SERVICE MANAGEMENT PRINCIPLES

INTRODUCTION

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The IT Infrastructure Library®, or ITIL® as it is commonly known, while not a name likely to set the pulse racing, is a good description of what it is: a library of books that document best practice for managing IT services. It was originally developed in the late 1980s by the Central Computer and Telecommunications Agency (CCTA), an agency of the British Government. The CCTA itself no longer exists and its responsibilities have been taken over by the Office of Government Commerce (OGC). The CCTA did not act alone in developing ITIL®, it had the active involvement of representatives of many other organizations with much practical experience of managing IT services, and for this reason it is reasonable to describe it as *documenting* best practice.

The value and relevance of ITIL® may be judged by its having been accepted worldwide as the *de facto* standard for IT Service Management. It forms the basis of ISO/IEC 20000, an international standard covering IT Service Management which was published in December 2005. It has been adopted by many types of organization right across the world: commercial and not-for-profit; large and small; national and global.

ITIL® is not static: it has been revised twice since the original version. In each case contributions were sought from a wide range of companies from very many countries. The improvements brought by the latest version (the third) include:

- Maintain alignment with industry practice particularly in areas such as outsourced services
- Improved consistency
- More guidance on implementation
- Integration of IT with the business
- Synergy with other best practices such as COBIT® and CMMI®

IT plays a central role in helping the organization to deliver services to its customers: all organizations depend on IT, most cannot operate effectively without it, and many could not even exist without it. This is why IT Service Management is important: poorly delivered IT services means poorly delivered services to the organization's customers. The following examples illustrate this by showing the consequences of the unavailability of key IT services:

- An air traffic control centre cannot ensure the safety of the aircraft and passengers in its area.
- An e-commerce retailer cannot sell its goods if its servers are down; will its customers wait until the servers are back? Or will they buy elsewhere?
- A motoring organization cannot despatch a patrolman to assist a stranded motorist because it doesn't know which patrolmen are available or where they are.
- A supermarket chain cannot maintain stock levels in its stores if the point-of-sale equipment fails.

ITIL® has become accepted as *the* source of advice and guidance by organizations throughout the world. The primary reason for this is that it works! And that is because it is based on practical experience: it *documents* the way organizations actually deliver their IT services.

The advice offered is not prescriptive: ITIL® is a framework that you must adapt and implement in the particular context of your organization. It is very flexible and so can be used by any type or size of organization.

The advice offered in ITIL® is in the public domain and so can be used freely.

Now is a good time to introduce one of the key features (and benefits) of ITIL®: its language. ITIL® has developed a vocabulary that allows Service Management professionals to communicate clearly and without ambiguity. It has not invented new names but has assigned very specific meanings to words and phrases that are already in common use by IT professionals. There is a potential for confusion here because these specific meanings are not necessarily the ones that you have been used to; it is very important that you become familiar with the ITIL® definitions.

An excellent example is the word *Problem*. We use this word every day in quite a loose way. An IT support engineer might say that she has a problem if the network is down or if a senior manager's PC is faulty. However, ITIL® would describe both of these occurrences as Incidents; an Incident being an occurrence which causes loss of service. The ITIL® definition of a Problem is 'the unknown underlying cause of one or more Incidents'. The network being down might reveal a Problem (what caused it to go down?) but it is not itself a Problem.

Why is this language important? For the reason that any technical language is important: it allows us to communicate clearly and unambiguously; it avoids the problems of misinterpretation and talking at cross-purposes. Relationships between organizations, between groups, and between individuals

are dependent on good communication: if communication breaks down then so does the relationship.

We know of many examples of this. In one case the relationship between an IT Service Provider and a new customer began to deteriorate in the months after the contract was signed. The Service Provider eventually realised that the cause was a breakdown of communication caused by them misunderstanding what the customer was asking for. At regular review meetings the customer would ask for action on outstanding problems; the Service Provider would promise action and indeed would take action. Unfortunately the two sides did not have the same understanding of the word *problem*. The customer was using the word in its ITIL® sense and was asking for action to address underlying faults. The Service Provider understood the word to refer to what ITIL® calls Incidents and had worked hard to ensure that Incidents were resolved quickly.

The increasing use of third parties to deliver specialised aspects of IT services makes good communication essential.
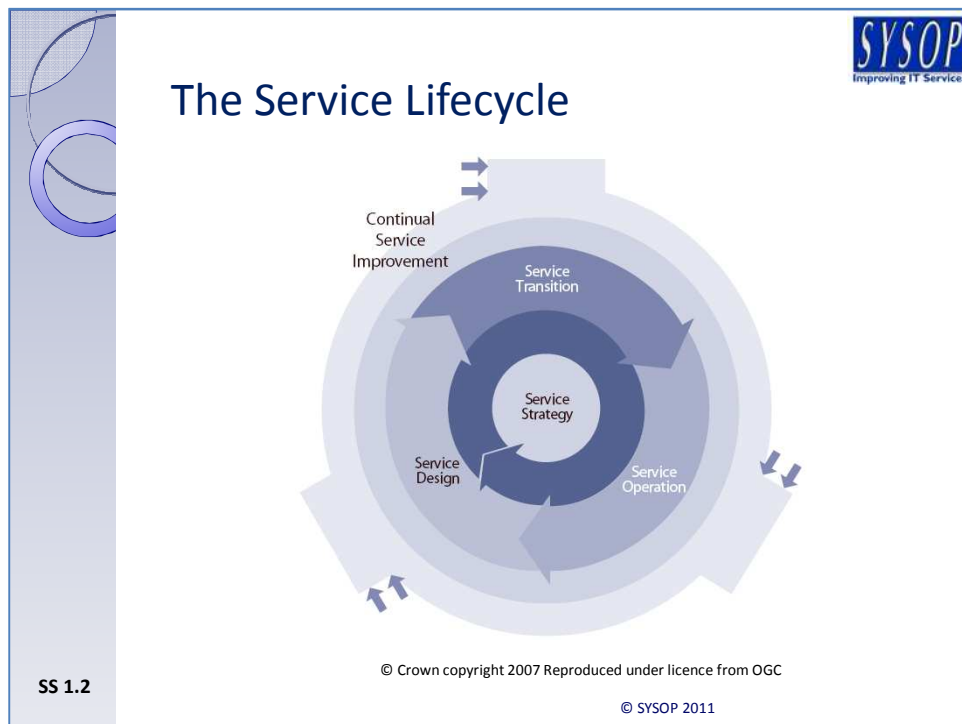
SERVICE MANAGEMENT

The phrase *Service Management* describes the capabilities required to deliver IT services. We will talk more about *capabilities* later, but for now let's just say that it represents our ability to make use of hardware and software to deliver IT services.

Service Management is a set of specialized organizational capabilities for providing value to customers in the form of services. The capabilities take the form of functions and processes for managing services over a lifecycle, with specializations in strategy, design, transition, operation and continual improvement. The capabilities represent a service organization's capacity, competency

and confidence for action. The act of transforming resources into valuable services is at the core of service management.

It is also a professional practice supported by an extensive body of knowledge, experience and skills. A global community of individuals and organizations in the public and private sectors fosters its growth and maturity. Formal schemes exist for the education, training and certification of practising organizations, and individuals influence its quality. Industry best practices, academic research and formal standards contribute to its intellectual capital and draw from it.

The origins of service management are in traditional service businesses such as airlines, banks, hotels and phone companies. Its practice has grown with the adoption by IT organizations of a service-oriented approach to managing IT applications, infrastructure and processes. Solutions to business problems and support for business models, strategies and operations are increasingly in the form of services. The popularity of shared services and outsourcing has contributed to the increase in the number of organizations who are service providers, including internal organizational units. This in turn has strengthened the practice of Service Management and at the same time imposing greater challenges upon it.

ITIL® is structured around the Service Lifecycle shown above

Service Strategy is the axis around which the lifecycle rotates; it represents the policies and objectives that guide Service Management.

Service Design, **Service Transition** and **Service Operation** are progressive phases where strategy is implemented.
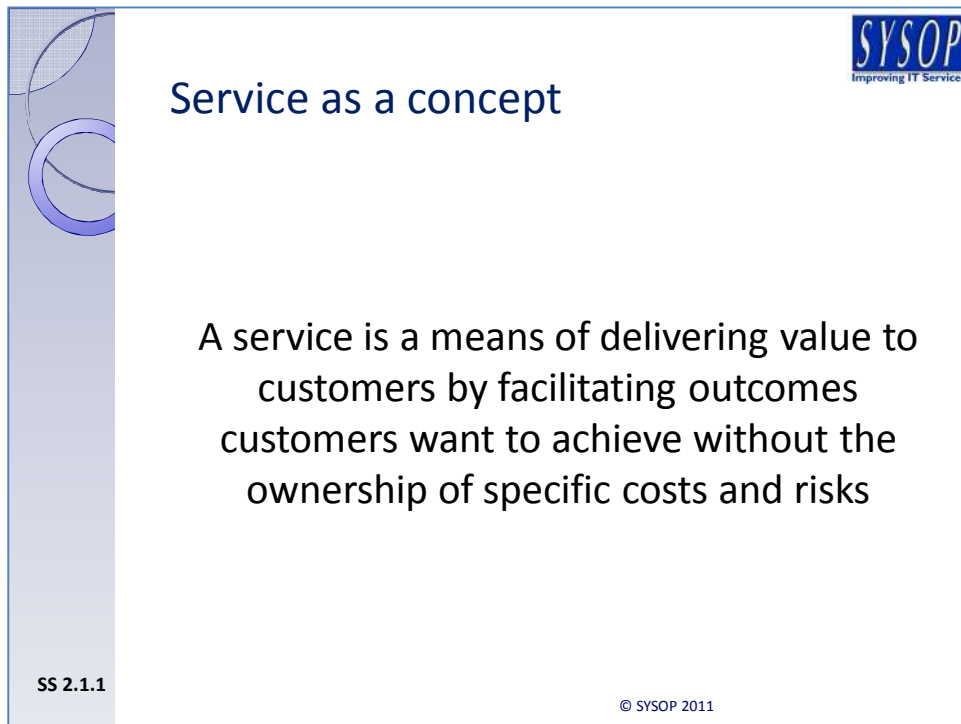
Continual Service Improvement drives improvement across all aspects of Service Management.

There are often many ways of carrying out a particular activity but over time one way often comes to be accepted as the best way – this is known as *good practice*. For example if we are re-decorating a room we start with the ceiling. There is no law or regulation that requires us to do that, but over time professional decorators have concluded that that is the best way to do the job.

Good practice is not static; it develops over time in response to changing circumstances and requirements. In IT Service Management changing technology and economics are major drivers of innovation of good practice. Large organizations (usually) improve on good practice and develop what might be termed best practice. Over time this becomes more widely accepted – it becomes accepted good practice.

ITIL® aspires to document best practice at a point in time, and therefore plays a role in getting that practice more widely accepted in the Service Management community. As Service Management practices are improved so ITIL® gradually falls behind the leading practitioners which is why ITIL® needs to be revised from time to time: we are currently on the third version of ITIL®, the second revision. Each revision has built on what has gone before, usually by expanding the scope of the guidance offered.

SERVICES

Service as a concept

A service is a means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks

SS 2.1.1

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"A service is a means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks"

In other words, a customer offloads certain tasks to another group usually because that group has appropriate specialist knowledge and can perform the tasks more effectively and efficiently. The customer is not interested in how the tasks are performed but only in the outcomes and costs.

Concepts

- Stakeholders
  - Customers – internal and external
  - Users
  - Suppliers
- Services
  - Internal and eternal
  - Core, enabling and enhancing
- Service provider
  - Type I – internal
  - Type II – shared services unit
  - Type III – external

SS 2.1.5, 3.1.1.2, 3.2.2.3, 2.1.4

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Stakeholders have an interest in an organization, project or service etc. and may be interested in the activities, targets, resources or deliverables from service management. Examples include organizations, service providers, customers, consumers, users, partners, employees, shareholders, owners and suppliers. The term 'organization' is used to define a company, legal entity or other institution. It is also used to refer to any entity that has people, resources and budgets – for example, a project or business.

Within the service provider organization there are many different stakeholders including the functions, groups and teams that deliver the services. There are also many stakeholders external to the service provider organization, for example:

- *Customers* Those who buy goods or services. The customer of an IT service provider is the person or group who defines and agrees the service level targets. This term is also sometimes used informally to mean user – for example, 'This is a customer-focused organization.'
- *Users* Those who use the service on a day-to-day basis. Users are distinct from customers, as some customers do not use the IT service directly.
- *Suppliers* Third parties responsible for supplying goods or services that are required to deliver IT services. Examples of suppliers include commodity hardware and software vendors, network and telecom providers, and outsourcing organizations.

There is a difference between customers who work in the same organization as the IT service provider, and customers who work for other organizations. They are distinguished as follows:

- *Internal customers* These are customers who work for the same business as the IT service provider. For example, the marketing department is an internal customer of the IT organization because it uses IT services. The head of marketing and the chief information officer both report

to the chief executive officer. If IT charges for its services, the money paid is an internal transaction in the organization's accounting system, not real revenue.

- *External customers* These are customers who work for a different business from the IT service provider. External customers typically purchase services from the service provider by means of a legally binding contract or agreement.

Service may be delivered from a variety of sources. ITIL® good practice recognises three types of service provider:

The Internal Service Provider (type 1)

In the type 1 scenario a service provider is closely associated with the business unit they serve. The provider is an internal resource and exists solely to provide service for that particular business unit. An example of such a service provider would be that of a local service desk.

The Shared Services Provider (type 2)

The type 2 service provider is also an internal organizational resource. The type 2 provider provides resource which is shared across many business units within the organization.

The External Services Provider (type 3)

The type 3 provider is external to the consumer or business. The consumer or business is engaging with the third party with the expectation that they will deliver the required Utility and Warranty for specific solutions.

No matter which type the service provider belongs to the focus should remain the same: the customer is interested in outcomes.

Services may be categorized as core, enabling or enhancing.

A *core service* provides the basic functionality that delivers the value that the customer buys. For example, the core service of an airline is to transport a passenger between two locations.
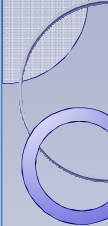
An *enhancing service* provides some additional utility or warranty over and above that provided by a core service. An example might be the use of a VIP lounge at the airport.

An *enabling service* is one that must be used in order to use the core service For example, if you wish to travel by air you must make use of the airport's security service.

PROCESSES AND FUNCTIONS
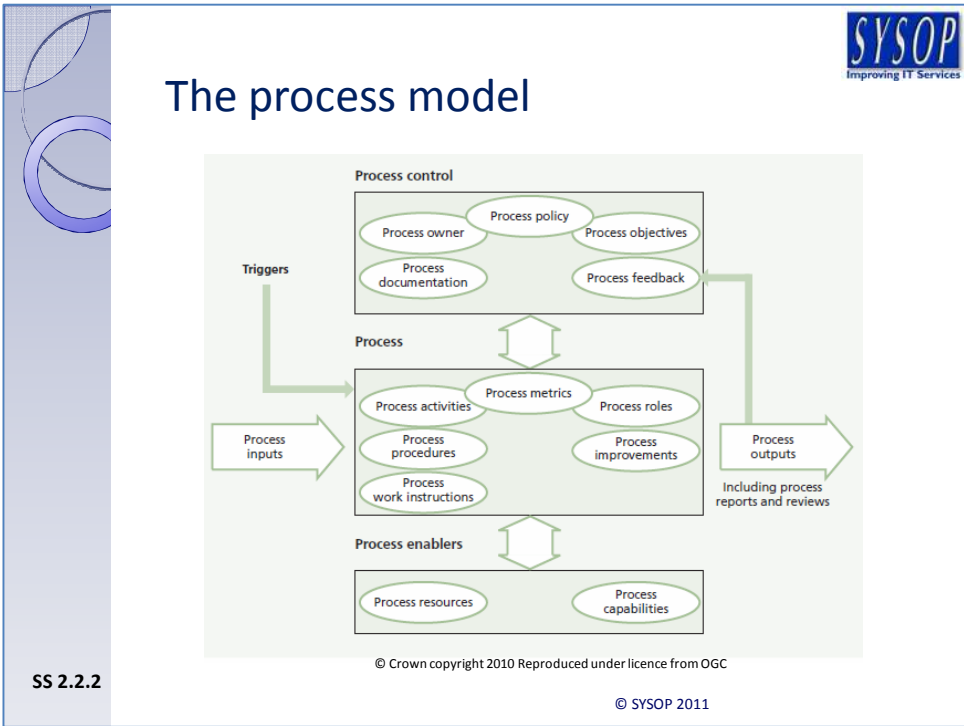

A process is a set of activities designed to achieve a specific operational purpose or goal. Key characteristics of a process are:

- Its performance is measurable in terms of cost, time and quality; this is of crucial importance if we seek to improve.
- It has a specific result that is identifiable and countable; a process exists to deliver the result over and over again.
- Each process has customers who benefit from, or depend upon, the result of the process; it is those customers whose requirements must be satisfied. The customer may be inside or outside the organization.
- A process responds to specific events; there is a trigger that sets in motion the process.

ITIL® has identified a number of activities that any IT service provider should perform if they are to be successful. But ITIL® also advises that to be effective these activities must be performed systematically. In other words, formal processes should be established.

A function is a team or group of people within an organization, which exists to perform a certain type of work. Typically a process is cross-functional with activities being carried out by more than one function. Similarly, a single function can perform activities for more than one process. For instance, a network team will perform activities within the Incident Management, Problem Management, Change Management and other processes.

The process model

Process control
- Process owner
- Process policy
- Process objectives
- Process documentation
- Process feedback

Triggers

Process
- Process activities
- Process metrics
- Process roles
- Process procedures
- Process improvements
- Process work instructions

Process inputs

Process outputs
Including process reports and reviews

Process enablers
- Process resources
- Process capabilities

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Processes exist to guide and co-ordinate functions, while functions provide the people to carry out the activities of the processes.

FUNCTIONAL ROLES ANALYSIS

The RACI model will be beneficial in enabling decisions to be made with pace and confidence. RACI is an acronym for the four main roles of:

- Responsible – the person or people responsible for getting the job done
- Accountable – only one person can be accountable for each task
- Consulted – the people who are consulted and whose opinions are sought
- Informed – the people who are kept up-to-date on progress.

Example RACI Matrix

	Service Level Manager	IT Manager	Security Manager	Problem Manager	Capacity Manager
Activity 1	I	AR	I	I	I
Activity 2	A	I	C	I	R
Activity 3	C	A	R	I	I
Activity 4	R	I	A	I	I

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The matrix should be analysed from the perspective of each role and each activity. So for each role we might ask:

- Many As: Are duties segregated properly? Should someone else be accountable for some of these activities? Is this causing a bottleneck in some areas that will delay decisions?
- Many Rs: Is this too much for one function?
- No empty spaces: Does this role need to be involved in so many tasks?

For each activity we might ask:

- More than one A: only one role can be accountable.
- No As: at least one A must be assigned to each activity.
- More than one R: too many roles responsible may mean that no one takes responsibility. Responsibility may be shared, but only if roles are clear.
- No Rs: at least one person must be responsible.
- Many Cs: Is there a requirement to consult with so many roles?
- No Cs and Is: Are the communication channels open to enable people and departments to talk to each other and keep each other up-to-date?

SERVICE MANAGEMENT ROLES

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Service Management roles

- Service owner
- Process owner
- Process manager
- Process practitioner

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SERVICE OWNER

The service owner is accountable for the delivery of a specific IT service. The service owner is responsible to the customer for the initiation, transition and ongoing maintenance and support of a particular service and accountable to the IT director or service management director for the delivery of the service. The service owner's accountability for a specific service within an organization is independent of where the underpinning technology components, processes or professional capabilities reside.

The service owner has the following responsibilities:

- Ensuring that the ongoing service delivery and support meet agreed customer requirements
- Working with business relationship management to understand and translate customer requirements into activities, measures or service components that will ensure that the service provider can meet those requirements
- Ensuring consistent and appropriate communication with customer(s) for service-related enquiries and issues
- Assisting in defining service models and in assessing the impact of new services or changes to existing services through the service portfolio management process
- Identifying opportunities for service improvements, discussing these with the customer and raising RFCs as appropriate
- Liaising with the appropriate process owners throughout the service lifecycle
- Soliciting required data, statistics and reports for analysis and to facilitate effective service monitoring and performance
- Providing input in service attributes such as performance, availability etc.

- Representing the service across the organization
- Understanding the service (components etc.)
- Serving as the point of escalation (notification) for major incidents relating to the service
- Representing the service in change advisory board (CAB) meetings
- Participating in internal service review meetings (within IT)
- Participating in external service review meetings (with the business)
- Ensuring that the service entry in the service catalogue is accurate and is maintained
- Participating in negotiating service level agreements (SLAs) and operational level agreements (OLAs) relating to the service
- Identifying improvement opportunities for inclusion in the continual service improvement (CSI) register
- Working with the CSI manager to review and prioritize improvements in the CSI register
- Making improvements to the service.

PROCESS OWNER

The process owner role is accountable for ensuring that a process is fit for purpose. This role is often assigned to the same person who carries out the process manager role, but the two roles may be separate in larger organizations. The process owner role is accountable for ensuring that their process is performed according to the agreed and documented standard and meets the aims of the process definition.

The process owner's accountabilities include:

- Sponsoring, designing and change managing the process and its metrics
- Defining the process strategy
- Assisting with process design
- Ensuring that appropriate process documentation is available and current
- Defining appropriate policies and standards to be employed throughout the process
- Periodically auditing the process to ensure compliance to policy and standards
- Periodically reviewing the process strategy to ensure that it is still appropriate and change as required
- Communicating process information or changes as appropriate to ensure awareness
- Providing process resources to support activities required throughout the service lifecycle
- Ensuring that process technicians have the required knowledge and the required technical and business understanding to deliver the process, and understand their role in the process
- Reviewing opportunities for process enhancements and for improving the efficiency and effectiveness of the process
- Addressing issues with the running of the process
- Identifying improvement opportunities for inclusion in the CSI register
- Working with the CSI manager and process manager to review and prioritize improvements in the CSI register
- Making improvements to the process.

PROCESS MANAGER

The process manager role is accountable for operational management of a process. There may be several process managers for one process, for example regional change managers or IT service continuity managers for each data centre. The process manager role is often assigned to the person who carries out the process owner role, but the two roles may be separate in larger organizations.

The process manager's accountabilities include:

- Working with the process owner to plan and coordinate all process activities
- Ensuring that all activities are carried out as required throughout the service lifecycle
- Appointing people to the required roles
- Managing resources assigned to the process
- Working with service owners and other process managers to ensure the smooth running of services
- Monitoring and reporting on process performance
- Identifying improvement opportunities for inclusion in the CSI register
- Working with the CSI manager and process owner to review and prioritize improvements in the CSI register
- Making improvements to the process implementation.
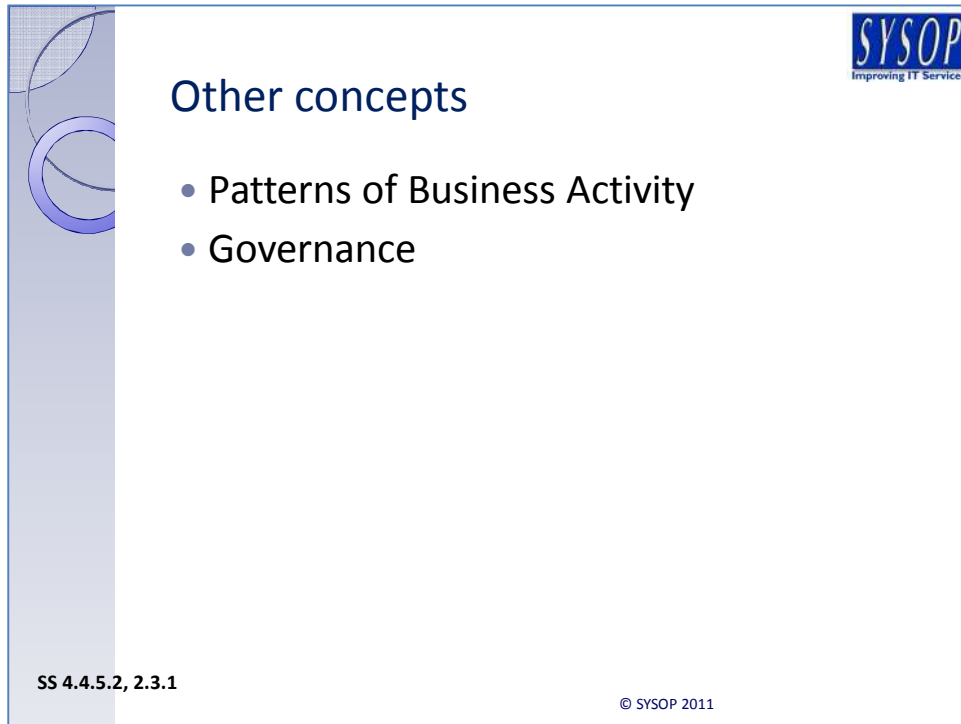
PROCESS PRACTITIONER

A process practitioner is responsible for carrying out one or more process activities.

The process practitioner's responsibilities typically include:

- Carrying out one or more activities of a process
- Understanding how their role contributes to the overall delivery of service and creation of value for the business
- Working with other stakeholders, such as their manager, co-workers, users and customers, to ensure that their contributions are effective
- Ensuring that inputs, outputs and interfaces for their activities are correct
- Creating or updating records to show that activities have been carried out correctly.

PATTERNS OF BUSINESS ACTIVITY (PBA)

Services are designed to enable business activities, which in turn achieve business outcomes. Thus every time a business activity is performed, it generates demand for services. Customer assets such as people, processes and applications all perform business activities, and because of the way these assets are organized or because of the tasks they are completing, this activity will tend to be performed in patterns. These patterns of business activity (PBA) represent the dynamics of the business and include interactions with customers, suppliers, partners and other stakeholders.

GOVERNANCE

Governance is the single overarching area that ties IT and the business together, and services are one way of ensuring that the organization is able to execute that governance. Governance is what defines the common directions, policies and rules that both the business and IT use to conduct business.

It ensures that policies and strategy are actually implemented, and that required processes are correctly followed. Governance includes defining roles and responsibilities, measuring and reporting, and taking actions to resolve any issues identified.