



An Introductory Overview of ITIL[®]





A high-level overview of the IT INFRASTRUCTURE LIBRARY The IT Infrastructure Library

An Introductory Overview of ITIL®

Version 1.0a

| Written by: | Colin Rudd | itEMS Lto | |
|---------------|---|-----------|--|
| Contributor: | Gary Hodgkiss | CGE&Y | |
| Edited by: | Alison Cartlidge | Xansa | |
| Published by: | <i>itSMF</i> Ltd Webbs Court 8 Holmes Road Earley Reading RG6 7BH United Kingdom | | |
| | Tel: +44 (0)118 926 0888 Fax: +44 (0)870 706 1531 e-mail: publications@itsmf.com | | |

© Copyright *İt*SMF, 2004 This version first published April 2004 Minor updates published July 2004

Based on other copyright material with the permission of the copyright owners. The itSMF would like to thank the contributors to an extensive international quality review process for their comments.

ITIL® is a registered trademark and a registered community trademark of the Office of Government Commerce (OGC) and is registered in the U.S. Patent and Trademark Office.

© Crown copyright material reproduced with the kind permission of OGC and the Controller of Her Majesty's Stationery Office (HMSO).

About this guide

ITIL (IT Infrastructure Library) provides a framework of "best practice" guidance for IT Service Management and is the most widely used and accepted approach to IT Service Management in the world. This pocket guide has been designed as an introductory overview for anyone who has an interest or need to understand more about the objectives, content and coverage of ITIL. Whilst this guide provides an overview, full details can be found in the actual ITIL publications themselves.

This guide describes the key principles of IT Service Management and provides a high-level overview of each of the core publications within ITIL:

- Service Delivery
- Service Support
- ICT Infrastructure Management
- Planning to Implement Service Management
- Application Management
- The Business Perspective
- Security Management.

This guide reinforces the key ITIL message that IT services are there solely to support the business and its efficient and effective operation.

The advice contained within this guide is neither definitive nor prescriptive, but is based on ITIL best practice. The use of ITIL is applicable and is of benefit to all IT organisations irrespective of their size or the technology in use.

Contents

| About this Guide | 2 |
|--|----|
| Contents | 3 |
| 1 Introduction | 4 |
| 2 What is IT Service Management? | 6 |
| 3 Why Implement Service Management? | 8 |
| 4 The ITIL Framework | 10 |
| 5 Service Delivery | 13 |
| 6 Service Support | 16 |
| 7 ICT Infrastructure Management | 19 |
| 8 Planning to Implement Service Management | 22 |
| 9 Application Management | 25 |
| 10 The Business Perspective | 28 |
| 11 Security Management | 31 |
| 12 Related Standards and Complementary Books | 34 |
| 13 Summary | 36 |
| 14 Further Guidance and Contact Points | 39 |

l Introduction

In recent years it has become increasingly recognised that information is the most important strategic resource that any organisation has to manage. Key to the collection, analysis, production and distribution of information within an organisation is the quality of the Information Communication Technology (ICT) systems and IT services provided to the business. It is essential that we recognise that ICT systems are crucial, strategic, organisational assets and therefore organisations must invest appropriate levels of resource into the support, delivery and management of these critical IT services and the ICT systems that underpin them. However, these aspects of IT are often overlooked or only superficially addressed within many organisations.

The key issues facing many of today's senior Business Managers and IT Managers are:

- IT and business strategic planning
- Integrating and aligning IT and business goals
- Acquiring and retaining the right resources and skill sets
- Implementing continuous improvement
- Measuring IT organisation effectiveness and efficiency
- Reducing costs and the Total Cost of Ownership (TCO)
- Achieving and demonstrating Value For Money (VFM) and Return on Investment (ROI)
- Demonstrating the business value of IT
- Developing business and IT partnerships and relationships
- Improving project delivery success
- Outsourcing, insourcing and smart sourcing
- Using IT to gain competitive advantage
- Delivering the required, business justified IT services (i.e. delivering what is required, when required and at an agreed cost)
- Managing constant business and IT Change
- Following the sun and offshore operations
- Demonstrating appropriate IT governance.

The challenges for IT managers are to co-ordinate and work in partnership with the business to deliver high quality IT services. This has to be achieved while reducing the overall TCO and often increasing the frequency, complexity and the volume of Change. The main method of realising this goal is the operation of effective processes and the provision of appropriate, value for money services. To achieve this, the correct processes need to be developed and implemented with in-built assessment and improvement mechanisms. IT management is all about the efficient and effective use of the four Ps, people, processes, products (tools and technology) and partners (suppliers, vendors and outsourcing organisations).



Figure 1: The Four P's

Management therefore needs to develop joint strategies and plans for all four areas within Figure 1. However, many organisations, in the past and still today, recognise the four Ps but do not use them for maximum advantage. All too often products are bought to manage areas of technology and then the processes, partners and people's roles are engineered to fit the technology and its limitations. The people and processes issues must be addressed first and this is one of the core principles of ITIL.

2 What is IT Service Management?

What do people mean when they refer to "Service Management"?

Different people use the term in different contexts. Some use it to refer specifically to just the content of the Service Delivery and Service Support ITIL books while others use it to include all of ITIL. In reality, Service Management should refer to any aspect of the management of IT service provision and therefore should include the whole of ITIL and not be limited to just two of the core modules. This is the definition and interpretation of the Service Management term used throughout this guide and is a core principle of ITIL.

Another core principle of ITIL and IT Service Management is the provision of quality Customer service. This is achieved by ensuring that Customer requirements and expectations are met at all times. The satisfaction of business and Customer requirements is fundamental to the whole of ITIL and there are a number of key activities that are vital to the success of ITIL processes within this area:

- Documenting, negotiating and agreeing Customer and business quality targets and responsibilities in Service Level Agreements (SLAs)
- Regular assessment of Customer opinion in Customer feedback and Customer Satisfaction Surveys
- IT personnel regularly taking the 'Customer journey' and sampling the 'Customer experience'
- IT personnel taking the Customer and business perspective and always trying to keep Customer interactions as simple and enjoyable as possible
- Understanding the ICT infrastructure.

Tip:

To keep interactions as simple and enjoyable for the Customer as possible use language that they understand and don't use technical IT terms.

ITIL recognises that there is no universal solution to the design and implementation of an optimised process for the management and delivery of quality IT services. Many experts, authorities, leading practitioners and exponents within the IT industry have contributed to the development of ITIL and the result is a framework that provides a *"common sense"*, structured approach to the essential processes involved. ITIL has been developed to be process driven and yet scalable and sufficiently flexible to fit any organisation from Small, Medium Enterprises (SMEs) to global Multi-National Organisations.

Each organisation whether an internal service provider or an external third party service provider should adopt the guidelines, principles and concepts of ITIL and adapt them to fit their own unique environment – "adopt and adapt".

IT management must recognise the importance of their role in underpinning the operation of the business. They must co-ordinate and work in partnership with the business, facilitating growth, rather than letting the technology and IT dictate and drive the business. It is essential therefore that the issues and expectations of business managers are closely aligned with the objectives and deliverables of IT management. Therefore IT processes must be developed based on their ability to deliver true business benefit.

The only way of achieving this is to design, plan and implement IT services using ICT infrastructure and management processes that deliver the information and solutions required by the business. The more effective organisations of today design the people's roles, partner's roles and the processes first and then configure the technology to support and automate them. In the truly efficient organisations these roles and processes are aligned to the business, the business requirements and the business processes. This ensures that the business and IT management processes and systems have aligned targets and goals.

ITIL provides "*best practice*" guidelines and architectures to ensure that IT processes are closely aligned to business processes and that IT delivers the correct and appropriate business solutions. ITIL is not a standard, nor is it rules or regulations and therefore neither tools, processes or people can be deemed "*ITIL compliant*". Processes and organisations can be assessed against BS 15000, the IT Service Management standard. However, neither tools nor individuals can be certified against BS 15000. Further information about BS 15000 is contained in section 12 of this guide.

3 Why Implement Service Management?

One of the main objectives of ITIL is to assist IT service provider organisations "to improve IT efficiency and effectiveness whilst improving the overall quality of service to the business within imposed cost constraints".

The specific goals of IT are to develop and maintain IT services that:

- Develop and maintain good and responsive relationships with the business
- Meet the existing IT requirements of the business
- Are easily developed and enhanced to meet future business needs, within appropriate time scales and costs
- Make effective and efficient use of all IT resources
- Contribute to the improvement of the overall quality of IT service within the imposed cost constraints.

Benefits realised by many IT organisations through implementing ITIL and processes based on "*best practice*" guidelines are:

- Continuous improvement in the delivery of quality IT services
- Reduced long term costs through improved ROI or reduced TCO through process improvement
- Demonstrable VFM to the business, the board and stakeholders, through greater efficiency
- Reduced risk of not meeting business objectives, through the delivery of rapidly recoverable, consistent services
- Improved communication and better working relationships between IT and the business
- The ability to absorb a higher rate of Change with an improved, measurable rate of success
- Processes and procedures that can be audited for compliance to "best practice" guidelines
- Improved ability to counter take-over, mergers and outsourcing.

Examples of some of the savings made by organisations include:

- Over 70% reduction in service downtime
- ROI up by over 1000%
- Savings of £100 million per annum
- New product cycles reduced by 50%.

However, care must be taken when developing IT Service Management within an organisation. It is easy to view and interpret ITIL as bulky and bureaucratic and as a result implement processes that inhibit Change rather than facilitate it. It is important that ITIL is implemented with an *"adopt and adapt"* approach so that effective and appropriate processes are put in place. This can only be achieved where business driven metrics, Critical Success Factors (CSFs) and Key Performance Indicators (KPIs) are put in place to measure the success of the process implementations and their continuous improvement. Quality and the measurement of quality, in business related terms, is yet another core principle of ITIL.

4 The ITIL Framework

ITIL provides comprehensive "*best practice*" guidelines on all aspects of "*end-to-end*" Service Management and covers the complete spectrum of people, processes, products and the use of partners. ITIL was initially designed and developed in the 1980s but has recently been revised and updated to bring it in line with modern practices, distributed computing and the internet. ITIL is the most widely used management approach to the delivery and support of IT services and infrastructure, world-wide. ITIL and its constituent modules were scoped and developed within an overall framework.



Figure 2: The ITIL Framework

Figure 2 shows the overall environment and structure within which the modules were produced. It illustrates the relationship that each of the modules has with the business and the technology. From the diagram it can be seen how The Business Perspective module is more closely aligned to the business and the ICT Infrastructure Management module is more closely aligned with the technology itself. The Service Delivery and Service Support modules provide the heart of the process framework.

These seven modules constitute the core of ITIL. Its recent revision has improved the structure of ITIL, and the new scope, contents and relationships of the various modules are in essence as follows.

Service Delivery: covers the processes required for the planning and delivery of quality IT services and looks at the longer term processes associate with improving the quality of IT services delivered.

Service Support: describes the processes associated with the day-to day support and maintenance activities associated with the provision of IT services.

ICT Infrastructure Management (ICT IM): covers all aspects of ICT Infrastructure Management from identification of business requirements through the tendering process, to the testing, installation, deployment, and ongoing operation and optimisation of the ICT components and IT services.

Planning to Implement Service Management: examines the issues and tasks involved in planning, implementing and improving Service Management processes within an organisation. It also addresses the issues associated with addressing Cultural and Organisational Change, the development of a vision and strategy and the most appropriate method of approach.

Application Management: describes how to manage applications from the initial business need, through all stages in the application lifecycle, up to and including retirement. It places emphasis on ensuring that IT projects and strategies are tightly aligned with those of the business throughout the application lifecycle, to ensure that the business obtains best value from its investment.

The Business Perspective: provides advice and guidance to help IT personnel to understand how they can contribute to the business objectives and how their roles and services can be better aligned and exploited to maximise that contribution.

Security Management: details the process of planning and managing a defined level of security for information and IT services, including all aspects associated with reaction to security Incidents. It also includes the assessment and management of risks and vulnerabilities, and the implementation of cost justifiable countermeasures.

Figure 3 illustrates the scope of each of the core ITIL modules together with the main deliverables from each of the individual processes, as shown within each of the individual process boxes. The lines between processes indicate where the deliverables of each process are principally used outside of their own process area.



Figure 3: The Deliverables and Interfaces

Each of the separate modules is expanded in the following sections.

5 Service Delivery

The Service Delivery module of ITIL covers the more forward-looking delivery aspects of service provision and consists of Service Level Management, Financial Management for IT Services, Capacity Management, IT Service Continuity and Availability Management. These processes are principally concerned with developing plans for improving the quality of the IT services delivered.



Figure 4 illustrates how Service Level Management (SLM) provides the major interface to the business and it also shows the major deliverables from each of the Service Delivery processes.

The SLM process negotiates, documents, agrees and reviews business service requirements and targets, within Service Level Requirements (SLRs) and Service Level Agreements (SLAs). These relate to the measurement, reporting and reviewing of service quality as delivered by IT to the business. The SLM process also negotiates and agrees the support targets contained in Operational Level Agreements (OLAs) with support teams and in underpinning contracts with suppliers, to ensure that these align with business targets contained within SLAs.

The other major roles of the SLM process are the production and maintenance of the Service Catalogue, which provides essential information on the complete portfolio of IT services provided, and the development, co-ordination and management of the Service Improvement Programme (SIP) or Continuous Service Improvement Programme (CSIP), which is the overall improvement plan for continuous improvement in the quality of IT services, as delivered to the business.

Financial Management for IT Services provides the basis for running IT as a business within a business and for developing a *"cost conscious"* and *"cost effective"* organisation. The principle activities consist of understanding and accounting for the costs of provision of each IT service or business unit and the forecasting of future expenditure within the IT Financial Plan. There is also another optional, but preferred activity, the implementation of a charging strategy, which attempts to recover the IT costs, from the business, in a fair and equitable manner.

SLM demonstrates the level of service being delivered to the businesses day in and day out. As long as the service meets the business' specified requirements, when cost models or a charge back mechanism are implemented under Financial Management, you can show the financial value of those services. This provides a baseline for assessing the financial viability of a service or adjusting charges in line with changing service requirements i.e. in general, a better service costs more money. The Capacity Management process ensures that adequate capacity is available at all times to meet the requirements of the business by balancing "business demand with IT supply". In order to achieve this, a Capacity Plan closely linked to the business strategy and plans is produced and reviewed on a regular basis. This covers the three principle areas of Business, Service and Resource Capacity Management (BCM, SCM and RCM). These three areas comprise the activities necessary for ensuring that the IT capacity and the Capacity Plan are kept in line with business requirements. The common activities used within these areas are Performance Management, Workload Management, Demand Management and Application Sizing and Modelling.

IT Service Continuity produces recovery plans designed to ensure that, following any major Incident causing or potentially causing disruption of service, IT services are provided to an agreed level, within an agreed schedule. It is important for each organisation to recognise that IT Service Continuity is a component of Business Continuity Planning (BCP). The objective of IT Service Continuity is to assist the business and BCP to minimise the disruption of essential business processes during and following a major Incident. To ensure that plans are kept in line with changing business needs Business Impact Analysis, Risk Analysis and Risk Management exercises are undertaken on a regular basis together with the maintenance and testing of all recovery plans.

Availability is a key aspect of service quality. Availability Management is responsible for ensuring that the availability of each service meets or exceeds its availability targets and is proactively improved on an ongoing basis. In order to achieve this, Availability Management monitors, measures, reports and reviews a key set of metrics for each service and component, which includes availability, reliability, maintainability, serviceability and security.

6 Service Support

The Service Support component of ITIL deals more with the day-to-day support and maintenance processes of Incident Management, Problem Management, Change Management, Configuration Management and Release Management plus the Service Desk function.



Figure 5: The Service Support Processes

Figure 5 illustrates that the Service Desk function provides the major interface to the business and it also shows the major deliverables from each of the Service Support processes.

The Service Desk provides a single, central point of contact for all Users of IT within an organisation, handling all Incidents, queries and requests. It provides an interface for all of the other Service Support processes.

Incident Management is responsible for the management of all Incidents from detection and recording through to resolution and closure. The objective of Incident Management is the restoration of normal service as soon as possible with minimal disruption to the business.

The goal of Problem Management is to minimise the adverse impact of Incidents and Problems on the business. To achieve this, Problem Management assists Incident Management by managing all major Incidents and Problems, while endeavouring to record all workarounds and 'quick fixes' as Known Errors where appropriate, and raising Changes to implement permanent structural solutions wherever possible. Problem Management also analyses and trends Incidents and Problems to proactively prevent the occurrence of further Incidents and Problems.

A single centralised Change Management process, for the efficient and effective handling of Changes, is vital to the successful operation of any IT organisation. Changes must be carefully managed throughout their entire lifecycle from initiation and recording, through filtering, assessment, categorisation, authorisation, scheduling, building, testing, implementation and eventually their review and closure. One of the key deliverables of the process is the Forward Schedule of Change (FSC) a central programme of Change agreed by all areas, based on business impact and urgency.

The Release Management process takes a holistic view of Changes to IT services, considering all aspects of a Release both technical and non-technical. Release Management is responsible for all legal and contractual obligations for all hardware and software in use within the organisation. In order to achieve this and protect the IT assets, Release Management establishes secure environments for both hardware in the Definitive Hardware Store (DHS) and software in the Definitive Software Library (DSL).

Configuration Management provides the foundation for successful IT Service Management and underpins every other process. The fundamental deliverable is the Configuration Management Database (CMDB), comprising one or more integrated databases detailing all of the organisation's IT infrastructure components and other important associated assets. It is these assets that deliver IT services and they are known as Configuration Items (CIs). What sets a CMDB apart from an ordinary asset register are the relationships, or links, that define how each CI is interconnected and interdependent with its neighbours. These relationships allow activities such as impact analyses and 'what if?' scenarios to be carried out. Ideally the CMDB also contains details of any Incidents, Problems, Known Errors, and Changes associated with each CI.

1 ICT Infrastructure Management

ICT Infrastructure Management (ICT IM) looks at the challenges associated with the management of the ICT infrastructure and covers overall Management and Administration, Design and Planning, Technical Support, Deployment and Operations.



Figure 6: The Major ICT IM Interfaces

ICT IM processes are closely associated with the ICT infrastructure on which the IT services run. They are all about managing the four Ps (see Figure 1) but concentrate on those areas of IT most closely related to the actual tools and technology as illustrated in Figure 6. The ICT IM processes are responsible for managing a service through each of the stages in its lifecycle, from requirements, through design, feasibility, development, build, test, deployment, operation and optimisation to retirement. The operation and optimisation stages are the responsibility of the ICT Operations processes and are responsible for ensuring that all operational events are appropriately managed and that all operational service targets are achieved. The Management and Administration areas of ICT IM are responsible for creating the most appropriate environment under which a secure infrastructure is maintained for the delivery of quality IT services to the business both currently and in the future. The goal is to improve the effectiveness and efficiency of the ICT infrastructure, while maintaining the overall quality of the IT services provided.

ICT Infrastructure Managers play a key co-ordination role as part of a Business Change programme, by working with ICT Steering Group (ISG), through participation in quality and audit reviews, and also in crisis management situations. They also need to ensure that the support processes are in place so that all other areas of IT can operate effectively and efficiently. This requires their involvement, together with all of the other ITIL processes, in all stages of the service lifecycle from requirements analysis, through design, feasibility, development, build, test, deployment, implementation, pilot, operation and optimisation, to eventual retirement.

The Design and Planning function is responsible for all of the strategic issues associated with the running of an ICT function. They liaise with the business regarding future business plans and from the information provided, and in consultation with all other areas of the business and IT, develop the plans, architectures and strategies required for the provision of current and future ICT business solutions. One of the key tasks of Design and Planning is to include all requirements, not just the functional requirements, for a new service, considering them at the initial requirements stage and at each subsequent stage of the service lifecycle. This ensures that services are designed for *"operational excellence"* and that all business, Service Delivery, Service Support, operational and maintenance requirements are included at the earliest possible and most cost effective moment within the service lifecycle.

Another vital role of Design and Planning is to work closely with all business managers and planners, ISG, IT managers and planners, following the Business Perspective approach, to ensure that all business and ICT plans and strategies, as illustrated in Figure 7 are closely co-ordinated and aligned.



Figure 7: The ICT Infrastructure Model

The Deployment process deploys new and changed ICT solutions to the business to agreed quality, cost and timescales. Deployment principally involves establishing projects and project methodology to ensure that new ICT solutions are delivered to the business with minimum disruption to business processes and that use of ICT resources is optimised. This is achieved by liaising closely with the business and agreeing training, methodologies, handover processes and acceptance criteria.

The operational IT services and environments are managed and controlled within the Operations Management function. Operations use all of the management tools available to ensure that all services and components meet all operational targets, as agreed with the business and other teams in SLAs and OLAs. Operations are also responsible for the tuning and optimisation of all operational areas of the ICT infrastructure.

Technical Support ensures that the necessary support, skills and knowledge are available to underpin the overall service delivered by ICT IM. They maintain a pool of in-depth technical expertise to provide information guidance and actual resources for the research and development of new technology solutions, and third line technical support for all other areas of IT

8 Planning to Implement Service Management

This module addresses the task of implementing or improving ITIL within an organisation and considers aspects such as where and when to start, Organisational Change, Cultural Change, Project and Programme Planning, Process Definition and Performance Improvement.



Figure 8: Planning to Implement Service Management – Continuous Improvement

Using the approach in Figure 8 the overall vision for IT is produced first. An IT Service Management vision is a mutually agreed statement of desire and intent between the business and IT. It describes the aim and purpose of the Service Management CSIP.

Once the vision has been determined it is important to establish *"Where are we now?"* This can be assessed using an overall IT organisational growth model that determines the current maturity of the IT organisation in terms of:

- Vision and Strategy
- Steering
- Processes
- People
- Technology
- Culture.

Other techniques which can be used for assessing current status include internal review, external benchmarking or process assessment against industry standards and guidelines (e.g. ITIL and BS 15000).

The business and IT must then agree the future role and characteristics required of the IT organisation, to understand *"Where do we want to be?"* This stage involves the completion of a gap assessment report, together with a business case for the CSIP. Wherever possible, 'quick wins' must be identified, provided they do not inhibit the achievement of long term objectives.

A plan must then be produced for the CSIP project of *"How do we get where we want to be?"* This considers:

- How the Changes are going to be achieved?
- Where to start?
- Which elements are essential to address within the CSIP?

The answers to these questions determine the approach, final scope and terms of reference for the CSIP project.

A set of measurable milestones, deliverables, CSFs and KPIs must be agreed to assess the progress and performance of the CSIP, i.e. "How do we check milestones have been reached?" All of these areas need to be regularly measured, monitored and reviewed at each stage of the project to ensure success. It is important to include measurements that directly relate to business benefits and quality business improvements.

Having started a CSIP, one of the hardest issues to address is maintaining the focus and commitment, i.e. "How do we keep the momentum going?" Sustaining improvement is made more difficult by the continued acceleration of the rate of Change within IT. The success of any 'quick wins' can be used to maintain the momentum during the project. Each improvement, once achieved, must be consolidated into everyone's everyday practice, in job roles and job descriptions.

Throughout all CSIP activities the key messages of maintaining business focus, priority, impact and alignment must be emphasised and re-emphasised to ensure that all improvements realise true business benefits.

9 Application Management

A key issue that has existed for some time is the problem of moving application developers and IT Service Management closer together. The lack of Service Management considerations within all phases of the application lifecycle has been seriously deficient for some time. Applications need to be deployed with Service Management requirements included, i.e. designed and built for operability, availability, reliability, maintainability, performance and manageability, and to be tested for compliance to specification.

To fully understand Application Management, it is necessary to compare it with Service Management and Application Development:

- Application Management is the superset which describes the overall handling, or management, of the application as it goes through its entire lifecycle (see Figure 9)
- Application Development is concerned with the activities needed to plan, design, and build an application that can ultimately be used by some part of the organisation to address a business requirement
- Service Management focuses on the activities that are involved with the Release, delivery, support and optimisation of the application. The main objective is to ensure that the application once built and deployed can meet the service level that has been defined for it.



Figure 9: The Application Lifecycle

It is essential that the requirements of all areas of the business and Service Management are considered at each stage of the application lifecycle. Having IT and the business jointly develop their strategies, as a mutual effort, needs to be a precursor to beginning any Application Development or deployment project. This ensures that IT and the business agree to objectives that are clear, concise and achievable. Once an organisation has a common understanding of the alignment between business and IT, it faces a new problem, ensuring that the increasing number of applications are appropriately documented. A method for managing a complex applications environment is through the use of an application portfolio, which provides a mechanism for viewing and evaluating the entire suite of applications in the business enterprise.

Organisations need to assess their ability to build, maintain, and operate the IT services needed by the business. A readiness assessment provides a structured mechanism for determining an organisation's capabilities and state of readiness for delivering a new or revised application to support business drivers. The information obtained from an assessment can be used to determine the delivery strategy for an application, IT service, or ICT system. The delivery strategy is the approach to move an organisation from a known state, based on the readiness assessment, to a desired state, as determined by the business drivers.

Application Management sees Application Development and all areas of Service Management as interrelated parts of a whole, which need to be aligned. The implication of this is that Application Development, Service Management and ICT IM units need to co-operate closely to ensure that every phase in the lifecycle dedicates the appropriate attention to service creation, delivery and operational aspects. The emphasis must be on the importance of dealing early in the lifecycle with those issues as this can have a large impact on the effectiveness and efficiency of service delivery and operation.

For each application lifecycle phase a management checklist can be developed to ensure appropriate Service Management aspects are fully considered and addressed, identifying the key Application Management roles that need representation to ensure that activities are completed comprehensively.

Within each phase of the application lifecycle, and likewise for the service lifecycle, each of the key Application Management roles has very specific goals to meet. It is crucial that organisations find some way of measuring progress and performance with respect to achieving these goals. To be effective, measurements and metrics must be woven through the complete organisation, touching the strategic as well as the tactical and operational levels.

10 The Business Perspective

The Business Perspective approach to the delivery of IT services focuses on the key principles and requirements of the business organisation and their operation. Especially to understand how they relate to and interface with the provision of IT within all areas of Service Management. This awareness of the business enables Service Management to ensure the most effective relationships, interfaces and delivery, which is aligned to the business, and so maximising business benefit that can be delivered by IT.

The objectives of the Business Perspective approach to delivering IT services are:

- To enable IT personnel to understand how they contribute to business objectives
- To enable IT personnel to deliver/improve IT services to underpin business objectives
- To enable IT personnel to assist the business in maximising the exploitation of IT
- To enable a complementary and integrated culture with the business
- To influence, innovate and enable Change for business advantage
- The alignment of IT with the business.

Effective processes ensure that IT services are aligned to business requirements and that the supplier elements also underpin and support that alignment. It is therefore essential that partnerships are forged between IT and the business, and IT and its suppliers to ensure that a *"business-led"* IT organisation develops.

To be effective this approach consists of a number of processes aimed at aligning the business and IT. The alignment does not just cover current, but also future ICT systems and IT services. There is therefore a requirement for alignment at strategic, tactical and operational levels as illustrated in Figure 10.



Figure 10: The Business Perspective

To achieve this alignment of interests a number of process areas and roles need to be considered. The key processes are:

- Business Relationship Management (BRM)
- Supplier Relationship Management (SRM)
- Review, planning and development of IT
- Liaison, education and communication of IT.

Developing and nurturing relationships with Customers has always been an important issue for all organisations. It is just as important for IT service providers to develop relationships with their Customers and business managers. It is equally important for them to develop relationships with their major suppliers, especially where aspects of the overall service are outsourced to these suppliers and they have a direct interface to and a direct impact upon the quality of service delivered to the Customers and the business. Establishing BRM and SRM processes is the preferred method of achieving this.

It is crucial that the people working within the BRM process appreciate the value of IT and its role within the business value chain and continually publicise this and reinforce the message of business and IT alignment. They need to have synergy and empathy with the business units and represent their views to the rest of IT.

SRM needs to ensure that supplier relationships are maximised to business advantage. This includes recognising the need for different types of suppliers together with their appropriate relationships, a Supplier Catalogue, the contract lifecycle, integration of suppliers into the *"end-to-end"* Service Management processes and supplier performance management.

Effective relationships at operational, tactical and strategic levels between the business and IT, and IT and its suppliers can also ensure effective and innovative use of IT for business advantage, e.g. identifying new technologies, facilitating business transformation and meeting ever increasing, rapidly changing business demands.

It is key for IT organisations to endeavour to align their organisation, delivery and culture as closely as possible to that of the business. Close alignment can achieve significant benefits for the business, especially in areas such as continuity, risk, Change and SLAs, bringing improved delivery focus and achievement of key business objectives. Alignment needs to start at the top, with alignment of IT strategies, governance and culture to those of the business. IT management needs to review their organisation and services against the business and improve business alignment through CSIPs.

At tactical and operational levels, in terms of managing IT service provision, alignment and business involvement must be considered for all process areas within Service Management. This ensures *"end-to-end"* integrated processes delivering the advantages of synergy and partnership working across the organisation. The approach also considers use of the Service Catalogue and SLAs to market IT and its services to the business, together with management of new service introduction, business expectations, continuous improvement and the development of organisational culture.

The Business Perspective approach also focuses on liaison between the business and IT, improving information flows, planning business communication, and particularly co-ordinating the activities of the BRM and SRM processes to ensure consistency of approach.

ll Security Management

IT Security Management is the process of managing a defined level of security for information, IT services and infrastructure. IT Security Management enables and ensures that:

- Security controls are implemented and maintained to address changing circumstances such as changed business and IT service requirements, IT architecture elements, threats, etc
- Security Incidents are managed
- Audit results show the adequacy of security controls and measures taken
- Reports are produced to show the status of information security.

IT Security Management needs to be part of every IT manager's job description. Management is responsible for taking appropriate steps to reduce the chances of a security Incident occurring to acceptable levels. This is the process of risk assessment and management.

Corporate executive management is accountable to stakeholders and shareholders for security, and is responsible for defining the corporate security policy. IT Security Management is governed by that policy. The existence of the policy registers and reinforces the corporate decision to invest in the security of information and information processing. It provides management with guidelines and direction regarding the relative importance of various aspects of the organisation, and of what is allowable and what is not, in the use of ICT systems and data.

Figure 11 illustrates the information security process as seen by the business. It covers all stages, from policy setting and initial risk assessment, through planning, implementation and operation, to evaluation and audit.



Figure 11: The Information Security Model (ISM)

Every organisation must have an information security policy that is widely circulated, committed to by everyone within the organisation and actively enforced and reviewed.

Figure 12 provides an overview of the ITIL IT Security Management Process. The process shows the complete route from the collection of a Customer's requirements, through planning, implementation, evaluation and maintenance – under a framework of control - with regular status reporting to the Customer closing the loop.



Figure 12: The IT Security Management Process

Intrinsic elements of all activities within the IT Security Management process are risk and vulnerability assessment, and management and the implementation of cost justifiable countermeasures to reduce vulnerability and risk to an acceptable business level. These activities must be closely coordinated with all other areas of Service Management, especially the Availability and IT Service Continuity Management processes.

12 Related Standards and Complementary Books

ITIL consists of modules containing advice and guidance on *"best practice"* relating to the provision of IT services. ITIL has subsequently been used as the basis for the development of a British Standard for Service Management. The standard and ITIL are aligned and the standard has itself been recently revised and is now documented in the following set of documents:

- BS 15000-1:2002, IT Service Management (Part 1: Specification for Service Management)
- BS 15000-2:2003, IT Service Management (Part 2: Code of Practice for IT Service Management)
- PD 0005:2003, IT Service Management A Manager's Guide
- PD 0015:2002, IT Service Management Self Assessment Workbook.

These documents provide a standard against which organisations can be assessed and certified with regard to the quality of their IT Service Management processes.

A BS 15000 Certification scheme was introduced in July 2003. The scheme was designed by the itSMF and is operated under their control. A number of auditing organisations are accredited within the scheme to assess and certify organisations as compliant to the

BS 15000 standard and its content. The BS 15000 standard is now progressing towards an International (ISO) standard on Service Management.

A complementary book on Software Asset Management (SAM) has also been added to ITIL. This concentrates on the specific demands of managing software assets within an organisation and the related issues associated with the use of those software assets. The book definition states that "SAM is all of the infrastructure and processes necessary for the effective management, control and protection of the software assets within an organisation, throughout all stages of their lifecycle". The overall objective of all SAM processes is good corporate governance, namely to manage, control and protect an organisation's software assets, including management of the risks arising from the use of those software assets. An overview of the process areas for SAM is shown in Figure 13.

| Overall Management Processes | | | | | | |
|---|---|--|--|--|--|--|
| Overall management responsibility Risk assessment | | Competence, awareness and training Performance, metrics and continuous improvements | | | | |
| Policies and procedures | | Service continuity and availability management | | | | |
| Core Asset Management Processes | | | | | | |
| Asset identification Asset control Status accounting | | Database management Financial management | | | | |
| Logistics Processes Requirements definition Design Evaluation Procurement Build Deployment Operation Optimisation Retirement | Verificati Compli Verificati Licensing Security of Other con | ition and ance Processes on and audit (compliance compliance mpliance | Relationship Processes Contract management Supplier management Internal business relationship management Outsourcing management | | | |

Figure 13: The SAM Process Areas

The objective of the **Overall Management processes** is to establish and maintain the management infrastructure within which the other SAM processes are implemented. Each of the other process areas can then achieve their objectives as follows:

- Core Asset Management processes: to identify and maintain information about software assets throughout their lifecycle, and to manage physical assets related to software
- Logistic processes: to control all activities affecting the progress of software through its lifecycle
- Verification and compliance processes: to detect, escalate and manage all exceptions to SAM policies, processes, procedures and licence use rights
- Relationship processes: to manage all relationships within the business, and with partners and suppliers, to agreed contractual, legal and documented service terms and targets relating to the use of software.

13 Summary

Many organisations still see IT service management as being predominantly a technology issue. ITIL promotes a much more "joined up", "end-to-end" approach to IT service management replacing the 'technology silos' and isolated 'islands of excellence'. The focus of IT management has been changing for some time and in the future management will be even less focussed on technology and still more integrated with the overall needs of the business management and processes. These new systems and processes are already starting to evolve and will continue to evolve over the next few years. This development will accelerate, as the management standards for the exchange of management information between tools become more fully defined, by organisations such as the Distributed Management Task Force (DMTF). This integration process may gather speed now that the itSMF is an Alliance Partner with the DMTF. In essence, management systems will become:

- More focussed on business needs
- More closely aligned to business processes
- Less dependent on specific technology and more "service centric"
- More integrated with other management tools and processes as the management standards evolve.

This will allow the above IT management processes to be developed that will replace the 'technical silos' and isolated 'islands of excellence' that have previously existed within IT organisations.

This will only happen if we adopt practices and architectures that are focussed on business needs and business processes. The OGC's ITIL framework gives a sound basis for achieving all of this once management tools and interfaces evolve to fully support them. The *"big picture"* of how all of these areas and processes together provide. *"joined up"*, *"end-to-end"* Service Management is illustrated in Figure 14.



Figure 14: The "big picture" of ITIL Processes

Several organisations have already used this approach to significantly improve the quality of IT services delivered to the business. The benefits gained have included:

- Greater alignment of IT services, processes and goals with business requirements, expectations and goals
- Improved business profitability and productivity
- Support staff that are more aware of business processes and business impact
- A reduction in overall management and support costs leading to a reduced TCO
- Improved service availability and performance, leading to increased business revenue
- Improved service levels and quality of service.

However, care must be taken when developing IT Service Management within an organisation. It is easy to focus on the internal aspects of IT process rather than on the Customer and business needs and requirements. The processes should always be designed primarily to make the Customer experience simple and enjoyable and secondly to make the backend IT processes effective and efficient. This can only be achieved when business and Customer driven measurements metrics, CSFs and KPIs are put in place to measure the quality of service and its continuous improvement.

14 Further Guidance and Contact Points

itSMF Ltd. Webbs Court 8 Holmes Road Earley Reading RG6 7BH United Kingdom Tel: +44(0)118 926 0888 Fax: +44(0)870 706 1531 e-mail: general@itsmf.com www.itsmf.com

OGC Rosebery Court St Andrews Business Park Norwich NR7 0HS United Kingdom Tel: +44(0)1603 704567 Fax: +44(0)1603 704517 e-mail: servicedesk@ogc.gsi.gov.uk <u>www.ogc.gov.uk</u> www.iti.co.uk

British Standards Institution 389 Chiswick High Road London W4 4AL United Kingdom Tel: +44(0)208 996 9001 Fax: +44(0)208 996 7001 e-mail: info@bsi-global.com

www.bsi-global.com

The itSMF is a totally independent, not-for-profit organisation owned and run by its members. It promotes and helps to set the standards for best practice in IT Service Management. There are national chapters in many parts of the world. For further details of the chapters, and how to contact them, access the web site or contact the UK office.

Best Practice with ITIL

The ITIL publication portfolio consists of a unique library of titles that give guidance on providing quality IT services. Used by hundreds of the world's most successful organisations, its seven core titles are available in a range of formats:

Manual/hard copy (M) CD-ROM (CD) and now as an on-line subscription.

ITIL Service Delivery : M 0 11 330017 4 ITIL Service Delivery : CD 0 11 330893 0 ITIL Service Support : M 0 11 330015 8 ITIL Service Support : CD 0 11 330867 1 ITIL ICT Infrastructure Management : M 0 11 330865 5 ITIL ICT Infrastructure Management : CD 0 11 330903 1 ITIL Planning to Implement Service Management : M 0 11 330877 9 ITIL Planning to Implement Service Management : CD 0 11 330905 8 ITIL Application Management : M 0 11 330866 3 ITIL Application Management : CD 0 11 330904 X ITIL The Business Perspective : M 0 11 330894 9 Available Soon ITIL The Business Perspective : CD 0 11 330902 3 ITIL Security Management : M 0 11 33014 X ITIL Software Asset Management : M 0 11 330943 0 ITIL Software Asset Management : CD 0 11 330944 9

For further information or to purchase the full range of ITIL publications on your preferred format visit:

www.get-best-practice.co.uk

or <u>https://www.itsmf.com/secure/shop/index.asp</u> for *itSMF* members discounts.



Published in the UK by the IT Service Management Forum Limited