Re-engineering Service Level Agreements

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Abstract
Outsourcing legacy services continues to expand and Business Process Re-engineering (BPR) projects now have the spotlight of management attention. In the rush to the panacea of the brave new world there appears to be little time for the legacy systems and tools and techniques of the past. Client/Server solutions are now being designed, developed and implemented using new technologies to support rapidly changing business demands. Change is the driving force with the risk being perceived as not changing fast enough!

As architectural chaos takes hold the seemingly obvious consequences of change are frequently overlooked.

**Re-engineering techniques must be applied to infrastructure support processes as well as application and business processes.**

Some things have not changed. Customers’ expectations must still be managed and service quality must still be achieved. Customer confidence in availability, reliability, recoverability and serviceability of the new infrastructures is still a high profile business requirement.

Overlooking the strengths of the past may be the cause of the weaknesses of the future. Abandoning sound management techniques developed over many years may be paid for in lost credibility in as many weeks. Building on success means improving these proven techniques and applying them to the new architectures and infrastructures.

**Service-Level Agreements need to be re-engineered to reflect the requirements of new business and technical architectures.**

Introduction
This presentation argues the case for re-engineering Service-Level Agreements.

Analysing the emerging techniques and approaches to business process re-engineering shows us the way forward in re-engineering a Service-Level Agreement. Reusability and application design techniques should be applied to a new process for creating a successful SLA. With a strong customer and business focus, a Service-Level Agreement will have an even more important role to play in the future Client/Server strategy for service
delivery. Paper-based service-level agreements have all the inherent weaknesses of passive documents. There is no direct link to the marketing and procurement of service and no direct links to work initiation processes, change management and problem management.
Worse still, there is no direct link to compliance management.

**Background**

Service-level agreement’s (SLA’s) are not new. For many years now SLA’s have formed part of the operations support responsibility. Classic SLA’s were department or application focused with most of the metrics associated with a mainframe system or subsystem. Typically, the SLA would address the use of a system by users in one or more departments. Example metrics would be CICS or IMS availability, with transaction throughput and response-times being the critical measures. A typical SLA would include all operational requirements for the system, subsystem or database. Along with on-line and batch schedules, the SLA would include backup and recovery requirements, contingency and disaster recovery arrangements and many other operational requirements specific to that service.

The basic characteristics were:

- Departmental and mainframe centric documents.
- IT driven and IT focused documents with IT metrics.
- Large comprehensive and cumbersome documents.
- Paper-based passive documents, reviewed annually.

With a centralised mainframe service this approach had moderate success. It established a working relationship between the providers of mainframe services and their users.

**Key Issues**

The transition of service delivery from centralised mainframes to networked client/server platforms has exposed many weaknesses in the style, design and use of service-level agreements. Mainframe centric SLAs are no longer effective in managing customer relationships. The key issue is that a service-level agreement should be business focused and designed to meet practical business requirements. The re-engineering of a service-level agreement should consider:

1. Establishing a clear **business focus**.
2. Marketing of the service being offered.
3. Procurement of the service being offered.
4. **Work initiation** to deliver the service being procured.
5. Compliance incentives for the service being delivered.
6. A managed-application solution with on-line views showing service descriptions, definitions and delivery metrics.
7. Provision for compliance measurement and reporting.
8. A link to **change management**.
9. A link to **problem management**.
A service-level agreement should actively support the procurement, delivery and management of all IT related goods and services. These issues influence and dictate the design of a re-engineered service-level agreement based on an integrated managed application.

A single fully integrated managed-application would deliver business benefits to the providers and consumers of services. The benefits include on-line access to a service catalogue, easy on-line procurement, automated work initiation, integrated compliance management and direct links to all infrastructure management processes.

**Business Focus**

A service-level agreement must deliver practical business benefits and establish a common understanding of delivery requirements. The benefits of a re-engineered SLA should include:

- Access to a catalogue of services being offered.
- Easy procurement of those services with supporting work initiation processes.
- Use of business terms and metrics directly associated with a business process.
- Easy access to defect and non-compliance reporting.

**Marketing Services**

All services being offered by the provider should be described in an on-line service catalogue. The catalogue must contain a directory of services by type with a service description, service-level and cost. The service catalogue should accessible on-line from a central database.

Services classifications should include:

- Commodity Services. e.g. provision of hardware and software components
- Desktop Services e.g. installation and testing
- Infrastructure Services e.g. connections to servers
- Support Services e.g. backup and recovery
- Added-Value Services e.g. help desk, problem and change, technical support
- Business Delivery Services e.g. business processes such as Workflow & Imaging

Each classified service will have a unique, reusable, service description, service-level and service cost.

**Procurement of Service**

Services must be procurable from the Service Catalogue and linked to a work initiation process. Having selected a required service the customer must be able to simply forward that request to the correct expert domain for authorisation and work initiation. Where multiple expert domains are involved work initiation requests should be automatically invoked. Procurement of services must be managed by the application including authorisation, billing and scheduling of work in compliance with the published service-
level agreement. The service description, definition and agreement should be available at the ‘click-of-a-button’.

**Work Initiation Processes**
The providers of services and the consumers of those services must share the same application. The providers must present a “one-stop-shop” image with management and distribution of work requests to multiple expert domains managed by the application. Giving a single point of contact is critical for effective service delivery. The application should generate and distribute work requests to the expert domain, providing the service requirement and service-level expectation.

**Compliance Management**
The managed-application should consider incentives for ensuring that service-level expectations are met. The work initiation process must address the following questions:

1. What are the client’s expectations of service from the providers?
2. What are the responsibilities of the client and the provider?
3. What should the provider expect of the customer?

By linking the service-level requirement to the procurement and work initiation process both provider and customer become actively involved with service-level compliance. Acceptance and acknowledgment of the service requested and customer confirmation of delivery of the service will facilitate compliance measurement and reporting requirement. The application must also provide for defect reporting, change requests and problem management.

**Change Management**
As the service catalogue contains an entry for each service, any changes to a service may affect the agreed service-levels. A managed-application should directly link change management process to the SLA compliance reporting.

**Problem Management**
Problems are treated as service failures. A service failure is non-compliance with the service-level agreement. Therefore problem management be directly associated with a compliance measurement process.

**Managed-Application for Service Delivery**
A managed-application allows critical functionality to be integrated into a single service management application. The objective is to link common management processes and dramatically improve management of service delivery. There are two fundamental requirements:

1. Groupware capability to enable access by providers, consumers and customers to a single on-line Service Catalogue for procurement, authorisation, work initiation and service delivery management.
2. Measurement data collection, reduction and analysis for compliance management.

The design solution is to facilitate common access to service management functions; distribution of requests to expert domains and on-line specification of agreed delivery compliance metrics.

The functions are therefore marketing of services, procurement of services, delivery of services and management of compliance with the specified service-level agreements.

**Tool-sets for a Managed-Application**

An example toolset for a managed-application is Lotus Notes. This is an example of suitable software to meet the groupware requirement. SAS-CPE is an example of suitable software to meet the measurement and compliance reporting requirement.

**Groupware**

A Lotus Notes and SAS-CPE based managed-application provides both service providers and their customers with on-line access to critical infrastructure management and service delivery processes. An on-line Service Catalogue enables proactive marketing of IT related goods and services. The ‘views’ of the catalogue should include:

1. A catalogue directory.
2. A structured catalogue entry by type of service and provider of service.
3. A Service description, definition and costs.
4. A procurement view.
5. A compliance reporting view.
6. A work initiation and workflow management process (including authorisation).
7. A problem and change request process.
8. A provider SLA build process.
9. A measurement and reporting process.

**SAS-CPE**

Measurement data collection, reduction and analysis are traditional background tasks that could be performed by a product such as SAS-CPE. Data from multiple sources could be uploaded to a central dedicated server and workstation to provide a central compliance database. Reports are uploaded or replayed, initiated by workstation based Lotus Notes macros and scripts.

**Summary**

There are clear business benefits, in both efficiency and effectiveness, to establishing a central Service Management managed-application, integrating many critical service delivery processes. Management of service delivery can and should be supported by a fully integrated application.

The business benefits are:

- Easy access to a catalogue of services.
• Easy procurement of services.
• Automated workflow and work initiation.
• On-line SLA with ‘push button’ service descriptions, definitions and delivery metrics.
• Improved service delivery.
• Enhanced customer focus.

Contact
For a more detailed discussion on the points raised and information to help you design and develop a managed-application please contact Adrian Shewan at the address below.

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Re-engineering
Service-Level Agreements

Adrian Shewan
June 1996
Key Issues (1)

- Reasons for change:
  - Departmental, mainframe and system centric
  - IT driven, IT focused with IT metrics
  - Large comprehensive and cumbersome documents
  - Passive, paper-based, reviewed annually

“No longer effective...”
Key Issues (2)

- Requirements of re-engineered service-level agreement:
  
  Service Management Application
  - Business focused based on business metrics
  - Integrated managed-application supporting the provider and consumer needs
  - Pro-active support of service delivery

  “Effective..... delivers practical business benefit....”
SLA re-engineering Issues (1)

- Problem & Change Management
- Compliance Management
- Compliance incentives
- Marketing
- Service Procurement
- Costing and Billing
- Work Initiation

SLA Design Issues
SLA re-engineering Issues (2)

- Business Focus
  - Access to a Catalogue of Services
  - Easy Procurement of Services
  - Link to business process, uses business terms
  - Easy access to defect, change and problem reporting

“Focus on business issues”
Service Catalogue: Marketing

- Service Classifications
  - Commodity Services
  - Desktop Services
  - Infrastructure Services
  - Support Services
  - Added-Value Services
  - Business Delivery Services
Design Overview(1)
Design Overview (2)

Trend & performance database

Data collection

Processor/Server Complex

Dedicated workstation & Server

SAS/CPE

Reduction

Analysis

LOTUS NOTES DATABASE
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<th>SLA</th>
<th>PROCURE</th>
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Business Benefits

- Integrated services
  - Procurement
  - Service Management
    - Service-Level Agreements
    - Problem Management
    - Change Management
  - Compliance Management
  - Work Initiation

“How to procure IT related goods and services”
Summary

- Integrate Lotus Notes and SAS-CPE to provide powerful Service-Management application
- On-line procurement, work initiation and compliance management
- Link to problem and change management

“Creates effective, proactive Service-Level Agreements”