FIVE STEPS TO DEVELOPING A CLOUD ERP TRANSFORMATION PLAN & SELECTING A VENDOR
This paper is written for the ownership, executive teams, and leaders of manufacturing and distribution companies. The purpose of this paper is to offer a primer for the mid-sized company leadership team to develop a cloud ERP strategy. This paper will cover the following topics:

1. What is cloud ERP?
2. Why should the leaders of mid-sized businesses be concerned about cloud ERP?
3. What are the issues that would drive a manufacturer or distributor to consider moving from an on-premise ERP solution to cloud ERP?
4. How should cloud ERP vendors be evaluated?
5. Who are the cloud ERP vendors?
What is Cloud ERP?

The concept of cloud computing has become commonplace in the past 5 years with applications like Gmail, iCloud, DropBox, and Microsoft 365, to mention a few. In the world of enterprise applications, we are past the novelty stage of e-Commerce, and most of us have already heard of or experienced enterprise applications in the cloud, such as Salesforce.com.

Ultra sees a great degree of confusion in the field regarding the understanding of cloud computing as it relates to enterprise applications, and in particular, ERP. This confusion stems primarily from three aspects that make cloud computing unique:

1. The method of delivery
2. The method of software upgrades
3. The method of payment

Cloud ERP Definitions

There is a unique vocabulary associated with cloud computing, one that may contribute to the aforementioned confusion. To assist in providing a better understanding, we offer the following definitions:

- **SaaS (Software as a Service)** – A payment method occurring on a monthly or quarterly subscription basis for the right to use an application license. This is an alternative to a 100% purchase upon a contract or lease.

- **Cloud** – A delivery method where the application software and hardware are off-site, not in a facility owned by the primary business.

- **Co-Location** – A delivery method where the software and hardware are located on-premises, but some hardware tasks are managed by a third, typically remote party.

- **On-Premises** – Traditional installation, encompassing three aspects:
  - Delivery is on-site at the primary business.
  - Upgrades are the primary responsibility of the business.
  - Payment is 100% paid for upon contract or leased via a bank.

- **Virtual Private Cloud** – Common today and encompasses three aspects:
  - Delivery is off-site, typically on a monthly schedule, paid for by the primary business, and at a list of services from a hosting provider (e.g., Rackspace, One Neck, Reviora).
  - Upgrade is the responsibility of the primary business or contracted to the hosting provider.
  - Payment is 100% paid for upon contract or leased.

- **BYOL (Bring Your Own License)** – A model where ownership, or “right to use”, of the license is with the primary business. This is the case for co-location and for the Virtual Private Cloud configurations, but not in any of the true cloud ERP deployments.

- **Single-Tenant** – An attribute of the application software that, when hosted, allows only one primary business per instance of the database/ERP system.

- **Multi-Tenant** – An attribute of the application software that, when hosted, allows multiple primary businesses per instance of the database/ERP system. The database is shared. Users don’t have access to the other companies, or logical walls within the ERP, but can personalize and customize their applications.
The ‘True’ Cloud

As we seek to minimize the confusion in the market, Ultra Consultants has taken the following position on defining the minimal criteria for a “true” cloud implementation.

- Delivery method – Hardware and software are off-site of the primary business.
- Payment method – Subscription, typically monthly.
- Upgrades – Performed by the vendor.

With this criteria in hand, we can look to ERP ownership as the simplest way to measure the extent and maturity of a cloud solution. The following in Table 1 lists the six models in terms of cloud capability:

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When most individuals talk about cloud solutions, the payment method is assumed to be SaaS. However, there is technically no difference between the “Almost Cloud” model and the “True Cloud 1.0” model other than the payment method.

GARTNER REPORTED IN JANUARY 2014 THAT "47% OF ORGANIZATIONS SURVEYED PLANNED TO MOVE THEIR CORE ERP SYSTEMS TO THE CLOUD WITHIN 5 YEARS"

At Ultra we estimate that as much as 66 percent of all organizations will have moved their core ERP to the cloud by 2019. Of course a number of users will be held back as a percentage of total, as larger organizations have their own solutions. We believe larger organizations will be brought into the cloud via Cloud 3.0. This is the next step in the cloud evolution, catering to the unique needs of companies with locations in different regions that seek to gain the benefits of cloud computing for their ERP.
One important reason for this drive emerges as we explore ownership over different elements of the scope of services. In a typical ERP implementation there are thirteen technical services that need to be maintained:

1. Applications/Upgrades  
2. Databases  
3. Middleware  
4. Uptime  
5. Backups  
6. Redundancy  
7. Operating System/Virtualization  
8. Virtualization  
9. Servers  
10. Storage  
11. Firewall  
12. Networking  
13. Facilities

In on-premise deployments, the primary business takes care of all of these, including acquisition, setup, configuration, monitoring, tuning, troubleshooting, training, and certifications, etc. With co-location (the first BYOL model), we start transferring responsibility over some of the services, specifically numbers 11, 12, and 13, away from the primary business to a third party. In the other BYOL model, Virtual Private Cloud, we transfer additional scope, specifically numbers 4 through 10. And finally, with the True Cloud Models, responsibility is transferred for all 13 technical services, including the applications, databases, and middleware.

With any of the models, it is possible to craft a support agreement to provide technical and functional support for any number of areas. With the Virtual Private Cloud and True Cloud models, there is a natural, built-in support component for all technical areas of the deployment.
Why Leaders of Mid-sized Businesses Should Be Concerned About Cloud ERP

If there ever was a model that enabled the mantra of "doing more with less", cloud ERP is it. The reasons are very simple, and are identical to the reasons Fortune 500 customers also need to be concerned with Cloud ERP:

1. To save the enterprise money
2. To concurrently reduce risk
3. To increase productivity potential and values realization from the ERP and associated enterprise applications

In December 2014, Cindy Jutras wrote in MintJutras, “Those companies running ERP SaaS today are clearly 'hooked' and unwilling to go back to on-premises deployment”. The high percentage of mid-market executives that have explored or implemented cloud solutions validates the strength of this statement.

Let us examine why these three concepts are so powerful.

Saving Money

Subscriptions Over License Fees

Typical subscription fees are known in advance, categorized as an operational expense, not paid up front, and modulate based on actual usage. License fees entail capital expenses paid up front, followed by annual maintenance fees for hardware and software. Most companies find the subscription causes a lower outlay than the on-premise, perpetual license option.

Hardware

Hardware upgrades are a known and recurring burden for IT departments, in particular when servers, SANs, and LANs are concerned. Most primary businesses upgrade or replace substantial hardware components every three to four years. With a cloud deployment, this cost and risk is taken care of by the provider, with all costs already covered in the subscription fees.

IT Costs

IT costs are more easily brought under control. With the transition of a large number of the traditional IT tasks to the cloud provider, the need for having wide coverage by a database administrator, a network expert, a web security expert, a disaster recovery expert and beyond is reduced. In some cases, companies have given up entirely on having permanent staff. Because the turnover in ERP employees is much higher than in other areas of an organization, the reduced need for such staff results in lower salary and fringe, less training costs on the technical side, lower search costs for replacements or when adding new skills, and of course simpler management structures.

ABERDEEN PUT IT VERY SUCCINCTLY IN THEIR 2013 REPORT: "ORGANIZATIONS WITH SAAS ERP SPENT EXACTLY 100% OF THEIR ERP IMPLEMENTATION BUDGET ON IMPLEMENTATION".

Faster Time to Solution

During the implementation of a new ERP system, a cloud deployment removes the technical activities of procuring hardware and software, installing and testing it, and associated training and remediation. Instead, the ERP applications are ‘turned on’ and users can start configuring them. Also, cloud deployments have the potential for a quicker time to solution, thus reducing consultant costs as well as internal costs, not to mention securing value realization benefits sooner.
With on-premise solutions, you can expect to perform an application “refresh” every seven to ten years; this exercise is essentially a major upgrade. Similar to the original implementation project, the costs to consider are hardware, software, consulting, and internal staff time to re-implement a new version. Because the cloud ERP solution is kept current, the chances you would want to replace it are lower. And even if an application upgrade is desired, the barrier to that change is dramatically reduced if moving from one cloud to the next compared to having to own all the aspects of the process yourself.

YOUR BUSINESS PROCESS CHANGES ARE ALLOWED TO HAPPEN INCREMENTALLY OVER TIME. AS THE CLOUD SOFTWARE IS UPDATED, YOU WILL SIMULTANEOUSLY UPGRADE YOUR BUSINESS.

Reduce Risk

Security

There is increasing evidence the rigid security compliance requirements of data centers provide a consistent and high degree of protection against denial of service, malware, viruses, hacking, and other technical security breaches. Due to continued training and upgrades of ancillary applications, the hosting services provider is less likely to fall prey to hacking.

Hardware

Hardware failure is a regular occurrence in IT operations. With the high degree of redundant systems (servers, nodes, etc.) and the ability to divert your user’s access from server farm A to server farm B in minutes, the sensitivity of your mission-critical applications to hardware failure is mostly mitigated.

Increases in hardware resource needs and scalability is protected as the data center has the ability to automatically and immediately add resources (RAM, storage, databases, servers, etc.) on demand as your needs come up. Just as quickly, surplus resources can be released when they are no longer needed.

Compliance and QA

These providers have well-documented procedures, and all who use their services are invited to audit. They also submit to rigorous quality assurance and compliance audits that confirm the capability of the data center to provide uptime as defined in their contracts. This assures a high degree of delivery on the SLA (Service Level Agreement) and will further reinforce your confidence that you know what to expect. Part of an SLA is also a continuum of disaster recovery methods that include hot swapping, mirroring, backups, data replication between data centers, and most importantly, periodic exercises in recovery from disaster.

Staff Backup

In an on-premise solution, your staff will have gained unique expertise in one or many aspects of your ERP technology, which gives rise to the question of vacation or sick day policies: “What will we do if Joe goes on vacation, or worse, gets sick?” Using a provider with 24/7 system monitoring that is staffed with a multitude of professionals who understand cloud ERP eliminates this risk.

Providers of SaaS ERP are experts in SDLC (Software Development Life Cycles), whereas many primary businesses are not. They will reduce the risk of confusion and waste by taking care of version control and configuration management as well as documentation and procedural and operational code promotion processes.

Single Source for Support

With cloud ERP, the same company and support engineers manage all support cases related to technology and gaining unique expertise on the shared environment. This environment is owned, maintained, and continuously improved by the support engineers of the SaaS provider. The around-
the-clock support, plus the fact that more than one primary business is using the system, reduces the risk of operational surprises when you start using a new feature or embark on a new business process.

Continuous improvement of the provider’s staff is accomplished as they push their engineers towards certification and re-certification on a long list of topics related to the services they provide.

Increased Productivity

Currency with ERP and the business model is enhanced, as the cloud provider takes care of code updates and patches as soon as they are available and when you want them implemented. Doing this enables all new features of the ERP application to be made available to your staff in a test environment for immediate assessment and adoption when you are ready. The improvements put out by the publishers at a regular tempo are meant to not only keep the ERP software in compliance and solve known bugs, but also to provide for new business processes and add productivity-enhancing features based on user feedback. It is recommended to take advantage of these new capabilities.

New components are available in the cloud deployment, for example new BI tools, devices, voice, portals, workflows, and integrated components, etc., and can be leveraged as soon as the publisher makes them available and you procure them. This flexibility dramatically reduces the need for your staff to seek out these solutions, experiment and learn the techniques of installing and configuring them – you will see them ready for use and tested on the environment.

WITH YOUR ERP APPLICATION IN THE CLOUD, IT IS EASIER TO ATTRACT TALENT THAT IS INTERESTED IN BEING PART OF A FORWARD LOOKING COMPANY, WHERE THE BUSINESS IS SUPPORTED BY CURRENT TECHNOLOGY.
What Issues Drive Manufacturers and Distributors to Consider Moving From On-premise to Cloud ERP?

Many of our customers ask us when they should move to the cloud. If the business is looking to move away from their current ERP provider and is involved in a selection process, then moving to the cloud should be considered. People also ask, “Why cloud versus on-premise at this specific time?” Or, “Why move my current ERP from on-premise to the cloud?” The answer is ROI.

However, the parties asking these questions have a business to run and starting an ERP project at any time is no small task. So when is the specifically right time to make the move? While there is no single answer to that question, it does make sense to look at the timing from two distinct perspectives:

1. When to move away from the current deployment model.
2. When to move to a cloud model.

Ultra Consultants recommends moving ERP from an on-premise deployment to a cloud-based deployment when the risk and cost of not doing so are beyond what you are willing to incur.

When Should You Move Away from the Current Deployment Model?

There are eight factors that indicate you might be ready to move away from your on-premise deployment model:

1. Application Readiness – Consider starting to use a cloud-ready enterprise if the application environment at your operation has become so complicated with custom coding and point-to-point integration routines that you can no longer upgrade mission critical applications. The ability to use a current code base on the cloud coupled with quickly on-ramping new capabilities, apps, and integrations, typically makes for an easier alignment of end-to-end business processes at your operation with pre-defined best practices. This reduces the need for many point-to-point integrations.

2. Security – It may seem counterintuitive at first, but as the pressures and challenges grow in protecting an operation’s data (as well as meeting HIPPA, Personal Confidential Information regulations, Payment Card Interface (PCI) compliance, and other data protection standards), an organization should be more interested in moving sensitive data to an environment that is built first and foremost to provide data security.

   Noted earlier were some of the characteristics that make the cloud providers capable and prepared to provide designed, measured and audited, and overall more superior data protection and access security. If your business requires a more secure environment and is concerned about data security, the cloud provides a cost-effective solution.

3. Cost/ROI - One dimension that deserves a close look is the change in the business model as a driver for a fresh ROI calculation. Many organizations opt to change to the more dynamic and flexible cloud deployment model when they move from a single country to a multi-national organization. The attendant needs include: a more complex supply chain, transportation and logistics needs, a change from pure manufacturing to added services, conducting a series of mergers and acquisitions, and even growth from a single-site to a multi-site situation, among others.

   In all of these cases, the burden, time, and cost of expanding the legacy environment on the basis of existing and newly acquired applications, business processes, technology infrastructure
and integration capabilities needs to be weighed against the one-time cost of moving to a cloud deployment. Equal consideration should be given to the much lower variable cost of turning services on or off, applications, user counts, hardware resources, and integrations that are needed as the business changes.

From a training and implementation cost perspective during the initial implementation or during process changes, one major advantage of the cloud is that it typically has a healthy portion of its training and implementation support done over the web. Experience shows this is done in bite-sized chunks with both the user and software vendor participating at a mutually-convenient time. While this does not necessarily shorten the time to implement or reduce the hard dollars associated with instructors’ training hours, it definitely contributes to cost-savings when one considers work productivity savings and reduced travel costs. Equally compelling is the ability to complete the entire implementation project without having to make a large up-front investment in perpetual license and maintenance fees that are characteristic of on-premise solutions.

Much of the existing research shows the TCO (total cost of ownership) in a cloud model – considering the accommodation of changes to the business and the business model – is positive for organizations.

4. **Culture** – Culture is hard to change and does not happen overnight. It requires changing many moving parts – including the CIO, IT organization, executive team and fellow business units – plus strong leadership, vision and tenacity. Your organization should therefore be forward-looking, not only IT but also the business and shared services should be aligned toward a future that leverages the flexibility and opportunity presented by a cloud deployment. If these elements are characteristic of your organization then it is time to consider a move.

5. **Internal Priorities** – At any given time, the organization, lines of business, shared services or IT has more than one potential project in which to consider investing. There is no substitute for a carefully laid out selection process, which balances risk with potential upside to assist the organization in deciding where to invest next. The cloud initiative is one such project, with clear ROI and with clear risk management; this includes mostly the reduction of existing risk, but at the same time introducing unknowns.

6. **Organization Readiness** – When looking at organizational readiness to move from an on-premise to a cloud-based ERP deployment, it is important to gauge the readiness of your “organic” staff and that of all the third parties that support your mission-critical enterprise applications. Ask the
following: Has this coalition of resources invested enough in keeping current on the older apps that are in place in your organization? Has everyone kept their certifications current? Are there capabilities in the newer apps that can be back-ported to your legacy version actually in use? Are the new business processes part of the discussion with the super users and the existing support network? And, is the technology infrastructure currently in place, one that can be supported for years to come?

If the answer to any of these is “no,” then based on the dynamics of your organizational readiness to provide ongoing upkeep to your legacy environment, it is time to start looking at cloud-based ERP.

7. Integration and Technology Capability – Many older deployments of on-premises ERP have become heavily customized, and Excel is running rampant as the “source of truth”. This would include not only a substantial library of work around solutions to business problems, including Excel, Access, etc., but also custom code and custom integrations. In some deployments, we observe the degree of change is so large the organization cannot keep up with the regular tempo of upgrades, deeming the status quo even more permanent. If you find your organization close to this situation, it is time to reconsider your current solution.

8. Ongoing Support – Another sign that it is time to consider cloud ERP is when your internal IT support staff are starting to age, retire or turn over at an increased pace. At some point, holding on to older technology also means holding on to a support infrastructure that is increasingly rare to find, and therefore expensive, including salaries, benefits, recruiting and replacement costs. Making the change to cloud ERP can prevent the risk of a staffing problem and can actually attract new talent to the organization that wants to align with a forward-looking organization.

When to Move to a Cloud Model?

The timing of the move becomes more interesting when you take into account that not all applications have to move at once. The intention in moving to the cloud is for the transition to be fast, efficient, and effective.

So is it better to move applications one at a time, or is it easier to move the core application ERP first, and have the others follow? The answer depends on where the business needs are versus the pain involved in moving. If ERP is not first, then there will be integrations from the outlier applications to the on-premise ERP, which are throwaways. If an application is, for the most part, self-contained and requiring limited interactions, e.g., forecasting, the application could be moved sooner than later.

Using this perspective, you might want to look at the stack of enterprise applications you’re running and start ‘peeling’ them off one at a time. Applications with limited integrations and high value, like forecasting and human resources can be a starting point, and from there moving to the core of CRM, ERP and BI, while leaving high integration “advanced” applications of APS, MES, WMS, and PLM systems for a later stage.
How Should Cloud ERP Vendors Be Evaluated?

Once you have made the decision to look into new ERP software and determined it is the right time to make a move, Ultra recommends performing a detailed analysis of the vendors. This analysis begins with understanding your business needs.

Ultra’s work with its clients usually begins with Business Process Improvement (BPI). Ultra’s BPI methodology starts with understanding what the business is doing today by mapping the current state, educating the team on what is possible, and following with a detailed mapping of the future state. A gap analysis between current state and future state reveals the business case for change.

Five Steps in BPI

1. **Organize the Team**: Be clear as to the roles, who is on the executive team, and who is the sponsor. Also, determine who will be looking at the software as part of the core team and who will be on the team to evaluate new business processes. This usually requires a larger team.

2. **Current State Mapping**: In this step, multiple maps are created, with 50 to 200 detailing every aspect of the organization. These maps are critical to getting everyone, including the executives, on the team and informed on how the business performs its current functions.

3. **Education**: Most organizations that are ready to move to a new system have either a team which is experienced in the current business processes, or a team fairly new to the organization which may not have created the current processes. In either case, the team needs to understand what is possible, i.e. what are the new features and functions, and what is available “out of the box” for their organization.

4. **Future State Mapping**: Future state mapping is the most critical aspect to selecting a new system and the second most critical aspect to implementing a new system. Future state maps allow the organization to look at new software in light of what the organization wants to do with respect to new and improved processes, versus what they do today. Also, future state maps are the foundation for the Conference Room Pilot scripts of the implementation. These scripts are used to test out the new software according to the organization’s desired business processes.

5. **Business Case for Change**: In this step the organization defines the goals and key success factors of the implementation, creating a baseline of ultimate success for the project. Typically, the first pass implementation charter is developed with these goals and factors in mind. Additionally, a road map of future projects is created, laying out the timeline of implementation. This step is critical to informing the vendors as to why the project is being undertaken, and ensuring that these goals are part of their proposals back to the organization.

Five Factors for ERP Selection

Once the project team has made it through the BPI efforts, it will be ready to look at the vendors. There should have been minimal contact with the vendors during BPI. Typically there is an RFI or long list which is reviewed both online and via written responses from the vendors. The long list is normally five to eight vendors if the team is educated in who the vendors are for its industry and size of company. A short list of three to four vendors are invited in to demonstrate the future state business processes, and ultimately two vendors are chosen to compete for the business. In all of these efforts it is critical that the team evaluates the vendors with the following five factors for a successful ERP selection.

1. **Features & Functions**: ERP selection projects must keep their focus on the ability of the software to meet the functional needs of the organization. Typically, a company will spend up to 8 percent of its time making sure the software provides adequate coverage of an organization’s specific business requirements. Ask: What does each company offer? What are the products for each industry/vertical? What are some of the key features and functions for each vertical?
2. **Cost & Contracts**: An ERP system represents a major investment in capital expenses and resources. Given the magnitude of both direct and indirect costs like software, training, implementation and services, companies expend a significant amount of time understanding and negotiating costs and contracts. Ask: What does it cost, in an apples-to-apples comparison?

3. **Company Risk**: Know the ERP vendor you are buying from. Ask: How many years have they been in business, and how many years has the application been sold in the market? What are the sales last year of each product they represent, in dollars and numbers? How much money is invested in R&D? What are their prospects long term? Are they positioned to be purchased or will they purchase another vendor?

4. **Technology & Platform Risk**: Know the vendor’s underlying technology such as the database structure or delivery model. Ask: What direction is the vendor taking with this technology platform in coming years? Are they staying current? What is their cloud offering? Do they perform well in the key areas of user interface and role centers, workflow, and business intelligence?

5. **Implementation & Support Risk**: Know if the implementation will be led by a partner or directly by the vendor. Ask: Do they have experience in your industry? Who do you call when you have a problem during implementation? What is support like after “Go Live?” Will they make a good partner? Careful scrutiny is needed here.

In looking at Cloud ERP solutions, the factors of technology and implementation may change, while the other three do not change in evaluating vendors. Of course the pricing model is different, but getting apples to apples is the same. Remember, a vendor might deliver excellent software at a competitive price, but is destined to fail if it is not implemented effectively.

**Cloud ERP and Technology**

There is a long list of issues to consider, which are different than that of the on-premise ERP solution including:

- **Upgrades** – How are these performed, and how often? Do you have a choice, or must you accept all the improvements blindly?

- **Customizations and Enhancements** – How can the software be modified? How do you make enhancements or change the screen, and how does this affect upgrades?

- **Reporting** – How can the reports be customized? How can BI be implemented? Is there a problem in multi-tenant environments where others can see my data?

- **Integrations with “other” applications** – This is very important, as not all your enterprise applications will be in the ERP systems. Ask: How does the cloud ERP provider offer integrations
between its database and that of other applications outside of the ERP-specific cloud, including to other cloud applications (e.g., CRM, Forecasting, MES, WMS)?

- **Response Time** – What is the response time of the application for your businesses? Based on your physical location, it may be different for different vendors.
- **Up Time** – What is the contracted uptime of the application and what is it demonstrated? How does the system “hot switch” from one data center to another?
- **Security** – What is the security of the sites? Do they offer special data centers for DOD, food and drug, pharma, or non-US locations?
- **Data** – What is the process to recover my data if there is a problem? How is it backed up? Can others get to my data via reporting?
- **World Wide** – What is the worldwide coverage of the applications, response time, up time, security, etc.?
- **Data Accessibility** – How do I get my data if after a year, I want to leave the solution, i.e. move back to on premise or another cloud solution?

**Implementation and Support**

Many of the true cloud ERP vendors do not offer the traditional implementation services with full-time project managers, instead offering extensive online training and much less time on-site. Therefore, when evaluating this area, understand clearly where the hours are being spent, whether on-site or remote, and in which category, for example project management, training in a class room or side-by-side with consultant, and functional and technical.
Who are the Cloud ERP Vendors?

Cloud 2.0 Vendors

1. **NetSuite** (100% cloud SaaS): NetSuite owns the lower end of the market, getting their start in distribution and service companies. They are working their way up market into larger companies, and they have added much needed manufacturing capabilities. Strong in B-to-C and retail as well. Publically traded. If you are looking at cloud you must look at them.

2. **Plex** (100% cloud SaaS): The #2 player in the pure SaaS cloud ERP model. They had their beginnings in the automotive industry, worked into distribution and then food. Currently expanding into all types of manufacturing and service industries. Tripled the size of the sales team in one year. They have the money behind them to continue to roll.

3. **QAD** (on-premise and cloud SaaS): Roughly the third player in the true Cloud 2.0 market. The first on-premise ERP to make the move to the true cloud deployment model. Their focus is manufacturing and distribution which have been the roots of the company for years.

4. **Infor** (on-premise and cloud SaaS): Infor’s CloudSuite is one of the newer entrants into this field. Came in with a huge amount of code ported over from multiple ERP systems. Tied in with Amazon, which allows them to leapfrog others into worldwide distribution of cloud ERP. True Cloud 3.0 is on the horizon. Infor offers all levels of cloud.

5. **Epicor** (on-premise and cloud SaaS): One of the newer entrants into this market. Bought a few of their customers along first. Two versions of the cloud; one is bare bones, the other is full Epicor ERP. Just getting started.

6. **IFS** (on-premise and cloud SaaS): One of the newer players in the market. Brought along a few customers. Still trying to ramp up. Their customer base tends to be larger mid-sized manufacturers which are not early adopters of cloud. Therefore, they are way ahead of their customers which implies a longer period of ramp up time and a longer tail once they get there.

7. **Kenandy** (100% cloud SaaS): Market and focus similar to RootStock. Sandra Kurtzig founded Kenandy in 2010 to transform the world of enterprise management software. The venture started as the result of a conversation between Kurtzig and Marc Benioff, Chairman and CEO of Salesforce.com, about building an enterprise management solution on the Salesforce platform. The product attempts to cover all vertical manufacturing and distribution markets as well as service companies.

8. **RootStock** (100% cloud SaaS): Market and focus is similar to Kenandy. Launched in 2008, Rootstock Software is a provider of cloud ERP manufacturing, distribution and supply chain solutions. The company has grown to serve customers throughout North America, Europe and Asia Pacific and is now available exclusively on the Salesforce platform (Force.com) and available through the salesforce.com AppExchange.

Almost Cloud and Cloud 1.0 Vendors

9. **Microsoft Dynamics AX & NAV** (Almost Cloud): The model today is largely partner-led. A customer could purchase a perpetual license and then deploy that in the cloud. Or a customer could subscribe on a monthly license subscription, but then deploy on their own servers. There are partners that provide hosting services from their own datacenters, and there are partners that host in Microsoft datacenters through Azure and provide management services for the client. To be clear, today there is not a Microsoft hosted and managed offering, providing a “version-less” instance for clients. This is an area of the business that is receiving a lot of investment and new info will be released as it becomes available.

10. **Oracle** (Almost Cloud): Not there yet. 40+ acquisitions all in the cloud in the past three years. But they are not offering a core ERP (MRP) product. Their partners are offering cloud solutions, in a SaaS, single tenant environment.
11. **SAP** (Almost Cloud and Cloud 1.0): SAP had a true cloud solution but then canceled it. Re-introduced the base version with single tenant type of service.

12. **Sage** (currently Almost Cloud): Almost there (Cloud 2.0), tried entering the market in 2014, and are currently in beta/pre-release mode. If they can do all that they say they can, with seamless functionality between on premise and the cloud, they should quickly ramp up. Their customer base is a perfect fit for the cloud model. Could easily be the #3 player, it all depends upon their ability to sell (assuming the product works).

**More information**

For more up to date information on all of these cloud ERP vendors, visit the Ultra Consultants website: www.ultraconsultants.com/erp-vendors/

**About Ultra Consultants, Inc.**

Ultra Consultants is an independent consulting firm serving the manufacturing and distribution industries. Organizations turn to the Ultra team for ROI-driven ERP technology expertise and business process management that improves revenue and customer satisfaction, enhances financial management and real-time decision making, improves productivity and reduces time to market. The world’s middle market companies make up the Ultra Consulting client roster including aerospace and defense; automotive; chemical; consumer goods; electronics; food and beverage; industrial equipment; medical device; metal fabrication and plastics manufacturers. Ultra Consultants offer deep experience in manufacturing process optimization. The team averages over 20 years manufacturing and process experience with professional certifications in APICS, Lean manufacturing, Six Sigma Green and Black Belt, and Project Management.

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