



Cloud Computing for the SME

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The IMPACT of Cloud Computing

- SAP CEO resignation
- Key reason cited: "Delay in new cloud softwares for SMEs"



Cloud Computing - Brief Intro

- Software delivered through internet
 - Its like accessing your yahoo mail or gmail
- Paradigm Shift
 - Mainframe era
 - PC era
 - ASP era
 - Cloud computing era
- Great adoption among SMEs



Types of Cloud Computing

- Utility computing (IaaS)
- Platform as a Service (PaaS)
- Cloud-based end-user applications (SaaS)



Infrastructure as a Service (IaaS)

- Vendor provides VM, storage and computation
- Target: Developers & ISVs
- Success story: Amazon & Smugmug



Platform as a Service (PaaS)

- Vendor provides higher level APIs
 - Hides machine, storage etc
- Target: Developers and SMEs
- Vendors: Force.com, Google AppEngine, Zoho Creator, ..



Software as a Service (SaaS)

- Business softwares delivered through cloud
- Target: SMEs & Enterprises
- Vendors: Google, Microsoft, Salesforce, Zoho,...



Cloud Computing - Innovation



Scalable Architecture

- Scales up to meet SMEs business goals
- Grids to handle failover, backup, disaster recovery & scalability
 - Computing grid: for serving User requests
 - Storage grid: File grid, Database grid
 - Messaging grid: for real time updates and chat



Performance

- Cloud can give better performance
- Caching
 - HTML page caching
 - Distributed server side object caching
 - Convert dynamic data into pre-computed static content
- For example, Zoho Sheet can be faster than loading complex Excel documents



Superior Integration

- Integration across SaaS applications is far easy
 - CRM integrating spreadsheet and email
- Small Web Services & Aggregation (SOA)
 - Evolve each service independently and rapidly
- Contextual Integration



Cloud Challenges: Security

- Top challenge faced by Cloud Computing vendors
 - Physical Security, Network Security, Application Security
- Simple theory: DO NOT TRUST any input from the user
 - XSS, Authenticated URLs, User switching, SQL Injection



Cloud Challenges: Operations

- Data security and safety
- Backup & Disaster Recovery
- Meeting SLA - monitoring 24x7
- Compliance
 - SAS 70, US Safe Harbor



Cloud Computing - Business Model

- 90:10 Promise
 - 90% of the features of the traditional business softwares at 10% of the price
- Pay as you use: Subscription Model
- Flexible deployment options
- Free Edition, Freemium



Cloud Computing – Success Stories



Success Story: Bharath Beedi

- Bharath Beedi Works
 - www.30beedi.co.in

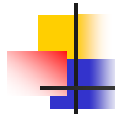
- Before: MS Excel & Desktop Solution
- Now: Cloud based CRM (Zoho CRM)

- Primary Reason: Cost & BI



Success Story: Team Everest

- Team Everest
 - Non Profit Group, Chennai
- Before: Microsoft Sharepoint
- Now: DIY PaaS (Zoho Creator)
- Primary Reason: Flexibility and Maintenance



Success Story: SEW Infrastructure

- SEW Infrastructure
 - <http://sewinfrastructure.com/>
- Before: Hosted Email
- Now: Collaboration Platform (Zoho Business)
- Primary Reason: Productivity & Collaboration



Cloud Computing & SMEs

How cloud computing help SMEs?

- Affordable: The 90:10 Promise
- Ease of use, Convenience
- No upfront cost, No vendor lock-in
- Productivity & Collaboration among workforce



Cloud Computing & SMEs

What kind of cloud apps would be useful for SMEs?

- CRM
- Business Email
- Office / Documents
- Project Management
- Do It Yourself apps (PaaS)



<http://zoho.com>