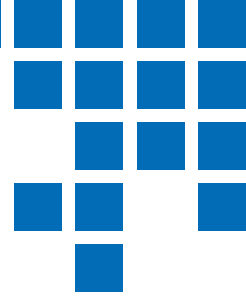




SYTELINE IN THE CLOUD

WHITE PAPER



SyteLine in the Cloud

Should manufacturers use on-site or cloud-based versions of their ERP systems? Or perhaps a combination of the two? What are the advantages and disadvantages of moving to a cloud-based ERP system?

What is the cloud?:

The cloud is a network of servers, and each server has a different function. Some servers use computing power to run applications or “deliver a service”. Other servers in the network are responsible for storing data.

What are the benefits of using the cloud?:

- **Flexibility:** Cloud-based services are ideal for business with growing or fluctuating bandwidth demands. It’s easy to scale up or down your cloud capacity.
- **Disaster Recovery:** Small businesses can implement cloud-based backup and recovery solutions that save time and avoid up-front investment.
- **Automatic Software Updates:** Cloud suppliers take care of your servers and roll out regular software updates so you don’t have to maintain the system yourself.
- **Capital-Expenditure Free:** Cloud computing cuts out the high costs of hardware, since the cloud providers charge a monthly fee.
- **Increased Collaboration:** Your team can access, edit, and share documents anytime, from anywhere.
- **Work from Anywhere:** If you have an internet connection, you can be at work. And most cloud services offer mobile apps, so you are not restricted by which device you have.
- **Document Control:** All files are stored centrally, so everyone sees one version of the document.
- **Loss Prevention:** Data is stored in the cloud, which gives you greater security in the case of lost laptops, since there is no sensitive data stored inside them.
- **Competitiveness:** The cloud gives you access to enterprise-class technology. It allows smaller businesses to act faster than big, established competitors.
- **Reduced IT Staff:** Since the cloud provider is maintaining updates and handling security, companies can limit the IT staff needed to maintain their information.
- **Insight:** Many cloud providers offer integrated cloud analytics for a birds-eye view of your data.

SyteLine in the Cloud

How can manufacturer's benefit from using the cloud?

- Companies can combine the manufacturing expertise built into their SyteLine system with cloud computing technology, giving them a powerful manufacturing-specific solution.
- The cloud makes it easier to capture, manage, and analyze data. Cloud platforms are especially valuable to manufacturers with build-to-order, configure to order, and engineer-to-order business models that require a dynamic computing environment.
- Cloud-based platforms can speed product development. The cloud enables greater collaboration earlier in product design cycles.
- SaaS (Software as a Service) based solutions are available with the SyteLine cloud model. SaaS is also offered on a pay-as-you-go basis, taking away the initial up front license purchase, which allows some businesses to turn the expenditure from capital expenditures to operational expenditures.
- Ease of Deployment - Implementing SyteLine can often be lengthy processes that are sometimes highly customized. SyteLine's cloud offering follows industry best practices and has methodologies that can dramatically cut project length.

What are the disadvantages of using the cloud?:

- Downtime: The cloud is fully dependent on your internet connection. If the internet goes out, your company could face significant downtime .
- Security & Privacy: Security is reliant on the provider of your cloud services. In some industries, such as defense, enhanced security needs may only be met by private, on-premise data storage.
- Regulatory Compliance: Government regulations may play a big role in how and where you store data and its accessibility.
- Vulnerability to Attack: Cloud providers do not check your backgrounds and administrative abilities before granting you an account. Do you know who else has access to the cloud where your data is stored?
- Visibility: Do you really know where your data is being stored? Private, hosted cloud may provide a little more peace-of-mind.
- Accessibility: High speed, high bandwidth internet connectivity is still not guaranteed in all locations. If your manufacturing operation is nationwide or global, data accessibility may be unreliable and inconsistent.
- Platform Dependencies: Deep rooted differences between cloud vendor systems could make it virtually impossible to switch between cloud platforms, causing "vendor lock-in".
- Cloud Computing Costs: Though it can allow a reduction in staff and hardware costs, the overall pricing may be higher than expected. The cloud can also be extremely costly when your offerings need to be customized.
- Latest & Greatest: If your business does not need the most up-to-date versions of software every year, desktop software can be cheaper in the long-run.

SyteLine in the Cloud

- **Data Transfer Costs:** Transferring data inbound is free. Outbound data transfers, however, are usually charged on a per GB basis.
- **Customer Support:** Cloud vendors are notorious for poor customer service. Although some vendors are starting to offer better service, this service is only provided for a fee.
- **Limited Control and Flexibility:** Users often have little control of the function and execution of their hosting infrastructure. Needed customizations may be difficult to achieve.

What are SyteLine's offerings?:

- **Multi-tenant in Amazon Cloud** - This option has no access to the server or SQL level. You can still add tables/fields to the database, create personalizations and create IDOs by using the CloudSuite application. You, however, cannot create stored procedures or touch the SQL layer. Multi-tenant is the "no administration" version for a low cost option, where you share space on servers with other customers.
- **Single tenant in Amazon Cloud** - this option gives the customer complete access to the server, only on a remote basis. They have access to the server and SQL level just like an on-premise installation. This is higher cost than multi-tenant but less administration and hardware costs than on-premise.
- **On-Premise** - the current on-premise platform is still a very viable option and Infor has no current plans to move everyone to the cloud.
- **A mix of both** - Some customers choose to implement cloud-based ERP gradually, keeping some of the ERP system with the on-premise platform, while introducing the cloud-based system gradually where applicable.

How can I minimize my risk when using the cloud?:

- Demand a service level agreement from your cloud provider guaranteeing uptimes in excess of 99.95%.
- Know who is supposed to have access to each resource and service.
- Limit data access based on user context.
- Extend security to all devices (phones, tablets, laptops, etc.)
- Scale down as well as up when able to reduce costs.
- Understand what your cloud vendors are selling in order to prevent "vendor lock-in".
- Authenticate identities when accessing the cloud.

SyteLine in the Cloud

What is the best for my business?:

While the cloud has some disadvantages, there are still many advantages to moving to a cloud-based system. Cloud computing has immense potential for many business models. Small businesses can greatly benefit from the technology gains, reduction in IT staff, and reduced capital expenditures. Cloud-based systems are the wave of the future. However, those with strict government regulations may not be able to fully utilize a cloud-based system. Each manufacturer will have to analyze its' business processes and customer needs in order to fully determine what solution is best for their business.

SyteLine in the cloud

Sources:

- <https://www.linkedin.com/pulse/11-Pros-and-Cons-Cloud-Computing-Everyone-Should-Know-umesh-singh>.
- “Disadvantages of Cloud Computing Unfolded” by Arpita Bhattacharjee
- “Why Only the Cloud?” www.inforlogic.com
- “What Cloudsuite Means for SyteLine Users” www.sytelineusernetwork.wordpress.com
- “Disadvantages of Cloud Computing” www.cloudacademy.com
- “5 Disadvantages of Cloud Computing” www.thebalance.com
- “Is the Cloud for Me?” www.inforlogic.com
- “Developing your IoT Strategy - Cloud or Premise Based” www.visualbusiness.net
- “Can Cloud Computing be Secure? 6 Ways to Reduce Risk and Protect Data” <https://www.theguardian.com>
- “Why Move to the Cloud? 10 benefits of Cloud Computing” www.salesforce.com
- “12 Benefits of Cloud Computing” www.salesforce.com