Capacity and Performance Management - The Key to Successful Outsourcing

Part 2 – Auditing the Outsourced Services Supplier

Agenda

- Outsourcing agreements
- Performance and Capacity across the Application Lifecycle
- Outsourcing process interfaces
- Capacity Planning requirements
- The Service Contract and SLA
- Outsourcing examples
- How to provide a suitable governance framework
- Data and audit requirements
- What to do if the outsourcer won't give you any capacity management information
Outsourcing Agreements

- Typically they are composed of:
  1. The legalities in the form of a contract
  2. Schedules that comprise how specific functions are undertaken
  3. A Service Level Agreement that describes characteristics about how the service is measured and the targets for these measures

- There will usually be some service penalties for not achieving targets, usually in the form of service credits, i.e. credit notes against future fees.
Outsourcing Agreements

Master Services Contract

Schedule 1

Schedule 2

Schedule n

SLA 1

SLA 2a

SLA n

e.g. Governance, Pricing, Standards, Service Credits, etc.

e.g. Desktop, Data Centre, Application Development, etc.

Performance/Capacity across the Application Lifecycle

4 Phases

'Concept'

'Development'

'Live'

'Phase-out'

Software Application Lifecycle
Performance/Capacity across the Application Lifecycle

Outsourcing Process Interfaces using ITIL descriptions
Capacity Planning Requirements from Outsourcer

For a company to undertake capacity planning and performance management when an outsourcer is involved often adds complexity to the process; this is especially prevalent where data gathering is involved.

The model used for outsourcing will have specific impact on the interfaces, governance, deliverables and data requirements needed for capacity and performance.

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Example Service & Resource Relationship Matrix

<table>
<thead>
<tr>
<th>Wintel</th>
<th>Wide Area Network</th>
<th>Web Application</th>
<th>Mainframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service A</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Service B</td>
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<td>Service C</td>
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<tr>
<td>Service D</td>
<td>Service E</td>
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<tr>
<td>Service E</td>
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</table>

Service A: Web-based application, such as Intranet services
Service B: Ported or Legacy terminal application
Service C: Contemporary multi-tiered application
Service D: Windows service such as DHCP or WINS
Service E: Batch transfer or electronic payment service
The Service Contract

The contract between the outsourced services supplier and the customer will contain many key areas that impact capacity and performance and, importantly, the converse is true too; capacity and performance functions should be involved when drafting outsourcing agreements, including the contract. Often important decisions are made at the contract stage that influence the ability to predict or manage performance or capacity throughout the lifecycle.

The Service Level Agreement (SLA)

The Service Level Agreement defines the service that the customer expects from a supplier

Key Points:
- Do not rely on Service Credits to guarantee performance; often it is cheaper for the outsourcer to pay the service credit than resolve the problem
- Ensure the SLA is achievable, watertight and equitable; one-sided SLAs help neither party in the long-term
- Unless the SLA has a Service Bonus for exceeding performance do not expect anything but achieving the targets; this is the outsourcers margins at stake!
Example 1: An Outsourced Technology Tower

This is a common arrangement in ICT departments today, most often used for outsourcing management of the wide-area network. Multiple services may be provided over the outsourcer's technology and so a number of requirements need to be met:

- Ensuring that each transaction 'crossing' the platform can be identified and measured appropriately, including:
  - Size of transaction
  - Timestamp entering and exiting the system (and hence the end-to-end response time)
  - Workload (/payload) information where available
- Service availability measured and recorded
- Total % utilisation recorded of the platform at any instant
Example 2: An Outsourced ICT Service

This is an increasingly common arrangement, whereby an individual ICT service is outsourced but is still provided to the business via the ICT Department (e.g. ASP model such as Salesforce.com). This enables the ICT Department to present a common interface to the Business, utilising a common SLA structure and associated Service Management processes.

The outsourced ICT service still must be monitored so a number of requirements need to be met:

- Ensuring that each transaction can be identified and measured appropriately, including:
  - Size of transaction
  - Timestamp entering and exiting the system (and hence the end-to-end response time)
  - Workload (/payload) information where available
- Service availability measured and recorded
- Total % utilisation recorded on all associated platforms at any instant
Example 2: An Outsourced ICT Service

Note that as the SLA/OLA is between the outsourcer and the ICT Department, therefore giving the ICT Department more leverage to control the situation.

However this model means that as the outsourcer controls both the development and management of the service it is often difficult to understand what is happening 'under the covers'.

An argument often used to counter this concern is "if the outsourcer fails to deliver we hit them with service penalties".

If an ICT Department thinks this is the appropriate method of managing the outsourcer and their service then they are in for a nasty surprise; it doesn't work.

The outsourcer will simply pay the service credit if it all goes wrong – the customer is the one that suffers reputational and financial loss.
A Governance Framework

To counter these limitations there should be some additional level of governance specifically for capacity planning and performance management in an outsourcing environment, above and beyond the contractual arrangements. However, any governance framework will have to be designed for each outsourcing operating model. The following slides provide some suitable examples.
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Governance Framework Example: ICT Service

- Concept
  - Feasibility
  - Require
  - Design
  - Coding
  - Testing
- Outsourced Development
  - Roll-out
  - Live
  - Changes
- Outsourced Operations
  - Roll-out
  - Live
  - Changes
- Phase-out
  - End-of-life

Performance and capacity review board

Have the transient and steady-state conditions been modelled for performance and capacity?

Is the service meeting performance service levels and using capacity as planned?

Is each change tested prior to incorporation into a release and the release tested?

Performance and Capacity Management Function

Governance Framework Example: Technology Tower

- Concept
  - Feasibility
  - Require
  - Design
  - Coding
  - Testing
- Development
  - Roll-out
  - Live
  - Changes
- Live Operations
  - Roll-out
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E2E Performance and Capacity Management Assurance Function

Performance and capacity review board
Data and Audit Requirements

The customer of any outsourced managed service (whether Tower, ICT service or otherwise) must have access to pertinent, timely and accurate capacity and performance data as required. However the outsourcer may argue that this is unnecessary as they are providing a managed service. This argument is only valid if the outsourcer is providing an ‘On-Demand’ service, and then it is only partially valid. Ultimately the customer must have the right to audit the outsourcer’s processes and documentation at any time, therefore this includes capacity plans, performance testing results, etc.

Retrieving Data without Outsourcer’s Assistance

[Diagram showing network with R1 and R2 nodes and an outsourced network connection]
Retrieving Data without Outsourcer’s Assistance

Can use ‘robotic’ synthetic transactions or instrument transactions to record end-to-end response times.

Can use system-level monitors to record internal response times.

Can measure internal network interfaces that connect to router ports to get Tx and Rx packet data.
Summary

- Different outsourcing models require different approaches to capacity planning and performance management.
- Define the process to ensure that you are able to impose standards, receive reports and capacity plans, etc.
- Ensure your contract states you have the ability to audit the outsourcer’s processes and documentation; this should only be a contingency though if the agreement doesn’t allow for suitable reporting, etc.
- Importantly capacity planning shouldn’t be outsourced to any of your ICT service providers unless you are moving to a utility model; this is like giving the poacher a job as your gamekeeper!