ITIL® Foundation with Case Study

(IV3-213 v5.33)

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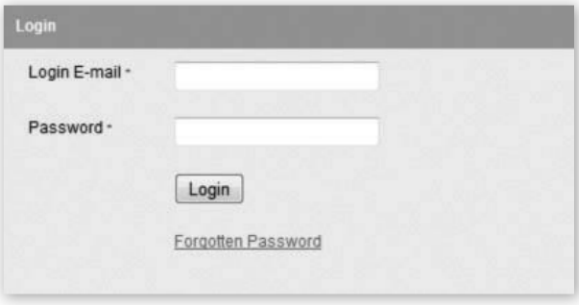

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Thank you for registering. Have a great class!

Attendees of this course earn Professional Development Units (PDUs) granted by the Project Management Institute (PMI®) in order to maintain their status as certified Project Management Professional (PMP).

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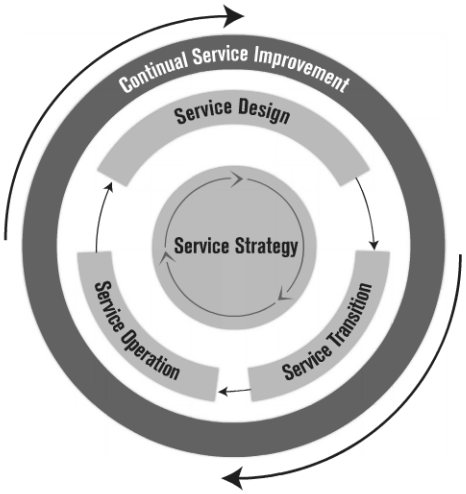
If you are interested to learn more about this program, please log onto: http://www.pmi.org/

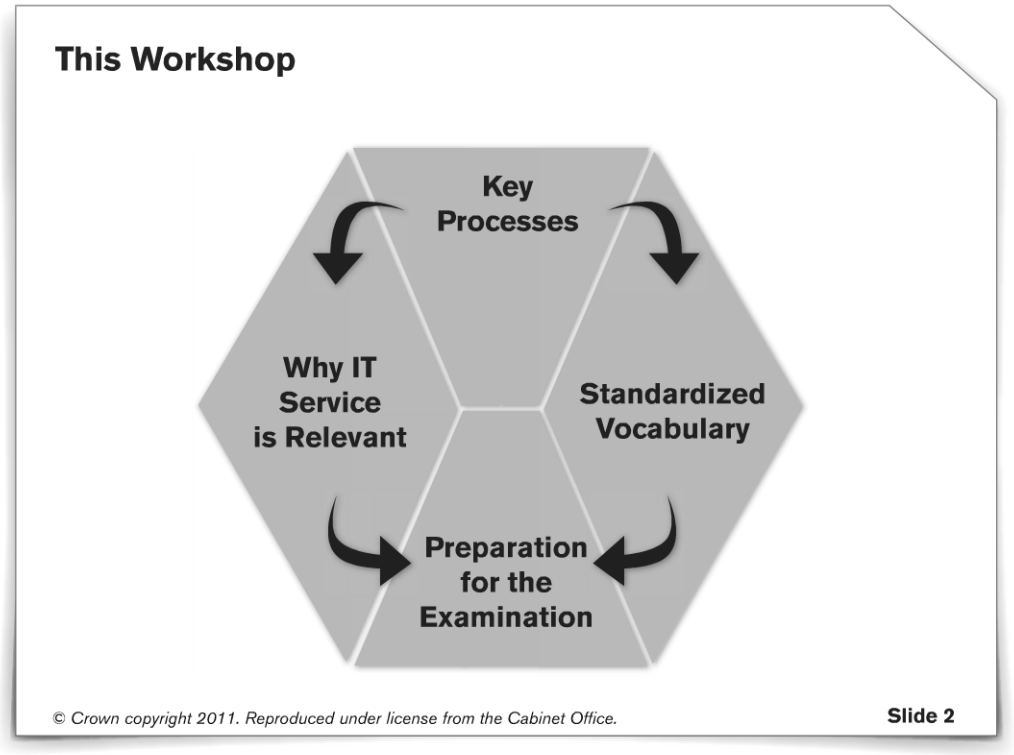
Agenda Timetable

ITIL® Foundation with Case Study (IV3-213 5.33)

Time	Day 1	Day 2	Day 3
9:00 a.m	Welcome & Introduction EX 2	Recap Day 1	Recap Day 1 & 2
9:15 a.m		Service Design 2 EX 3	
9:30 a.m			Continual Service Improvement 1
9:45 a.m			
10:00 a.m			
10:15 a.m		Service Transition 1	
10:30 a.m			
10:45 a.m			
11:00 a.m	Break	Break	Break
11:15 a.m	Service Strategy 1 EX 2	Service Transition 2 EX 4	Continual Service Improvement 2
11:30 a.m			
11:45 a.m			
12:00 p.m			
12:15 p.m			
12:30 p.m	Lunch	Lunch	Lunch
12:45 p.m			
1:00 p.m			
1:15 p.m			
1:30 p.m	Service Strategy 2 EX 3	Service Operations 1	Sample Exam
1:45 p.m			
2:00 p.m			
2:15 p.m			
2:30 p.m			
2:45 p.m			
3:00 p.m	Break	Break	Break
3:15 p.m	Service Design 1	Service Operations 2 EX 5	Evaluation and Closure
3:30 p.m			
3:45 p.m			Exam
4:00 p.m			
4:15 p.m			
4:30 p.m		Discussions, Homework and Revision prep	
4:45 p.m			
5:00 p.m			Course Admininstration

1 Introduction





This Workshop

The purpose of this course is for students to build a fundamental understanding of IT Service Management (ITSM) and the Information Technology Infrastructure Library (ITIL®) as approached in the latest 2011 edition set of books.

The topics covered are:

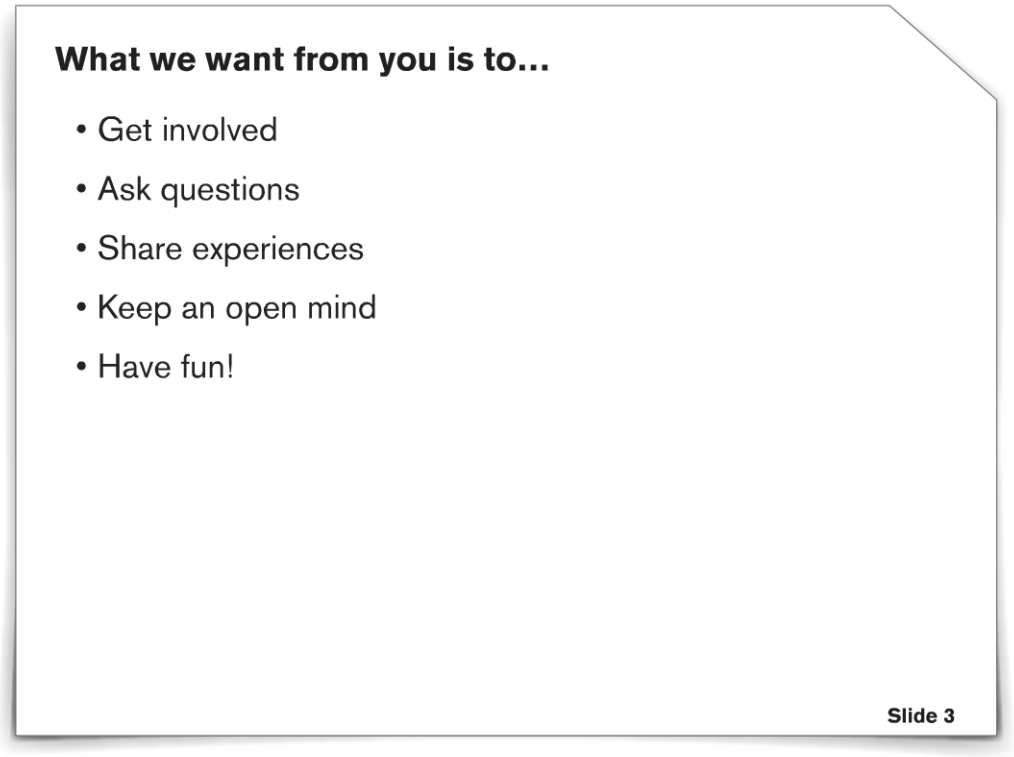
- Service Strategy
- Service Design
- Service Transition
- Service Operation
- Continual Service Improvement
- How these topics interrelate

By the conclusion of this class, the student will:

- Understand the purpose of the different processes, the relationships and associated roles and responsibilities of each.

- Learn the importance of using a standardized vocabulary to describe Service Management processes.
- Gain an understanding of the relevance of Service Management to the student's own organization

Upon completion of the course, students will be fully prepared to take the examination for the ITIL 2011 Edition Foundation Certificate in IT Service Management.

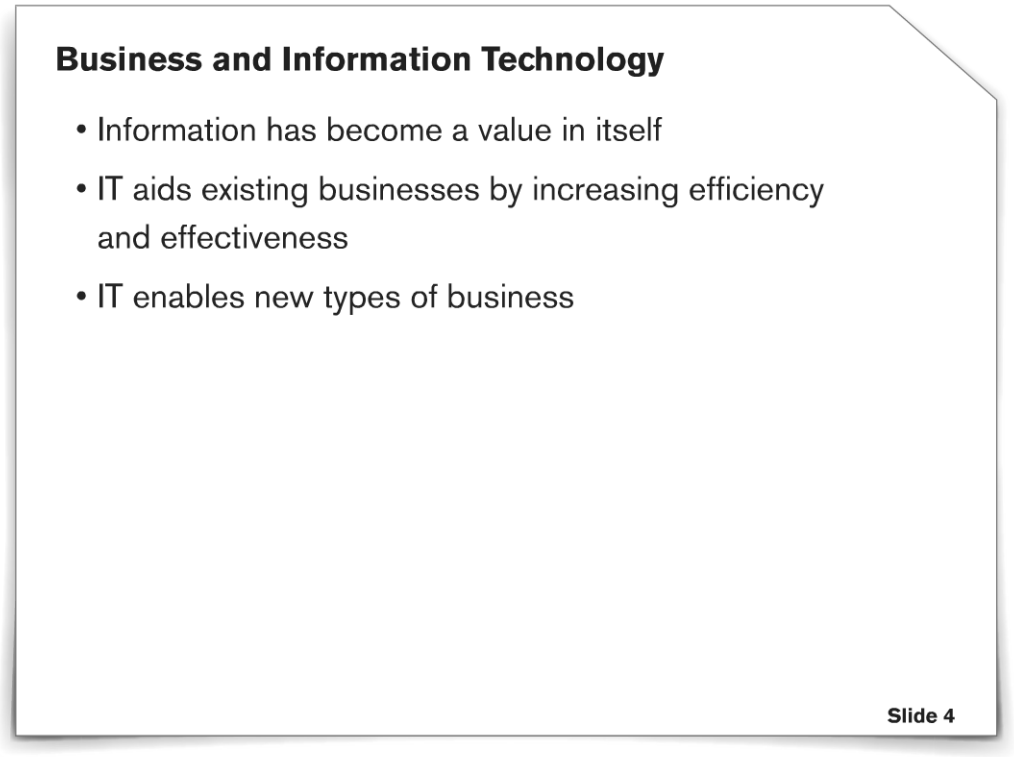


What we want from you is to…

Since this is about your work and your organization, we ask you to be actively involved in this workshop. The workshop is highly interactive and there is plenty of room for discussion. We also understand that these are all fairly new topics for most of you, so please feel free to ask any questions you may have.

Share previous or current experiences from your career. We can all learn from past experiences, so by sharing your experiences you are helping the class as well. Additionally, please keep an open mind about the subject matter. ITIL/ITSM is not an exact science; it is about organizational structures and processes. ITIL is not a silver bullet, but it will certainly help you get on the right path. We should not forget about other principles we need or may use, such as PMI/PMBOK® or Prince2™, Six Sigma, ISO, Total Quality Management, CobiT®, Sarbanes-Oxley, etc.

Last, but certainly not least, let's have some fun! As mentioned before, this is an interactive workshop where we ask everyone to join in and contribute. Your active participation will help the class run smoothly.



Business and Information Technology

The current era is often referred to as the Information Age. From the 1980s onward, IT has become increasingly important.

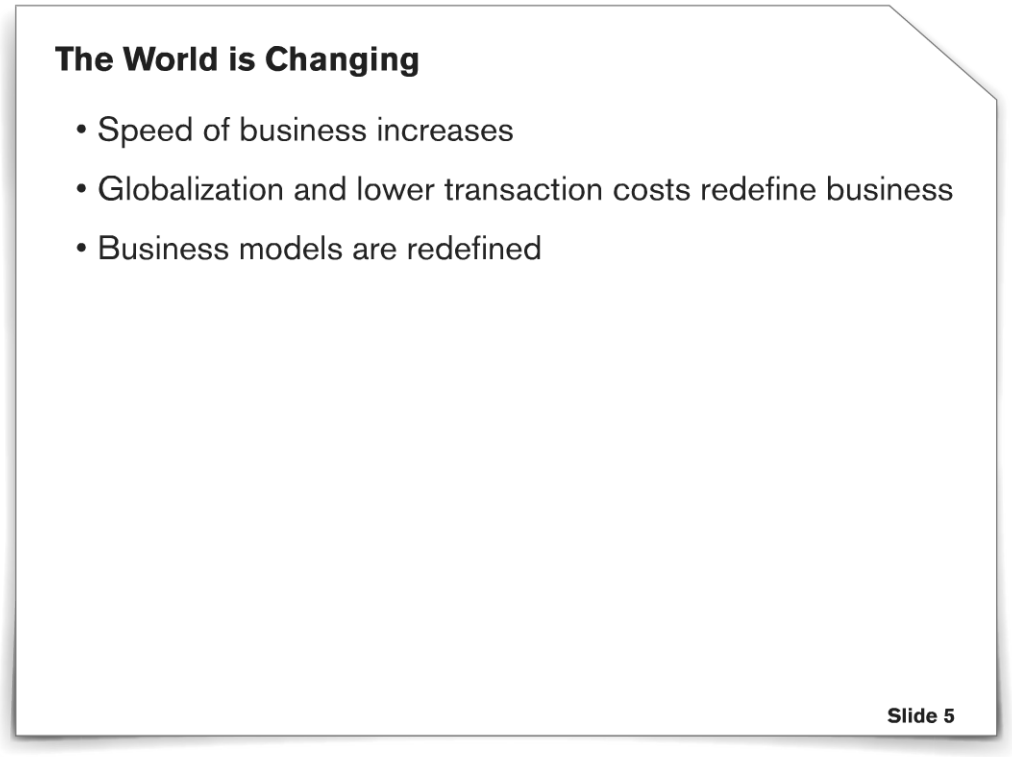
Information technologies (IT) enable, enhance and are embedded in a growing number of goods and services. They are connecting consumers and producers of services in ways previously not feasible, while contributing to the productivity of numerous sectors of the services industry, such as financial services, communications, insurance and retail services.

Tremendous change and growth is taking place in information-based services. *Information, previously a supporting element, has become the basis for value in itself*. Recent years have seen significant increases in valuation for businesses that facilitate interactions or the exchange of information.

This rapid development of IT aids existing businesses by increasing their efficiency and effectiveness, but also makes room for new types of businesses. New types of companies have formed, whose business model is focused solely on using and processing information. A good example is Google, which derives its profit completely from intangible assets.

The concept of effectiveness and efficiency are seen throughout the Service Lifecycle.

- Effectiveness can be viewed as “doing the right things”
- Efficiency can be viewed as “doing things right”

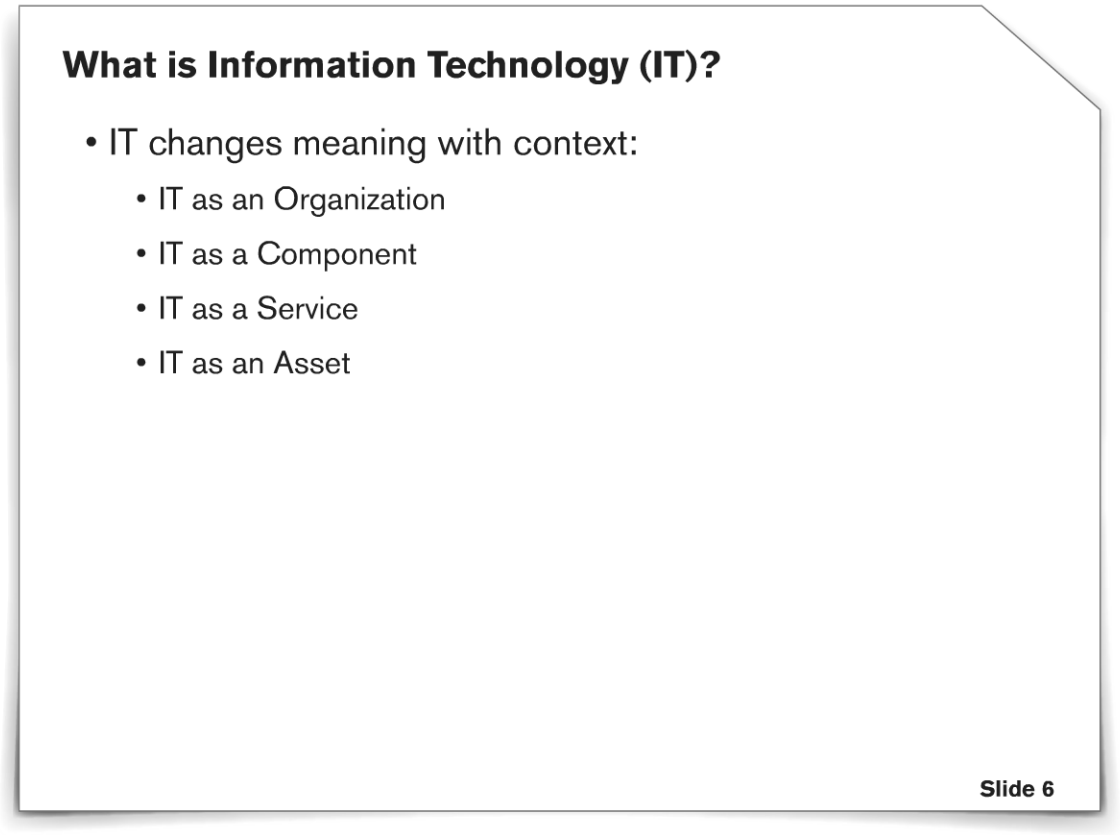


The World is Changing

The world is changing at a faster pace than ever before. Markets are created almost spontaneously with innovative business models and value propositions. The digitization of commercial activities, social interactions and government has meant fewer physical constraints on new business models, strategies and relationships. Knowledge and productive capacity are more dispersed than ever before.

Business executives everywhere appreciate the value of speed and agility. An enterprise that can act swiftly on routine transactions (speed), and that can also modify its processes quickly in response to changing conditions (agility), will have a competitive advantage.

Business models are redefined and new strategies are developed. Integration of different technologies now leave different industries competing with each other. For example, traditional photo-camera companies are now competing with telephone manufacturers, as integrated cameras continue to improve.



What is Information Technology (IT)?

Information Technology (IT) is a commonly used term that changes its meaning with context.

- **IT as an Organization**: As an internal unit or function of the enterprise or commercial service provider, IT is an organization with its own set of capabilities and resources. IT organizations can be of various types such as business functions, shared services units and enterprise-level core units.
- **IT as a Component**: As components of systems and processes, IT systems, applications and infrastructure are components or sub-assemblies of a larger product. They enable or are embedded in processes and services.
- **IT as a Service**: IT may be a shared category of services utilized by business or by business units. These services are typically IT applications and infrastructure that are packaged and offered by internal IT organizations or by external service providers. IT costs are treated as business expenses.
- **IT as an Asset**: As capabilities and resources that provide a dependable stream of benefit, IT is a category of business assets that provide a stream of benefits for their owners, including, but not limited to, revenue, income, and profit. IT costs are treated as investments.

It is important to be clear on what the term means in a given context. It is often used with different meanings in the same sentence or paragraph, often creating confusion. Read carefully!

Services – IT as a Service (1/4)

- Definition of a service:
  - "***Services*** *are a means of delivering value to customers by facilitating the* ***outcomes*** *customers want to achieve without the ownership of specific costs and risks.*"
- "*People want a quarter-inch hole, not a quarter-inch drill.*"

– Professor Theodore Levitt, Harvard Business School

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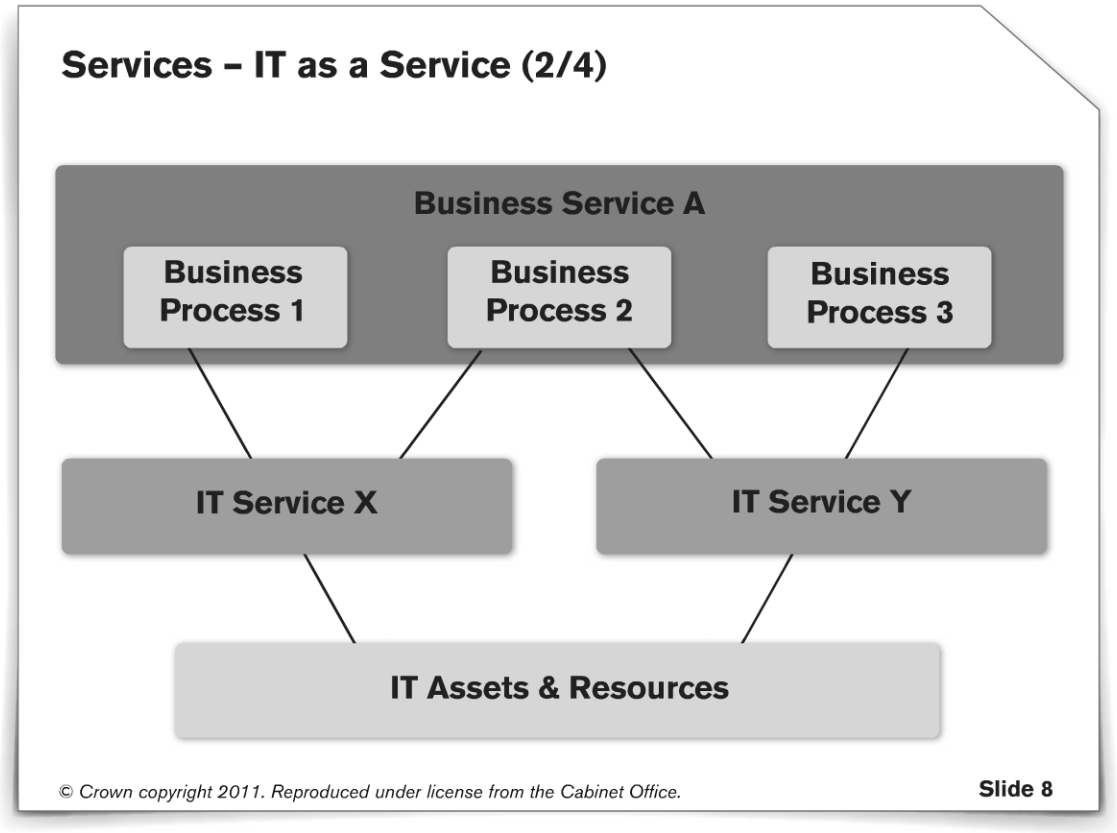
Services – IT as a Service (1/4)

Services are a means of delivering value to customers by facilitating the outcomes customers want to achieve without the ownership of specific costs and risks.

Outcomes are possible from the performance of tasks and are limited by the presence of certain constraints. Broadly speaking, services facilitate outcomes by enhancing the performance and by reducing the grip of constraints.

The often repeated quote by Harvard Business School Professor Theodore Levitt shows the intangible nature of services: "*People want a quarter-inch hole, not a quarter-inch drill.*"

This is also applicable to IT; the customer wants a specific service, such as email, which supports the outcome of cheap, reliable and fast written communication. A customer does not want to be bothered by running hardware, maintaining software and ensuring that there is sufficient capacity in the network.



Services – IT as a Service (2/4)

IT is an ***enabler*** for business processes and not a goal on its own. Therefore, IT must never forget that they primarily exist to support the business services, and that it is important to specify the business outcomes when defining a service. In this perspective, IT services can be seen as a ***strategic asset*** that provides a basis for core competence, distinctive performance, durable advantage and qualifications to participate in business opportunities.

IT services derive their potential from assets (capabilities and resources), such as processes, people, infrastructure, etc. These assets are discussed in detail in the Service Strategy module later in this course.

Business managers challenge the IT organization to engage with them at the level of business processes. They want assurance that applications and infrastructure will support new business initiatives. However, there are coordination and cooperation problems between the two sides. Business managers may not understand the complexity and detail of creating the business process within the realm of information, applications and infrastructure. IT managers may not have a clear understanding of exactly what business managers wish to accomplish. The problem worsens with complexity, duplication and the absence of clear models for coordination and control.

Services – IT as a Service (3/4)

- Definition: outcome
  - The result of carrying out an activity, following a process, or delivering an IT service etc. The term is used to refer to intended results, as well as to actual results.
- An outcome-based definition of service moves IT organizations beyond business–IT alignment towards business–IT integration
- Internal dialogue and discussion on the meaning of services is an elementary step towards alignment and integration with a customer's business

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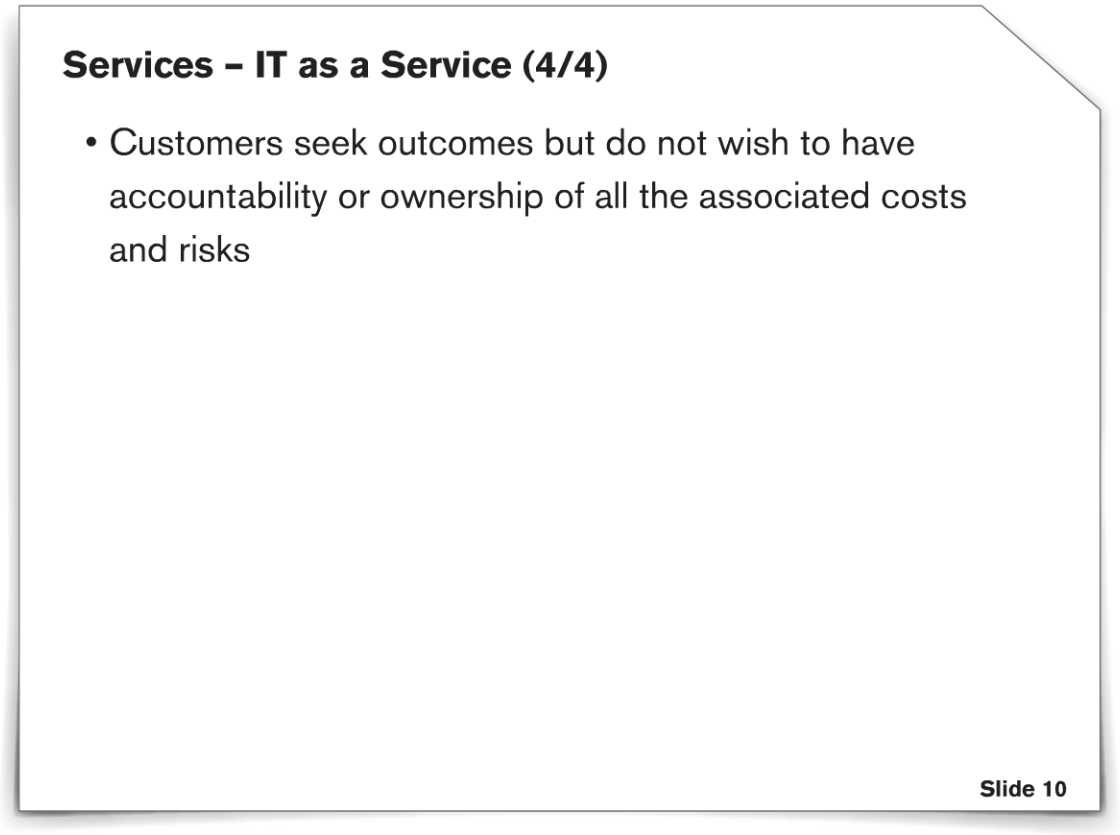
Services – IT as a Service (3/4)

Definition: outcome

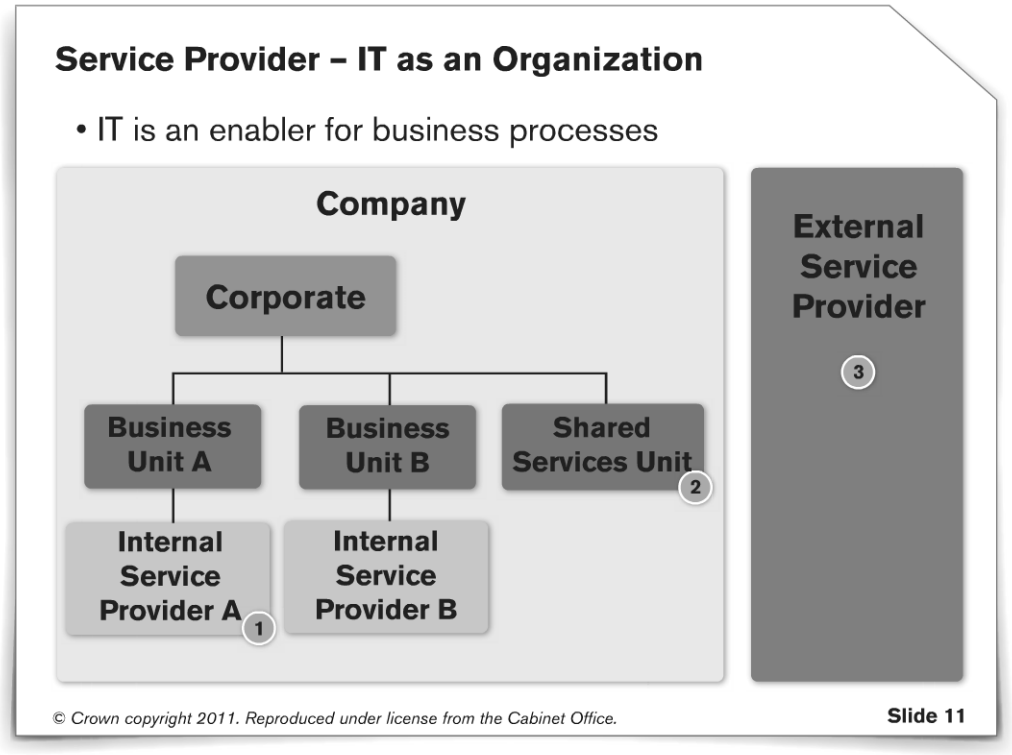
The result of carrying out an activity, following a process, or delivering an IT service etc. The term is used to refer to intended results, as well as to actual results.

An outcome-based definition of service moves IT organizations beyond business–IT alignment towards business–IT integration. Internal dialogue and discussion on the meaning of services is an elementary step towards alignment and integration with a customer's business. Customer outcomes become the ultimate concern of business relationship managers instead of the gathering of requirements, which is necessary but not sufficient. Requirements are generated for internal coordination and control only after customer outcomes are well understood.



Services – IT as a Service (4/4)

Customers seek outcomes but do not wish to have accountability or ownership of all the associated costs and risks. All services must have a budget when they go live and this must be managed. The service cost is reflected in financial terms such as return on investment (ROI) and total cost of ownership (TCO). The customer will only be exposed to the overall cost or price of a service, which will include all the provider's costs and risk mitigation measures (and any profit margin if appropriate). The customer can then judge the value of a service based on a comparison of cost or price and reliability with the desired outcome.



Service Provider – IT as an Organization

A **customer** is defined as "*someone who buys goods or services.*" Within the realm of IT, the customer wishes to buy IT services. A typical large company often has multiple business units or Departments that have a different need for IT services. In this case, there are multiple customers that are looking for services.

Services may be acquired from a Service Provider, and a Service Provider may provide any type of service. Within ITIL, the definition of a Service Provider is: "*An organization supplying **services** to one or more internal or external customers.*" This definition is not IT specific; for example, other services may be human resource management or finance. Most importantly, a Service Provider provides services, which differ significantly from the more traditional (tangible) goods.

Three types of service providers may be identified:

1. **Internal Service Provider**: An Internal Service Provider is established close to the business and is defined as "*A Service Provider that is part of the same organization as its customer.*" As shown in the graphic above with (1), the Internal Service Provider A and B are both examples of Internal Service Providers that provide their services to a business unit. In this case, each business unit has its own Service Provider.

2. **Shared Services Unit**: As many services like finance, IT and human resources are not part of the business of many organizations and are often consolidated into an autonomous special unit, called the Shared Services Unit (SSU). This structure helps spread costs and risks and allows a more business-like approach for the Service Provider. For small organizations, a Shared Services Unit is not an option, as it would be the same as an Internal Service Provider.
3. **External Service Provider**: Defined as "*A Service Provider that is part of a different organization as its customer*," it is often referred to as an external supplier. External Service Providers usually serve many organizations and customers and are often dedicated to supplying IT services.

Business/IT Alignment

- Customers of IT (businesses) require IT services that continuously support their business needs
- IT should be aware of rapid changes in business
- Internal providers face possible outsourcing and must run their IT as a business

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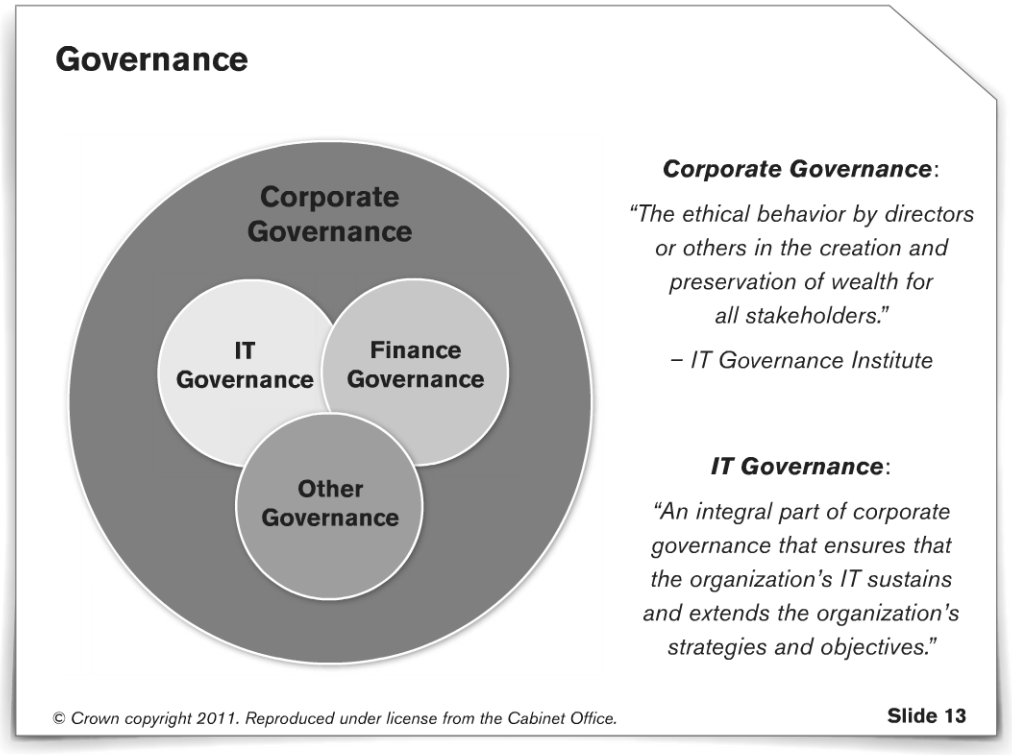
Business/IT Alignment

The frequently cited objective of "alignment with the business" characterizes a common problem faced by the leadership of IT organizations in general and Chief Information Officers (CIOs) in particular. Those who succeed in meeting this objective are those who understand the need to be business-minded. When an IT organization has an internal focus on the technology being delivered and supported, they lose sight of the actual purpose and benefits that their efforts deliver to the business.

The increasing popularity of managed services and outsourcing places tremendous pressures on internal providers to adopt the structure and behavior of a professionally managed business. A well-managed IT organization can act like a business-within-a-business and deliver value that meets or exceeds the value proposition of commercial alternatives.



Governance

In general, governance ensures that policies and strategies are implemented, and that required processes are correctly followed. Governance includes defining roles and responsibilities, measuring, reporting and taking actions to resolve any identified issues. It is important to distinguish between governance and management, as they are often used within the wrong context. Governance is about maintaining proper policy and procedures to ensure that IT is "doing the right things." Management is about "doing things right."

A recent and highly-visible example of a renewed emphasis on corporate governance is the Sarbanes-Oxley Act (SOX) of 2002 in the United States.

IT is increasingly being called upon to "do more with less" and create additional value while maximizing the use of existing resources. However, in terms of IT governance, IT must now comply with new rules and legislation and continually demonstrate its compliance through successful independent audits by external organizations.

These increasing pressures dovetail perfectly with the basic premise of ITIL: IT is a service business. Existing internal IT organizations must transform themselves into effective and efficient IT service providers or they will cease to be relevant to the business. This continual and unending drive toward greater business value with greater internal efficiency is at the heart of Continual Service Improvement (CSI), one of the modules covered in this course.

Why is ITIL successful? (1/2)

- ITIL embraces a practical approach to service by adapting a common framework of practices that unite all areas of IT service provision towards a single aim – that of delivering value to the business
- **Vendor-neutral** ITIL service management practices are applicable in any IT organization because they are not based on any particular technology platform or industry type. ITIL is owned by the UK government and is not tied to any commercial proprietary practice or solution

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Why is ITIL successful?

A multi-disciplinary approach is required to answer such questions. Technical knowledge of IT is necessary but not sufficient. The guidance is pollinated with knowledge from the disciplines such as operations management, marketing, finance, information systems, organizational development, systems dynamics, and industrial engineering. The result is a body of knowledge robust enough to be effective across a wide range of business environments. Some organizations are putting in place the foundational elements of service management. Others are further up the adoption curve, ready to tackle challenges and opportunities with higher levels of complexity and uncertainty.

Why is ITIL successful? (2/2)

- **Non-prescriptive** ITIL offers robust, mature and time-tested practices that have applicability to all types of service organizations. It continues to be useful and relevant in public and private sectors, internal and external service providers, small, medium and large enterprises, and within any technical environment
- **Best practice** ITIL represents the learning experiences and thought leadership of the worlds best-in-class service providers

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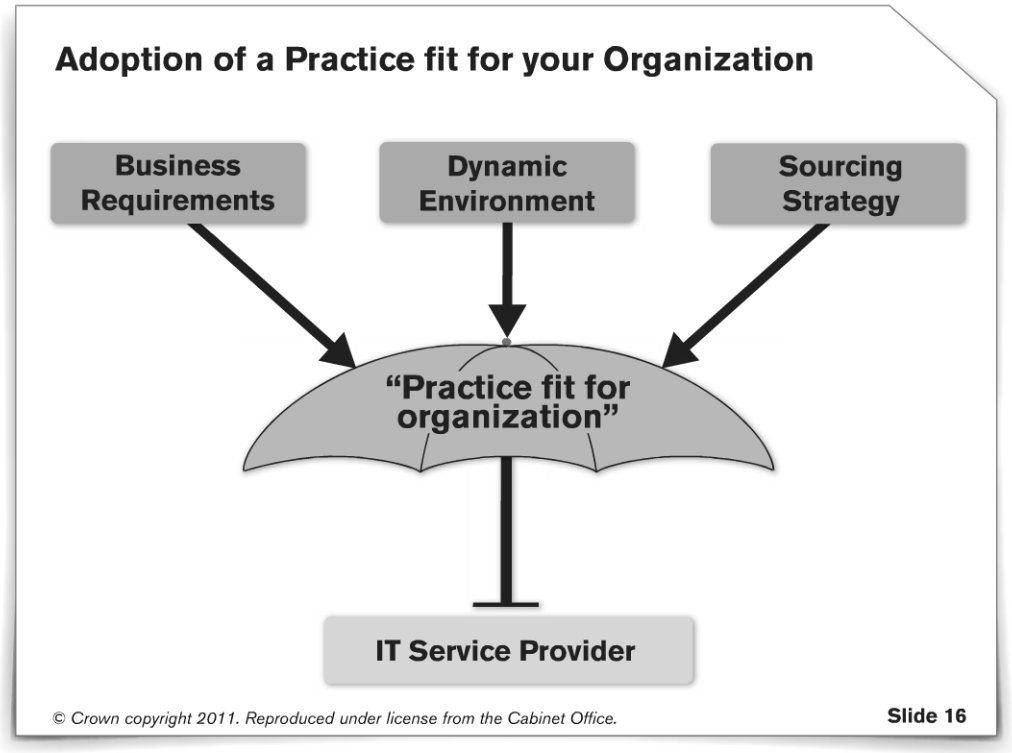


Adoption of a Practice that is fit for your Organization

Organizations operate within dynamic environments with the need to learn and adapt–to improve performance while managing trade-offs. Under similar pressure, customers seek advantage from Service Providers. They pursue sourcing strategies that best serve their own business interest.

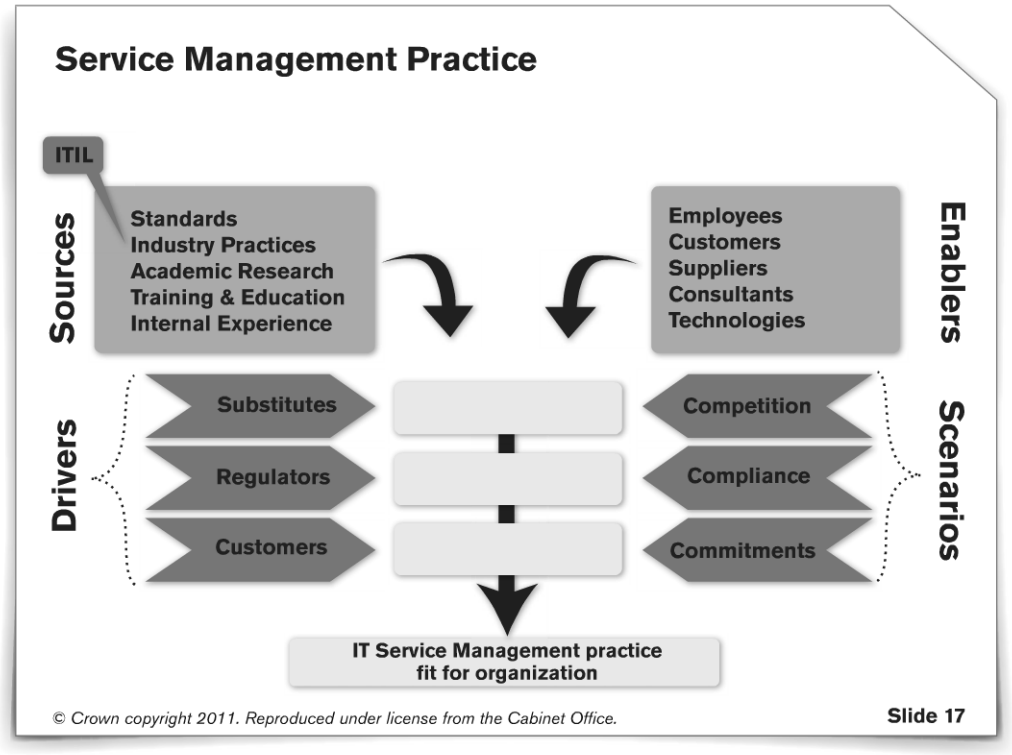
This puts additional pressure on Service Providers to maintain a competitive advantage with respect to the alternatives that customers may have. The increase in outsourcing has particularly exposed internal Service Providers to unusual competition.

To cope with the pressure, organizations benchmark themselves against peers and seek to close gaps in capabilities. One way to close such a gap is the adoption of good practices in wide industry use.

Many organizations are similar, therefore, best practice guidance can be used to improve the ability to deliver quality services.

ITIL defines Best Practice as: "*Proven activities or processes that have been successfully used by multiple organizations*."

ITIL is the most widely recognized and trusted source of best-practice guidance in the area of ITSM.



Service Management Practice

There is no single, best Service Management practice available that fits every company. However, there are several sources for a Service Management practice that is fit for the business objectives, fit for the context of the business and fit for purpose.

These sources include:

- Standards such as ISO9000, ISO/IEC20000, and ISO/IEC27001 are a set of criteria that help validate a practice. These standards may be based upon existing industry practices or originate from (academic) research.
- Industry practices (ITIL®, CobiT®, CMMI®, eSCM-SP, PRINCE2™, PMBOK®, M_o_R®, eTOM®, Six Sigma) are a set of guidelines that are used throughout the industry and have proven their usefulness.
- Academic research
- Training and education
- Internal experience, also called proprietary knowledge

The other side of the graphic depicts the enablers that define how these sources may be used. These enablers play an important role in determining the practice that is fit for purpose. The employees (related to corporate culture) will play an important role in the organization, and the use of technology may also facilitate much within Service Management.

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The enablers and sources alone do not form the practice that fits the organization; several drivers and scenarios influence the employment of a Service Management practice. Laws such as Sarbanes-Oxley (SOX) have a major influence on the way business operates, and customers will usually desire that an organization's way of working is aligned with its own. Competition may further shape the way of business, as the organization must stay competitive to stay alive.

Ignoring public frameworks and standards can needlessly place an organization at a disadvantage. Organizations should cultivate their own proprietary knowledge on top of a body of knowledge based on public frameworks and standards. Collaboration and coordination across organizations become easier on the basis of shared practices and standards.

IT Service Management

- *IT service management (ITSM)*: The implementation and management of quality IT services that meet the needs of the business. IT service management is performed by IT service providers through an appropriate mix of people, process and information technology
- *IT service provider*: A service provider that provides IT services to internal or external customers

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IT Service Management

ITSM must be carried out effectively and efficiently. Managing IT from the business perspective enables organizational high performance and value creation. A good relationship between an IT service provider and its customers relies on the customer receiving an IT service that meets its needs, at an acceptable level of performance and at a cost that the customer can afford.

The IT service provider needs to work out how to achieve a balance between these three areas, and communicate with the customer if there is anything which prevents it from being able to deliver the required IT service at the agreed level of performance or price.

A service level agreement (SLA) is used to document agreements between an IT service provider and a customer. The SLA describes the IT service, documents service level targets, and specifies the responsibilities of the IT service provider and the customer. A single agreement may cover multiple IT services or multiple customers.

Stakeholders in service management (1/2)

- 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
- Within the service provider organization there are many different stakeholders including the functions, groups and teams that deliver the services

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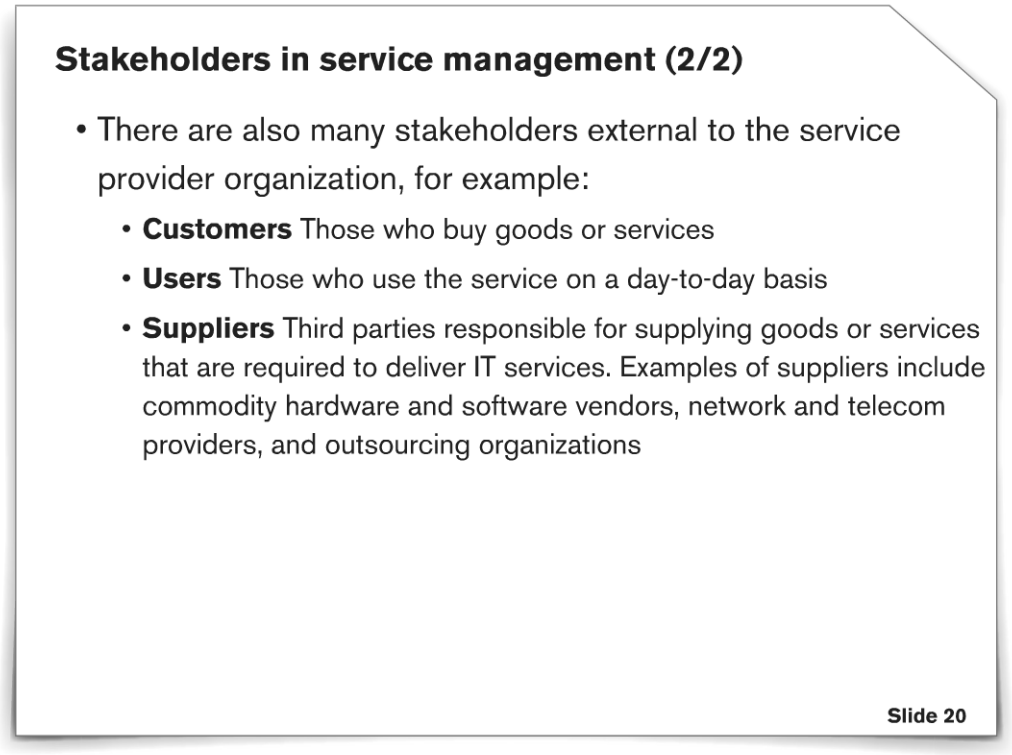
Stakeholders in service management (1/2)

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.



Stakeholders in service management (2/2)

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.'

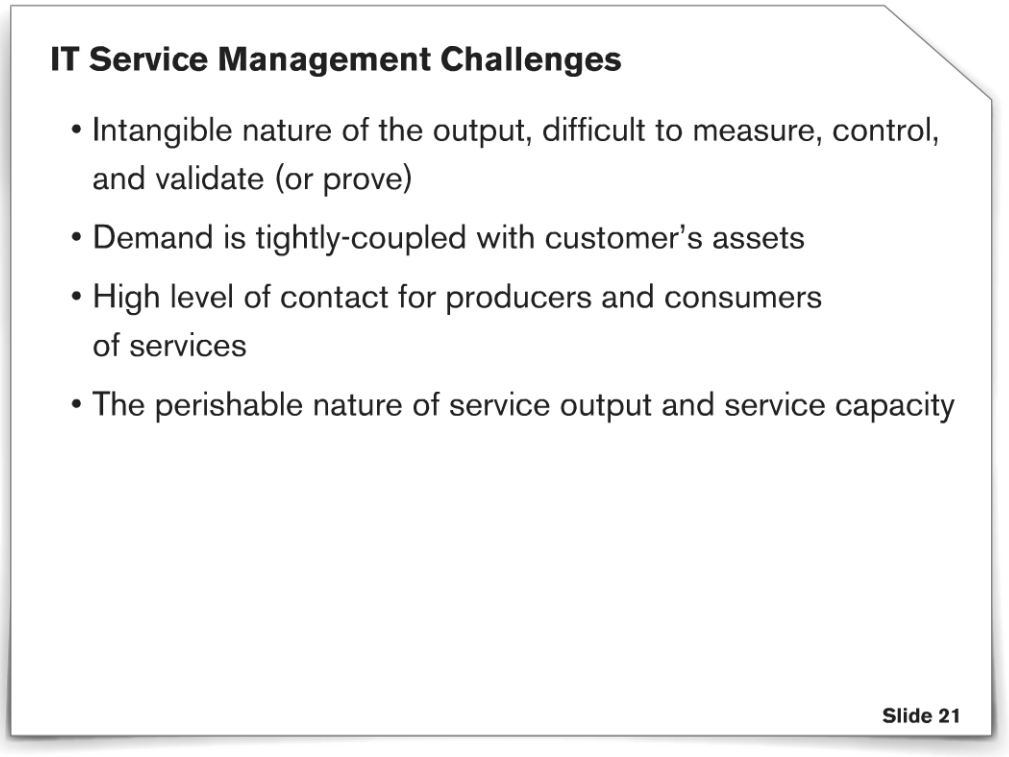
Users Those who use the service on a day-to-day basis. Users are distinct from customers, as some customers do not use the IT service directly.

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.

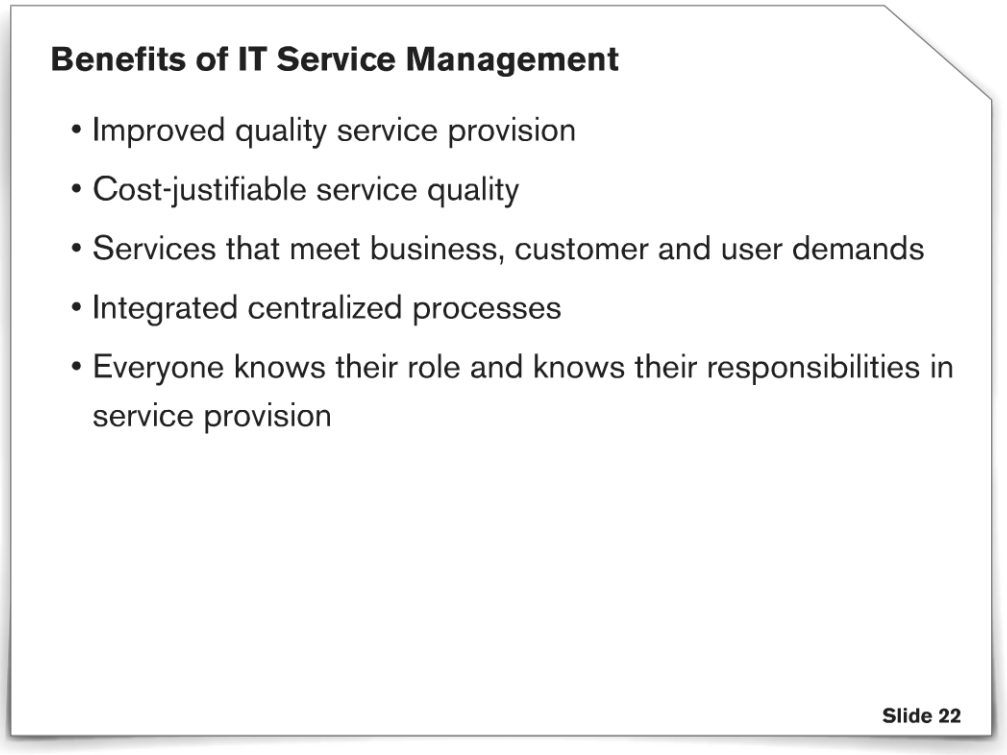
External customers These are customers who work for a different business from the IT service provider. External customers typically purchase services from the service provider by means of a legally binding contract or agreement.



IT Service Management Challenges

Organizational capabilities are shaped by the challenges they are expected to overcome. Service Management capabilities are similarly influenced by the following challenges that distinguish services from other systems of value-creation, such as manufacturing, mining and agriculture:

- The intangible nature of the output and intermediate products of service processes: Difficult to measure, control, and validate (or prove)
- Demand is tightly-coupled with customer's assets: Users and other customer assets such as processes, applications, documents and transactions arrive with demand and stimulate service production
- High level of contact for producers and consumers of services: Little or no buffer between the customer, the front-office and back-office
- The perishable nature of service output and service capacity: There is value for the customer from assurance on the continued supply of consistent quality. Providers must secure a steady supply of demand from customers



Benefits of IT Service Management

Does an organization need IT Service Management? The following questions can serve as a guide to answer this question:

- Do the IT services align with business requirements?
- Are the customers satisfied with the IT services?
- Are the customers provided with IT services that match THEIR needs and not the needs of the IT department?
- Is there any risk that the customers will shop elsewhere?
- Are there appropriate levels of security?
- How would the IT department fare in an audit?
- What would happen to the IT services in a contingency situation?
- Is the IT department proactive or reactive?
- Are changes requested by the business side of the organization able to be accommodated?

IT Service Management assists organizations to align IT with the business side of the organization. This will improve IT's ability to deliver consistently reliable services that meet customer needs. The benefits of applying IT Service Management practices vary depending on the needs of each organization; however, there are many benefits that organizations may gain by introducing IT Service Management practice. These benefits are generic to IT Service Management in general and are not ITIL specific benefits.

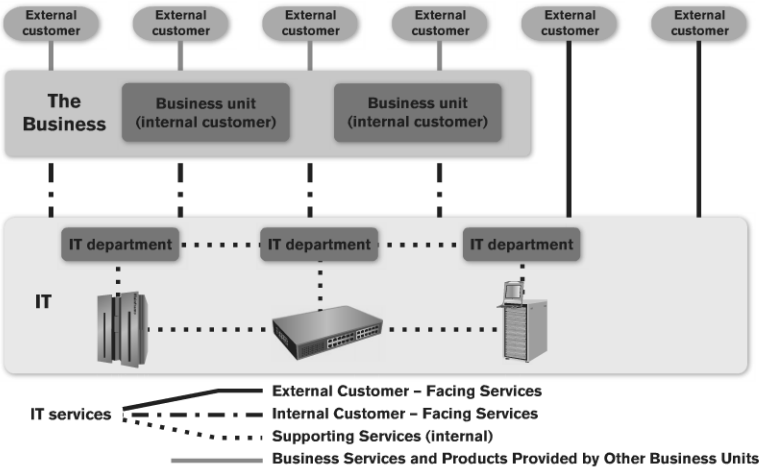
Internal and External customers

- Regardless of how consistently customers and consumers are treated, they are not all the same
- There is a difference between customers who work in the same organization as the IT service provider, and customers who work for another organization
- Internal customers are people or departments who work in the same organization as the service provider
- External customers are people who are not employed by the organization, or organizations that are separate legal entities, that purchase services from the service provider in terms of a legally binding contract or agreement

Slide 23

Internal and External Services (1/3)

- Just as there are internal and external customers, there are internal and external services



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Internal and External Services (2/3)

- Internal services are delivered between departments or business units in the same organization. External services are delivered to external customers
- The reason for differentiating between internal and external services is to differentiate between services that support an internal activity, and those that actually achieve business outcomes

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Internal and External Services

Dealing with external customers

Many IT organizations who traditionally provide services to internal customers find that they are dealing directly with external customers because of the online services that they provide. It is important that the service strategy clearly identifies how the IT organization interacts with these customers, as well as who owns and manages the relationship with them.

Internal and External Services (3/3)

- The difference may not appear to be significant at first, since the activity to deliver the services is often similar. However, it is important to recognize that internal services have to be linked to external services before their contribution to business outcomes can be understood and measured
- This is especially important when measuring the return on investment of services

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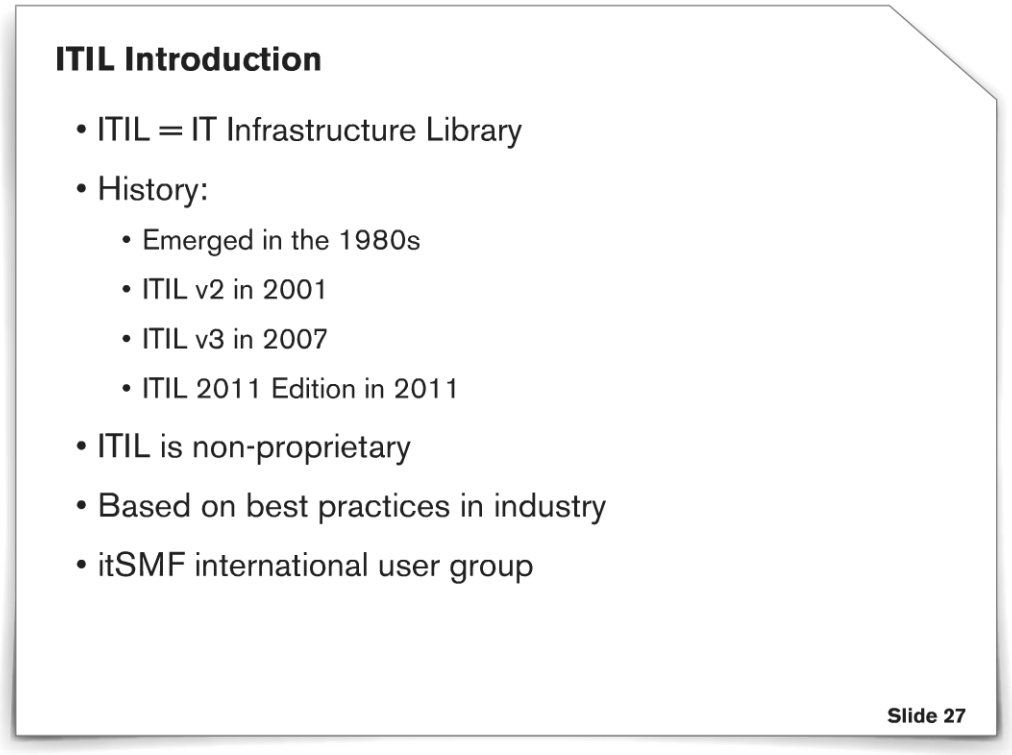


ITIL Introduction

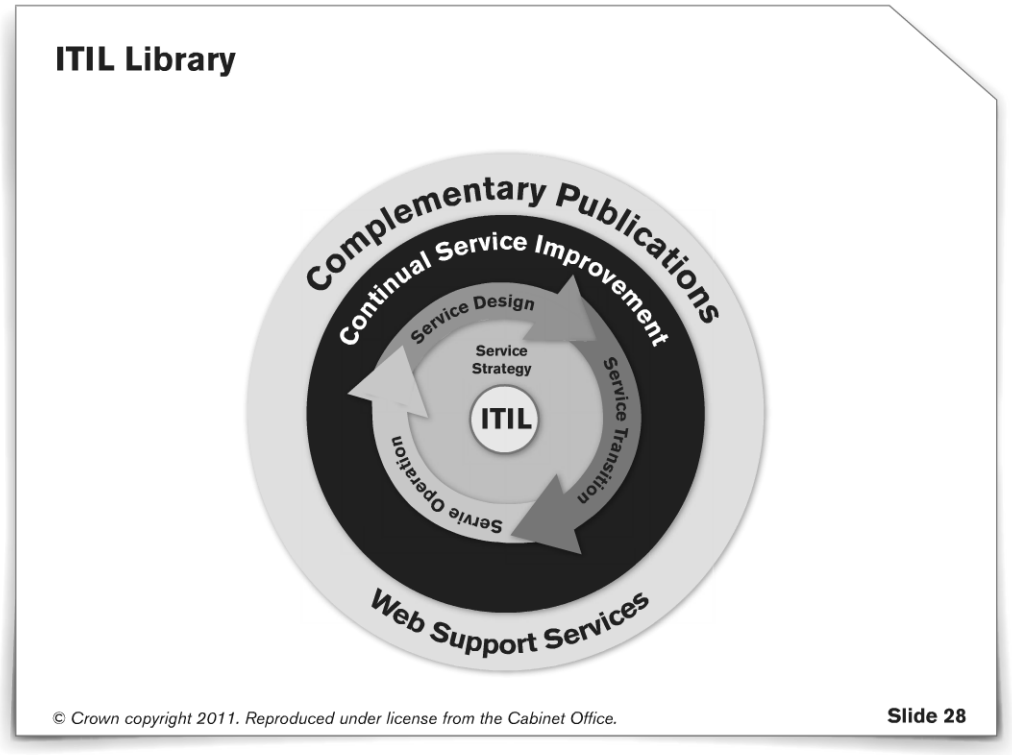
ITIL is an acronym for the **IT Infrastructure Library** and provides a source of good practice in IT Service Management. ITIL is used worldwide by organizations to establish and improve capabilities in Service Management. In the same area, ISO/IEC20000 provides a formal and universal standard for organizations seeking to have their Service Management capabilities audited and certified. While ISO/IEC20000 is a standard to be achieved and maintained, ITIL offers a body of knowledge useful for achieving the standard. It is important to note that organizations CANNOT become ITIL certified, only people can.

ITIL emerged in the 1980s while the UK Government's Central Computer and Telecommunications Agency (CCTA, which is now known as the Office of Government Commerce) gathered practices from users, suppliers and consultants. The amount of publications comprising the ITIL library grew to more than 30 books, but was not widely embraced by the industry until the mid 1990s. To make ITIL more accessible, ITIL v2 focused on reducing the amount of books, of which two (Service Support and Service Delivery) became the most used.

ITIL Service Management practices are not based on any particular technology platform or industry type. ITIL is owned by the UK government and not tied to any commercial proprietary practice or solution. The ITIL books and diagrams are Office of Government Commerce (OGC) copyrighted but ITIL can be used publicly without any fee.

In 2005, the OGC began an effort to further improve the ITIL Library. A major refresh project began and authors from throughout the industry were appointed to develop ITIL v3, which now consists of five books.

The IT Service Management Forum (itSMF) is the largest user group formed around IT Service Management. The itSMF publishes books on IT Service Management, ITIL and related subjects, and organizes conferences and meetings. Many countries, states, provinces and even some cities have their own chapters. Its website, www.itSMF.org, contains valuable information and offers opportunities to connect and share experiences and tips with peers.

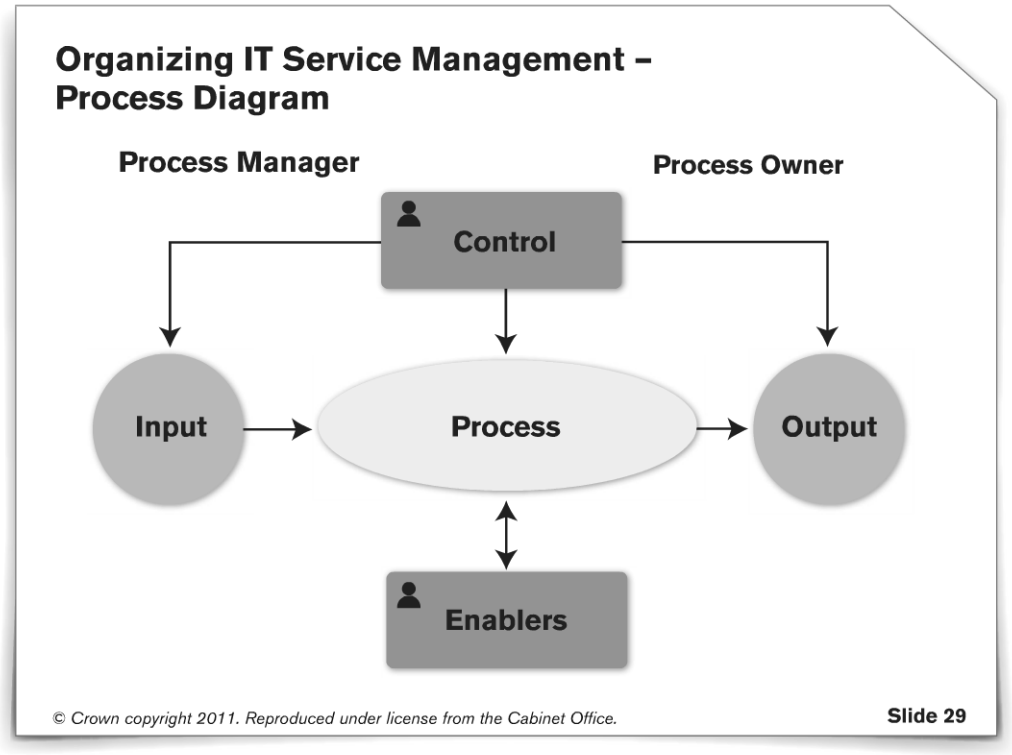


ITIL Library

The ITIL Library is the set of publications officially endorsed by OGC as the ITIL Best Practice. It contains the following components:

- The ITIL Core: Best practice guidance applicable to all types of organizations that provide services to a business. It consists of five books—of which this training gives you a basic overview—plus a sixth book, an introduction to the ITIL Service Lifecycle. These books are:
  - Service Strategy
  - Service Design
  - Service Transition
  - Service Operation
  - Continual Service Improvement
  - The Introduction to the ITIL Service Lifecycle
- Complementary Guidance: The Library includes a complementary set of publications with guidance specific to industry sectors, organization types, operating models and technology architectures.
- ITIL Live: Web support services provide additional knowledge on ITIL.

The guidance in ITIL can be adapted for use in various business environments and organizational strategies. The Complementary Guidance provides flexibility to implement the Core across a diverse range of environments. Practitioners can select Complementary Guidance as needed to provide traction for the Core in a given business context, much like tires are selected based on the type of automobile, purpose and road conditions. This traction increases the durability and portability of knowledge assets and protects investments in Service Management capabilities.



Organizing IT Service Management – Process Diagram

A **process** can be defined as a structured set of activities designed to accomplish a specific objective. A process takes one or more *inputs* and turns them into defined *outputs*. A process includes all of the roles, responsibilities, tools, metrics (measurements) and management controls required to reliably deliver the outputs.

The diagram above illustrates the generic process diagram, with Process Inputs on the left, the process itself in the center and the Process Outputs on the right. Every process requires Process Enablers and is regulated by a control mechanism. It also exhibits the two major roles in the process: Process Owner and Process Manager.

Each process should have a **Process Owner** who is responsible for the process, its improvement and for ensuring that the process meets its objectives. The objectives of any IT process should be defined in measurable terms and should be expressed in terms of business benefits and underpinning business strategy and goals. The output produced by a process must conform to operational norms that are derived from business objectives. If products conform to the set norm, the process may be considered effective (because it can be repeated, measured and managed). If the activities are carried out with a minimum use of resources, the process may also be considered efficient. Process analysis, results and metrics should be incorporated into regular management reports and process improvements.

Each process may also have a **Process Manager** who is responsible for the operational management of a process. There may be several managers for the one process and they will report to the process owner.

For each part of this diagram, we may identify some typical elements. For the **Process** these include the Process Activities, Process Metrics, Process Roles, Process Procedures, Process Work Instructions and Process Improvements.

Process Enablers are the process assets, resources and capabilities.

Process Control is defined as: The activity of planning and regulating a process, with the objective of performing a process in an effective, efficient and consistent manner. Processes, once defined, should be documented and controlled; once under control, they can be repeated and become manageable. Degrees of control over processes may be defined, and then process measurement and metrics may be built in to the process to control and improve the process as illustrated. It includes, among others: Process Policy, Process Owner, Process Documentation, Process Objectives and Process Feedback.

The generic process elements show that data enters the process, is processed, is output and the outcome is measured and reviewed. A process is always organized around a set of objectives. The main outputs from the process should be driven by the objectives and should always include process measurements (metrics), reports and process improvement.

Organizing IT Service Management – Process Characteristics

- Definition
  - "*A set of coordinated activities combining and implementing resources and capabilities in order to produce an outcome, which, directly or indirectly, creates value for an external customer or stakeholder.*"
- Processes are strategic assets when they create competitive advantage or market differentiation

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Organizing IT Service Management – Process Characteristics

A **process** is a set of coordinated activities combining and implementing resources and capabilities in order to produce an outcome, which, directly or indirectly, creates value for an external customer or stakeholder. Processes that provide transformation towards a goal and utilize feedback for self-reinforcing and self-corrective action function, as closed-loop systems. It is important to consider the entire process or how one process fits into another.

Each **Process Owner** is responsible for ensuring that their process is being performed according to the agreed upon and documented process and is meeting the aims of the process definition. This includes such tasks as:

- Ensuring that the process is fit for the desired purpose
- Defining the Key Performance Indicators (KPIs) to evaluate the effectiveness and efficiency of the process
- Responsibility for the process design
- Improving the effectiveness and efficiency of the process
- Ensuring that all relevant staff has the required training in the process and are aware of its role in the process
- Interfacing with line management to ensure that the process receives the needed staff resources

Organizing IT Service Management – Process Characteristics

A process should have these four characteristics:

Measurable: The organization is able to measure the process in a relevant manner, and ensure that it is performance driven. Managers will want to measure cost, quality and other variables, while practitioners are concerned with duration and productivity.

Specific results: The reason a process exists is to deliver a specific result. This result must be individually identifiable and quantifiable. While we can count changes, it is impossible to count how many Service Desks were completed.

Delivers to customers: Every process delivers its primary results to a customer or stakeholder. They may be internal or external to the organization but the process must meet their expectations.

Responds to a specific event: While a process may be ongoing or iterative, it should be traceable to a specific trigger.

Organizing IT Service Management – Organization Structure

- Function:
  - "*A logical concept that refers to the people and automated measures that execute a defined process, an activity or a combination of processes or activities.*"
  - Provides units of organization responsible for specific outcomes
- Role:
  - "*A set of connected behaviors or actions that are performed by a person, team or group in a specific context.*"

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Organizing IT Service Management – Organization Structure

In an organization's structure, it is important to align all contributors to the use of common terms with the same meaning. ITIL therefore defines several concepts when it comes to an organization's structure by employing several concepts. These are listed below:

Function: A function is a logical concept that refers to the people and automated measures that execute a defined process, an activity or a combination of processes or activities. In larger organizations a function may be broken out and performed by several departments, teams and groups, or it may be embodied within a single organizational unit (e.g., Service Desk).

Role: A role refers to a set of connected behaviors or actions that are performed by a person, team or group in a specific context. For example, a technical management department may perform the role of Problem Management when diagnosing the root cause of Incidents. This same department could also be expected to play several other roles at different times. For example, they may assess the impact of changes (Change Management role), manage the performance of devices under its control (Capacity Management role), etc. The scope of the department's role and what triggers it to play that role are defined by the relevant process.

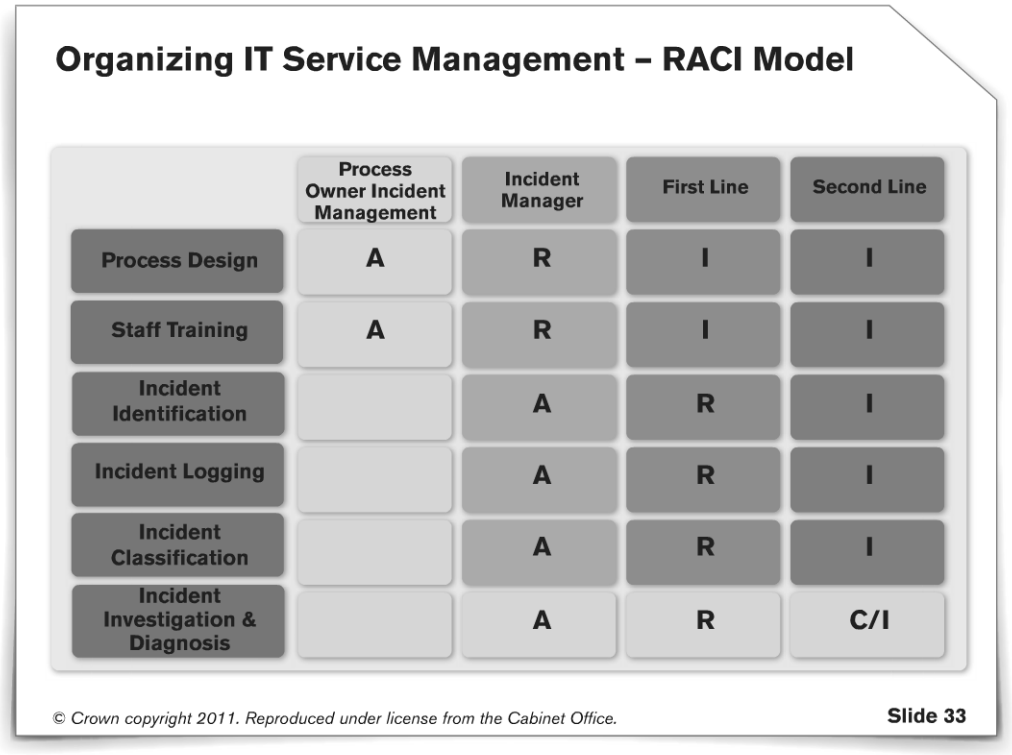
Group: A group is a number of people who are similar in some way. In this book, groups refer to people who perform similar activities, even though they may work on different technology or report to different organizational structures or even to different companies. Groups are usually not formal organizational structures, but are very useful in defining common processes across the organization.

For example, ensuring that all people who resolve incidents complete the Incident Record ("close the ticket") in the same way.

Team: A team is a more formal type of group consisting of people who work together to achieve a common objective, but not necessarily within the same organizational structure. Team members may be co-located, or work in multiple different locations and operate virtually. Teams are useful for collaboration, or for dealing with a situation of a temporary or transitional nature. Examples of teams include project teams, application development teams (often consisting of people from several different business units) and Incident or Problem resolution teams

Department: Departments are formal organizational structures which exist to perform a specific set of defined activities on an ongoing basis. Departments have a hierarchical reporting structure with managers who are usually responsible for the execution of the activities, and also for day-to-day management of the staff in the department.

Division: A division refers to a number of departments that have been grouped together, often by geography or product line. A division is normally self contained and is able to plan and execute all activities in a supply chain.



Organizing IT Service Management – RACI Model

For Service Management to be successful it is essential to define the roles and responsibilities within the organization for various activities.

When managing a service or a process it imperative that all the roles are clearly defined. A trademark of high performing organizations is the ability to make the right decisions quickly and execute them effectively. Whether the decision involves a strategic choice or a critical operation, being clear on who has input, who decides, and who takes action will enable the company to move forward rapidly.

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 that are kept up-to-date on progress

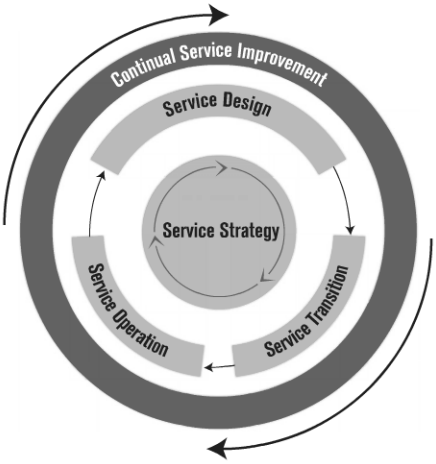
The RACI chart in the above table shows the structure and power of RACI modeling with an example of process activities down the left-hand side including the actions that must be taken and decisions that must be made. Across the top, the chart lists the functional roles responsible for carrying out the initiative or playing a part in decision-making.

Note: Only one "A" per row is permitted and at least one "R" is needed per row (this ensures that someone actually performs the work).

Whether RACI or some other tool or model is used, the important point is to not just leave the assignment of responsibilities to chance or leave it until the last minute to decide. Conflicts can be avoided and decisions can be made quickly if the roles are determined in advance.

Service Lifecycle Approach

- The structure of the Service Lifecycle is an organizing framework



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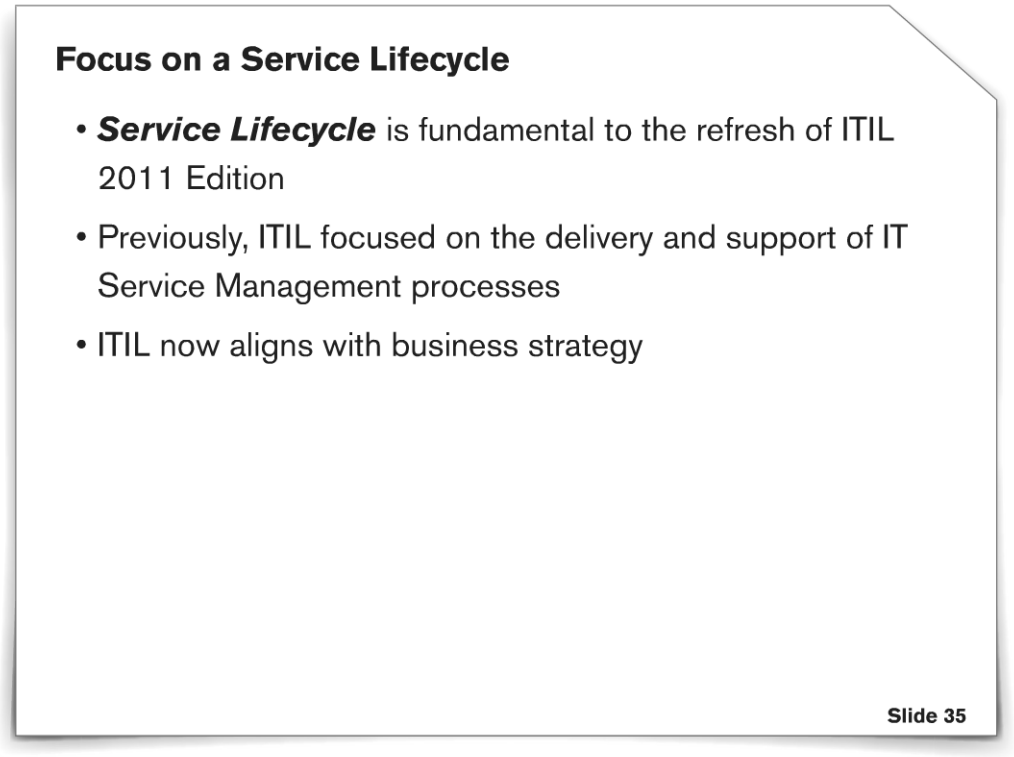
Service Lifecycle Approach

The structure of the Service Lifecycle is an organizing framework. ***Processes*** describe how things change, whereas ***structure*** describes how they are connected. Structure determines behavior. Without structure, it is difficult to learn from experience or use the past to educate for the future.

Specialization and coordination are necessary in the Lifecycle approach. Feedback and control between the functions and processes within and across the elements of the Lifecycle make this possible. The dominant pattern in the Lifecycle is the sequential progress starting from Service Strategy through Service Design, to Service Transition, to Service Operation and back to Service Strategy through Continual Service Improvement. That, however, is not the only pattern of action. Every element of the Lifecycle provides points for feedback and control.

The combination of multiple perspectives allows greater flexibility and control across environments and situations. The Lifecycle approach mimics the reality of most organizations where effective management requires the use of multiple control perspectives. Those responsible for the design, development and improvement of processes for Service Management may adopt a process-based control perspective.

For those responsible for managing agreements, contracts and services may be better served by a Lifecycle-based control perspective with distinct phases. Both these control perspectives benefit from systems thinking. Each control perspective can reveal patterns that may not be apparent from the other.



Focus on a Service Lifecycle

The concept of the ***Service Lifecycle*** is fundamental to the refresh of ITIL 2011 Edition. Previously, much of the focus of ITIL was on the ***processes*** required to design, deliver and support services for customers.

As a result of this previous focus on processes, version 2 of the ITIL Framework provided best practices for ITSM and addressed the ***how*** questions. These included:

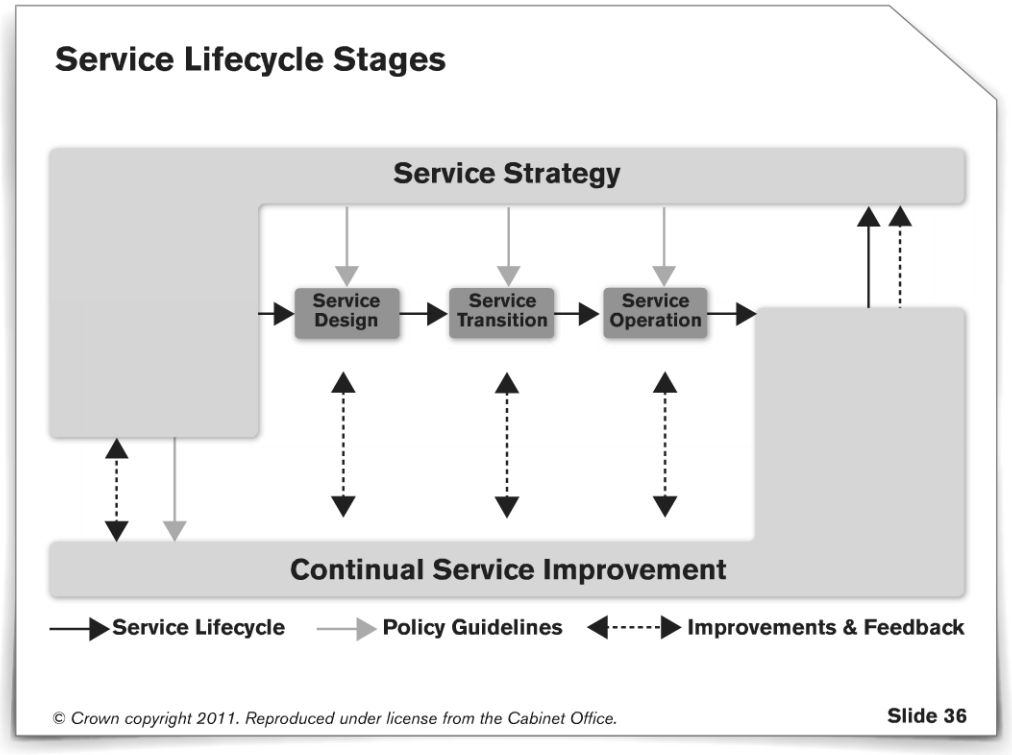
- How should we design for availability, capacity and continuity of services?
- How can we respond to and manage Incidents, Problems and Known Errors?

As 2011 Edition now maintains an end-to-end view covering the entire lifecycle of a service, ITIL now focuses on the ***why*** questions as well. These include:

- Why does a customer need this service?
- Why should the customer purchase services from us?
- Why should we provide (x) levels of availability, capacity and continuity?

By first asking the ***why*** questions it enables a service provider to provide overall ***strategic objectives*** for the IT organization, which will then be used to direct ***how*** services are ***designed***, ***transitioned***, ***supported and improved*** in order to deliver maximum value to customers and stakeholders.

The ultimate success of Service Management is indicated by the strength of the relationship between customers and service providers. The five phases of the Service Lifecycle provide the necessary guidance to achieve this success. Together they provide a body of knowledge and set of good practices for successful Service Management.



Service Lifecycle Stages

The Service Lifecycle may be viewed as a phased lifecycle, where phases are:

- Defining strategy for the IT Service Management (SS)
- Design the services to support the strategy (SD)
- Implement the services in order to meet the designed requirements (ST)
- Support the services managing the operational activities (SO)
- The interaction between phases are managed through the Continual Service Improvement (CSI)approach, which is responsible for measuring and improving service and process maturity levels

After a completion of all phases, a service period is concluded and another service period begins.

At the beginning of the Service Strategy, the IT Service Provider begins to set strategy by managing the business requirements (Demand Management), and formulating a strategy to deliver service (Service Strategy), validating the sustainable costs (Financial Management) and introducing the service in the Service Portfolio (Service Portfolio Management). In this phase IT is required to use resources (costs) in consultancy projects at a strategic level. At this stage IT does not provide value to the business.

When a strategy is complete, IT begins to design the service (Service Design phase) by setting the service level requirements for the service (Service Level Management), analyzing the required

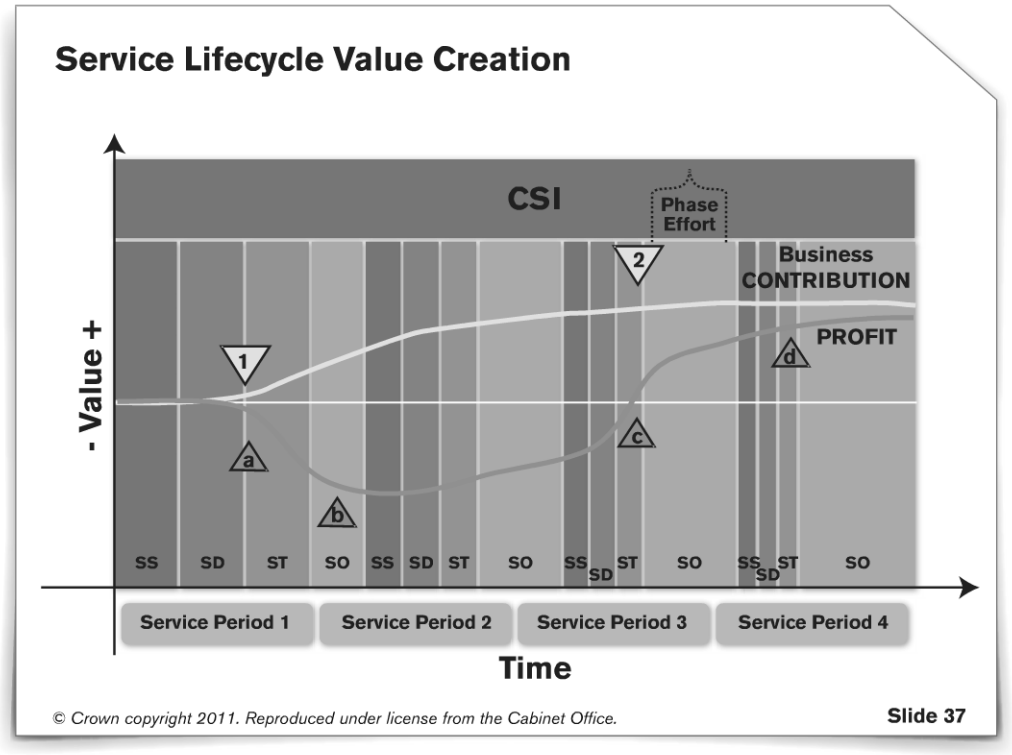
availability and capacity (Availability and Capacity Management), selecting the suppliers that will support service (Supplier Management), defining the adequate service continuity arrangements (Service Continuity Management), validating and designing the security requirements (Information Security Management) and introducing the service in the Service (Service Catalog Management).

In the third phase (Service Transition phase), the service is ready to be implemented in the live environment. The Service Provider defines the transition plan (Transition Planning and Support) and assesses, approves, implements and plans the change (Change Management Process). After the change implementation, the service is tested (Service Test and Validation) in a "pre-live" environment. If the test is successful, the service is documented (Knowledge Management) and its components are introduced in the Asset and Configuration databases (Asset and Configuration Management). The final activity is to release the service into the live environment (Release and Deployment Management) and after the "go-live," a post implementation review will be made (Evaluation Management).

In the fourth phase (Service Operation phase), the service begns to be managed and supported in order to reach the agreed upon service level by managing the users' support requests (Service Desk and Request Fulfilment), monitoring the service event and alerts (Event Management), restoring the service after disruptions (Incident Management), avoiding the incident causes and reduce the incident duration (Problem Management), managing in secure manner the utilization of service (Access Management), maintaining the software (Application Management Function), executing the day-by-day activities (Operation Management) and supporting the infrastructure (Technical Management).

The Continual Service Improvement phase is involved during all phases of the Service Lifecycle. It is responsible to measure the service and the processes (Service Measurement), and to document the results (Service Reporting) in order to improve the service quality and the processes maturity (Service Improvement).

These improvements will be implemented in the next period of Service Lifecycle, starting again with Service Strategy. And afterwards with Service Design and Service Transition, the Service Operation phase continues to manage operations during all service periods.



Service Lifecycle Value Creation

The Service Lifecycle is a comprehensive approach to Service Management–seeking to understand its structure, the interconnections between all its components, and how changes in any area will affect the whole system and its constituent parts over time. It is an organizing framework designed for sustainable performance.

The Service Lifecycle may be viewed in a graphical manner, where it is easy to demonstrate the value provided, both in terms of "business contribution" and "profit." The **business contribution** is the ability of an IT organization to support a business process, managing the IT service at the requested performance. The **profit** is the ability to manage cost of service in relation to the business revenue.

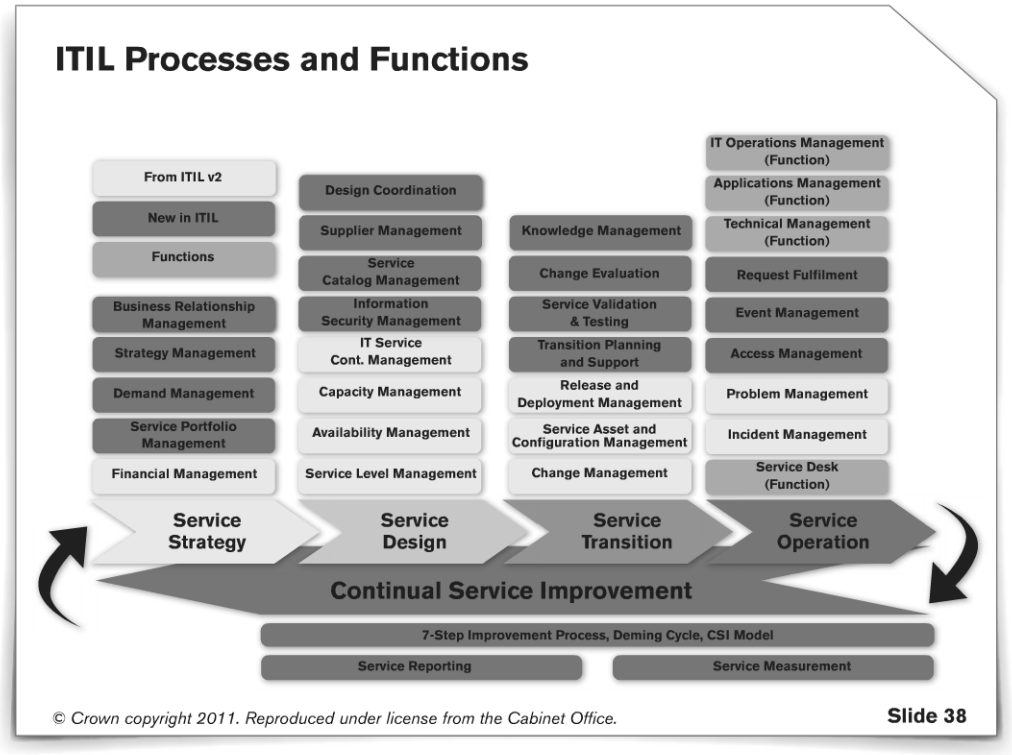
With the evolution of the service periods, the "effort" for each phase will be reduced concerning the strategic and tactical phases (Service Strategy, Service Design and Service Transition), and the Service Operation phase is optimized and takes the primary role. At each cycle of the service (service period) the service will be improved with a result of increasing of the value of business and maximizing profits.

In terms of business contribution (as in contribution to the business), the IT service becomes valuable when the Service Transition begins (see triangle "1" on the diagram) during the first service period.

In terms of profits, major investments are required with this substantial service implementation project (Service Transition)–(see triangle "a"). When the transition is complete and the operations

start, the service begins to support business process and the new revenues balance the costs (see triangle “b”). After some periods of service optimization the “Profit and Loss” begin to be profitable and reach the “break-even point” (see triangle “c”).

After a number of periods (depending of the complexity of the service and the agility of the business), the business contribution (see triangle “2”) and the profit (see triangle “d”) will be stabilized, which means that the IT organization has reached the appropriate level of maturity to manage processes and that the service has reached the optimal performance level to meet the service level requirements.



ITIL Processes and Functions

The graphic presented above gives a brief overview of the processes and functions contained within ITIL. During this course, all of these will be discussed in further detail. Within ITIL, the processes are distributed over the five books. Each book describes the processes in detail, including the goals, objectives, activities, roles, etc. If you work in an IT environment, you may be familiar with some of these processes, or may know them under a different name.

Not all processes fit completely in the lifecycle stage that the book describes, some processes cover the whole lifecycle. This course is set up to discuss each lifecycle and the processes described in each book.

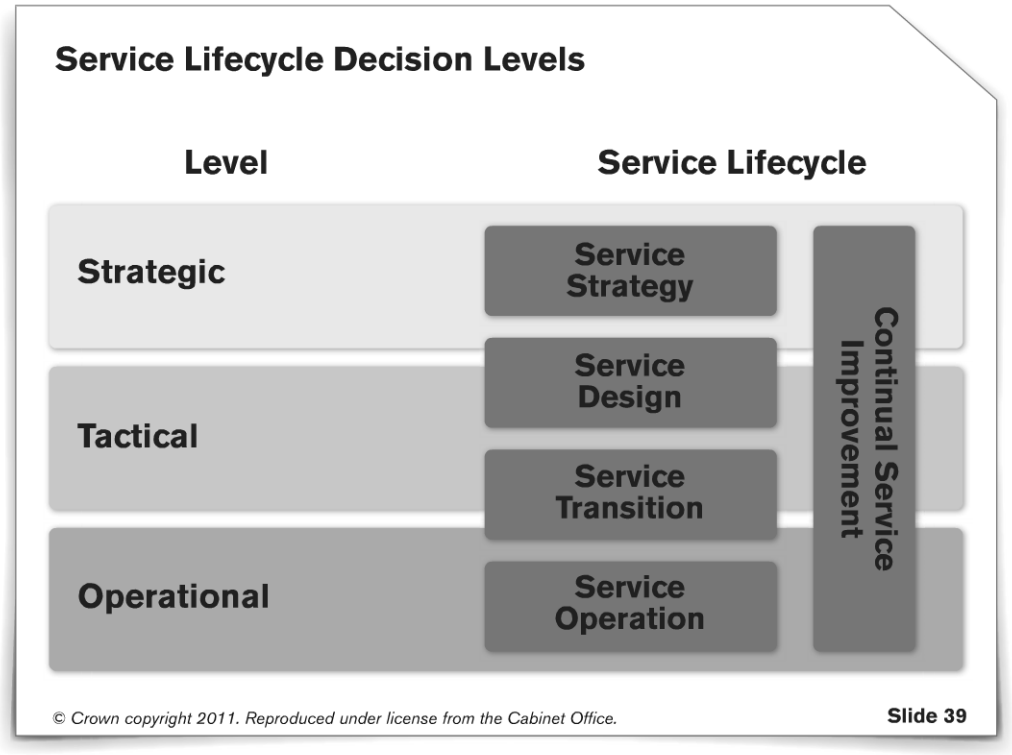
Service Strategy: Envisioning and conceptualizing the set of services that help achieve business goals

Service Design: Designing the services with utility and warranty objectives in mind

Service Transition: Moving services into the live production environment

Service Operation: Managing services on an ongoing basis to ensure their utility and warranty objectives are achieved

Continual Service Improvement: Evaluating services and identifying ways to improve their utility and warranty in support of business objectives



Service Lifecycle Decision Levels

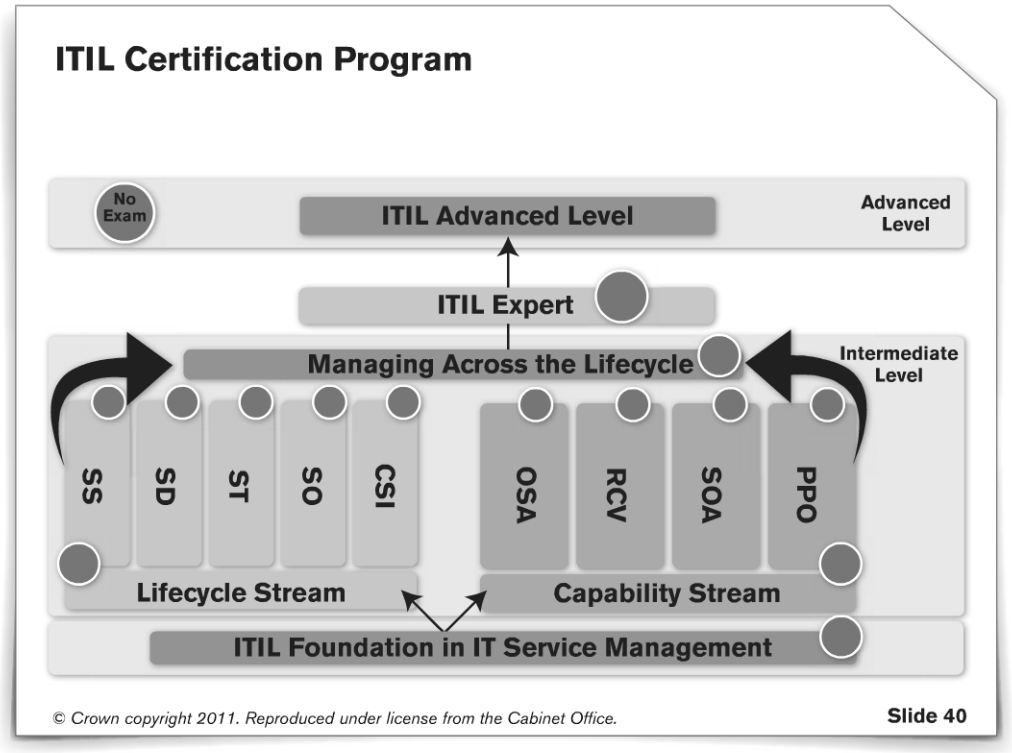
In reference to decision-making in an organization, three levels are identified:

- Strategic: Decisions for the long term, which are usually made to accomplish certain goals and objectives. A wrong decision at this level often has major consequences or very high costs.
- Tactical: Decisions for the medium term, often to be proactive and as an intermediate level between strategic and operational decisions
- Operational: Decisions for the short term, often reactivewhich affect the day-to-day business operation

Not only are these levels useful to identify decision-making, it also helps in identifying lines of communication. The business and IT communicate with each other on all levels. Within ITIL, the Service Desk (discussed in the Service Operation module) is the single point of contact for the IT organization for all *operational* issues and communicates with the users.

At a tactical level, the business (the customer) most likely talks to the Service Level Manager (discussed in Service Design).

The strategic level communication is usually the responsibility of higher IT management, the CIO, and senior management within the business, depending upon the size and structure of the organization.



ITIL Certification Program

Different levels of certification are available for ITIL. The Office of Government Commerce (OGC) is the official copyright owner of ITIL and has appointed the APM Group to manage the certification paths. APM Group accredits exam institutes that currently are EXIN, ISEB and APM Group. These exam institutes all offer the exams as shown in the program.

By following courses in the ITIL certification program, one can acquire ITIL credits (after passing the exam), which eventually can lead to the ITIL Expert certification. A total of 22 credits is required to achieve the *ITIL Expert certification*.

At the bottom, the ITIL Foundation course and corresponding examination provide a basic overview of the concepts of ITIL. Targeted at anyone who needs a basic understanding of ITIL and as a starting point for those who wish to progress in the area of IT Service Management, the Foundation exam is worth two ITIL credits.

From Foundation, there are two different streams from which to choose:

The **ITIL Intermediate Lifecycle Stream**–consisting of five modules, each with a separate exam–focuses on one of the five core books. This lifecycle stream is meant for generic managers and those who want a more thorough understanding of a specific stage in the lifecycle. These modules are worth three credits each and are:

- Service Strategy
- Service Design
- Service Transition
- Service Operation
- Continual Service Improvement

The **ITIL Intermediate Capability Stream**–consisting of four modules, each with a separate exam–focuses on a group of closely related processes. This stream is meant for those who require more practical experience in implementing or running and managing these processes. The modules are worth four credits each, and the available modules are:

- Operational Support and Analysis
- Release Control and Validation
- Service Offerings and Agreements
- Planning Protection and Optimization

The **Managing Across the Lifecycle** course integrates all knowledge on ITIL acquired in either the lifecycle courses or the capability modules. This is also concluded by an exam which is worth five credits. These credits are required within the 22 credits to acquire the ITIL Expert.

After reaching the ITIL Expert, professionals can work towards the ITIL Advanced level qualification. This level of the qualification will assess an individual's ability to apply and analyze the ITIL concepts in new areas. This higher level certification is currently under development.

Foundation Exam

- 40 multiple choice questions
- 65% score to pass (26 correct to pass)
- 1 hour

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Foundation Exam

This training will be concluded with an ITIL Foundation exam. The examination includes 40 multiple choice questions, with a 65% needed to pass.

To prepare for your exam, sample exams are provided that will be discussed in class. Your trainer will provide further information on when to take the sample exam.

If the exam is in a different language than your native tongue, extra time may be allotted and use of a dictionary may be permitted. Please ask your instructor or exam proctor for more information, as restrictions apply.

Summary

Service Management as a practice

- Business and IT
- Definition of service
- Definition of Service Management
- The IT organization
- Process model
- Characteristics of processes

ITIL

- History
- Service Lifecycle
- Structure, scope and components of the ITIL Library
- Certification paths