COURSEWARE

Specialist – Create, Deliver & Support (CDS) Courseware

ITIL Master

Managing Professional (MP) Transition

ITIL Specialist

Create,

Deliver &

Support

ITIL Managing Professional (MP)

Specialist

High

Velocity

Specialist

Drive

Stakeholder

Value

ITIL Strategist Direct, Plan &

Strategist

Direct,

Plan &

Improve

ITIL Strategic Leader (SL)

> ITIL Leader Digital & IT Strategy

ITIL Foundation

Improve





Colophon

Title: ITIL® 4 Specialist – Create, Deliver & Support (CDS) Courseware

Author: Van Haren Learning Solutions A.O.

Publisher: Van Haren Publishing, 's-Hertogenbosch

ISBN Hard Copy: 978 94 018 0614 5

Edition: First edition, first print, Februari 2020

Design: Van Haren Publishing, 's-Hertogenbosch

Copyright: © Van Haren Publishing 2020

For further information about Van Haren Publishing please e-mail us at: info@vanharen.net or visit our website: www.vanharen.net

All rights reserved. No part of this publication may be reproduced, distributed, stored in a data processing system or Published in any form by print, photocopy or any other means whatsoever without the prior written Consent of the authors and publisher.

ITIL® is a registered trade mark of AXELOS Limited, used under permission of AXELOS Limited.

The Swirl logo™ is a trade mark of AXELOS Limited, used under permission of AXELOS Limited. All rights reserved.

able of content	
Reflection	6
<u>Agenda</u>	8
FOUNDATION RECAP	11
The evolution of professionalism	22
Using information and technology	43
Value streams	58
Prioritizing and managing work	79
How ITIL practices contribute to value streams	97
Sample Exam	151
Question Booklet	152
Answers and Rationale	167
Syllabus	177

Self-Reflection of understanding Diagram

'What you do not measure, you cannot control." - Tom Peters

Fill in this diagram to self-evaluate your understanding of the material. This is an evaluation of how well you know the material and how well you understand it. In order to pass the exam successfully you should be aiming to reach the higher end of Level 3. If you really want to become a pro, then you should be aiming for Level 4. Your overall level of understanding will naturally follow the learning curve. So, it's important to keep track of where you are at each point of the training and address any areas of difficulty.

Based on where you are within the Self-Reflection of Understanding diagram you can evaluate the progress of your own training.

Level of Understanding	Before Training (Pre- knowledge)	Training Part 1 (1st Half)	Training Part 2 (2nd Half)	After studying / reading the book	After exercises and the Practice exam
Level 4					Ì
I can explain the					,
content and apply it .					,/
Level 3					/
I get it!					Ready for
I am right where I am				100	the exam!
supposed to be.				,,,,,	
Level 2					
I almost have it but			' مر		
could use more					
practice.					
Level 1					
I am learning but don't					
quite get it yet.					

(Self-Reflection of Understanding Diagram)

Write down the problem areas that you are still having difficulty with so that you can consolidate them yourself, or with your trainer. After you have had a look at these, then you should evaluate to see if you now have a better understanding of where you actually are on the learning curve.

Troubleshooting		
	Problem areas:	Topic:
Part 1		
Part 2		
You have gone		
through the book		
and studied.		
_		
You have answered		
the questions and		
done the practice		
exam.		

Timetable

Day 1: ITIL 4 Create Deliver and Support

- ITIL 4 Foundation recap
- · The evolution of professionalism in IT and service management
- Using information and technology to create, deliver, and support services

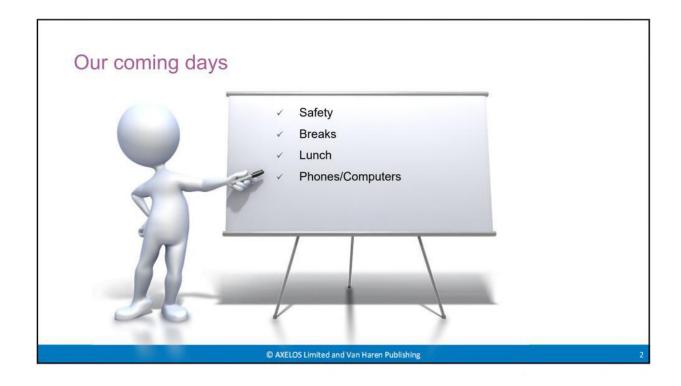
Day 2:

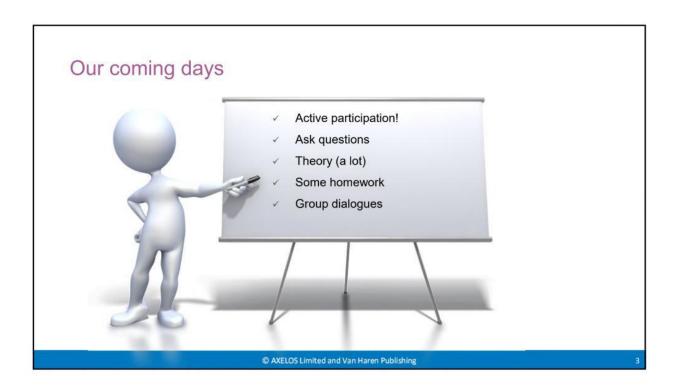
- Value streams to create, deliver, and support services
- · Prioritizing and managing work
- How ITIL practices contribute to value streams

Day 3:

• How ITIL practices contribute to value streams











Course schedule

Day 1:

- ITIL 4 Foundation recap
- The evolution of professionalism in IT and service management
- Using information and technology to create, deliver, and support services

Day 2:

- Value streams to create, deliver, and support services
- Prioritizing and managing work
- How ITIL practices contribute to value streams

Day 3:

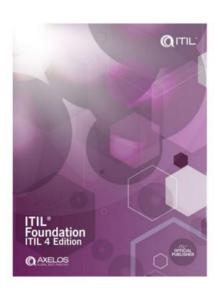
• How ITIL practices contribute to value streams

© AXELOS Limited and Van Haren Publishing

1

ITIL 4: FOUNDATION RECAP

Background and a short recap on some fundamentals from ITIL 4 Foundation



COURSEWARE

©2019 - All training materials are sole property of Van Haren Publishing BV and are not to be reproduced in any form or shape without written permissic

Introduction

This section will focus on validating the ITIL 4 Foundation concepts that are prerequisites for this training. Key areas covered include:

- Basic terms and definitions such as:
 - Provider and Consumer
 - · Service and Products
 - · Service management
 - Service relationship management
 - · Value; Outcome, Cost and Risk
 - · Utility and Warranty
- · The four dimensions model

- The ITIL service value system (SVS)
- · The ITIL guiding principles
- Governance
- · The ITIL service value chain
- · The ITIL management practices
- Continual improvement
- ...

© AXELOS Limited and Van Haren Publishing

ITIL is evolving...

- · From process focus to a more holistic view
- · From fragmented lifecycle to end-to-end visibility
- · From major releases to continual improvement
- · From operational silos to flexible value flow

Since the latest update of ITIL in 2011 we have seen huge changes impacting many organizations who have adopted ITIL best practices.

Therefore there has been a clear need to adapt to changes in markets, technologies and ways of working and ITIL is no exception and needs to evolve accordingly.



© AXELOS Limited and Van Haren Publishing

8

Principles as a central theme

There has been a clear trend among the commonly used frameworks, models and methodologies to move away from rules or controls and focus more on principles.

This development is in general positive as it can make interoperability and integration between frameworks and methodologies easier and more accepted, as many basic underpinning principles are shared between different frameworks and/or methodologies.

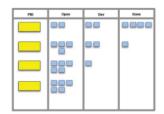


© AXELOS Limited and Van Haren Publishing

Product management

There is a trend among IT organizations to use a product management terminology and adopt ways of working from other domains like engineering or manufacturing.

Organizations own or have access to a variety of resources (and capabilities). Products are configurations of these resources that will potentially be valuable for its customers. The management of these products has for many become synonymous with service management.



This is not new as it was already partly introduced in previous versions of ITIL but makes ITIL 4 even more relevant and easier to relate to the emerging agile movement with its strong emphasis on development and management of products.

© AXELOS Limited and Van Haren Publishing

10

Value - outcomes, costs and risks

Definition: Value

Value is the perceived benefits, usefulness and importance of something.

Definition: Outcome

A result for a stakeholder enabled by one or more outputs.

Definition: Cost

The amount of money spent on a specific activity or resource. Cost can be expressed in non-monetary terms, such as time, people allocated, etc.

Definition: Risk

A possible event that could cause harm or loss or make it more difficult to achieve objectives. Can also be defined as "uncertainty of outcome".

© AXELOS Limited and Van Haren Publishing

Service & service management

Definition: 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 risks.



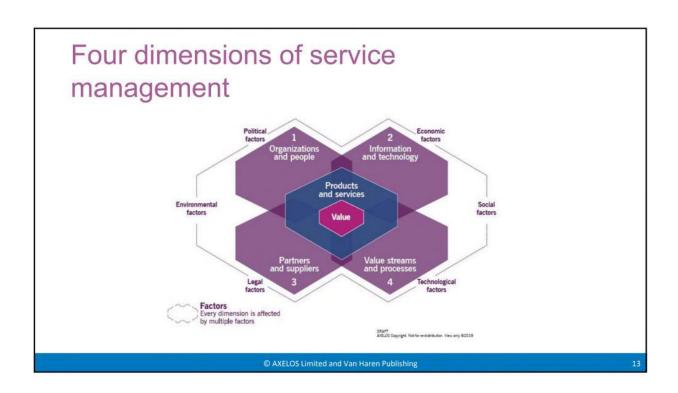
A set of specialized organizational capabilities for enabling value for customers in the form of services.

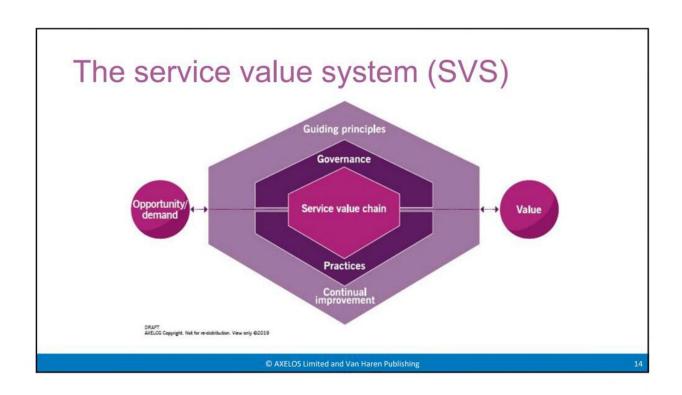
Developing these capabilities requires an understanding of:

- · the nature of value
- · the nature and scope of the stakeholders involved
- · how value creation is enabled through services.



© AXELOS Limited and Van Haren Publishing





The 7 ITIL guiding principles



Focus on value

Everything that the organization does needs to map, directly or indirectly, to value for the stakeholders.



Start where you are

Do not start from scratch and build something new without considering what is already available to be leveraged. The current state should be investigated and observed directly to make sure it is fully understood.



Progress iteratively with feedback

Do not attempt to do everything at once. Even huge initiatives must be accomplished iteratively.



Collaborate and promote visibility Working together across boundaries produces results that have greater buy in, more relevance to objectives and better likelihood of long-term success. Achieving objectives requires information, understanding and trust.



Think and work holistically

Results are delivered to internal and external customers through the effective and efficient management and dynamic integration of information, technology, organization, people, practices, partners and agreements, which should all be coordinated to provide a defined value.



Keep it simple and practical

If a process, service, action or metric provides no value, or produces no useful outcome, eliminate it. Always use outcome-based thinking to produce practical solutions that deliver results.



Optimize and automate

Eliminate anything that is truly wasteful and use technology to achieve whatever it is capable of. Human intervention should only happen where it really contributes value.

© AXELOS Limited and Van Haren Publishing

1

Governance

Governance is the means by which an organization is directed and controlled.

The role and position of governance in the ITIL Service Value System (SVS) will vary depending on how the SVS is applied in an organization.

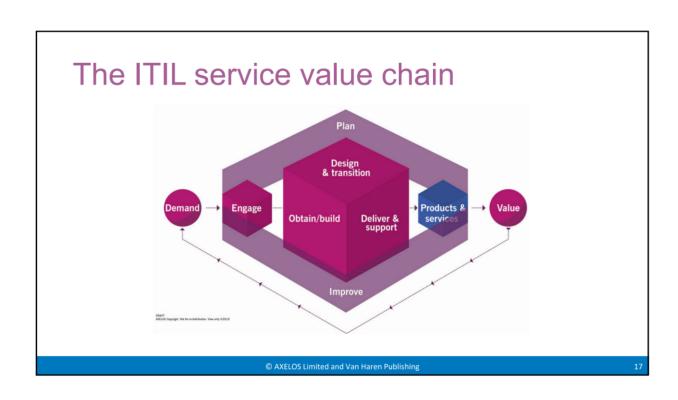
The governance function of an organization has three main responsibilities:

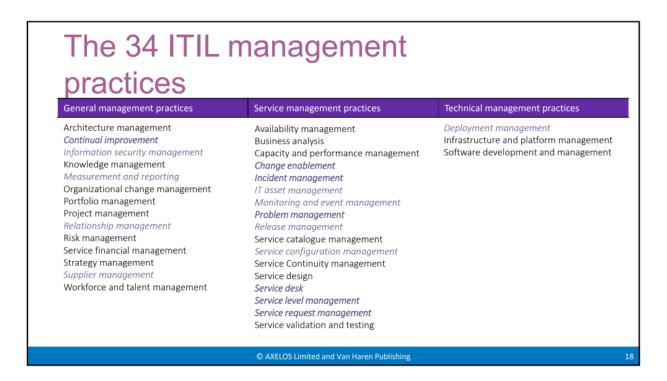
- Evaluate to identify the right options and objectives for the organization
- Direct to point out the right direction and set overall objectives for the organization
- Monitor to follow up on the management and realisation of agreed objectives

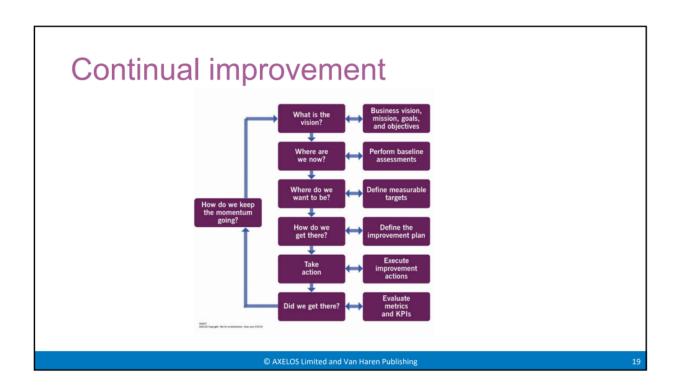
The acronym **EDM** is commonly used to refer to these three distinct responsibilities. It's important to understand the reason for the separation and the difference between the three.

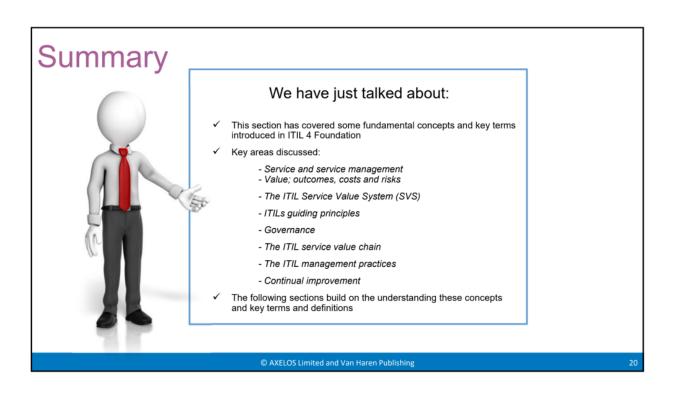
© AXELOS Limited and Van Haren Publishing

16









Q: What are the two types of cost that a service consumer should evaluate?

- A. The cost of creating the service, and the cost charged for the service
- B. The costs removed by the service, and the costs imposed by the service
- C. The cost of provisioning the service, and the cost of improving the service
- D. The cost of purchasing software, and the cost of purchasing hardware

© AXELOS Limited and Van Haren Publishing

21

Q: Which service management dimension is focused on activities and how these are coordinated?

- A. Organizations and people
- B. Information and technology
- C. Partners and suppliers
- D. Value streams and processes

© AXELOS Limited and Van Haren Publishing

22

Q: Which ITIL concept describes governance?

- A. The seven guiding principles
- B. The four dimensions of service management
- C. The service value chain
- D. The service value system

© AXELOS Limited and Van Haren Publishing

23

Q: What is the first step of the guiding principle 'focus on value'?

- A. Identify the outcomes that the service facilitates
- B. Identify all suppliers and partners that are involved in the service
- C. Determine who the service consumer is in each situation
- D. Determine the cost of provisioning the service

© AXELOS Limited and Van Haren Publishing

24

Q: Which value chain activity includes negotiation of contracts and agreements with suppliers and partners? A. Engage B. Design and transition C. Obtain/build

20

Q: How does categorization of incidents assist incident management?

- A. It helps direct the incident to the correct support area
- B. It determines the priority assigned to the incident

D. Deliver and support

- C. It ensures that incidents are resolved in times agreed with the customer
- D. It determines how the service provider is perceived

© AXELOS Limited and Van Haren Publishing

26

Q: Which is NOT usually included as part of 'incident management'?

- A. Scripts for collecting initial information about incidents
- B. Formalized processes for logging incidents
- C. Detailed procedures for the diagnosis of incidents
- D. Use of specialized knowledge for complicated incidents

© AXELOS Limited and Van Haren Publishing

27

Course schedule

Day 1:

- ✓ ITIL 4 Foundation recap
- The evolution of professionalism in IT and service management
- Using information and technology to create, deliver, and support services

Day 2

- Value streams to create, deliver, and support services
- Prioritizing and managing work
- How ITIL practices contribute to value streams

Day 3

• How ITIL practices contribute to value streams

© AXELOS Limited and Van Haren Publishing

28



How to plan and build a service value stream to create, deliver, and support services with relevant ITIL practices



COURSEWARE

©2019 - All training materials are sole property of Van Haren Publishing BV and are not to be reproduced in any form or shape without written permission

Create, deliver and support

Create, deliver and support covers the integration of a number of proven areas that often have not been built, run and integrated as seamlessly as needed to fully deliver optimum value. A core of ITIL 4 is that this work is all part of a single value chain. The book includes core content describing how different types of work (value streams) are built, tested and delivered 'end-to-end' from beginning to end and with continual iterations and feedback loops.

Key terms defined and important concepts of service management introduced here include:

- · organizational structures and integrated/collaborative teams
- · team capabilities, roles, competencies, culture and differences
- · a customer-oriented mindset and the culture of continual improvement
- · how to use value streams to design, develop, transition and support services
- · how to co-ordinate, prioritize and structure work to create, deliver and support services.

© AXELOS Limited and Van Haren Publishing

30

Key learning requirements



CREATE, DELIVER & SUPPORT

- ✓ Understand how to plan and build a service value stream to create, deliver, and support services
- ✓ Know how relevant ITIL practices contribute to the creation, delivery and support across the SVS and value streams
- √Know how to create, deliver and support services

© AXELOS Limited and Van Haren Publishing

3

Introduction

This section focuses on guidance for professionals in IT and service management who are required to build and maintain a broad professional portfolio. It relates to organizational structures, people, communications, and the importance of being aware of new opportunities.

These particular areas are emphasized in ITIL 4 because they are as important for success as processes, practices, and technical knowledge. Areas covered in this section are:

Organizations, people, and culture

- Organizational structures
- Using the ITIL guiding principles to improve the organizational structure

Building effective teams

- Roles and competencies
- Professional IT and service management skills and competencies
- Workforce planning and management
- Employee satisfaction management
- Results-based measuring and reporting

Developing team culture

- What is team culture?
- What does cultural fit mean and why is it important?
- · How to develop and nurture good team culture
- A continual improvement culture
- · A collaborative culture
- Customer orientation: putting the customer first
- Positive communication
- Challenges

© AXELOS Limited and Van Haren Publishing

32

Organizational structure

Definition: Organization

A person or a group of people that has its own functions with responsibilities, authorities, and relationships to achieve its objectives.

There are various types of organizational structures. Some high-level examples are:

Functional often based on functional areas with formal lines & roles

• **Divisional** often based on markets, products, geography, etc. with each having profit & loss responsibility

Matrix a grid of relationships, often dual reporting lines, can

provide speed and agility

Flat very little hierarchy, often fast decision making, can be

challenging to maintain as organization grows



© AXELOS Limited and Van Haren Publishing

33

Organizational agility and resilience

Organizational agility is the ability of an organization to move and adapt quickly, flexibly and decisively to support **internal changes**.

Organizational resilience is the ability of an organization to anticipate, prepare for, respond to and adapt to both incremental changes and sudden disruptions from an **external perspective**. It requires a common understanding of priorities and objectives.

Successful organizations must achieve agility and resilience to support internal changes and withstand or even thrive in changing external circumstances. They must also be part of larger ecosystems, delivering, coordinating and consuming products and services.

The SVS provides the means to achieve organizational agility and resilience and to facilitate the adoption of a strong unified direction, focused on value and understood by all.

© AXELOS Limited and Van Haren Publishing

34

Adopting organizational structure

The ITIL 4 guiding principles are a useful reference point when planning to change and improve the organizational structure. The following considerations may be useful:

Focus on value: What is the key driver for changing the way of working?

Progress iteratively with feedback: Ensure that the work is broken down into manageable "bite size"

Start where you are: Ensure that the cultural aspects of the organization are

considered as part of this design. Use value stream mapping

and RACI matrix to understand the current roles and responsibilities

Collaborate and promote visibility:

Ensure that all stakeholders are engaged throughout the change.

process and enable transparency

Think and work holistically:
 Collaboration with all appropriate leaders/managers will ensure

any potential risks are understood and managed as appropriate

Reduce the complexity of the organization as much as possible to enable the flow of work and information to be uninhibited

Design and plan in a way where any tasks can be consolidated

or automated

© AXELOS Limited and Van Haren Publishing

3

Roles versus Jobs

Optimize and automate:

- A role is a set of responsibilities, activities and authorizations granted to a person or team, in a specific context
- A job is a position within an organization that is assigned to a specific person
- A single person may, as part of their job, fulfil many different roles. A single role may be contributed to by several persons



© AXELOS Limited and Van Haren Publishing

36

Roles and competencies

Roles in IT traditionally have followed technical competencies and been related to clearly defined areas of work in development or operations.

In the information age roles tend to change more often and require more flexibility.

Even IT and ITSM roles now require soft skills and business capabilities such as:

- Ability to manage and motivate people and teams
- · Relationship management
- · Negotiation skills
- Supplier and contract management.

In IT and service management, this involves a wider definition of skills, competencies, and areas of work, reflecting the changes in teams and organizational structures.

© AXELOS Limited and Van Haren Publishing

27

Professional ITSM competencies

Examples of skills and knowledge needed to be fully effective in service management:

- Communication skills ability to establish good working relationships with a variety of stakeholders
 at a number of levels, using different techniques
- Business and commercial skills Service managers are required to use a number of commercial skills to specify, buy, negotiate and manage these relationships
- Relationship management skills an active liaison and synchroniser for information, feedback, demand and progress between parties
- Leadership skills ability to influence, motivate and support people in their work and build a culture
- Market and organizational knowledge being aware of the business and market sector of their organization including industry factors, competition and cost & price considerations
- Management and administration good management, teambuilding, recruitment, delegation, documentation and logistical skills
- Developing innovation required to identify new ways of working, delivering services and solving problems.

© AXELOS Limited and Van Haren Publishing

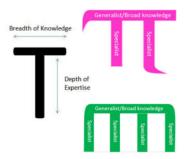
38

Neither generalist or specialist

In the past, individuals were typically viewed as either generalists or specialists. Today, this no longer the norm.

Increasingly organizations look for people of these types:

- T-shaped Individuals with expertise in one area and broad, less profound, knowledge in other areas
- **Pi-shaped** (π) Individuals with expertise in two areas and broad, less profound, knowledge in other areas
- Comb-shaped () Individuals with expertise in more than two areas and broad, less profound, knowledge in other areas



Although a clear focus on one competency creates deeper understanding, it can be dangerous to have only one area of expertise.

© AXELOS Limited and Van Haren Publishing

39

Developing broad competencies

Examples of different ways of gaining and recognizing a wider set of competencies:

- · Building job descriptions, that clarify the full non-technical requirements for roles
- · Developing recruitment and onboarding skills
- $\bullet \quad \text{Recognising non-IT experience in} \text{e.g. team management, procurement and contract management} \\$
- · Ensuring that job descriptions include 'soft' skills, such as communications, leadership and innovation
- · Performance management, appraisals and reward programmes should reflect and reward the full scope
- · Opportunities for training and development for all staff in all areas
- Encouraging CPD (Career Professional Development) initiatives that recognise and develop all areas
- · Role-based and competency-based models, based on job descriptions with career paths
- Competency based models that are more focussed on generic skills
- · Hybrid role-based and competency-based models by combining job related and talent related aspects

There is no single path to achieving a full set of competency across all areas!

© AXELOS Limited and Van Haren Publishing

40

Workforce planning & management

The workforce is arguably the most important asset of most organizations. It is essential to identify the required roles, associated knowledge, skills and attitudes to:

- · Keep the organization running
- · Exploit emerging technologies
- Provide leadership and organizational change capabilities
- Position the organization for future success and growth.

Fundamentally, workforce planning and talent management are a set of specific workforce strategies for recruiting, retaining, developing, and managing employees.

The **purpose** of the **workforce and talent management practice** is to enable organization, leaders, and managers to focus on creating an effective and actionable people strategy so that the organization can achieve its mission, goals, and strategic objectives.

© AXELOS Limited and Van Haren Publishing

41

Manage employee satisfaction

The true potential of an organization can only be realized when the productivity of individuals and teams are aligned, and their activities integrated to achieve the goals of the organization.

Understand and manage employee satisfaction:

· Morale and engagement influence productivity, customer satisfaction, employee retention...

Need to measure many aspects of employee satisfaction:

- · Leadership, culture, organization climate, job activities
- Baseline satisfaction levels
- · Identify actions to improve commitment and trust

Don't just measure, improve, and be seen to improve:

- · Assign resources to act on the measurement
- Results and actions must be demonstrated back to employees

© AXELOS Limited and Van Haren Publishing

Key elements in feedback:

- Confidentiality
- Support & understanding
- Call to action

42

Feedback types

There are many ways of measuring employee satisfaction. Some typical feedback types are:

- · Employee surveys
- Regular meetings
- Unstructured meetings
- · Reviewing sickness and attrition data
- · Staff driven metrics.

One challenge for organizations conducting surveys is presenting the results and corresponding actions based on the analysis of the results. Feedback to users need to be timely, as well as the actions taken in response to the results.

It is important to remember that the top four motivation factors for people at work are achievement, recognition, responsibility and interesting work

© AXELOS Limited and Van Haren Publishing

43

Results-based measuring & reporting

Examples of why we measure:

- · To identify current and planned future state
- · To measure achievement of improvements, changes, or plans
- To measure progress towards goals or objectives
- · To support business decisions
- · To drive behaviours
- To understand how well services are meeting customer needs/expectations
- · To identify opportunities for improvement

It is important to set appropriate objectives and related metrics, as metrics drive behaviour. Incorrectly calibrated metrics can lead to inappropriate behaviour in order to meet targets. The targets may also be inappropriate for the overall business or customer experience.

Differentiate between output & outcome!



© AXELOS Limited and Van Haren Publishing

44

Measuring behaviour or results

When should behaviours be measured?

- When there is no clear relationship between behaviours and results
- · If outcomes are too far in the future
- If results are not in control of those being measured

When should results be measured?

- When there is a clear link from behaviours to results
- · When it is the easiest way to translate strategic objectives into measured actions
- When people have skills and abilities needed to complete their work and can correct their own behaviours
- To motivate people to improve, while allowing autonomy on how to deliver the results

© AXELOS Limited and Van Haren Publishing

45

Performance goals

When setting and measuring individual performance goals, it is important to:

- · Arrange a face-to-face meeting and agree on a set of individual goals
- · Ensure that the goals are measurable and documented and make it easy for all to track their progress
- · Express the goals in specific terms
- · Adapt the goals to the individual
- · Adjust any goals that prove to be unrealistic

When measuring an employee's performance, it is important to:

- Ensure that the individual's goals are aligned with those of the team and the organization
- Measure both team and individual performance
- · Qualitative and quantitative measures are needed
- Measures must continue to change and evolve to ensure that there are changes in behaviour to drive continual improvement



Goals

© AXELOS Limited and Van Haren Publishing

46

Developing a team culture

What is 'team culture'?

A set of values that are shared by a group of people, including expectations about how people should behave, ideas, beliefs, and practices

Service providers focusing on value creation display these common characteristics:

- Value, quality and operational excellence focus
- · Client, customer and consumer orientation
- Investment in people and communication/collaborative tools
- Strong team composition within a structured organization
- Continual alignment with the vision, mission and strategic objectives

Often it is the unwritten – 'how we do things here' – or 'how we've always done things here'

© AXELOS Limited and Van Haren Publishing

47

Cultural fit

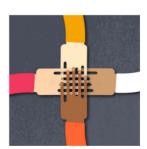
What is cultural fit and why is it important?

Cultural fit is the ability of an employee or a team to work comfortably in an environment that corresponds with their own beliefs, values, and needs.

A good cultural fit benefits both the team member and the team.

A diverse approach supports good culture as it allows the team or organization to see their work from a broader perspective.

Note: When hiring for cultural fit, it is important to be aware of bias. It is human nature to gravitate towards like-minded individuals with a similar personality or beliefs.



© AXELOS Limited and Van Haren Publishing

48

How to nurture good team culture

It is possible to grow and evolve a team's culture over time. The ITIL guiding principles and the continual improvement model can be very useful tools for implementing cultural change.

Some simple guidelines on how to develop and nurture good team culture:

- Incorporating vision into the team culture
- · Meeting regularly
- · Creating leaders, more than managers
- · Encouraging informal teams
- · Cross-training employees
- Integrating socially
- · Providing feedback
- Promoting a culture of learning.



© AXELOS Limited and Van Haren Publishing

40

A continual improvement culture

Continual improvement should not be thought of as a practice or process, as a workflow or just as some key artefacts or tools – it should be embedded in all of these things, as the 'way we do things here' – as the culture of the organization

Key elements of a continual improvement culture are:

- Transparency
- · Management by example
- Building trust
- · Active encouragement of positive behaviours
- Clear continual improvements expectations
- · Marketing and celebration of success



Creating this environment within an existing culture is a challenge and requires bravery, commitment and persistence and needs ongoing, visible support from senior management.

© AXELOS Limited and Van Haren Publishing

50

A collaborative culture

Cooperation

Working with others to achieve your goals, which may be part of a common goal

- May be an effective model for standardized work in work with clear separation of duties
- · Everyone needs to understand their own role
- Individuals and teams succeed independently
- Need to understand PESTLE factors for own role
- · Less need for trust and transparency
- · Needs for effective communication
- Alignment of goals

Collaboration

- Working together to achieve a common/shared goal
- Higher potential for creative and entrepreneurial work in complex environments
- Everyone needs to understand how they contribute to the big picture
- · Everyone succeeds or fails together
- Need to understand PESTLE factors for all stakeholders
- · Needs for respect, trust and transparency
- · Needs multi-channel communication
- · Shared and integrated goals

© AXELOS Limited and Van Haren Publishing

5

Team collaboration & integration

Cooperation and collaboration are vital for effective and valuable teamwork and service relationships.

It is impossible to force collaboration, as it is based on shared goals and a high level of trust.

Sometimes it is more realistic to establish effective cooperation within and between teams using aligned, transparent, and integrated goals and metrics.

Shared principles can be a foundation for effective teamwork and a starting point for its improvement.



© AXELOS Limited and Van Haren Publishing

52

Align with the type of work

Algorithmic work:

Involves a person following a defined process, driven by a set of established instructions, along a consistent pathway until the work is concluded

- · Predictable process paths
- Clear inputs, instructions, outputs, etc.
- Reassignments and handovers
- All roles should should be encouraged to identify opportunities for improvement

Heuristic work:

Fundamentally more dependent on human inventiveness. It involves enabling a person to discover or learn something for themselves

- Depends on human understanding & intervention
- · Learning and discovery
- Needs flexibility, information, knowledge & experience
- Insights can be recorded for future use, moving some work to algorithmic (removing 'toil')

The service designer needs to understand the nature of the work on which their service and process depends

© AXELOS Limited and Van Haren Publishing

· e

Design for collaboration

Gain knowledge from collaboration!

In heuristic situations, new insights and solutions will frequently emerge in the course of work getting done.

Even where the algorithmic approach applies, companies have found great benefit in making it easy for the workers performing the tasks to suggest improvements.

Collaboration frameworks should be used which enable the knowledge gained to be captured, refined and reused.



Effective design of collaboration and workflow requires each interaction to align well to the needs of the agents involved.

© AXELOS Limited and Van Haren Publishing

54

Servant Leadership

In order to adapt to new more flexible and responsive ways of working such as Agile and DevOps, many organizations have adopted new approaches, where a leader's role is more 'servant'.

Key assumptions in 'Servant Leadership':

- Managers should meet the organization's needs, not only those of teams
- Managers are there to 'serve' and support their people and ensure they have the right resources and support to get their jobs done

Servant Leadership can be often seen in flat, matrix, or product-focused organizations; however, this approach is applicable and beneficial in any organizational structure. It inspires people to naturally collaborate and use the leaders support to become more cohesive and productive.



© AXELOS Limited and Van Haren Publishing

55

Service empathy & service mindset

It is critical to the success of service relationships that all involved in the service provision and consumption act responsibly, considering the interests of others and focusing on the agreed service outcomes.

Service empathy

The ability to recognize, understand, predict, and project the interests, needs, intentions, and experience of another party, in order to establish, maintain, and improve the service relationship.

Service mindset

An important component of the organizational culture that defines an organization's behaviour in service relationships. Service mindset includes the shared values and guiding principles adopted and followed by an organization.

Service empathy is an element of a service mindset, but not the only one. Service mindset also includes shared principles that drive organization's behaviour and define organization's attitude towards the service relationship and other parties involved.

© AXELOS Limited and Van Haren Publishing

56

A customer-oriented mindset

From a service provider perspective, service mindset is also known as customer orientation. A customer-oriented organization places customer satisfaction at the core of each of its business decisions.

Customer orientation is defined as an approach to sales and customer-relations in which staff focus on helping customers to meet their long-term needs and wants. Here, management and employees align their individual and team objectives around satisfying and retaining customers.

Strive to:

- · Understand that every customer is unique and have individual needs and wishes
- · Create a clear link between your service or product and these customer needs
- · Focus on value and on the correct 'package' of customer needs
- · Care about customer experience and continually improve it.

© AXELOS Limited and Van Haren Publishing

57

Customer experience

Steps to help an organization become customer oriented:

- · Create a value proposition that sells the organization and its services
- Map the customer and user experience journeys and all its touchpoints
- · Recruit user- and customer-friendly individuals
- Treat employees well
- · Train individuals and teams
- · Lead by example
- · Listen to the customer through a broad set of inputs
- Empower staff
- Avoid silo mentality and encourage close cooperation
- Design for humans and take into consideration the experience



© AXELOS Limited and Van Haren Publishing

58

Value of positive communication

The ability to communicate effectively is a key business skill, which is also fundamental to success in service management.

Good human communication is about being effective, often through establishing positive relationships, which include trust, empathy, proximity and shared goals that avoid problems and stress. This forms the basis for the success of the services that are delivered.

Good communication starts with listening. Try to understand, more than being understood.

Good communication is good for business



© AXELOS Limited and Van Haren Publishing

50

Communication principles

The **fundamental principles** required for good communication can be summarised as:

- Communication is a two-way process successful communication is an exchange of information and ideas between two or more parties
- We are all communicating, all the time people convey messages about their mood, attitude and
 emotional state through the use of language, tone of voice, body language, dress and manners
- Timing and frequency matters successful communications needs to take into account when is the best time to make contact and also when is not
- There is no single method of communicating that works for everyone its important to recognise and make use of different preferences and methods used by those with whom we interact
- The message is in the medium choose an appropriate way that is appropriate for the importance of the
 message that is being communicated. A minor point may be communicated via messaging or email. Big
 issues or questions require direct discussion and should not be carried out via email

Understanding, recognising and acting upon these principles is vital in order to build positive relationships with colleagues, customers and all stakeholders.

© AXELOS Limited and Van Haren Publishing

60

Challenges

Changing an existing culture, especially with people who are autocratic and not very collaborative, is challenging and requires bravery, commitment, and persistence. In addition, there is a need for ongoing and visible support from senior managers and leaders from across the organization.

Managers need to lead by example to show they are serious about the need to change and to be open and transparent, as well as to share ideas and information. In order to build trust, everyone needs to follow through on their promises.

The chances of successfully developing a new culture can be improved by using tried and tested methods from the body of knowledge around organizational change management.



© AXELOS Limited and Van Haren Publishing

61

Applied to the service value chain

Plan

Understand current and future skills requirements, and staff turnover

Improve

Continually adapt to meet evolving business needs

Engage

Understand & forecast changing demand for services and how this will impact workforce

Design and transition

Understand competences needed for Agile, DevOps, etc. define training plans

Obtain/build

Training, mentoring, succession planning, recruiting or sourcing skills

Deliver and support

Measure how knowledge, abilities and attitude impact practices

Paris Prince | Prince

© AXELOS Limited and Van Haren Publishing

62





We have just talked about:

- This section has covered how to work with organizational structures and team culture to ensure organizational agility and resilience
- Key areas discussed:
 - Organization and organizational structures Roles, jobs and competencies

 - Cooperation and collaboration
 - Service mindset and service empathy
 - Customer orientation
- The value of positive communication and communication principles

© AXELOS Limited and Van Haren Publishing

Q: Which is the BEST example of team collaboration?

- Working with others to achieve individual goals Α.
- В. Implementing technology to facilitate communication between team members
- C. Working together to achieve a shared organizational objective
- D. Aligning the goals and KPIs of all individual and groups

© AXELOS Limited and Van Haren Publishing

A.	Employee satisfaction measurement	
В.	The value of positive communication	
C.	Organizational structure	
D.	Automated interactions	

Q: An organization has set up an 'ideas' page on an internal website and is encouraging its employees to experiment with different working methods when they experience issues that prevent the achievement of outcomes. Which concept is involved in these changes?

A. Integration and data sharing

B. Advanced analytics

C. Team culture

D. The culture of continual improvement

Q: Which is a key aspect of collaboration and workflow?

- A. Understanding the complexity of data to assess if it will add value
- B. Ensuring that interactions are designed with an understanding of the human behaviour involved in each step
- C. Deciding on a model which can help an organization to manage and control its suppliers
- D. Designing surveys to baseline employee satisfaction and identify actions for improvement

© AXELOS Limited and Van Haren Publishing

67

Q: Which statement about employee surveys is CORRECT?

- A. They are intended to be conducted across an entire organization
- B. They are typically conducted annually
- C. They are conducted at several levels formally and informally
- D. They can only be conducted electronically so have limited application

© AXELOS Limited and Van Haren Publishing

68



Course schedule

Day 1:

- ✓ ITIL 4 Foundation recap
- √ The evolution of professionalism in IT and service management
- Using information and technology to create, deliver, and support services

Day 2:

- Value streams to create, deliver, and support services
- Prioritizing and managing work
- How ITIL practices contribute to value streams

Day 3:

How ITIL practices contribute to value streams

© AXELOS Limited and Van Haren Publishing

6

Introduction

This section will focus on the different technologies and tools needed to create, deliver, and support services. Key areas covered include:

- · Integration and data sharing
- Reporting and advanced analytics
- · Collaboration and workflow
- Robotic process automation (RPA)
- · Artificial intelligence

- · Machine learning
- Continuous integration, continuous delivery, and continuous deployment
- · The value of an effective information model
- · Automation of service management

"Technology and tools are useful and powerful when they are your servant and not your master." Steven Covey

© AXELOS Limited and Van Haren Publishing

70

Integration and data sharing

Service design frequently relies upon integration between multiple systems, and in such cases it is important to understand the different levels at which integration may be modelled. For example:

- · Application Applications are made to interact with each other
- Enterprise Integrated applications are aligned to provide value
- Business Existing business services are aligned.

A number of integration methodologies have evolved over time, each having specific goals. Selection of an integration methodology requires the consideration of multiple factors.

Good integration enables and reinforces the processes which underpin the delivery of value. For integration to be effective, it must be based on a clear understanding of the stakeholders affected by the integration, and designed to support their work methods and needs.

© AXELOS Limited and Van Haren Publishing

71

Integration topologies

Integration design requires an understanding and consideration of the different topographical approaches to integrating multiple systems.

There are two generally accepted topologies:

Point-to-point integration involves directly linking pairs of systems. This may be suitable for simple services with a small number of integrated systems. There are, however, drawbacks with this approach:

- · The number of connections grows quickly in proportion to the number of integrated systems
- The number of different integration protocols and methods may be high, increasing complexity.

Publish–subscribe is an alternative topology in which messages are published by systems to an event broker, which forwards the message to the systems that have been designated as its recipients.

© AXELOS Limited and Van Haren Publishing

72

Integration approaches

Big bang

A 'big bang' approach involves the delivery of every integration at once. This has potential benefits for testing because the entire system is in place prior to a live roll-out. The approach is suited to simple service implementations with fewer integrated systems and simpler, lower-risk integration.

Incremental delivery

Incremental delivery is a more Agile approach for the integration of multiple components in which new integrations are introduced separately in a pre-defined order. It reduces the scale of each individual delivery into production. This approach can be used in most circumstances. Nevertheless, because the overall service remains incomplete until each integration is in place, service testing may require extensive simulation to account for undelivered elements. There may also be a heavy regression test burden.

Direct integration with the (value) stream

Direct integration allows individual integrations to be deployed as soon as they are ready. This provides greater agility and enables rapid initial progress, as with incremental delivery. The approach may necessitate significant simulation to facilitate adequate testing. Global tests of the entire service, and even of the subsets of functional chains within it, can only be run late.

© AXELOS Limited and Van Haren Publishing

73

Reporting and advanced analytics

Advanced analytics is the autonomous or semi-autonomous examination of data or content using high-level techniques and tools. These go beyond traditional business intelligence to discover new or deep insights, make predictions, or generate recommendations.

Some advanced analytic techniques are:

- complex event processing
- data/text mining
- forecasting
- · graph analysis
- · machine learning
- multivariate statistics
- network and cluster analysis

- neural networks
- pattern matching
- · semantic analysis
- · sentiment analysis
- simulation
- visualization.



© AXELOS Limited and Van Haren Publishing

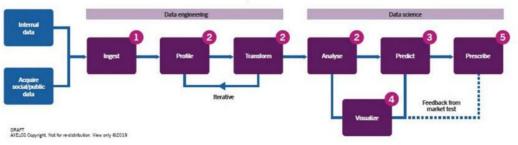
74

Data analytics

Definition: Data

Information that has been translated into a form that is efficient for movement or processing.

Data analytics is the method of examining data sets, often using specialized software, in order to draw conclusions about the information they contain.



© AXELOS Limited and Van Haren Publishing

75

Big data

Big data is a term that describes large volumes of structured, semi-structured, and unstructured data.

To extract meaningful information from big data requires processing power, analytics capabilities, and skill.

The more complex the data, the bigger the challenge of finding value within it.

Understanding and assessing the complexity of data is important when deciding whether a particular solution is appropriate and for mapping out the best approach.



© AXELOS Limited and Van Haren Publishing

76