



PMI Maine – Monthly Chapter Meeting

Cloud Projects – are they different?

February 15, 2018

Today's Agenda

- What is “Cloud”?
- Project Factor Comparisons
- Cloud Project Pitfalls
- Vendor Management
- Case Study – SaaS
- Case Study – DRaaS
- Resources
- Q&A

What is “Cloud”

- Definition: the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local (on-premise) server or a personal computer
- XaaS – “as a service”
- Types of Cloud Computing Services:
 - SaaS = Software as a Service
 - Salesforce.com; Cisco WebEx or Office365
 - IaaS = Infrastructure as a Service
 - Amazon Web Services; Microsoft Azure
 - DRaaS = Disaster Recovery as a Service
 - Sungard Availability Services; Axcient; Tierpoint and others

Gartner defines cloud computing as:

“A style of computing where scalable and elastic IT-related capabilities are provided ‘as a service’ to external customers using Internet technologies.”

5 attributes that support outcomes

1 Service-based

Consumer concerns are abstracted from provider concerns through service interfaces.

2 Scalable and elastic

Services scale on demand to add or remove resources as needed.

3 Shared

Services share a pool of resources to build economies of scale.

4 Metered by use

Services are tracked with usage metrics to enable multiple payment methods.

5 Internet technologies

Services are delivered through use of Internet identifiers, formats and protocols.

gartner.com/SmarterWithGartner

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Gartner.

Cloud Project Factors – the Product

- **Traditional IT Infrastructure Projects**

- Hardware centric
 - Servers
 - Storage
 - Switches
 - Routers
- Detailed technical designs and “blueprints”
- Typically within the data center

- **Cloud Projects**

- Very little hardware
- Little to no “Design”
- Focus is on configuration options that match up to project scope and (hopefully) business objectives

Cloud Project Factors - Stakeholders

- **Traditional IT Infrastructure Project Stakeholders**

- The IT Department
- Engineers
- System Administrators
- CIO

- **Cloud Project Stakeholders**

- IT Department (but less!)
- Department heads/managers
- End-users
- Vendor teams

Cloud Project Factors - Requirements

- **Traditional IT Infrastructure Project Requirements**

- Driven by capacity planning, compute needs, network bandwidth
- Technical details gathered in early stages of projects “Design” or “Architecture” phases
- Typically reviewed by technical peers and customer prior to implementation/installation

- **Cloud Project Requirements**

- Considerably less technical
- Base requirements gathered during solution “sales”
- Functionality and Configuration options reviewed with IT and business stakeholders
- Focus on rapid deployment and/or adoption

Cloud Project Factors - Training

- **Traditional IT Infrastructure Project Training**

- Technically oriented
- Focus on knowledge transfer during configuration
- Drive towards certifications like CCIE...etc.

- **Cloud Project Training**

- Wider audience
- Technical training focused on configuration and daily operations
- End user training to promote adoption and integration of solution into day-to-day work
- Management training on reporting and “train-the-trainer” efforts
- The “training” can be a project unto itself!

Cloud Project Factors – Other Deliverables

- **Traditional IT Infrastructure Project Deliverables**

- Hardware!
- Technical documentation
- “As-Built” post install
- Configuration files
- Executed test plans
- Visio diagrams

- **Cloud Project Deliverables**

- End-user communications and communication plans
- Online and recorded training sessions
- Post-adoption analytics
- Drop-in sessions to increase adoption and utilization

Cloud Project Factors – Success Factors

- **Traditional IT Infrastructure Project Success**

- Working solution
- High-availability and/or proven disaster recovery
- Operationalizing the technical solution
- Integration with existing systems/solutions and/or applications
 - e.g. Monitoring tools, data base systems...etc.

- **Cloud Project Success**

- Adoption and product usage rates
- Measurable cost-savings
- Remediate barriers to adoption
- Circle back to user expectations and stewardship over time
- Lower cost of maintenance, licenses, power and other infrastructure items

Cloud Project Pitfalls

- Often sold as an “IT” project so customer mindset is rooted in traditional thinking
- Set application with roadmap that isn’t driven by the customer directly
- Multiple vendors
- Traditional hosting services and locations
- Ping, power and pipe are still important
- Change management; internal vs. external/provider change management
- Have you managed any cloud-based projects?
- What pitfalls have you encountered?

Vendor Management

- Cloud projects typically have multiple vendors; the Cloud provider, VARs, systems integrators
- PMBOK areas touched on can include:
 - Cost Management
 - Procurement Management (especially contract management)
- Communication plan should include vendor stakeholders and participants
- Vendor lead times need to be fully understood
- Change management both vendor-side and internal and how they will interact and force dependencies

Case Study – SaaS

- Project overview:
 - Enterprise deployment Cisco WebEx cloud solution for 6000 users
 - Provide end-user training both live as well as recorded for later review
 - Review administration and operational concerns for the cloud solution post-project
 - Provide analytics and reporting post-deployment
- Project plan:
 - Identify “early adopters” to utilize new solution; flush out concerns and challenges for larger user community
 - Communications plan to include standard project reporting along with end-user reference cards, resource links and tips and tricks
 - Conduct enterprise deployment to remaining users, document and troubleshoot issues
- Risks
 - Variable costs related to toll and toll-free calling; mitigated with use of VoIP technology
 - Multiple versions of end-user application tools on PCs as well as mobile devices; mitigated through automated software pushes

Case Study – SaaS (continued)

- Lessons Learned
 - Core project team set in “software development” mindset; Friction over features, functionality and platform parity (e.g. Windows vs. Mac or iOS vs. Android devices); took focus away from majority of deployment and adoption efforts
 - Similar mindset on training curriculum; customer fell into old pattern of highly-customized offering
 - Edge use cases with high visibility:
 - C-level executives with Admin staff scheduling and “hosting” multiple meetings in overlapping time slots
 - Company-wide broadcasts across multiple geographies fraught with network issues unrelated to the solution
 - Help desk support unready for volume of tickets for support
- Conclusion
 - Overall project success
 - Spin off project to conduct network analysis and provide recommendations on futures (traditional or cloud? TBD!)

Case Study – DRaaS

- Project overview:
 - Customer relocation primary data center services from hosted to solution to on-premise data center
 - Multiple geographic locations but centralized “corporate” applications
 - Build out of corporate HQ systems to follow traditional infrastructure project methodologies
 - Disaster Recovery as a Service (DRaaS) to be implemented once new infrastructure ready
- Project plan:
 - Hybrid of traditional and cloud projects
 - Work with OEMs and resellers to acquire hardware, build design/architecture and install “green field” in customer corporate HQ
 - Multiple vendors including:
 - Current hosting provider (classic data center)
 - Data migration to new solution at corporate HQ
 - Configure, install and test DR solution to protect new corporate systems in the Cloud
 - Challenges around vendor exit and starting up with new vendor

Case Study – DRaaS (continued)

- Risks:
 - Traditional DR risks apply; meeting recovery-time-objectives for DR solution
- Lessons Learned:
 - Important to manage multiple vendor communication and maintain transparency, even between potential competitors
 - Technology decisions and plans driven by customer's revenue plan and capitalizing equipment
 - Vendor lead times need to be carefully considered

Resources and Articles

- Microsoft Azure: <https://azure.microsoft.com/en-us/overview/what-is-cloud-computing/>
- Amazon Web Services (AWS) : <https://aws.amazon.com/>
- Google Cloud services: <https://cloud.google.com/>
- Gartner Cloud Advice: <https://www.cloudadvice.com/>

Questions?