

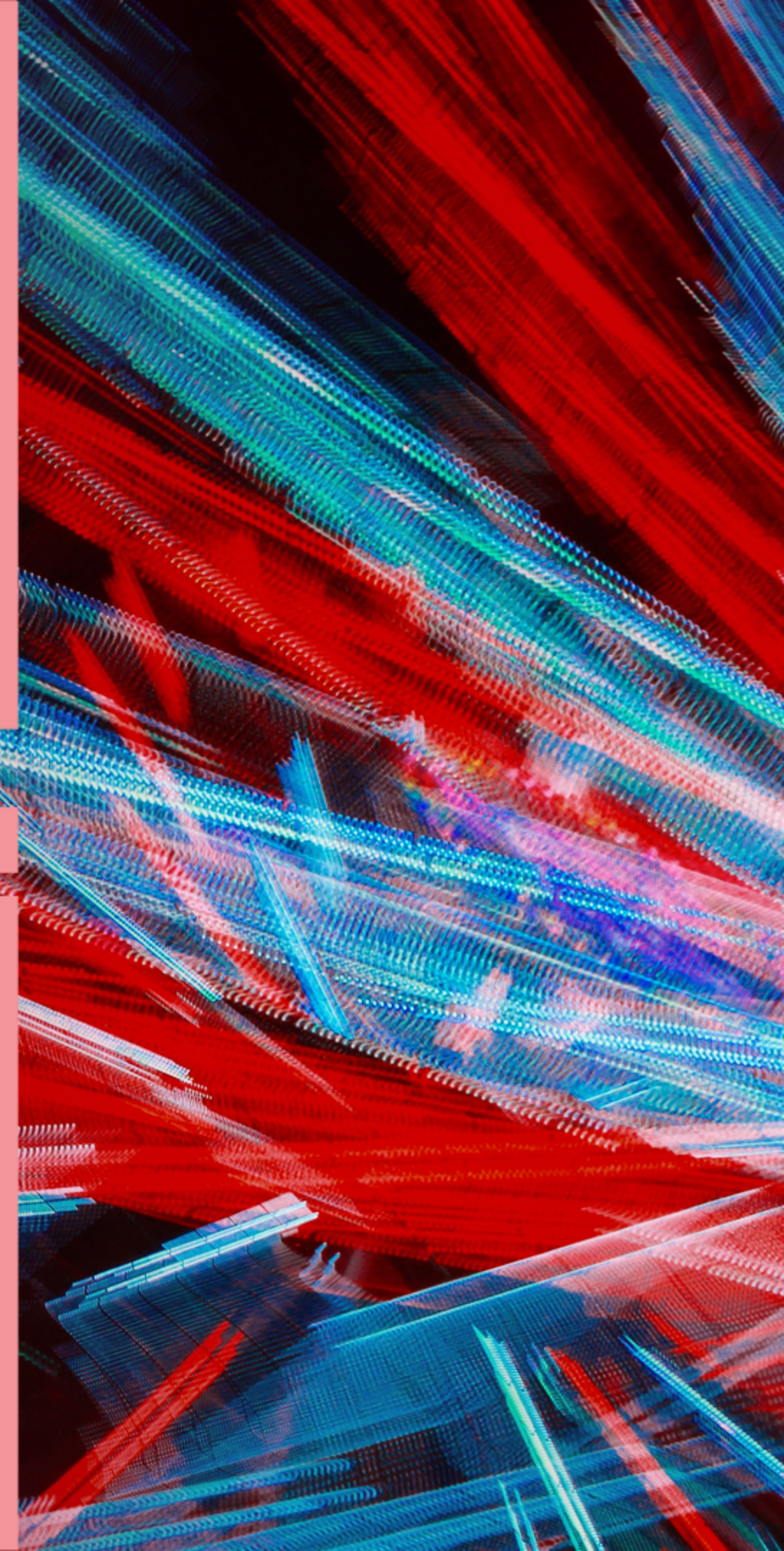
DIGITAL

KNOWLEDGE MANAGEMENT

in small and medium-sized companies



Invest in knowledge and secure competitive advantages

With support from





EDITORIAL	THE DIGITAL WORKPLACE IS A KNOWLEDGE WORKPLACE What you should think and do now	PAGE 3
-----------	--	-----------

CHAPTER 1	My business: knowledge in businesses and companies  Areas of knowledge management: organisation, people, technology Managing knowledge – it's important What exactly is intellectual capital? Worksheet:  Knowledge in focus: strategically significant knowledge	PAGE 5 9 10 11
--------------	--	--------------------------------

CHAPTER 2	My team: collective knowledge  How knowledge grows in a team: the knowledge spiral Explicit and implicit knowledge Experience exchange, cooperation and collaboration Worksheet:  Secure treasure troves of experience, learn from projects	PAGE 12 17 18
--------------	---	----------------------------

CONCLUSION	Knowledge management secures intellectual capital and the future of your company	PAGE 27
------------	---	------------

GLOSSARY G	The Job Wizards knowledge management glossary Knowledge management has generated many new terms and criteria. Here are the most important ones to be able to join the conversation.	PAGE 19 21
---------------	--	------------------

CHAPTER 3	My qualifications: individual knowledge  The focus is on people The knowledge staircase: information, competences, value creation Worksheet:  Ensuring and developing competences: the knowledge tree	PAGE 22 24 25 26
--------------	---	----------------------------------

Contents



Share your knowledge. In the context of development and innovation cycles that are moving ever faster, knowledge and information are playing an increasingly important role for each individual and every company these days.

In view of the huge floods of data and information, the need for an overview and structured system understanding is growing. What among the vast array of data and information is really relevant and worth knowing? And what can I confidently ignore? There is even a new term for that already: 'ignorance competence'.

Knowledge is now one of the core resources in small and medium-sized companies. Did you know that the most important element of the (*value creation-*) relevant knowledge in your company lies in the personal experience of your employees?

How can that valuable, personally stored know-how be made visible, retained, optimally used, shared and further developed for your company? What is the 'intellectual capital' situation in your company? What knowledge is strategically significant now and in future?

The first chapter of this workbook is designed to present you with some important foundations of knowledge management in organisations and companies. The second chapter is about how knowledge grows in teams and SMEs. Skills and competence are built through the integration of information into the context of human experiences. The third chapter is about how you can visualise and further develop your personal knowledge.

Our fifth Job Wizards workbook is rounded off with a glossary containing various work techniques, tools and inspiration. We hope this workbook contributes to an expansion of your personal treasure trove of knowledge.

If you decide (*or have already decided*) to invest in your company's knowledge pool, it's a safe choice, because as Benjamin Franklin recognised, an investment in knowledge pays the best interest.

The Job Wizards

The digital workplace is a knowledge workplace

What you should think about and set up now



*Good to know –
knowledge that you should consider and act on*



*Good to do –
categorise your own experiences and grow personally*

The concept of the Job Wizards Workbooks

The Job Wizards workbooks are published four times a year. They offer entrepreneurs and decision makers up-to-date facts, content and inspiration on different subjects in the world of work.

In Workbook No. 5, we have collated the most important information about the workplace of the future and the corresponding digital knowledge management for you. It includes important suggestions and inspiration for how small companies in particular can invest in a future-oriented knowledge pool.

- In the knowledge section
„Think ahead – good to know“
the workbook explains how relevant knowledge in a team and the whole company grows and can be managed.
- In the practical section
„Work smart – good to do“
worksheets help you implement the freshly acquired insights and findings in your daily work.

How to read this workbook.

CHAPTER

1

MY BUSINESS KNOWLEDGE IN BUSINESSES AND COMPANIES



A large part of business success is based on a solid foundation of knowledge. In a knowledge society, it is no surprise ‘that knowledge about things is at least as important, if not more so, than implementation’, says Bill Fischer, Professor of Technology Management at IMD (*the International Institute for Management Development*) in Lausanne, Switzerland.

Toyota (‘Start your impossible’), the most valuable car brand in the world, has shown that good knowledge management pays off. The Japanese company is known for its strict quality management and meticulous knowledge management.

With that in mind, the induction of new employees, called Job Instruction, follows a highly polished plan. For the first months, checklists with a wide variety of information are provided. This not only includes step-by-step instructions for specific tasks, lists with helpful tips and warnings for each specific step and explanations of why particular steps have to take place exactly as they do,

but each new employee is also provided with an experienced colleague by their side. In that way, the car company ensures that the knowledge that has already been acquired by all employees is passed on in its entirety.

This example cannot be directly transferred to all careers – creative jobs probably need different instructions, for instance. But it does show how company-relevant know-how can be well managed. Three areas are intertwined in this context:

- **The corporate organisation**, which ensures that business workflows and processes are designed in a knowledge-centred way
- **The people**, who have a lot of knowledge and, at the same time, are always acquiring and creating new knowledge
- **The technology**, which ensures that existing knowledge is documented, secured and sensibly structured so that it is accessible to all interested employees in the company

Areas of knowledge management: organisation, people, technology





People, organisation, technology



*The three core
areas of knowledge
management*

MAKE KNOWLEDGE TRANSPARENT

This is about identifying company-relevant knowledge.

In other words:

- a) gaining a comprehensive overview of the existing knowledge and
- b) in the process, exploring whether there are knowledge gaps that should be filled.

RETAIN AND SECURE KNOWLEDGE

This is a core activity of knowledge management that plays a particularly important role in times of change. That may be the case, for example, when experienced employees leave your company, a generational change is on the horizon, or parental leave or sabbaticals lie ahead. Securing knowledge after the completion of projects is also included here.

DEVELOP KNOWLEDGE WITHIN THE COMPANY

Unlike in a big company, a specific department for research, development or innovation that generates knowledge is not immediately necessary. The launch of a new product or the results of a customer survey, for example, also generate new knowledge.

ACQUIRE EXTERNAL KNOWLEDGE

In times of transformation in particular, this is an important activity with the aim of acquiring new knowledge, be it through training and education, commissioning external experts or hiring new employees.

SHARE AND DISTRIBUTE KNOWLEDGE

This is about accessibility of knowledge, in contrast to confidentiality of knowledge. The University of Cambridge set out its stall clearly in favour of sharing knowledge in 2017. It published the PhD thesis of the physicist Stephen Hawking publicly on the Internet in order to make it globally available. Within a company, the following questions are relevant: how is the exchange of information and documents arranged?

Managing knowledge – it's important



Knowledge management is a wide-ranging area of activity that includes various tasks. Here are the most important ones.

The intellectual capital of a company or organisation describes the knowledge of all employees, as well as the available data and information, e.g. about products, services, customers, experts or competitors. Licences and patents are also included.

Intellectual capital is displayed in what is known as a knowledge balance sheet, which can be compiled in different ways. Knowledge balance sheets generally include factors such as corporate goals, business processes, intellectual capital and business success.

There are various ways to structure a knowledge balance sheet. One way to depict the intellectual capital of a company is the description of human, structural and customer capital:

1. HUMAN CAPITAL = HC

What particular skills, talents or competences are collected together in a company? Roughly speaking, this is about using the collective abilities of all employees together with all available knowledge to provide the best possible offers and solutions for customers.

2. STRUCTURAL CAPITAL = SC


Worth noting: structural capital includes all the knowledge that stays in the company when all the employees go home – all the existing fixed organisational and communication structures. That could be processes of documentation of knowledge and business processes, as well as databases, copyrights, patents and company-internal software.

3. CUSTOMER CAPITAL = CC

How much faith do customers have in the products and services of a company? This is about a stable network of successful relationships with domestic and international customers and business partners.



What exactly does ‘intellectual capital’ mean?

 **Would you like to know** why knowledge management in SMEs is continuously growing in importance? Read our Job Wizards article **‘Knowledge management: intellectual capital for SMEs’**.

1

If we want to achieve our project/department/company goal (in 12 months, three years, five years), what knowledge / know-how do we need?

2

Can that knowledge possibly be divided into business-relevant knowledge areas? (e.g. project knowledge, systems knowledge, customer knowledge; or knowledge of particular departments or employees, project knowledge, knowledge of particular branches, etc.)

3

3. How well is the relevant and existing knowledge in the individual areas already documented?

4

Who has documented the knowledge thus far and in what form?

5

Who could document it in future and in what form?

The following table is an example of how and in what form you can gain an initial overview.



Knowledge in focus: strategically significant knowledge



You can derive the aims of strategic knowledge management from your corporate goals. Take your time to read the questions and note your answers down as keywords.

Employee name

Mr / Mrs Smith

Business-relevant
knowledge areas
(max. four)Easily documentable
information / explicit knowledge

OR

Hard-to-document (experience-based)
knowledge and implicit knowledgeKnowledge concerning
certain **products**Knowledge concerning
central **work steps**Knowledge concerning
machines / plantsKnowledge concerning
customers

Knowledge in focus: strategically significant knowledge



Source:

Table based on the PDF 'Keeping and
distributing knowledge in a company'. p. 20
www.rkw-kompetenzzentrum.de (2013)



CHAPTER

2

MY TEAM

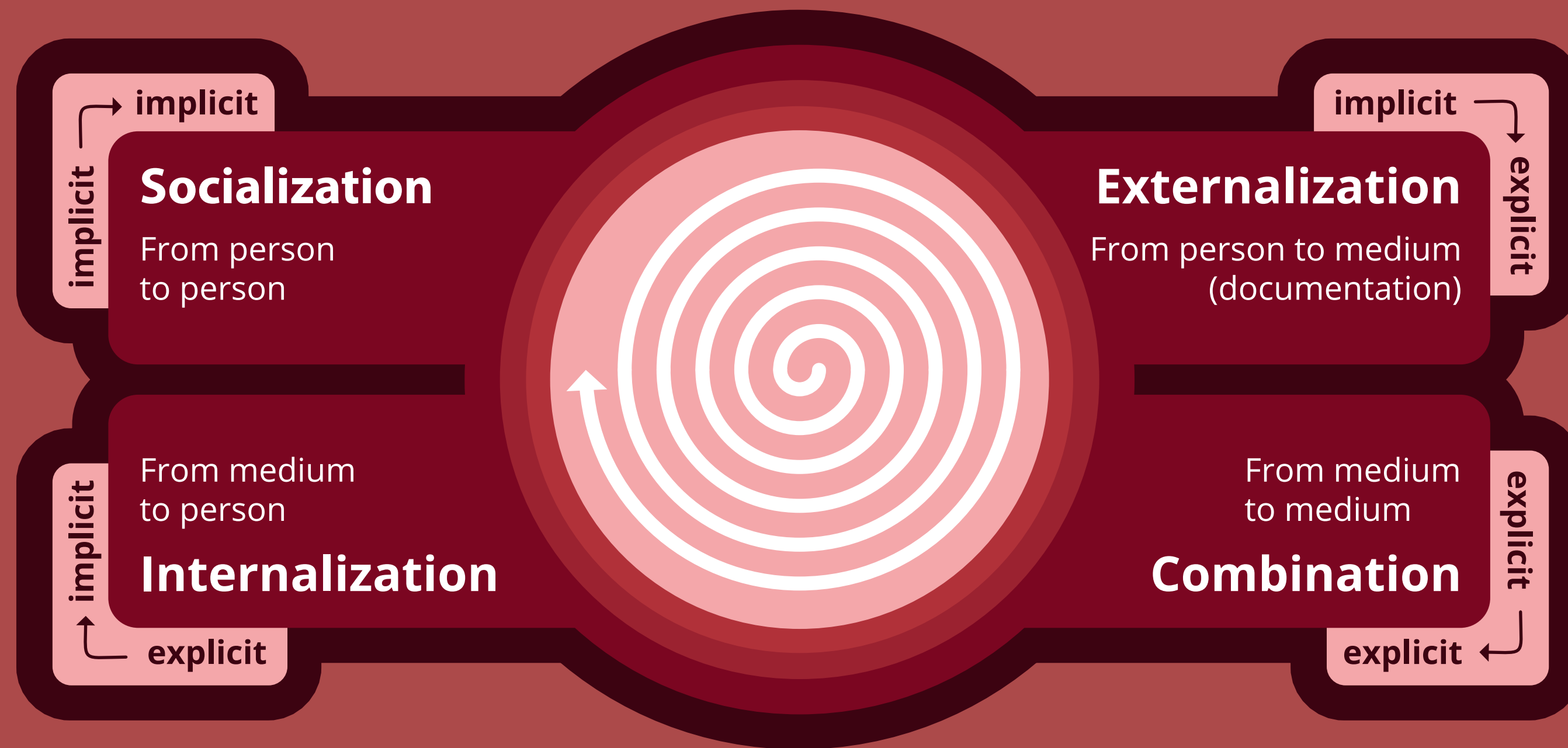
COLLECTIVE KNOWLEDGE

Whether it is about making knowledge in a company transparent, sharing it, securing it, retaining it or developing it: communication and exchange between colleagues play a vital role in all those processes. In everyday work, colleagues should share their specialist knowledge and support each other in the acquisition of new information.

An additional challenge is that employees often work at different locations. Learning with and from each other needs to be well organised. One possibility is to make centralised experience of the introduction of a new product available to all employees involved in marketing, distribution and sales: this could be through a checklist, a platform specifically designed for product launches, or in a face-to-face or virtual meeting.

My team: collective knowledge





What makes a company or organisation a learning organisation? One of the best-known models for depicting and explaining the processes of productive knowledge retention and creation in companies comes from the Japanese visionaries Ikujiro Nonaka and Hirotaka Takeuchi.

With their guide *The Knowledge-Creating Company*, they attracted attention to the importance of knowledge management and wrote a management classic.

Their model, also known as the SECI or spiral model of knowledge, shows how knowledge in a company is created and developed – through communication and social interaction between people. SECI is an abbreviation of the four terms *socialisation, externalisation, combination and internalisation*.

How knowledge grows in a team: the knowledge spiral



The SECI Model or knowledge spiral: how knowledge develops and grows in a continuous process within a company

Differentiating between explicit and implicit knowledge is important in order to understand the model. So-called explicit knowledge covers all knowledge that is clearly documented, which can include knowledge of rules or facts from textbooks, but also any operational know-how from instructions, papers or documents, as described in the Toyota example in the first chapter.

Implicit knowledge, or tacit knowledge, on the other hand, describes personal knowledge. For example, an employee knows how a machine works best (*don't start it cold, don't overload it, etc.*) – that information is essentially stored in their personal experience. But: there is no manual or documentation for this knowledge. That knowledge would not be available to a stand-in for the employee in question.

Experience exchange, cooperation and collaboration

The SECI model describes how implicit and explicit knowledge can be combined in a continuous process through cooperation and collaboration in everyday work. This creates a kind of knowledge spiral, in which the available and accessible knowledge in the company grows. At the same time, the knowledge growth makes innovations and new findings possible.



Socialisation

describes the exchange of tacit knowledge among colleagues, for example in conversations or meetings. Being instructed and observing workflows also belong in this category.

Externalisation

describes the process in which tacit knowledge is written up, stored or documented in such a way that it can be comprehended by other employees without social exchanges.

Combination

describes what happens when explicit knowledge is systematically developed or transferred to new areas through combination with other explicit knowledge content.

Internalisation

occurs whenever explicit existing knowledge, for example in the form of books or manuals is taken in by employees and integrated into their own world of knowledge and experience.

Explicit and implicit knowledge



It is interesting to note that collegial and social interaction plays a key role in almost every form of knowledge exchange and transfer. Cooperation and collaboration will become increasingly important for work in future. Employees or teams work cooperatively when they are used for a planned end product at different times or on different sub-projects. They work alongside each other, so to speak.

Collaborative work, on the other hand, means that all those involved in the project are involved in the process and the development of the planned end result. They work with each other throughout the entire project phase. What are known as collaboration tools are usually used in such cases. This allows a more diverse exchange or experience and knowledge to take place.

Experience exchange, cooperation and collaboration



Would you like an overview of collaboration and communication in teams? You can find it in our Job Wizards download **'Communications Charta for virtual teams'**.



Does your company have lots of data and frequently experience problems with collaborative data exchange? Then read the Job Wizards article **'File dilemma on collaboration platforms: are you still sending or have you synchronised?'**

Knowledge is not only shared digitally, but increasingly also virtually. The reason: many employees now do mobile work or work in teams at different locations.



Would you like to know more about digital networking of teams and new forms of cooperation in SMEs? Read our Job Wizards article **'Managing virtual teams successfully'**.

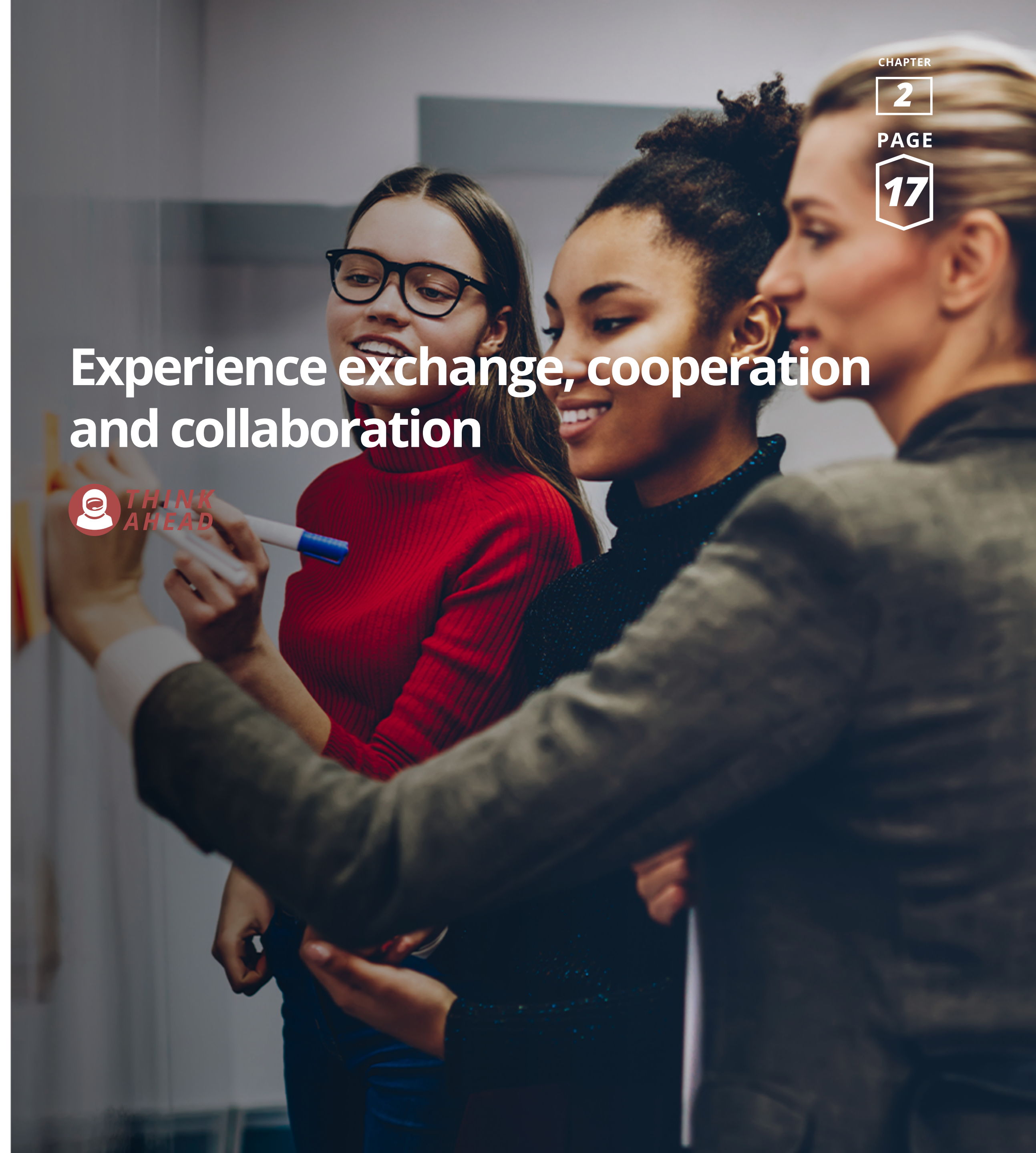


Would you like to know more about professional knowledge exchange, the community of knowledge or the new corporate trend of microlearning? Read our Job Wizards article **'Microlearning – time for some bite-sized digital knowledge'**.



Would you like to find out more about how to improve internal communication in a company using a social networking tool? Read our Job Wizards article **'Fast and transparent: how a social network tool is brought into the company (part 2)'**.

Experience exchange, cooperation and collaboration



Here are 11 questions that can help you assess projects. The questions might seem simple – but the main challenge in everyday work is to take time as a team for a joint project debrief.

Source: Knowledge management
Organise knowledge – secure competitive advantages (Cornelsen, Pocket Business), p. 61/62

- 1

Looking back: what went well? What didn't?
- 2

In hindsight, what could we have planned better?
- 3

Did we achieve all the aims?
- 4

What was particularly helpful in doing so?
- 5

Were there pleasant or unpleasant surprises during the project?
- 6

How did we react to them within the team?
- 7

How satisfied were we with the team set-up?
- 8

How good was the cooperation within the team?
- 9

Were there difficulties or problems?
How did we resolve them?
- 10

What three good tips have we gained for future project planning?
- 11

What three good tips can we pass on for the implementation phase?



Secure treasure troves of experience, learn from projects



Lessons learned, debriefing – different terms for the same important principle, namely: learning as a team from how a project has gone – from shared experiences and errors.

There are various techniques and tools for this. If important experiences from projects are retained, analysed and critically assessed, everyone in the company can learn from them.

CHECKLISTS

They originated in aviation and are very helpful in structuring tried-and-tested problem solutions in a clear, step-by-step manner. They present existing knowledge in a concise form. Working with checklists, and sometimes manuals or succinct handbooks, ensures that all process-relevant tasks and jobs are completed.

COPS (COMMUNITIES OF PRACTICE)

are a kind of expert community or network of experts and are often established to drive innovation. The idea goes back to the American sociologist Jean Lave and the Swiss social researcher Étienne Wenger. Their belief: new knowledge arises from mutual exchange; people always learn in the context of social relationships. CoPs can work in-house or across companies. They meet in a virtual space or for a personal exchange of experiences.

The Job Wizards knowledge management glossary

Knowledge management has generated many new terms and criteria. Here are the most important ones to be able to join the conversation.



The Job Wizards knowledge management glossary

Knowledge management has generated many new terms and criteria. Here are the most important ones to be able to join the conversation.

DATABASE-BASED KNOWLEDGE SYSTEMS

are the digital counterpart to the classic archive. Instead of keeping books, files, instructions for use, etc. in a library or filing cabinet, data is entered, files scanned, various types of information stored. The most important criteria for well-functioning knowledge systems are **a)** a good, practical search function to find the stored information and **b)** continuous maintenance of the content, so that the database is always up to date.

DIRECTORY OF EXPERTS

A simple and effective tool for creating transparency of knowledge: who can do what particularly well in the company? Who knows Customer X best? Who has what expertise? Which competence profile? An efficient directory of experts works like a database, providing quick access to the knowledge that exists in the company.

Would you like to know how to promote the development of good ideas and create a culture of innovation supported by suitable technologies? Read our Job Wizards article **‘Innovation: great ideas need a place to hatch and grow (part II)’**.

JOUR FIXE

A regular meeting to share and distribute knowledge, for example every first Wednesday of the month from 11 a.m. to 12 p.m. In project management, a jour fixe ensures that the project participants do not make any other appointments at that time, but rather reserve it to exchange knowledge and bring each other up to date.

IDEA MANAGEMENT


is a buzzword for internal suggestions. An important prerequisite for finding and managing ideas is defining a person or group to describe the challenges, set the time frame and, with the support of the management, drive forward the creation of ideas. Ideas can be managed efficiently with the help of a platform.

LESSONS LEARNED

This is about learning as a team from a project or production that has already been completed. This usually takes the form of a debriefing workshop (*see also Worksheet 2*). Important experiences, dos and don'ts, or a checklist of core steps can be documented and help subsequent teams to improve their workflow.

MENTORING

Experienced colleagues (*mentors*) work together with new and/or younger colleagues to support integration and to transfer knowledge. Mentors are available as contact persons, for example to answer questions that arise or to help solve problems. Recently, what is known as reverse mentoring has also cropped up: young employees help experienced top managers to become familiar with digital tools and use them for work.



Would you like to know more about ‘reverse mentoring’ and find out how it works in practice? Then read our Job Wizards two-parter **‘Put the youngsters in charge. How old and young alike learn from one another in the digital company (part I)’** and **‘Put the youngsters in charge. How does reverse mentoring work in practice? (Part II)’**.

PATENTS

Are effectively the codification of operational knowledge. They protect operational inventions and innovations, whether they relate to specific products or processes. Registering a patent is a complex process. It requires a patent attorney and a precise presentation of the invention.

KNOWLEDGE TANDEMS

Also called learning tandems, they enable a structured form of knowledge transfer, for example from older, experienced colleagues to newcomers. Learning tandems are suitable for a wide range of tasks, including for induction if someone is to take on a new key position in the company.

The Job Wizards knowledge management glossary

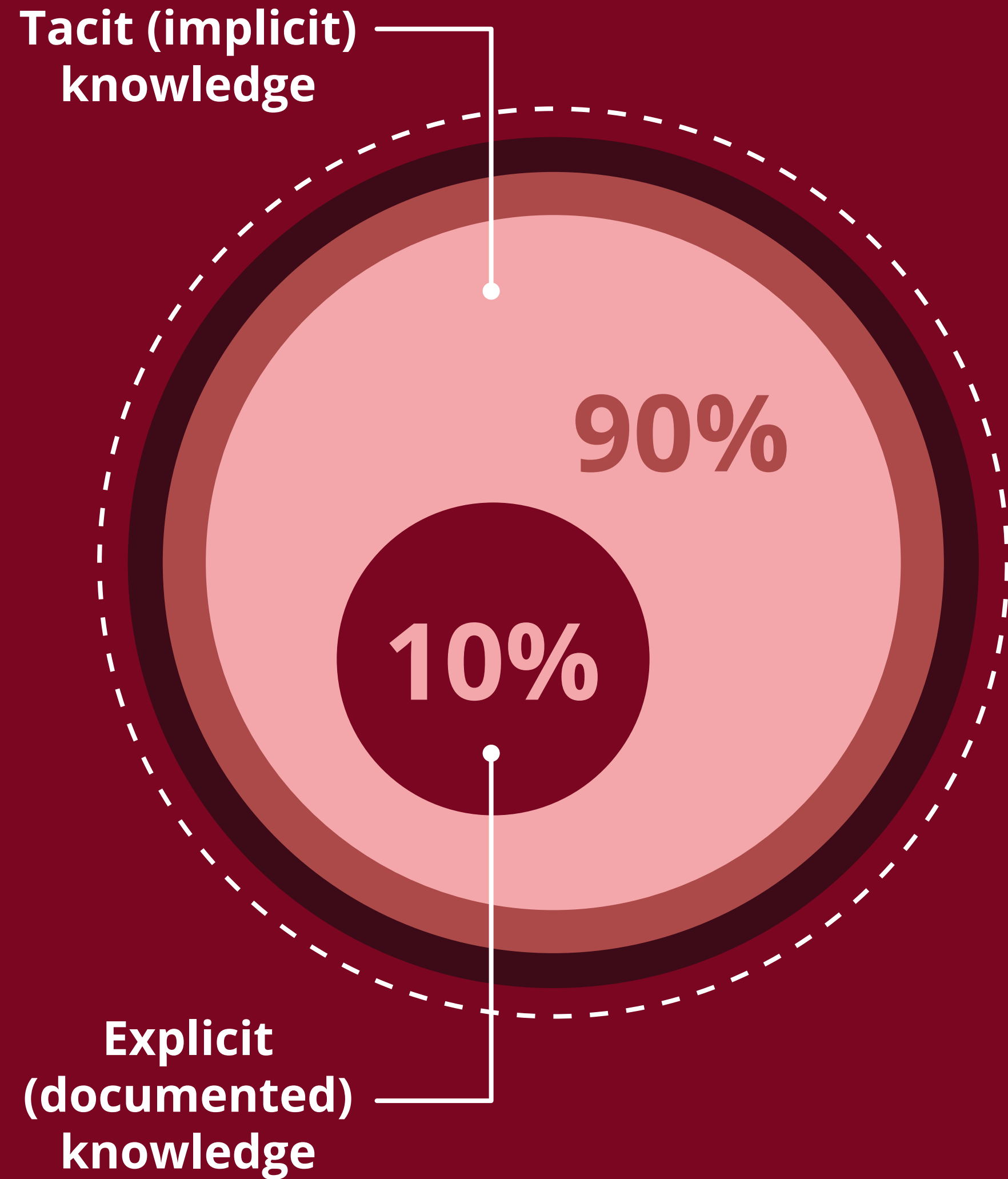
Knowledge management has generated many new terms and criteria. Here are the most important ones to be able to join the conversation.

CHAPTER

3

MY QUALIFICATIONS INDIVIDUAL KNOWLEDGE





There is a small but significant difference between the terms 'information' and 'knowledge'. As the SECI model in Chapter 2 showed, knowledge only comes into being through the integration of information into human experience contexts. This is also shown by Klaus North's knowledge staircase in the next section.

Experts estimate that tacit – implicit – knowledge accounts for about 80 to 90% of a company's knowledge. That means: every single employee has a large implicit wealth of knowledge. Knowledge management is about making this tacit and dormant knowledge effective in companies: by transferring it into explicit and well-documented knowledge.

The focus of knowledge management is on people

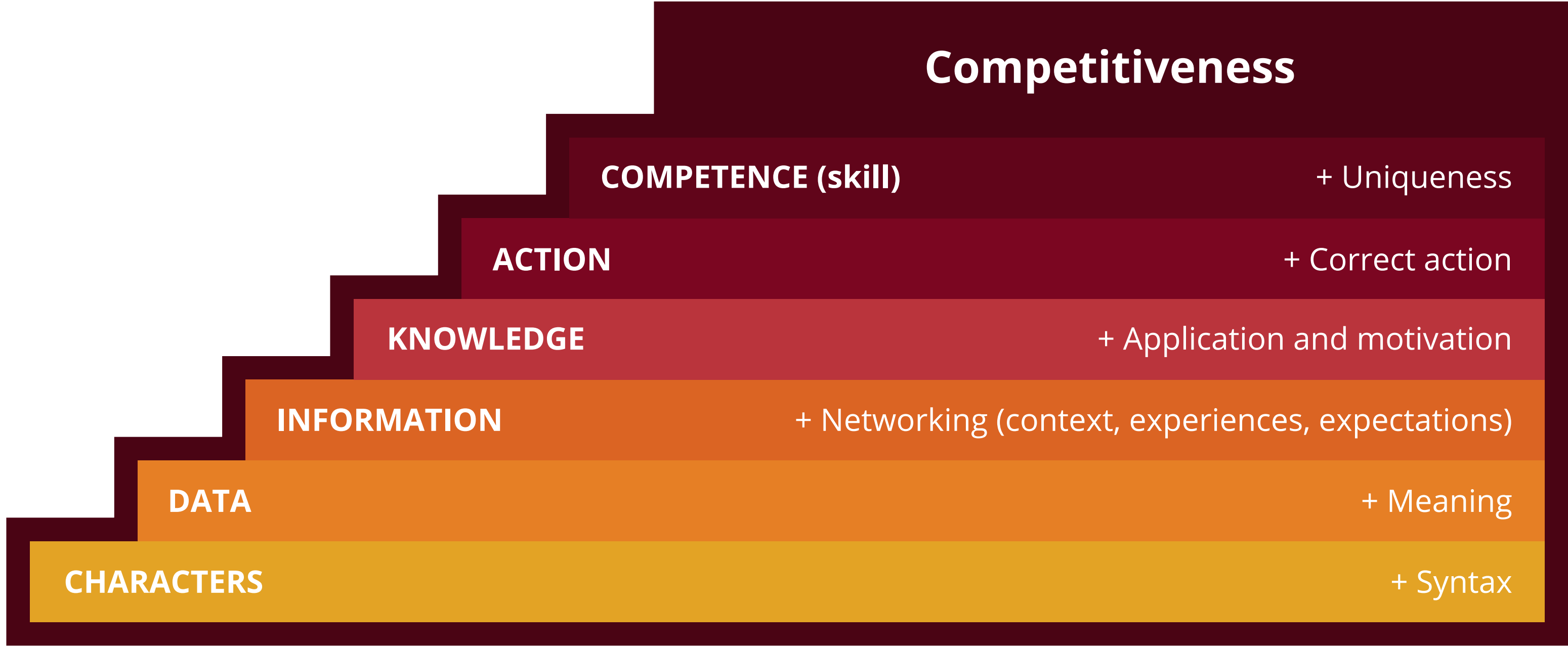


Making knowledge transparent pays off: because the majority of tacit (*implicit*) knowledge is not (*explicitly*) documented

Source:
[123rf.com](https://www.123rf.com)

The knowledge staircase shown below provides another overview of how characters and data become information in different processes (*orange area = information management*). Knowledge, entrepreneurial action derived from it and the skills based on it (*red area = knowledge management*) ultimately give a company special, ideally unique competences and enable the creation of added-value knowledge and competitiveness.

In the age of digitisation, value creation is the ‘result of the interplay of multiple competences of people, groups, networks, intelligent systems or institutions based on their unique information and knowledge resources,’ emphasises Klaus North, Professor of International Management (*at Wiesbaden Business School*) and creator of the knowledge staircase.



Collection and management of data, together with good information and knowledge management, lead to value creation and competitiveness

Source:
Knowledge staircase based on that of Klaus North, 2016
North, K., (2016) Die Wissenstreppe. In: Wissensorientierte Unternehmensführung. Springer Gabler, Wiesbaden

Have you ever documented the knowledge – implicit and explicit – you personally possess? The knowledge tree is a proven way to get an initial overview and visualise your own competences.

The knowledge tree is also used in consultations and coaching to support personal competence development and to uncover development potential, or to support the knowledge retention of outgoing employees.

The tree consists of three elements: the roots, the leaves and the trunk. Take a look at the tree.

The roots symbolise the roots of your professional competences. Where did you start your training/degree? Which career stations followed? Where and in which positions have you worked?

The trunk stands for your professional characteristics and core competences: what can you do very well in your job? What skills and specialisations do you provide? In which areas of work are you particularly strong?

Finally, the leaves are intended to symbolise your personal design of your core competences. Here you enter all the specific important activities that determine your professional life. That is probably a lot more things than you spontaneously think of.

With that in mind, take your time designing your knowledge tree. You don't have to fill in all the elements at once. Many insights, ideas or inspirations only arise during the process and while reflecting on your own competences.

Ensuring and developing competences: the knowledge tree



CURRENT ACTIVITIES AND KNOWLEDGE

My work areas

My tasks/to-dos – daily

My contacts / my network

Additional knowledge relevant for my job

My tasks/to-dos – weekly

My tasks/to-dos – monthly

My tasks/to-dos – quarterly

CORE COMPETENCES

Personal skills

Qualities in job

Important experiences

Special know-how

Education Degree

Career stations

Career positions

Training and further education

The knowledge tree



Make your own
explicit and implicit
knowledge visible

Today, more data and information is publicly available worldwide than ever before. At the same time, experts are working to prepare all this knowledge in such a way that it is accessible at all times without obstruction and in a well-structured way. New virtual spaces and realities are being created in the process. Nevertheless, the digital transformation and advancing virtualisation do not make knowledge management superfluous.

Knowing your own entrepreneurial knowledge well and using it efficiently is and remains a key challenge. Increasingly, individuals and entire companies are asking themselves what knowledge is or could become really relevant in the future?

We hope that with this workbook we have inspired you to approach the subject and expand the knowledge that is relevant to you personally and entrepreneurially.

Jack Ma, founder and long-time boss of China's Alibaba Group, values education and knowledge so highly that he left his company on his 54th birthday in autumn 2018 to focus more on education issues in the future. His belief: people should primarily build their knowledge and education in the areas that machines will never understand and reach.

**Knowledge
management
secures intellectual
capital and the
future of your
company.**

**Konica Minolta
Business Solutions Europe GmbH**

**Europaallee 17
30855 Langenhagen
Germany**

**Phone: +49-511-7404-0
Fax: +49-511-741050**

www.konicaminolta.eu

Local Court: Hanover, HRB 58272
VAT ID-Number: DE 135 099 727
Business Seat: Langenhagen

Management: Keiji Okamoto
Responsible as regards of content:
Olaf Lorenz



**Follow
Job Wizards**



job-wizards.com