

Don't Be Deceived by the Fake Hosted Cloud

Why Cloud ERP Provides More Value Than Microsoft's Hosted Solutions

SUMMARY

NetSuite is built on multi-tenancy and self-service, two of the core elements of a real cloud, and as a result offers its customers instant upgrades, APIs to customize the core applications, and connectors to other cloud services in a secure environment.

Burdened with a history of legacy on-premise software, Microsoft is "cloudwashing" many customers by trying to convince them that a hosted Microsoft Dynamics ERP solution is equivalent to a true cloud solution.

Gartner and other respected analyst firms have stated that hosted services are not the same as cloud computing. Hosting poses a lot of risks related to upgrades, cost, customizations and economies of scale.

The VARs and hosting partners of Microsoft may also face serious problems when it comes to uptime, security, and reliability, and customers should also be careful to examine the business viability of the VAR.

Microsoft's Azure cloud service contains several components that are simply rebranded versions of on-premise software, and in some cases have less functionality

You've decided you don't want to run your software solution in-house, and it's time to move to the cloud. But it's important to recognize that not all applications provided over the internet are equal, and that some "cloud" choices aren't actual cloud solutions at all. Many on-premise vendors, like Microsoft, are in the process of "cloudwashing" their solutions and customers by offering hosted versions of their software. So what's the difference between NetSuite, an ERP solution that is designed to run in the cloud, compared to using a product that was designed to run on-premise, but is now being offered as a hosted solution? And why should it factor into your decision making process?

According to IDC, SaaS solutions are set to grow six times faster than all software, at a compound annual growth rate (CAGR) of 26% through 2014.¹ With cloud computing growing so rapidly, many vendors are trying to position themselves as cloud providers. NetSuite's comprehensive solutions consisting of CRM, ERP, accounting, financials, ecommerce and order management were always designed as a web-based, multi-tenant, self-service cloud.

“ It is important to also differentiate SaaS from hosting or application management or application outsourcing. Because SaaS and cloud are hot concepts in the market, many suppliers are rebranding their hosting or application management or application outsourcing capabilities as SaaS or are claiming their solutions are available 'in the cloud.' Much relabeling of more-traditional application outsourcing approaches is occurring. Suppliers run the risk of confusing and antagonizing buyers if they persist in this approach. Enterprises run the risk of getting nasty shocks when the thing they thought they were buying turns out to be something altogether different. Hosting and application management are not synonymous with SaaS, nor do they necessarily comply with the definition of cloud computing. ” —Gartner²

In contrast, Microsoft Dynamics ERP systems (such as NAV, GP and AX) were designed to run on-premise in a LAN environment. In a fake cloud, on-premise software is typically hosted by a value-added reseller (VAR) or other service provider in a manner similar to the application service providers (ASPs) of the late 1990s. In addition to being unintegrated, a hosted solution poses many risks related to upgrades, process integration, business viability of the VAR or service provider, customization tools and other issues highlighted in this document. With a fake cloud, your organization will not reap the full benefits of a true cloud solution.

The "advantages" that Microsoft spins for its hosted applications are in fact nothing more than mere characteristics of on-premise software. It's important to recognize that any software vendor today designing a cloud application is designing it to be a multi-tenant, completely web-based application. No new cloud vendor is designing single-tenant applications with isolated databases, running in their own application instance. The reason is that hosting these kinds of single-tenant applications are simply too expensive, inefficient and not scalable.

¹ IDC, *Worldwide Software as a Service 2010-2014 Forecast: Software Will Never Be the Same*.

² Gartner, *Forecast Analysis: Software as a Service, Worldwide, 2009-2014, Update*.

 Find out more: contact NetSuite, Inc. at 1-877 NETSUITE or visit www.netsuite.com

“While Microsoft Dynamics has over 300,000 customers, we believe it will lose share in the long run to other vendors with more comprehensive SaaS solutions, such as NetSuite.”

—Jason Maynard
Senior Analyst
Wells Fargo Securities³

While the viability of a hosting VAR is questionable due to the economics of hosting, NetSuite is public, profitable, and transparent and has over \$100 million in cash reserves. With NetSuite, you can be confident that the application and its means of delivery will be around for the long haul. Microsoft claims that you don't have to worry about viability because Microsoft Dynamics ERP is backed by Microsoft. Yet VARs that host fake clouds are consolidating regularly, and there is no guarantee that the VAR that you use for hosting will be around for the long haul.

Equally important, with their limited headcount and resources, VARs simply cannot achieve the same levels of security and uptime that NetSuite has consistently provided to clients for over 12 years. VARs will claim you can bring the application on-premise, but that would take time, resources and IT headcount. More likely, you'd end up having to shop for another VAR to host your solution—with different rates, service levels and responsiveness.

Benefits of NetSuite's Cloud Solution that Hosted Microsoft Dynamics ERP Can't Match

There are many aspects of a true cloud solution that Microsoft's hosted Dynamics ERP does not live up to. IDC provides a simple comparison, of a public cloud solution (like NetSuite), compared to a hosted solution (like Microsoft Dynamics ERP). It clearly identifies areas such as scaling, self service, integration, and flexibility that are all important advantages of a public cloud solution.

	Public Cloud	Hosted App Mgt/ Infra Hosting	App/Infra Management, Outsourcing
Solution/service-packaged	●	●	●
Shared, standard service	●	◐	○
Elastic scaling	●	◐	○
Use-based (elastic) pricing	●	◐	○
Self-service	●	○	○
Accessible via the internet	●	◐	◐
Standard UI technologies	●	◐	◐
Published service interface/API	●	○	○

Degree of standardization/production	High	Moderate	Low
Minimum length of commitment required	Short-term to transactional	Medium-term	Long-term
Speed to adopt/change/enhance	Fast	Medium	slow
Extensibility, value via community/partners	Very high	Limited	Very limited

Source: IDC

³ InformationWeek, *Microsoft Needs Apps to Win in the Cloud*, February 2011.

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Below, is a more complete discussion of the key benefits that a true cloud solution provides to your business that hosted can't match.

1) You never have to wait for upgrades

With NetSuite: Because NetSuite's R&D and data center operations teams are completely integrated and NetSuite runs in a multi-tenant environment, NetSuite is able to ensure you are always running on the latest version of the software. When NetSuite announces new functionality, you don't have to wait for months to get the benefits at your business. You also get important benefits such as sandbox environments for testing, live beta previews of new functionality to help you and your users gain familiarity, and the confidence that your customizations are upgraded reliably and automatically.

With Microsoft: Because you're disintermediated from Microsoft, and because the hosting VAR is the middleman, every time Microsoft releases a new version of the product, you have to wait for your VAR to upgrade you. In a single-tenant hosted environment, each customer stack must be individually upgraded - application, middleware, and database. In addition, there will often be a period where the VAR has to reapply and test customizations. If your application has been extensively customized, or there are partner add-on dependencies, this will affect how long you have to wait for your upgrade. Depending on how many IT resources the VAR has, your delay could easily stretch into many months.

2) A cloud vendor can achieve substantially better economies of scale

With NetSuite: NetSuite has a single instance of the application supporting over 10,000 organizations with over 4 billion requests per month. NetSuite's multi-tenant infrastructure enables our operations team to spend resources on shared improvements rather than repeating the same effort over and over again on separate stacks (as in a hosted solution).

Furthermore, because NetSuite's multi-tenant architecture is more efficient to run, NetSuite is able to devote substantially more resources to security, data management and uptime in its data centers. NetSuite has achieved the latest security certifications such as SAS 70 Type II, and compliance with the PCI Data Security Standard and EU-Safe Harbor, as well as running multiple datacenters. This translates into millions of dollars of investment in application level security and uptime, far more than any VAR can manage by itself.

This investment has allowed NetSuite to offer you a contractual guarantee of 99.5% uptime. NetSuite has consistently averaged 99.97% uptime, and provides you with real-time access to system uptime performance at <http://status.netsuite.com>.

With Microsoft: A hosted Dynamics ERP solution requires a single customer's application per instance, each typically running in a virtual machine. Because each application is in a separate stack (including sandbox, development and production), and each instance requires separate pieces of Microsoft infrastructure (such as SQL Server, SharePoint etc). The VAR is forced to spend substantially more resources to keep each hosted stack running. The service provider often cannot achieve economies of scale, has to add substantial headcount as more customers are added, and either must pass on the cost of operations to the customer, or operate on less resources than necessary, to preserve margins. Furthermore, many hosted solutions have only a small number of actual clients, and it's questionable whether they can grow their hosted offering without impacting their service. In short, a cloud solution enables the vendor to run the application and support your needs much more efficiently than a hosted solution.

⁴ Gartner, *Scalability, Elasticity and Multitenancy on the Road to Cloud Services*, November 2009.

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“Hosted web services can be experienced as cloud computing, but they'll prove more expensive and less flexible than genuine cloud services.”
—Gartner⁴

“These [hosted services] are dedicated resources, with full costs borne by the user, scalability that is slow (hours, at best, but typically days or weeks) and expensive. Users retain near-full control of resources, despite delegating platform ownership responsibilities.”

—Gartner⁵

3) Your customizations migrate seamlessly during an upgrade

With NetSuite: NetSuite’s SuiteCloud platform provides a full customization layer that enables your customizations to migrate reliably and automatically with each upgrade. The platform supports managed customizations such as custom reports, custom scripts, workflows, schema changes, integration and much more. It means that you’ll always get the latest release, no matter how much you’ve customized it, and you can be confident that your customizations will migrate seamlessly to the latest release.

With Microsoft: Microsoft Dynamics ERP solutions such as GP, AX and NAV were designed with the expectation that a company’s IT department would be readily available to test and implement customizations during upgrades. While NetSuite has a separate customization layer that is abstracted from the underlying application and infrastructure, Microsoft’s solutions often have many individual infrastructure components (such as SQL Server, BizTalk Server, SharePoint, along with the Dynamics application server itself). Each has to be configured separately, and customizations made to each component must be checked and reapplied, which often results in a resource intensive and error prone process.

What this means is that it is highly inefficient for a VAR to migrate customizations of every single application instance to a new release. Your upgrade may be delayed because of these customizations, or even break. Partner add-ons that customize Dynamics ERP further may add yet another layer of complexity to this process.

4) You can customize the application with self-service tools

With NetSuite: NetSuite was designed from the outset with the assumption that an organization running in the cloud does not have an IT department on standby to customize the application. NetSuite is designed to be self-service, allowing you to make all customizations yourself without relying on additional IT resources, and never having to rely on NetSuite to make changes for you. This allows you to save costs on both IT personnel and change management. You can use NetSuite’s self-service features to create scripts, workflows, schema changes, new reports, dashboards, integrations and more.

With Microsoft: While you may be able to perform some customizations yourself, many changes will require assistance from your VAR or hosting provider simply because the Microsoft Dynamics ERP stack relies on so many underlying Microsoft infrastructure components. This will end up costing you more in IT consulting hours, requiring specialized knowledge of SQL Server, SQL Server Reporting Services, BizTalk Server and other components. For some customizations you may be beholden to the VAR to make changes for you. In short, each Microsoft Dynamics ERP application instance whether GP, AX, or NAV was designed to have a full IT staff supporting it—neither your company nor your hosting VAR can realistically allocate the necessary level of resources to it.

⁵ Gartner, *Scalability, Elasticity and Multitenancy on the Road to Cloud Services*, November 2009.

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“ We find Microsoft’s business applications strategy fragmented and incoherent. First off, it’s a mish-mash of small- and mid-sized-business focused products from the Great Plains, Navision, Axapta, and Solomon acquisitions, that together they call Microsoft Dynamics.”

—Jason Maynard
Senior Analyst
Wells Fargo Securities⁶

5) The cloud vendor can optimize the application based on usage

With NetSuite: Because NetSuite’s solution is multi-tenant, and the same organization that develops the solution is also actually providing the solution, the NetSuite team can clearly understand general application usage across its customers, identify any performance bottlenecks, and clearly see where to make user experience improvements to the product. It enables NetSuite to provide the best possible web based experience to its customers, and continue to evolve and improve it over time.

With Microsoft: In contrast, since Microsoft is disintermediated from the customer by having the hosting partner as the middleman, Microsoft does not have direct insight into user experience metrics, such as the performance the customer is experiencing from the hosted application. Any metrics that hosting partners may capture vary widely from VAR to VAR and recommendations for improvement may take a while to reach Microsoft. Since Microsoft’s various Microsoft Dynamics ERP products are being hosted by VARs in different ways, it is also extremely hard for Microsoft to optimize their performance for any particular hosting environment.

6) You can more easily add and integrate other cloud-based applications

With NetSuite: NetSuite’s cloud ERP solution allows you to more easily connect with other cloud-based software applications (in addition to integrating with on-premise investments). NetSuite is able to do this because its SuiteCloud platform technology is completely web-services SOA-based and is designed to interoperate with other cloud offerings. You can use NetSuite to integrate with salesforce.com, Amazon, eBay, UPS, FedEx Google Apps, and many other online solutions. NetSuite customers can choose from the hundreds of cloud applications that integrate with the NetSuite online marketplace, SuiteApp.com. This means that you can quickly boost productivity by adding other cloud solutions that integrate with your core cloud ERP offering from NetSuite, or even integrate with other solutions yourself.

With Microsoft: Microsoft Dynamics GP, AX, and NAV solutions are built on a legacy architecture and cannot integrate with other cloud apps without numerous tedious connectors and expensive IT consulting services. Based on the infrastructure that is hosting the ERP solution, it may be even more technically challenging to integrate with other cloud solutions. In fact, there may be cases where the only way to integrate with partner applications is to have the VAR host them as well. This would make you even more dependent upon the VAR, and add to your hosting fees.

7) Your users can access the application more easily

With NetSuite: NetSuite’s solution is completely web-based - for both end users and administrators. As long as users have access to a browser, mobile device (such as the iPhone) or tablet (such as the iPad), they are able to fully access NetSuite. Secure and easy access over the internet is one of the key benefits of cloud computing. Your employees can work from anywhere at any time using just a web browser. There’s no need to use Citrix clients, install VPN clients, or risk frustration struggling with partial web based experience. Additionally, because NetSuite’s applications were designed to run over the internet through a web browser, NetSuite typically requires much less network bandwidth than hosted solutions.

⁶ InformationWeek, *Microsoft Needs Apps to Win in the Cloud*, February 2011.

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“ One of NetSuite’s key differentiators is that it offers a seamless, holistic, cloud-based solution, whereas even within the Microsoft Dynamics product line, it is still difficult to integrate the multiple pieces like financials, CRM and ecommerce.”

—Jason Maynard
Senior Analyst
Wells Fargo Securities⁷

With Microsoft: Hosting partners running Microsoft Dynamics ERP deployments will require you to use VPN, Citrix or Windows Terminal Services to access a majority of the features. By doing so, you risk poor performance or a subpar user experience. Your users will require special tools to connect, and it will be hard to achieve the anytime, anywhere benefit of cloud applications. Another key consideration is that Microsoft Dynamics ERP applications were designed for an intranet client server environment, not the internet, which typically requires more bandwidth than a completely web based solution. It was only with the recent Dynamics NAV 2009 R2 release that Microsoft allowed internet access for the first time (and that was limited strictly to the RoleTailored interface). However customers will still have to use Citrix to access other features. This means that you’ll get less value out of your IT investment, since you won’t be able to access key features without going through time-consuming configurations first.

8) It’s easier to resolve customer issues

With NetSuite: Because NetSuite logs detailed metrics regarding application performance, it can resolve user experience issues much faster by identifying the root cause of a problem. In addition, NetSuite can design future functionality knowing exactly how it will be deployed, thereby offering you a more cohesive experience.

With Microsoft: When performance issues arise with a hosted Microsoft Dynamics ERP solution, it is hard to pinpoint whether it’s a problem with the application itself or the VAR’s data center. Microsoft cannot design the application to work efficiently because each hosting provider has its own proprietary hosting deployment infrastructure. You’ll waste valuable time being shuffled back and forth between Microsoft and the VAR trying to determine the root cause of your problem.

9) Your applications are more secure than a hosted solution

With NetSuite: NetSuite runs thousands of customers on a single instance of its application. Since the application runs on a single code base, NetSuite has a unified view of its infrastructure and can roll out security upgrades to you much faster than a VAR. NetSuite’s business is built around the security and reliability of its cloud ERP applications so it dedicates a tremendous amount of time and resources towards ensuring these applications have the best performance, reliability, and data management possible. It is important to recognize that since the inception of NetSuite in 1998, NetSuite has never had a security breach of any kind.

With Microsoft: A VAR hosting Microsoft Dynamics ERP has multiple instances of the database, application server, web server and other infrastructure components to keep track of—all with a small IT team. Consequently, it’s difficult for the VAR to gain a unified view of its data center, even though it hosts many fewer customers than NetSuite. After identifying security threats, the myriad of customizations built on separate databases and application instances mean a much longer time to apply security patches, increasing the risk that a breach will occur.

⁷ InformationWeek, *Microsoft Needs Apps to Win in the Cloud*, February 2011.

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Myths that Hosters Will Spread about the Cloud

It's important to recognize the myths that hosting providers will spread about real cloud solutions. In a nutshell the benefits that hosting providers cite, are typically nothing more than the characteristics of an on-premise solution.

“Microsoft gave up on “Project Green” back in 2007 and hasn't really had a compelling story for years in this market. When Microsoft says they are “all in” on the cloud, it is not entirely clear how applications fit into this plan.”

—Jason Maynard
Senior Analyst
Wells Fargo Securities⁸

“In truth, multi-tenancy matters even more to buyers, because it's what makes the difference between a SaaS application that's destined for rapid obsolescence and one that will continue to evolve with the cloud and all the wealth of possibility that's opening up in the connected web.”

—Phil Wainwright
ZDNet blogger¹⁰

1) “Hosting allows you to take your data back on-premise at any time”

For almost every business, once they move to the cloud, it's a one-way, one-time move simply because the value of the cloud is too compelling. No one wants to move servers back in-house, or staff up a large IT team once they realize the waste this deployment model produces. There may be customers who choose to go from one cloud vendor to another but never back on-premise. NetSuite allows you to have a full export of your data, and all reference and transactional data can be exported any time, as often as you like.

2) “Single tenant environments are more secure than multi-tenant environments”

NetSuite safely manages over 7,000 customers in its multi-tenant environment and has multiple security certifications, with no history of any security issues since the inception of the company. In fact, NetSuite is able to devote more investment towards keeping your data secure than hosters due to its economies of scale and greater resources. Hosters only claim single-tenancy as a benefit because the Dynamics ERP application was never built to run as a multi-tenant application. By not being multi-tenant, they can never achieve economies of scale like NetSuite.

3) “Hosting allows you to upgrade at your own pace while the cloud does not”

This is simply not true. NetSuite allows you to choose your own upgrade window if desired. Hosters make this statement because their own operation often cannot keep up with the pace of customers demanding upgrades to the latest version. Once again, this is a symptom of software that was designed to be on-premise in the first place.

4) Microsoft allows you to have a hybrid cloud model with Windows Azure and Dynamics ERP

This is nothing more than a ploy to sell the customer more on-premise Microsoft software and for the hosting partner to gain additional IT consulting revenue for services that would otherwise be automatically available with a true cloud vendor. In fact, the respected SQL Server Magazine states: “The current release of SQL Azure provides support for the SQL Server relational database engine. This allows SQL Azure to be used as a backend database for your applications. However, the other subsystems found in the on-premises version of SQL Server, such as Analysis Services, Integration Services, Reporting Services, and replication, aren't included in SQL Azure.”⁹

⁸ InformationWeek, *Microsoft Needs Apps to Win in the Cloud*, February 2011.

⁹ SQL Server Magazine, *SQL Server vs. SQL Azure: Where SQL Azure is Limited*, August 2010.

¹⁰ ZDnet.com, *Multi-Tenancy: Why You Should Care*, September 2010.

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What this means is that more advanced features such as reporting and analysis (which are standard in NetSuite) requires the purchase of on-premise SQL Server software, not to mention additional IT personnel with database administration skills.

Microsoft will try to convince prospective customers that because Azure is a true cloud, any application that is built on Azure and interacts with hosted Microsoft Dynamics ERP is a true cloud solution. Customers should be aware that Dynamics ERP does not integrate natively with the Azure code base and that Microsoft has not released a roadmap for rewriting Dynamics ERP for Azure. Microsoft's own Dynamics NAV Team blog states: *"Dynamics NAV (or any of the Microsoft ERP products for that matter) is not architected to support database 'sharing' as this is a relatively new concept for SQL Server"* and that *"if your NAV database is over 50 GB or will ever be over 50 GB, using SQL Azure as a database platform for NAV is not currently possible due to its application architecture."*¹¹

As a result, customers would need a consulting firm that specializes in Azure to build connectors between Microsoft Dynamics ERP and Azure, and they would find it very difficult to use the Azure toolset to customize Dynamics ERP on their own.

Conclusion

In conclusion, the differences between a fake hosted solution and a true cloud solution are substantial – in terms of security, speed of upgrades and deployment, integration, application optimization and self-service. We would like to leave you with a quote from Microsoft's own execs, where they admit that applications in the cloud should be designed specifically for the cloud:

“ Apps should be designed specifically for the cloud. If you move your existing apps into the cloud, they don't take advantage of all the features the cloud offers. If you're just putting applications onto a virtual machine, you're just putting a horse's head on the front of a car. That is just not the optimum way to take advantage of the cloud.”

—Rolf Harms, Director of Corporate Strategy, Microsoft¹²

¹¹ Microsoft Dynamics NAV Team Blog, *Dynamics NAV and SQL Azure*, January 2011.

¹² The Register, *Microsoft Compares Amazon Cloud to Horseless Carriage*, March 2011.