ITIL® 4
Leader Digital and IT Strategy (DITS) Courseware

ITIL Master

Managing Professional (MP) Transition	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

ITIL®
ACCREDITED TRAINING ORGANIZATION
PeopleCert ON BEHALF OF AXELOS

ITIL® 4 Leader Digital and IT Strategy (DITS)
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®	

For the latest information on VHP publications, visit our website: www.vanharen.net.

Table of content

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
Introductions
DITS Key terms & concepts
What is the vision?
Where are we now?
Introduction to case & assignment 1
Day 2
Where do we want to be? & How do we get there?
Take action!
Did we get there?
Assignment 2
Assignment 3
Day 3
How do we keep momentum going?
Assignment 4
The 4 key capabilities
Exam preparation
ITIL Practices
Glossary

Welcome to
ITIL® 4
Digital and IT Strategy

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Our coming days
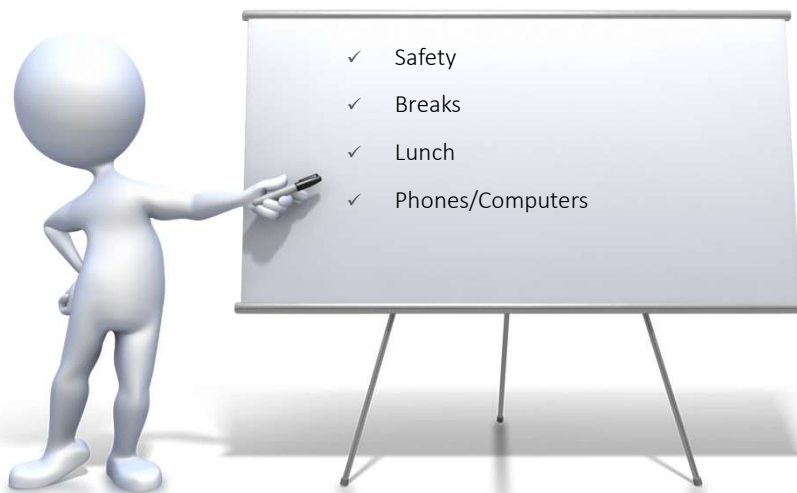
✓ Safety

✓ 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?

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ABOUT THIS COURSEWORK

slides are extras, they are outside of Syllabus

We will test your exam skills by ending each chapter with several multiple-choice questions.
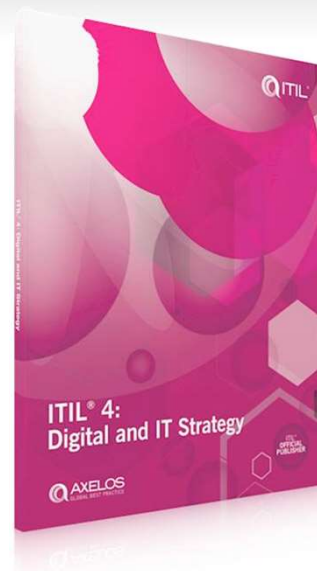
This is a relatively complex course. Therefore, to support the didactive storyline we have additional slides that that are outside the syllabus, these slides are not required exam content.

They are visualized with the icon above; the trainer may decide to use or neglect them during the training.

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ITIL® 4:
DIGITAL AND IT
STRATEGY (DITS)

ITIL® 4:
Digital and IT Strategy

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Digital and IT Strategy (DITS)

ITIL® 4: Digital and IT Strategy (DITS) focuses on the alignment of digital business strategy with IT strategy, adding a new perspective to the ITIL suite and elevating the discussion around ITIL concepts to a strategic level among business leaders and aspiring leaders. It also covers how disruption from new technologies is impacting organizations in every industry and how business leaders are responding.

The ITIL 4 publications are supported by the ITIL management practice guides, which contain pragmatic, hands-on guidance that can be applied in the context of all ITIL 4 publications. Practices that are particularly relevant to Digital and IT Strategy include architecture management, measurement and reporting, portfolio management, risk management, service financial management, strategy management, and workforce and talent management.

This guide provides detailed guidance on leading service organizations through digital transformation programmes. These programmes may include analysing internal and external ecosystems, developing business and operating models, managing organizational change, and cultivating a more agile and resilient organization.

This training **assumes that the reader is familiar with ITIL Foundation**, where the fundamental service management concepts of ITIL 4 are introduced and has a minimum working experience.

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The ITIL 4 certification scheme

The ITIL 4 certification scheme that has two main training streams and four levels:
- ITIL Foundation
- ITIL 4 Managing Professional (MP)
- ITIL 4 Strategic Leader (SL)
- ITIL Master
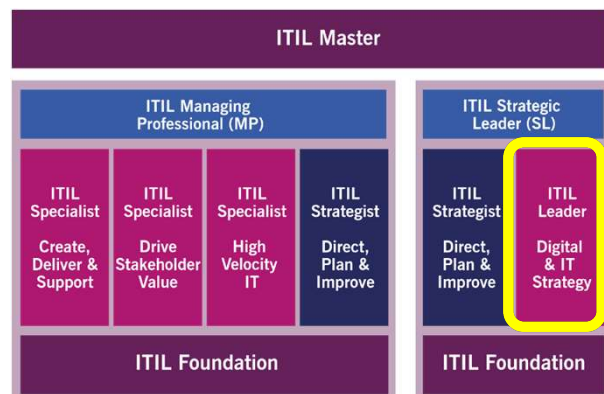
2 modules of the ITIL 4 Strategic Leader designation:
- ITIL 4 Strategist Direct, Plan and Improve
- ITIL 4 Leader Digital and IT Strategy

In order to be eligible to become an ITIL Master, end-learners must have both the ITIL MP and ITIL SL designations.

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Content from several sources

Examinable

Non examinable

Digital & IT Strategy

Syllabus

Practices that are particularly relevant to this publication

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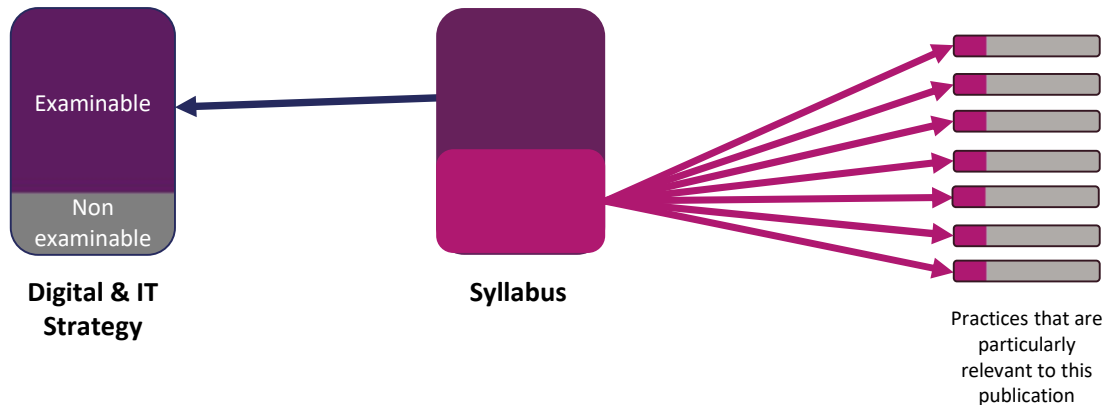
Key learning requirements

DIGITAL AND IT STRATEGY

- ✓ Demonstrate the use of the ITIL guiding principles in Digital and IT Strategy decisions and activities
- ✓ Understand how to leverage digital strategy to react to digital disruption
- ✓ Understand the relationship between the concepts of Digital and IT Strategy, the service value system and the service value chain, and explain how to utilize them to create value
- ✓ Understand how an organization uses Digital and IT Strategy to remain viable in environments disrupted by digital technology
- ✓ Understand strategic approaches made possible by digital and information technology to achieve customer/market relevance and operational excellence
- ✓ Understand the risks and opportunities of Digital and IT Strategy
- ✓ Understand the steps and techniques involved in defining and advocating for a Digital and IT Strategy
- ✓ Understand how to implement a Digital and IT Strategy

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Two-part assessment for DITS

Part 1: In-course practical assignments

- 4 in-course, practical group assignments based on a case study with three fictional companies and a risk report:
  - MCL – language learning centres
  - TNH (The New Hospitality) company
  - InteLearn – software startup
- 5 assessment criteria, each worth maximum of 8 points
- Pass mark 75% (30/40)
- Bloom's level 4 ("Analysis")
- Open-book
- The trainer evaluates the outputs of the assignment on:
  - scope: completeness of the results
  - quality: relevance to the case study and application of ITIL
- Individual or group skills and behaviour are NOT evaluated
- Marks are shared by all participating group members

Part 2: Multiple-choice question exam

- 60 minutes
- 30 questions
- Pass mark 70% (21/30)
- Bloom's level 2 ("Comprehension") and 3 ("Application")
- Online proctored exam
- Closed-book

Note:
If a candidate misses a group assignment, an individual written assignment should be fulfilled.

Fulfilment of all in-course assignments with a passing score is required to take the multiple-choice question exam!

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Course schedule

Day 1:
- Introduction to Digital and IT Strategy
- DITS Key terms & concepts
- The strategy journey
  - What is the vision?
  - Where are we know?
- Introduction to case study & assignment 1

Day 2:
- The strategy journey
  - Where do we want to be? & How do we get there?
  - Take action
  - Did we get there?
- Assignment 2
- Assignment 3

Day 3:
- The strategy journey
  - How do we keep momentum going?
- Assignment 4
- The 4 key capabilities
  - Digital leadership
  - Managing innovation and emerging technologies
  - Managing strategic risk
  - Structuring for digital business
- Exam preparation

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INTRODUCTION TO DIGITAL AND IT STRATEGY

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What is Digital and IT Strategy (DITS)?

Digital and IT Strategy is:

- An examination of the role of strategy in a digitally enabled organization
- An overview of the capabilities needed to compete in a digital world
- About how to evaluate new technology and its potential for competitive differentiation
- A way of thinking about innovation so that organizations can prepare successive waves of disruptive technology

Digital and IT Strategy is NOT:

- A "how to" guide to doing strategy
- A list of dos and don'ts
- An overview of specific emerging technologies and how to use them
- A forecast of the next wave of ideas and technologies that will disrupt the industry

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The strategy journey

There is a great degree of alignment between the Digital and IT strategy journey in alignment and the continual improvement model. The sections are mapped to chapters 3-8 in the DITS publication:

What is the vision?	Details the types of digital disruptions and factors that impact organizations, examples of digital maturity and positioning models, and guidance on how to craft a compelling digital vision.
Where are we now?	Gives an overview of how to assess an organization's digital readiness, and assess internal and external environments and their impact.
Where do we want to be? **How do we get there?**	Presents specifics about strategy cycles and horizons, structuring a business case for change, selecting the appropriate business model, planning a strategy that meets the organization's objectives relative to its customers and internal and external environment, and how to frame discussions and obtain buy-in from key stakeholders.
Take action!	Details how to implement a digital and IT strategy, including digital transformation at all levels of an organization, and how to structure, lead, and communicate as part of several different types of strategic change initiatives.
Did we get there?	Provides an overview of how to measure the progress and effectiveness of a strategy, including an overview of OKRs, CSFs, and KPIs, and guidance on how to change an existing strategy accordingly.
How do we keep the momentum going?	Gives recommendations on parallel operating models, surviving and thriving in a volatile, uncertain, complex, and ambiguous (VUCA) environment, and continual improvement of the organization's digital transformation efforts.

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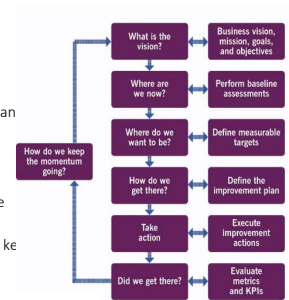
Related ITIL practices

There are many ITIL practices that support the realisation of Digital and IT Strategy. The key practices covered as part of this training are (examinable practices in **bold**):

- **Architecture management**
- Project management
- Continual improvement
- Relationship management
- Knowledge management
- **Risk management**
- **Measurement and reporting**
- **Service financial management**
- Organizational change management
- **Strategy management**
- **Portfolio management**
- **Workforce and talent management**

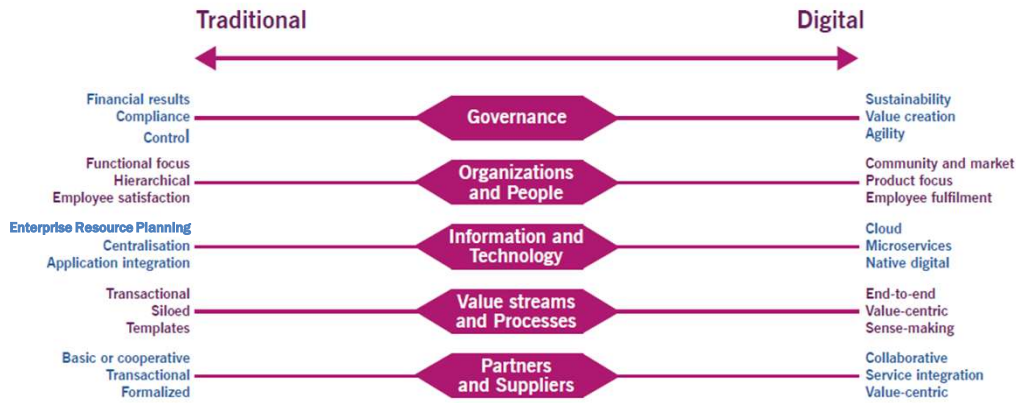16

Digital technology has changed the world

Figure 1.2 Governance and management shift from traditional to digital organizations

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Business models are changing

The opportunities and changes created by digital technology force organizations to rethink their entire business models.

New business models replace slower, older, and more expensive ways of working, by changing the go-to-market approach; how the organization engages with customers; and the products, services, and delivery platforms. These models result in a demand for further innovation.

Older business models are becoming less relevant because they depend on established relationships, unchanging processes, consistent availability of resources, and loyal customers and employees. These qualities can be constraining when competing against agile and innovative organizations.

Until recently, the relationship between an organization and its customers was that the customer revolved around the products and services. However, today the most successful organizations are those that revolve around and align with the changing needs of the consumer (Denning, 2013).
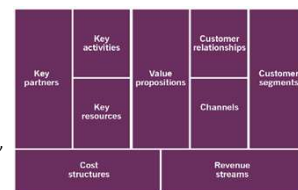
Definition: **Business model**   A formal description of how an organization should be configured to create value for customers based on its strategy

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The role of technology leader is changing

As technology becomes more complex, it also becomes easier to access and use. Consequently, the role of the technology leader, as someone who unlocks the value of technology through specialized technical expertise, is changing. Although there will always be a role for technical experts, it is increasingly regarded as a back-office role. The new technology leader is a business executive who understands technology, rather than a technology expert who understands the business.

This poses challenges for both business leaders and technology experts. **To become leaders, technology experts need to do more than just understand business principles. They need to become experts in the business they are a part of.**

For example, they need to know how to manage technical debt while operating and understanding the technology, and committing to the expense of making it manageable and secure. Business leaders must also understand the limits of technology, and have a basic understanding of best practice frameworks and ways of working.

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A need to adapt to accelerated innovation

Innovation replaces or changes the current situation or creates a new capability or product, but it is expensive to introduce and often not very reliable. Innovation is introduced because it provides competitive advantage

As the use of the innovative product scales up, the organization uses standard processes and education to produce consistent, predictable results. Soon the innovation becomes a well-understood component of standard business operation

The more successful the innovation, and the more well understood it is, the more other organizations will use it or replicate it. No longer unique, it becomes a commodity that is essential to stay in business, but no longer a source of competitive advantage

Commoditized technology is inexpensive to produce and maintain, and the skills required to manage it are inexpensive and abundant. Organizations emerge that use economies of scale to supply and manage the commodity more cheaply and better than it can be done in-house.
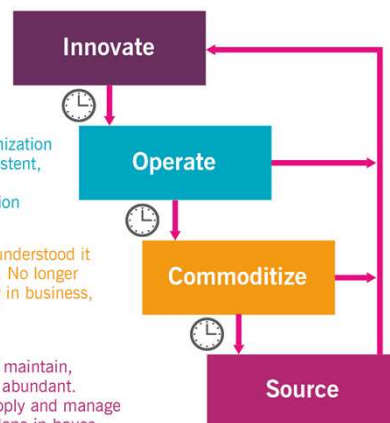
The more widely an innovation is understood and used, the more likely it is to become a baseline or a building block for further innovation

Innovate
Operate
Commoditize
Source

Figure 1.4 What happens when innovation accelerates

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Accelerated innovation and business change

Firstly, emerging technology has introduced opportunities that have disrupted industries. The ability to achieve and maintain a position requires an organization to think differently about its business and operating models.

Secondly, the speed of innovation has accelerated significantly. Technology is cheaper, faster, and easier to implement. Innovation adds greater functionality, making it faster and easier to enter new markets. Organizations need to change quickly to harness the power of rapidly evolving digital technology.

In the early years of computerized automation and digitization, organizations managed technology using a relatively simple plan-build-run model, as illustrated by the left-hand diagram in 1.3. Innovation changed organizations, but the rate of change was in months and years. **Today organizations need to change quickly to harness the power of rapidly evolving digital technology, increased pace of innovation, and the ever-changing demand of a mobile consumer base.**
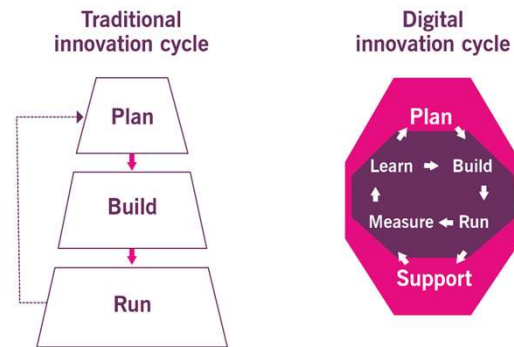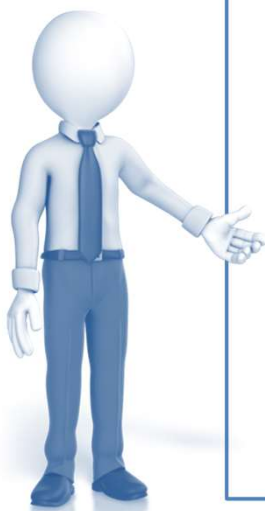

Figure 1.3 Traditional vs continual innovation cycle

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Summary

We have just talked about:

- ✓ What Digital and IT Strategy (DITS) is and what it is not.
- ✓ The way a strategy journey can be based on the ITIL continual improvement model and some of the related key practices
- ✓ The way digital technology has changed the world and created a need for business model innovation, changes in operating models and how it puts new and more complex requirements on technology leaders
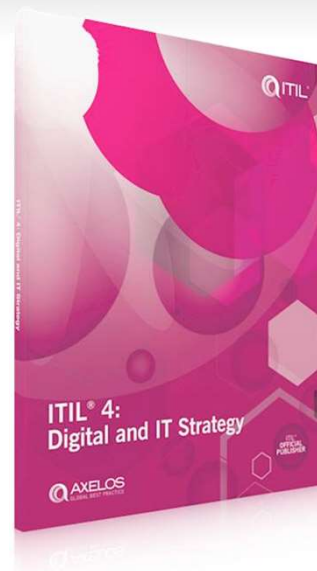- ✓ Ways to better support innovation in a digital environment and ways to adapt to accelerated innovation

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Course schedule

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DITS KEY TERMS & CONCEPTS

ITIL® 4:
Digital and IT Strategy

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Key terms

Digital technology is any technology that digitizes something or processes digital data. The term refers to the merging of information technology (IT), operational technology (OT), and communication technology to achieve levels of functionality and automation that are not possible with any of these alone.
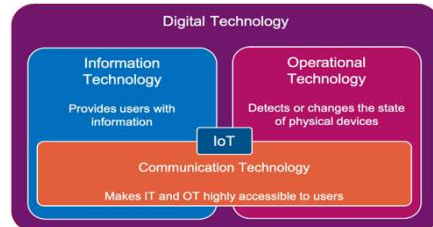

Figure 2.1 Digital technology

Definition: **Information technology (IT)**	The application of digital technology to store, retrieve, transmit, and manipulate data, often in the context of a business or other kind of organization
Definition: **Operational technology (OT)**	The application of digital technology for detecting or causing changes in physical devices through monitoring and/or control
Definition: **Internet of Things (IoT)**	A system of interrelated computing devices and mechanical and digital machines that are interconnected via the internet, enabling them to send and receive data without human interaction
Definition: **Communication technology**	Which is sometimes seen as a component of either IT or OT, enables IT and OT to be highly mobile and accessible to organizations, consumers, and other stakeholders

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Digital organization & digital business

What differentiates a **digital organization** is the extent to which it **uses digital technology as a basis to differentiate itself**. Digital organizations rely on digital technology as a fundamental component of their business and operating models. Their products and services often have a digital component, or may be entirely digital.

Most organizations will rely on a combination of digital, IT, OT, analogue, and manual systems and activities. An organization needs to decide which parts of the business to digitize and to what extent, so that it can achieve and maintain a competitive advantage.

The term 'digital business' is here referred to as **the activities that, using digital technology, enables an organization to fulfil its purpose**.

Definition: **Digital business**	Activities that use digital technology, enabling an organization to fulfil its purpose
Definition: **Digital organization**	An organization that is enabled by digital technology to do business significantly differently, or to do a significantly different business

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Digitization vs digital transformation

'**Digital transformation**' has different potential meanings, depending on the individual and the context.

Executives should view digital transformation as an organization's ability to identify innovative uses of both emerging and current technologies. The organization should then respond by transforming its strategy and operations to maintain and grow its market position. Many approaches limit digital transformation to technologies, such as data, automation, and virtualization. However, transformations impact all areas of an organization. This is illustrated in Figure 2.2.
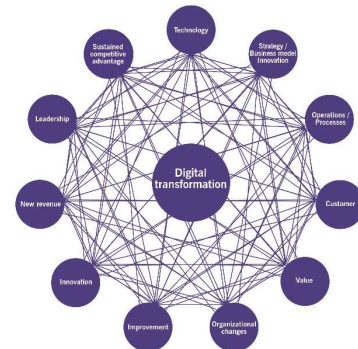
Figure 2.2 Modified list of key digital transformation themes

Definition: **Digitization**	The process of transforming something (e.g. text, sound, or images) from analogue to digital form by expressing the information in binary digits

Definition: **Digital transformation**	The use of digital technology to enable a significant improvement in the realization of the organization's objectives that could not feasibly have been achieved by non-digital means

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Products and services

The products and services that an organization offers are central to its strategy, as this is how it realizes its purpose and co-creates value. The relationship between products and services is the basis for business decisions and which operating model it chooses to use.

Services are presented to consumers in the form of **service offerings**, which describe one or more services based on one or more products. Service offerings might include **goods**, **access to resources**, and **service actions**.
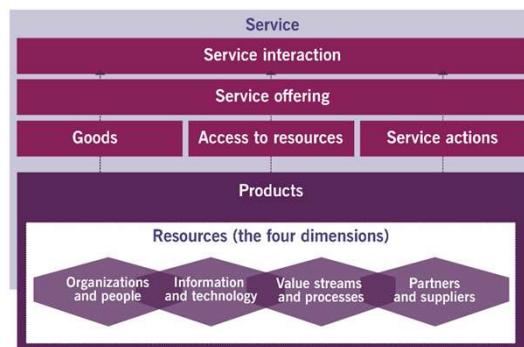
Figure 1.10 How services, service interactions, service offerings, products, and resources are related

Definition: **Resource**	A person or other entity that is required for executing an activity or achieving an objective

Definition: **Product**	A configuration of an organization's resources, designed to offer value for a consumer

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

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