies to place more emphasis on innovation. Windows of opportunity can open and close very quickly. Of course an agile ERP solution isn't all you need to accelerate new product introductions, but you also don't want it to be the reason you can't respond to new market demands or take advantage of new and unprecedented opportunities.

New ways of selling/pricing existing products might include subscriptions to services or outcomes that replace outright sale of products. Rather than selling a machine, you might invoice for uptime or hours of production. You might ship a physical product for free and charge for usage and/or consumables. Software companies that used to offer perpetual licenses might now also (or instead) offer subscriptions to software as a service (SaaS). These types of changes can have a major impact on how you invoice, recognize revenue and manage cash. And these changes must be reflected in your ERP solution.

The impact of entirely new business models is even harder to predict because of the inherent "newness." You don't want your ERP solution to be the reason you can't capitalize on that brilliant new idea that can create a new revenue stream. Your ERP must adapt as your business evolves.

And if you are like one in three (33%) of our survey participants, you expect change to come from a combination of these disruptive factors, which is even harder to predict. You must continue to support your current revenue streams in conjunction with these new opportunities.

DON'T FORGET THE MORE TRADITIONAL DISRUPTION

Disruption is not entirely new or exclusively the result of the digital economy. Growth and regulatory changes are perhaps the two most common causes. However while not exclusively the result thereof, growth is in fact impacted by the digital economy. The Internet has leveled the playing field for globalization. Innovation and advanced technology, combined with the Internet, have opened doors to opportunities all around the world. New consumer middle classes have sprung up in countries that were hardly industrialized a short decade ago, creating unprecedented growth opportunities. But windows of opportunity can close as quickly as they open.

To take advantage of these opportunities, you might expand into new territories either organically or through mergers and acquisition, both of which can cause disruption throughout the enterprise and place new requirements on finance, accounting and compliance reporting. This may also result in organizational restructuring. If your organizational and reporting structure is still hard coded into your chart of accounts, you are severely limited in how and how quickly you can restructure.

Whether change is initiated by growth or by the factors shown in Figure 2, these in turn (or independently) can cause changes to accounting methods and reporting requirements. A change in accounting method might be made at the discretion of executive management, but more often is imposed upon an enterprise through new laws such as those introduced in 2002 with the Sarbanes-Oxley Act and the convergence of standards and reporting requirements of International Financial Reporting Standards (IFRSs) and US General Accepted Accounting Principles (GAAP).

A perfect example of regulatory changes that can be disruptive is the change to revenue recognition as a result of the merging of accounting standards (ASC and IFRS). These place additional functional requirements on ERP, requiring changes to installed accounting software that are not insignificant. Depending on your business, these new rules have the potential of creating the most significant changes accountants have faced in many, many years and apply to any company that enters into contracts with customers to transfer goods or services or for the transfer of nonfinancial assets. With the trend towards a subscription economy, there are fewer and fewer companies that are immune.

ASC 606 and IFRS 15

In May 2014, FASB issued Accounting Standards Update (ASU) 2014-9, Revenue from Contracts with Customers (Topic 606). At the same time the International Accounting Standards Board (IASB) also issued International Financial Reporting Standards (IFRS) 15, Revenue from Contracts with Customers. In doing so, these two governing bodies largely achieved convergence. These converged standards for revenue recognition go into effect the beginning of 2018 for public entities, bringing very significant changes to financial statements and reporting for any company doing business under customer contracts.

THE BUSINESS CASE FOR CONTINUOUS IMPROVEMENT

Given the accelerating pace of change and the unprecedented potential for business disruption, it should be easy to justify a business strategy that embraces continuous improvement. With the advent of "lean manufacturing" and Six Sigma, manufacturers in particular have adopted continuous improvement in manufacturing processes for some time now. By proactively taking the same approach to the software that runs your business, you position yourself to weather the storm of disruption. Yet this approach is rare in ERP implementations.

An ERP implementation should be focused on outcomes: growth, profits, and efficiencies. But it is so easy for the evaluation, implementation and ongoing operation of ERP to be subsumed by the features needed to meet the objectives of the business at a specific moment in time. Those features become the primary objective and the connection to the business strategy gets blurred or forgotten.

Maybe you start out with the objective of reducing production costs. You might have dedicated production facilities to optimize labor, machine and inventory costs. You select a solution and implement the features that provide a solid foundation for this approach. What happens when customer response and lead-times become the primary objectives instead? A sound business strategy might be to move production closer to customers, who happen to be located around the globe. But if the foundation you created was poured in concrete, it will be difficult, if not impossible to change it without destroying it. Will it mean ripping out your ERP solution and replacing it only to face the possibility of another change in strategy once implemented?

What happens when you introduce entirely new business models?

DREADED BUT INEVITABLE CUSTOMIZATION

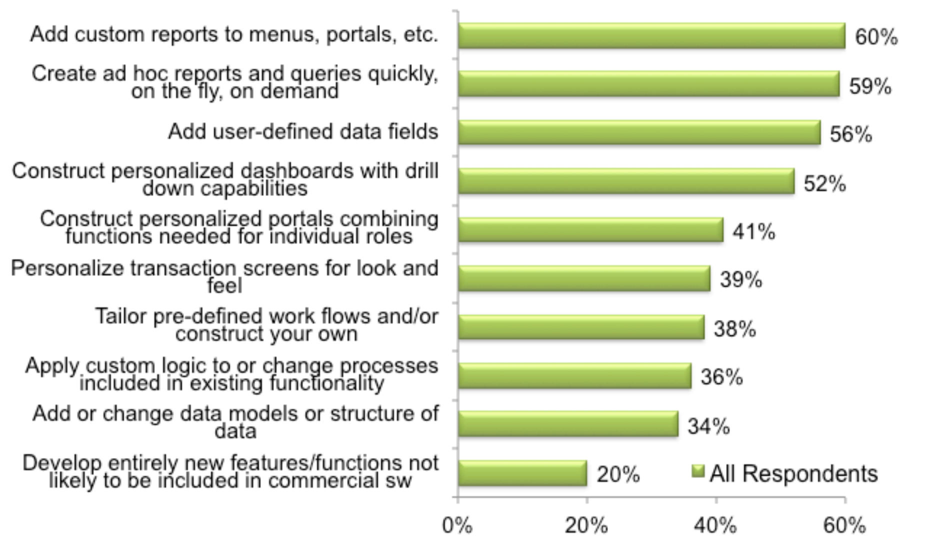
Companies can no longer afford to respond to these types of challenges like they used to. In days gone by, companies were forced to handle this kind of change in the same way they had always handled gaps in functionality: through customization of the software. In the past customization was invasive; it meant mucking around in source code. Not only was this a costly, lengthy and time-consuming process, it also created barriers to upgrades. It was the equivalent of pouring that cement.

No company can afford to stagnate, nor can they afford long leads times to implement change.

But innovation is far more important today than it has ever been. Business conditions, processes and even entire business models are much more fluid than ever before. No company can afford to stagnate, nor can they afford long leads times to implement change.

This is exactly why modern-day ERP solutions have become much more configurable, allowing you to personalize and tailor the solution to your individual needs without costly and invasive customization. We asked our 2016 Enterprise Solution Study participants to check off all the different types of "customization" they **believe they need** (Figure 3). Keep in mind that most any change to the software or the user experience is typically referred to as "customization."

Figure 3: What type of customization do you believe you need?



Source: Mint Jutras 2016 Enterprise Solution Study

"Customization"

Many modern, technology-enabled ERP solutions today deliver a high level of personalization and configuration without customization as defined in the classic sense of invasive code changes.

There are ten different types of "customization" listed in Figure 3. They are sorted by the likelihood of them being required. Any modern ERP worth its salt should deliver the first seven of these without requiring any invasive code changes and without building barriers to consuming innovation. The next two may or may not require code changes.

If your current solution does not allow you to respond to new business or new business models, you need a new one.

If your current solution does not allow you to "customize" through this type of configuration and tailoring, if "customizing" prevents you from consuming innovation, adapting to business change or responding to new business or new business models, you need a new one. It's as simple as that. And when you search for a new solution, you should not be thinking of one that will last five to eight years. The right solution should not only evolve, but also easily adapt to changing business needs. Look for a solution for life.

Responding to the last requirement shown in Figure 3 - developing entirely new features and functions that are unlikely to be available in commercial software - is a different story. If you do indeed (really) require this, it is likely because you seek to clearly differentiate yourself in your market. And that's a good thing. But how you go about adding that functionality can lead you down a path of stagnation, or a path to growth and prosperity.

INNOVATION THAT IS EASY TO CONSUME

Definition of ERP

Mint Jutras defines ERP as an integrated suite of modules that forms the operational and transactional system of record of the business. This definition allows for some flexibility in terms of modules required since different types of business have different needs and typically manufacturers will require a more comprehensive set of modules. In addition, the footprint of most established ERP solutions has grown significantly and provides more functionality than needed for this core system of record, often making upgrades harder and more complex.

Adding new functionality to ERP in a way that makes it easy to consume has long been a challenge. The very definition of ERP (at least the definition according to Mint Jutras) contributes to this challenge. Mint Jutras defines ERP as an integrated suite of modules that forms the operational and transactional system of record of a business. This is a rudimentary definition because today ERP is likely to do much more than this.

Not only do all modules of an ERP solution share a common database, but also all are developed using the same tools and technology (platform) and traditionally they all move forward in lock step. This eliminates data redundancy and any need for separate integration efforts. And a common platform for development is beneficial to both the customer and the vendor.

When new features and functions are added to ERP, either as generally available innovation or as a customization, this tight integration implies that all modules, all functions, and therefore all departments within an organization must move forward together. This can slow down the upgrade cycle (or in the case of customization, prevent it). But even more troublesome: It takes massive efforts of coordination for all departments within a customer's organization to take those next steps all together. And all might not have the same level of motivation.

So what's the alternative to this tight integration? The alternative is often referred to these days as "loosely coupled," but that terminology frequently conjures the "best of breed" approach of yesterday, where you had independent point solutions that needed to be interfaced or integrated back into ERP. We're not advocating taking a step backwards. Perhaps a better way of describing the newer alternative would be "component-based" or "service-based."

When it comes time to offer up new features and functions, instead of inserting lines of code directly into ERP, you might instead call upon a standard "service." When it comes time to upgrade or add new functionality, simply swap out the old "service" for the new. You might also view these services as external components. While this is an oversimplification, it conceptually describes how next generation ERP can effectively deliver new, targeted innovation without forcing all departments served by ERP to march forward together.

While components and services are becoming more prevalent, solution providers have taken a wide variety of different approaches to delivering innovation today. Many are still packaging up releases that require an all-

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.***

In a SaaS environment you are not allowed to stagnate, but you will also be relieved of much of the burden of the upgrade process.

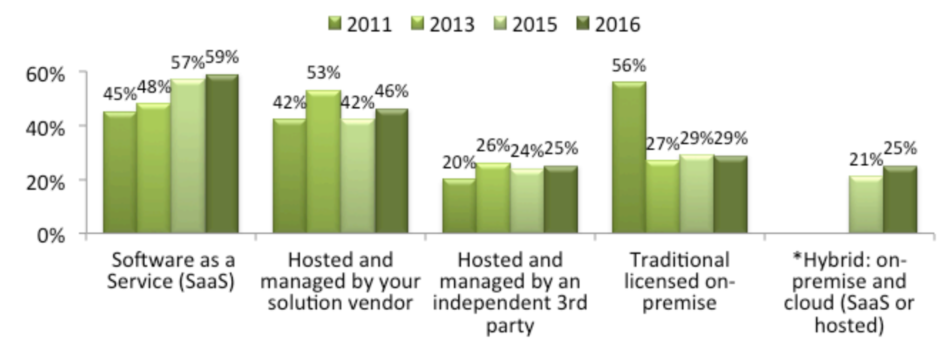
inclusive upgrade. But that doesn't mean you have to take this approach in adding on new functionality that you either develop yourself, commission to have built, or buy from a third party (typically a partner of your ERP solution provider). Anything you can do to move away from managing a single, massive monolithic structure is a step in the right direction.

CLOUD AND SAAS OPTIONS

No discussion of innovation and customization would be complete today without addressing the shift in movement to cloud computing in general and software as a service (SaaS) in particular. While Mint Jutras believes the transition to SaaS ERP will take years, this is largely because of the sheer dominance of on-premise solutions and (historically) the reluctance to rip and replace systems.

We have been asking the following hypothetical question for years now: *If you were to select a solution today, which deployment options would you consider?* We have watched the percentage that would even consider a SaaS solution grow from single digits (10 years ago) to 59% in 2016. Figure 4 also shows SaaS as the deployment option most likely to be considered for the past two years.

Figure 4: Which deployment options would you consider?



Source: Mint Jutras 2016 Enterprise Solution Study
* Option was added in 2015

There are two points to consider here. First of all, you can't be agile if you are stuck on outdated releases and not able to innovate to meet the new demands placed on your business either because of digital transformation or more traditional business change. In a SaaS environment you are not allowed to stagnate, but you will also be relieved of much of the burden of the upgrade process. Of course you need to review new features and functions and "opt in" to using them, but the SaaS solution provider does all the heavy lifting. You can spend your time and energy making those decisions, responding to change and running your business.

But (secondly) what about the possibility that you will need to fill some gaps in the software or differentiate yourself? In other words, what about a real need for customization, rather than configurability? If you are running in a private cloud or just a hosted environment, the situation is not very different from an on-premise environment, except perhaps that you pay a third party for the care and feeding of your solution. But then you don't get all the benefits of a SaaS solution either, including the potential for more and more frequent updates.

While different SaaS solution providers handle customizations in different ways, invasive customization of code is discouraged, if allowed at all. Here is where the ability to externalize the customization and plug it in as a service is so important. You can leave your SaaS solution essentially untouched and simply plug your customization in. While we are oversimplifying, you get the picture.

KEY TAKEAWAYS AND RECOMMENDATIONS

Many of the ERP solutions installed today remain rigid and require extensive modifications to meet the changing needs of enterprises today. ***Is yours one of them?***

Many of the ERP solutions installed today remain rigid and require extensive modifications to meet the changing needs of enterprises today. **Is yours one of them?** Did you originally set out to support your business objectives, but got side-tracked in becoming laser-focused on the features needed to meet those objectives at a single point in time? Did you lay a foundation that now needs to change in shape or size? Is that foundation cast in concrete?

While most consumers of ERP will initially select a solution that is the "best fit," all too often they lose sight of that as their requirements change over time. Many of the ERP solutions installed today remain rigid and require extensive modifications to meet the changing needs of enterprises today. And the pace of change does not appear to slowing down. Even traditional types of business change resulting from growth, expansion, organizational restructuring, and/or regulatory changes are accelerating along with the pace of business itself. Add to that the threat of disruption made possible by the digital economy and a stagnant solution may just put you ahead in the race to the bottom.

***RECOMMENDATION*:** Don't let change be your enemy. Make your ability to manage change a competitive differentiator. Consider the following:

- If your current solution is rigid and monolithic, moving forward at a snail's pace… you need a new one.
- If your current solution is not supported by a platform or architecture that allows you to easily connect new services or components… you need a new one.
- If your current solution does not allow you to "customize" through configuration and tailoring, if "customizing" prevents you from

consuming innovation, adapting to business change or responding to new business or new business models… you need a new one.

Agility provides you with the ability to innovate, evolve and change in order to take full advantage of new business opportunities.

If you do indeed find yourself in need of a new solution, you still need to consider features and functions that give you the best fit today. But don't stop there in your evaluation. Acknowledge the fact that we live in disruptive times and seriously take into consideration the agility of any new solution. Agility provides you with the ability to innovate, evolve and change in order to take full advantage of new business opportunities. You may not be able to accurately predict what the future holds, but with an agile solution, you can be ready for anything.

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 10+ 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.*