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

ITIL Master					
ITIL Managing Professional (MP)				**ITIL Strategic Leader (SL)**	
ITIL Specialist Create, Deliver & Support	ITIL Specialist Drive Stakeholder Value	ITIL Specialist High Velocity IT	ITIL Strategist Direct, Plan & Improve	ITIL Strategist Direct, Plan & Improve	ITIL Leader Digital & IT Strategy
ITIL Foundation					

Managing Professional (MP) Transition

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

Colophon

Publisher about the Courseware

The Courseware was created by experts from the industry who served as the author(s) for this publication. The input for the material is based on existing publications and the experience and expertise of the author(s). The material has been revised by trainers who also have experience working with the material. Close attention was also paid to the key learning points to ensure what needs to be mastered.

The objective of the courseware is to provide maximum support to the trainer and to the student, during his or her training. The material has a modular structure and according to the author(s) has the highest success rate should the student opt for examination. The Courseware is also accredited for this reason, wherever applicable.

In order to satisfy the requirements for accreditation the material must meet certain quality standards. The structure, the use of certain terms, diagrams and references are all part of this accreditation. Additionally, the material must be made available to each student in order to obtain full accreditation. To optimally support the trainer and the participant of the training assignments, practice exams and results are provided with the material.

Direct reference to advised literature is also regularly covered in the sheets so that students can find additional information concerning a particular topic. The decision to leave out notes pages from the Courseware was to encourage students to take notes throughout the material.

Although the courseware is complete, the possibility that the trainer deviates from the structure of the sheets or chooses to not refer to all the sheets or commands does exist. The student always has the possibility to cover these topics and go through them on their own time. It is recommended to follow the structure of the courseware and publications for maximum exam preparation.

The courseware and the recommended literature are the perfect combination to learn and understand the theory.

-- Van Haren Publishing

Other publications by Van Haren Publishing

Van Haren Publishing (VHP) specializes in titles on Best Practices, methods and standards within four domains:
- IT and IT Management
- Architecture (Enterprise and IT)
- Business Management and
- Project Management

Van Haren Publishing is also publishing on behalf of leading organizations and companies: ASLBiSL Foundation, BRMI, CA, Centre Henri Tudor, Gaming Works, IACCM, IAOP, IFDC, Innovation Value Institute, IPMA-NL, ITSqc, NAF, KNVI, PMI-NL, PON, The Open Group, The SOX Institute.

Topics are (per domain):

IT and IT Management	Enterprise Architecture	Project Management
ABC of ICT	ArchiMate®	A4-Projectmanagement
ASL®	GEA®	DSDM/Atern
CATS CM®	Novius Architectuur	ICB / NCB
CMMI®	Methode	ISO 21500
COBIT®	TOGAF®	MINCE®
e-CF		M_o_R®
ISO/IEC 20000	**Business Management**	MSP®
ISO/IEC 27001/27002	*BABOK® Guide*	P3O®
ISPL	BiSL® and BiSL® Next	*PMBOK® Guide*
IT4IT®	BRMBOK™	Praxis®
IT-CMF™	BTF	PRINCE2®
IT Service CMM	EFQM	
ITIL®	eSCM	
MOF	IACCM	
MSF	ISA-95	
SABSA	ISO 9000/9001	
SAF	OPBOK	
SIAM™	SixSigma	
TRIM	SOX	
VeriSM™	SqEME®	

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Table of content

--- Page number

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 I can explain the content and apply it .					
Level 3 I get it! I am right where I am supposed to be.					Ready for the exam!
Level 2 I almost have it but 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

Welcome to
ITIL 4
Create Deliver and Support

ITIL®
ACCREDITED TRAINING ORGANIZATION
PeopleCert ON BEHALF OF **AXELOS**

COURSEWARE

Our coming days

- ✓ Safety
- ✓ Breaks
- ✓ Lunch
- ✓ Phones/Computers

2

Our coming days

- ✓ Active participation!
- ✓ Ask questions
- ✓ Theory (a lot)
- ✓ Some homework
- ✓ Group dialogues

3

Presentation

My questions:

- ✓ Who are you?
- ✓ What experience do you have from ITIL®?
- ✓ What is your role at work?
- ✓ What are your expectations?

4

Course schedule

Day 1:

- ITIL 4 Foundation recap
- The evolution of professionalism in IT and service management
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Day 3:

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5

ITIL 4: FOUNDATION RECAP

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

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
- …

7

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.

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.
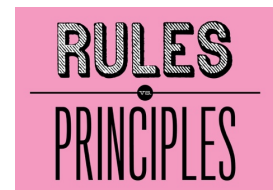

Product management

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.
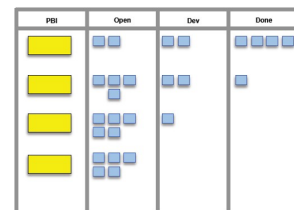
Value - outcomes, costs and risks

Definition: **Value**

Value is the perceived benefits, usefulness and importance of something.
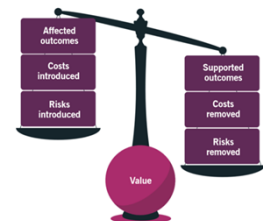
Definition: **Outcome**

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".

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.

Definition: **Service management**

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.
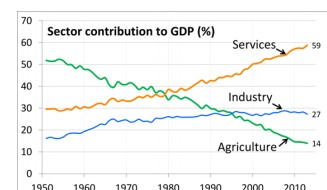
Four dimensions of service management

The service value system (SVS)

The 7 ITIL guiding principles

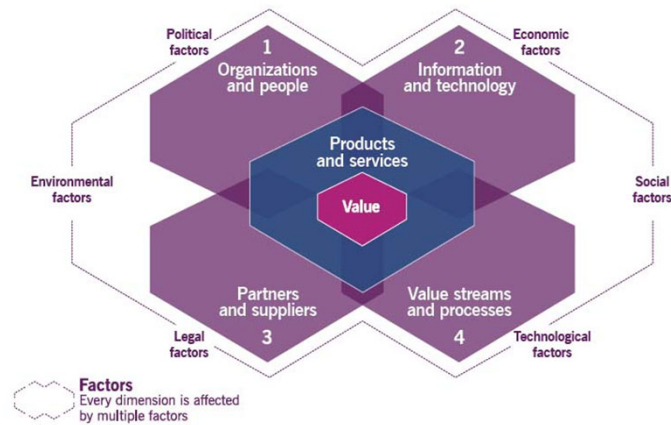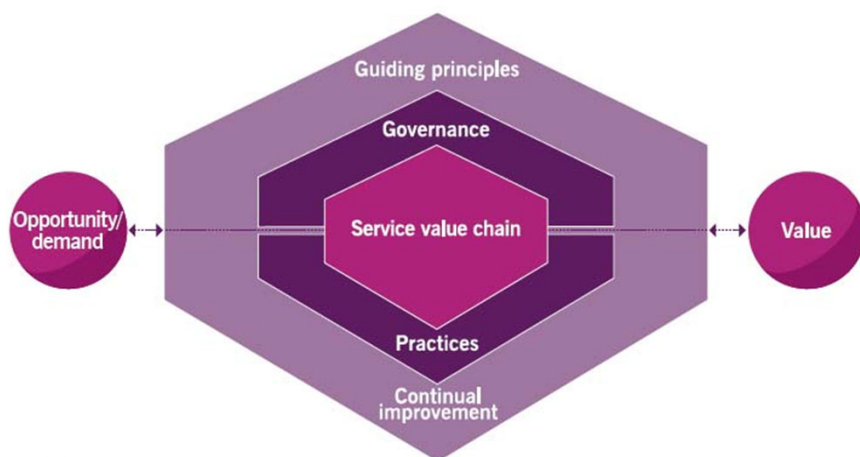|		
	Focus on value	Everything that the organization does needs to map, directly or indirectly, to value for the stakeholders.
	Start where you are	Do not start from scratch and build something new without considering what is already available to be leveraged. The current state should be investigated 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.

15

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.

16

The ITIL service value chain
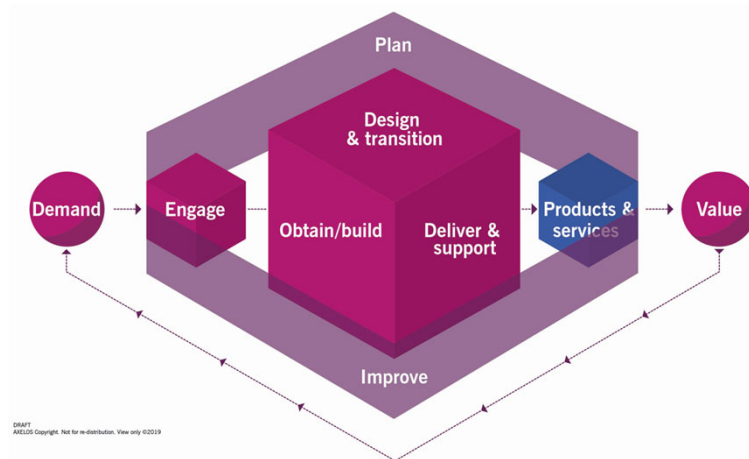
17

The 34 ITIL management practices

| General management practices	Service management practices	Technical management practices
Architecture management	Availability management	*Deployment management*
Continual improvement	Business analysis	Infrastructure and platform management
Information security management	Capacity and performance management	Software development and management
Knowledge management	*Change enablement*	
Measurement and reporting	*Incident management*	
Organizational change management	*IT asset management*	
Portfolio management	*Monitoring and event management*	
Project management	*Problem management*	
Relationship management	*Release management*	
Risk management	Service catalogue management	
Service financial management	*Service configuration management*	
Strategy management	Service Continuity management	
Supplier management	Service design	
Workforce and talent management	*Service desk*	
	Service level management	
	Service request management	
	Service validation and testing	

18

Continual improvement
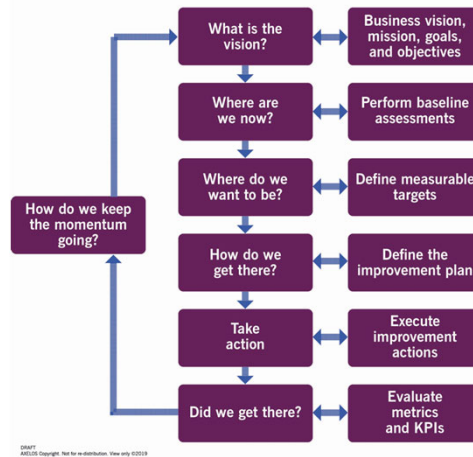
Summary
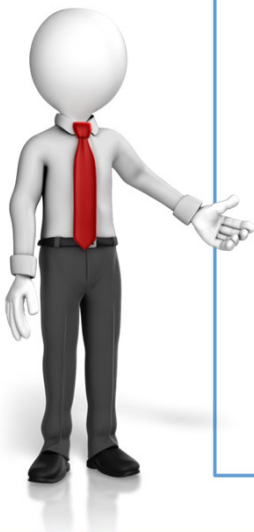
We have just talked about:

✓ This section has covered some fundamental concepts and key terms introduced in ITIL 4 Foundation

✓ Key areas discussed:

- Service and service management
- Value; outcomes, costs and risks

- The ITIL Service Value System (SVS)

- ITILs guiding principles

- Governance

- The ITIL service value chain

- The ITIL management practices

- Continual improvement

✓ The following sections build on the understanding these concepts and key terms and definitions

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

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

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

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

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

D. Deliver and support

25

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

C. It ensures that incidents are resolved in times agreed with the customer

D. It determines how the service provider is perceived

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

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

28

ITIL 4:
CREATE, DELIVER AND SUPPORT

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

ITIL® 4
Create, Deliver and Support

COURSEWARE

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.

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

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

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

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.

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
- **Keep it simple and practical**:   Reduce the complexity of the organization as much as possible to enable the flow of work and information to be uninhibited
- **Optimize and automate**:   Design and plan in a way where any tasks can be consolidated or automated

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Roles versus Jobs

- 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

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.

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.

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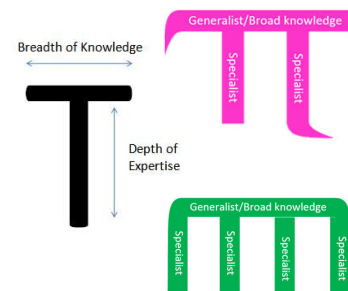
Although a clear focus on one competency creates deeper understanding, it can be dangerous to have only one area of expertise.

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
- Recognising non-IT experience in – 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!

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.

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

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**

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

Differentiate between output & outcome!

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.

44