

ITIL^{®4} training course
FOUNDATION

The diagram illustrates the ITIL 4 Foundation model, divided into two main sections: the Service Value System and the Delivery System.

Service Value System: This section shows the relationship between external factors and internal components. It includes a central hexagon labeled "Products and services" with "Value" at its core, surrounded by four quadrants representing different dimensions:

- 1. Organizations and people:** Associated with Political factors.
- 2. Information and technology:** Associated with Economic factors.
- 3. Partners and suppliers:** Associated with Social factors.
- 4. Value streams and processes:** Associated with Technological factors.

These quadrants are interconnected by arrows labeled "Environmental factors", "Legal factors", and "Factors" (indicated by a cloud icon).

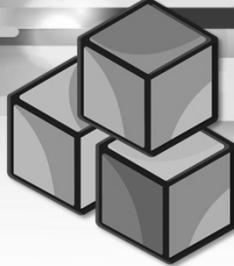
Delivery System: This section shows the flow of value creation. It consists of two main hexagons connected by an arrow labeled "Value".

- Top Hexagon (Plan & Design):** Contains "1. Guiding principles", "2. Governance", "3. Service value chain", "4. Practices", and "5. Continual improvement". It receives input from "Opportunity and demand" and leads to "Value".
- Bottom Hexagon (Deliver & Support):** Contains "Engage", "Obtain/build", "Deliver & support", and "Improve". It receives input from "Demand" and leads to "Value".

Day 01

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Course plan



- Introduction
- What is ITIL?
- Basis for ITIL V4



- SVS
- Value
- SVC



- ITIL V4 Practices

Daily plan



KSC

Agenda



- **Introduction**
- **ITIL overview**
- **ITIL® Certificate**
- **ITIL® 4 compared to ITIL® 3**
- **Service relationship model**
- **The guiding principals**
- **The dimensions**

Introduction

Name

Role

Expectations

What do you know about:



改善 ?

DevOps

Service management origins:

Service Management is a professional practice that has **origins** in traditional service industries, such as banking, airlines, and hotels.

In recent years, IT organizations have embraced a service-oriented approach to managing IT processes.

Service Management is a set of specialized organizational capabilities that can provide value to customers in the form of services.



Service management:

Service Management is a set of specialized organizational capabilities that can provide value to customers in the form of services.

In Service Management, the **provider's resources** are the organizational capabilities used to manage services over a **lifecycle**.

These resources can be specialized in strategy, design, transition, operation, and continual improvement.

The challenges of Service Management are also a feature of it. This is because a service provider's organizational capabilities are often shaped by the challenges they are expected to overcome.



Challenges to Service Management:

Some of the challenges to Service Management can be:

- the subjective nature of the output
- the demand is tied to customers' assets
- the high level of contact with consumers
- the changing nature of demand





Governance

A First Definition for Governance

Management

Routine

Governance

Steering



Governance Is Like Piloting
Airplane pilots don't need to be engineers
Each department is a part of the engine
Managers run the engine
Chief Officers steer the corporation



Project management

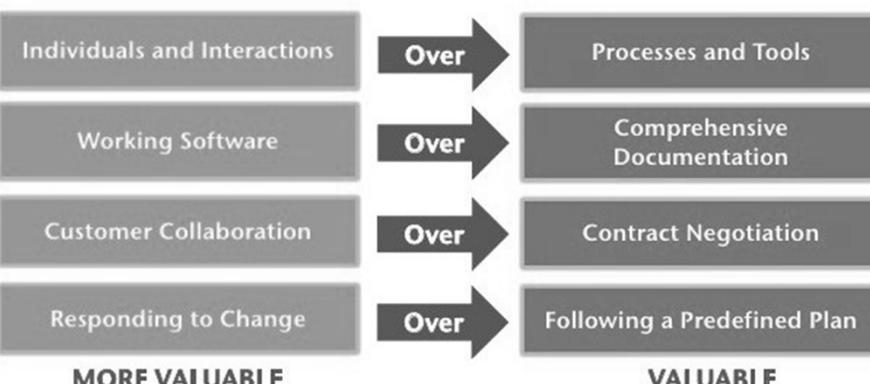
Agile

Agile
1/13

The manifesto for Agile Software Development was written in 2001 by a group of software developers that were dissatisfied with the current state of software development.

They felt the increasing levels of bureaucracy and process were being layered onto projects in the hopes of more efficient results. - But often the outcome was the opposite.

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:



THAT IS, WHILE THERE IS VALUE IN THE ITEMS ON THE **RIGHT**, WE VALUE THE ITEMS ON THE **LEFT** MORE.

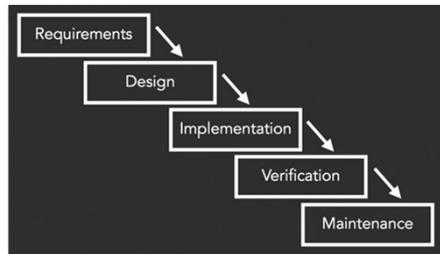
Agile manifesto

1	Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.	7	Working software is the primary measure of progress.	Agile 3/13
2	Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.	8	Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.	
3	Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.	9	Continuous attention to technical excellence and good design enhances agility.	
4	Business people and developers must work together daily throughout the project.	10	Simplicity—the art of maximizing the amount of work not done—is essential.	
5	Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.	11	The best architectures, requirements, and designs emerge from self-organizing teams.	
6	The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.	12	At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.	

Agile manifesto

	CUSTOMER SATISFACTION IS HIGHEST PRIORITY		CHANGING REQUIREMENTS ARE ALWAYS WELCOMED	Agile 6/13
	FREQUENT DELIVERY OF WORKING SOFTWARE		WORKING TOGETHER ON DAILY BASIS	
	TRUST & SUPPORT THE TEAM TO GET THE JOB DONE. GIVE PROPER ENVIRONMENT		FACE TO FACE CONVERSATION BETWEEN THE TEAM	
			WORKING SOFTWARE IS THE PRIMARY MEASURE OF PROGRESS	
			CONTINUOUS ATTENTION TO TECHNICAL EXCELLENCE AND GOOD DESIGN	
			THE BEST RESULTS COME FROM SELF-ORGANIZING TEAMS	
			Maintain Simplicity	
			REFLECT AND ADJUST REGULARLY AND ACCORDINGLY	

Waterfall

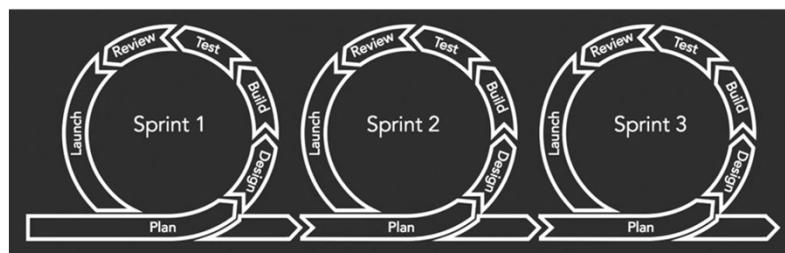


Agile
8/13

The previous approach to software development is called Waterfall and that's because it moves software down from stage to stage.

First you get all the requirements completely done and documented,
then you throw them over the wall to development,
who codes them.

Then they throw it over the wall to QA who tests it
and they then throw it over the wall to whoever
does release engineering and then if it's a service it
gets thrown over another wall to operations.



Agile
9/13

In Agile development the process is deliberately more iterative.

Instead of trying to complete each phase up front it stresses flexible collaboration between both workers and customers around frequent inner room deliverables of working software.

This can quickly generate solutions that better



Lean

Lean

Lean
1/7

Lean, a systematic process for eliminating waste was originally devised in the manufacturing world by W. Edwards Deming and Taiichi Ohno's Toyota production system.

It revolutionized the Japanese industrial economy after World War Two.

Seven Principles of Lean Software

- ① Eliminate waste
- ② Amplify learning
- ③ Decide as late as possible
- ④ Decide as fast as possible

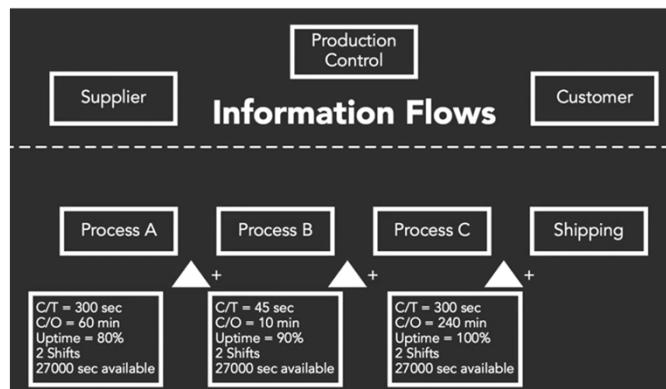
Lean recognizes three major types of waste, and they all have Japanese names.

Muda (waste), Muri (overburden) and Mura (unevenness).

Muda is the major form of waste and it comes in two types. Type one, which is technically waste, but necessary for some reason, like compliance. And type two, which is just plain wasteful.

Build - Measure - Learn

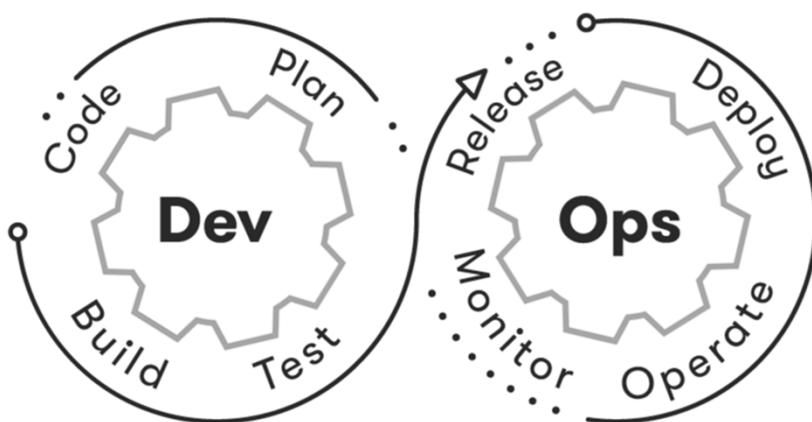
- ① Build the minimum viable product
- ② Measure the outcome and internal metrics
- ③ Learn about your problem and your solution
- ④ Repeat. Go deep where it's needed



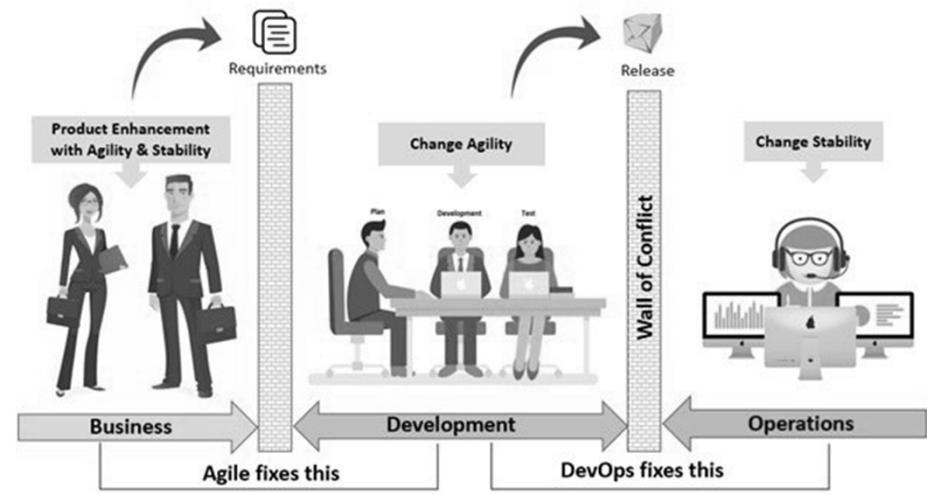
Lean, a systematic process for eliminating waste was originally devised in the manufacturing world by W. Edwards Deming and Taiichi Ohno's Toyota production system.

DevOps

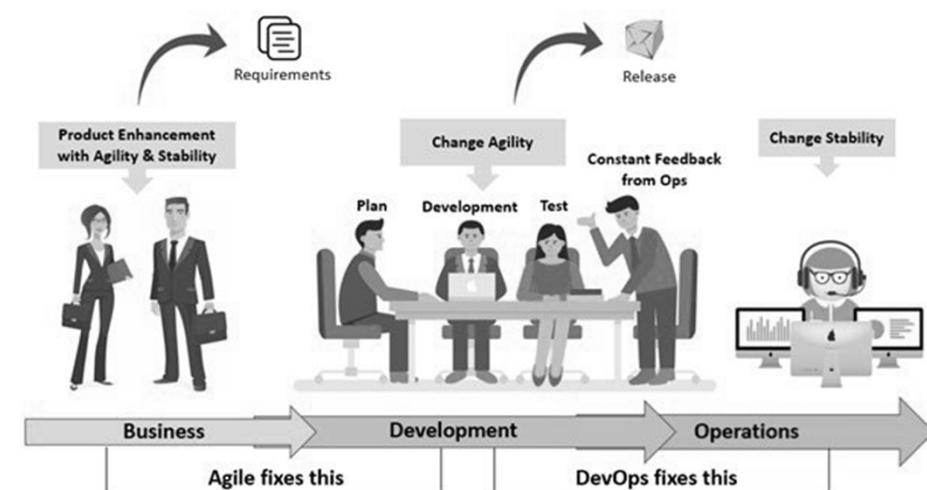
What is DevOps?



Without DevOps

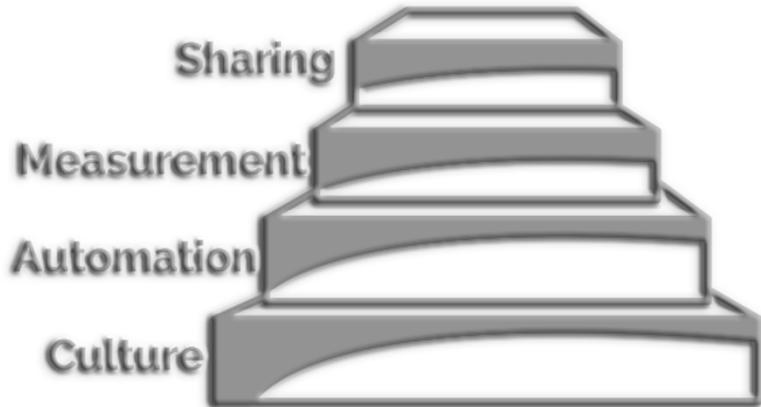


With DevOps



DevOps enables a **cultural change** to remove the barrier between development and operations, working together for common set of objectives.

DevOps core values: CAMS



ITIL® 4 Foundation: Core Concepts

INTRODUCING ITIL® 4: WHAT IT IS AND WHY YOU
SHOULD KNOW IT

ITIL® 4 Foundation: Core Concepts

INTRODUCING ITIL® 4: WHAT IT IS AND WHY YOU SHOULD KNOW IT

What You'll Learn



Background and nature of the framework

What is the Service Value System

Basic definitions of terms used throughout the framework

Key concepts of creating value

What is a Service relationship

Background and Nature of the ITIL® 4 Framework

Every organization is a service organization

Almost all services today are IT enabled

Technology is advancing faster than ever before

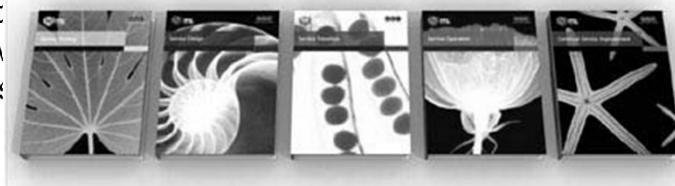
ITIL® 4 gives organizations a comprehensive framework for ITSM

ITIL® overview

More and more organizations are becoming **dependent on IT** – requiring consistent and high quality IT services.

The IT Infrastructure Library (ITIL®) is a set of guidelines and best practices outlining how IT Service Management (ITSM) can be implemented. It provides documentation in the form of five books, each covering a different aspect of ITSM

ITIL is intended to help organizations manage their IT service delivery processes in a more efficient and effective way.



Historical perspective ITIL:

- During the 1980s the practice of service management grew, so too did the dependency of the business → **'IT help desk' emerged.**
- The UK government, fuelled by a need for finding efficiencies, set out to **document** how the best and most successful organizations approached service management.
- By the late 1980s and early 1990s, they had produced a series of books documenting an approach to the IT service management needed to support business users → **the IT Infrastructure Library**.
- The original Library grew to over **40 books**, and started a chain reaction of interest in the UK IT service community.
- Mid 1990s, until 2004 → ITIL's next revision producing **ITIL V2**
- From 2004 till 2008 → the second major refresh initiative of ITIL coming up with **ITIL V3**.
- 2011 → Revised version for ITIL V3
- 2011 → Revised version for ITIL V3

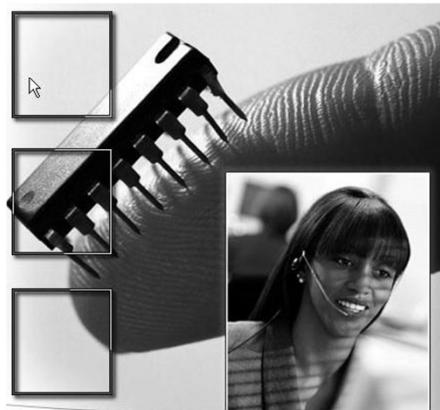
ITSM and ITIL:

ITSM involves **controlling** the methods and strategies associated with managing any IT service provided by an organization, such as PC installation, delivery, and maintenance. ITSM **enables** organizations to provide reliable, high-quality IT services.

Since its development in the late 1980s, ITIL® has become one of the leading frameworks for ITSM globally.

The reasons for this include that

- it is nonproprietary
- it is nonprescriptive
- it provides best practices
- it provides good practices



Nonproprietary:

One of the main reasons for ITIL®'s success is that it is **nonproprietary** – it is not owned by any organization and can be used by anyone.

ITIL® was developed and is managed by the Office of Government Commerce (OGC), an independent office of the British Treasury.

It is a generic framework that is not based on any specific operating system, technology, or industry.



Nonprescriptive:

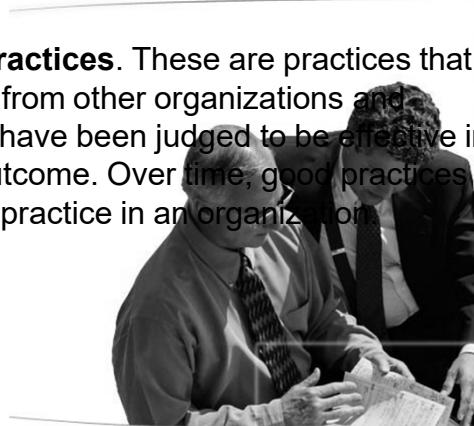
A second reason for ITIL®'s success is that it is **nonprescriptive** – the framework is applicable in all types of organizations of any size. The best practices ITIL® prescribes are equally applicable in the public and private sectors.



Best and good practices:

ITIL **provides best practices** for ITSM by outlining the practices that leading IT service providers, who are considered the best in their fields, follow. This means that your organization benefits from the experience of industry leaders.

It also **provides good practices**. These are practices that have been adapted from other organizations and environments, and which have been judged to be effective in achieving a particular outcome. Over time, good practices become common practice in an organization.



Question

Why is ITIL® so successful?

1. It's not owned by any one organization
2. It contains a framework that is applicable to any organization
3. It provides best practices
4. It is very specifically focused on a single area of technology
5. It provides a strict methodology for solving business problems
6. It provides an organization with good practices

Organizations:

OGC works in conjunction with additional organizations to manage and provide ITIL®. These business partners include:

the Stationery Office (TSO) TSO is the largest publishing house in the UK and provides publishing solutions to the public and private sectors. TSO is the official publisher for the OGC.

The APM group (APMG) **APMG** is an accreditation, certification, and qualification organization. OGC appointed APMG as its official accreditor.



Examination Institute for Information Science (EXIN) **EXIN** is a global, independent IT examination provider. Based in the Netherlands, EXIN develops and organizes official ITIL® examinations for all ITIL® qualifications.

Benefits of applying ITIL® guidelines:

ITIL® provides a globally recognized framework for the development of good practices in ITSM. Applying ITIL® is beneficial in business environments where there are huge pressures to perform and improve performance, while at the same time managing the trade-offs that come with that.

The benefits of applying ITIL® guidelines in your organization include:

- establishing clear links between IT services and business strategies
- improving quality and speed of IT services
- improving customer relations



Adopting ITIL® best practices also helps close the gap between you and your **competitors**. As more organizations adopt ITIL® best practices, they become standard, which levels the playing field and improves the service quality baseline.



Not applying the framework can be detrimental to your organization and can put it at a disadvantage.

For example, a medium-sized IT organization decides to develop its own in-house ITSM guidelines, while its competitor, another medium-sized IT organization, adopts the ITIL® framework. Both companies bid for the same contract, which is awarded to the organization using the ITIL® framework.

The competitor wins the bid because the client recognizes the quality and standards that the organization using ITIL® best practices guidelines provides.

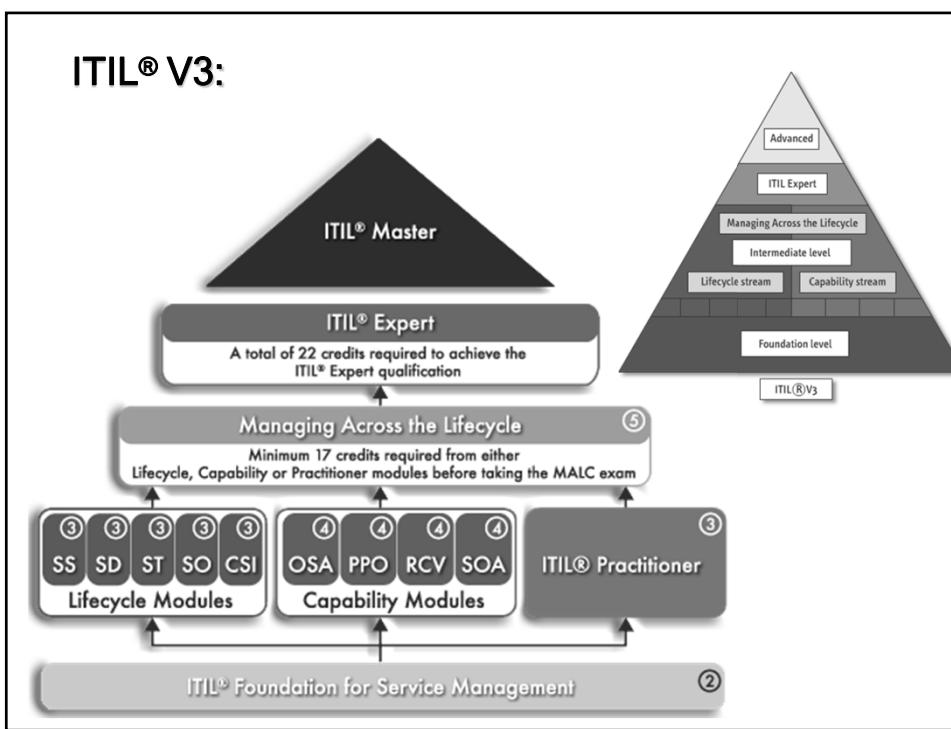


ITIL® Certificate

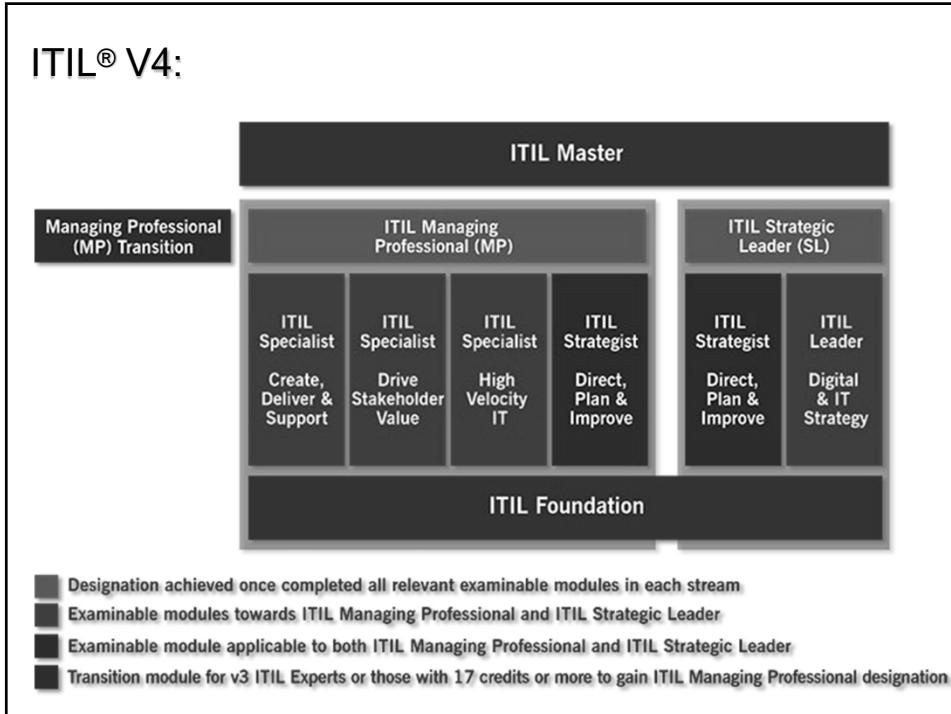
**The Old ITIL® V3/2011 Edition
Certification Scheme**

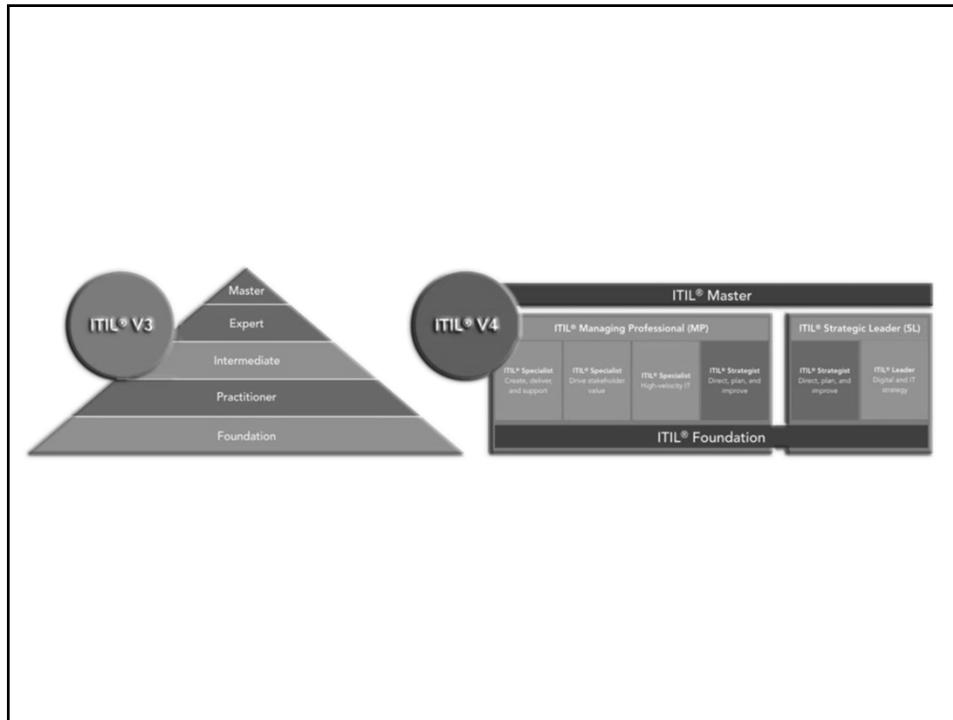
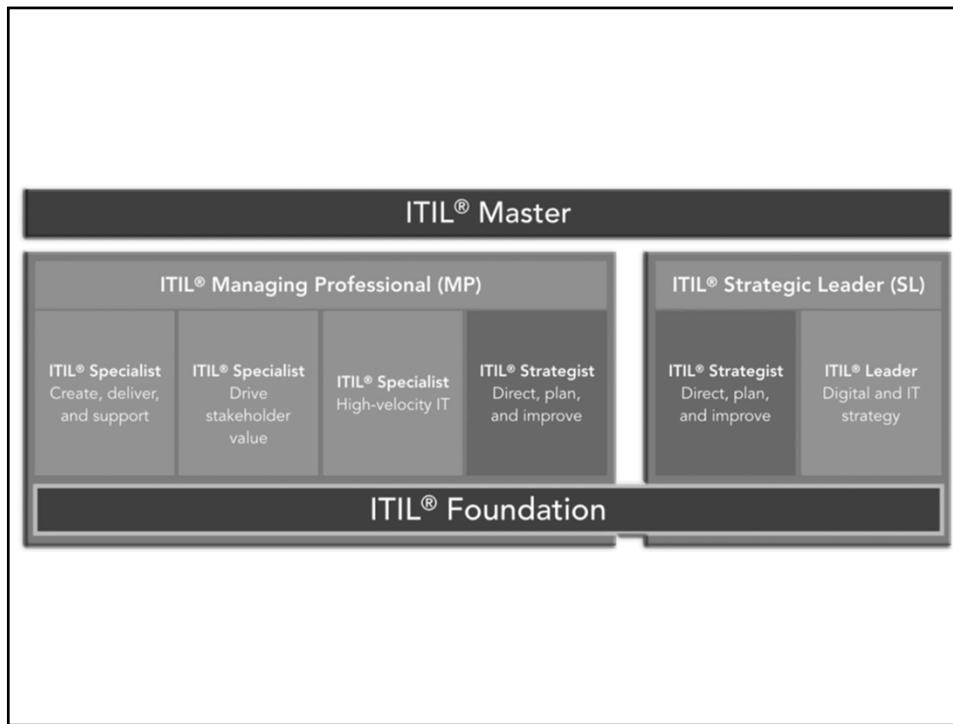


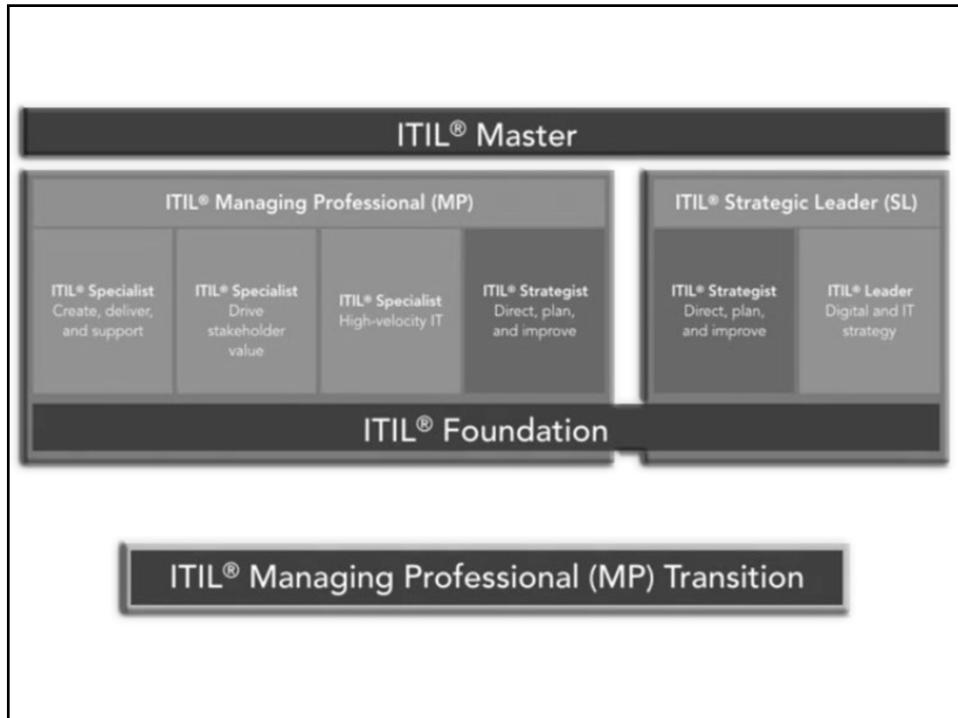
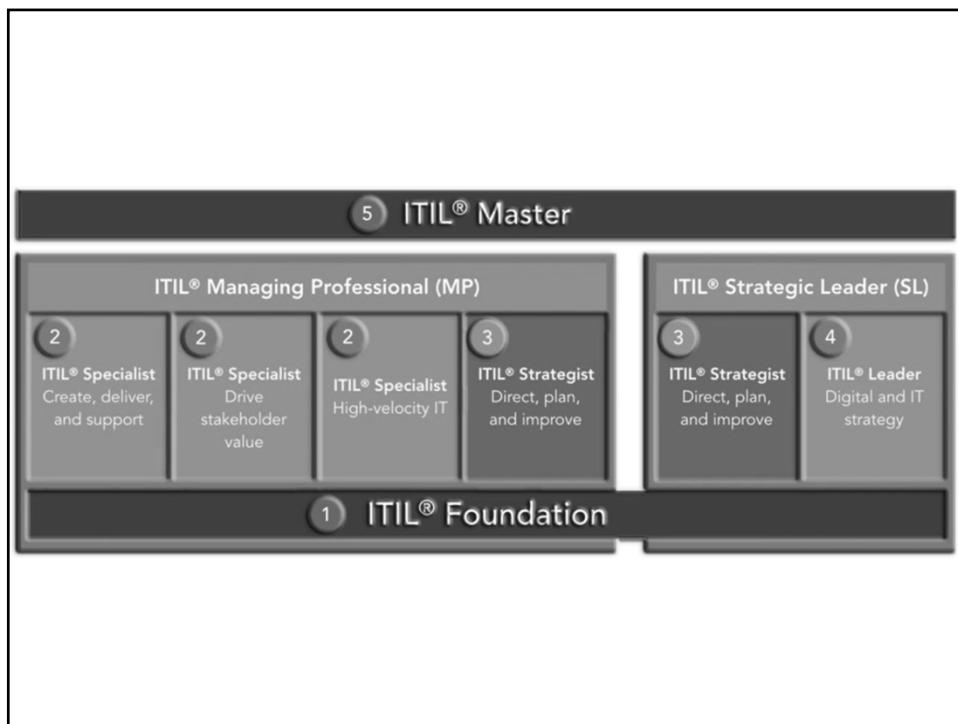
ITIL® V3:



ITIL® V4:







Why a New ITIL® 4?

- Businesses have changed, as has IT's role in businesses
- IT has changed (from traditional to a hybrid with cloud/mobile)
- New practices have emerged (including DevOps, lean, and agile)



ITIL® Differences

ITIL® 4
(2019)

vs

ITIL® v3
(2007)/
2011 edition
(2011)

Source Publication(s)

ITIL® 4 (2019)

- One 200-page ITIL® 4 Foundation book

ITIL® v3/2011 edition

- Subset of five books (1,788 pages)

Examination

ITIL® 4 (2019)

- 40 multiple choice questions
- One-hour exam
- 26/40 or 65% to pass

ITIL® v3/2011 edition

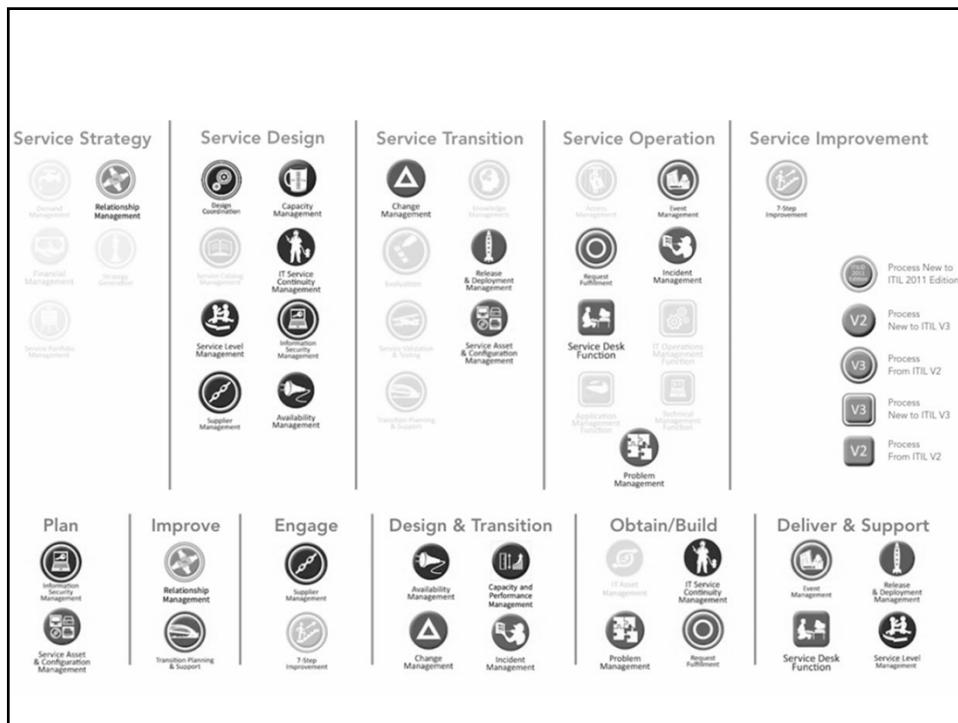
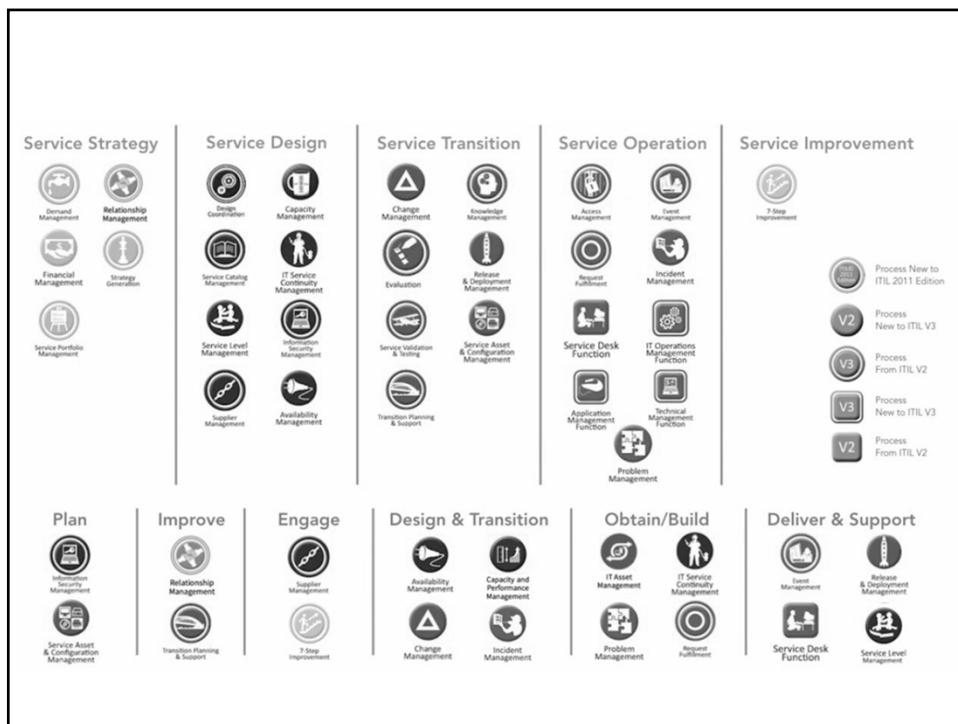
ITIL® 4	ITIL® V3/2011 Edition
Service management (four dimensions)	Services, service management, the four Ps
Service value chain	Service lifecycle
Service value system	<i>No real equivalent</i>
Terminology, seven guiding principles	Terminology, key principles, and models
34 ITIL® practices	26 processes, 4 functions
<i>No real equivalent</i>	Roles
Principle #7: Optimize and automate	Technology and architecture

ITIL® 4	ITIL® V3/2011 Edition
Services, service management (four dimensions) 1. Organizations and people 2. Information and technology 3. Partners and suppliers 4. Value streams and processes	Services, service management, the four Ps 1. People 2. Process 3. Products (technology) 4. Partners (suppliers)
Service value chain	Service lifecycle
Service value system	<i>No real equivalent</i>
Terminology, seven guiding principles	Terminology, key principles, and models
34 ITIL® practices	26 processes, 4 functions
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Principle #7: Optimize and automate	Technology and architecture

ITIL® 4	ITIL® V3/2011 Edition
Services, service management (four dimensions)	Services, service management, the four Ps
Service value chain	Service lifecycle
Service value system 1. Guiding principles 2. Governance 3. Service value chain 4. Practices 5. Continual improvement	<i>No real equivalent</i>
Terminology, seven guiding principles	Terminology, key principles, and models
34 ITIL® practices	26 processes, 4 functions
<i>No real equivalent</i>	Roles
Principle #7: Optimize and automate	Technology and architecture

Syllabus/Exam Specification

ITIL® 4	ITIL® V3/2011 Edition
19 key terms and 7 guiding principles	34 key terms, principles, and models

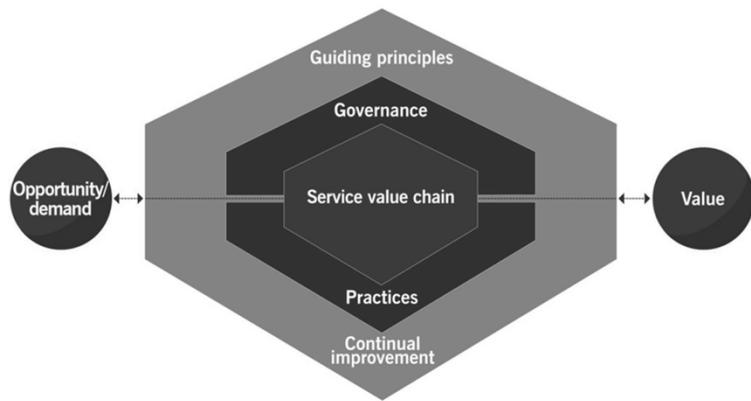


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Service value system	<i>No real equivalent</i>
Terminology, seven guiding principles	Terminology, key principles, and models
34 ITIL® practices	26 processes, 4 functions
<i>No real equivalent/first dimension of service management "organization and people"</i>	Roles 1. Service owner 2. Process owner 3. Process manager 4. Process practitioner
Principle #7: Optimize and automate.	Technology and architecture

ITIL® 4	ITIL® V3/2011 Edition
Service management (four dimensions)	Services, service management, the four Ps
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Principle #7: Optimize and automate.	Technology and architecture

What Is the Service Value System?

Service Value System: SVS



Laying the Groundwork: Service Management Basic Definitions

Service Management

A set of specialized organizational capabilities for enabling value for customers in the form of services.

Service

A means of enabling value co-creation by facilitating outcomes that customers want to achieve, without the customer having to manage specific costs and risk.

Service



Service Consumers



Customer: A person who defines the requirements for a service and takes responsibility for the outcomes of service consumption



User: A person who uses the service



Sponsor: A person who authorizes budget for service consumption

Service provider

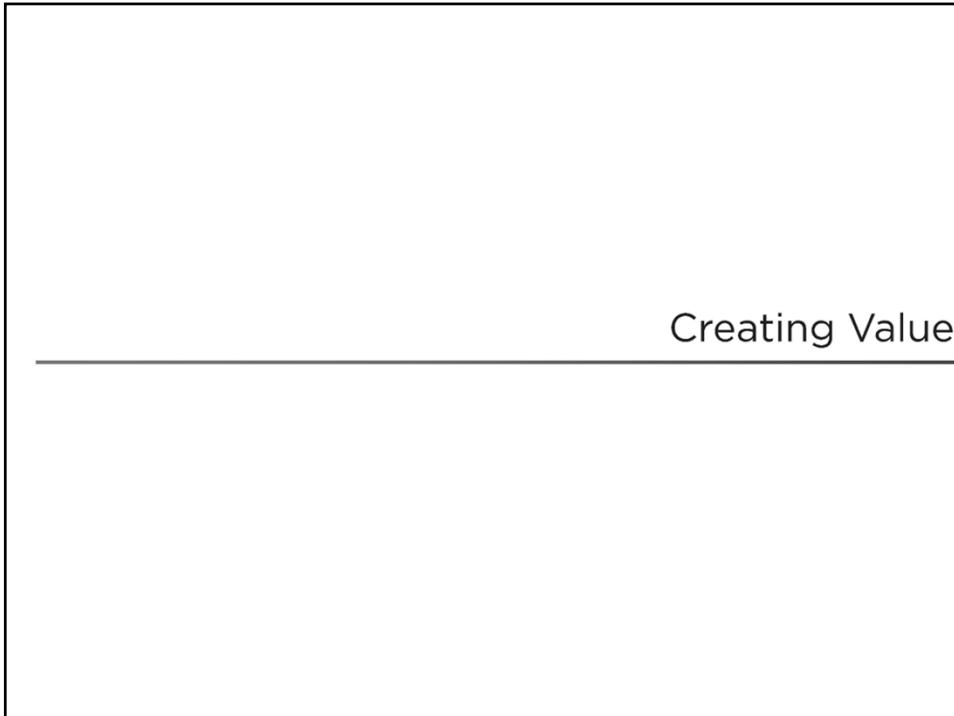
Service provider employees

Society and community

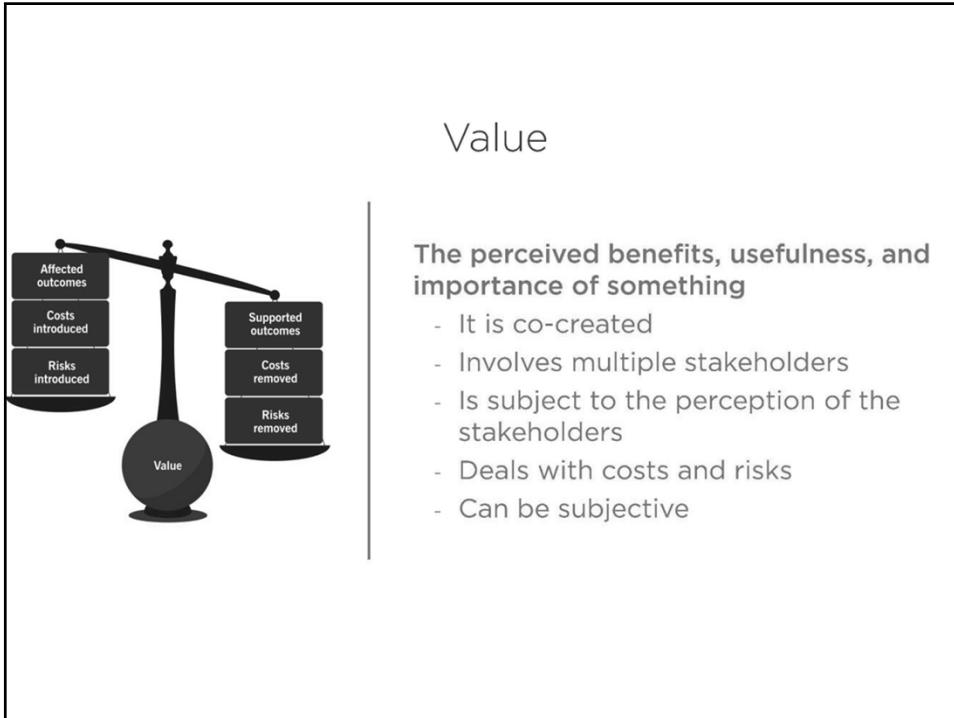
Charity organizations

Shareholders

Creating Value



Value





Costs

- Removed costs
- Imposed costs



Risks

- Removed risks
- Imposed risks

How services provide value?

Services are **only successful** if they provide value for a customer.

To add real value for customers, a service must have:

- **Utility** – be fit for purpose – and have
- **warranty** – be fit for use.

Together, utility and warranty help to assure customers that their requirements will be consistently fulfilled.

At the same time, a service **shouldn't provide more value** than a customer requires and is willing to pay for. This is not cost-effective and so reduces the value of the service.



Example for service utility and warranty:

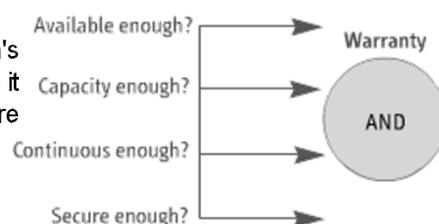
Say your organization creates software solutions for online banking.

To improve service **utility**, you set about increasing performance by training the developers in the latest technology.

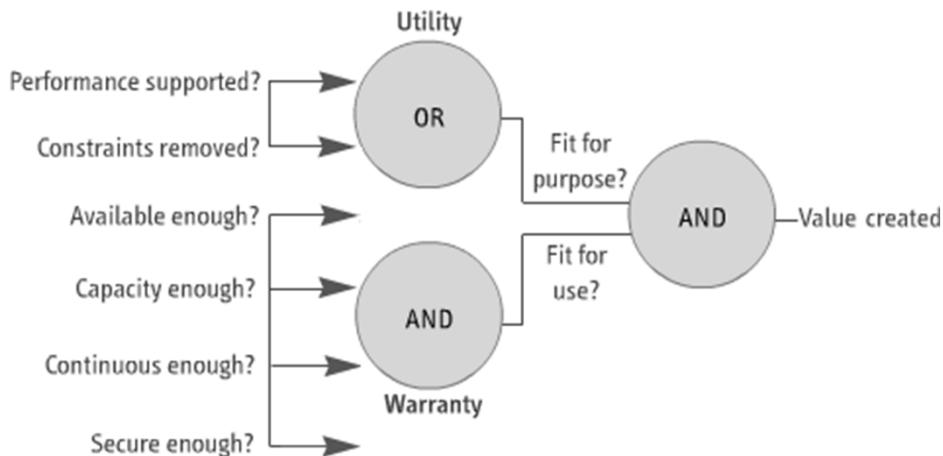
Service delivery has been constrained by use of outdated hardware. So by upgrading to the latest hardware, you remove that constraint on utility.

In terms of **warranty**, the organization's services are available when needed – it has a reputation for delivering software solutions on schedule.

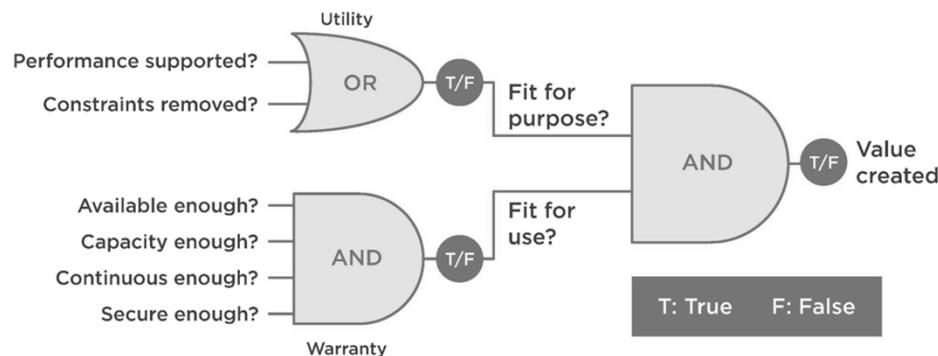
It provides service at the required capacity. If an online bank requires 24 hour support, it can offer this.

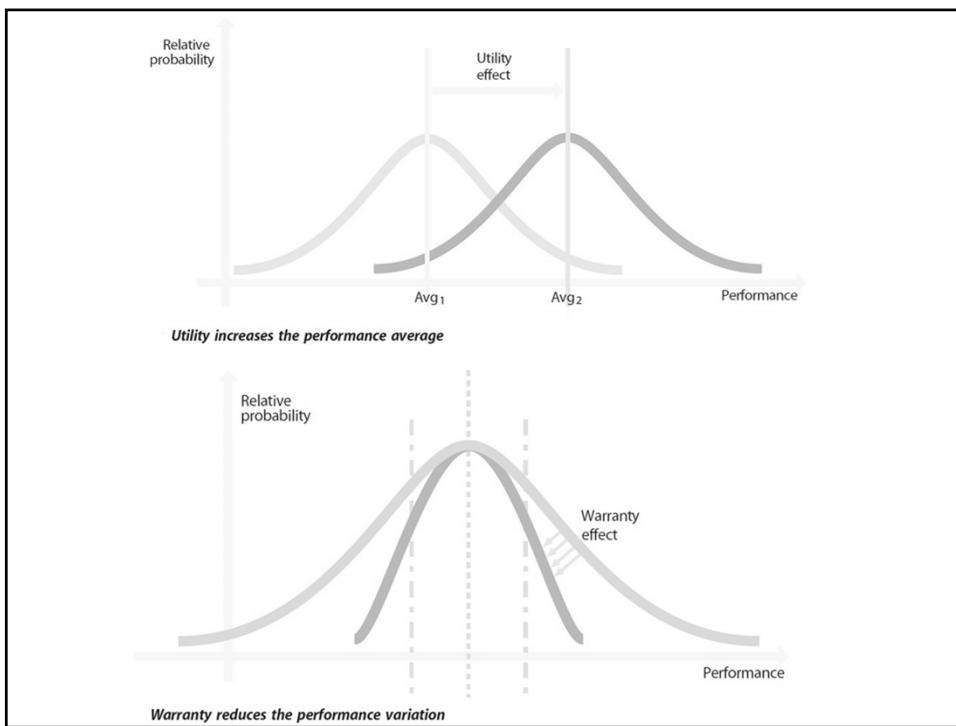


Example for service utility and warranty (cont.):



Utility and Warranty



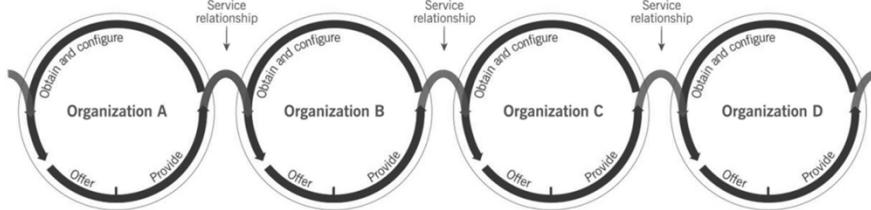


The Service Relationship Model

Service Relationship

A cooperation between a service provider and service consumer. Service relationships include service provision, service consumption, and service relationship management.

The Service Relationship Model



Basics of Service Relationships



Service provision



Service consumption



Service
Relationship
Management

Building the Backbone of the Framework: ITIL® 4 Guiding Principles

What You'll Learn



What are the guiding principles?

How do the principles relate to value creations?

Guiding Your Organization Forward: The ITIL® Guiding Principles

A guiding principle is a recommendation that guides an organization in all circumstances, regardless of changes in its goals, strategies, or structures. It's universal and enduring.

Encourages and supports organizations in continual improvement at all levels

Organizations should consider all principles, not just one or two

Not all principles might apply, but should be considered

The Guiding Principles

Focus on value

Start where you are

Progress iteratively with feedback

Collaborate and promote visibility

Think and work holistically

Keep it simple and practical

Optimize and automate

Relating the Principles with Value Co-creation

The Guiding Principles

Focus on value

Start where you are

Progress iteratively with feedback

Collaborate and promote visibility

Think and work holistically

Keep it simple and practical

Optimize and automate

The Guiding Principles

Focus on value

Start Where you are

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Collaborate and promote visibly

Think and work holistically

Keep it simple and practical

Optimize and automate

Focus on the Value



Understand and identify the service consumer

Understand the consumer's perspective of use

Map value to intended outcomes, which change over time

Understand the customer experience

The Guiding Principles



Focus on value



Start Where you are



Progress iteratively with feedback



Collaborate and promote visibly



Think and work holistically



Keep it simple and practical



Optimize and automate

Start Where You Are



Look at what exists

Determine if successful practices/services can be replicated

Apply risk management skills in decision making

Recognize that you might need to start fresh

The Guiding Principles



Focus on value



Start Where you are



Progress iteratively with feedback



Collaborate and promote visibly



Think and work holistically



Keep it simple and practical



Optimize and automate

Progress Iteratively with Feedback

Comprehend the whole but do something

The ecosystem is constantly changing, use feedback

Fast does not mean incomplete



The Guiding Principles



Focus on value



Start Where you are



Progress iteratively with feedback



Keep it simple and practical



Collaborate and promote visibly



Think and work holistically



Optimize and automate

Collaborate and Promote Visibility



Collaboration does not mean consensus
Communicate in a way the audience can hear
Decisions can only be made on visible data

The Guiding Principles



Focus on value



Start Where you are



Collaborate and promote visibly



Think and work holistically



Progress iteratively with feedback

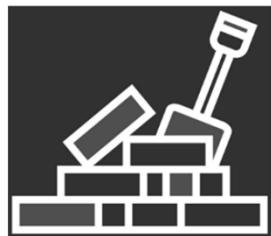


Keep it simple and practical



Optimize and automate

Think and Work Holistically



Recognize the complexity of the systems
Collaboration is key to working holistically
Look for patterns between system elements when possible
Automation can facilitate holistic work

The Guiding Principles



Focus on value



Start Where you are



Progress iteratively with feedback



Collaborate and promote visibly



Think and work holistically



Optimize and automate



Keep it simple and practical

Keep It Simple and Practical

Ensure value

Simplicity is the ultimate sophistication

Do fewer things but do them better

Respect the time of the people involved

Easier to understand, easier to adopt



The Guiding Principles



Focus on value



Start Where you are



Progress iteratively with feedback



Collaborate and promote visibly



Think and work holistically



Keep it simple and practical



Optimize and automate

Optimize and Automate

Simplify and/or optimize before automating

Define your metrics

Understand and agree to the context for the optimization



The guiding principles help with value co-creation

- Know how service consumers use each service
- Encourage a focus on value among all staff
- Include focus on value in every step of improvement
- Focus on value even in daily operations

Understanding Your Operating Environment: The ITIL® 4 Dimensions of Service Management

*The 4 dimensions
collectively support a
holistic approach to service
management. They are
relevant to the entire service
value chain (SVC).*

The Four Dimensions of Service Management

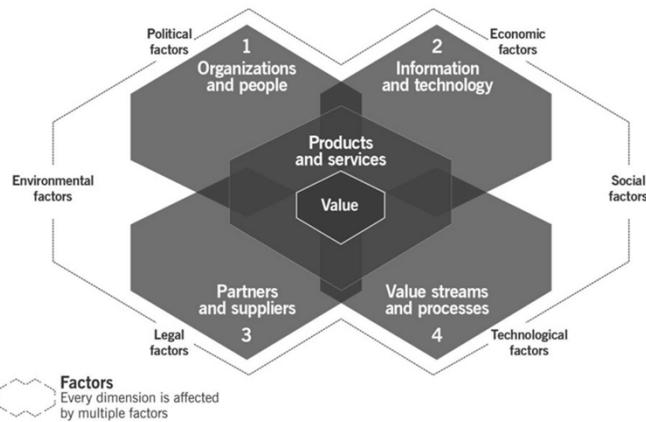


Provides effective and efficient facilitation of value to customers

Represents perspectives that are relevant to the whole SVS

Understands the constraints placed upon SVS by external factors outside their control

The 4 Dimensions of Service Management



Working in the 4 Dimensions

The 4 Dimensions of Service Management



Organizations
and
people



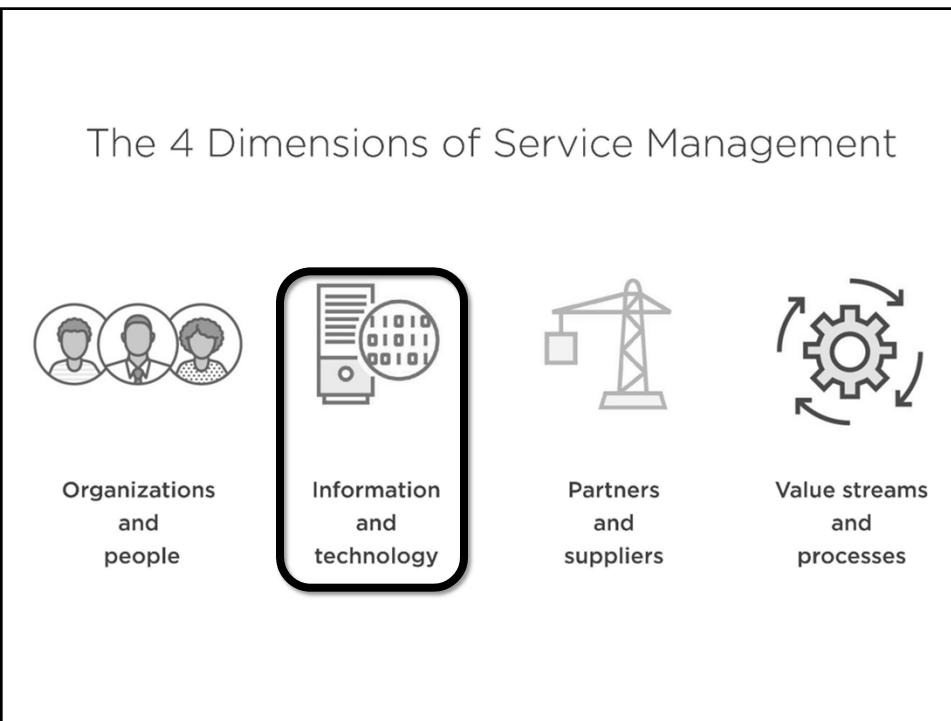
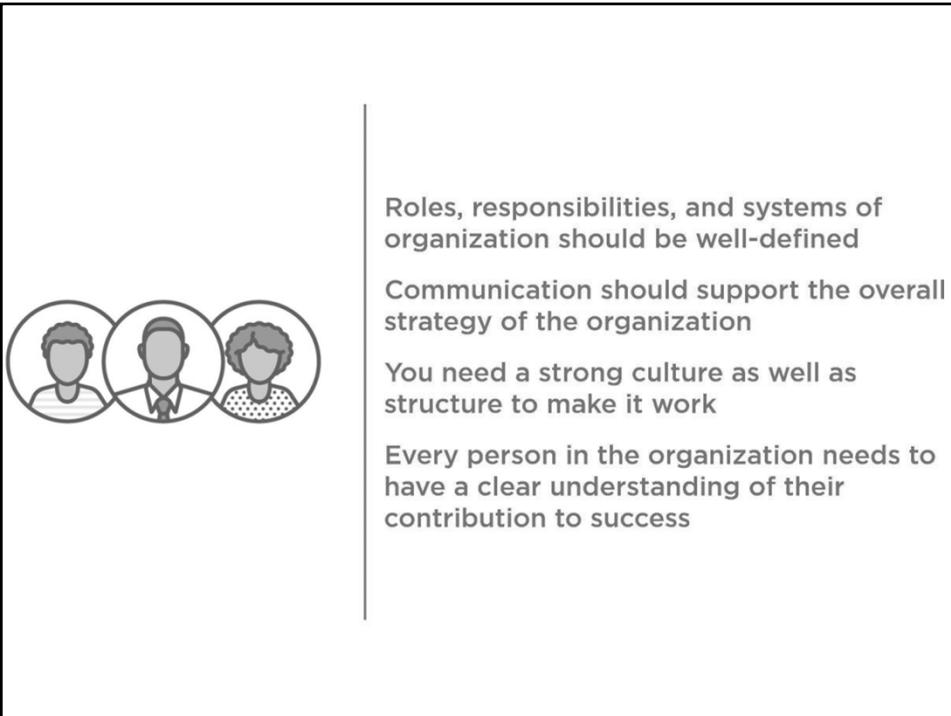
Information
and
technology



Partners
and
suppliers



Value streams
and
processes





Information

- What information is managed by services?
- What supporting information and knowledge are needed to deliver and manage the services?
- How will the information and knowledge assets be protected, managed, archived, and disposed of?



Technology

- Is the technology compatible with the current architecture?
- What about regulatory or other compliance issues with the organizations policies?
- Is the technology viable for the foreseeable future?
- Does the technology align with the strategy of the service provider and customers?
- Do you have the right skill sets to operate and maintain the technology?

Example: Cloud computing

- On-demand availability
- Network access
- Resource pooling
- Rapid elasticity
- Measured service

Technology can change and affect many areas of service provision and consumption

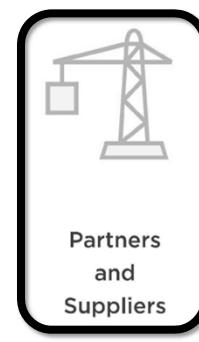
The 4 Dimensions of Service Management



Organizations
and
People



Information
and
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Partners
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Suppliers



Value Streams
and
Processes



Partners and suppliers encompasses an organization's relationships with other organizations in the areas of:

- Design
- Development
- Delivery
- Support

Strategic focus
Corporate culture
Resource scarcity
Cost concerns
Subject matter expertise
External constraints
Demand patterns

The 4 Dimensions of Service Management



Organizations
and
People



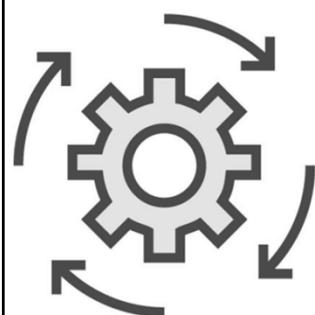
Information
and
Technology



Partners
and
Suppliers



Value Streams
and
Processes



Value streams and processes

- How do the parts of an organization work in an integrated and coordinated fashion?
- How do we enable value creation through products and services?
- What activities do we undertake and how are they organized efficiently?

Value Stream

A series of steps an organization undertakes to create and deliver products and services to consumers.

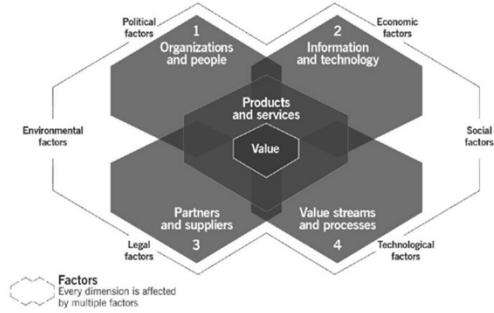
Process

A particular set of activities that transform inputs to outputs. Processes describe what is done to accomplish an objective. They are usually detailed in procedures, which outline who is involved and the work instructions necessary to accomplish the outputs.

External Factors

P.E.S.T.L.E

Political factors
Economic factors
Social factors
Technological factors
Legal factors
Environmental factors



What You Learned



Background and nature of the framework

What is the Service Value System

Basic definitions of terms used throughout the framework

Key concepts of creating value

What is a Service relationship

What You Learned



What are the guiding principles?

How do the principles relate to value creations?

What You Learned



What are the 4 dimensions?

How do the dimensions relate to value creations?