Does Cloud Equal On Demand?

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Cloud computing is Internet-based computing, whereby shared resources, software and information are provided to computers and other devices on-demand, like a public utility.

Cloud, SaaS, On Premise, On Demand, Managed Service, a mélange of technical terms is flooding the market.

What is the difference between Cloud or On-Demand, or SaaS or Hosted for that matter? Or is Cloud just a second-decade buzz word?

Every conference we go to is suddenly about Clouds.



A good Wikipedia definition of cloud is:

Cloud computing is *Internet*-based *computing*, whereby shared resources, software and information are provided to computers and other devices on-demand, like a public utility.

Many are claiming to offer Cloud, but they are all so different that I went away feeling "I really don't know clouds at all".

What is the difference between Cloud or On-Demand, or SaaS or Hosted for that matter? Or is Cloud just a second-decade buzz word? (Which we might need, since the buying public has re-emerged from under a cloud of their own from the last two years, and is looking for new technologies to solve some new and some old problems.)



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Architectural Considerations - a Choice of Platform

Understanding the architectural underpinning of web-based solutions is absolutely critical. Gone are the days when the business user can leave the understanding of the technical constructs to the IT department. <u>Significantly different results are attained, based on architectural approaches.</u>

Here are some considerations of web-based:

- Software or Service version control Is this my license in which I worry about versions and upgrades, or a non issue, since the utility or provider handles all the changes?
- Network data Is this single instance data that is sharable, many-to-many data? Update once and subscribers instantly see it? This is a zero information cycle-time model. Or does data have to be replicated and propagated through multiple applications and enterprises?
- Community Connectivity Is community of subscribers already connected? As new members come online they may become visible to you (we say "may," since some subscribers do want to remain unlisted).
- Funding of applications use Different funding mechanisms and value for your IT investments occur from these different approaches. On-Demand has a self-service goal, like Hoovers or Salesforce, or in Supply Chain, GT Nexus reduces time and cost to implement. Pay-as-you-go models, like One Network, are transparent to users, since they pay only for what they use. Others ask for multi-year contracts and monthly commitments for usage levels and/or support.

You're on the Web, but are you in the Cloud?

Here is what we think makes up Cloud:

- 1. Inter-enterprise: Shared services by members of the community
- 2. Single-Instance database: Cloud databases are changed once and everyone gets the update
- 3. Web-based: all services are on the internet
- 4. Can be many-to-many or one-to-one
- 5. Can be for fee or public

Is Cloud On-Demand? Maybe. Let's take two examples: Salesforce.com is On-Demand. In ten minutes, you can activate an account and be using the solution. But it is enterprise-centric. In other words it is not a shared database. In fact, the database is nonexistent until you enter the data. The other example is your cell phone service. Anyone who has signed up for a cell phone knows there is nothing "instant" or On-Demand about it. However, once you are "live" you can reach any subscriber in the network. Without the network, the service is useless. With Salesforce.com, you don't necessarily need their network. *So, does Salesforce qualify as Cloud?*

Is SaaS/e-procurement Cloud? Maybe. With some of these solutions, there are many common services that can be shared across the network. However, many solutions, though on the web, are enterprise-centric and have unique propriety catalogues, data, or pricing models unique to one company. So, it's SaaS, for sure. But Cloud?

How about hosting? There are various hosting models. But fundamentally, hosting services manage many different software instances, version-specific data models, and customer-specific databases in a separate location from the customer. You, therefore, will access your application from the web. Oracle has, and JDA is planning, this type of service. Each user will have unique connections to their trading partners. These vendors do have carrier connections, for example. But is it SaaS? Maybe. On-Demand? No. *Or Cloud?* We think not.

"Cloud" Technology	Examples		Definitions
Cloud Utilities	Telco's Financial Networks Naming Services Search	 <u>VeriSign</u> <u>SWIFT</u> Google Bing 	One-to-One Services in the Cloud
Cloud Services	Storage Hosting Data delivery Monitoring	 <u>Amazon's</u> S3, EZ2, etc. <u>Microsoft Cloud</u> <u>Services</u> Google VeriSign 	3 rd party mega-players with global presence and instant end-user access
Cloud On-Demand	Networks Applications EDI	 <u>GT Nexus</u> <u>One Network</u> <u>Descartes</u> <u>Digital Tempus</u> 	Networks are single-instance data based with many-to-many constructs. Change the data once. Self service is a goal for these systems (see notes below) and they are set up for simple activation.
SaaS - Enterprise		 <u>Workday</u> Salesforce.com 	Applications may be single instance but are enterprise only, such as Salesforce.com.
Hosted	3 rd party off- premises	• <u>Oracle</u> • <u>JDA</u>	3 rd party off-premises of your license/your version of your application
Managed Service	Data cleansing	<u>Digital Tempus</u>Nielsen	3 rd party providing business or technical service to support your data and/or applications
Business Condition / Monitoring		 iJET <u>Planalytics</u> 	Many-to-one - Subscriber access to a 'collector' of many source data
Track and Trace	Product or Asset Tracking Provenance data "Gathering"	 <u>Acsis</u> <u>Savi Technology</u> <u>One Network</u> 	Multi-tenant/inter-enterprise solution focused on items and assets as they move inter-enterprise

Please Note: Self service may not be achievable by users. Experience and adherence to standards helps!

Activating networks requires:

- Permissions to share data
- Standardization of process
- Standardization of data

Non-standard approaches to process, business rules, and data may require interventions, e.g. consulting.

Good solutions provide user education and various assistances.

Conclusion:

For many requirements, the economics of Cloud are too powerful to resist. Pervasive architecture, full community connectedness with global access - these capabilities are not affordable without a shared economic model. You can't build your own interstate highway, but sharing the expense with all the communities is almost an imperceptible cost. On-Demand is a very unique approach towards providing solutions in the Cloud on a massive scale with instant access to the service. Services can be data and content-rich search and/or business applications such as Supply Chain, CRM, or even ERP.

References: Joni Clouds / Judy Clouds / On Demand Now