Geist

Turn knowledge into impact

We help organisations and individuals to identify and actively manage strategic knowledge

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1.
Knowledge economy

History

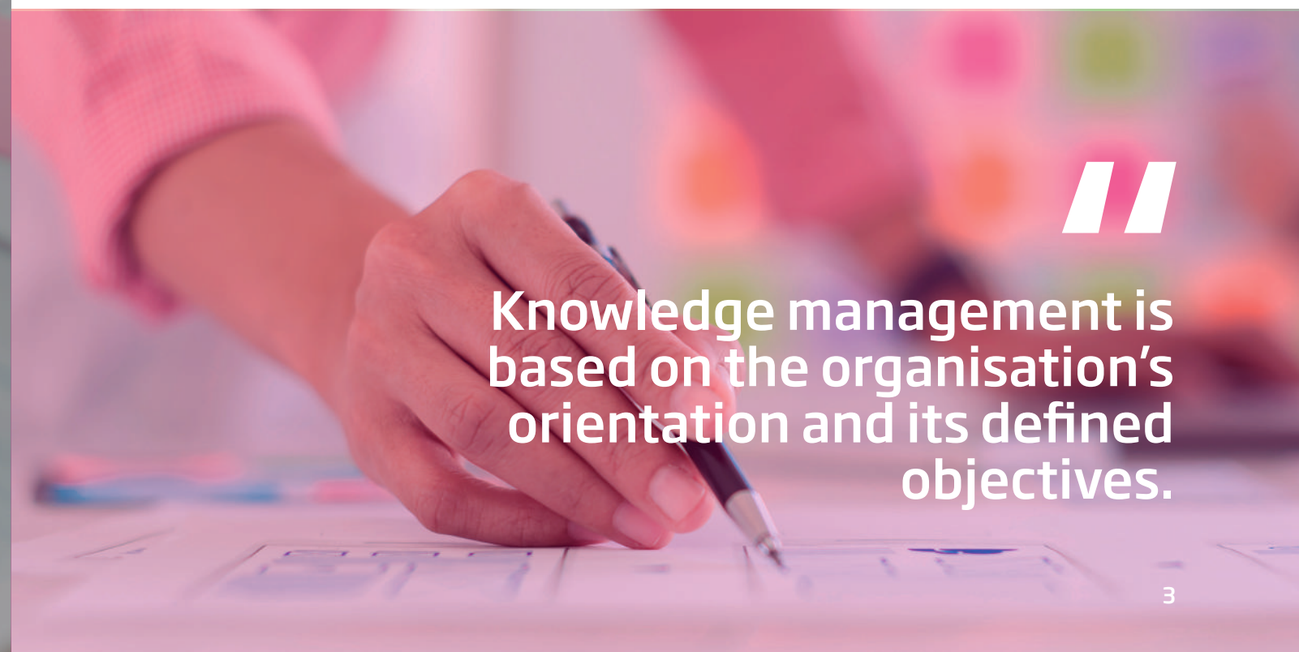
"Every few centuries, Western history undergoes severe transformations. These transformations are characterised by a reordering of social and political structure within a few decades. As a result, society changes its world view, its art and its main institutions. Fifty years later, society finds itself immersed in a new world, totally different from the one in which their grandparents their grandparents lived and their parents were born."

"One such transformation took place in the 13th century, when the European world became concentrated in the city, with the emergence of city guilds as the new dominant social groups and with the resurgence of long-distance trade; with the shift to Aristotle as the source of wisdom; with urban universities source of wisdom; with urban universities replacing monasteries as centres of culture in their rural isolation."

Two hundred years later, the next transformation took place as a result of a set of events: the invention of movable type printing in 1455; Luther's Protestant Reformation in 1517; the rediscovery of anatomy and, with it, scientific research; and the general adoption of Arabic numerals in the West.

In 150 years, from 1750 to 1900, capitalism and technology conquered the world and created a world civilisation. Neither capitalism nor technical innovations were new; both had been common and recurrent phenomena over the centuries, both in the West and in the East. What was entirely new was their speed of diffusion and their global reach across cultures, classes and geography. And it was this, its speed and reach, that made capitalism "Capitalism" and a "system". It turned technical advances into the "industrial revolution". This transformation was driven by a radical change in the meaning of knowledge. In both the West and the East, knowledge had always been seen as applied to the self. Almost overnight, it came to be applied to doing. It became a resource and a utility. Knowledge had always been a private good. Almost overnight it became a public good.

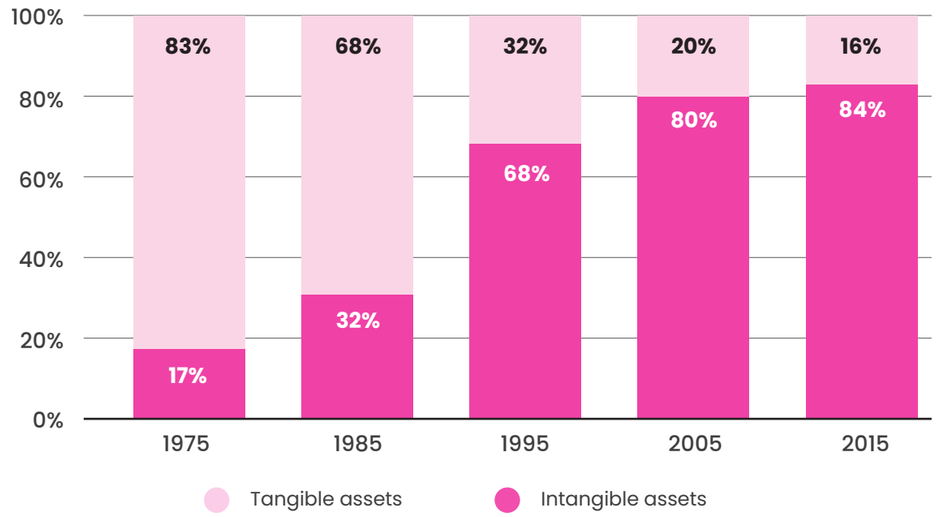
For a hundred years, during the first phase, knowledge was applied to tools, processes and products. In its second phase, which began around 1880 and culminated with the Second World War, knowledge, in its new conception, came to be applied to labour. This gave way to the productivity revolution, which defeated class warfare and communism. The last phase began after the Second World War. In this phase, knowledge was applied to knowledge itself. This was the management revolution. Knowledge is fast becoming the sole factor of production, pushing capital and labour aside.



> **Knowledge management is based on the organisation's orientation and its defined objectives.**

	WORK 1.0	WORK 2.0	WORK 3.0	WORK 4.0
KEYWORDS	• Mechanisation • Steam power • hydropower	• Mass production • Manufacturing line • Electricity	• Automation • Computing • Electronics	• Networking • Internet of Things • Big data • Robotics • Artificial intelligence
INDUSTRIAL DEVELOPMENTS	The steam engine heralded a new era in industry: the muscle power of man and beast was joined by the power of steam. This means that much more energy is available. Production and transport capacities increase considerably.	Chain labour enables the production of fair and affordable goods. Electrification paves the way for this. But the most important innovation is organisational: the external division of labour.	Microelectronics and information technology are changing industry. Machines are now electronically controlled, programmed and automated. Routine work is done quickly by machines, productivity increases and production costs decrease. Sophisticated mass products become affordable.	Industry is constantly networked. “From man to machine”, even beyond company boundaries. Production is becoming flexible and adaptable. Machines organise production processes autonomously. Algorithms interact independently with the algorithms of business partners.
EFFECTS ON HUMANS	Low-skilled people find work in the many new factories that are springing up. Due to the high degree of specialisation in the individual work steps, work becomes more monotonous.	The hard muscular work is facilitated by the supporting force of the machines. At the same time, new technical qualifications are required: to maintain and operate the machines.	Automation takes over monotonous tasks and relieves humans, who need ever higher skills. Despite massive waves of automation, the end result is that no jobs are lost. More is produced and the jobs that are lost are compensated by new ones.	People take centre stage, working more closely than ever with technology. Work is more varied and creative. A high level of qualification is increasingly important.
	Late 18th century	Early 20th century	Early 1970s	Nowadays

Evolution of intangible assets



Definition

The term knowledge economy was coined in the 1960s to describe the shift from traditional economies to ones in which the production and use of knowledge is paramount. The Organisation for Economic Co-operation and Development (OECD) defines knowledge economies as conomies that are directly based on the production, distribution and use of knowledge and information.

The knowledge economy focuses on the accumulation of highly skilled labour, capital, technology, technological capabilities and science in the development of productive activity. Knowledge economies move from a production-based economy to a service-based economy, in which knowledge is embodied in both goods and services.

“Its characteristic ideal is permanent innovation in procedures and methods as well as in products and technologies. Academic institutions and research and development companies are important foundations of this system. The key component of a knowledge economy includes a greater reliance on intellectual capabilities than on physical inputs or natural resources, together with efforts to integrate improvements at every stage of the production process, from the R&D laboratory to the shop floor and the interface with customers.”

Organisational knowledge is specific knowledge that the organisation generally acquires through experience. It is information that is used and shared to achieve objectives.

ISO 9001:2015 §7.1.6

Features

In the knowledge economy, financial capital remains an important element, but the challenge is how to transform human capital, social capital and intellectual capital into financial capital. In the knowledge economy it is this interaction between the different forms of capital and the firm's success in managing this interaction, together with the use of knowledge in the interrelationships between market actors to produce goods and services, that decides whether the firm survives and develops.

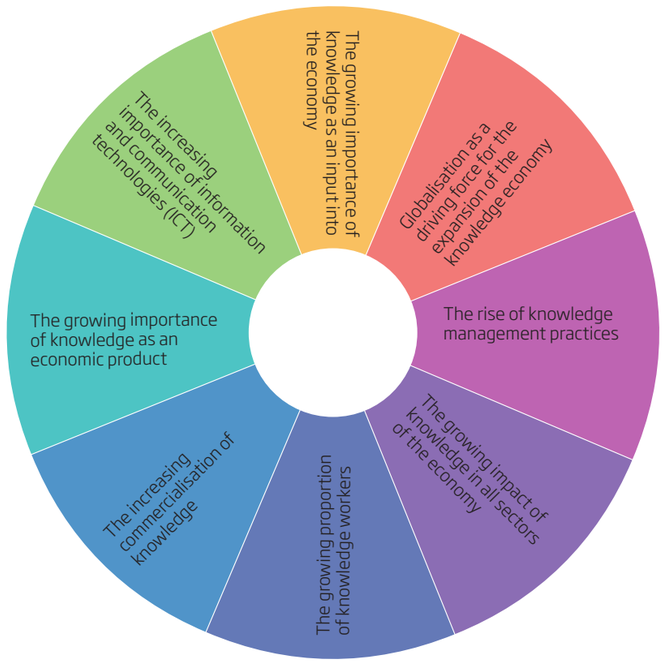
In considering knowledge in the economy it is also important to recognise that knowledge has fundamental differences from other resources:

Unlike tangible assets, knowledge defies scarcity. The gain from the consumption and/or exchange of intangible knowledge, information, ideas and other abstract objects of thought does not diminish the stock of knowledge.

On the other hand, once knowledge is discovered and made public, the marginal cost of acquiring it is virtually zero, because the knowledge is freely available and does not have to be rediscovered by each new consumer. However, depending on the nature of the knowledge, the recipient may incur costs in terms of developing the capacity to understand and use the knowledge effectively.

Finally, unlike in the industrial systems of the past, where authority flowed downstream from management, in the knowledge economy, authority flows the other way around, because organisations are not able to survive if workers submit their knowledge to that of management. This is due to the fact that although management may possess specialised knowledge, they often suffer from a lack of innovative employee knowledge.

The 8 aspects that characterise the knowledge economy:



> **There is no management in knowledge; there are only people with knowledge. Information only becomes knowledge in the hands of those who know what to do with it.**

Peter Drucker
Economist and business consultant

- Tangible assets

- **Raw materials and stocks**
- **The furnishings**
- **Machinery**
- **The land**
- **Money**

- Intangible assets

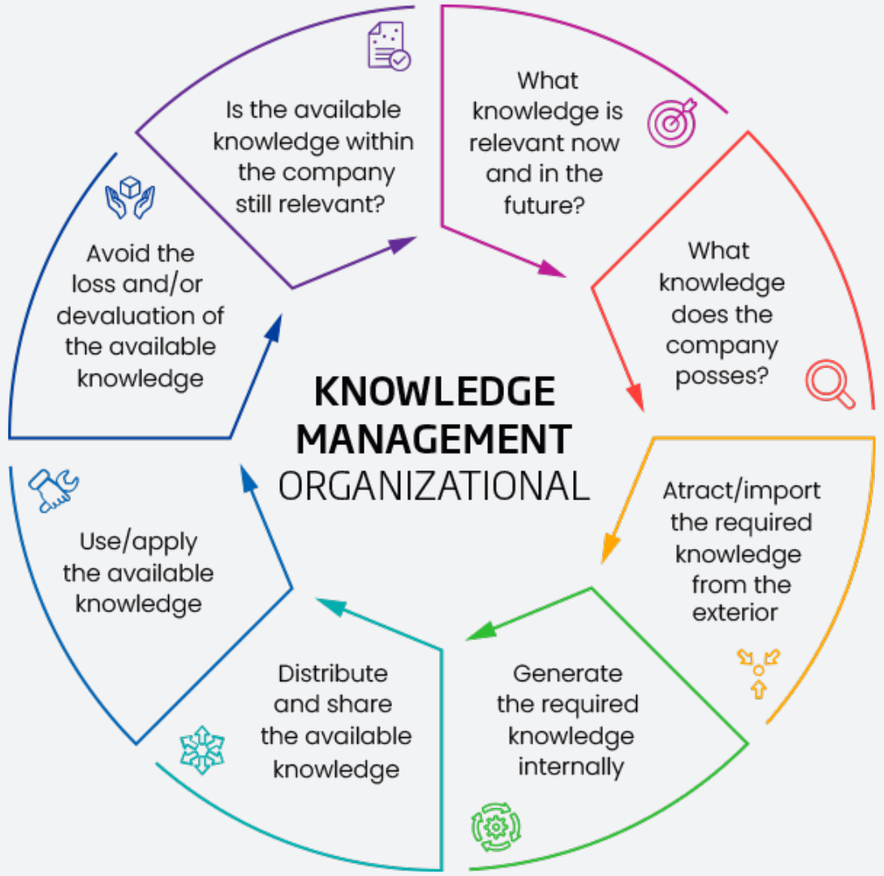
- **Brand image**
- **Customer base**
- **Supplier base**
- **Knowledge**
  - Knowledge about competition
  - Knowledge about clients
  - Knowledge about technology
  - Knowledge about employees
  - Organisational knowledge

2. Knowledge management

Knowledge management is an activity with a holistic character, focused on actively, consciously and systematically managing and using organisational knowledge for competitive advantage.

It is based on a culture of continuous learning in which knowledge is progressively acquired according to needs and experience gained is internalised in order to learn. Without learning, knowledge cannot be generated, and without the networking of individual learning, organisational learning cannot emerge and lead to fundamental changes in the organisation.

Knowledge management is based on the organisation's orientation and its defined objectives and therefore interacts strongly with organisational management. Knowledge management consists of 8 activities



DEFINITION OF KNOWLEDGE OBJECTIVES

Normative objectives are defined with the purpose of creating an enabling context for the implementation and execution of knowledge management in the organisation. Normative objectives create a culture of trust, open-mindedness and tolerance for failure.

Strategic knowledge objectives are defined by the executive committee as part of the organisation's strategy. The strategic objectives are translated into the competence model of the organisation.

Strategic objectives are transformed into operational objectives. The operational objectives are translated into a set of competency profiles for the different positions in the organisation.

IDENTIFICATION OF KNOWLEDGE REPOSITORIES

To achieve transparency about the knowledge context of an organisation in order to identify existing internal and external knowledge.

Transparency with respect to internal knowledge is about gaining an awareness of the capabilities, individual and collective, that an organisation possesses. The identified knowledge is recorded and stored through the use of different formats (e.g. knowledge maps, business processes, etc.).

Transparency with regard to external knowledge consists of a systematic analysis of all relevant fields of knowledge.

EXCHANGE / DISTRIBUTION OF KNOWLEDGE

Making knowledge stored in a dispersed manner available to all members of the organisation, so that everyone has access to the knowledge relevant to their activities, at the required time.

Knowledge sharing focuses on the effective provision of knowledge, so that members and groups of the organisation have access only to the knowledge they require at any given time, avoiding saturation.

Knowledge sharing consists of a holistic approach that considers three domains present in every organisation: The organisational structures, the technical infrastructure and geographical disposition of the organisation's members.

USE / APPLICATION OF KNOWLEDGE

Ensuring that existing knowledge in the organisation is used in a systematic way.

It consists of achieving an organisational context that promotes the use, individually and collectively, of the new knowledge acquired.

It is an activity that considers the use of knowledge in a global way, covering the formats of the various knowledge containers, as well as the layout of workspaces.

It is based on the fundamentals of cognitive learning and makes use of visualisation techniques to adapt the knowledge stored in the containers to the cognitive mechanisms of individuals. people's cognitive mechanisms.

KNOWLEDGE ACQUISITION / ATTRACTION

Importing into the organisation the required knowledge that it cannot generate itself. The import can be in the form of procurement from other organisations, hiring of staff (either employees or contractors) or purchase of knowledge products (licences, patents, technologies).

The selection of candidates for recruitment, both internal and external, is based on the level possessed by the candidates in the different competencies present in the competency profile to be filled.

KNOWLEDGE CREATION / DEVELOPMENT

In-house generation of the required knowledge. Generation can take place through research and development, training and further training, learning from experience, etc.

It consists of the continuous and systematic use of all available means for the active development of skills and capacities that are not available in the organisation. It can take place at the individual and/or collective level.

It requires the establishment of an enabling environment for creativity, innovation and systematic problem solving.

KNOWLEDGE PRESERVATION

Storage of existing and acquired knowledge to ensure its availability over time.

It represents one of the core activities of knowledge management. It focuses on avoiding the loss of organisational knowledge, due to factors such as labour turnover, which, if critical, may even call into question the continuity of the organisation itself.

It consists of three consecutive and recurrent phases: the selection of the knowledge to be preserved; the storage of the selected knowledge; and, the updating of the stored knowledge.

It is based on three pillars: content, organisational culture and technological infrastructure.

KNOWLEDGE ASSESSMENT

Monitoring the status and evolution of knowledge in the knowledge in the organisation. It focuses on the definition of indicators at a normative, strategic and operational level, which make it possible to determine the degree of achievement of the various knowledge objectives, as well as the value associated with the existing knowledge in the organisation.

Knowledge assessment provides critical information to management for decision making related to knowledge management.

3.
Advantages of knowledge management

Increasing innovation and competitiveness

Those who have knowledge that others do not have, have a competitive advantage. Companies with open access to existing knowledge and good knowledge transfer between the different units of the company are fundamentally more innovative than others and are ahead in competition with others.

In concrete terms, this means that a company's knowledge ultimately leads to success. Therefore, good knowledge management is of great importance in addition to classical project management in companies. In the era of the globalised economy, organisations find themselves in an environment characterised by highly dynamic markets and technologies that are difficult to predict. organisations must therefore increase their own flexibility in order to be able to react to market and technology trends.

The main benefits of knowledge management in an organisation include.

EMPLOYEES	PROCESSES	INNOVATION	CUSTOMERS	FINANCES
• Increased motivation • Employee engagement • Improved teamwork • Reduced adaptation time for newcomers • Competence development • Increased market value at a personal level • Improvement of the personal knowledge base • Acceleration of organisational learning	• Acceleration of process execution • Reduction of duplicated work • Re-use of internal knowledge • Reduction of transfer costs • Greater transparency about processes • Increased productivity • Error reduction • Saving time in performing routine tasks	• Improved research and development • Application of new technologies • New products and services • New business segments	• Reduction of reaction times • Increasing quality of products and services • Improving communication with customers • Increased customer satisfaction • Increased customer retention • Increased knowledge about customers	• Improved risk management • Increase in revenue • Increased market share • Optimisation of marketing campaigns • Reduction of administrative costs

Knowledge management use cases

Case #1

Industrial electronics company

Corrective and preventive maintenance solutions in:

- Power electronics.
- Induction heating equipment.
- Machine tool maintenance.
- Supply of power electronics equipment and components

8 Employees

Starting point

- The company wants to know the value added by knowledge management.
- They have an employee who is nearing retirement age and wanted to ensure the transfer of the knowledge he possessed.

Actions carried out

- Diagnosis of the main needs in the area of knowledge management.
- Identification of the critical knowledge associated with the main processes they execute.
- Know the type of knowledge involved (tacit vs. explicit) and who has it/who needs it.
- Combined Assessment Attitudinal Competences within the business competence framework.
- Knowledge creation and development: Design and implementation of the customer orientation workshop with the main objective to define a strategy to develop the competence “customer orientation”.

Results

- Definition of mechanisms for:
    - Capture of identified critical knowledge.
    - Organisation of and access to identified (explicit) critical knowledge.
- Incorporation of instances of reflection for discussion and transfer of identified critical (tacit) knowledge.

Case #2

Electronics / mechanical engineering company

Engineering of renewable energy plants (wind energy):

- Planning.
- Construction.

Operation of renewable energy plants.

20 Employees

Starting point

- The company has to execute a growth process due to several factors:
    - Increasing the scope of projects.
    - Increased demand.
    - Creation of new markets.

Actions carried out

- Diagnosis of the main needs in the area of knowledge management.
- Identification of critical knowledge repositories.

Results

- Creating a structured archive and classifying information.
- Creation of a uniform basic structure with regard to file storage and file names.
- Improving the culture of meetings.
- Development of a communication and knowledge platform (terra-wiki).
- Developing a mechanism for the transfer of project experience.
- Lessons learnt.
- Best practices.

Case #3

Electronics/automation company

Commercial vehicle automation.

260 Employees

Starting point

- The company has to execute a growth process due to various factors:
  - Increasing the scope of projects.
  - Increased demand.
  - Creation of new markets.

Actions carried out

- Analysis of technical project management processes.

Results

- Creation of mechanisms for knowledge transfer:
  - Technical.
  - Methodological.
- Development of a platform for the communication of organisational processes.

Case #4

Construction and Land Management Administration

Construction and Land Management Administration.

1230 Employees

Starting point

- The administration has a number of modern IT systems and information management technologies in place.
- Management wants to audit the condition of its intangible assets as a basis for:
  - Determine future strategic objectives.
  - Prioritising knowledge management measures to be implemented.

Actions carried out

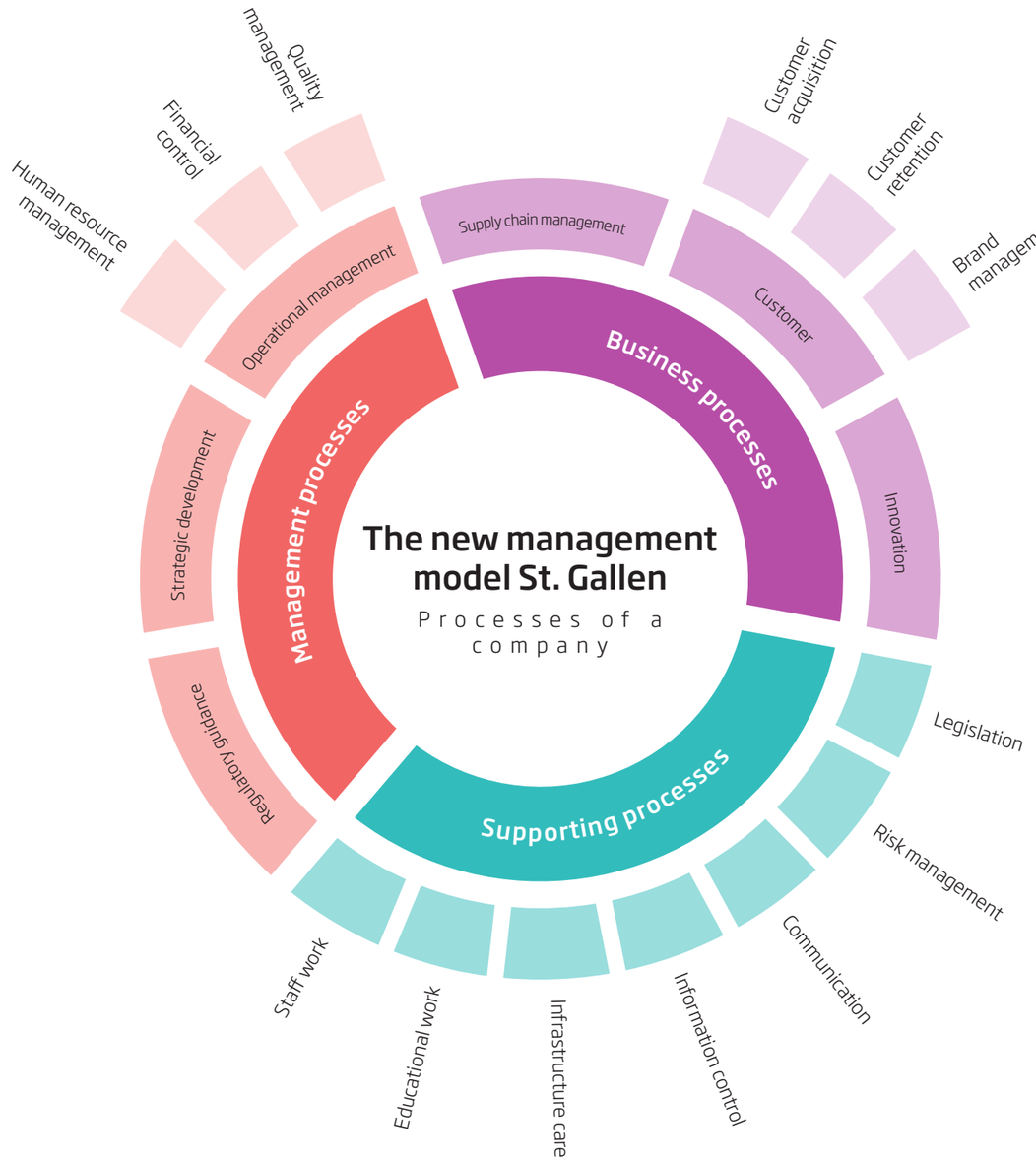
- Audit of the intangible assets of the administration using the Wissensbilanz method.

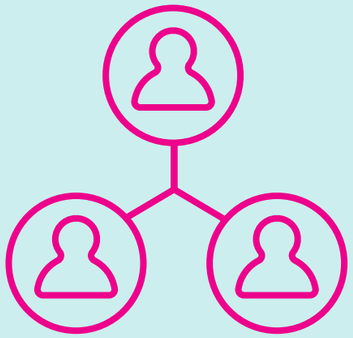
Results

- Implementation of non-technical information exchange formats at the personal level:
  - Series of internal presentations with themes derived from project activities.
  - Information sessions open to all staff.
  - Forward-looking workshops to devise solutions to specific recurring problems.
- Generation of knowledge maps.

4.
Knowledge management processes

Process architecture





The processes

The value-adding processes of an organisation can be classified into three process categories:

1. Management processes

A set of processes that encompasses all the fundamental management activities related to designing, controlling (guiding) and developing an organisation. Management processes can be classified into three categories:

Policy guidance processes: A set of processes that establishes and describes the guidelines for business activity. They determine the decision-making criteria and the principles of action and patterns of conduct in the organisation.

Strategic development processes: A set of processes that lead to the development of a viable strategy and its successful implementation. They include the development of new business models, new process architectures, the establishment of strategic alliances or even mergers and acquisitions.

Operational management processes: Set of processes related to the execution of activities within the individual business and support processes. Operational management processes can be classified into three categories:

- People leadership processes: Set of processes related to the establishment of an appropriate working environment and the development of a results-oriented attitude of employees and constructive teamwork. development of a result-oriented attitude of employees and constructive teamwork.
- Financial control processes: A set of processes related to the analysis of the financial implications of organisational decisions, the evaluation of economic performance and the acquisition of capital for the execution of activities.
- Quality management processes: A set of processes aimed at correctly defining and meeting the expectations of all stakeholders in the individual management, business and support processes.

2. Business processes

A set of processes associated with the practical implementation of a company's core activities that are directly related to the creation of a benefit for the customer.

Management processes can be classified into three categories:

Customer processes: A set of processes oriented towards the customer's decision to purchase the organisation's products or services. Customer processes can be classified into three categories:

- Customer acquisition processes.
- Customer retention processes.
- Brand management processes.

Supply chain management processes: Set of activities that contribute to the customer receiving the agreed product or service at the agreed level of quality.

Innovation processes: Set of processes that contribute to the systematic innovation of products and services.

3. Supporting processes

A set of processes that provide the infrastructure and internal service delivery necessary for business processes to be carried out effectively and efficiently.

Support processes can be classified into seven categories:

- Personnel processes.
- Educational and personal development processes.
- Infrastructure management processes.
- Information control processes.
- Communication processes.
- Risk management processes.
- Legal management processes.

The organisation shall determine the knowledge necessary for the operation of its processes and for achieving conformity of products and services. This knowledge should be maintained and made available as necessary.

When addressing changing needs and trends, the organisation must consider its current knowledge and determine how to acquire or access the necessary additional knowledge and updates required.

ISO 9001:2015 § 7.1.6

ISO 30401

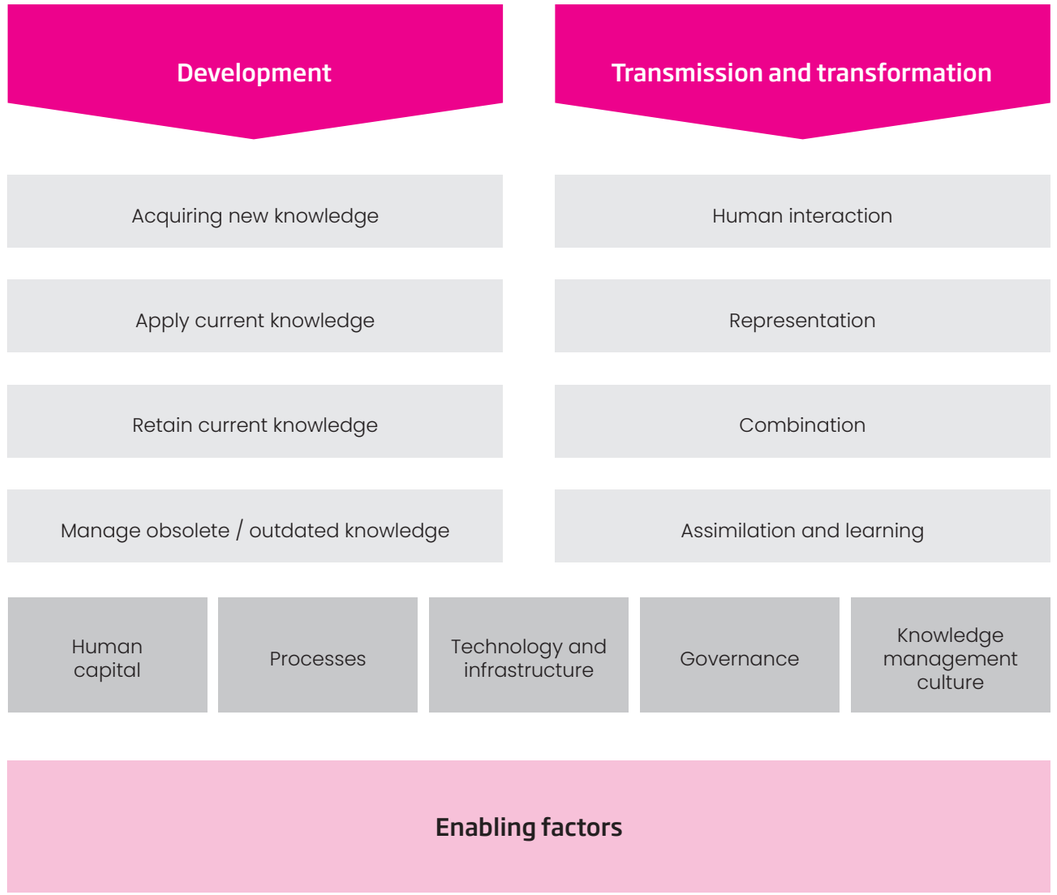
The International Organisation for Standardisation (ISO) published the ISO 30401 international standard in 2018, with the aim of helping organisations to develop a management system that promotes and enables value creation through knowledge. The ISO 30401 standard pursues two main objectives: on the one hand, it seeks to act as a guide for organisations that wish to as a guide for those organisations that want to optimise the value of the organisational knowledge they possess; on the other hand, it aims to serve as a basis for auditing, certifying, assessing and recognising competent knowledge management organisations by recognised internal and external auditing bodies. The standard defines the necessary requirements for an effective implementation of knowledge management systems in any type of organisation.

Specifically, the standard defines a number of activities that must be carried out as part of a knowledge management system:

- Understanding the organisation and its context.
- Understand the needs and expectations of stakeholders.
- Determine the scope of the knowledge management system.

DIN SPEC91443

DIN SPEC was developed 2021 and adopted by the authors named in the foreword of DIN SPEC. This document sets out guidelines for the implementation, planning, control and further development of systematic knowledge management activities that are specifically tailored to the needs, framework conditions and contexts of small and medium-sized enterprises. Abbreviated and implified version of ISO30401, especially for SMEs, and at the same time 100% compatible with it.



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An investment in knowledge always generates the highest returns.

Benjamin Franklin
Scientist, inventor and co-founder of the United States of America

5.
GEIST Consultancy

GEIST Consultancy was founded in 2019 with the aim of helping organisations to reach their full potential by identifying the essential capabilities for each type of organisation, contributing to knowledge management and developing the talent present in the organisation in that direction. Since then, we have been helping organisations to manage their most important asset, their knowledge. That knowledge resides, in part, in the people who make up the organisation. Our main task is to help organisations understand the strategic nature of the knowledge they have and to manage it consciously.

If you are interested in knowing the state of knowledge management in your organisation, please fill in the form you will find in the following link and we will send you a report with the result of the knowledge scan free of charge.

https://geistconsultancy.com/gestion-conocimiento/escaneo-de-conocimiento#formulario

GEIST'S MISSION

To provide products and services to make our customers aware of the strategic importance of co-knowledge, teaching them to manage it consciously and systematically to become learning organisations. Supported by a prosperous and innovative company, committed to the development of its staff and the society where it is located.

GEIST'S VISION

To be leaders in the implementation of learning cultures based on knowledge management recognised for their quality and level of innovation.

Aiming for the satisfaction of our customers. Driven by a diverse, talented, experienced and highly motivated human capital. Always guided by a desire to learn, improve and surprise; founded on a search for lasting relationships based on communication and mutual trust.

GEIST'S VALUES

We are guided by a direct, honest, professional and committed way of acting, in which social responsibility plays a prominent role and in which respect for personal life and family reconciliation are undisputed.

We consider critical thinking, continuous learning and tenacity as indispensable means for growth. We internalise talent, innovation, quality and cooperation as the key to success. For us, the essence of every company lies in its employees and for this reason, we encourage the personal and professional growth of the people who make up our organisation.

gfwm Gesellschaft für Wissensmanagement e.V.

DIE KOMPETENZENBILANZ® PERFORMPLUS

We are part of a Europe-wide network of knowledge management experts, which gives us access to accumulated knowledge in all aspects of knowledge management and competence management.

6.

Our services.
Value added by GEIST

DEFINITION OF KNOWLEDGE OBJECTIVES

We help our clients understand the strategic value associated with knowledge.

We accompany them in identifying and modelling the knowledge they need.

We support you in defining the strategy, based on internationally recognised processes, for knowledge management.

IDENTIFICATION OF KNOWLEDGE REPOSITORIES

We help our clients to identify and visualise the knowledge they already possess, both at organisational and individual level, as well as the gaps with respect to the strategic objectives set.

We support them in identifying the key people for the organisation from a knowledge management point of view.

We support them in defining operational action plans to achieve their objectives.

KNOWLEDGE ACQUISITION / ATTRACTION

We support our clients in defining their talent needs in order to cover their shortfalls with respect to the established strategic objectives.

We accompany you in the search and selection of the most suitable talent for your needs.

KNOWLEDGE CREATION / DEVELOPMENT

We help our clients define the internal asset training plans, at both executive and operational levels, that they need.

We support them in the creation of training packages for the achievement of the strategic knowledge objectives.

We accompany them in the realisation of the packages created for the implementation of the training plans.

KNOWLEDGE SHARING / KNOWLEDGE DISTRIBUTION

We help our clients define a plan to make their knowledge available to their organisations in a transparent way.

We support you in the identification, design and implementation of the means for knowledge distribution in your organisation.

We accompany them in the creation of content for the implementation of the defined knowledge distribution plan.

USE / APPLICATION OF KNOWLEDGE

We help our clients define the action plan to transform their organisation into a learning organisation.

We support them in structuring and editing knowledge containers to promote effective use of knowledge.

We support them in redesigning workspaces to ensure that the right knowledge is available, in the right form, to the right person, at the right time.

KNOWLEDGE PRESERVATION

We help our clients to identify and make explicit the knowledge they possess.

We support you in measuring the risk of loss of individual knowledge in your organisation and in defining courses of action to reduce/accommodate existing risks.

We assist you in structuring your corporate digital memory for effective preservation of the knowledge you hold.

KNOWLEDGE ASSESSMENT

We help our clients understand their situation and their progress in knowledge management.

We support them in defining indicators for monitoring the knowledge management process and measuring the current status.

We support them in the interpretation of the data collected and the analysis of progress against the strategic objectives set

> **There is no wealth like knowledge, and no poverty like ignorance.**

Buddha
Founder of Buddhism

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