

The Future Ahead: Cloud Computing

Kantanu Kundu
Founder & CEO, A2Zapps.com

“Computation may someday be organized as a public utility...”

opined McCarthy during 60s

What Is Cloud?

A new way of delivering solutions to customers over the web

Why Is It Getting So Popular?

1

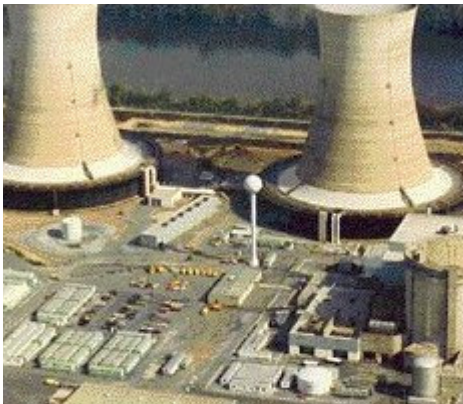
Focus on Business, Not Technology



2

On-Demand (Pay-as-you-Grow)

Traditional Software



Build Your Own

On-Demand Utility



**Plug In, Subscribe
Pay-per-use**

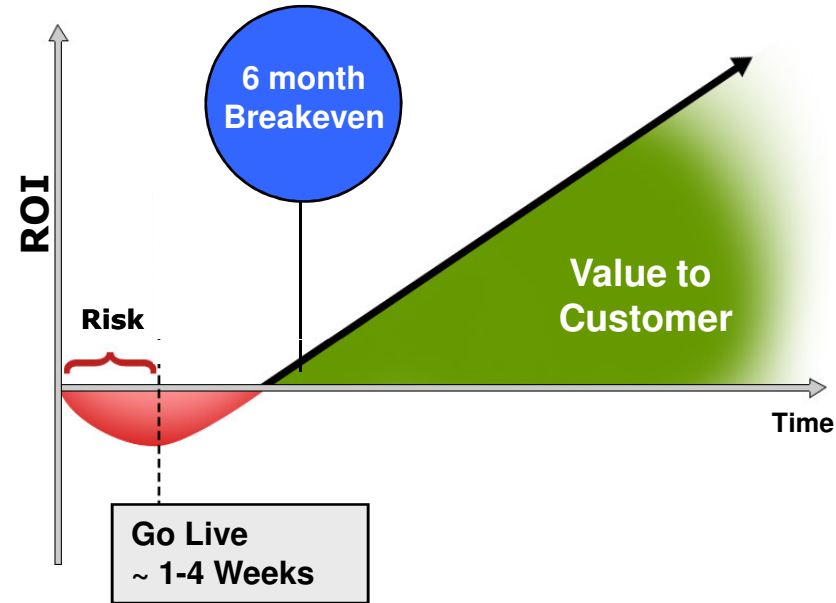
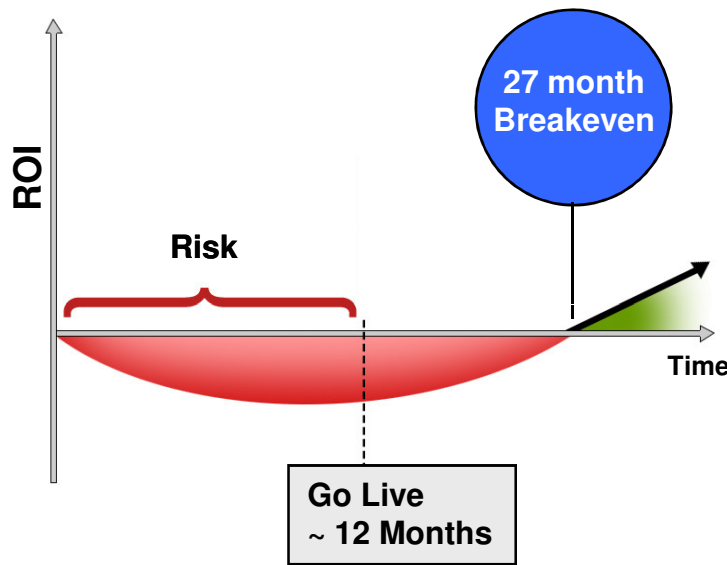
3

Delivers Value in Weeks Not Years

Traditional Solution

Cloud-based Solution

Source: Gartner, Customer Surveys



“Fast time-to-value for customer management deployments often outweigh the potential benefits of a more complex traditional deployment. . .faster implementations and simpler user interfaces are behind the move toward SaaS. Large enterprises are jumping on the bandwagon.”

—Robert Bois, AMR Research

4

Mash-Ups: Composite Web Services Apps

Combining heterogeneous web services creates new apps & value

For Rent For Sale Rooms Sublets

City: SF - East Bay Price: \$1500

	pics	price	bd	
		\$1750	2bd	Upper Roc Montclair Apartment
		\$1795	4bd	Brentwood home
		\$1795	3bd	Brentwood family neig
		\$2000	2bd	Very quiet Berkelev a

Google Maps craigslist apartments

www.housingmaps.com

Map flickr photos

www.flickrmap.com

amazon.com Alfred's Store See All 32 Product Categories Your Account

Completed Orders

Order Date: May 12, 2006
Order #: 104-2761227-8877547
Recipient: Alfred Falcione

Items:

Track your package with 1Z10FR310344305558

- 1 of: Yamaha HTR-Channel A/V Surrou

amazon.com FedEx

www.amazon.com

“Mash-ups should do what Lotus Notes did for an earlier generation: empower user-driven innovation at the level of individuals, workgroups, and departments.”

—Jon Udell, Infoworld

*Ok. I got it....but confused with so
many buzzwords*

Public Cloud

Private Cloud

SaaS

PaaS

IaaS

Hybrid Cloud

Enterprise Cloud

Who you provide to?

What do you provide?

How do you provide?

The Consumer Cloud



The Enterprise Cloud

Salesforce.com

Rackspace

Amazon EC2

SAP Business ByDesign

Microsoft Dynamics

Microsoft Azure

Netmagic

A2Zapps.com

What do you provide?

SaaS - Business Applications – CRM, HR,ERP etc.

PaaS - Development Platform

IaaS - Server Infrastructure & Management

Software-as-a-Service

No Applications Market Is Untouched

Office

<https://www.google.com/hosted>
<http://smallbusiness.yahoo.com/email/>
www.zimbra.com
 many others...

Spreadsheets

www.numsum.com
www.irows.com
 many others...

Word

www.writely.com
www.writeboard.com
www.inetword.com
 many others...

Graphics

www.pxn8.com
www.pixoh.com
 many others...

Database

www.dabbledb.com
www.Lazybase.com
www.quickbase.com
 many others...

Document Mgmt

Invoice 10001

21 Apr 2006
Due 21 May 2006 (NET 30)

Qty	Description
1.0 Hours	Stuff

www.blingsale.com
 many others...

Contacts

Connection	Headline
133 Andrews, Brett brett_andrews@yahoo.com	Sr. Manager - Marketing & Business
127 Rabnet, Eric erabnet@yahoo.com	Sr. Program Manager at Salesforce
58 Bennett, Jonathan jrbennett@salesforce.com	Sr. Sales Engineer at Salesforce.com
95 Boyer, Donna donna_boyer_1@yahoo.com	Director of Personalization, Yahoo
64 Byrd, Neal nealbyrd@salesforce.com	Enterprise Software Sales Veteran
500 Chandry, John jchandy@salmon.lv.com	Experienced Consulting Professional and Media experience
204 Cochran, Glenn gcochran@cochran.com	Sr. Mgr. User Experience & Chief U...

www.linkedin.com
www.plaxo.com
 many others...

Project Mgmt.

www.basecamp.com
www.jot.com
www.dreamfactory.com
 many others...

“The appeal is obvious: SaaS is quicker, easier and cheaper to deploy than traditional software, which means technology budgets can be focused on providing competitive advantage, rather than maintenance.”

—The Economist, April 20, 2006

Platform-as-a-Service

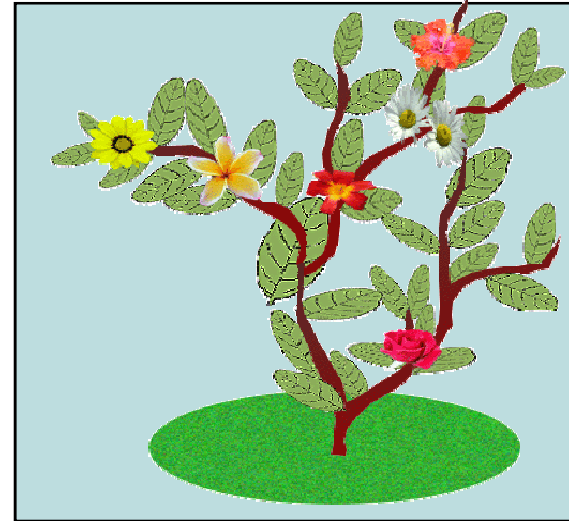
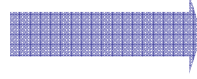
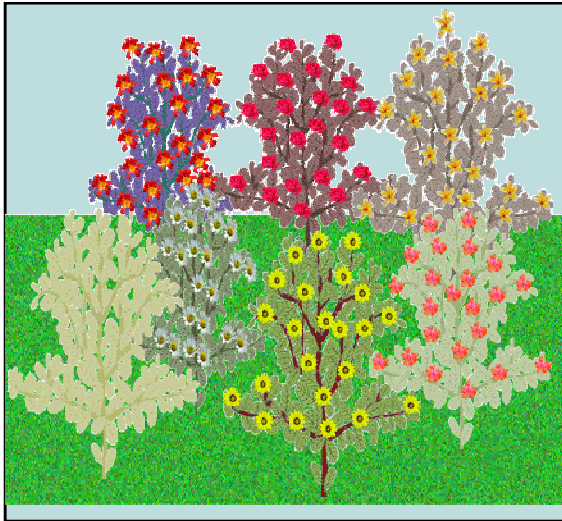
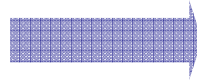
Build SaaS Applications

'In' Cloud Vs. 'For' Cloud

Force.com
A2Zapps.com

MS Azure
OrangeScape

SaaS Vs. PaaS



Infrastructure-as-a-Service

Cloud Enabler

offering virtualized servers on
pay-as-your-use model...

How do you provide?

Public Cloud

Private Cloud

Hybrid Cloud

Private Vs. Public Cloud

Single Tenant Isolated



- Multiple Software Versions
- Higher Maintenance/IT Cost
- Less Vendor Innovation
- Higher Control (Just a perception)

Multi-Tenant Shared

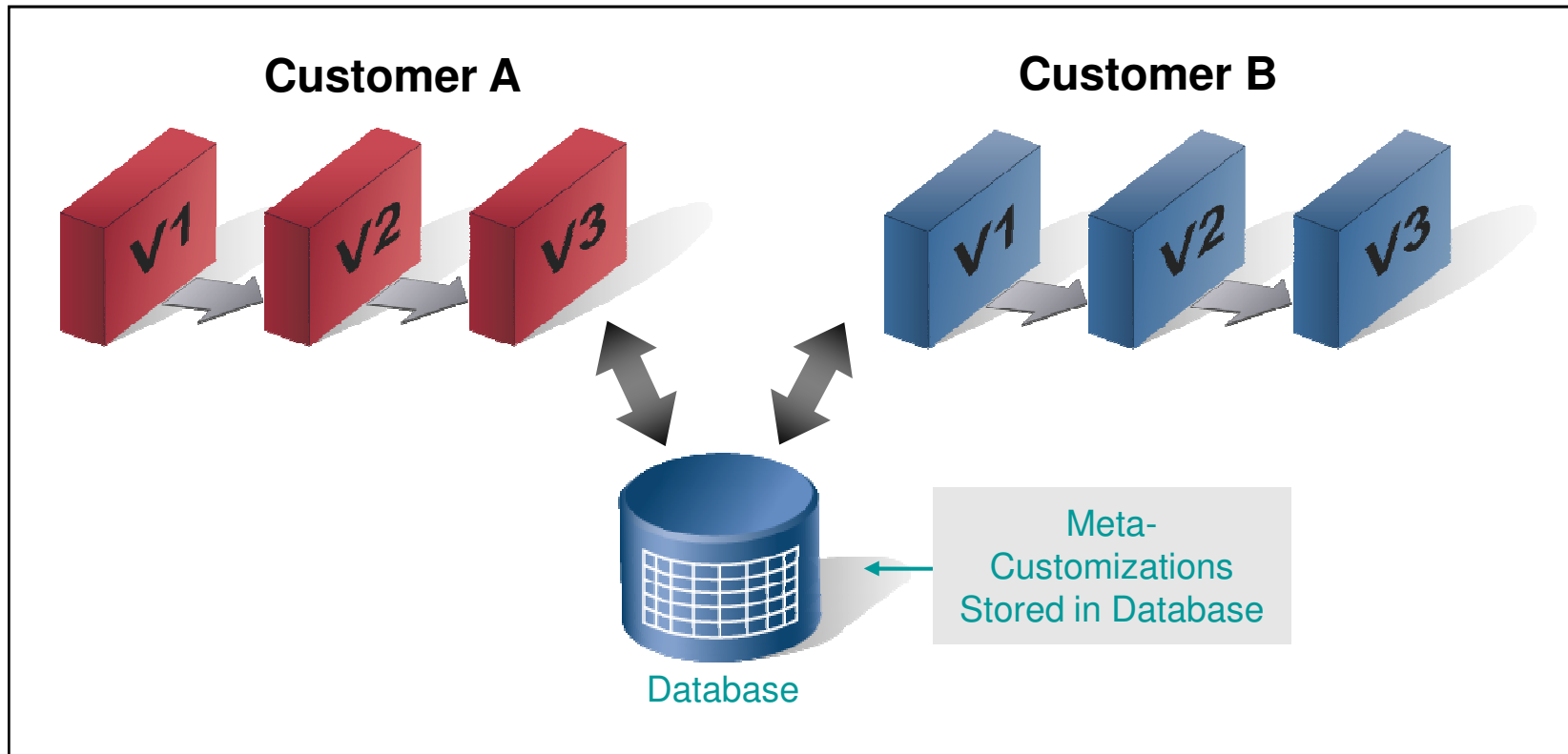


- Greater Vendor **Innovation**
- **High Performance and Any Time Monitored** Infrastructure for Every Customer

“Without multi-tenancy, a SaaS offering can't cultivate a Web. 2.0-like community of developers who add functionality that all can share.”

—Eric Knorr, InfoWorld

Easy Meta Data Customization



→ Upgrade Meta-Customizations With Zero Customer Effort

1 to 10,000+ Users on the Same Instance



→ World-class performance & scalability for any-size business

- Same Features
- Same Scalability
- Same Global Solution
- Same Performance
- Same Reliability

“Companies of all sizes are now using hosted applications as revenue generation becomes a top priority. This, coupled with shorter implementation times, makes the hosted model very attractive.”

—Rob Bois, AMR Research

Better Integrate-ability & Extensibility

- Multiple ways for Integrating External Applications with SaaS Platform
 - Web Services/XML/REST API
 - HTTP URL
- Mass Data Import or Export Interface
- Support for AJAX – Advanced Java Script And XML

Development-as-a-Service

Be Your Own Developer. Choose Right Platform. Develop and Deliver in Few Days.

- Don't Invest in Hardware or Software Tools
- Subscribe to SaaS Platform & Develop Unlimited Business Apps for Any Industry
- Use Extensibility Features of SaaS Platform, Mash-ups To Create New Services
- Focus more on Customer's business needs than programming languages
- Deploy Solutions For Your Customers In Few Days/Weeks

New Technologies Shaping the Future of Software

REST API

HTML5

AJAX

Web 2.0

Virtualization

JSON

JQuery

Opportunities

Education

Healthcare

Online Retail

e-Agriculture

e-Panchayat

And many more...

**On Demand *is* the Future of
Software...**



FAQ

FAQ

- How do these SaaS platform (PaaS) help independent developers, innovators?
- What will the role of a software consulting company be in the future?
- I want to develop a solution on a SaaS platform. What is the next step?

Thank You

kantanu@A2Zapps.com

Follow our blogs at <http://blogs.A2Zapps.com> to know more about Cloud and its usage