



Study on Key Competences State of the Art | D3.1

Project for the Assessment and Support of Key Skills/Competences (PASS)

Study on Key Competences State of the Art

D3.1 Desk Research

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Executive Summary

The study on key competences is conceptually based on policy documents, reports, and projects. These have been carefully selected among many other relevant sources. The first part of the study refers to the Recommendation of the Council of the European Union, adopted in May 2018, which foresees and identifies eight key competences to highlight important tools to include in curricula for those involved in education and training. Employers are also encouraged to support their employees in learning new skills to achieve better results.

The second section refers to the Top 15 Skills for 2025 recommended by the World Economic Forum's Future Jobs Report 2025. There we see a clear increase in demand for skills relevant to critical thinking, analysis, and problem-solving. On the other hand, physical skills are on the decline. However, in many professions, they remain a mandatory skill for workers. Furthermore, much of the European labour market facing change is automotive-related. Although the Just and Green Transition is already underway, a large part will remain and withstand the change towards greener transport. The blueprint project DRIVES, which provides evidence and data from companies through a Forecasting Dissemination Report, uses surveys to identify the most needed skills for the future, and supports the key competences and skills emerging in the automotive sector. See Figure 3: Top 15 overall skills for the results.

3 The progressive development of new technologies such as digitalization, automation, and coexistence with globalization in all business areas is a mix in the current market situation. On the other hand, apart from technologies, there is much less progress in training and developing employees from a different perspective than working according to instructions.

Key competences are an effective tool to generate progress in professionally represented behaviour which will be modified and improved in changing working conditions in the future. The key competences for development of employees are analytical thinking and innovation, active learning, critical thinking, and complex problem solving, and many more. Therefore, the study is also focusing on a deep understanding of key competence usage, their assessment, and further development. Along with key competences are soft skills such as communication, listening and speaking skills of foreign language, logical and rational thinking, engagement with digital and AI technologies, identification of one's capacities, and many other. Soft skills are an essential part of key competences to understand its implication and to identify specific areas for better understanding and further improvement on individuals.





1. Introduction to Key Competences evolution

The educational policy of the EU has stressed the importance of the acquisition, monitoring, and teaching of key competences to help workers and students to find fulfilling jobs, become independent as well as engaged citizens, together with the aim of boosting EU's innovation capacity, productivity, sustainability, and competitiveness in view of the digital and green transition.

The Fourth Industrial Revolution has even more strongly asked for greater adoption of technology, which means in-demand skills, up and reskilling. Societal, environmental, and technological requirements are thus evolving rapidly, requiring highly skilled professionals equipped with both hard skills, but at the same time with the right set of soft skills. If hard skills are those more easily identifiable for a particular job, soft skills can be broader in their application, transferrable as well as sometimes less identifiable. These transversal skills and competences are the building blocks for the development of the “hard” skills and are required to succeed on the fast-changing labour market.

This chapter will help understanding which competences are needed nowadays and, in the future, and aims at providing a concise list and reference frameworks of the most required ones. This will help their measurement and facilitate the development of methods for their assessment targeting workers and students. This research focuses on both general key competences as well as those that are specifically required for the automotive sector. The aim is to build a methodology that can also be applicable across sectors.

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1.1. Framing and Identifying key competences

The acceleration in the use of new technologies coupled with the growing attention towards a Just and Green Transition are asking for a clear understanding of which key competences are and will be most needed in the next future. Several efforts across many industries have been made trying to frame which key competences shall be addressed, and many high-level EU documents have been published helping them to plan and strategize towards this goal.

To this end, a first reference shall be made to the Recommendation of the Council of the European Union adopted in May 2018. This Recommendation was conceived as a reference tool giving a common understating of the main key competences for lifelong learning. Thanks to this guide, not only all stakeholders in the education and training field can check and eventually integrate them in their curricula, but also employers can use them to have an overview of the main key competences for their employees, to always ensure a good mix of skills towards a better future of work.

Starting with a definition, according to the Recommendation key competences are a mix of:





- **Knowledge:**

concepts, facts and figures, ideas and theories which are already established, and support the understanding of a certain area or subject.

- **Skills:** the ability to carry out processes and use the existing knowledge to achieve results.
- **Attitudes:** disposition and mindset to act or react to ideas, persons, or situations.

From this definition we can already evidence that key competences include a theoretical background, consequent abilities but also mindset. This automatically means that key competences are not only acquired from the formal education pathway of an individual, but they also come from his/her life (family, workplace, community, and social relations).

It is important to state that the above terminology has varied. Often there is no distinction between competences and skills, and therefore it is frequent to encounter both words together. For this study, this distinction will be specified whenever possible.

Coming to the core of the Recommendation, eight main key competences were identified, which will be more thoroughly explained below.

1.1.1. Literacy competence

For the literacy competence the Recommendation refers to “the ability to identify, understand, express, create and interpret concepts, feelings, facts, and opinions in both oral and written forms, using visual, sound/audio, and digital materials across disciplines and contexts. It implies the ability to communicate and connect effectively with others, in an appropriate and creative way”.

This competence requires knowledge of:

- Reading and writing: grammar, functions of language and knowledge of vocabulary
- Verbal interaction: main types, registers, and type of language

Skills are related to:

- Communication skills (oral and written)

And specific attitudes are:

- Critical and constructive dialogue disposition
- Disposition for interaction and responsible use of language

1.1.2. Multilingual competence

Multilingual competence refers to the “ability to use different languages appropriately and effectively for communication”. It is like the literacy competence when it comes to communication skills, also considering the intercultural dimension.

This competence requires knowledge of:

- Grammar, vocabulary of the language and verbal interaction
- Societal conventions and cultural aspects

Skills are related to:

- Speak, listen, understand, and read the language properly with different levels of proficiency.





And specific

attitudes are:

- Understanding cultural diversity and being open and curious
- Respect for other languages

1.1.3. Mathematical competence

Mathematical competence is the “ability to develop and apply mathematical thinking and insight in order to solve a range of problems in everyday situations”. This competence also includes competence in science, technology, and engineering, which is “the ability and willingness to explain the natural world by making use of the body of knowledge and methodology employed, including observation and experimentation, in order to identify questions and to draw evidence-based conclusions”.

This competence requires knowledge of:

- Numbers and basic mathematics operations, terms, and concepts
- Principles of natural world, scientific theories and concepts, technological products and processes, and their applications for society (for science, technology, and engineering)

Skills are related to:

- Good application of mathematical principles and mathematical reasoning, for both private and professional life. This includes use of financial skills and instruments such as statistics, but also the implication of digitalization.
- Understanding of science as a process for the investigation, the ability to use logical and rational thought to verify/discard a hypothesis, but also to use technology and data as an evidence-based methods (for science, technology, and engineering)

And specific attitudes are:

- Respect for truth, looking for verification, reasons, and validity.
- Critical appreciation and curiosity as well a concern for ethical issues and support for both safety and environmental sustainability

1.1.4. Digital competence

Digital competence is the “confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society”.

This competence requires knowledge of:

- Opportunities and challenges of digital technologies (including ethics, legal, reliability, validity)
- Basic function of devices, software, and networks

Skills are related to:

- Use, access, filter, evaluate, create, program, share of digital content
- Manage and protect information
- Engage with emerging technologies such as AI, robots





And specific attitudes are:

- Critical thinking and open-minded approach
- Responsibility and ethical use

1.1.5. Personal, social and learning to learn competence

Personal, social and learning to learn competence refers to the “ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one’s

own learning and career”. It does include well-being and supporting mental and physical health, as well as manage complexities and problem solving,

This competence requires knowledge of:

- Rules and code of communication
- Principles of healthy lifestyle
- Understanding learning strategies as well as knowing one’s competence development needs

Skills are related to:

- Complexity management, dealing with uncertainty
- Critical thinking and decision making
- Identification of one’s capacities
- Work both collaboratively and autonomously
- Confidence and empathy

And specific attitudes are:

- Positive attitude toward one’s personal, social and physical well-being
- Collaboration, assertiveness and integrity
- Respecting diversity
- Motivation, resilience and confidence
- Problem-solving

1.1.6. Citizenship competence

This competence is the “ability to act as responsible citizens and to fully participate in civic and social life, based on understanding of social, economic, legal and political concepts and structures, as well as global developments and sustainability”.

- This competence requires knowledge of:
 - Basic concepts relating to individuals, groups, work organisations, society, economy and culture
 - European common values





- Developments in national, European and world history
- Values and policies of social and political movements, as well as of sustainable systems (climate change and demographic change)
- Diversity and cultural identities

Skills are related to:

- Critical thinking and integrated problem solving
- Engage with others in common or public interest, including the sustainable development of society
- Arguments and constructive participation as well as decision making

And specific attitudes are:

- Respect for human rights
- Support for social and cultural diversity
- Support for gender equality
- Engaging in sustainable lifestyles
- Respect for privacy

1.1.7. Entrepreneurship competence

Entrepreneurship competence is the “capacity to act upon opportunities and ideas, and to transform them into values for others”. Of course, in this competence problem solving, critical thinking and a collaborative approach are essential.

This competence requires knowledge of:

- Contexts for developing ideas and actions
- Managing projects
- Economics and social economic opportunities and challenges
- Ethical principles
- Sustainable development

Skills are related to:

- Creativity
- Strategic thinking
- Problem-solving,
- Innovation
- Financial skills for making decisions
- Managing human capital
- Communication and negotiation
- Managing risk





And specific attitudes are:

- Sense of initiative
- Proactivity
- Courage and resilience
- Motivation for oneself and the others
- Empathy and taking care
- Accepting responsibility

1.1.8. Cultural awareness and expression competence

This competence refers to “having an understanding of and respect for how ideas and meaning are creatively expressed and communicated in different cultures and through a range of arts and other cultural forms”.

This competence requires knowledge of:

- Local, national, regional, European, and global cultures and traditions
- Different ways of communicating in different forms
- Identity and cultural heritage, as well as cultural diversity

Skills are related to:

- Expressing figurative and abstract ideas, experiences, and emotions
- Identifying opportunities for personal, social, or commercial value through the arts and other cultural forms
- Engaging in creative processes

And specific attitudes are:

- Respect for diversity
- Openness and curiosity
- Ethical approach and respect for intellectual property

The above eight key competences provide a general framework helping to better frame on a first and general stage which competences shall be considered as key. To integrate the list provided by the Recommendation of the Council of the European Union, the World Economic Forum has outlined a list of the top 15 skills for 2025. The report also considers the effects of the COVID-19 pandemic, which together with the technological transformations are leading to a “double-disruption” affecting the future of work and related jobs and skills. The forecasts for 2025 show that the skills gaps continue to be an issue, since there is not 100% compensation between old and new jobs. At the same time, skills such as critical thinking and analysis, problem-solving, active learning, resilience, stress tolerance and flexibility are increasing in their importance.

Having a closer look on such emerging skills, the WEF has examined the relative importance of different skills group, which is described in Figure 1.



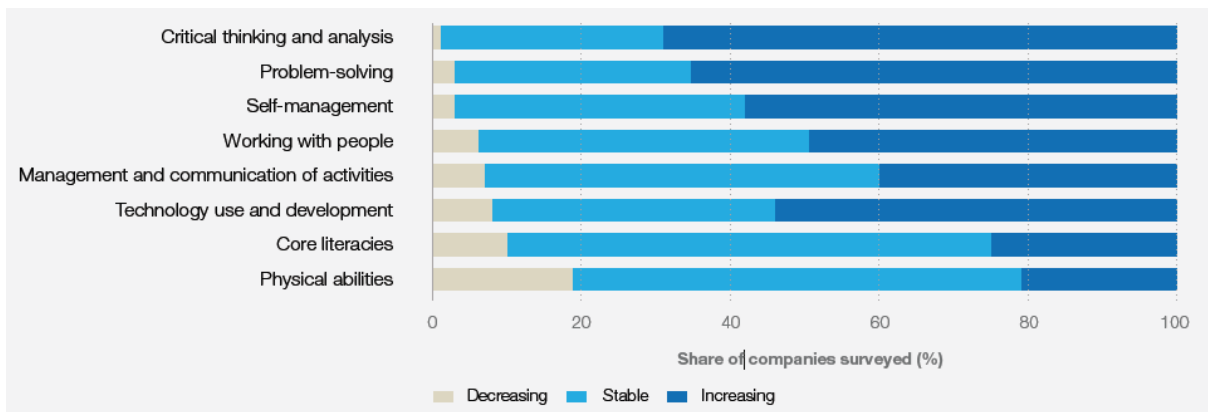


FIGURE 1: RELATIVE IMPORTANCE OF DIFFERENT SKILLS GROUPS WITH GROWING DEMAND BY 2025 (SOURCE: FUTURE OF JOBS REPORT, WORLD ECONOMIC FORUM, 2020)

From this figure we can already evidence that critical thinking as well as problem solving and self-management are emerging, together with technology use and development. Even if always needed, it is perceived that physical abilities will be slowly decreasing, both for a large proportion are going to remain stable together with core literacies.

Going more in detail, the WEF also lists 15 top emerging specific skills, which is worth mentioning:

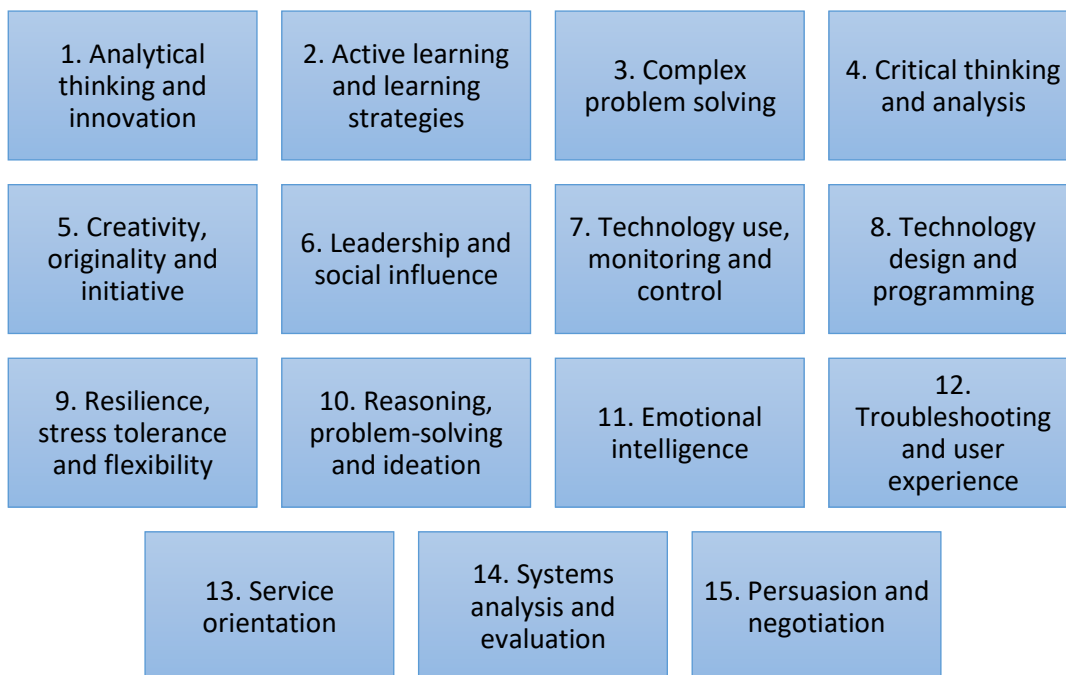


FIGURE 2: TOP 15 SKILLS BY 2025 (SOURCE: OWN ADAPTATION FROM FUTURE OF JOBS REPORT, WORLD ECONOMIC FORUM, 2020)



2. An overview of key competences for the automotive sector

The aim of this study is also to provide a general framework for those competences and skills that are emerging as key for the automotive sector. The Development and Research on Innovative Vocational Educational Skills project (DRIVES), under the Erasmus+ Blueprint has already provided a list of important and emerging skills and job roles. Its “Forecasting Dissemination Report” aims to provide an explanation of the evidence collected and data analysed relating to a survey activity designed to collect information on the skills needs, and the main drivers of change. The survey targeted large enterprises, small and medium enterprises (SMEs) as well as sectoral industrial associations asking to rank the most needed skills for the future along the below harmonized list:

NAME OF THE SKILL
BIG DATA/DATA ANALYTICS
SOFTWARE DEVELOPMENT
TECHNICAL KNOWLEDGE
MECHATRONICS
SYSTEM INTEGRATION
MATERIALS SCIENCES
LEARNABILITY
SPECIFIC MANUFACTURING PROCESSES
DIGITAL SKILLS
ARTIFICIAL INTELLIGENCE
ELECTRICAL/ELECTRONIC
ADAPTABILITY/FLEXIBILITY
R&D&I
AUTOMATION/ROBOTICS
CYBERSECURITY
MARKET ANALYSIS
MANAGEMENT & LEADERSHIP
PROCESS ENGINEERING
AUTOMATED DRIVING
BATTERIES
TESTING/VALIDATION
DESIGN





COMMUNICATION
SYSTEM ARCHITECTURE
PRODUCT DEVELOPMENT
FUNCTIONAL SAFETY
AFTER-SALES SERVICES
MECHANICAL
SUSTAINABILITY
DRIVETRAIN
ENERGY MANAGEMENT
CONNECTIVITY
CREATIVITY
CHANGE MANAGEMENT
3D PRINTING
POWER ELECTRONICS
PROJECT MANAGEMENT
PRODUCTION ORGANIZATION
THERMAL MANAGEMENT
FOREIGN LANGUAGES
SIMULATION
MOBILITY SERVICES
TEAMWORK
DIGITAL NETWORKS
VIRTUAL PRODUCT DEVELOPMENT & TESTING
INTERNAL LOGISTICS
ELECTRIC MOTORS
SALES
CONTINUOUS IMPROVEMENT
PROBLEM SOLVING
RESILIENCE
IOT & CLOUD
CRITICAL THINKING
ELECTROCHEMICAL
NETWORKING
DIGITAL TWINS





ENTREPRENEURSHIP
BEHAVIOURAL AGILITY
ALTERNATIVE ICE POWERTRAINS
MAINTENANCE
PREDICTIVE MAINTENANCE
OPTIMIZE ACTIVITIES

Figure 3 shows the top 15 overall skills. For our study, it is interesting to note both the more “technical/hard” – such as big data analytics, software development, digital skills, artificial intelligence (i.e., those more technology related), and those that are “softer”: “learnability”, “adaptability/flexibility”, “management and leadership”.

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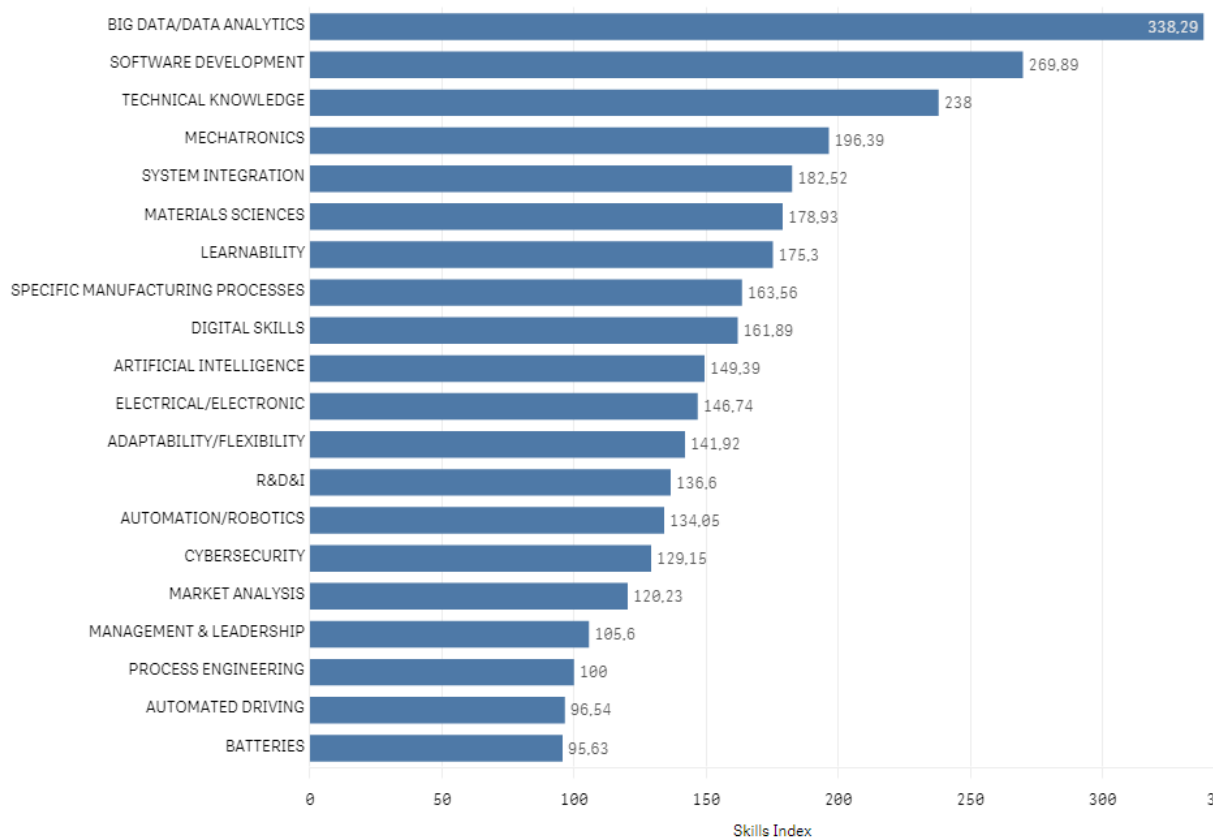
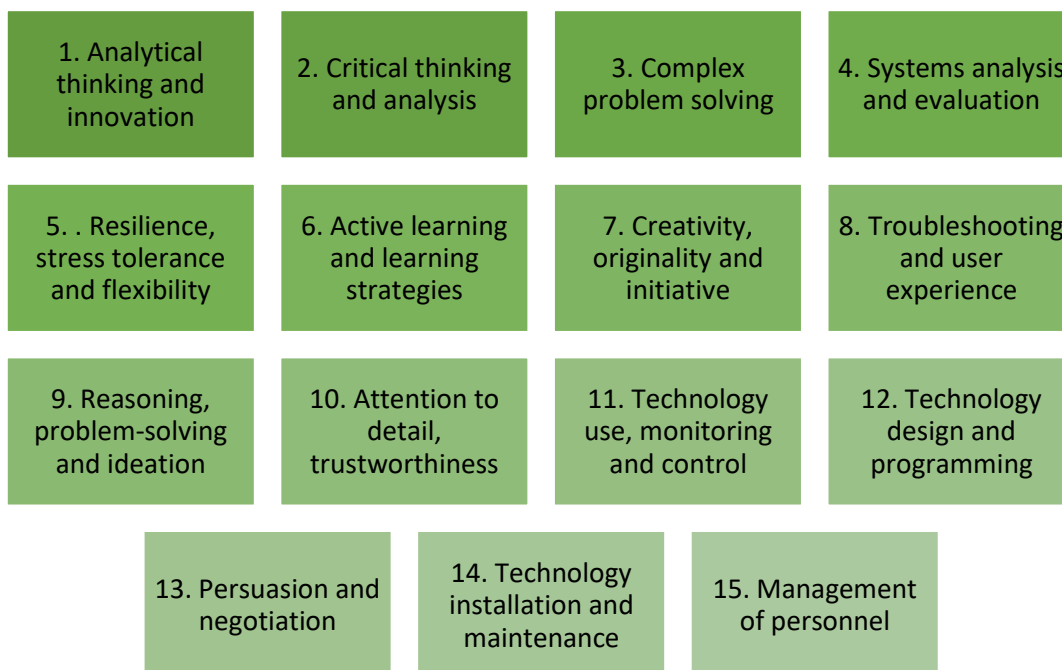


FIGURE 3: TOP 15 OVERALL SKILLS (SOURCE: BLUEPRINT PROJECT DRIVES FORECASTING DISSEMINATION REPORT)



Another useful reference is the one provided by the WEF report, whose survey conducted across several companies has revealed perceptions on the most needed future skills specifically for this sector.



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FIGURE 4: EMERGING SKILLS (SOURCE: OWN ADAPTATION FROM FUTURE OF JOBS REPORT, WORLD ECONOMIC FORUM, 2020)

For the automotive sector, the link between technology and demand of skills is evident. It is important to state that according to the WEF the most important barrier to the adoption of new technologies is indeed the skills gaps in the local labour market and among organization's leadership. When it comes to the up/reskilling process, companies have ranked the following as the ones most in need of up/reskilling:

1. Analytical thinking and innovation
2. Critical thinking and analysis
3. Technology use, monitoring and control
4. Leadership and social influence
5. Active learning and learning strategies
6. Complex problem-solving
7. Reasoning, problem-solving and ideation
8. Quality control and safety awareness
9. Persuasion and negotiation
10. Management of financial, material resources

The growing attention towards sustainability, green mobility and sustainable transport is also affecting the automotive sector. Apart from the increasing requirements of sustainability specific





skills, students and workers will need to be able to apply such skills transversally, with a horizontal knowledge and expertise on more than one subject.

2.1 An overview of key competences for the battery sector

Linked to the automotive and transport sector when it comes to the electrification of transport, green energy and environmental goals, another Blueprint project which is worth mentioning as part of the aim of this study is ALBATTTS (Alliance for Batteries Technology, Training and Skills). ALBATTTS promotes sectoral cooperation on skills in the battery sector with 20 full partners from 10 European countries, aiming at gathering demand and supply sides of competences across the battery value chain, as well as identify skills and job role needs throughout the whole battery production lifecycle from cell production to battery systems in stationary and mobile applications.

Regarding the identification of skills and competences, ALBATTTS has analysed and provides a full list of competences subdivided according to each step of the battery value chain, which is composed of:

1. Raw materials and processing
2. Components and cell manufacturing
3. Battery Integration, Modules, and Packs
4. Operation, Repair, and Maintenance
5. Second Life
6. Recycling and Sustainability

15 If each of these steps has sector-specific job roles associated to similarly specific skills and competences (which in a certain way reflect the hard and technical skills), the project has also provided an analysis for the overall sector in terms of transversal competences.

Figures 5 and 6 show respectively the occurrence of the general transversal competences and of the soft competences. The former are defined as the “general ability or expertise which may be used in a variety of roles or occupations“, whereas the latter as “the combination of individuals, skills, social skills, communication skills, character or personality traits, attitudes, career attributes, social intelligence, and emotional intelligence quotients, among others, that enable people to interact with their environment, work well with others, perform well, and achieve their goals with complementary hard or sector-specific/transversal skills”.



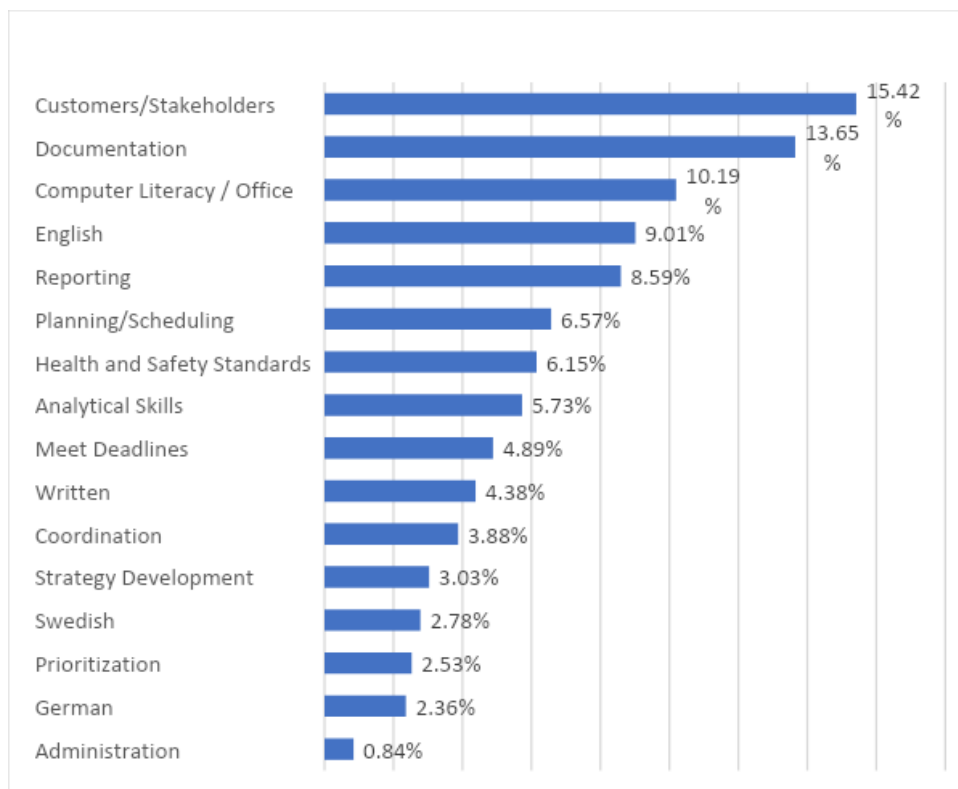


FIGURE 5: GENERAL TRANSVERSAL COMPETENCES

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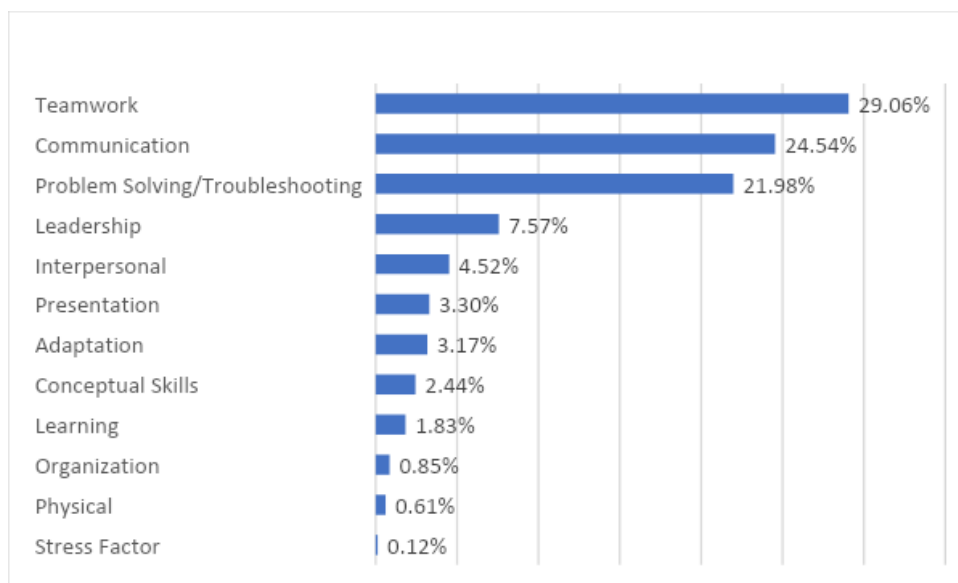


FIGURE 6: SOFT COMPETENCES

From the above figures, it is interesting to note the “customers/stakeholders” competence, which refers to the ability to interact with customers and understand their needs and requirements. When it comes to the soft competences, again we see the stress on working with people and building productive and solid teams, followed by communication skills and a problem-solving attitude.





3. Assessment and key competences usage

The World Economic Forum's "The Future of Jobs Report 2020" (WEF, 2020) describes today's modern world of work as highly uncertain, defined by constant (and, as the situation of recent years shows, often unpredictable) change. It is not just technological advances, automation and globalisation that constantly influence and transform the way we live and work. As a result, the acronym VUCA (volatile, uncertain, complex, ambiguous) has been coined for the contemporary world. Clearly these aspects place increased demands on the organisation of businesses and their prosperity.

Attention is therefore turning more intensively to maximising the use of all types of resources, not excluding human resources. But how to select suitable employees when it is unclear what skills will be needed by the businesses? Enterprises have often focused on recruiting new, skilled people and only addressed gaps in the training and development of existing people. Little conceptual focus has been given to opportunities to improve existing employees (Alessandri et al., 2018). It now appears that it is the employees who, with appropriate and thoughtful nurturing, will help a company gain a competitive advantage.

Attention is thus turning again and more structurally to competences and competency models. Professionally specific behaviour must be continuously modified or replaced by new elements. To manage this process, core competences are needed as they represent a lasting value in the process of change. Working according to instructions is no longer implemented; autonomy is coming to the fore. Key competences are a kind of meta-knowledge and are therefore an effective tool for solving various problems of professional education and development in an environment of rapidly changing framework conditions (Belz, Siegrist, 2015). The topic of a functional concept of key competences is relevant not only regarding the current needs of companies, but especially to the future ones (Luthans, Youssef-Morgan, 2017). And hand in hand with the description of the necessary skills goes the appropriate diagnosis of their current level.

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3.1. Introduction: On Competences, Their Use, Assessment And Development

The definition of Campion et al. (2011) captures the essence of why competences are such a hot topic in Western economies - it defines competences as a set of knowledge, skills, abilities, experiences, and other characteristics that are needed to perform effectively in given jobs. This perspective defines competences as the demonstrable characteristics of a person, including knowledge, skills and behaviours that enable performance (Ledford, 1995). The main purpose of the concept of competences both inside and outside the company is then communicative. They describe what people need to know and master to effectively contribute to the profitability of a given enterprise (Zingheim, Ledford, & Schuster, 1996). Along with competences, enterprises often focus their attention on motivational drivers to increase the efficiency of employees' work (Žiaran, Janiš, & Pánková, 2016).

Although the notion of competences is not a new concept, it is now becoming increasingly relevant. This is due to the current high level of environmental uncertainty, the development of artificial intelligence and others, which point precisely to the importance of

targeted development of the quality of human resources in terms of competency. It is competences that will enable greater flexibility in responding to changing environments and employment circumstances. The conclusions of the document estimate that up to 85 million jobs





may be transformed, replaced by automation or digitization, or disappear by 2025. As a result, tens of millions of jobs will emerge with new requirements for their performers, i.e. with the potential for diagnosing existing employee competences and developing new ones.

The preceding text summarises the current views on categorisation and enumeration of competences in both general and very detailed terms. If we want to think in greater detail about the diagnosis and methodical monitoring and development of competences in different enterprises, we need to understand the concept of competences and competency models in more depth so that we can design them effectively for the benefit of the productivity of the enterprise.

The key qualifications were mentioned as early as 1974 by D. Mertens (1974). He described them as elements of education that are superior in content to other educational objectives. They help people to function in practical aspects of work and personal life and facilitate the development of further knowledge (Srbecká 2010, Belz, Siegrist, 2015). The notion of competency was introduced into work practice by R. Boyatzis in 1982. Boyatzis (1982, In Rothwell, Lindholm, 1999) defines competency as "an essential characteristic of an employee (e.g., a motive, trait, skill, aspect of self-image, social role, or body of knowledge) that results in effective or above-average job performance." Based on the research findings, Boyatzis pointed out that there is no single factor that distinguishes successful performance from unsuccessful performance, but that this is due to the influence of multiple factors, i.e., he anticipated the emergence of competency models.

. Important is the observability of competences in behaviour (also referred to as Skills, or Hard-Skills vs. Soft-Skills). The definition by Belz, Siegrist (2015) points out the difficulty of diagnosing competences, their overlap and intersectionality - "Core competences encompass the full spectrum of competences which cross the boundaries of individual disciplines. They are an expression of a person's ability to behave appropriately in a particular situation, in accordance with oneself, i.e. to act competently". Lyce and Signe Spencer (1993, cited in Rothwell, Lindholm, 1999), add an essential and still valid fact - a characteristic becomes a competency only when it can predict something meaningful in the real world, i.e. it is described by the rhetoric of specific behavioural manifestations.

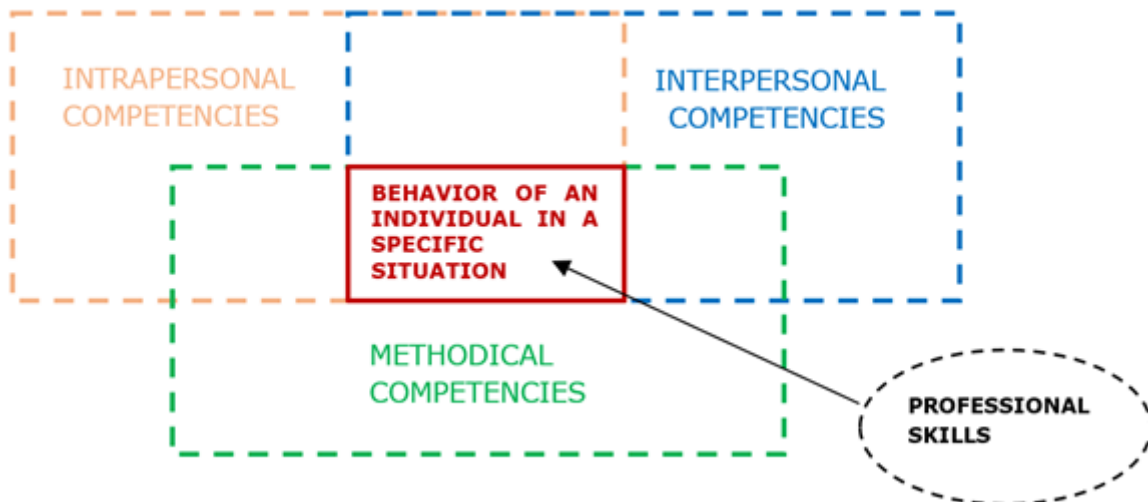
In practice, competences are often described in sets, called competency models. These are multiple competences defined in relation to a specific role or position. Within the cognitive-theoretical approach, certain general structure of competences was defined already by Mertens (1974). He calls them key competences because they help to cope with the reality and manage the flexible demands of the world of work. This is the list of key competences according to Mertens:

- basic competences (basic mental operations as a prerequisite for cognitively coping with various situations and requirements);
- horizontal competences (to acquire information, understand it, process it and understand its specificity);
- extension elements (basic knowledge in terms of fundamental cultural techniques - numerical operations, and knowledge relevant to a specific occupation - measuring techniques, work protection, handling tools);
- contemporary factors: filling in knowledge gaps in the light of new knowledge (modern history and literature, counting with sets, the constitution).



The individual competences cross the boundaries of each discipline. They express the ability to act in accordance with oneself, appropriately to the situation, to be competent. These are various highly complex competences working together. A more concrete and practically applicable way of thinking about the competency model is offered by Belz, Siegrist (2015). It presents a structure involving the interplay of three components - personal competences (intrapersonal), social competences (interpersonal) and methodological competences. The groups of competences further branch into specific competences with unique content.

FIG 1 : COMPETENCY MODEL (ADAPTED FROM BELZ, SIEGRIST, 2015)



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- Intrapersonal competences, i.e. in relation to one's own person (competent handling of oneself, ability to reflect, assess and develop one's own value - e.g. ability to self-reflect, self-manage, self-confidence, etc.);
- Interpersonal competences, i.e. social competences (e.g. ability to communicate, negotiate, resolve conflicts, lead a group, teamwork, etc.);
- Methodological competences (related to the way of working and achieving the goal - e.g. ability to plan, work with information, analytical thinking, etc.).

From the description of the various groups of competences, only the so-called "soft skills" are included in the competences, the individual's expertise stands outside the competency system, as these are the focus of environmental variability. According to the authors, it is the competency level of everyone that determines the ability to apply expertise in practice.

Vaculík (2010) describes the same groups of competences in terms of content. He describes competences that relate to a) a person's approach to a problem, b) approach to people, c) approach to oneself. The last group of competences, focusing on the approach to oneself, is the most difficult to identify (Krause, Gebert, 2003). The others can usually be identified by

observation or by specialised methods, such as those that tend to be part of the Assessment Centre¹.

The World Economic Forum regularly conducts large-scale employer surveys on employability skills. In The Future of Jobs Report 2020, it lists the emerging skills for year 2025.

FIG 2: TOP 10 SKILLS OF 2025 (FUTURE OF JOBS REPORT, 2020)



Figure 2 shows the overlap of the list of skills and especially their breakdown ('competency model') with the above. Three, or four unifying groups have crystallized - methodological (Problem-solving), intrapersonal (Self-management), interpersonal (Working with people) and basically professional, technological competences (Technology use and development).

A well-designed competency model is the basis for the most effective measurement of competences for specific employees in a company. The development of a competency model in a

¹ This is a diagnostic method, most often used in selection procedures. It is based on the observation of participants in a group by several evaluators. The subject and output is a behavioural assessment of competences in a variety of individual and group activities.



company can be based on the general structure presented above. At the same time, the characteristics formulated by Woodruffe (1993) must be considered when constructing it so that the competency model is viable:

- be at a certain level of generality,
- be based on observable behaviour
- be simple and concise
- be user-friendly
- be marked with dimensions
- avoid vagueness and ambiguity
- be forward-looking and mirror even future requirements.

Kubeš, Spillerová, and Kurnický (2004) summarize it simply: "Whether competency is considered to be an observable behaviour or rather behavioural assumptions in the form of personality characteristics, both approaches use performance in a specific work situation as a criterion." Authors defining competences agree on the need to link competency to observable behaviour, job performance and company values.

The competency-based model is always job specific. On the other hand, Collins and Porras (1994) declare some competences and values as universal for all visionary companies. Such as innovation, product quality and customer service, individual initiative and growth, integrity, continuous improvement and self-renewal, and technical superiority. Competences are defined for the whole organization or certain professions (Armstrong, Taylor, 2020).

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Kubeš, Spillerová, Kurnický (2004) summarize several types of competence models:

- Universal competency models (core competency models) include competences common to all employees of a company regardless of their role or position in the hierarchy.
- Specific competency models identify competences that are key to a specific job in a specific company. This is also the understanding of Arnold et al. (2007), according to whom "a competency model includes an exhaustive list of all relevant competences directly related to a given job role."
- Generic competency models represent a proven, empirically derived list of competences common to specific roles. The lists are the result of extensive research and can be a good guide or starting point for developing a company's own competency model.

Rothwell and Lindholm (1999) frame possible approaches to building a competency model in a particular enterprise as follows:

- Borrowed approach - in this approach, the company does not create the competency model, but adopts it ready-made, usually from a commercial offer of HR and consulting companies. These usually are based on generic models.
- Borrowed and tailored approach - i.e. the combined approach adapts the adopted model to the specifics of the company.
- Tailored approach - is the most challenging but often the most functional approach to constructing a competency model. It requires a deep knowledge of the position, the





company, and the external conditions. It is based on the analysis not only of specific positions, but also of the company culture and its values.

Sophisticated definitions of competences and their decomposition into concrete observable behaviours are a prerequisite for being able to assess them.

3.2. Key Assumptions And Principles Of Competence Assessment

In his paper (1996), Professor Yves Doz says about competences, among other things: “Competences are not easy to manage. Competences are not very tangible, nor measurable, and the more valuable competences may well be the least manageable. Competences are fragile.”

Competences in the concept as presented above are indeed entities that are quite difficult to quantify and directly measure, particularly when we talk about competences of the so-called soft-skills nature. This does not mean, however, that it is not possible to assess the level of competency of a given person, to monitor its development and to consciously encourage and then achieve its development.

Despite being difficult to measure, the competences are undoubtedly both measurable and systematically developable. This fact can be demonstrated by almost any human skill, starting with movement skills, specifically walking in young children, through e.g. riding a scooter, bicycle, ski or snowboard, playing a musical instrument, dancing, etc. to controlling (driving) a motor vehicle or even an aeroplane, etc. Almost identically, it is possible to look at soft-skills competences, including typical managerial skills in the form of leadership, crisis communication, negotiation, conflict resolution and others (cf. Woodruffe, 1993; Doz, 1996; Ballantyne, Povah, 2004 and others).

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However, if competences are to be quantified, meaningfully "measured", credibly assessed, and then purposefully developed, certain key conditions and requirements need to be met, particularly related to:

1. the assessed competency itself,
2. the process of assessing individual competences as well as the competency endowment of the individual as a whole,
3. the choice of appropriate assessment methods for the chosen competency,
4. the process of competency assessment.

All actors involved in the evaluation, i.e. the commissioner, the evaluators and the evaluated must have a common understanding not only of the purpose (Why?) and the subject (What?) of the evaluation, but also of the methods and procedures (How?) of the evaluation process as a whole.

In relation to the competency being assessed, it is essential to have an adequate, precise, and sufficiently detailed definition of the competency that is fully and unreservedly shared and understood by the commissioner of the assessment, all individual assessors and the person being assessed and is in line with all evaluation methods used in the assessment.

Accuracy and consistency in understanding the nature, content and structure of the competency being assessed is the absolute basis for its meaningful assessment regardless of whether it is a knowledge-based competency, a hard-skills competency, or any typical soft-skills component.

The unambiguous definition of competency must be shared by all actors and be complemented by a purposefully created transparent set of relevant criteria and indicators that will allow the





assessment of the

level of competency in the case of a specific person being evaluated. The individual criteria consider various sub-aspects of the definition of the relevant

competency, while the indicators enable the identification and subsequent comparison of the degree of fulfilment of the chosen criterion. To quantify the indicators with the necessary level of detail and precision, scales or rating scales are usually used. It is appropriate to relate these scales directly to specific observable or measurable manifestations of competency (e.g. a required test result or observable behaviour).

The above-mentioned facts very clearly indicate what makes the process of assessing individual competences as well as the competency endowment of the individual so specific and which part of the process requires special attention. The main keywords in this context necessarily include, in particular: qualitative, individuality, objectivity and ethics (Woodruffe, 2000; Thornton III, Rupp, 2006; Gruber, Kyrianova, Fonville, 2016, etc.).

Qualitativeness can be considered as a literal baseline characteristic of core competences and their assessment. Qualitative in nature are both the individual competences assessed (regardless of whether they are knowledge, skills or abilities, whether they are hard-skills or soft-skills, etc.), but also their assessment by assessors, the individual assessment methods, etc. Similar thing applies individuality; everyone is an individual in his or her own right - be they the evaluated persons, the assessors or other actors involved in the assessment process, e.g. the commissioning bodies, etc.

The essential degree of qualitativeness and individuality logically leads to an emphasis on ensuring the objectivity of competency assessment and competency endowment. In this context, it is directly suggested to pay attention to and verify the aspects of validity and reliability of surveys/assessments which are so well known from the field of social research (Reichel, 2009 and in more detail a number of other authors, e.g. Kerlington, 1972; Hendl, 1997, Punch, 2008, etc.).

When checking the validity of an evaluation, we determine whether and to what extent the evaluation has given a true picture of reality, i.e. whether we have actually assessed what we wanted to assess. In practice, validity checks are then used to highlight possible errors in the evaluation, whatever the stage of the evaluation process.

Reliability then represents a view of how reliable the assessment is in the sense of its repeatability with identical results. Possible unreliability (low reliability) may be partly by the persons being assessed (change of motivation, fatigue, influence of other factors, etc.), and partly by the assessors (non-compliance with agreed rules and procedures, errors and mistakes, influence of other circumstances, etc.) or the methods used (ambiguity of the assignment, etc.). The reliability of the resulting assessment can be influenced by monitoring one competence through several methods.

In the context of ensuring the objectivity of competence assessment and competence endowment, several authors (Woodruffe, 2000; Ballantyne, Povah, 2004; Thornton III, Rupp, 2006 and others) have mentioned the importance of the multifaceted perspective of assessors on the persons assessed and their behaviour.

In this context, Grubek, Kyrianová and Fonville (2016) talk about, so-called, triangulation which is meant to be an approach that summarises the different perspectives of different assessors observing the actions and behaviours of the evaluated persons in various situations using different assessment methods and techniques, resulting in more comprehensive, less biased by





the individuality of the assessment and therefore more accurate information. At the same time, however, they add that the use of too much data confirmed from too many perspectives can become counterproductive, leading to time delays and wastefulness without further improving their prognostic skills.

The last important group of characteristics of the evaluation process of individual competences as well as the competency endowment of the individual are the requirements for ethicality of the evaluation as such, consistency in ensuring equal conditions for all evaluated persons, observance of the rules of etiquette in behaviour and conduct within the evaluation process, creation of a positive environment and atmosphere, as well as confidential treatment of information.

In the context of the competence assessment process, the persons assessed must not be subjected to requirements that would contradict or border on general ethical requirements, which also applies, for example, to the individual assignments used in the implementation of specific assessment methods. All evaluated participants must always have an equal chance of success in the assessment and should not be fundamentally favoured regarding, for example, their previous experience, physical fitness, etc. Assessments should take place in a positive, supportive environment and atmosphere. Respect for the generally applicable principles of the treatment of personal data and information, as well as the confidential treatment of information obtained about the evaluated persons throughout the competency assessment process, is also a key attribute.

The methods of competency assessment are the subject of a separate section of the text below; their selection, combination and use must respond to the form and nature of the competency being assessed and contribute as far as possible to the key principles of effective, efficient, and cost-effective competency assessment described above.

The process of competency assessment is also discussed in detail in a separate chapter below, including an explanation of its importance and potential for the effective functioning of institutions and organisations (especially economic entities), an outline of the key activities during its preparation, implementation, and evaluation, etc.

3.3 Methods Of Competency Assessment

The choice of the relevant method or combination of methods, their specific use, organisation, implementation, and evaluation are undoubtedly among the most important parts of the assessment of competences and competency endowment as a whole.

The chosen methods must reflect not only the definition of the competency to be assessed, including criteria and indicators necessary for its assessment, but also the fulfilment of individual principles that are key to the effectiveness and efficiency of the assessment, i.e. in particular validity, reliability and ethicality of the assessment.

In general, competency assessment methods can be categorised in various ways, e.g. (cf. e.g. Woodruffe, 2000; Thornton III, Rupp, 2006; Armstrong, Taylor, 2020 and others):

1. implemented individually / in small groups / in larger groups,
2. based on immediate/short-term/medium-term observation and evaluation,
3. conducted with a single evaluator / multiple collaborating evaluators / multiple independent evaluator,





4. carried out with the participation of either internal / internal and external / external evaluators only,
5. conducted in real (work) conditions / simulating (work) reality / deliberately divorced from (work) reality,
6. implemented in the workplace / outside the workplace,
7. implemented through face-to-face contact / implemented online,
8. carried out periodically / non-periodically / irregularly / randomly / one-off,
9. implemented as part of / outside the performance appraisal system,
10. having impact on the remuneration of evaluated persons / no impact on remuneration.

The following belong to the specific tools that are most often used for mapping and assessing competence endowment and subsequently for competence development (both hard-skills and soft-skills) (cf. Woodruffe, 2000; Ballantyne, Povah, 2004; Thornton III, Rupp, 2006; Vaculík, 2010; Pechová, Šišová, 2016 etc.):

- a. Verification of (expert) knowledge and skills
- b. Observation (observation)
- c. Analysis of evidence
- d. Multi-faceted feedback
- e. Interviews
- f. Behaviourally oriented interviews
- g. Psychodiagnostic tools
- h. Rehearsal, training
- i. Case studies
- j. Group games
- k. Role-playing
- l. Simulation
- m. Mystery activities
- n. Assessment centre / development centre

Validation of (expert) knowledge and skills is used particularly to determine the level (i.e. extent, structure, quality and intensity) of the assesses specific expertise and skills, including e.g. language skills, manual skills, etc.

It uses a number of distinct and mutually different ways and forms of assessment, ranging from structured, semi-structured or unstructured tests (written, online, ...), through examinations based on dialogue between the assessor and the assessed, which may include some of the other tools described below, too, for example, the testing of practically oriented knowledge and skills in the form of an observation of a specific activity by the assessor.

By observation we understand the assessment and evaluation of the level of competence from the point of view of one or more external observers. Alternatively, self-observation and self-assessment can also be considered.





In the case of observation, it is appropriate to objectify the knowledge gained, e.g. from the perspective of several different observers (see below for tools responding to this, e.g. multiparty feedback or assessment centres), as well as by observing over time, under various conditions in

which the person being assessed is observed, etc. Observation can be carried out 'on the job', i.e. during the individual's work activity, or 'off the job' using some of the other methods listed below.

The analysis of evidence can be considered as a specific type of verification of expert knowledge, but its potential also lies in the identification and assessment of some soft-skills competences. In the case of the analysis of documents aimed at the assessment of soft skills, it is necessary to stress the need for a multifaceted view of the documents analysed.

The subject of the analysis can either be the materials produced by the assessor for purposes other than solely for his/her assessment (typically the outputs of his/her normal work activities, etc.) or it can be the materials produced solely for the purpose of assessing and evaluating the level of his/her competences. Although this seems to be a rather procedural and technician approach, it is also rooted in psychology. Each person's creation tells us something about his/her and gives us information about his/her competence.

Multifaceted feedback is an approach in which the assessment of the degree of disposition towards a particular competence or competences is based on the evaluative opinions obtained from several evaluators, each of whom is in a different position in relation to the evaluated person, perceiving him/her from a different perspective.

A well-known approach using the above-mentioned principle of evaluation is e.g. the so-called 360-degree feedback, or different variants of peer evaluation within a selected circle of persons, etc. In the case of 360-degree feedback, this is most often an anonymous evaluation of an individual, usually by means of a questionnaire survey. The investigation is conducted using employees within the company (each person being evaluated is evaluated by his/her colleagues, subordinates and supervisors), while external sources (e.g. suppliers or business partners) can also be involved. Another example of multifaceted feedback is feedback from subordinates - upward feedback, which is particularly useful in assessing managerial competences (Mount, Scullen, 2001).

Self-assessment is also part of multisource feedback. Self-assessment, when supplemented and viewed in the context of others' assessments, is a valuable source of information not only about competence, but also about an individual's self-concept and perception of his or her own self-efficacy (McCormick, 2001). In a competence context, the focus is usually on the assessment of work behaviour. The main aim of self-assessment is to enhance the tendency of employees to reflect on their competence endowment, its impact on performance and to consider opportunities for development, while promoting objectivity in the assessment. Self-assessment can be used for certain competency characteristics.

Interviewing is also a method of assessing various competences and competency endowments. When an interview is used as an assessment method, it is usually structured, in which the wording and order of the questions or other characteristics of the interview process are clearly specified. The content and structure are clearly defined in advance. A semi-structured interview is also a variant, with a given main structure and freedom to specify and inquire according to specific answers (Ferjenčík, 2010). In combination with the observation method described above, some competences can be directly observed in the interview (e.g. subcomponents of





communication

competences, stress resilience). Other types of competences are then inferred from the participant's statements and assessed indirectly.

To increase the validity of the interview, it is possible to involve multiple assessors, take detailed notes or record the interview (with the consent of the interviewee). The use of scaling based on observable behaviour (behaviourally anchored scales) is also an option (Dipboye, 2017).

Methodologically, two types of interviews can be distinguished according to the types of information being collected - situational interviewing and behavioural interviewing. In a situational interview, questions focus on how the interviewee would behave in a certain situation. It assumes that a person's future behaviour can be predicted based on his or her intention (Maurer, Sue-Chang, Latham, 1999).²

The Behavioural Event Interview (BEI) method evolved from Flanagan's critical event method and was later developed by McClelland (1998). In contrast to the previous interviewing approach, it is based on the premise that we best predict future behaviour (i.e. the expression of competence) based on behaviour in a similar situation in the recent past. Although this relationship is certainly somewhat more complex and other factors come into play, the relationship between past and future behaviour refers to a certain behavioural stability (Ketphat et al., 2013).

Behavioural Interview is a form of structured interviewing where we analyse past events, behaviours, and specific actions of the person being assessed, with particular emphasis on facts and examples from real situations. The basic principle of this method is that the person being assessed tells short 'stories' that describe a specific relevant event and the specific behaviour, thinking and actions of the individual, either in everyday or critical situations. Questions about the thoughts and possibly feelings of the individual in a particular situation are also used (Macan, 2009). Although a mostly small number of relevant events are mapped in this approach, they are asked about in great detail and depth, which, together with the structured form of the questions, leads to relatively good predictive validity demonstrated by a number of studies (Raisova, 2012; Moscoso, 2000)

Psychodiagnostic tools³ are certainly another category of methods that can be effectively used in the assessment of competences in the work environment. These are mainly performance psychodiagnostic tests (e.g. intelligence tests or instrumental diagnostics) and personality questionnaires focusing on the description of personality characteristics of the individual. Standardized psychodiagnostic instruments can appropriately complement the other methods mentioned above, especially by clearly quantifying their validity and reliability (Svoboda, Humpolíček and Šnorek, 2013, Seitl, 2015). The outcome characterises the probability with which a certain behaviour can be expected or how a certain behaviour can be interpreted (Gruber, Kyrianova and Fonville, 2016). Effective use requires especially the selection of an appropriate method, ideally one that is designed specifically for the work (not clinical) environment. Results

² An analogy may be situational judgement tests, where the interview is replaced by a questionnaire assessment of hypothetical events and their resolution (Joiner, 2002).

³ Psychodiagnostic tools (texts and questionnaires) are a subset of psychodiagnostic methods and include a variety of methods used to understand the psychological characteristics of individuals, including competency endowment. The result of psychodiagnostics is a description. Depending on the content of a particular method, the output may be, for example, a description of your attitude towards others, your leadership or communication tendencies, or your attitude towards yourself. The psychodiagnostic methods can therefore include the aforementioned observation and interview.





are not affected by errors in social perception on the part of the assessors. Nowadays, it is possible to competently evaluate psychodiagnostic instruments to a wider group of people and

their use in the context of competence assessment is greatly facilitated by this (Smrčková, 2014). Personality questionnaires are being developed directly for HR work and psychological education is being replaced by psychological trainings for each method to ensure their correct interpretation (Assessment System, 2022).

Personality questionnaires are psychodiagnostic instruments based on the subjective statement of the person being assessed and tell about "characteristics, feelings, attitudes, opinions,

interests, the way of reacting in various situations, etc." (It is an indirect assessment where the candidate takes a position on a set of questions or statements and selects the most meaningful answer on a scale. The questionnaires are based on introspection and on the internal knowledge of the assessed person. The advantage of the questionnaires is the ease and speed of administration. A certain disadvantage of questionnaires is social desirability, i.e. the possibility of deliberate distortion of the results - the person being assessed may deliberately stylize or overestimate (Assessment Systems, 2022). Their outputs can be flexibly linked to individual competences.

Performance tests or cognitive ability tests are diagnostic of various skills and knowledge. These tests can be used to determine, for example, intelligence, logical or mathematical skills, attention, verbal skills, and language skills. They are among the oldest diagnostic methods in psychology and are therefore also the most sophisticated and validated in practice. Responses are usually rated on scales or by numerical value. The results are not intentionally influenced by the person being tested. There are right and wrong answers. Norms have been developed for these types of tests that allow comparison of an individual's results with the average representation in the population (Svoboda, Humpolíček, Šnorek, 2013). Their use is often for competences within specific professions, for example, instrumental diagnosis in traffic psychology. The most widely used of this group are tests of general intelligence, which have long been shown to be a good predictor of, for example, the competences required for leadership positions (Ree, Earles, 1992).

Exercises and trainings are used to learn, consolidate, and develop skills, but also abilities and experience. They usually take place in so-called 'laboratory conditions', and their key premise is to provide a safe environment from the participants' point of view, which gives them a sense of security, relieves them of the fear of making mistakes and showing their own shortcomings or inexperience, etc.

Exercises and training sessions are primarily used for the development of competences, but they can also be used secondarily for their "measurement" and evaluation. They are led by experts in the trained field, who act as trainers, lecturers, mentors, consultants, and coaches, and may also act as evaluators.

A case study is a specifically formulated, complex assignment usually linking many different aspects, factors, processes or roles.

Case studies can vary widely, ranging from realistic assignments simulating specific situations in the environment of the economic sector or the entity in which the AC/DC participants operate, to "game-like" assignments that are deliberately completely detached from the participants' everyday reality.

A case study may have a single desired correct solution, but more often it is designed in such a way that it allows for several more or less "correct" solutions. The time for solving a case study is





usually limited. A case study can also be designed as a management game, where the assignment is distributed to the participants sequentially, with changes in the context of the solution, addition of new requirements for the participants, etc.

Group games are group activities that do not conceal the fact that their essence is a game, i.e. the performance of tasks and requirements unrelated to the reality of the participant's normal work activities, usually requiring a certain manual or physical activity, application of the participant's skills, etc.

A more mentally oriented group game can be considered as an activity almost identical to the case studies of a "game" character.

An important factor in deciding whether to use game-based activities, which is also true for "game-oriented" case studies, is the degree to which participants are willing to take on such assignments and participate fully in the activity; participants may feel discomfort, experience feelings of awkwardness, loss of valuable time, etc. when completing assignments designed in this way.

Role-playing consists of solving a defined task or managing a defined situation by an individual, a couple, or a small group of participants, each of the actors involved having a specific position or role to perform. The positions or roles usually correspond to real positions or roles, but at the same time they are not positions or roles in which the role-play participants normally work professionally.

Role-playing can take place between two or more evaluated participants, but often observers or evaluators are also involved as role-players. A frequent limitation to the use of role-playing is, similarly to game-oriented activities, the reluctance and unwillingness of participants to fully participate in such activities, feelings of awkwardness about such performances, etc.

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Simulations are a combination of exercise or training, case study solving and role-playing, eliminating some of the disadvantages of the above-mentioned tools. At the same time, however, they require a realistic context, considerably more careful preparation, and the choice of a well-prepared actor or even actors in whose presence the simulated activity takes place. Simulations can be conducted with a pre-prepared scenario or with a free scenario. A typical example of the use of simulations are hiring interviews or performance reviews.

Mystery activities can be described as a special kind of simulations, but their nature is so specific that it would be more appropriate to talk about a separate category of activities designed for assessment and competency development. In the case of a mystery activity (e.g. mystery selection interview), the evaluated participant carries out a very real activity from his/her point of view (e.g. conducting a hiring interview with a job candidate), but is actually observed and evaluated by the other party (i.e. the evaluator would be the job candidate). Usually, logically, it is a well-prepared actor, but in the case of mystery negotiations with a supplier or customer, for example, it may also be a representative of a real economic entity with which the company is in contact.

An assessment centre (AC), if implemented with the primary objective of participant development, it is usually called a development centre (DC), is a complex set of activities oriented towards identifying, "measuring" and evaluating competences of a group of participants.

Both assessment and development centres (hereinafter also referred to as AC/DC) are group-oriented tools used mainly in the selection of employees, their systematic evaluation, including the evaluation of their competency endowment level, as well as the initiation and implementation





of their competency development. Participants are continuously observed and evaluated by a group of assessors (see also the principle of triangulation above).

The AC/DC is usually attended by 8-14 evaluated participants, 3-4 assessors and 1-2 members of the support team (assistants). The duration of the AC is usually ½ to 2 days, in the case of the DC implementation it is usually 1 to 3 days. A prerequisite for an effective AC/DC is adequate and suitable premises, not disturbing the participants with other stimuli related mainly to their normal work activities, ensuring adequate personal comfort (meals and refreshments during the programme, accommodation in case of multi-day events, etc.).

The AC/DC uses a range of different tools described above for the assessment and subsequent development of competences, which are combined in the AC/DC programme. AC/DC can also be

enriched with outdoor or virtual elements. A modern trend is the implementation of completely virtual AC/DC.

The various tools outlined above for monitoring, evaluation and, subsequently, for competency development are not firmly or mandatorily categorised, there is no complete and exhaustive list, etc.

Similarly, there are no precise definitions of these tools, they have no fixed frameworks, they often overlap or combine with one another in ways that are adapted to the specific needs, environment, context, competences being assessed and developed, participants being assessed, etc.

3.4. Implementation Of Competency Assessment In The Context Of A Specific Organization

30 The topic of key competences, their evaluation and development has been resonating in professional publications focusing on management and especially human resources management for more than a quarter of a century. The competences of employees are an important aspect of the competitiveness of any organisation, not just businesses. Possession of relevant key competences in their required quantity is considered one of the basic prerequisites for the fulfilment of vision, mission, strategy and strategic objectives (cf. e.g. Armstrong, Taylor, 2020, etc.).

However, if key competences are to make an effective contribution to the above, they must be given adequate attention by the institutionalised body in question. Particularly the existence of a coherent internal system dedicated to the definition, assessment, and development of (staff) competences is essential.

One of the primary requirements conditioning the existence of a functional system of evaluation and development of key competences is the existence of a universal competency model (e.g. Kubeš, Spillerová, Kurnický, 2004) including competences identified as key within the institution as a whole, regardless of the roles and positions of the evaluated persons (see also above in the first part of the text), which can be further supplemented:

- universal competency models developed within large and important, usually highly autonomous organisational units or management levels of a given entity,
- specific competency models for individual job types,
- generic competency models for specific job roles.





The so-called competency profiles for specific type or individual job positions should then be elaborated. These profiles should be linked to the specific or generic competency models created and should define the optimal level of endowment (quality of disposition) of each competency listed in the model.

Precisely defined and universally shared definitions of individual competences as well as adequately defined relevant criteria and indicators enabling the assessment of the level of competency in the assessed person are a necessary prerequisite for the existence of a functional and practically used system of competency models and profiles (see also e.g. Thornton III, Rupp, 2006; Armstrong, Taylor, 2020, etc.).

In the context of the actual assessment of key competences, it is essential to choose appropriate assessment methods and tools that reflect, to the maximum extent possible, the needs of objectivity (validity and reliability) and ethicality of the assessment (see more in the previous sections of this text).

Specifically, it is also necessary to draw attention to the need for adequate training of evaluators, be they recruited from among the internal staff of the organisation or from external sources. Particular attention should then be paid to the case of evaluators in situations where internal and external evaluators work together.

In the preparation of assessors, it is essential to pay special attention to:

- valid definitions of the nature, content and structure of the individual competences being assessed and the need for these to be shared by all assessors,
- the criteria and indicators used in assessing the level of competences, as well as the scales used in the assessment,
- procedures to support and verify the validity and reliability of the assessment,
- assessment errors and ways of consciously eliminating them, etc.

An appropriate part of assessor training is to conduct a pilot evaluation within each of the evaluation methods used, with the participation of selected evaluation methodologists. The pilot evaluation contributes significantly to the mutual alignment of assessors, clarification of methods of procedure, sharing of perspectives on individual competences and the assessment tools used, etc.

Although it may seem obvious, careful attention must also be paid to the organisational preparation of the evaluation, especially in terms of timing (timing and communication to all evaluators and evaluated persons, etc.) and space (selection and provision of suitable premises, including the necessary support services, e.g. transport, accommodation, catering, etc.).

It is also necessary to ensure adequate administration of the evaluation, both in the preparation phase, during its implementation and after its completion. Mechanisms for the processing of the evaluation outputs, rules, and methods for handling the outputs respecting the generally applicable principles of handling personal data and other information obtained about the evaluated participants, mechanisms for distributing the outputs to authorised representatives of the contracting entity and to the evaluated participants themselves, etc. should be defined well in advance.

An integral part of the key competences evaluation should be an overall analysis (evaluation) of the whole process reflecting its preparation, course, results and final impacts, including e.g.





medium- or long-term monitoring of the impact it had on the implementation of the vision, mission, strategy, strategic, tactical and operational objectives of the organisation.





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