The Impact of "*as-a-Service*" Models on Service Level Management

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Agenda

- Who am I. Why am I here?

- The "as-a-Service" Business Model

- The impact of "as-a-Service" on IT

- The impact of "as-a-Service" on SLM

- Conclusions

- Questions

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Who am I? Why am I here?

- **Technical Director of Anaeko**

  - Specialists in IT Service Management (ITSM) for the Cloud

  - Customers include Microsoft, Fujitsu, BT, Belfast Trust

  - Released a Software-as-a-Service SLM Product *ServiceClarity*

  - Automated ITIL Processes for major UK Government Departments

- **itSMF UK SLM SIG Member**

  - Special Interest Group for Service Level Management

  - Co-authoring Cloud SLM chapter of advanced SLM book

  - Co-organiser of SLM SIG Workshops

  - Presented at itSMF UK and itSMF Ireland

- **Technical Director of Whisple Cloud Services**

  - Collaborative Network for Cloud Service Providers

  - Launching a Cloud Services Platform

The "as-a-Service" business model

What is a Service?

There is no standard definition for a service

IT Service (ITILv3):
A Service provided to one or more Customers, by an IT Service Provider. An IT Service is based on the use of Information Technology and supports the Customer's Business Process. An IT Service is made up from a combination of people, Processes and technology and *should be defined* in a Service Level Agreement.

A service is how you define it and how you measure it

Key Characteristics:
· **Services are intangible – definition, communication & perception**
· **Service consumption coincides with production**
· **Services typically have high human involvement**

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IT "as-a-Service"

- **Cloud Computing Examples:**

  - **Application: Software-as-a-Service (SaaS)**
    - On-demand software for end-users
      - SalesForce CRM, ServiceNow Service Desk, Microsoft Office 365

  - **Platform: Platform-as-a-Service (PaaS)**
    - Computing platform and solution stack for developers
      - Google App Engine, Microsoft Azure, Force.Com, Heroku

  - **Infrastructure: Infrastructure-as-a-Service (IaaS)**
    - Virtualised Compute, Storage and Networking
      - Amazon EC2, S3, Microsoft Azure, RackSpace

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The "as-a-Service" Business Model

- **The business model that underpins cloud computing:**

  - **Usage-based Payment**

- **Forrester's Definition of Cloud Computing**

  - **Standardised IT capability**

  - **Delivered via Internet technology**

  - **Pay-per-use**

  - **Self-service**

- **"as-a-Service" is not only Cloud Computing**

  - **Can involve a high degree of customisation**

  - **Not only IT services**

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Other "as-a-Service" examples

- **HR**

- **Marketing**

- **Professional Services**

- **Consultants**

- **Solicitors**

- **Doctors**

- **Retailers**

- **…..**

- **……**

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Why should we care?

- **As a Service Consumer:**

    - **Reduced up front investment**

    - **Cost is proportionate to usage**

    - **Avoid provisioning unnecessary capacity**

    - **Increased freedom from long term commitments**

    - **Increased agility, faster setup, scale up and scale down**

- **As a Service Provider**

    - **Increased risk because of shorter contract commitments**

    - **Supply expected to meet demand**

    - **Capacity planning is essential**

   - **Need to record usage and apportion costs**

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The Impact of "as-a-Service" on IT

IT is moving to the Cloud

- Gartner estimated $112bn will be spent on cloud services in 5 years from 2010

- The U.S. share of the worldwide cloud services market was 60% in 2009, which will drop to 50%. Western Europe will account for 24%

- 70% of the cloud opportunity exists in private clouds, 30% in public clouds.

- IDC's 2010 European Services Survey, 32% of UK companies were currently planning/deploying cloud solutions but by 2015 this will be 56%

- In the UK, cost related drivers form 2 of the top 3 drivers for Cloud adoption - the other top 3 driver was 'improved IT Service Quality'

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Software moving to 'as-a-Service'

- **HR Software:**
  - SaaS is increasingly the dominant deployment model

- **CRM Software:**
  - SaaS is the preferred deployment model

- **Content and Collaboration:**
  - SaaS appearing in select categories

- **ERP and Supply Chain:**
  - Slow and selective movement to SaaS

- **IT Management Applications:**
  - SaaS increasingly is key to the solution landscape

- **Platform and Middleware Solutions:**
  - Minimal impact of SaaS

- **Business Intelligence:**

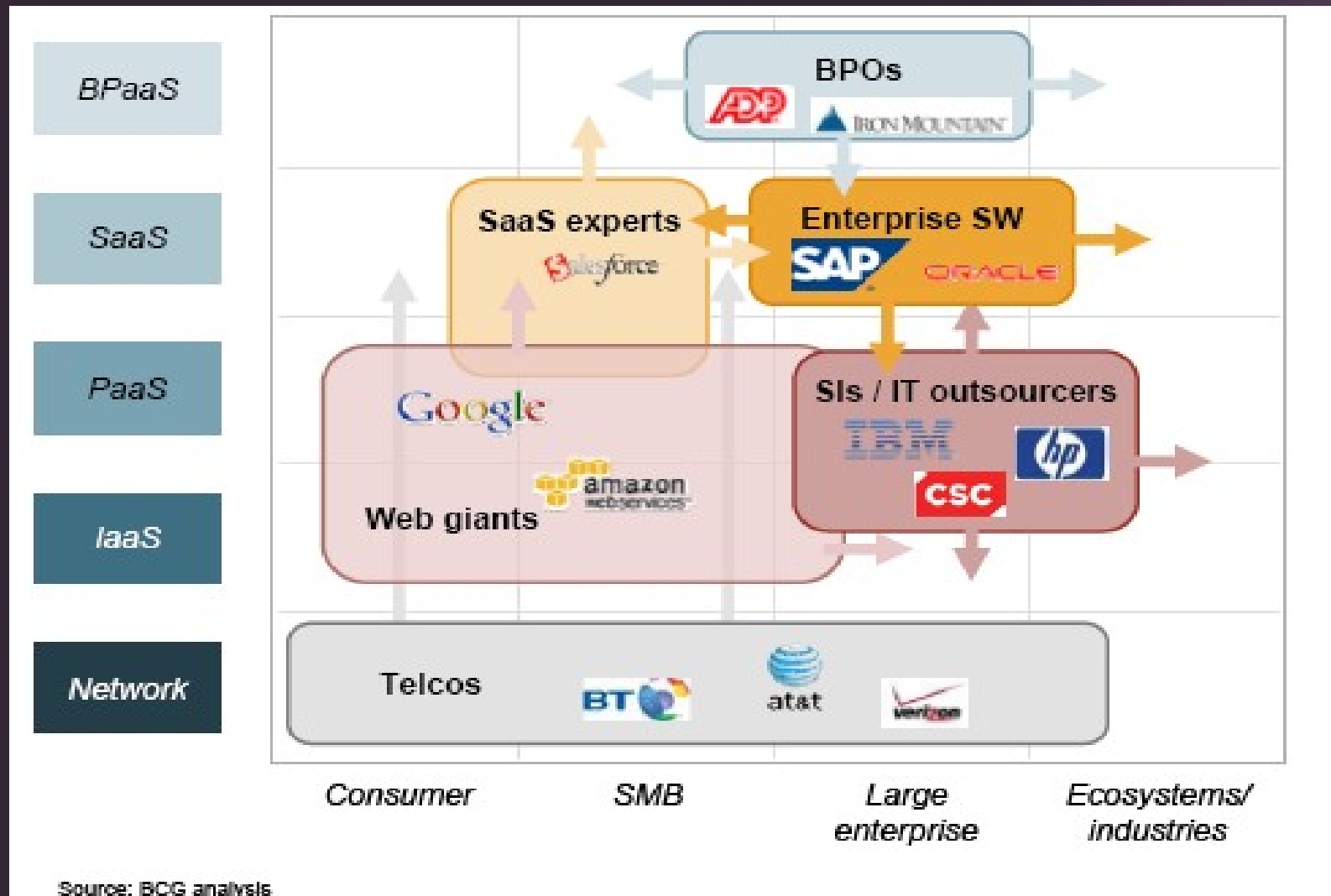### SaaS share of total software revenues

14%

7%

2010   2013
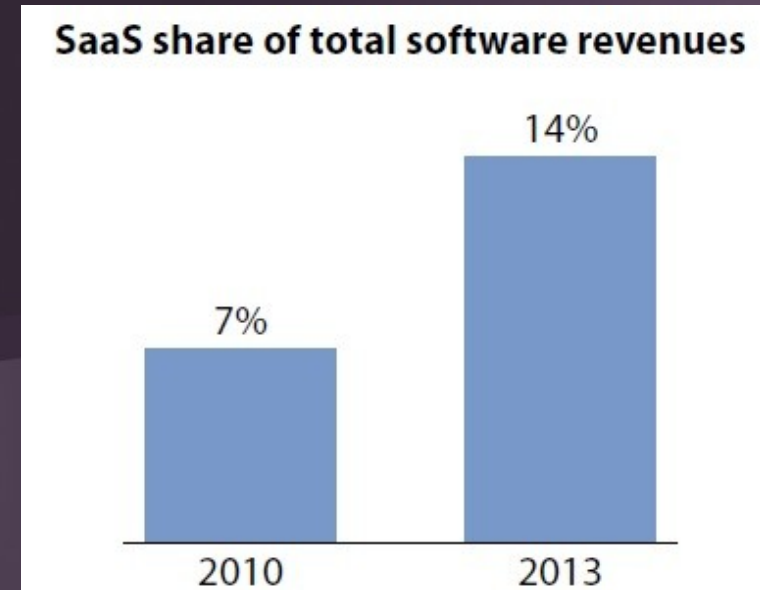
Source: Forrester (2011)
How SaaS Will Change Technology Sourcing
Strategy

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Hybrid service environments common

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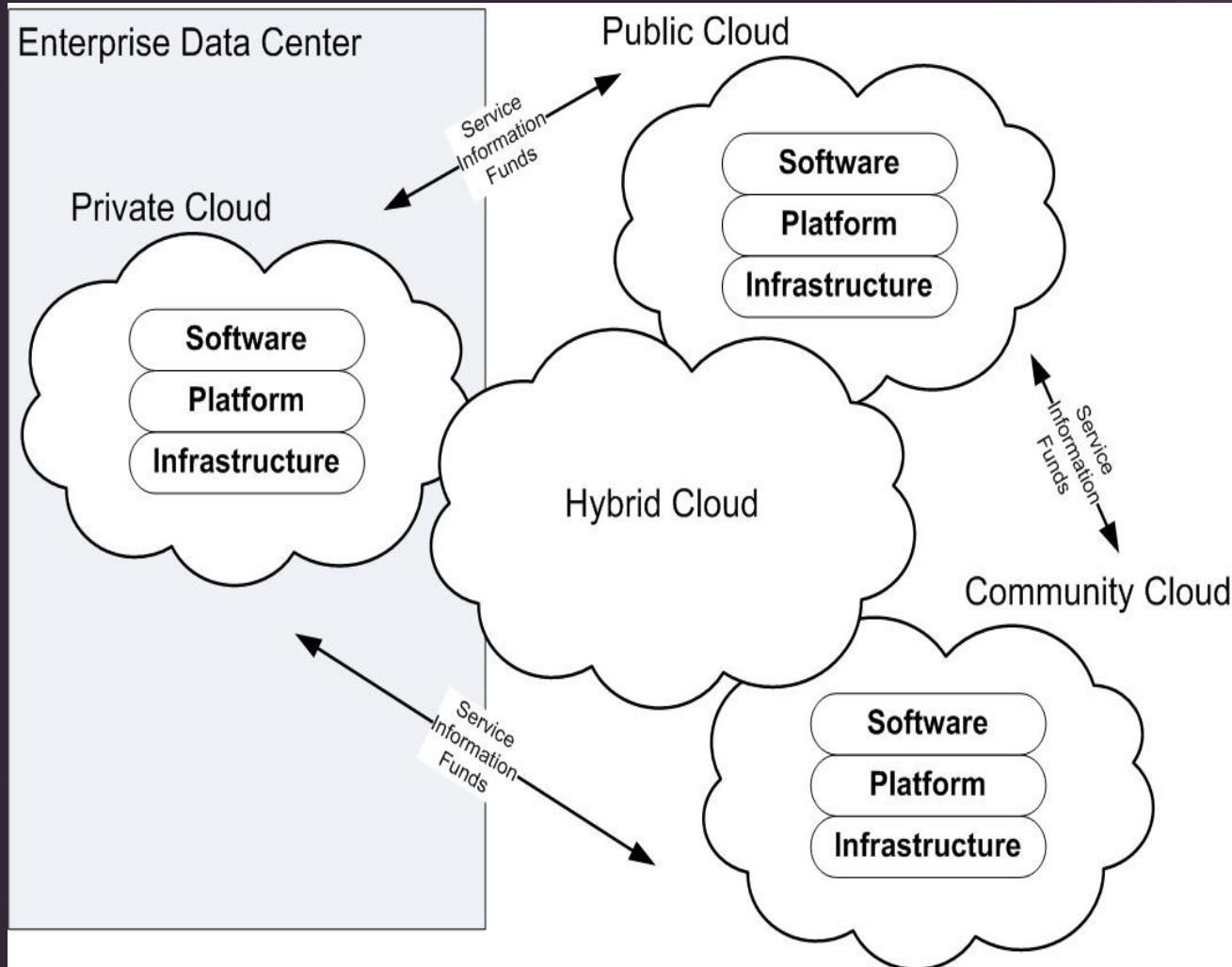
Interdependencies Increase

Source: BCG analysis

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The User Expects More Convenience

- **The consumerisation of IT services**
  - IT users expect app-store service discovery and fulfilment
  - IT users look to public cloud for innovation and convenience

- **Device Diversification**
  - Growing user demand for the latest laptop, mobile, tablet
  - Multi-purpose devices blur the boundaries
  - 'Device Wars' and 'Operating System Wars'

- **Everything is mobile**
  - IT users want access to services while on the move
  - Users switch between laptops, tablets and mobiles

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The Role of the IT Dept. is Changing

- **'IT' changes from provider to broker**
  - IT no longer provides all the services to the business
  - IT must broker internally and externally provided services
  - Skills change from technical to management and relationships
- **The CIO as Orchestrator**
  - 'Multi-sourcing' becomes increasingly common
  - Evaluating Cloud Service Providers becomes critical
  - The CIO must justify the value of alternatives
- **Change Management needs to evolve**
  - Public SaaS applications have limited Change processes
  - Aligning windows within dependent service is complex
- **'IT' needs to market itself better**
  - Defend the value of internal services compared to outsourced services

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CAPEX models mix with 'as-a-Service'

- **Comparing like-for-like costs is difficult**
  - CAPEX model must be expressed in usage-based terms
  - The OPEX costs of a shared service are often difficult to measure
  - Showback and chargeback increasingly common
  - Per use cost for shared assets, services and people requires complex calculation
  - Apply the Pareto rule (80 20 rule) to manage complexity
- **It's important to consider trade-offs other than cost**
  - Security & Legal
  - Agility
  - Green
  - Risk & Reputation
- **Focus must switch from cost to value**
  - A value-based discussion can more easily accommodate investment

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Concerns remain about Cloud

- **Data Security**
  - Where's my data held?

- **Lack of Trust**
  - High profile outages and security breaches of Public Cloud services

- **Lack of Control**
  - Limited Change Management on Public Cloud service

- **Lack of Accountability**
  - Who is responsible for Public Cloud services?

- **Lack of Transparency**
  - What is the incident and problem resolution process?

- **Lack of Clarity**
  - Confusion over the risks and benefits of cloud
  - Complex hybrid cloud services are difficult to understand

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The impact of "as-a-Service" on SLM

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For the Service Provider

- No longer just a service provider, now also a service consumer

- Aligning SLAs with OLAs and UCs is essential

- Understanding the trade-offs will drive business forward

- Automation is vital to delivering on-demand services

- **Focus of SLM must be on value**
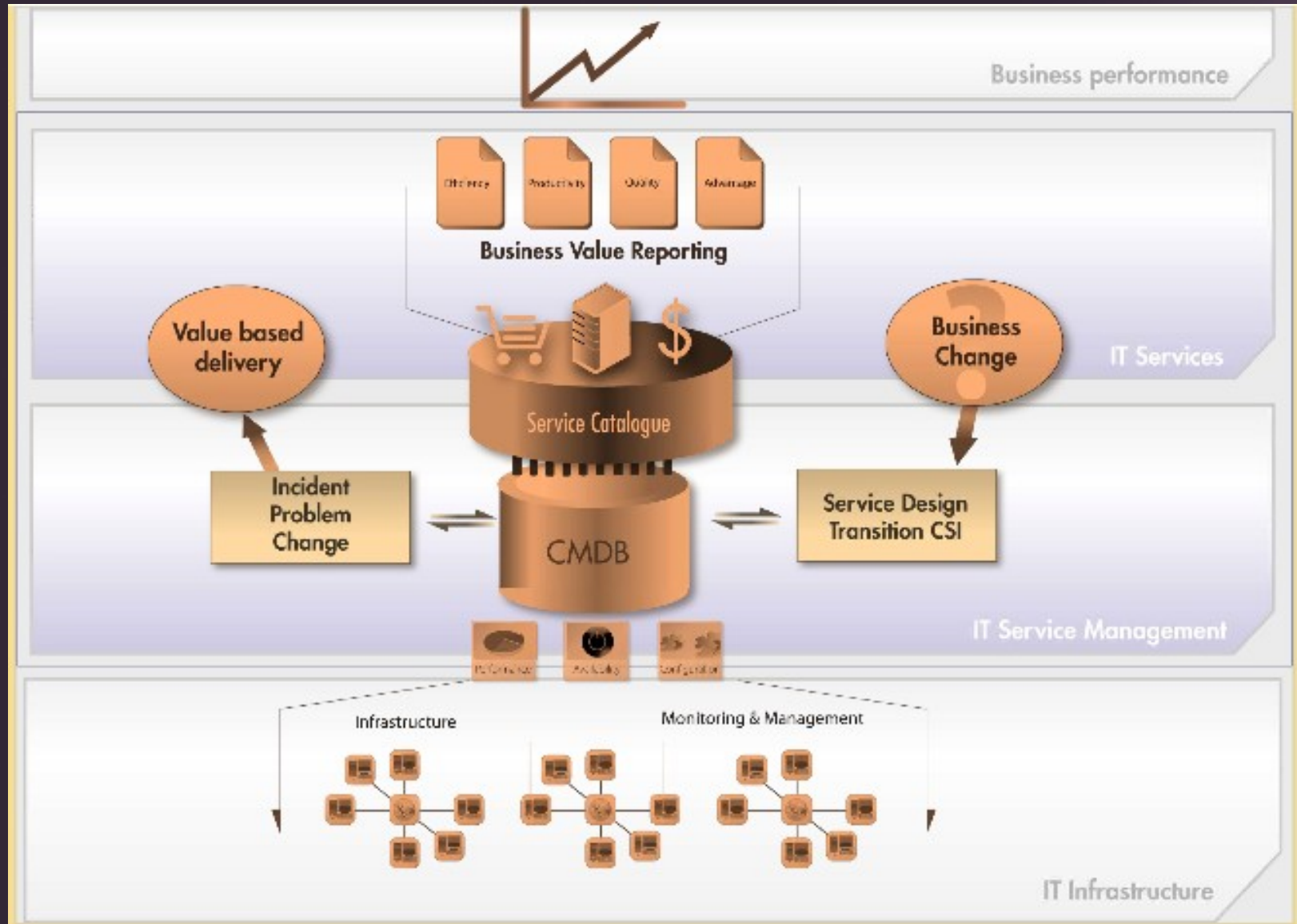
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For the Service Consumer

- New Cloud Service Provider Assessment models required

- Multi-sourcing becomes a viable strategy

- Unified, independent, executive monitoring is essential

- **Focus on supplier relationship management**

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Understanding Value
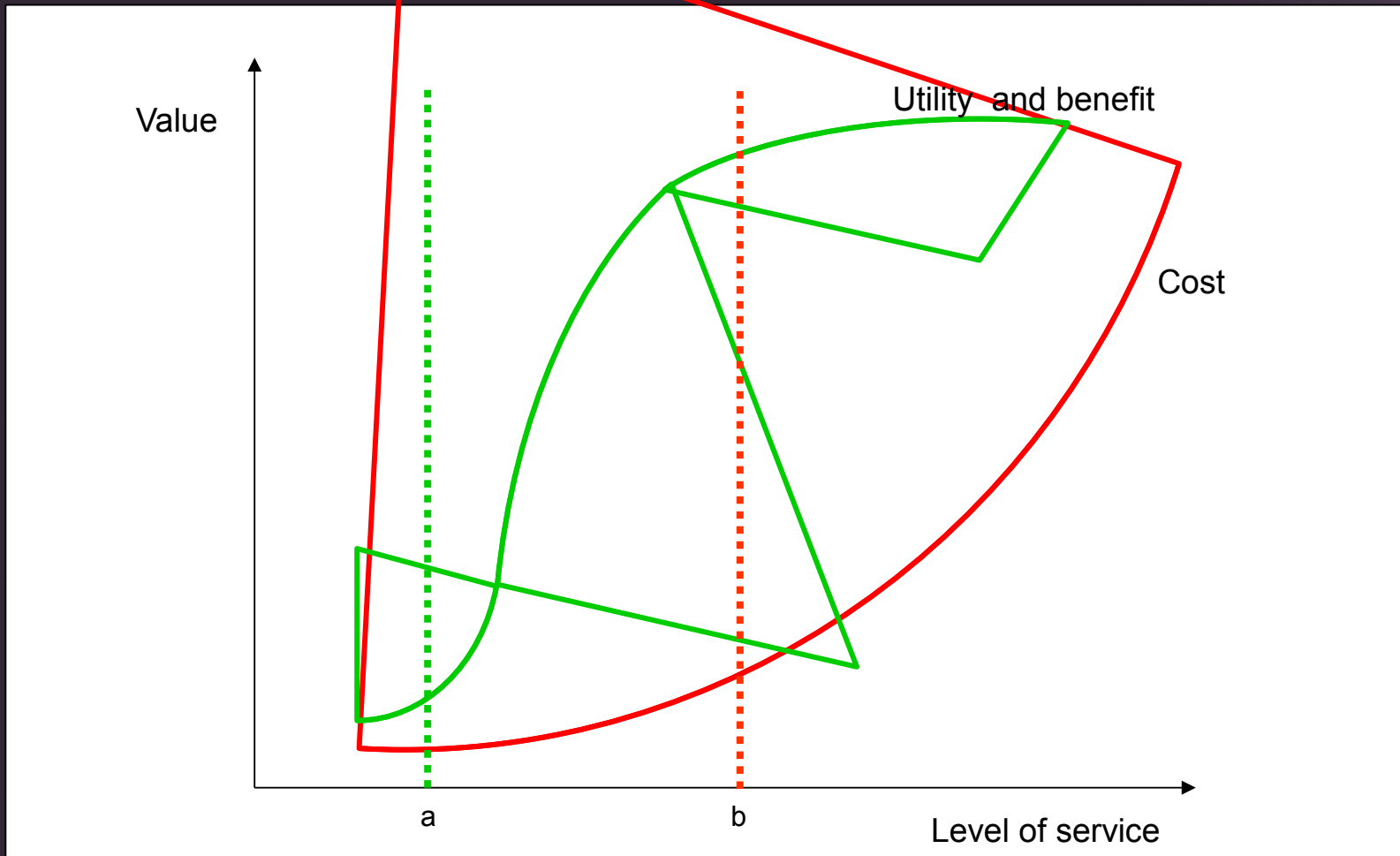
Business Value Reporting

Evolving SLM for 'as-a-Service'

1. **AGREE** the SLA with the customer
2. **MONITOR** the KPIs against the Service
3. **REPORT** performance in a Service Report
4. **REVIEW** performance against Targets
5. **IMPROVE** service delivery *and* the SLA

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Agree:

- **Cloud Services are 3rd Party Services**
  - Establish Underpinning Contracts where possible (Private & Community Clouds)
  - Understand limitations where not possible (Public Cloud services)

- **Consider Technical, Commercial and Legal aspects**
  - Can the availability SLA of the Cloud Service support the desired service availability?
  - Does the service charging align with the elastic cloud service costs?
  - Are service credits and penalties back-to-back with the cloud Service ?

- **A maintainable Service Catalogue is essential**
  - User Request Catalogue to recommend Public Cloud services
  - Impact analysis to show dependencies between Business and Technical services
  - Simple visual representation helps anticipate demand on shared services

Monitor:

- **Traditional metrics are insufficient**
  - Usage-based payment means that daily utilisation must be recorded
  - Unified monitoring is required to combine metrics from 3rd Parties
  - 'What gets measured gets done'

- **Active Monitoring is required**
  - Periodically simulate requests to evaluate end-to-end response times
  - Often the only way to predict performance for hybrid cloud services

- **End-user experience is key**
  - Customer is concerned with what is delivered, not how
  - May need to monitor experience across devices (PC Browser, Mobile)

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Report:

- **Need to report fine-grained usage information**
  - e.g. Number of Virtual Machine hours per day

- **Need to report on a more regular basis**
  - Requirement to understand current utilisation
  - Customer demand for near real-time reporting

- **Categorise and Annotate Breaches**
  - '3rd Party Breach'
  - 'Gmail experienced a service outage affecting all entry-level mail accounts'

- **Automated reporting is essential to cope with increasing complexity**

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Review:

- **Focus on Service Highlights as much as SLA Breaches**
  - **Requires KPIs that may not be part of the SLA**
    - Mean Time to Deploy Virtual Server
    - Number of User Accounts Provisioned per day
    - Number of dormant User Accounts closed

- **Communicate Benefits and Tradeoffs to the Customer**
  - **Use appropriate Service Packages**
    - Instead of: '*Platinum*', '*Gold*', '*Silver*'
    - Try : '*Rapid Deployment*', '*Extra Secure*', '*Maximum Availability*'

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Improve:

- **Consider switching Cloud Providers**
  - **Need clear Cloud Service Provider Assessment Model to assess risk**
  - **Need to measure same key metrics from alternative Cloud Service Providers**
  - **Vendor lock-in still an issue**

- **Move services between Public Cloud, Private Cloud, On-Premise**
  - **Understand the tradeoffs between:**
    - Performance and Availability
    - Cost (CAPEX vs OPEX)
    - Agility
    - Risk
    - Security

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Conclusions

How 'as-a-Service' impacts SLM

- The adoption of 'as-a-Service' is growing

- The role of the IT department must change

- SLM most evolve to business and supplier relationship management

- SLM must focus on business benefit

- Monitoring must include usage based metrics and cost modelling

- Automation is essential to manage Hybrid environments

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Questions

Thank You

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