ITM123 – Planning Your Company’s SAP Systems Migration to the Cloud
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**Gartner Definitions**

- **Business Process as a Service (BPaaS)** as the delivery of business process outsourcing (BPO) services that are sourced from the cloud and constructed for multitenancy. Services are often automated, and where human process actors are required, there is no overtly dedicated labor pool per client. The pricing models are consumption-based or subscription-based commercial terms. As a cloud service, the BPaaS model is accessed via Internet-based technologies.

- **Software as a Service (SaaS)** as software that is owned, delivered and managed remotely by one or more providers. The provider delivers software based on one set of common code and data definitions that is consumed in a one-to-many model by all contracted customers at anytime on a pay-for-use basis or as a subscription based on use metrics.

- **Platform as a Service (PaaS)** offering, usually depicted in all-cloud diagrams between the SaaS layer above it and the IaaS layer below, is a broad collection of application infrastructure (middleware) services (including application platform, integration, business process management and database services). However, the hype surrounding the PaaS concept is focused mainly on application PaaS (aPaaS) as the representative of the whole category.

- **Infrastructure as a Service (IaaS)** is a standardized, highly automated offering, where compute resources, complemented by storage and networking capabilities are owned and hosted by a service provider and offered to customers on-demand. Customers are able to self-provision this infrastructure, using a Web-based graphical user interface that serves as an IT operations management console for the overall environment. API access to the infrastructure may also be offered as an option.
How do we approach migrating to cloud technology and services?

What will this new world look like?

What should you remember?
TCO Cost Factors

- **Availability**
  - High availability
- **Manageability (BP/DR)**
  - Backup
  - Hours of operation
  - Disaster Scenario
  - Restore
  - Effort for Complete Site Recovery
  - SAN effort
- **Infrastructure Cost**
  - Space
  - Power
  - Network Infrastructure
  - Storage Infrastructure
  - Initial Hardware Costs
  - Software Costs
  - Maintenance Costs
- **Additional development and implementation**
  - Investment for one platform – reproduction for others
- **Controlling and Accounting**
  - Analyzing the systems
  - Cost
- **Operations Effort**
  - Monitoring, Operating
  - Problem Determination
  - Server Management Tools
  - Integrated Server Management – Enterprise Wide
- **Security**
  - Authentication / Authorization
  - User Administration
  - Data Security
  - Server and OS Security
  - RACF vs. other solutions
- **Deployment and Support**
  - System Programming
    - Keeping consistent OS and SW Level
    - Database Effort
  - Middleware
    - SW Maintenance
    - SW Distribution (across firewall)
  - Application
    - Technology Upgrade
    - System Release change without interrupts
- **Operating Concept**
  - Development of an operating procedure
  - Feasibility of the developed procedure
  - Automation
- **Resource Utilization and Performance**
  - Mixed Workload / Batch
  - Resource Sharing
    - shared nothing vs. shared everything
  - Parallel Sysplex vs. Other Concepts
  - Response Time
  - Performance Management
  - Peak handling / scalability
- **Integration**
  - Integrated Functionality vs. Functionality to be implemented (possibly with 3rd party tools)
  - Balanced System
  - Integration of / into Standards
- **Further Manageability Aspects**
  - Planned outages
  - Unplanned outages
  - Automated Take Over
  - Uninterrupted Take Over (especially for DB)
  - Workload Management across physical borders
  - Business continuity
  - Availability effects for other applications / projects
  - End User Service
  - End User Productivity
  - Virtualization
- **Skills and Resources**
  - Personnel Education
  - Availability of Resources
- **Scalability**
  - Horizontal
  - Vertical

**TCA**
Routinely Assessed Cost Factors
What is Driving Enterprises to Consider Cloud Technology?

While a reduction in TCO drives many companies to consider cloud technology, there are many other benefits which should be examined.
Game Changers

Cost Flexibility
- Shifts fixed to variable cost
- Pay as and when needed

Business Scalability
- Provides limitless, cost-effective computing capacity to support growth

Market Adaptability
- Faster time-to-market
- Supports innovative ideas

Masked Complexity
- Expands product sophistication
- Simple

Context-driven Variability
- User-defined experiences
- Increases relevance

Eco-system Connectivity
- New value nets
- Potential new businesses

Cloud’s Business Enablers

Social Media

Mobility

Hyper-connectivity

Big Data

Source: IBM Analysis
What is Your Cloud Strategy?

A Cloud strategy needs to address key questions in order to fully address the transformation opportunity for the business.

**Application and Delivery Platforms**: Do you have the agility and speed to deliver solutions to the business in a matter of days instead of months?

**Business Models Enabled by Cloud**: What is the value of getting to market more quickly? Should we standardize processes to take advantage of standardized applications?

**Infrastructure Platforms**: Should we use a partner for aspects of our business that are commoditized?

**Data Platforms**: Are we in a regulated environment and what is our regulator’s view of the Cloud?
## Four Key Dimensions for Cloud Adoption

| Business Models | • Enables industry, enterprise, and business unit initiatives to drive step-change market performance  
• Includes front-office and back-office transformation, leveraging Cloud ecosystem–drive new revenue, channel, and product opportunities  
• Drives opportunities ranging from optimization and innovation to highly disruptive plays |
| --- | --- |
| Application and Delivery Platforms | • Leverages variable service models for application software to enhance process agility and economics  
• Enhances product and services architecture  
• Drives extreme innovation  
• Drives enhanced productivity in IT, improving cycle time execution in software delivery–promotes workforce transformation and Application Portfolio Management and Project Portfolio Management (APM/PPM) |
| Data Platforms | • Leverages variable service models to align enterprise capabilities in data transformation and management  
• Drives actions to optimize process through efficient information management, reporting, and predictive analytics  
• Enhances results through complex event processing of structured and unstructured information sources |
| Infrastructure Platforms | • Leverages robust, scalable, and highly available computing platforms to manage the enterprise and ecosystem  
• Integrates hybrid Cloud networks to ensure ‘friction free’ access to capabilities |
Scaling Up

What is Offered by the Cloud Provider?

- T Shirt Sizes
- On-Demand Scaling
- Limits on # of SAPS
Scaling Out

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Central System (T-Shirt)

SAP Application Servers

Scale-Out
Storage

What is Offered by the Cloud Provider?

- T Shirt Sizes
- On-Demand Scaling
- Limits on # of TB
- Add in Chunks
What about the Network?

What is Offered by the Cloud Provider?

- How are you accessing your systems?
- What are the bandwidth requirements?
- Is the Cloud POD a data center within a data center?
- Do you need to provide network hardware?
- What is your plan for refreshing non-production systems from production?

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Maintenance Windows

What is Offered by the Cloud Provider?

- What are the maintenance windows?
- How does this impact non-production systems?
- How does this impact production systems?

The automated patching process can be negotiated. E.g. SAP PRD System A is normally included in week 3, but due to a business reason the client may shift either to week 4 or postpone for one cycle to week 7.
Perhaps Hybrid Cloud (Example)?

**Public:**
SaaS, Collaboration, Non-Production Applications with minimum processing requirements and storage

**Private:**
PaaS, Non-Production, Production Applications
2. Analysis and Planning (High-level design)
So what does this new world look like?

Example: Large, global, professional services firm

Implementing financials, service delivery administration, procurement and CRM / opportunity management.

**Characteristics**

- Managed cloud-to-cloud communication via client compliant use of SAP PI/PO
- Highly secure network connections and encrypted data required
- Highly demanding project environments with complex path-to-production.
- Commitment to UI5 and client device diversity.
- Deploying Fiori (Mobile) labor and expense capture applications.
- Work flow and notifications via OUTLOOK

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IBM CMS4SAP (Raleigh – Boulder)
Points to remember!

1. It's not just about TCO and cheap infrastructure.
   - Cloud providers can respond faster to transformation program needs. Time-to-Solution!
   - Investments in automation & processes reduce risk and improve quality – Reduced Risk!

2. The next several years will largely see business processes supported by a combination of on-premises and cloud based applications.

3. Many corporations will not just use cloud services, they will create them. Not just a consumer, they will be a provider.

4. Use Cloud Envisioning Workshops to bootstrap the creation of an enterprise cloud strategy and your SAP migration roadmap.

5. No one has more experience and capability with SAP and cloud technology than IBM.

Cloud represents the next major evolution in SAP deployments. It's not optional. It's not an “if”. It’s a “when”.
Session Evaluation

Feedback

Please Complete a Session Evaluation for this Session!