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Jaroslava Kubátová · Michal Müller · David Kosina ·  
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# Soft Skills for the 21<sup>st</sup> Century

Defining a Framework  
for Navigating  
Human-Centered  
Development in an  
AI-Driven World

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ISSN 2191-5482

ISSN 2191-5490 (electronic)

SpringerBriefs in Business

ISBN 978-3-031-89556-2

ISBN 978-3-031-89557-9 (eBook)

<https://doi.org/10.1007/978-3-031-89557-9>

The research presented in the book was funded by the European Union within Horizon Europe project MEGASKILLS — MEthodology of Psycho-pedagogical, Big Data and Commercial Video GAMES procedures for the European SKILLS Agenda Implementation. Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

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# Foreword

In this highly peculiar moment of history in which we are experiencing the emergence of artificial intelligence and we are witnessing growing polarization in the world while, curiously enough, most people in the business community are growingly convinced of the need to look at economy and management from a more humanistic perspective, is refreshing and comforting to welcome a new book on soft skills and, very specially, a book with a clear focus on what is required from soft skills in this turbulent twenty-first century.

While many people might think that academicians and practitioners should mainly be focused on the ways to apply AI to business or to enhance the sustainability of business models, the authors of the book, and I fully agree with them, go back to the essence and revisit, from a twenty-first-century perspective, what has always made businesses and human organizations more dynamic and resilient, the human factor, by analyzing and going in detail through the soft skills that will make business succeed in the coming decades.

Because it is never only about the technology, or the new emerging trends, or the many different threats that might affect businesses in different moments of time. Success is always deeply related to the human factor, to how leaders and managers lead an organization under specific circumstances and to the way they apply the most convenient soft skills in every single situation. From that perspective this book is a must read.

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# Preface

Recent years and months have brought significant technological advancements that have resulted in societal changes affecting all areas of human life, including the professional sphere. The impact of generative artificial intelligence on ways of working and related changes in the labor market is being discussed by researchers and experts from various institutions. However, one certainty in this dynamic environment is the growing importance of soft skills, which are exclusively human. Artificial intelligence has significant power, but it is important to remember that it also has limitations and risks that must be considered. However, with the right combination of human soft skills and ethical use, artificial intelligence can be a valuable tool for institutions, businesses, and individuals.

This book, based on the most up-to-date sources, provides clear and concise guidance for navigating the complex soft skills landscape with confidence and expertise. This text presents and defines a clear set of the most important soft skills, their categorization, and a comprehensive model for understanding the interrelationships between them. To support the development of these soft skills, it provides a unique set of soft skills rubrics.

Although the outputs of the book are the result of scientific procedures, they are presented as concisely and clearly as possible in order to support the efforts of all those interested in the development of soft skills – social institutions, schools, companies, and individuals.

Olomouc, Czech Republic

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David Kosina  
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Pavla Slavíčková

# Acknowledgment and Disclaimer

The research presented in the book was funded by the European Union within Horizon Europe project **MEGASKILLS – Methodology of Psycho-pedagogical, Big Data and Commercial Video Games procedures for the European SKILLS Agenda Implementation**, <https://cordis.europa.eu/project/id/101094275>

The main objective of the MEGASKILLS project is to help bridge the gap between education and the labor market by researching and designing an innovative and affordable methodology for training and assessing soft skills. The project consortium is composed of these partners: All Digital, CEGOS Espana Learning & Development SA, European Entrepreneurs CEA-PME, Fundacion Tecnalía Research & Innovation, Fundacion Iberoamericana Del Conocimiento (GECON ES), Palacký University Olomouc, University of Southampton.

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**Competing Interests** The authors have no competing interests to declare that are relevant to the content of this manuscript.

# Ethics Approval

The authors followed ethical standards for primary research. Informed consent (see below) was obtained from all individual participants.

## **Online survey consent**

You are invited to participate in a research study about the importance of soft skills in the twenty-first century. The aim of the research is to map the views of professionals from academia and business on the importance of soft skills.

This study is being conducted by Jaroslava Kubátová, Michal Müller, Ondřej Kročil, David Kosina and Pavla Slavíčková (Department of Economic and Managerial Studies, Palacký University Olomouc). Research is conducted within project METHodology of Psycho-pedagogical, Big Data and Commercial Video GAMES procedures for the European SKILLS Agenda Implementation (MEGASKILLS), funded by the EU Horizon Europe Framework Programme (Horizon 2022).

Your participation in this survey is voluntary. You may refuse to take part in the research or exit the survey at any time without penalty. You may skip any question you do not wish to answer for any reason.

Your survey answers will be stored initially with EUSurvey platform, in a password protected electronic format. The survey is secured by a password and EUSurvey does not save any user-related information.

Your information will be assigned a code number that is unique to this study. The list connecting your name to this number will be kept in a locked file and only the research team will be able to see the survey you participated in.

At the end of the survey, you will be asked if you are interested in participating in an additional interview by Zoom. If you choose to provide contact information such as your email address, your survey responses may no longer be anonymous to the researcher. However, no names or identifying information would be included in any publications or presentations based on these data, and your responses to this survey will remain confidential.

Study findings will be presented only in summary form and your name or email address would not be used in any report. While the investigators will keep your

information confidential, there are some risks of data breaches when sending information over the internet that are beyond the control of the investigators.

Results from this study may be published or presented at research conferences, and the anonymous data and may be shared with other researchers through an online data repository.

Please note: You must be 18 or older to participate in this study.

If you have any questions about this study, please contact Jaroslava Kubátová (jaroslava.kubatova@upol.cz). If you have questions about your rights as a research participant, please contact Michal Müller (michal.muller@upol.cz).

By completing this survey, you are consenting to participate in this study.

Please print or save a copy of this form for your records.

### **Thank you for you participation**

Research team

- I have read the above information.
- I am 18 years of age or older.
- I voluntarily agree to participate.

## About the Authors

The book, *Soft Skills for the Twenty-First Century: Defining a Framework for Navigating Human-Centered Development in an AI-Driven World*, is authored by a distinguished team from the Department of Economic and Managerial Studies at Palacký University, Czech Republic. The research team is led by Associate Professor *Jaroslava Kubátová*, an expert in human capital management and entrepreneurship with a positive social impact. Assistant Professor *Michal Müller* is an expert in management, social entrepreneurship, and the philosophy of economics. Assistant Professor *David Kosina* (corresponding author, david.kosina@upol.cz) focuses on intercultural communication and leadership, drawing on his extensive experience in educational project management. Assistant Professor *Ondřej Kročil*, the department head, specializes in sustainable and social entrepreneurship. Associate Professor *Pavla Slavíčková* enriches the team with her expertise in economic theories. Together, they embody a synergistic team whose comprehensive research and academic pursuits aim to advance the understanding and application of business and management principles in contemporary contexts.

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# List of Abbreviations

AI	Artificial intelligence
BCG	Boston Consulting Group
CFO	Chief financial officer
CONARC	Continental Army Command
ESCO	European Skills, Competences, and Occupations
EU	European Union
EY	Ernst & Young
ILO	International Labour Organization
OECD	Organisation for Economic Co-operation and Development
PwC	PricewaterhouseCoopers
SHRM	Society for Human Resource Management
UNICEF	United Nations Children’s Fund
VALUE	Valid Assessment of Learning in Undergraduate Education
WEF	World Economic Forum
WTO	World Trade Organization

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# Chapter 1

## Introduction: Why Soft Skills Again?



At first glance, it seems that soft skills are a widely discussed topic and there is not much to add. However, *Soft Skills for the Twenty-First Century* reveals that the subject remains unresolved and continually evolving and proposes solutions to associated problems. The initial chapters document the extensive attention soft skills receive in academic literature and non-academic sources, such as professional services firms' reports and publicly available Internet sources, as well as within European Union and global institutions initiatives supporting soft skills development. Across these sources, there is consensus on the importance of soft skills for individuals and society, and several dozen soft skills are identified as most crucial. Yet, universally accepted and usable definitions of individual soft skills, and even of the term "soft skills" itself, are completely lacking.

To address this issue, Delphi research, presented in the subsequent parts of the book, was conducted. This research aimed not only at revising soft skills significant for sustainable development in the twenty-first century but also at clearly defining, categorizing, and organizing them into a model to support the development of strategies for their development. Experts from various professional backgrounds participated in this research. The revision of the soft skills issue is also necessary due to the exponential technological development in the recent period, especially in connection with the wide availability of tools based on artificial intelligence, which will have a significant impact, particularly in the field of knowledge work. The outputs of the Delphi research were critically evaluated and revised, concluding that consensus was reached on a set of thirty most significant soft skills, but their definitions did not meet the criteria of good definitions. The proposed categorization and models of soft skills were more of an inspirational nature. Nevertheless, the contribution of the Delphi research lies in the numerous comments and notes of the participating experts.

The final parts of the book present a precisely defined scientific work process, wherein a list of the most significant soft skills and their unambiguous definitions, the definition of the term "soft skills" itself, a categorization of soft skills, and a soft skills model are developed, using all collected sources, and simultaneously

considering the need for an innovative approach reflecting current changes. In addition, rubrics for all thirty soft skills are created. These rubrics are significant in terms of supporting development and evaluating the level of a specific soft skill achieved by a particular individual. In creating the rubrics, known good practice was combined with innovation corresponding to the current technological and social development.

It can also be said that the book simplifies and clarifies the topic of soft skills, which is of great importance to stakeholders involved in soft skills development. The research also showed that it is difficult for organizations to use existing high-quality but very extensive and complicatedly structured databases of skills and competencies in daily practice when, for example, business representatives responded to the question of whether they know European Skills, Competences, and Occupations (ESCO) by saying that it means energy service company, a company that provides comprehensive energy solutions to its customers.

While the book builds upon existing knowledge, its true innovation lies in addressing the previously unresolved issues of ambiguous definitions and classifications of soft skills. It also responds adeptly to contemporary challenges, particularly the advent of widely available artificial intelligence and its impact on the workforce and personal development. It is a significant step forward in making the concept of soft skills more tangible, structured, and relevant in the era increasingly dominated by technological advancements.

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## Chapter 2

# Soft Skills in the Academic Literature



The concept of soft skills came to prominence in the 1970s when the U.S. Army began to focus on them. Referring to CONARC Regulation 350-100-1 (U.-S. Continental Army Command, 1968), Whitmore (1972, p. II-5) explained that soft skills can be thought of as “job related skills involving actions affecting primarily people and paper, e.g., inspecting troops, supervising office personnel, conducting studies, preparing maintenance reports, preparing efficiency reports, designing bridge structures.” Following this explanation, which leaves much to the imagination, Whitmore (1972, p. II-7) suggested a tentative definition of soft skills: “Soft-skills are (1) important job-related skills (2) which involve little or no interaction with machines (including standardized because the situation or context contains a great deal of uncertainty; that is, we don’t know much about the physical and social environments in which the skill occurs and we don’t know much about the consequences of different ways of accomplishing the job function). In other words, those job functions about which we know a good deal are hard skills and those about which we know very little are soft skills.”

However, even today, half a century later, the terminology of soft skills is still not clear; on the contrary, the range of terms used in the same sense is expanding. At the same time, the conviction about their importance in professional life remains consistently strong. A wide range of documents published by the European Union, various academics, and human resources experts point out that soft skills are closely linked to employability (Cinque, 2016). Cinque (2016), Cinque et al. (2021), Kyrousi et al. (2022) found out that, for example, key competencies, transversal competencies, life skills, key transferable skills, cross competencies, general competencies, essential competencies, generic competencies, twenty-first-century skills, non-cognitive skills are used as synonyms of soft skills.

Cimatti (2016) documents that the term soft skills is used to indicate all the competences that are not directly connected to a specific task, but they are necessary for any position as they mainly refer to the relationships with other people involved in the organization, even though also self-oriented soft skills are important. She compares soft skills with hard skills, which are specific capabilities to perform a

particular job. Touloumakos (2020) points out that different people mean different things when referring to soft skills. The term soft skills has expanded to encompass a variety of qualities, traits, values, and attributes, as well as rather distinct constructs such as emotional labor and lookism. To avoid confusion, Parlamis and Monnot (2019) propose to start using a uniform term CORE skills. CORE represents an acronym for Competence in Organizational and Relational Effectiveness and should be a good counterpart to STEM (science, technology, engineering, and mathematics) competencies.

Matteson et al. (2016) consider soft skills as a collection of people management skills, important to many professions and job positions, yet they also point out that the concept of soft skills lacks definition, scope, instrumentation, as well as systematic education and training. Moreover, they emphasize that a clear differentiation must be made between skills, knowledge, attitudes, and beliefs. They conclude that a skill implies the prerequisites of having and accessing certain knowledge, processes, or sequences of behavior leading to a specific performance, and that for something to be considered a skill, it must contain an element of action.

Marin-Zapata et al. (2022) conducted a systematic review aimed at shedding light on the meaning of competencies and soft skills in business literature with a conclusion that improvements must be made to help develop an understanding of competencies and soft skills. They found out that only 11% of the articles they reviewed provide a definition of soft skills. The analysis of these definitions has shown that as perceived today, soft skills comprise how to handle interactions with others as well as how to manage oneself; thus, soft skills have two main components: intrapersonal and interpersonal skills. They also focused on the distinction between the concepts of competence, competency, and skill, with the conclusion that competence is the generic capability of a professional; competent professionals are able to accomplish their job assignments. Competency is one of the components of the individual competence. And drawing from Spencer and Spencer (1993), and Boyatzis (1982), Marin-Zapata et al. (2022, p. 974) define a skill as the ability to perform a certain physical or mental task that is functionally related to attaining a performance goal.

The inconsistency in the definition of soft skills in the academic literature was also noted by Brown and Luzmore (2023). In their systematic literature review, they found that the term soft skills is widely used, but without an accepted definition of its meaning or a definitive list of the skills it encompasses. At the same time, however, soft skills are generally characterized as transversal, meaning that those who possess them can use them in different work contexts and occupations. This distinguishes them from hard skills, which are required to perform a specific job. In the literature reviewed, Brown and Luzmore (2023) identified over forty soft skills that were considered important. Specifically, the following soft skills (listed in order of frequency in the literature reviewed) were identified:

1. Communication
2. Collaboration
3. Problem-solving
4. Creativity and innovation

5. Critical thinking
6. Leadership
7. Flexibility/adaptability
8. Social skills
9. Self-regulation/self-awareness
10. Analytical skills
11. Decision-making
12. Integrity
13. Managing learning
14. Conflict management
15. Managing responsibility
16. Positive attitude
17. Well-being/Stress management
18. Identifying work goals/goal orientation
19. Motivation
20. Negotiating
21. Cultural awareness
22. Empathy/understanding others' needs
23. Planning
24. Conscientiousness
25. Applying work protocols/values
26. Social awareness
27. Influence
28. Initiative
29. Time management
30. Assertiveness
31. Commitment
32. Perseverance
33. Resilience to criticism
34. Competitiveness
35. Curiosity
36. Diplomacy
37. Growth mindset
38. Image distortion
39. Instilling trust
40. Leisure orientation
41. Logical thinking
42. Mobility

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## Chapter 3

# Soft Skills in Non-academic Sources



The resources reviewed in this chapter include documents from the European Union's skills development initiatives, global institutions' skills development initiatives, studies and recommendations from professional services firms, and publicly available Internet sources that reflect current trends in soft skills requirements.

### 3.1 European Union's Skills Development Initiatives

The European Union attaches great importance to soft skills as they are believed to contribute to personal development, employability, and effective participation in the EU labor market and society. The period from 9 May 2023 to 8 May 2024 was designated the European Year of Skills (Decision (EU) 2023/936). This decision summarizes the steps taken so far and outlines future steps to develop the skills of European Union citizens. In terms of the soft skills required, the EU initiatives listed below can be considered the most important.

In 2010 the development of ESCO, the European Skills, Competences, Qualifications, and Occupations Classification (European Commission, 2023), began. The need for such a classification system arose from the recognition that European labor markets were facing significant challenges due to skill gaps and mismatches, as well as difficulties in mobility due to different languages and ways of defining occupations and skills across countries. ESCO was created to address these issues by providing a common language and a standardized system that could be used across employment and education sectors within the EU. ESCO is maintained by the European Commission and has been developed in close cooperation with stakeholders including member states, employers, trade unions, employment services, and others. ESCO is regularly updated to reflect the evolving nature of the labor market.

In 2018, the Council of the European Union adopted the revised Recommendation on Key Competences for Lifelong Learning (Council Recommendation of 22 May 2018). As a further step, LifeComp, a conceptual framework for the

Personal, Social, and Learning to Learn key competence for education systems, students, and learners on the whole (Sala et al., 2020), was developed.

LifeComp is the third competence framework for individuals, following the Digital Competence Framework for Citizens, DigComp (Carretero Gomez et al., 2017), and the Entrepreneurship Competence Framework, EntreComp (Bacigalupo et al., 2016).

Other important documents relating to soft skills have been developed in the context of other EU-supported projects and activities. CEDEFOP Skills intelligence (2014) aims to provide evidence on current and future skills and labor market trends. It uses narrative-driven visualizations to help policy makers and other skills intelligence users understand what is trending in occupations, sectors, countries, and skills. CEDEFOP Skills intelligence has been developed since 2014.

The Viska: Visible Skills of Adults (2017) project was an initiative aimed at making the skills and competences of adults, especially migrants and those with low qualifications, more visible and validated across Europe. Through field trials, stakeholder engagement, and policy recommendations, the project sought to address barriers in recognizing non-formal and informal learning to improve adults' access to further education and employment, thereby empowering a vulnerable segment of the population and informing policy enhancements at national and European levels.

The SOSTRA (2019), Soft Skills Training and Recruitment of Adult Educators, project focused on improving the quality and efficiency of adult education by enhancing the soft skills of adult educators. SOSTRA aimed to develop innovative education tools and methodologies that foster key soft skills such as communication, problem-solving, and teamwork, which are crucial for effective teaching and learning. The initiative also addressed the recruitment processes of adult educators by identifying the soft skills needed in adult education and ensuring that the recruitment strategies align with these competencies. Through this approach, SOSTRA tried to empower adult educators to better engage with diverse adult learners and enhance overall educational outcomes.

The aim of the Skill (2020) project was to provide people working in the ICT sector with the necessary resources to improve their soft skills in order to meet the needs of the sector. The ULISSE project (Gabelloni et al., 2020) aimed to unveil the true meaning of soft skills by developing the disruptive concept of “not-so-soft skills” and creating a common language between the main actors involved, i.e., job seekers and employers. The idea on which the ULISSE project is based considers soft skills as having a “hard” component, which makes it possible to develop them by learning to use appropriate tools, procedures, and methods. The Soft Skills (2021) project aimed at facilitating access to soft skills for people with low qualification levels and/or with disabilities, in order to promote their professional and even social inclusion and equal opportunities. Within the project, a catalogue of soft skills references was created as a basis for the development of a training program, training tools, and a placement and assessment method: it contains the list of soft skills, the levels of acquisition and their definitions, a method to link soft skills to professional occupational standards as well as a description of the soft skills acquisition process

and the observable behaviors used to facilitate the placement and assessment process.

The objectives of the SoftSkills4EU (2021) project were to identify the key soft skills needed in Europe, to develop new e-validation and e-learning tools using the concept of “open badges,” to develop a standardized system for self-assessment and validation, and to develop a recognition strategy aimed at employers, guidance practitioners, and other relevant stakeholders. Skills4Employability (Manasia et al., 2021) was a project that aimed to help universities integrate soft skills into their curricula for better employability. The Soft Skills Assessment Guidelines help faculty and university leaders to rethink curriculum design and pedagogical approaches by integrating soft skills as learning outcomes.

The Playing 4 Soft Skills (2021) project was aimed to address existing needs in terms of transversal skills by introducing non-formal education and digital tools in the context of vocational education and training providers with the objective to enhance students' awareness and ability to recognize and develop relevant transversal skills.

All analyzed EU sources contain lists of soft skills. They usually define or explain soft skills. However, there is ambiguity both in the names of the soft skills and in their definitions. The lists of soft skills are also very different in scope and are created for different purposes. This makes them difficult to compare or summarize. In addition, different names are used for the umbrella concept of soft skills, such as transversal skills. Table 3.1 provides an overview of the soft skills that appear in at least three of the sources analyzed. Despite the limitations of comparability, they are listed according to the frequency with which they appear in the sources. In addition to the different scope of the lists of soft skills, the problem of comparability is caused by the inconsistency of the names. The second column of the table lists alternative names used in different sources.

Several models of soft skills are suggested in the analyzed European sources. These models correspond to the goals of the projects within which they were created and are therefore also incomparable and incompatible. For example, EntreComp (European Commission, 2018, p. 8) uses a flower model. LifeComp (Sala et al., 2020, p. 21) uses a metaphor of a tree, which stresses the dynamic interdependence of all competences in an individual and a growth model over time.

All the EU resources analyzed represent high-quality and useful tools for identifying and developing important soft skills. In practice, however, conceptual and definitional ambiguity can be a problem. Also, their robustness, which is a strength on the one hand, can be an obstacle to easy practical use on the other hand. For example, ESCO is a very sophisticated database of soft skills, but its fragmented nature can make it difficult to navigate and use.

**Table 3.1** The most frequent soft skills in the EU sources

Soft skill	Other names	Frequency
Communication	Communication skills, oral communication, non-verbal communication, written communication	12
Empathy	–	5
Emotional intelligence	Emotional skills, understanding and regulation emotions	6
Adaptability	Flexibility, flexibility and adaptability, cognitive flexibility, cognitive adaptability	9
Creativity	Creativity and innovation, fostering creativity	9
Teamwork	Teamwork management, team-working skills, teamwork, and collaboration	9
Learning skills	Learning from experience, learning to learn, desire to learn, willingness to learn, active learning	9
Planning	Planning and organization skills, planning skills, strategic planning, plan proactively – look for opportunities	9
Critical thinking	–	8
Motivation	Intrinsic motivation, motivating to development, passion, and self-motivation	7
Ethics	Sense of ethics, work ethic, sense for dignity, sustainable thinking	6
Self-awareness	Self-reflection	6
Conflict management	Managing conflicts	5
Diversity	Diversity sensibility, openness to diversity, respect for diversity	5
Think analytically	Analytical thinking, analyze context	5
Stress management	Dealing with stress, resilience, handling stress	5
Time management	Time management skills	5
Cultural skills	Cultural awareness, intercultural skills, multicultural skills	4
Leadership skills	Leadership, leadership and social influence	4
Problem-solving	Problem-solving skills	4
Confidence and believe in ability	Confidence, awareness of abilities	4
Managing and understanding risks and probabilities	–	3
Be determined	Show determination	3
Cope with uncertainty and ambiguity	Cope with uncertainty, cope with ambiguity	3
Demonstrate curiosity	Be curious and open, intellectual interest and curiosity	3

## 3.2 Global Institutions' Skills Development Initiatives

Global institutions operate on an international scale and have a significant impact on global affairs. They influence policies, practices, and discussions on various issues that transcend national boundaries. While unique in their focus and methods, they contribute to shaping a more interconnected and coordinated approach to global challenges, emphasizing the importance of multilateralism and cooperative action. These organizations often set or influence global trends and policies in workforce development and education. Their perspectives on soft skills can shape education systems, job training programs, and employment policies worldwide, emphasizing the importance of these skills in the modern workforce. Since 2010, six global institutions, International Labour Organization (ILO), Organisation for Economic Co-operation and Development (OECD), United Nations Children's Fund (UNICEF), World Bank, World Economic Forum (WEF), and World Trade Organization (WTO), have focused a great deal of attention on the topic of soft skills, some of them more than once.

The International Labour Organization (2021) presents a global framework of essential skills needed for modern life and work, highlighting the importance of soft skills, such as interpersonal skills, critical thinking, and adaptability, and describing them as essential for the evolving demands of the twenty-first-century workplace and life in general.

The OECD (2019a) framework focuses on the need for soft skills, including emotional intelligence and collaborative skills, in the context of future education and labor markets, emphasizing their importance alongside traditional cognitive skills. It emphasizes the importance of developing a mix of cognitive, emotional, and social skills to navigate a complex and interconnected world.

Another OECD framework (2019b) focuses on transformative competencies, a set of soft skills such as creativity, critical thinking, and emotional regulation that are seen as critical for adapting to and shaping a rapidly changing world, and particularly important for young people to thrive in a rapidly changing world and shape a better future.

The UNICEF report (Drysdale, 2022) discusses the critical role of soft skills in youth development and identifies twelve key transferable skills, including social skills, emotional regulation, and critical thinking, that are essential for navigating complex social and professional landscapes.

The World Bank (2010) report discusses the importance of skills development for job creation and increased productivity. It provides insights into how countries can develop effective skills strategies to promote economic growth and reduce poverty. It links the development of soft skills to improved employment opportunities and productivity. It argues for the integration of soft skills training into education and training programs to meet the evolving needs of the labor market.

World Bank (2023) Skills Development is a webpage that provides an overview of the World Bank's approach to skills development, emphasizing the importance of skills in achieving economic growth and poverty reduction. It highlights the World

Bank's focus on soft skills development as part of its broader skills initiative, recognizing these skills as essential not only for economic growth but also for personal development.

The World Economic Forum (2015) report explores how technology can be used to improve education. It focuses on the integration of technology in learning environments to improve educational outcomes and prepare students for the digital age. It also discusses how the integration of technology in education can enhance the development of soft skills such as digital literacy, problem-solving, and collaboration that are essential in the digital age.

Another World Economic Forum (2016) publication examines the impact of the Fourth Industrial Revolution on the labor market, identifying the skills that will be in high demand and strategies to prepare the workforce for future challenges. The publication highlights the growing importance of soft skills in the labor market. It identifies skills such as creativity, critical thinking, and people management as essential for future job roles.

A year later, the World Economic Forum (2018) published an in-depth analysis of emerging employment trends, skills requirements, and the expected impact of technology on jobs across industries and regions. It highlights the growing need for soft skills such as emotional intelligence, leadership, and social influence in the face of rapid technological and economic change.

The World Trade Organization (2017) advocates the development of soft skills, such as communication and teamwork, as essential for individuals and nations to effectively participate in and benefit from an inclusive global trading system.

The documents analyzed focus on the skills needed in today's and tomorrow's society. However, they have different purposes and scopes. The Global Framework on Core Skills for Life and Work in the twenty-first century (International Labour Organization, 2021) stands out as the most comprehensive of the documents reviewed. It provides an extensive literature review of both international and national core skills frameworks, along with an analysis of how transformative global trends are impacting the workforce. It includes a detailed comparison of different international and national core skills frameworks, which is particularly insightful. The OECD's contributions (2019a, b) are linked to an overarching concept known as the OECD Learning *Compass*, 2030 toward Well-being 2030 (Organization for Economic Cooperation and Development, n.d.). This initiative focuses on aligning education goals with broader well-being goals over the next decade. In the World Economic Forum (2018) report, there's a compelling juxtaposition of the top ten skills in demand for 2018 and 2022. This comparison provides valuable insights into the evolving skill requirements in the global labor market.

A common feature of all the sources examined is the inclusion of a list of skills considered essential for the twenty-first century or the future more broadly. However, none of these sources establish a hierarchy or ranking of the recommended skills that could guide the prioritization of skills development. One confusing observation is the interchangeable use of the terms skills and competencies in the documents, which seems to blur the distinctions between the two concepts. Also, when soft skills are defined in the documents, the definitions vary. Some of the

**Table 3.2** The most frequent soft skills in global institutions' sources

Soft skill	Other names	Frequency
Problem-solving	Identify problems, problem sensitivity	10
Self-management	Manage oneself at work, self-control	8
Collaboration	Collaboration and teamwork, cooperation	7
Communication	–	7
Creativity	Think creatively, creative and innovative thinking	6
Planning and organizing	Prioritizing and organizing, collect, organize and analyze information, organize, plan	6
Leadership	Lead effectively	5
Flexibility	Adapt, adaptability, adapt to new circumstances, flexibility	4
Critical thinking	Analytical and critical thinking	4
Time management	Spend time effectively, use time efficiently without sacrificing quality	4
Resolve conflicts	Conflict resolution and negotiation	4
Teamwork	Collaboration and teamwork, work in team	3
Responsibility	Taking responsibility	3

documents also propose classifications and models of soft skills, but always with the specific purpose of the document in mind.

In total, the recommended soft skills from all the sources analyzed amount to approximately 200 items. Despite this diversity, certain skills consistently emerge as the most prevalent across the documents, including problem-solving, self-management, collaboration, and communication. These skills appear to be considered critical across a wide range of contexts and industries.

Table 3.2 gives an overview of the soft skills that appear in at least three of the sources analyzed. Although the sources are difficult to compare, the skills are listed according to the frequency with which they occur in the sources. In addition to the different ranges of soft skills lists, the problem of comparability is caused by the inconsistency of names. In the second column of the table, alternative names used in the sources are listed.

All the resources of global institutions that focus on soft skills provide valuable recommendations for all the stakeholders to whom they are addressed. However, their overall volume and the inconsistencies in their content can make it difficult to use them to develop strategic policies and plans, as well as to apply them in daily practice.

### 3.3 Professional Services Firms' Insights on Soft Skills

Organizations that offer specialized expertise in areas such as management consulting, financial advisory, human resources, and staffing services are leaders in their fields and have access to a wealth of data and industry insights. Their research and

publications often reflect a deep understanding of current trends and future directions in the business world. Although academics caution that these firms' publications are intended to promote the use of their services, they have a significant influence on hiring trends and workplace cultures. Their views on soft skills can shape how companies perceive and prioritize these skills in their hiring and training processes. For individuals, gaining knowledge about the soft skills that these companies emphasize can be crucial for making informed career development decisions. In recent years, the topic of soft skills has been addressed by organizations such as Boston Consulting Group (BCG), Deloitte, Ernst & Young (EY), McKinsey & Company, Monster, PricewaterhouseCoopers (PwC), and Society for Human Resource Management (SHRM).

The BCG (2022) report examines the significant changes in requested skills from 2016 to 2021, highlighting the rapid evolution of job requirements across various industries. It notes that the requirements on skills have considerably changed, with many being entirely new. The report emphasizes the role of technology as a primary driver of these changes, affecting even traditionally non-digital occupations.

The Deloitte (2017) study predicts that soft skill-intensive occupations will account for two-thirds of all jobs by 2030. The study emphasizes that businesses with more skilled staff see higher rates of innovation and productivity and highlights the necessity of obtaining and measuring soft skills to improve workforce capabilities. In their other study Deloitte (2019) emphasizes that artificial intelligence, robotics, and other digital innovations are reshaping work with likely mixed effects. Employers and workers require the necessary digital and soft skills to take advantage of the new opportunities they are expected to face. As Europe and the whole world are facing considerable challenges to guarantee a future of work for everyone, governments and employers share a responsibility to identify skills needs and provide training and guidance to workers about which new skills to develop.

EY (2021) focuses on a specific group of chief financial officers (CFOs). Traditionally, the strengths of CFOs have been defined in terms of their approach to rational, analysis-based decision-making, rather than the skills that are important for empathetic communication. It turns out, however, that soft skills are important for these professionals as well and that they need to work on improving them.

McKinsey (2019) points out that as workers interact with ever-smarter machines, the demand for soft skills is beginning to surge. Social, emotional, and technological skills are becoming more crucial as intelligent machines take over more physical, repetitive, and basic cognitive tasks. Nevertheless, companies report difficulty recruiting candidates who have the necessary soft skills for an automating world.

Monster (2022) discusses the challenges and opportunities in the job market influenced by pandemic-related disruptions. The report deals with topics such as increased competition, employer versus candidate priorities, skills gaps, and the young generation approach to recruiting. A serious gap between the required and available soft skills of job candidates was revealed. The report also discusses possible solutions to this problem.

PwC (2022) focuses on skills development in the current labor market. Employees need to learn new skills, upgrade existing skills, or complete compliance

training. Moreover, the new reality of remote and hybrid work has made traditional, face-to-face training a challenge. The report suggests ways employers can address this challenge, emphasizing that many employees also need to learn soft skills, and that it is possible and highly advantageous to teach them through virtual reality and metaverse experiences.

The SHRM (2018) report presents an exploratory study on the current state of the skills gap, including what skills employers feel are most lacking, and how business is addressing the issue. The findings show that employers are making the effort to invest in reskilling workers, to hire from more diverse talent pools and to work with educational institutions to build talent pipelines. However, employers are also reporting that those methods have not been fully effective for their organizations in terms of sourcing, hiring, and retaining employees with the skills to do the work.

The professional services publications analyzed vary in focus and scope and have all of the advantages and disadvantages noted above. As a result, they are not comparable, and their findings cannot be easily summarized. Nevertheless, it can be argued that all these firms emphasize the growing importance of soft skills in a technologically dynamically evolving work environment. The second common finding is that there is a lack of soft skills on the part of both employees and job seekers. They do not focus on defining the concept of soft skills or on defining individual soft skills. They do not make any classifications or offer any models of soft skills.

Despite all the limitations of these publications, it is possible to identify a number of soft skills that are repeatedly mentioned as being particularly important. These are (in alphabetical order):

- Communication
- Critical thinking
- Emotional intelligence
- Flexibility
- Problem-solving
- Teamwork

The biggest gap, i.e., the imbalance between the need and availability, was identified in:

- Communication
- Critical thinking
- Problem-solving

The publications from well-known professional services firms collectively underscore the crucial role of soft skills in today's dynamic and technology-driven work environment. These organizations, influential due to their extensive industry expertise, global reach, and role in shaping business practices, highlight a critical gap between the demand for and supply of these skills in the labor market. Their insights are particularly impactful as they not only reflect deep, although purpose-driven, research and understanding of current trends but also significantly influence hiring trends and workplace cultures globally. As a result, their findings and

recommendations carry substantial weight, guiding corporate strategies, individual career development, and policymaking. The synthesis of their reports underscores the urgency and universal importance of enhancing soft skills across all workforce levels, marking it as a key focus for future professional development and organizational advancement.

### 3.4 Soft Skills in Public Internet Sources

The Internet is easily accessible to most people, making it their primary source of information. Its convenience and the speed at which information can be obtained make it highly influential. Searching for information on the Internet reflects the principle of least effort. This principle, proposed by George Zipf (1949), implies that people naturally prefer to achieve their goals with the least amount of effort. That makes the Internet a natural place for people to search for and share information, including the subject of soft skills. With this in mind, publicly available Internet sources that reflect current trends in soft skills requirements, such as job portals, professional forums, and social networks, were analyzed to determine what soft skills are considered important.

Sketch Engine (*Create and search a text corpus*, 2022) was used to find web pages so that their set matched the specified criteria. Sketch Engine is an online text analysis tool that works with large samples of language to identify what is typical and frequent in a language. It includes web search functionality to search for specific words or phrases on the Internet that provides a list of webpages where the searched keywords occurred (*How to build a corpus from the web*, 2021). Search phrases *soft skills*, *transversal skills* and *twenty-first century* were used. About sixty results were returned. All the webpages were assessed in terms of their suitability and reliability for this research. Sources published in 2018 at the latest and selected according to the above-given specification (job portals, professional forums, social networks) were chosen for further analysis.

The final list of websites and platforms from which fifteen specific pieces of online content were analyzed was as follows:

- [cnbc.com](https://www.cnbc.com): website with business news and business content including an analysis of ZipRecruiter job offers, that is not otherwise publicly available (Malinsky, 2022),
- [glassdoor.com](https://www.glassdoor.com): jobs and recruiting site (Glassdoor Team, 2020, 2021),
- [hr.com](https://www.hr.com): social networking and resource site for HR professionals (Farmiloe, 2022),
- [indeed.com](https://www.indeed.com): job site (*Top 11 skills employers look for in job candidates*, 2020),
- [linkedin.com](https://www.linkedin.com): professional networking platform (Chris, 2018; Kong Pheaktra, 2020; *The top 16 in-demand soft skills for 2022 you need to master*, 2022),
- [livecareer.com](https://www.livecareer.com): job search and resume builder website (Ciechanowski, 2022),

**Table 3.3** The most frequent soft skills in public Internet sources

Soft skill	Number of sources
Communication/communication skills	13
Critical thinking	11
Leadership	11
Collaboration	10
Time management	10
Adaptability	9
Creativity	9
Flexibility	8
Teamwork/teamwork skills	7
Emotional intelligence	6
Active listening	5
Organization/organizational skills	5
Conflict resolution	4
Decision-making	4
Empathy	4
Problem-solving	4
Social skills	4
Confidence	3
Interpersonal skills	3
Learning skills	3
Project management	3
Responsibility	3

- [mondo.com](#): staffing agency website (*The 9 workplace soft skills most valued by employers*, 2022),
- [quora.com](#): social question-and-answer website (*What are the twenty-first century soft skills?* n.d.)
- [testgorilla.com](#): pre-employment website (Sheena, 2022),
- [topresume.com](#): career advice website (Chase, n.d.-a, n.d.-b),
- [wikijob.co.uk](#): job application advice website (Dale, 2023),

First, the online resources analyzed were examined for a definition of the soft skills concept. All explained this or a related concept, but each in a different manner. Second, it was examined which soft skills are considered important in these sources. The sources list a total of 246 soft skills. Some are listed repeatedly in several sources (sometimes even in the same source). The shortened list (without multiplicities) contained 125 unique soft skills.

Table 3.3 gives an overview of twenty-two soft skills that appear in at least three of the sources analyzed. Although the analyzed sources are difficult to compare, the skills are listed according to the frequency with which they occur in the sources. If an alternative name was used for a soft skill, it is given after the slash.

Some of the sources provide definitions or explanations of the manifestations of each soft skill. These definitions and explanations were searched and compared across the sources, with the result that they are different and inconsistent. An attempt

to categorize soft skills was found in one source. None of the sources proposes a model of soft skills.

There is considerable agreement across the sources on the most relevant soft skills. At the same time there is a great deal of ambiguity in the actual definition of soft skills in general, as well as in the definitions of individual soft skills. Moreover, both are often used without any attempt to define them. Thus, despite the aforementioned consensus on the most important soft skills, these skills are called by different names.

### **3.5 The Most Recommended Soft Skills in the Analyzed Non-academic Sources**

To determine which soft skills are considered most important in the twenty-first century, results from four non-academic areas of interest in soft skills were analyzed: EU skills development initiatives, global institutional initiatives, professional services firms' insights, and soft skills in public Internet sources. The term soft skills itself is not uniformly defined. However, it is more commonly used than other possible synonyms such as transversal skills. Soft skills are generally presented as being applicable to a wide variety of life and work situations. They are more related to personality than to education. For each group of initiatives and documents analyzed, a list of the most recommended soft skills was compiled (see Table 3.4).

A comparison of these lists reveals several soft skills whose relevance for the twenty-first century is widely agreed upon. However, many ambiguities remain, so it is not even possible to say how many soft skills are included in this final list. Different sources name the same soft skill differently, and conversely, similar definitions mean differently named soft skills. For this reason, the list below gives two alternatives for three items. The most important soft skills for the twenty-first century in the non-academic sources analyzed are (in alphabetical order):

- Adaptability/flexibility
- Communication
- Creativity
- Critical thinking
- Emotional intelligence/empathy
- Leadership
- Problem-solving
- Teamwork/collaboration
- Time management

**Table 3.4** The most recommended soft skills in non-academic sources

Soft skills in non-academic sources			
EU skill development initiatives	Global institutions' skill development initiatives	Professional services firms' insights	Soft skills in public Internet sources
Communication	Problem-solving	Problem-solving	Communication/communication skills
Empathy	Self-management	Critical thinking	Critical thinking
Emotional intelligence	Collaboration	Innovation	Leadership
Adaptability	Communication	Creativity	Collaboration
Creativity	Creativity	Ability to deal with complexity and ambiguity	Time management
Teamwork	Planning and organizing	Communication	Adaptability
Learning skills	Leadership	Self-management	Creativity
Planning	Flexibility	Teamwork	Flexibility
Critical thinking	Critical thinking	Analytical thinking	Teamwork/teamwork skills
Motivation	Time management	Leadership and social influence	Emotional intelligence
Ethics	Resolve conflicts	Resilience, stress tolerance, and flexibility	Active listening
Self-awareness	Teamwork	Emotional intelligence	Organization/organizational skills
Conflict management	Responsibility	Persuasion and negotiation	Conflict resolution
Diversity		Dependability	Decision-making
Think analytically		Willingness to experiment and take calculated risks	Empathy
Stress management		The intellectual humility to admit when you do not have all the answers	Problem-solving
Time management		The courage to challenge entrenched interests and beliefs	Social skills
Cultural skills			Confidence
Leadership skills			Interpersonal skills
Problem-solving			Learning skills
Confidence and believe in ability			Project management
Managing and understanding risks and probabilities			Responsibility

(continued)

**Table 3.4** (continued)

Soft skills in non-academic sources			
EU skill development initiatives	Global institutions' skill development initiatives	Professional services firms' insights	Soft skills in public Internet sources
Be determined			
Cope with uncertainty and ambiguity			
Demonstrate curiosity			

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## Chapter 4

# Comparison of the Most Important Soft Skills in Academic and Non-academic Sources



The lists of the most important soft skills for the twenty-first century identified in non-academic and academic sources are compared below. The lists are in alphabetical order because, especially in the analysis of non-academic sources, it was not possible to establish a uniform criterion for determining the frequency of occurrence in the sources.

Soft skills in academic sources:	Soft skills in non-academic sources:
Adaptability/flexibility	Adaptability/flexibility
Collaboration	Collaboration/teamwork
Communication	Communication
Creativity and innovation	Creativity
Critical thinking	Critical thinking
Leadership	Emotional intelligence/empathy
Problem-solving	Leadership
Self-regulation/self-awareness	Problem-solving
Social skills	Time management

The content of the lists is largely identical. Identifying the most important soft skills for the twenty-first century is very similar from both academic and non-academic perspectives.

### 4.1 Three Key Findings and Further Research

The analysis of contemporary academic and non-academic sources, focusing on the most important soft skills for a successful professional and personal life in the twenty-first century, revealed three key findings:

1. Soft skills are an important prerequisite for a sustainable and prosperous working life.
2. There is strong agreement between academics and practitioners (non-academics) about which ten or so soft skills are most important in the twenty-first century.
3. Neither the overall concept of soft skills itself nor individual soft skills have a single, established definition. Similarly, there is no single categorization or hierarchical model of soft skills.

Therefore, it can be considered proven that developing soft skills positively impacts individual well-being and, consequently, society as a whole. However, clearly naming and defining soft skills, as well as understanding their manifestations in individual behaviors, will significantly support their development on both societal and individual levels. This clarity also enables the identification of appropriate areas for improvement and the evaluation of the progress.

Nevertheless, in identifying the most important soft skills for the twenty-first century, it is important to move away from a retrospective view and take into account the unprecedented technological developments we have been experiencing since artificial intelligence-based tools were made available to the public without specific professional training, which happened at the end of 2022. The early 20 s of the twenty-first century are also associated with the effects of the COVID-19 pandemic and with major changes in the social and security situation in various regions of the world. It can be assumed that the soft skills that are likely to be most valuable in the future are those that complement the strengths of artificial intelligence systems while leveraging uniquely human capabilities.

There are many parts of the economy and economic development that are intimately linked with dramatic improvements in information technology and computing (Shalf, 2020). If Bozesan (2020, p. 23) pointed out a few years ago that humanity is at a seminal point of technological evolution where its exponential growth is becoming explosive and massively disruptive and that “if we want not only to survive but also to thrive in the twenty-first century, we must learn to think, and most important to act, exponentially and globally,” this call is even more relevant today. Soft skills, as exclusively human attributes, play a vital role in this. Given the ambiguity and complexity of future developments, it is appropriate to use an expert forecasting method to identify the soft skills needed in this situation. The Delphi method was selected to identify the crucial soft skills for the upcoming years of the twenty-first century.

## 4.2 The Delphi Method

The Delphi method is a structured communication technique originally developed for systematic, interactive forecasting and is well-suited for qualitative research (Linstone & Turoff, 1975). The method involves a panel of experts who contribute their opinions or insights, selected based on their knowledge and experience in the

specific area of interest (Hasson et al., 2000). The experts respond to a series of questionnaires. After the initial round, the responses are summarized and shared with the panel, with subsequent rounds refining the responses. The responses of the experts are typically anonymous, which helps in reducing the influence of dominant individuals and promotes honest and uninhibited feedback (Rowe & Wright, 1999). There is no agreed standard for the number of the experts (Alizadeh et al., 2020). Studies have been conducted with virtually any panel size starting with five and ending with almost two thousand experts (Akins et al., 2005).

The Delphi method aims to achieve a convergence of opinion through iterative feedback and discussion, leading to a reliable consensus across the panel. In qualitative research, the Delphi method is used for exploring future trends, developing or testing theoretical frameworks, and identifying areas of consensus or divergence among experts in a certain field. Smaller panels can allow for more in-depth and thoughtful responses. In qualitative research, the richness and depth of data is more valuable than sheer volume. Thus, the Delphi method is particularly suitable for complex research questions without clear, empirical answers. It is widely used in the fields of health, education, and social policy (Okoli & Pawlowski, 2004). For the reasons mentioned above, it was chosen to identify the soft skills that are important in the rapidly evolving situations of the twenty-first century.

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## Chapter 5

# Soft Skills for the Twenty-First Century: Delphi Research



In order to establish a unified definition of soft skills, identify those relevant in the evolving context of the twenty-first century, define these skills clearly, propose their categorization, and possibly develop a model illustrating their interrelationships, research was conducted using the Delphi method. All research data are openly accessible (Kubátová et al., 2023).

A fundamental step considerably influencing the quality of the research is the selection of the Delphi experts (Hsu & Sandford, 2007). Also the facilitator plays a crucial role in guiding the process and ensuring that the research progresses smoothly. The facilitator is responsible for moderating the communication among the experts, managing the flow of information, and promoting consensus building. The facilitator also serves as a neutral party and helps to maintain the anonymity of the experts throughout the research. A minimum of 45 days is usually recommended for the execution of a Delphi study (Delbecq et al., 1975; Hsu & Sandford, 2007).

The characteristics of the experts involved in the Delphi research are shown in Table 5.1. They were all experts in the field, with the group displaying diversity in terms of age, gender, nationality, and professional activity. The facilitation of the process was conducted by an experienced scientist trained for this role. The identity of the facilitator was not known to the experts nor did the experts know each other's identities.

The Delphi research was planned for three months (91 days), which provides enough time for both the answers by the experts and their analysis by the researchers and ensures a smooth running of the individual rounds and sub-rounds of the research. As Brady (2015) mentions, standard Delphi studies typically have three rounds (or sub-rounds within one round if there are more thematic rounds within one Delphi research as it was in this case). In this Delphi research, in the first (sub)round, the experts answered a questionnaire on the topic at hand. In the second (sub)round, experts were asked to provide feedback on all the responses from (sub)round one. The third (sub)round aimed to reach a final consensus on the topic at hand. The Delphi research was conducted online with the full anonymity of the experts. Data collection and communication with the experts was carried out using the EUSurvey

**Table 5.1** The characteristics of the Delphi experts

Gender (indicated)	Age	Profession	Place of stay	Nationality
Female	25–34	HR expert, manager	Czechia	Czech
Female	35–44	Manager	Spain	Spanish
Male	35–44	Academic, scientist, manager	Slovakia	Slovak
Male	35–44	Academic, scientist, business expert, consultant	Poland	Polish
Female	45–54	Business expert, consultant, writer	Italy	Italian
Male	55–64	Academic, scientist, business expert, consultant	Greece	Greek
Male	55–64	Academic, entrepreneur, business expert, consultant, philosopher	The UK	British
Male	65–74	Academic	England	British
Male	65–74	Academic, scientist, CEO	Germany	German

platform (<https://ec.europa.eu/eusurvey>), an official robust online survey management tool of the European Commission. The Delphi research timetable is shown in Table 5.2.

## 5.1 The Delphi Research Round 1: Identification and Definitions of Soft Skills for the Twenty-First Century

The first round of the Delphi research focused on finding a way to define the concept of soft skills and to identify and define specific soft skills that are most important in the twenty-first century. In the first sub-round, the experts were asked to propose a definition of the concept of soft skills and then to list and define the soft skills they considered most important in the twenty-first century. The experts' responses were summarized, and in the second sub-round, the experts were asked to modify or comment on the list of soft skills and the proposed definitions. Their responses were summarized again and in the third sub-round the experts were asked to express their level of agreement with the proposals and any additional comments. The experts expressed their level of agreement on a scale of 1 to 100, with 100 representing complete agreement. In all cases, the level of agreement was between 96 and 68, so the results of the first round were accepted.

The results were a definition of the concept of soft skills and a proposal for thirty soft skills and their definitions. Arriving at the number thirty resulted from the work of the experts and was not influenced in any way by the research team. All results are presented below *verbatim* as they were generated by the expert group. These results are discussed in Sect. 5.4 The Delphi Research Results: Summary and Discussion.

**Table 5.2** The Delphi research timeline

The Delphi research timeline		
Round 1 – Identification and definitions of soft skills		
Process description	Materials	Time
<i>Input 1.1</i>	Questionnaire 1.1	Available on Day 0
<i>Sub-round 1.1</i>	Expert suggestion of soft skills	Days 1–4
<i>Analysis 1.1</i>	Completed analysis of sub-round 1	Days 5–7
<i>Output 1.1</i> <i>Input 1.2</i>	Questionnaire 1.2	Days 8–10
<i>Sub-round 1.2</i>	Expert feedback on answers	Days 11–14
<i>Analysis 1.2</i>	Completed analysis of sub-round 2	Days 15–17
<i>Output 1.2</i> <i>Input 1.3</i>	Questionnaire 1.3	Days 18–20
<i>Sub-round 1.3</i>	Expert expression of consensus	Days 21–24
<i>Analysis 1.3</i>	Completed analysis of sub-round 3	Days 25–27
<i>Output 1.3</i>	Identification and definitions of soft skills, questionnaire preparation	Days 28–30
Round 2 – Soft skills categorization		
Process description	Materials	Time
<i>Input 2.1</i>	Questionnaire 2.1 (based on output 1.3)	Available on Day 30
<i>Sub-round 2.1</i>	Expert opinion on soft skills categorization	Days 31–34
<i>Analysis 2.1</i>	Completed analysis of sub-round 1	Days 35–37
<i>Output 2.1</i> <i>Input 2.2</i>	Questionnaire 2.2	Days 38–40
<i>Sub-round 2.2</i>	Expert feedback on answers	Days 41–44
<i>Analysis 2.2</i>	Completed analysis of sub-round 2	Days 45–47
<i>Output 2.2</i> <i>Input 2.3</i>	Questionnaire 2.3	Days 48–50
<i>Sub-round 2.3</i>	Expert expression of consensus	Days 51–54
<i>Analysis 2.3</i>	Completed analysis of sub-round 3	Days 55–57
<i>Output 2.3</i>	Categorization of soft skills, questionnaire preparation	Days 58–60
Round 3 – Unified model of key soft skills		
Process description	Materials	Time
<i>Input 3.1</i>	Questionnaire 3.1 (based on output 2.3)	Available on Day 60
<i>Sub-round 3.1</i>	Expert opinion on soft skills model	Days 61–64
<i>Analysis 3.1</i>	Completed analysis of sub-round 1	Days 65–67
<i>Output 3.1</i> <i>Input 3.2</i>	Questionnaire 3.2	Days 68–70
<i>Sub-round 3.2</i>	Expert feedback on answers	Days 71–74
<i>Analysis 3.2</i>	Completed analysis of sub-round 2	Days 75–77

(continued)

**Table 5.2** (continued)

The Delphi research timeline		
<i>Output 3.2</i> <i>Input 3.3</i>	Questionnaire 3.3	Days 78–80
<i>Sub-round 3.3</i>	Expert expression of consensus	Days 81–84
<i>Analysis 3.3</i>	Completed analysis of sub-round 3	Days 85–87
<i>Output 3.3</i>	Unified model of key soft skills Final Delphi research report	Days 88–91

### ***Soft Skills Definition by the Delphi Experts***

Soft skills refer to personal and interpersonal abilities and character traits that enable individuals to effectively navigate work environments, interact with others, and live in harmony with themselves. They encompass a wide range of skills, including problem-solving, teamwork, communication, adaptability, emotional intelligence, and non-technical competencies. Unlike hard skills, which are job-specific, soft skills are more generic and transferable across different roles and sectors. While some soft skills may be innate and express personality, they can also be learned and enhanced. It is important to note that soft skills play a vital role in complementing technical expertise and facilitating collaboration, productivity, and positive relationships in the workplace. They increase the chances of success. Soft skills are relevant to individuals of all ages and are essential in today's ever-changing technological context. While soft skills are generic and applicable to various roles, certain occupations, such as leaders, may require specific soft skills.

### ***The List of the Thirty Most Important Skills for the Twenty-First Century by the Delphi Experts***

A positive attitude toward challenges and problems, Adaptability, Becoming gritty, Collaboration, Communication, Coping with uncertainty, ambiguity, and risk, Creativity, Critical thinking, Cultural competence, Digital literacy, Emotional intelligence, Empathy, Ethical skills, Exploratory thinking, Flexibility, Growth mindset, Leadership skills, Listening skills, Making deal with complexity, Negotiation skills, Own understanding of societal realities, Problem-solving, Resilience, Self-awareness, Self-control, Self-motivation, Self-regulation, Teamwork, The ability to solve conflicts and problems, Time management.

## ***The Definitions of the Thirty Most Important Skills for the Twenty-First Century by the Delphi Experts***

### **A Positive Attitude Toward Challenges and Problems**

A positive attitude toward challenges and problems involves adopting an optimistic and proactive mindset when faced with difficulties or obstacles. It encompasses viewing challenges as opportunities for growth and learning, rather than insurmountable barriers. Having a positive attitude toward challenges and problems also entails cultivating a growth mindset, where failures are seen as temporary setbacks rather than permanent failures. It involves being open to new perspectives, seeking support when needed, and maintaining a sense of optimism and enthusiasm throughout the problem-solving process. A positive approach to challenges and problems contributes to creating a pleasant work environment, motivating performance, and increasing the likelihood of finding solutions and creating value. It is not about denying the gravity of the present situation but rather focusing on the potential for a successful future while acknowledging the existing reality. A positive attitude toward challenges and problems is not a skill itself but an attitude that can be connected to other soft skills such as creativity and problem-solving. It is the practice of intentionally directing attention toward the positive aspects of any given situation.

### **Adaptability**

Adaptability is a soft skill that empowers individuals to navigate and adjust to new circumstances, challenges, and changing environments. It involves the ability to cope with change, overcome obstacles, embrace opportunities, and build resilience. Adaptable individuals exhibit flexibility, open-mindedness, and a willingness to learn. They can thrive in diverse environments, enhance personal growth, and promote mental well-being. Adaptability entails accepting one's opinions, situations, and surroundings, whether through inherent character traits or cultivated skills. It is a crucial aspect of personal and professional development, allowing individuals to embrace the ups and downs of life with resilience, seize new opportunities, and maintain a positive outlook. Adaptable individuals can adjust themselves to novel situations, changing conditions, and different social and work environments. They possess the engine of creativity, leveraging adaptability to generate innovative solutions and positively impact their domains. The skill of adaptability can be both conscious and unconscious, exercised through mindful appreciation of the creative output that arises from adaptive results. Ultimately, adaptability skills enable individuals to adjust fast and effectively to changes in their personal, social, and work environments, promoting successful navigation of life's transitions.

## **Becoming Gritty**

Grit, or the ability to defer instant gratification in favor of a long-term goal, encompasses characteristics such as resilience, determination, self-motivation, endurance, and perseverance. It involves having the mental strength to overcome obstacles, bounce back from setbacks, and maintain commitment and drive during the pursuit of objectives. Grit combines self-efficacy and an attitude of enduring challenges, showcasing a strong determination to see a problem through. While some experts view it as a crucial soft skill that should be prioritized and included in the shortlist, others suggest it may be more of an attitude than a distinct skill. Despite differing opinions, grit is seen as valuable in today's society, where instant gratification is often emphasized, and organizations may seek individuals capable of postponing immediate needs in pursuit of long-term success.

## **Collaboration**

Collaboration is a soft skill that encompasses the ability to effectively work with others in a team or group setting to achieve a common goal. It involves active participation, shared ideation, attentive listening, and contributing to collective decision-making and problem-solving processes. Collaboration relies on strong communication skills, empathy, and a willingness to compromise and find common ground. It entails recognizing and valuing the diverse strengths and perspectives of team members, fostering a culture of learning from one another. Successful collaboration acknowledges the importance of interpersonal skills and appreciates the integration of technology within human interactions. It embraces the complexity of working with diverse cultures, neurodiversity, and social backgrounds for optimal outcomes. Collaboration allows for the pooling of different resources, skills, and opinions, promoting dialogue, questioning, and reaching agreed-upon solutions. It facilitates the smooth alignment of individuals with varied ages, cultures, socioeconomic statuses, and backgrounds in small and large teams and communities. Collaboration is driven by actions that collectively contribute to the achievement of shared objectives.

## **Communication**

Communication is the essential competence to convey information and ideas clearly, effectively, and with understanding, while actively listening to others. It plays a vital role in personal relationships, professional interactions, and overall success in various aspects of life. Communication serves as the link between individuals, teams, and entities, enabling collaboration, teamwork, and the transfer of information on multiple levels, including content, attitudes, culture, and emotion. It encompasses various methods of expression, such as oral, written, and digital, and is

adaptable to different audiences and contexts. Effective communication involves transmitting ideas without difficulties and receiving feedback in return. It recognizes the impact of technology and digital expression on communication dynamics and emphasizes the importance of maintaining cultural efficiency and courtesy. Communication skills enable the conveyance and interpretation of simple and complex information through verbal and non-verbal means. They contribute to goal achievement at both the individual and organizational levels and facilitate learning, reflection, and the establishment of a positive corporate atmosphere.

### **Coping with Uncertainty, Ambiguity, and Risk**

Coping with uncertainty, ambiguity, and risk is a soft skill that involves effectively managing and adapting to situations characterized by unknown outcomes, ambiguous information, and potential hazards. It encompasses embracing change, maintaining composure, making informed decisions, and learning from challenges and setbacks. This skill is influenced by personal attitudes toward risk, which can vary between preferences, aversions, or neutrality. It is also shaped by upbringing, education, surroundings, and social connections, highlighting the importance of developing coping strategies in individuals from an early stage. Uncertainty refers to a personal emotion that is often difficult to define, while ambiguity arises from uncertainty and denotes a lack of experience and necessary information. Risk, on the other hand, can be measured and serves as a rational approach to dealing with uncertainty and ambiguity. Coping with uncertainty, ambiguity, and risk requires the ability to navigate novel contexts, adapt to uncertain inputs, and strike a balance between established beliefs and innovative thinking in a complex world. It involves visualizing and making sense of weak signals, embracing serendipitous learning opportunities, and reframing failure as an opportunity for growth and adaptive learning. Resilience is a key aspect of this skill, enabling individuals to bounce back from setbacks and navigate change effectively. Although closely related to creativity skills, coping with uncertainty, ambiguity, and risk is a distinct skill that encompasses the ability to deal with change and risk in a proactive and adaptive manner.

### **Creativity**

Creativity is a multifaceted skill that encompasses the ability to generate new and original ideas, think divergently, and approach challenges with originality. It involves the capacity to bring forth innovative solutions, foster personal growth, and drive innovation. Creativity goes beyond aesthetics and includes the ability to analyze problems critically, question assumptions, and consider multiple perspectives. It enables individuals to express themselves, effectively communicate ideas, and engage in self-discovery and personal reflection. Creativity is the skill of creating something new and valuable, utilizing innate abilities that can be cultivated

and refined. It is applicable across various professions and contexts, involving the generation of novel approaches, whether in problem-solving, design, or content creation. Creativity involves imagination, curiosity, and the capacity to connect ideas in unique ways. It is a process that allows individuals to work with limited resources to produce adaptations for a domain, with the results having the potential for both positive and negative impacts. Creativity is not limited to individual efforts but can also be a collective and intentional activity that interacts with the surrounding political, economic, social, and cultural context. The creative activity aims to realize the creative potential of the creators and results in original, useful, and desirable products. Creativity is driven by a willingness to think outside the box, challenge conventional thinking, and explore new possibilities.

### **Critical Thinking**

Critical thinking is the ability to objectively and logically analyze and evaluate information in order to form well-reasoned judgments and make informed decisions. It involves questioning assumptions, examining evidence, and considering alternative perspectives. Critical thinkers break down complex information into its component parts and explore the relationships between them. They identify patterns, connections, and underlying concepts to gain a deeper understanding of a subject. They also possess the skill to assess the credibility, relevance, and reliability of information and arguments. Critical thinking is instrumental in effective problem-solving, enabling the identification of root causes, the generation of innovative solutions, and the evaluation of potential outcomes. It goes beyond blindly following others' thinking and actively involves self-reflection on one's own motives, thought processes, and the formation of opinions and decisions. Critical thinking encourages a balanced perspective, allowing for the consideration of different viewpoints and the avoidance of cognitive biases. It involves the ability to question received information and seek additional sources to arrive at a well-rounded judgment. Ultimately, critical thinking is an intellectually disciplined process that draws upon observation, experience, reflection, reasoning, and communication to guide belief and action.

### **Cultural Competence**

Cultural competence refers to a set of soft skills that involve awareness, sensitivity, and adaptability to different cultures. It encompasses the understanding of cultural differences, effective communication across cultural boundaries, and the ability to adjust to new cultural contexts. Cultural competence also encompasses respect, tolerance, and appreciation for diversity, as well as the capacity for intercultural collaboration. Developing cultural competence is essential for interacting positively and productively in culturally diverse environments, fostering mutual understanding, cooperation, and community. It is a lifelong skill that can be learned and requires

ongoing education. Cultural competence involves being aware of different attitudes, emotions, and rituals stemming from diverse cultural backgrounds and integrating this awareness into various settings such as teams and communities. It includes recognizing that different cultural norms exist in different societies and embracing the diversity of ideas that arise from these differences. Cultural competence also involves the ability to adapt one's behavior to different cultures, demonstrating flexibility and tolerance. It requires effective communication, active listening, and the ability to navigate unfamiliar cultural environments. In an increasingly globalized and technologically interconnected world, cultural competence has gained significant importance in both personal and professional intercultural settings.

### **Digital Literacy**

Digital literacy is an interdisciplinary soft skill that lies on the border between technical and non-technical skills. While some experts may view it as a hard skill, there is a compelling argument for considering it a soft skill. Digital literacy encompasses the ability to effectively navigate, understand, and evaluate digital technologies, including critical thinking, information evaluation, online safety, and adaptability. It requires a holistic understanding of the digital landscape and the capacity to apply digital tools and resources in various contexts, making it a valuable soft skill in today's technology-driven world.

### **Emotional Intelligence**

Emotional intelligence is the ability to recognize, understand, and effectively manage one's own emotions, while also recognizing and empathizing with the emotions of others. It involves being self-aware and having the capacity to regulate emotions appropriately in various situations, as well as using emotional information to guide one's thinking and behavior. Emotional intelligence encompasses skills such as self-awareness, self-regulation, empathy, and social skills. It enables individuals to navigate social interactions, build and maintain relationships, make informed decisions, and handle stress and challenges with resilience. Emotional intelligence is shaped by experiences, including those in childhood, and can be developed and strengthened in adulthood, leading to improvements in health, relationships, and work. It involves controlling emotions to create a positive public image and fostering a sense of group cohesion. Additionally, emotional intelligence includes the ability to understand and respond to the emotional states of others, mindfully exercising empathy and considering multiple realities to promote harmonious action. It plays a crucial role in effective communication, building positive relationships, preventing conflict, and making decisions that balance both emotions and logic.

## **Empathy**

Empathy is the ability to understand and share the feelings, perspectives, and experiences of others. It goes beyond mere sympathy and involves actively connecting with others on an emotional level. Empathy allows us to form and maintain high-quality relationships by demonstrating care, understanding, and a willingness to be there for others. It involves actively listening, offering assistance, and striving to comprehend the thoughts and emotions of others. Through empathy, we put ourselves in the shoes of others, seeking to understand their motivations and behaviors. It is the ability to relate to and appreciate the emotional states and realities of other individuals without passing judgment. Empathy is characterized by an understanding of another person's situation, emotions, viewpoint, and needs, ultimately fostering a sense of connection and support.

## **Ethical Skills**

Ethical skills encompasses the moral principles, values, and attitudes that guide individuals and societies in distinguishing right from wrong. It involves understanding and applying principles of fairness, honesty, integrity, and respect for others in personal and professional contexts. Ethics includes making ethical judgments and decisions based on ethical frameworks, considering the impact of one's actions on others and the greater good. It entails acting in accordance with ethical standards and taking responsibility for the consequences of one's choices. Ethics shapes behavior and influences personal and professional conduct, guiding individuals to act ethically and uphold moral standards. It involves considering the rights, welfare, and dignity of others, striving to act in a morally upright and responsible manner. A strong work ethic is important in the workplace and can be cultivated and shaped through experience. Ethics is a set of principles that underpin one's behavior and provide guidance in various contexts. It entails an appreciation of ethical dilemmas and the understanding that decision-making involves measured and relative responses to complex problems. Ethics is driven by a set of values that guide a person's behavior, fostering integrity and moral conduct. It involves the ability to deal with moral principles and make ethical choices in personal and professional settings, maintaining integrity and acting with honesty and responsibility.

## **Exploratory Thinking**

Exploratory thinking is the soft skill that involves adopting a relational way of thinking by actively exploring and linking different disciplines. It encompasses characteristics such as creativity, experimentation, and comfort with ambiguity. Individuals with strong exploratory thinking skills are able to question, investigate, and challenge existing assumptions, promoting innovation, problem-solving, and

learning. While opinions differ on its inclusion in the shortlist, exploratory thinking is considered valuable for connecting knowledge from diverse disciplines and fostering lifelong learning.

### **Flexibility**

Flexibility is a vital life skill that encompasses adaptability, open-mindedness, and the ability to adjust to challenges and changes in a timely and effective manner. It involves embracing change, being willing to take on different roles and responsibilities, and adjusting timeframes to meet objectives. Flexible individuals are accommodating of other people's choices and can consider alternative courses of action based on environmental inputs. They appreciate cognitive dissonance and understand that opposing ideas can have similar impacts on a given situation. Flexibility promotes resilience, collaboration, and the ability to achieve work-life balance. It also encourages continuous learning, enabling individuals to acquire new skills and knowledge necessary to adapt to evolving circumstances. Flexible individuals can handle unexpected problems or tasks without stress, maintaining a positive and composed attitude. They create space for individual performance at work and possess the expertise to adapt to changes and new demands. Flexibility is about adjusting effectively and efficiently, while remaining aligned with objectives and within dynamic processes, to achieve personal growth and success.

### **Growth Mindset**

A growth mindset is an attitude and belief system that embraces the idea that one's abilities, talents, and intelligence are not fixed traits but can be developed and improved through effort, perseverance, and continuous learning. It is the understanding that personal growth and skill enhancement are attainable through dedication and hard work. Individuals with a growth mindset have a positive attitude toward learning and personal development, actively seeking opportunities to expand their knowledge and capabilities. They set ambitious goals, embrace challenges, and persist in the face of setbacks, viewing them as opportunities for learning and improvement. Cultivating a growth mindset fosters motivation, resilience, and a passion for lifelong learning. It involves approaching problems and obstacles with determination and a belief in one's capacity to overcome them through hard work and dedication. A growth mindset extends beyond individual development to encompass team and organizational growth, emphasizing the importance of continuous improvement and adaptability. It is characterized by an open-minded and flexible approach to learning, recognizing that there are infinite learning opportunities and that personal growth is an ongoing journey. Ultimately, a growth mindset nurtures the ability to learn and adapt, enabling individuals to reach their full potential.

## **Leadership Skills**

Leadership skills encompass the ability to influence, guide, and inspire others toward the achievement of common goals. A good leader possesses the capacity to make effective decisions, communicate clearly and empathetically, manage change, and foster collaboration within a team. Leadership skills include active listening, motivating others, delegating tasks, managing conflicts, and taking initiative. An effective leader is adaptable to different working styles of team members and inspires them to perform at their best. Leadership involves establishing a clear vision, making data-driven decisions, and taking responsibility for the consequences of one's actions. Developing leadership skills requires cultivating self-awareness, managing emotions, building self-confidence, and positively influencing others. It is a process that goes beyond the exercise of power and authority, characterized by the relationship between the leader and their followers and the impact of leadership on organizational behavior. Leadership creates the overall atmosphere of a company and involves a set of soft skills. It guides teams and entities, sets objectives, and brings people together to work toward shared goals, encompassing conflict management, risk management, creativity, listening, communication, and more. Leadership is the ability to encourage others to accomplish specific tasks and follow a collective mission, creating a culture of values and principles. A leader has the ability to convince others to take action by articulating and adapting a vision, story, or dream to the group's reality. They positively influence, organize, and motivate others, particularly in management roles, to achieve shared goals in work or social contexts.

## **Listening Skills**

Listening skill is the active and empathetic engagement in the communication process, involving the ability to receive and interpret information and messages accurately. It goes beyond merely hearing words and encompasses paying attention to both verbal and non-verbal cues, seeking clarification when necessary, and providing feedback to ensure mutual understanding. Effective listening involves devoting focused attention to the speaker, showing respect and receptiveness without judgment, and interpreting meaning from both explicit and implicit communication. It is a foundational aspect of successful communication, collaboration, and teamwork, enabling the establishment of better relationships, conflict resolution, and task accomplishment. Listening skill recognizes the significance of understanding diverse perspectives and socioeconomic and cultural backgrounds, fostering inclusive and effective communication. It involves actively sensing and responding to the needs of others, creating an environment conducive to open dialogue and mutual comprehension.

### **Making Deal with Complexity**

Making deal with complexity is a soft skill that involves simplifying complex situations by reducing complicated elements and embracing the edge of chaos for innovative opportunities. While opinions vary on its inclusion as a separate skill, it can be seen as an aspect of adaptability, problem-solving, creativity, and a mindset that appreciates systems thinking. While some experts suggest incorporating it into other skills, it highlights the ability to navigate complexity and distinguish the essential from the non-essential.

### **Negotiation Skills**

Negotiation skills encompass the ability to effectively manage discussions and reach satisfactory agreements for all parties involved. It involves analyzing situations, setting clear objectives, identifying common interests, and exploring mutually beneficial options. Negotiators practice active listening, collaborative negotiation, and seek win-win solutions. It is an important business skill that creates desired win-win results, and even children can demonstrate talent in negotiation. Negotiation skills require communication with objectives, understanding one's own limits and the limits of negotiation partners. It involves considering a range of views and ideas to reach an agreement and striking deals that are acceptable and more favorable compared to those without negotiation skills. A negotiator balances assertiveness and conflict avoidance to achieve action, understanding game theory and the impact of zero-sum and non-zero-sum games. The skill enables individuals to achieve beneficial outcomes in personal and professional contexts by feeling needs, being assertive, and reaching common agreements.

### **Own Understanding of Societal Realities**

Own understanding of societal realities is a soft skill that involves developing a meta-perspective on technologies and artificial intelligence, informed by personal experience and formal learning. It encompasses cultural awareness, critical thinking, and the ability to navigate and evaluate the environment. While opinions vary on its separate inclusion as specific soft skill, it is seen as fundamental for resilience, goal-setting, and integrating diverse perspectives in societal and economic contexts.

### **Problem-Solving**

Problem-solving is the aptitude to identify, analyze, and effectively resolve issues by employing a range of strategies and techniques. It encompasses the ability to gather relevant information, critically evaluate options, make informed decisions, and

implement practical solutions. Problem-solving skills are honed through practice, experience, and expertise, and they contribute to creating added value and achieving objectives. A proficient problem solver demonstrates an analytical and critical mindset, capable of identifying the root causes of problems and thinking creatively to devise innovative solutions. Effective problem-solving also entails efficient time management, collaboration with others, and adaptability to changes. It involves using existing knowledge and researching as well as exploring non-traditional and maverick approaches for innovative problem-solving. A skilled problem solver calmly faces challenges, analyzes them from multiple perspectives, and leverages the experience and knowledge of others to reach resolutions. Problem formulation, an integral part of problem-solving, involves defining the problem accurately, which serves as a crucial initial step in the problem-solving process.

## **Resilience**

Resilience is the capacity to bounce back, adapt, and thrive in the face of adversity, challenges, or stressful circumstances. It encompasses maintaining a positive mindset, demonstrating determination, and persevering through difficult times. Resilient individuals actively seek support from others, utilize problem-solving skills, and draw upon past experiences to grow stronger. It is not about avoiding or denying difficulties but rather facing them head-on and finding ways to overcome them. Resilience is cultivated through practice, experience, successes, and failures, which contribute to building strength and adaptability. It involves self-awareness, self-care, and a willingness to learn and adapt in the face of challenges. Resilience is characterized by the ability to persist when faced with obstacles, maintaining motivation and taking action even in the presence of setbacks and failures. It requires the capacity to maintain focus on long-term goals despite challenges, setbacks, and changing environments. Resilient individuals possess a high degree of self-efficacy and self-awareness, enabling them to effectively navigate and recover quickly from difficulties, particularly in stressful situations. Resilience is the ability to remain effective, handle frustrations positively, and adapt to a changing environment, fostering personal growth and well-being.

## **Self-Awareness**

Self-awareness is the ability to recognize and understand one's own emotions, thoughts, behaviors, and internal states. It involves introspection and contemplation of one's individuality, including personality traits, values, beliefs, strengths, and weaknesses. Self-awareness enables individuals to make conscious choices, set realistic goals, and effectively manage their emotions and reactions. It involves a deep understanding of one's own limits, capabilities, and self-perception. Self-awareness also extends to seeking external perspectives, such as feedback from others, to gain objective insights into one's own reality. It fosters a sense of reflection

on personal achievements, strengths, and weaknesses, allowing for continuous personal growth and development. Self-awareness is a fundamental aspect of understanding oneself, encompassing the exploration of personality, actions, values, beliefs, emotions, and thoughts. It involves the ability to focus inward and gain insights into one's own identity and characteristics, akin to the ancient Greek philosophy of "Know Thyself."

### **Self-Control**

Self-control is the ability to regulate one's thoughts, emotions, and behaviors in order to achieve desired outcomes. It involves managing impulses, resisting temptations, and maintaining focus even in challenging situations. Self-control enables individuals to make rational decisions, exercise discipline, and maintain a sense of balance and stability. It requires the ability to control and direct emotions effectively, avoiding impulsive or irrational reactions. Self-control contributes to the development of healthy habits and the achievement of long-term goals. It is an innate quality that can be learned and cultivated through practice. By exercising self-control, individuals can avoid undesirable behaviors, increase desirable ones, and make choices that prioritize long-term advantages over short-term gains. It is closely related to self-awareness but emphasizes the ability to regulate and alter responses to align with desired outcomes. Self-control plays a vital role in personal and professional growth, enabling individuals to manage their emotions, thoughts, and behaviors in a way that leads to positive outcomes.

### **Self-Motivation**

Self-motivation refers to the internal drive, determination, and enthusiasm that enables individuals to proactively pursue and achieve personal and professional goals without relying on external influence or supervision. It involves taking initiative, persevering, and consistently working toward objectives. Self-motivation is not solely dependent on external sources of motivation but based on one's personality, intrinsic attitude, and intrinsic reward. It is the ability to propel oneself to action, develop an internal monologue that overcomes challenges, and encourage oneself to undertake activities. Self-motivation is an internal state that helps initiate, continue, or terminate behaviors, and it plays a crucial role in maintaining a high level of performance.

### **Self-Regulation**

Self-regulation is the ability to effectively manage one's thoughts, emotions, and behaviors in alignment with desired goals and values. It involves self-awareness, self-monitoring, and self-correction to maintain focus, navigate stress, and make

informed decisions. Self-regulation encompasses the capacity to set clear intentions, regulate emotions, and implement strategies to address challenges. It requires self-reflection and self-control to adapt to changing circumstances while maintaining personal discipline. Emotionally intelligent individuals often exhibit strong self-regulation skills as they understand the importance of managing their emotions. Self-regulation involves rationalization and negotiation with oneself and others to maintain control. It includes self-motivation, taking responsibility for one's learning and actions, and being proactive in personal development. It entails the ability to modulate responses to impulses and emotions, avoiding irrational behaviors and temptations. According to the American Psychological Association (APA), self-regulation involves self-monitoring, self-evaluation, and self-reinforcement to control one's behavior. It encompasses managing behavior and reactions to external stimuli, allowing individuals to navigate and respond effectively to the events happening around them.

### **Teamwork**

Teamwork is a soft skill that encompasses the ability to collaboratively work with a group of individuals toward a shared objective. It involves active participation, contribution, and respect for the diverse contributions of team members. Effective teamwork relies on effective communication, coordination, and cooperation, fostering a harmonious and synergistic working environment. Individuals with strong teamwork skills excel in building relationships, resolving conflicts, and leveraging the strengths of each team member. They understand the value of shared responsibility, trust, and mutual accountability. Teamwork is characterized by a collective commitment to achieving common goals, guided by clear objectives, allocated resources, and time-based project completion. Successful teams strike a balance between fostering personal connections and maintaining a focus on achieving objectives, understanding the importance of diversity of thought within the team. Teamwork requires active listening, open communication, and a willingness to adapt personal interests for the benefit of the team's success. It thrives on the ability to work parallelly with others, subordinating individual goals for the collective achievement. Teamwork skills are rooted in effective communication, active listening, responsibility, and honesty, enabling seamless collaboration during conversations, projects, meetings, and other joint endeavors. It entails a deep understanding of team dynamics, where team members know each other's roles, respect one another, and collectively assume responsibility for the team's outcomes.

### **The Ability to Solve Conflicts and Problems**

The ability to solve conflicts and problems encompasses a range of skills and traits, including objective analysis, critical thinking, effective communication, collaboration, emotional management, flexibility, adaptability, and creative thinking. It

involves identifying the underlying causes of conflicts or problems, evaluating various options, and actively working toward finding solutions. This skill is important for managers and leaders as it contributes to creating a positive and harmonious working environment. It also requires the ability to act as a mediator between conflicting parties, facilitating communication and promoting understanding. Problem-solving and conflict resolution are separate but closely related skills. Problem-solving focuses on finding solutions to specific challenges, while conflict resolution emphasizes addressing disagreements and reaching consensus. The ability to solve conflicts and problems relies on experience, effective communication, active listening, and the ability to approach issues from different perspectives. It also involves acknowledging and respecting diverse opinions and viewpoints, applying empathy and active listening, and seeking input from others to arrive at healthy and constructive resolutions. Overall, this skill is connected to one's personality and readiness to handle conflicts in a positive and constructive manner.

### **Time Management**

Time management is the ability to effectively plan, organize, and prioritize tasks and activities within a given timeframe. It involves allocating appropriate time to different responsibilities, setting realistic goals, and meeting deadlines. Time management requires identifying and eliminating distractions, making efficient use of available resources, and maintaining focus and productivity. It includes the skill of making effective decisions about how to allocate time, delegate tasks when necessary, and balance competing priorities. Time management is a soft skill that is developed through experience and practice, as it cannot be taught through formal training. It is a key factor in achieving success at work. The skill of time management enables individuals to organize themselves effectively and efficiently, aligning their activities with objectives and milestones. It involves the ability to plan and structure one's time productively and efficiently, ensuring that daily and long-term goals are met. Prioritization is an essential component of time management, as it allows individuals to determine the value and importance of tasks and allocate time and energy accordingly. Time management methods emphasize the skills of awareness, arrangement, and adaptation, involving mindfulness of time, structuring it effectively, and making adjustments as needed. Overall, time management encompasses the ability to organize, plan, and allocate time for various activities in a way that enhances efficiency and productivity.

## 5.2 The Delphi Research Round 2: Categorization of Soft Skills

The goal of the second round of the Delphi research was to propose a categorization of the soft skills identified in the first round. The Delphi experts were asked to sort the soft skills into categories and to suggest a common criterion for each of these categories. A categorization of soft skills can serve as a basis for finding possible relationships between the individual soft skills and thus for the creation of a model of soft skills for the twenty-first century.

Again, there were three sub-rounds within this round. First, the experts were asked if they thought it was important to categorize soft skills and express the relationships between them. Regardless of their opinion, they were asked to suggest criteria for categorization and to sort the soft skills into categories. Most experts agreed that categorization provides a structure for understanding and assessing the importance of different soft skills. They highlighted the practical benefits of categorizing soft skills, such as designing training programs, curricula, and courses. One expert was critical of the categorization of soft skills as being overly analytical. The experts offered eight suggestions for categorizing soft skills.

The goal of the second sub-round was to come closer to a consensus on the categorization of the soft skills. To this end, experts were asked to rate and comment on the eight proposed soft skill categories. Experts rated each of the categorizations on a scale of 1 to 100, with 100 representing complete agreement. For each of the categorizations, the arithmetic mean, standard deviation, and coefficient of variation were calculated from the individual ratings.

The average rating of one categorization (76.95) was significantly higher than the other categorizations, while the variability of this rating (0.27) was the lowest. Therefore, it was considered the most supported proposal. Nevertheless, taking into consideration the experts' feedback, proposed changes, additional comments, and recommendations, a modified version was developed for comparison with the original best-rated categorization in the third sub-round.

The third sub-round aimed to select the most appropriate categorization of soft skills and to determine the extent to which the experts agreed with this categorization of the most important soft skills for the twenty-first century. The experts chose between two options – the top-ranked categorization from the second sub-round and its modified version proposed based on the experts' feedback. The experts expressed their meaning that the given categorization of the soft skills is the most appropriate on the scale of strongly disagree/somewhat disagree/somewhat agree/strongly agree. If they disagreed, they were asked to explain why. They were also asked which version of the categorization they would prefer to work with in the third round of the Delphi research.

The modified categorization of soft skills (Table 5.3) was rated better than the best-rated categorization from the second sub-round. Six out of the nine experts also strongly agreed that the modified categorization is an improved proposal and

**Table 5.3** The best-rated categorization of soft skills

Soft skills categories			
Interpersonal skills	Intrapersonal skills	Analytical and methodological skills	Attitudes and mindsets
Ability to solve conflicts	Adaptability	Problem-solving	Becoming gritty
Collaboration	Coping with uncertainty, ambiguity, and risk	Critical thinking	Positive attitude toward challenges and problems
Communication	Flexibility	Digital literacy	Growth mindset
Cultural competence	Making deal with complexity	Time management	Self-motivation
Empathy	Resilience	Exploratory thinking	Own understanding of societal realities
Ethical skills	Self-awareness	Creativity	
Leadership skills	Self-control		
Listening skills	Self-regulation		
Negotiation skills			
Teamwork			
Emotional intelligence			

addresses the shortcomings of the original proposal, the remaining three chose the “somewhat agree” answer.

Although none of the experts disagreed with the modified categorization, they did provide comments for possible further improvements. Several key themes emerged. The experts highlighted the importance of considering multiple dimensions such as social context, tasks, and objectives within organizations for effective skill allocation. They also noted the need to assess the teachability of soft skills and suggested the inclusion of a specific category for this aspect. With regard to category names, it was recommended that names be chosen that accurately represent the categories and add scientific value, rather than simply echoing the names of individual skills. The experts acknowledged the need for multiple categorizations to capture different perspectives and recommended a range of general to more specific categories, including subcategories for detailed understanding. Suggested categorizations included groups such as intrapersonal skills, interpersonal skills, cross-cutting skills, and attitudes and mindsets.

The distinction between intrapersonal and social skills was considered fundamental to these classifications. In addition, some experts suggested treating attitudes as a separate category from soft skills and distinguishing them from mindsets. The ideal number of categories was suggested to be between three and five to avoid undue complexity. The overarching recommendation was to strive for clarity and simplicity in categorizing soft skills, aiming for a clear and unambiguous framework that would facilitate the understanding and development of these skills.

### 5.3 The Delphi Research Round 3: Soft Skills Model

The aim of the third round of the Delphi research was to propose a model of the key soft skills for the twenty-first century that would show the relationships between the categories of soft skills and individual soft skills. Knowledge of such relationships is useful in determining the order in which training and development of soft skills should take place in individuals. Again, three sub-rounds were organized to achieve this.

In the first sub-round, the experts were reminded of the best-rated categorization of soft skills (Table 5.3). Then they were asked for their opinion on the importance and applicability of a soft skills model and what an appropriate soft skills model should include. Next, the experts were asked to design and comment on their own model of soft skills.

In this case, there was a wide range of views and opinions among the experts. The experts stressed the importance of such a model in elucidating the complex relationships between different soft skills. They emphasized that certain basic skills contribute to the development of more complex skills. For example, leadership skills were shown to rely on a combination of other skills, highlighting the need for an interconnected model. Such a hierarchical framework was seen as providing a structured approach to skill development, particularly in educational programs. Conversely, another important theme centered on customization and adaptability. Experts suggested that organizations, including schools and colleges, would tailor the model to fit their specific goals and missions. Suggesting linkages between different categories of soft skills was seen as beneficial, allowing organizations to create customized pathways. This adaptability was considered essential to ensure that the model would meet the diverse needs of different contexts.

Another key theme is the complexity of applying soft skills in practice. Experts emphasized that soft skills are not isolated entities but are interconnected and contextually relevant. This adaptive perspective requires a nuanced understanding of how these skills interact within complex systems. While some experts suggested a hierarchical structure, others emphasized the importance of situational needs in guiding the application of soft skills within different projects. The experts' insights provided valuable perspectives for creating a model of soft skills. The themes of interconnectedness, customization, and adaptability reflected the complexity involved in developing such a model and its potential applications.

The importance of a hierarchical model with clear categories and interdependencies between soft skills was highlighted in the experts' responses. According to them, the model should include detailed levels of proficiency, descriptors, and contextualized examples for use in practice. A layered representation was recommended, and the foundational role of attitudes and mindsets was emphasized. The potential of the model to support training programs and its adaptability to different settings were key considerations for the experts in the development of the model. A total of nine models were proposed by the experts as a reflection of their perceptions of the relationships between the different categories of soft skills.

In sub-round two, the experts were initially asked to rate the soft skills models proposed in sub-round one on a scale of 0 to 100. Here, 0 represents a very poor model and 100 a very good model. They were then requested to provide the main reasons for their ratings, to offer comments on the models, and to suggest further improvements. The final question in this sub-round concerned another model of soft skills that the experts are familiar with and would recommend considering in the proposal of a model for the thirty soft skills suggested in the Delphi research.

The average rating (arithmetic mean), standard deviation, and coefficient of variation for each model were calculated from the completed responses. The average ratings of the proposed models ranged from 76 to 49, but the standard deviations and thus the coefficients of variation also had a large variance. Therefore, it was not possible to declare a top-ranked model. Even the lower-ranked models had high coefficients of variation, indicating inconsistency in the experts' ratings. This could be due to the different perspectives and approaches of the experts. This was also evident in their comments on each model, which ranged from praise to criticism for each model.

In analyzing the experts' perspectives on soft skills models, several themes and key insights emerged in this sub-round of the Delphi research. First, there was a strong consensus on the integration of multiple models, emphasizing their specific approaches while incorporating a process orientation and case studies. This approach was seen as providing a more holistic understanding of soft skills. Second, experts highlighted the complexity of classifying soft skills by drawing a parallel to the concept of Schrödinger's cats in modern physics. This metaphor highlights the challenge of capturing the complex nature of soft skills in models. Third, there was a preference for models that avoid a hierarchical ranking of skills. The experts expressed a preference for models that capture the evolving nature of skill development, rather than constraining it within a rigid hierarchy. In addition, graphical clarity and simplicity were valued, with experts suggesting that models should be both visually appealing and easy to understand. Overall, the experts' insights underscored the multifaceted nature of soft skills and the need for dynamic, adaptable models that reflect this complexity. A useful outcome of this sub-round was a large number of comments and recommendations from the experts that will need to be taken into account when designing further versions of the soft skills model.

The aim of the third sub-round was to find out whether the experts would agree on an appropriate model of soft skills for the twenty-first century or what suggestions they had for developing such a model in the future. As this was the last sub-round of the Delphi research, the experts were also asked for any final comments on the topic of soft skills for the twenty-first century. The experts were given the three top-ranked soft skills models from the previous sub-round and asked to assign six points to each model based on how relevant they felt it was in illustrating the relationships between the soft skills. They could assign any combination of non-negative integer points to the models, but the total had to be exactly six. More points awarded meant a higher rating. After summing up the points awarded by the experts, it was possible to determine the ranking of the three selected models. But the experts also provided many suggestions for each one to develop it further. Even the author of the model

with the highest score noted in his comment that the proposal should be used as a basis for further development.

The experts emphasized the need to capture the complex interdependencies and situational relevance of soft skills. They stressed the importance of considering the complexity and real-world context in which these skills operate. It was noted that some existing approaches to soft skills are overly idealistic. The experts pointed out the potential benefits of negative attitudes, such as using pessimism for analytical problem-solving. They recommended enhancing models by providing concrete application examples, organized by levels of competence. The necessity for clear, commonly understood definitions of these competencies was also emphasized.

The integration of soft skills with technical skills was recommended. The experts challenged the belief that soft skills are innate, advocating for a positive attitude toward developing these skills. They proposed creating a matrix to compare soft skills across different models, aiming to define and promote consensus. This supports the broader initiative of developing a unified framework for soft skills, recognized as enduring competencies vital for shaping the future.

The experts highlighted the importance of tailoring the soft skills framework to various contexts and elevating soft skills to core competencies. Refining the model for practical use, specifying mastery levels, and providing concrete examples in work and education contexts, drawing inspiration from established European models, were suggested. In their concluding remarks, the experts reiterated their support for establishing a unified soft skills framework. They proposed shifting the dialogue to focus on future skills instead of just soft skills for the twenty-first century, underscoring their enduring relevance.

## 5.4 The Delphi Research Results: Summary and Discussion

The objective of the Delphi research was to identify a set of soft skills relevant to successful professional and personal life in the twenty-first century, to define these soft skills, and to propose a categorization and model reflecting their interrelationships. The Delphi research followed a review of academic literature and non-academic sources focused on the topic of soft skills.

In the academic literature reviewed, Brown and Luzmore (2023) identified forty-two soft skills that are considered important (Chap. 1). A review of non-academic sources identified several dozen important soft skills; after removing recurring skills, the list also includes about forty soft skills (Chap. 2).

Approximately twenty soft skills common to both lists can be identified by comparing these two lists. The number is really only approximate because the names of some soft skills are used in a very fuzzy and blurred way. These soft skills are as follows: Collaboration, Communication, Conflict management, Creativity and innovation, Critical thinking, Empathy and understanding others' needs, Flexibility and adaptability, Leadership, Motivation, Planning and organizing, Social skills, Time management, Well-being and stress management.

The Delphi research resulted in a list of thirty soft skills that are important for the twenty-first century. Most of the soft skills from the common list of soft skills identified in academic and non-academic sources are also on the Delphi list. The remaining soft skills, motivation, planning and organizing, social skills, and well-being and stress management may be also related to other soft skills from the Delphi list. Again, the problem is the inconsistent use of soft skill names across sources and the lack of consistent definitions.

In the Delphi research, the experts not only agreed on a list of the most important soft skills for the twenty-first century and their names but also proposed and agreed on definitions. At the same time, the experts were aware of the latest technological and societal trends that could not have been reflected in any of the sources reviewed because they had not yet occurred. Therefore, the experts' suggestions can be considered relevant because they are based on both prior knowledge and experience and on anticipation of future developments. Nevertheless, the experts' proposals need to be critically examined. It should be verified that the names of the soft skills are clear and as compatible as possible with established classifications such as ESCO (European Commission, 2023), that the definitions are unambiguous, and that they meet the requirements of a good definition.

The experts also agreed on the proposal of a soft skills categorization. However, the level of agreement was lower than for the list of soft skills and their definitions, and the experts made several suggestions to further improve the categorization. The overall recommendation was to seek clarity and simplicity when categorizing soft skills, with the goal of providing a clear and concise framework that would facilitate understanding and development of these skills.

The experts agreed on the usefulness of a model of soft skills for the twenty-first century, but there was no consensus on a specific model. The experts stressed the importance of having a model that makes clear the relationships between the different types of soft skills. Some experts suggested a hierarchical model, while others focused on customization and adaptability to different organizational needs. The complexity of applying soft skills in practice was a key theme, with an emphasis on their interconnectedness and contextual relevance. Themes such as integrating existing models, avoiding hierarchical ranking, and emphasizing dynamic, adaptive models emerged. Experts highlighted the need for a model that captures the complex interdependencies and situational relevance of soft skills and advocated for a unified framework.

The following conclusions are drawn from the Delphi study, taking into account all the arguments presented:

1. The proposed list of soft skills for the twenty-first century is relevant and will be used for further elaboration.
2. The names of the soft skills will be subject to linguistic review and harmonization with an existing established classification.
3. The definitions of the soft skills will be evaluated in terms of their fulfillment of the criteria of a good definition and adjusted if necessary.

4. Taking into account the recommendations of the Delphi experts, a classification of soft skills will be proposed.
5. Taking into account the recommendations of the Delphi experts, a model of soft skills will be proposed.

## 5.5 Revision of the Delphi Soft Skills Names and Definitions

The findings from the Delphi research were subject to four independent peer reviews. Some of the reviewers were native English speakers and all were experts in the research area. Some were academics and some were practitioners. In terms of the soft skills names, they assessed linguistic accuracy and clarity. They recommended that the comparative basis for the names should be the ESCO classification (European Commission, 2023). Ten names of the soft skills were modified. In the case of a positive attitude toward challenges and problems, the indefinite article was dropped. Becoming gritty was replaced by a simpler name Grit. Instead of Cultural competence, the established name Cultural intelligence is used. Established and simpler name Ethics replaced Ethical skills, Leadership skills were replaced by simple name Leadership. Listening skills were replaced by the established name Active listening. Making deal with complexity was replaced by a better understandable and established name Complexity management. Negotiation skills were replaced by simple Negotiating. In the case of Own understanding of societal realities, the pronoun own was dropped. The ability to solve conflicts and problems was replaced by the established name Conflict management.

The final list of the soft skills for the twenty-first century is as follows:

Active listening  
 Adaptability  
 Collaboration  
 Communication  
 Complexity management  
 Conflict resolution  
 Coping with uncertainty ambiguity and risk  
 Creativity  
 Critical thinking  
 Cultural intelligence  
 Digital literacy  
 Emotional intelligence  
 Empathy  
 Ethics  
 Exploratory thinking  
 Flexibility  
 Grit  
 Growth mindset  
 Leadership

### Negotiating

Positive attitude toward challenges and problems

Problem-solving

Resilience

Self-awareness

Self-control

Self-motivation

Self-regulation

Teamwork

Time management

Understanding of societal realities

The next step was a review of the definitions of soft skills. Definitions are fundamental tools in communication, education, and other fields, as they help to ensure that everyone has a common understanding of specific terms and concepts. A definition is a statement that explains the meaning of a term or concept. It typically includes the essential characteristics or properties that distinguish the term from others. In essence, a definition serves to clearly identify and describe the unique aspects of a term, enabling a precise understanding of what it represents or signifies. The term definition can be defined as a verbal expression of a concept. A good definition can be defined as a concise, clear verbal expression of a unique concept (Wacker, 2004).

According to Schiappa (2003) definitions should be seen as proposals for shared knowledge. This approach emphasizes the role of definitions in constructing shared realities and underscores the importance of context, adaptability, and the sociopolitical implications of the terms defined. Essentially, a good definition is one that is pragmatic, contextually relevant, and conducive to establishing common understandings in a given society or community. Thus, to define a term effectively, it is important to adhere to several fundamental criteria:

- **Precision:** The definition should be precise and specific, accurately capturing the essence of the concept or term being defined.
- **Clarity:** The definition should be clear and easy to understand, avoiding complex or ambiguous language.
- **Conciseness:** The definition should be succinct, providing sufficient information to elucidate the term without being unnecessarily wordy.
- **Consistency:** The definition should be consistent with the established usage and understanding of the term in the relevant field or context.
- **Explanatory power:** The definition should enhance understanding and provide insight into the term or concept.
- **Contextual relevance:** The definition should be appropriate to the context in which the term is used, considering the audience, purpose, and field of study or application.
- **Non-circularity:** The definition should avoid relying on the term being defined or its close derivatives; it should independently explain the term.

- **Inclusiveness and exclusiveness:** The definition should encompass all instances of the term while excluding non-instances, thus preventing over-generalization and excessive narrowness.

The definitions of the soft skills suggested in the Delphi research were evaluated against these criteria. Five academics from the fields of economics, business, management, and research methodology were given the text of the definitions and a description of the criteria. The academics were asked to rate all definitions for all criteria on an integer scale of 1 to 4, where 1 is a very poor-quality definition, 2 is a poor-quality definition, 3 is a good-quality definition, and 4 is a very good-quality definition. The academics were also asked to comment on the definitions. They completed the rating independently. The data were then summarized and shared (Kubátová et al., 2024). A facilitated discussion of the results of the evaluation and the comments on the definitions followed. An overall assessment of the quality of the soft skill definitions against each criterion was summarized as follows:

**Precision:** The definitions generally capture the essence of the soft skills they are meant to define. They incorporate key characteristics and attributes specific to each skill, providing an understanding of what each skill entails. However, the precision could be improved by focusing more narrowly on the core aspects of the skill.

**Clarity:** The definitions are understandable, using language that is accessible to a broad audience. However, some definitions include complex terms or phrases that could be simplified for better comprehension, particularly for readers who may not be familiar with certain terminology or technical language.

**Conciseness:** While the definitions provide sufficient detail to elucidate the terms, they tend toward being wordy and could benefit from more succinct phrasing. Eliminating redundant or unnecessary information would make the definitions more concise without sacrificing essential details.

**Consistency:** The definitions largely align with the established usage and understanding of the terms in relevant fields. However, some tend to diverge from standard interpretations, which could lead to confusion or misinterpretation.

**Explanatory Power:** The definitions generally do well in enhancing understanding and providing insight into the terms. They elaborate on various aspects of the skills, contributing to a deeper comprehension. Nevertheless, more than to define the soft skill in question they tend to describe its manifestations.

**Contextual Relevance:** The definitions are mostly appropriate to the contexts in which the terms are used, considering the audience, purpose, and field of study or application. However, they could be tailored more precisely to fit specific contexts or applications.

**Non-circularity:** A serious issue with many of the definitions is their tendency to use the names of other soft skills within the definitions, which can create circularity and reduce the independence of the explanation. This practice undermines the effectiveness of the definitions and should be avoided to ensure that each term is defined independently.

The overlaps in the definitions are shown in Table 5.4. Specifically, the definitions of eighteen soft skills (in the columns) include a name of one or more other soft skills, and the names of fourteen soft skills (in the rows) are used in the definitions of other soft skills.

**Inclusiveness and Exclusiveness:** The definitions generally encompass well all instances of the term while excluding non-instances. However, there is a tendency to be overly broad, which can lead to over-generalization.

In summary, while the definitions are largely effective in conveying the intended soft skills, improvements can be made in terms of conciseness, avoidance of circularity, and precision. Ensuring that each definition stands on its own without relying on other soft skills within its explanation is crucial for clarity and effectiveness. Additionally, tailoring the definitions to be more context-specific and avoiding over-generalization would enhance their applicability and relevance. With regard to the above proven problematic definitions and use of the terms skill, ability, competence, and competency, it was recommended to avoid the use of these terms in the definitions of soft skills. It was also recommended to revise the Delphi definition of the term soft skills, which also shows the described problems; for example, it contains a list of selected soft skills.

The revision of the soft skill names and definitions from the Delphi research resulted in a slightly revised list of names that are well understood and aligned with the established ESCO classification. Another conclusion was that all soft skill definitions needed to be modified to meet the general requirements for the definitions, while consistently using the parts that capture the specific characteristics of individual soft skills. Those parts of the Delphi definitions that describe the manifestations of soft skills can be used as a basis for developing rubrics. After optimizing the content of the soft skills definitions, a new classification and model of soft skills for the twenty-first century can be proposed, reflecting both common and distinct characteristics of specific soft skills as well as their interrelationships.

**Table 5.4** Overlaps in the Delphi soft skills definitions

	AC	AD	CL	CM	CU	CR	CT	EM	FL	LE	LI	MD	NS	PS	RE	SA	SR	TW
AD	x											x						
CL	x			x					x	x	x		x	x				x
CM	x		x							x	x		x					x
CR		x			x					x		x		x				
CT	x																	
EI																	x	
EM							x											
FL	x																	
LI										x			x					x
NS										x								
PS						x	x			x					x			x
RE					x				x									
SA																	x	
SR																x		

AC Ability to solve conflicts and problems, AD Adaptability, BG Becoming gritty, CL Collaboration, CM Communication, CU Coping with uncertainty, ambiguity, and risk, CR Creativity, CT Critical thinking, CC Cultural competence, DL Digital literacy, EI Emotional intelligence, EM Empathy, ET Ethics, EX Exploratory thinking, FL Flexibility, GM Growth mindset, LE Leadership, LI Listening skills, MD Making deal with complexity, NS Negotiation skills, UN Our understanding of societal realities, PA Positive attitude towards challenges and problems, PS Problem Solving, RE Resilience, SA Self-awareness, SC Self-control, SM Self-motivation, SR Self-regulation, TW Teamwork, TM Time management

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## Chapter 6

# Soft Skills for the Twenty-First Century: Definitions, Rubrics, Categories, and Model



Based on the conclusions of the revision of the Delphi research results, improved definitions of soft skills, rubrics for assessing the level of their manifestation in specific individuals, categorization, and a model of interrelationships were proposed. To achieve these goals, content analysis of the definitions from the Delphi research was first conducted. Then, using nominal group technique, definitions, rubrics, categories, and a soft skills model were proposed. The same five experts were involved in these processes as in the review of the Delphi results. This number of participants ensures a diversity of ideas and perspectives in a manageable environment. A group of this size is large enough to generate a variety of ideas but small enough to allow for effective discussion and consensus building.

Content analysis is a research method used to analyze and interpret the content of various forms of documents or communications (Neuendorf, 2016). The primary goal of content analysis is to identify patterns, themes, and meanings within the data that can then be used to draw insights and conclusions about the phenomenon being studied. The goal in this case was to dissect existing definitions of soft skills to extract key characteristics and themes within them. The result of this analysis was an understanding of what is right and what is redundant, missing, or misrepresented in the current definitions.

The nominal group technique is a consensus method used in research that is directed at problem-solving, idea-generation, or determining priorities (McMillan et al., 2016). The nominal group technique is a highly structured face-to-face group interaction (Delbecq et al., 1975). This technique is particularly useful in contexts where multiple perspectives are needed to capture the essence of an inherently multifaceted concept such as soft skills.

## 6.1 The Process of Final Defining, Categorizing, and Creating a Twenty-First-Century Soft Skills Model

The development of the final definitions, categorization, and model of soft skills for the twenty-first century represents a process whose inputs are the results of the Delphi research and the conclusions from their revision. The outputs are proposals for universally applicable definitions of soft skills, their categorization, and a model. The process involved six phases:

### Phase 1: Preparation

The project objectives were clearly outlined and communicated to the participants. Additionally, the participants were thoroughly briefed on the methodologies to be employed, namely, content analysis and the nominal group technique. Furthermore, the participants were provided with detailed information regarding the phases of the project and its timeline.

### Phase 2: Content analysis of the definitions

The participants were already familiar with the definitions of soft skills from the Delphi research, as well as with the criteria for a good definition. They were now asked to identify the key characteristics of each soft skill, descriptions of its manifestation, overlaps with other definitions, and overall areas for improvement. Participants worked individually within the allotted time.

### Phase 3: Redefining soft skills

Three nominal group technique sessions were held to redefine soft skills and the concept of soft skills. Participants attended the sessions in person. First, participants were asked to individually generate an idea for a definition of the soft skill in question. The proposed definitions were then shared and discussed in a round-table format. The proposals and comments were compiled until a new definition was proposed and approved by the participants. Around ten definitions were formulated in each session.

### Phase 4: Developing rubrics

Three nominal group technique sessions were held to develop soft skills rubrics. Based on the Delphi research comments the participants agreed to draw inspiration from the VALUE Rubrics (Association of American Colleges and Universities, 2009; Brookhart, 2013). The sessions were structured similarly to the previous phase. The dimensions of the rubrics, the levels of manifestation, and their content were approved for each soft skill.

### Phase 5: Categorization

This phase was a combination of individually performed content analysis of the new definitions of soft skills and the nominal group technique. In the content analysis, participants were asked to find thematic elements in each definition and to group the soft skills that shared some of these elements. In the following nominal group technique session after several rounds of round table discussion, the division of the soft skills in categories and the names of the categories were approved.

### Phase 6: Model of soft skills for the twenty-first century

For phase 6, the categorization of soft skills was already available, and the goal was to link these categories into a model that shows their interrelationships. The participants agreed to reflect the recommendations from the Delphi research and to take some inspiration from some existing model, modifying and updating it. The LifeComp tree metaphor (Sala et al., 2020, p. 21) as an inspiration was approved by the participants for this purpose.

By the end of the sixth phase, all the planned objectives and outputs of the process were achieved. These included clear definitions of the concept of soft skills and of the thirty specific soft skills identified as important for the twenty-first century, their rubrics, a categorization of these soft skills, and a model showing the interrelationships between the soft skills. These results are presented in Chap. 6.

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## Chapter 7

# The Final Twenty-First-Century Soft Skills Definitions and Rubrics, Categories, and Tree Model



This chapter presents the developed definitions and rubrics of the soft skills for the twenty-first century. First, the definition of the concept of soft skills itself is presented and the origin, structure, and purpose of the rubrics are explained in detail. Then, for each of the soft skills, a new definition and a rubric based on that definition are presented.

Rubrics are versatile tools that aid in the fair and effective assessment and development of skills and performance and are often used in educational and professional settings. Assessing soft skills is crucial for ensuring that individuals are well-equipped for the demands of modern workplaces and social environments. It aids in personal growth, professional development, and the overall effectiveness of teams and organizations.

In 2009, the VALUE rubrics (Association of American Colleges and Universities, 2009; Brookhart, 2013) were created, initially as a tool for assessing learning outcomes. They have gradually spread internationally and are used as a starting point for assessment in various fields. They are therefore also an inspiration for the assessment of the twenty-first-century soft skills.

Using a rubric to assess a skill provides a structured and transparent way to evaluate mastery levels. When considering how many manifestations and their levels to include in a rubric, it is essential to balance clarity, simplicity, and comprehensiveness. All rubrics for the soft skills for the twenty-first century have five dimensions and four levels of their manifestations. The dimensions of a soft skill are the thematic elements or components that constitute a particular soft skill. It is the breakdown of what that skill encompasses at its core. The levels of manifestation of a soft skill, named fundamental, competent, proficient, and excellent, represent the depth or degree to which those dimensions are exhibited. They act as a scale to evaluate on what level each dimension of the soft skill is manifested in a particular individual (and are therefore given in the third-person singular).

The following are revised definitions of the term soft skills and individual soft skills. The definitions of the individual soft skills are provided along with the rubric for that skill.

### Soft Skills Definition

*Soft skills* encompass a wide array of personal, interpersonal, and cognitive attributes, allowing individuals to effectively interact and navigate diverse situations. Transferable across jobs, they are vital for both personal growth and performance in professional settings, complementing hard skills. Soft skills are developed through experiences, reflection, and ongoing learning. Soft skills are relevant to individuals of all ages, genders, and cultural backgrounds.

### Active Listening

Definition: Active listening lies in fully concentrating on, understanding, responding to, and remembering what someone else is saying. It is a participatory form of listening where the listener seeks to comprehend the speaker's message, asks pertinent questions, and provides feedback, ensuring genuine two-way communication.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Concentration and attention	Occasionally struggles to give full attention to speakers and is easily distracted	Usually maintains focus on the speaker but occasionally becomes distracted	Consistently concentrates on what the speaker is saying without getting sidetracked	Always remains fully engaged, effectively blocking out distractions and immersing in the conversation
Understanding and interpretation	Often needs repetition or clarification to understand the speaker's points	Understands the main ideas but may miss some details or nuances	Routinely grasps both main points and subtleties, demonstrating a comprehensive understanding	Always perceives the depth, nuances, and emotions behind the words, ensuring complete comprehension
Feedback and response	Occasionally provides feedback but it might not always be relevant or appropriate	Offers feedback that indicates a general understanding but may occasionally miss the mark	Consistently provides insightful feedback that shows a deep understanding of the speaker's message	Always responds with thoughtful, constructive feedback that adds value and fosters deeper communication
Questioning	Rarely asks questions or may ask ones that are off-topic	Asks basic questions that pertain to the conversation but may not probe deeper	Usually poses questions that enhance understanding and drive the conversation forward	Masterfully uses questions to steer, enrich, and deepen the dialogue, ensuring clarity and mutual understanding
Recollection and memory	Often forgets details or main points of conversations	Remembers main ideas but may forget some specifics over time	Typically recalls important details and the essence of conversations	Demonstrates impeccable memory, recalling even minute details and nuances from past conversations

**Adaptability**

Definition: Adaptability consists of quick and effective orientation in new conditions and situations, followed by adjustment to new circumstances, changes, and challenges. It encompasses openness, a willingness to learn, overcoming obstacles, seizing new opportunities, and discovering innovative solutions, all while maintaining a positive outlook.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Quick orientation	Understands new conditions but requires guidance to navigate through them	Navigates through common new situations with minimal assistance	Adjusts to various new conditions independently, with occasional challenges in complex scenarios	Effortlessly adapts to a wide array of new situations, even highly complex ones, with ease
Adjustment to changes	Willingly adjusts to changes but may lack strategic approach	Adapts to familiar changes effectively but may struggle with unforeseen alterations	Exhibits strategic adjustments to diverse changes, slightly challenged by sporadic, rapid alterations	Expertly adjusts to any change, demonstrating strategic flexibility and foresight
Continuous learning and application	Open to learning but struggles with practical application of new knowledge	Actively learns and applies new knowledge in familiar contexts	Seamlessly learns and integrates new knowledge in various situations	Consistently embodies a learning mindset, integrating and applying new insights across all contexts
Opportunity utilization and innovation	Recognizes straightforward opportunities and tries standard approaches to utilize them	Identifies and capitalizes on clear opportunities, displaying flashes of innovative thinking	Perceives and adeptly exploits opportunities, often through innovative means	Proactively creates opportunities, maximizing their potential in varied contexts, and pioneers innovation
Maintaining positivity	Keeps a positive outlook in stable and predictable conditions	Maintains positivity in general circumstances but may waver under unexpected challenges	Upholds a positive outlook in various situations, only shaken by intense challenges	Exemplifies unwavering positivity and constructive approach even in the most adverse conditions

**Collaboration**

Definition: Collaboration involves creating value by a group of individuals across various functions, while maintaining their separate identities. Significant for collaboration is the willingness to engage and contribute with one’s knowledge and skills; accepting and utilizing diversity; recognizing and appreciating the skills, expertise,

and contribution of all participants; supporting mutual learning; and effective integration of technologies into human integrations.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Engagement and contribution	Participates in collaborative efforts but may not fully utilize personal knowledge and skills	Engages actively, contributing knowledge and skills regularly but may struggle in more challenging collaborative contexts	Consistently engages and contributes effectively, leveraging personal expertise in various collaborative scenarios	Proactively enhances collaborative efforts through exceptional engagement and strategic contribution of expertise
Appreciation and utilization of diversity	Acknowledges diversity but may struggle to fully embrace or utilize it	Appreciates and occasionally leverages diverse perspectives and skills, sometimes overlooking valuable insights	Usually appreciates and leverages diversity, integrating varied insights and skills into collaborative efforts	Actively seeks, appreciates, and ingeniously leverages diversity, consistently enhancing collaboration through varied perspectives and skills
Valuation and optimization of collaborative inputs	Recognizes contributions but may not always express appreciation or utilize them effectively	Usually acknowledges and utilizes contributions, sometimes missing opportunities to fully leverage them	Consistently recognizes and effectively utilizes contributions, ensuring they enhance collaborative efforts	Consistently recognizes and effectively utilizes contributions, ensuring they enhance collaborative efforts
Support for mutual learning	Participates in learning opportunities but may not actively support mutual learning among collaborators	Supports mutual learning but may struggle to facilitate it in challenging or complex scenarios	Consistently supports and often facilitates mutual learning, ensuring knowledge transfer across various contexts	Actively fosters a culture of mutual learning, ingeniously facilitating knowledge transfer and skill development in all collaborative contexts
Integration of technologies in human interactions	Understands the role of technology but may struggle to integrate it effectively into collaborative efforts	Integrates technology into collaboration in straightforward contexts, facing challenges in more complex scenarios	Effectively integrates technology, ensuring it enhances collaboration across varied contexts and challenges	Masterfully integrates technology, optimizing its utility to enhance, innovate, and streamline all aspects of collaboration

**Communication**

Definition: Communication consists of the mutual transfer of information, knowledge, and ideas. It encompasses various modes of expression, especially oral and written, both synchronously and asynchronously. Oral communication can occur face to face or virtually, while written communication can manifest in the form of pen and paper or electronically. To ensure effective communication on the part of the communicator, it is necessary to determine the communication’s goal, analyze the audience, and compose a corresponding message. Additionally, the communicator must exert effort to receive and comprehend the message.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Goal-oriented messaging	Understands the importance of goal alignment in communication but may lack precision and consistency	Usually communicates with a clear goal, though may face challenges in complex scenarios	Consistently ensures communication is goal-oriented, aligning messages effectively with intended outcomes	Seamlessly ensures every communication is sharply goal-oriented, optimizing alignment and impact in all scenarios
Audience analysis and message tailoring	Demonstrates initial understanding and attempts at tailoring messages to the audience	Frequently adapts messages according to audience, yet may lack depth or foresight in adaptations	Habitually aligns messages with a deep understanding of audience needs, ensuring clarity and engagement	Masterfully tailors messages, navigating complexity and diversity in audience needs, maximizing clarity and impact
Strategic communication decision-making	Recognizes the distinction between virtual and in-person communication but may not consistently make strategic choices	Often chooses suitable modes of communication (virtual/in-person) but may not always align with strategic needs	Usually makes strategic choices regarding the mode of communication, ensuring alignment with situational needs	Consistently and strategically chooses the optimal mode of communication (virtual/in-person), maximizing efficacy and alignment with situational demands
Expressive versatility	Engages in various forms of communication with varying levels of comfort and effectiveness	Navigates through different communication modes capably but may face challenges in certain contexts	Demonstrates versatile expressive capabilities, ensuring clear and engaging communication across modes	Exhibits masterful versatility, optimizing expressiveness across all communication modes and ensuring exceptional clarity and engagement

(continued)

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Receptive communication and insightful feedback	Actively receives messages but may struggle with providing insightful feedback	Engages in carefully listening and provides constructive feedback but may occasionally miss nuanced understanding	Consistently ensures comprehensive understanding through careful listening and provides valuable feedback	Masterfully receives messages, ensuring nuanced understanding and providing exceptionally insightful feedback, enriching communication dynamics

### Complexity Management

Definition: Complexity management involves navigating intricate systems, multifaceted challenges, or dense information, identifying the underlying patterns, interrelations, and dynamics to derive meaningful insights and develop effective strategies.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Navigation and orientation	Struggles to find their way through complex scenarios and often feels overwhelmed	Manages to navigate through complexity but might take longer routes or miss some elements	Efficiently navigates and understands multifaceted challenges, recognizing key elements	Seamlessly moves through intricate systems, always knowing where they are and what they need to focus on
Pattern recognition	Finds it challenging to spot patterns and may miss recurring themes	Identifies some patterns but might miss subtler ones or their significance	Regularly detects underlying patterns and can predict certain outcomes based on them	Always perceives even the most hidden patterns, understanding their intricate implications and significance
Interrelation analysis	Struggles to see how elements are connected, often viewing them in isolation	Recognizes some connections but may not fully grasp the broader system of relations	Understands the interplay between various elements, using it to gain deeper insights	Always discerns the complex web of interrelations, leveraging this understanding to make informed decisions

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Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Dynamic interpretation	Gets easily swayed by shifting dynamics, often feeling lost or surprised	Notes changing dynamics but might be a step behind in reacting to them	Keeps up with and interprets changing dynamics, adjusting strategies accordingly	Anticipates and adeptly navigates dynamic shifts, always staying ahead of the curve
Strategy formulation	Struggles to develop strategies in complex scenarios, often resorting to generic solutions	Creates strategies that address some facets but might miss others	Regularly devises effective strategies that take into account multiple facets of the problem	Always crafts impeccable strategies, leveraging deep insights to address all complexities involved

**Conflict Resolution**

Definition: Conflict resolution entails resolving disagreements and reaching a consensus. This process involves identifying the root causes of conflict, seeking and evaluating various options for resolution, and actively working toward a solution. It necessitates acting as a mediator between conflicting parties to facilitate communication and promote understanding. It requires approaching problems from multiple perspectives, as well as acknowledging and respecting diverse views, to forge constructive solutions.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Identification of root causes	Can identify surface-level causes and obvious issues	Able to delve deeper into underlying issues, occasionally overlooks less apparent causes	Frequently identifies subtle and indirect causes, linking them to the conflict	Masterfully identifies all relevant root causes, including those embedded in systemic or cultural contexts
Evaluation of resolution options	Considers a few straightforward options, typically those immediately apparent	Analyzes several options and considers their immediate implications	Weighs numerous options, considering both immediate and long-term consequences	Exhaustively explores and evaluates all available options, integrating a complex understanding of long-term impacts and secondary effects

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Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Mediation and facilitation	Understands the primary role of a mediator and attempts to facilitate discussions	Actively facilitates communication and mediates with a basic application of conflict resolution theories	Successfully mediates by applying conflict resolution strategies effectively in varied situations	Artfully mediates even in highly complex or escalated scenarios, applying a profound understanding of advanced conflict resolution theories and models
Approach to diverse perspectives	Acknowledges different perspectives but struggles with integrating them into the resolution process	Considers multiple perspectives in solution finding, sometimes overlooking nuanced views	Integrates diverse perspectives into the resolution, occasionally missing subtle aspects	Seamlessly and fully integrates a multitude of perspectives, appreciating and utilizing the richness of diversity in forming solutions
Promotion of understanding and consensus building	Encourages open communication but struggles to guide parties toward mutual understanding	Facilitates understanding among parties and attempts to build consensus, sometimes rushing the process	Consistently promotes understanding and strategically guides parties toward consensus, considering various viewpoints	Masterfully navigates discussions to promote deep understanding, skillfully building consensus while honoring the diversity of opinions

### **Coping with Uncertainty, Ambiguity, and Risk**

Definition: Coping with uncertainty, ambiguity, and risk involves dealing with situations where outcomes are particularly uncertain or unknown, input information is incomplete, or there is a significant degree of risk involved. It requires making decisions and taking actions even when there is a lack of clear information or when multiple possible outcomes exist. Coping with uncertainty, ambiguity, and risk necessitates an innovative approach sound judgment, assessing probabilities, and willingness to take calculated risks.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Risk assessment and management	Demonstrates awareness of risks but may struggle with systematic assessment and management	Routinely assesses and manages risks but may lack consistency in high-stakes scenarios	Systematically identifies, assesses, and manages risks with consistent performance across scenarios	Exhibits mastery in strategic risk management, ensuring optimal decisions across various contexts and scales
Decision-making under uncertainty	Takes decisions under uncertainty but may not always evaluate all available options	Demonstrates capability to make informed decisions, albeit with occasional lapses under significant uncertainty	Consistently makes well-versed decisions under uncertainty, aligning with overarching goals	Masterfully navigates decision-making under substantial uncertainty, ensuring robust, goal-aligned choices
Navigating ambiguity	Operates under ambiguity but may struggle with maintaining strategic direction	Navigates through ambiguous situations with some strategic alignment but may falter in complex scenarios	Skillfully navigates ambiguity, maintaining strategic alignment and ensuring progress	Expertly steers through ambiguity, leveraging it to enhance strategic development and innovation
Innovative approach in uncertainty	Demonstrates openness to innovation but may struggle to implement novel approaches under uncertainty	Engages in innovative approaches with occasional successes in uncertain situations	Consistently leverages innovative approaches under uncertainty, frequently realizing positive outcomes	Masterfully employs innovative approaches in uncertain contexts, optimizing outcomes and pioneering advancements
Sound judgment amidst vagueness	Displays elementary sound judgment but may be swayed by external factors amidst vagueness	Demonstrates sound judgment, albeit with occasional influence from external vagueness	Consistently exhibits sound judgment, effectively mitigating the impact of external vagueness	Expertly applies incisive judgment amidst pervasive vagueness, optimizing decision-making through insightful discernment and strategic thinking

**Creativity**

Definition: Creativity lies in thinking unconventionally, questioning established assumptions, and generating original ideas and solutions. It involves the capacity to transcend conventional boundaries and connect seemingly unrelated concepts. It

entails approaching challenges with originality, embracing ambiguity, and seeing failure as an integral part of the learning process. It requires ongoing self-reflection and critical analysis of situations to refine and fix creative ideas for their practical application.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Inventive ideation	Sometimes formulates original ideas but remains largely within conventional boundaries	Frequently conjures original ideas, occasionally pushing against traditional boundaries	Habitually creates innovative ideas, consistently challenging and extending beyond conventional boundaries	Innovates incessantly, redefining boundaries with a perpetual flow of revolutionary ideas
Divergent conceptual blending	Identifies distinct concepts but struggles to merge them innovatively	Combines disparate concepts to create novel ideas with some innovative outcomes	Skillfully fuses unrelated concepts, crafting innovative and functionally connected ideas	Ingenuously blends disparate concepts, forging profoundly innovative and symbiotic connections
Constructive ambiguity utilization	Recognizes ambiguity but may find it challenging to turn into a creative advantage	Utilizes ambiguity to foster creativity but might struggle in highly uncertain situations	Harnesses ambiguity effectively, systematically translating it into creative fuel	Orchestrates ambiguity masterfully, transforming it into a powerhouse for creative breakthroughs
Resilient creative perseverance	Appreciates the importance of perseverance but may struggle to apply learnings from setbacks	Demonstrates resilient creative efforts and begins incorporating lessons from setbacks	Consistently exemplifies resilient creativity, ensuring that setbacks substantially inform subsequent efforts	Epitomizes resilient creative perseverance, converting every setback into a steppingstone for innovative leaps
Reflective creative refinement	Engages in reflection and analysis but may not substantially refine creative ideas	Usually refines creative ideas through reflection and analysis but may lack depth in refinement	Systematically refines creative ideas through deep reflective analysis, enhancing their practical application	Meticulously refines creative ideas through incisive reflection and analysis, achieving unparalleled practical application

### Critical Thinking

Definition: Critical thinking is a systematic approach to comprehending information and forming well-considered judgments. It involves a thorough examination of available evidence and facts, as well as consideration of alternative viewpoints and

perspectives. It entails breaking down complex information and scrutinizing the relationships between various elements within that information, identifying patterns, connections, and underlying concepts, leading to a deeper comprehension of the subject matter. It also involves examining motives, thought processes, the formation of opinions, and decision-making tendencies to avoid cognitive biases.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Evidence-based reasoning	Recognizes the importance of evidence but may rely on superficial or unverified sources	Frequently consults credible sources and integrates evidence into judgments, with occasional oversights	Consistently and thoroughly examines evidence from reliable sources, ensuring well-informed judgments	Masterfully synthesizes evidence from diverse, credible sources, forming nuanced and deeply informed judgments
Perspective diversification	Acknowledges alternative viewpoints but may not actively seek or integrate them	Usually considers multiple viewpoints, though might struggle with highly contrasting perspectives	Habitually integrates diverse perspectives into analyses, enhancing the depth and breadth of judgments	Expertly navigates and synthesizes a multitude of perspectives, leading to holistic and encompassing judgments
Analytical decomposition	Attempts to break down information but may struggle with complexity	Successfully decomposes most information, identifying patterns and connections in familiar scenarios	Skillfully deconstructs complex information, revealing intricate patterns, connections, and underlying concepts	Seamlessly dissects and navigates the intricacies of any given information, uncovering profound insights
Bias identification and mitigation	Recognizes common biases but may not consistently identify or mitigate them in personal thinking	Frequently identifies biases and makes efforts to counteract them, with occasional lapses	Systematically identifies and actively mitigates cognitive biases, ensuring objective analysis	Demonstrates an innate ability to pinpoint and neutralize even subtle biases, guaranteeing pristine objectivity in thought
Conceptual synthesis	Occasionally identifies underlying concepts but may not consistently integrate them into understanding	Regularly synthesizes key concepts, enhancing comprehension of familiar topics	Effectively amalgamates complex concepts, deepening comprehension and forming sophisticated insights	Masterfully intertwines diverse concepts, achieving unparalleled depths of understanding and innovative insights

### Cultural Intelligence

Definition: Cultural intelligence encompasses awareness, sensitivity, and adjustment to various cultures. It involves understanding cultural differences and their expressions, as well as versatility in diverse cultural contexts. It also includes respecting, recognizing, and tolerating diversity.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Cultural awareness	Acknowledges the existence of various cultures but has limited understanding of their nuances	Displays a foundational understanding of major cultural differences and practices	Demonstrates a deep understanding of diverse cultures, including subtleties and less prominent traditions	Possesses a profound and comprehensive understanding of a wide array of cultures, recognizing both overt and covert nuances
Cultural sensitivity	Avoids blatant cultural offenses but may inadvertently overlook subtler cultural norms	Usually recognizes and respects cultural norms, occasionally requiring guidance	Consistently operates with respect for diverse cultural norms, rarely making missteps	Consistently respects even the subtlest of cultural norms and expectations
Cultural versatility	Operates comfortably within familiar cultural contexts but struggles in unfamiliar settings	Adapts to major cultural differences but might struggle with subtle distinctions	Seamlessly transitions between diverse cultural contexts, recognizing and adjusting to both major and minor differences	Thrives in any cultural setting, effortlessly adapting to even the most nuanced cultural variances
Diversity respect	Shows basic respect for overt cultural differences but may not fully tolerate deeper diversities	Usually shows respect for cultural diversity and exhibits a growing tolerance for diverse expressions	Demonstrates consistent respect and tolerance for all facets of cultural diversity, from the overt to the subtle	Embodies profound respect and unwavering tolerance for all aspects of cultural diversity, valuing the richness it brings
Constructive integration	Occasionally integrates cultural understanding into interactions	Usually attempts to integrate cultural knowledge into interactions, with some missed opportunities	Consistently integrates cultural insights into interactions, enhancing understanding and collaboration	Masterfully integrates diverse cultural understandings, fostering enriched, informed, and harmonious interactions

**Digital Literacy**

Definition: Digital literacy (as a soft skill) entails the aptitude to swiftly assimilate and embrace emerging digital technologies, while also responsibly overseeing personal data, practicing cybersecurity vigilance, and demonstrating ethical behavior as a conscientious participant in the digital sphere.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Adaptive technological engagement	Has a foundational understanding of prevalent digital tools and technologies but may struggle with newer innovations	Usually adopts mainstream digital tools, occasionally experimenting with emerging technologies	Swiftly learns and integrates new technologies into daily routines and responsibilities	Continuously on the frontier of digital innovations, effortlessly assimilating the latest technologies, and predicting their implications
Data responsibility	Recognizes the importance of personal data but may not consistently manage it securely	Regularly backs up and organizes personal data, being cautious about sharing it openly	Implements advanced measures to protect personal data and is discerning about where and when to share	Has an expert understanding of data management, always maintaining the utmost security and being selective in data-sharing decisions
Cybersecurity vigilance	Knows fundamental cybersecurity principles but may not always follow best practices	Usually employs basic cybersecurity measures like strong passwords and two-factor authentication	Adopts a multi-faceted approach to cybersecurity, staying informed about the latest threats and countermeasures	Leads in cybersecurity practices, both in personal endeavors and in guiding others, with an always updated knowledge of potential vulnerabilities
Ethical digital behavior	Avoids overtly harmful digital behaviors but may be unaware of more nuanced ethical considerations	Usually acts ethically in digital contexts, occasionally seeking guidance on complex issues	Consistently behaves ethically online, recognizing and navigating even subtle ethical dilemmas	Is a paragon of ethical behavior in the digital sphere, setting standards, and guiding others in ethical considerations

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Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Digital community contribution	Engages in digital spaces primarily as a consumer or passive participant	Occasionally contributes to digital communities or discussions, sharing insights or resources	Regularly contributes positively to digital spaces, fostering community growth and encouraging responsible behavior	Recognized as a thought leader or key contributor in digital communities, setting trends and advocating for positive digital societal impacts

### Emotional Intelligence

Definition: Emotional intelligence lies in discerning and managing one's own emotions and the emotions of others. It involves recognizing and understanding emotional nuances, using emotions to facilitate various cognitive processes, and regulating personal emotions to achieve personal growth and interpersonal harmony. It facilitates navigating social complexities and making informed decisions in emotionally challenging situations.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Emotional discernment	Recognizes basic emotions in oneself and others but may struggle with subtleties	Identifies a broad range of emotions and begins to understand their nuances in various contexts	Deeply comprehends intricate emotional nuances, anticipating potential emotional triggers	Masterfully discerns even the most subtle emotional undercurrents in diverse scenarios
Emotion-driven cognition	Occasionally utilizes emotions to inform thinking and decision-making	Usually taps into emotions to facilitate cognitive processes and problem-solving	Strategically channels emotions to enhance creativity, critical thinking, and decision-making	Expertly harnesses emotions as a driving force for high-level cognitive functions and innovative solutions
Emotional regulation	Understands the need for emotional balance but may struggle in emotionally charged situations	Manages personal emotions in most scenarios, seeking balance and emotional well-being	Demonstrates consistent emotional balance, even under significant emotional distress	Masterfully modulates emotions, turning potential emotional upheavals into growth opportunities

(continued)

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Interpersonal harmony	Occasionally uses emotional insights to navigate social situations	Usually employs emotional insights to foster harmonious interpersonal relationships	Consistently ensures interpersonal harmony by tactfully navigating social complexities	Sets a gold standard in maintaining interpersonal harmony, turning potential conflicts into bonding moments
Informed emotional decision-making	Recognizes the role of emotions in decision-making but may not always incorporate them	Considers emotions in decisions, especially in challenging situations	Systematically integrates emotional insights into the decision-making process	Expertly merges emotional understanding with logic, ensuring optimal decisions even in the most emotionally charged situations

**Empathy**

Definition: Empathy involves deeply connecting with another’s emotions and perspective, enabling a genuine understanding of their feelings and experiences without judgment. It entails the intrinsic capacity to emotionally resonate with others, providing comfort and support during challenging moments. It fosters authentic interpersonal relationships and compassionate actions.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Emotional resonance	Occasionally identifies with others’ feelings but may not fully grasp their depth	Usually resonates emotionally with others, understanding their sentiments at a surface level	Consistently tunes in to others’ emotions, deeply experiencing their highs and lows	Exemplifies a profound emotional connection, virtually feeling the emotions of others as one’s own
Perspective understanding	Attempts to understand others’ viewpoints but may project personal biases	Often sees situations from others’ perspectives, reducing personal judgments	Routinely grasps the worldview of others, approaching situations with an open heart and mind	Masterfully dives into the minds of others, effortlessly adopting their viewpoints and understanding their motivations

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Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Compassionate support	Offers support during challenging moments but may not always relate emotionally	Usually provides comfort, drawing from personal emotional experiences	Naturally offers solace and comfort, deeply connecting with the emotional needs of others	Serves as an unwavering pillar of support, always providing heartfelt consolation and encouragement
Authentic relationship building	Engages in relationships with a surface-level emotional connection	Builds relationships with a growing depth of emotional understanding	Fosters deep and meaningful relationships, prioritizing emotional bonding and trust	Embodies the essence of genuine relationships, forming connections that transcend the ordinary
Non-judgmental recognition	Attempts to approach situations without judgment but may occasionally falter	Frequently recognizes others' emotions without casting judgments	Consistently approaches emotional situations with a non-judgmental stance, offering acceptance	Always offers a sanctuary of understanding, where others can express emotions freely without fear of judgment

**Ethics**

Definition: Ethics encompasses internalized principles and moral codes that guide an individual's behavior and decisions, promoting fairness, honesty, and integrity. It manifests as consistently acting in a manner that upholds personal and societal values, even in challenging situations.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Principle adherence	Demonstrates a rudimentary understanding of ethical principles	Acts according to recognized ethical standards in common situations	Upholds ethical principles even when challenged or pressured	Champions ethics, often guiding and influencing others to uphold high ethical standards
Fairness and integrity	Recognizes the importance of fairness in day-to-day interactions	Makes decisions that reflect an equitable approach, balancing personal interest with broader implications	Demonstrates unwavering integrity in decision-making, even if it means personal disadvantage	Inspires and holds others accountable for maintaining fairness and integrity

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Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Value consistency	Has a basic awareness of personal and societal values	Consistently acts in ways that reflect personal values and societal norms	Prioritizes and upholds values even when they conflict with personal desires or societal pressures	Is a role model in demonstrating how values guide behavior and decisions
Moral choices	Can differentiate between right and wrong in straightforward situations	Consistently makes decisions based on a recognized moral code in everyday scenarios	Navigates and evaluates complex ethical issues, making morally sound choices in nuanced situations	Actively engages in, leads, and shapes moral discussions, guiding others in their moral decisions
Ethical resilience	Shows hesitation when facing ethical dilemmas	Stands firm in upholding ethical standards in minor challenges	Maintains ethical behavior even in complex, high-pressure situations	Demonstrates an unwavering commitment to ethics, acting as a pillar of strength and guidance in the most challenging situations

**Exploratory Thinking**

Definition: Exploratory thinking involves an eager pursuit of knowledge beyond the known, driven by curiosity and a desire to uncover new insights or principles. It is characterized by questioning, probing, and investigating unfamiliar terrains, subjects, or concepts, leading to broader horizons and enriched understanding.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Curiosity drive	Shows interest in new information or experiences within familiar contexts	Actively seeks out new knowledge and experiences in broader areas of interest	Delves deep into unfamiliar subjects or terrains, driven by an intrinsic desire to learn	Continuously pushes boundaries in the quest for novel insights, inspiring others with their relentless curiosity
Questioning ability	Asks basic questions to clarify understanding	Usually poses questions that delve deeper into subjects, going beyond surface-level understanding	Formulates insightful and challenging questions that drive exploration into uncharted territories	Masters the art of questioning, fostering a culture of inquiry that promotes deeper exploration

(continued)

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Investigative techniques	Utilizes straightforward methods to gather and analyze information	Employs a range of techniques to investigate and comprehend new topics	Adopts innovative techniques to probe and explore complex subjects or terrains	Pioneers new investigative methodologies, setting standards for comprehensive exploration
Broadening perspective	Expands knowledge within familiar domains	Steps outside comfort zones to gain diverse perspectives in known fields	Consistently immerses in diverse disciplines or cultures, significantly broadening horizons	Seamlessly integrates a vast array of perspectives, achieving a holistic and enriched understanding of the world
Adaptive learning	Adjusts to new information in familiar contexts	Adapts learning approaches when encountering new subjects or terrains	Swiftly adapts to and integrates a plethora of new insights, even in challenging or rapidly changing scenarios	Champions adaptive learning, constantly refining methods, and mentoring others in dynamic exploration techniques

### Flexibility

Definition: Flexibility lies in promptly adjusting to dynamic changes. It encompasses a readiness to assume different roles and responsibilities, and the ability to efficiently adjust priorities and timeframes to accomplish defined objectives. Flexibility enables managing unforeseen tasks or challenges with minimal stress, fosters personal growth, and facilitates the achievement of work-life balance.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Responsiveness to change	Acknowledges changes but struggles to modify actions or plans accordingly	Adjusts actions and plans to accommodate changes, occasionally facing difficulties with swift or major shifts	Adjusts fluidly to most changes, occasionally challenged by rapid or significant alterations	Seamlessly adjusts to all changes, swiftly modifying actions and plans even in the face of sudden or major shifts

(continued)

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Role and responsibility management	Accepts varied roles and responsibilities but struggles with execution	Manages distinct roles and responsibilities with occasional difficulties in balancing them	Effectively juggles various roles and responsibilities, slightly troubled by overlapping or conflicting demands	Masterfully assumes and manages diverse roles and responsibilities, even when they conflict or overlap
Priority and timeframe adjustment	Identifies the need for adjustment but struggles with implementation	Adjusts priorities and timeframes successfully in straightforward contexts	Adapts priorities and timeframes effectively in varied situations, occasionally facing difficulties in complex scenarios	Nimble adjusts priorities and timeframes across all contexts, ensuring optimal outcomes in complex situations
Managing unforeseen tasks or challenges	Engages with unforeseen tasks but often feels overwhelmed or stressed	Manages unexpected tasks with some efficiency, experiencing stress in more challenging situations	Handles unforeseen tasks and challenges with composure in most situations, slightly strained by particularly demanding scenarios	Tackles all unforeseen tasks and challenges with aplomb, maintaining composure even in the most demanding situations
Achieving work-life balance	Struggles to balance work and personal life, frequently feeling imbalanced	Achieves work-life balance in stable conditions but struggles when demands escalate	Maintains work-life balance in varied conditions, occasionally challenged by intense periods	Masterfully maintains work-life balance across all scenarios, optimizing well-being even during high-demand periods

**Grit**

Definition: Grit entails postponing immediate gratification in favor of pursuing long-term goals. It demands mental strength to overcome obstacles, learn from setbacks, and maintain a steadfast commitment to achieving those long-term objectives.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Resisting immediate incentives	Recognizes the value of long-term goals but often opts for immediate rewards	Occasionally postpones immediate rewards in favor of longer-term benefits, struggling at times when faced with strong immediate incentives	Usually prioritizes long-term objectives over immediate inducements, occasionally yielding to strong short-term incentives	Consistently prioritizes and pursues long-term goals, seldom if ever succumbing to immediate inducements
Mental strength amidst obstacles	Understands the need to overcome challenges but easily becomes discouraged	Pushes through common obstacles but may waver when faced with significant hurdles	Demonstrates strength in overcoming varied challenges, occasionally faltering with extremely demanding obstacles	Exemplifies unwavering mental strength, surmounting even the most daunting of challenges
Learning from setbacks	Recognizes setbacks but struggles to extract lessons from them	Often learns from setbacks, but might miss deeper insights or patterns	Consistently derives lessons from setbacks, occasionally overlooking intricate lessons	Masterfully learns from every setback, extracting even nuanced lessons and integrating them for future endeavors
Commitment to long-term objectives	Shows commitment to goals but can be easily sidetracked	Demonstrates a solid commitment to objectives, occasionally being diverted by distractions or alternative paths	Maintains a strong commitment to long-term objectives, occasionally reconsidering in the face of substantial challenges or new information	Embodies unwavering dedication to long-term objectives, resolutely pursuing them regardless of distractions or challenges
Sustained effort over time	Initiates efforts toward goals but may not maintain consistent effort over extended periods	Demonstrates a consistent effort in pursuit of objectives but may occasionally lose momentum	Maintains a strong and consistent drive in most long-term endeavors, rarely experiencing dips in motivation	Exhibits unwavering drive, dedicating consistent effort and energy to objectives regardless of the length or difficulty of the journey

### Growth Mindset

Definition: Growth mindset represents the belief in the potential for continuous learning, development, and improvement. It lies in viewing challenges as opportunities for growth, believing that abilities can be cultivated through effort and perseverance, and embracing feedback as a tool for personal enhancement.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Perception of learning opportunities	Recognizes the potential benefits of new situations but may not always actively pursue them	Sees most new situations as chances to learn but sometimes sticks to comfort zones	Usually identifies and pursues learning opportunities from different situations	Always turns new experiences into platforms for learning and encourages others to do the same
Belief in effort	Understands the value of effort but may lack consistent application	Usually puts in effort to overcome obstacles and enhance abilities	Holds a steadfast belief that persistent effort is key to mastery and acts upon this belief	Embodies the principle that effort transcends talent, motivating others to exert consistent effort in their pursuits
Feedback reception	Accepts feedback but may occasionally become defensive	Actively seeks feedback and typically uses it for self-improvement	Embraces feedback as a continual learning tool, consistently applying insights for personal betterment	Cultivates a culture where feedback is treasured, leading by example in its application for personal and team growth
Belief in ability development	Acknowledges that abilities can develop but may have reservations about personal potential	Believes in and demonstrates the growth of specific abilities with guided effort	Firmly believes and showcases that any ability can be cultivated with dedication and strategic practice	Becomes a beacon of the growth mindset principle, mentoring others in harnessing their untapped potential
Continuous improvement orientation	Understands the principle of improvement and occasionally reflects on personal growth	Regularly sets goals for self-betterment and works toward them with commitment	Lives by the mantra of continuous improvement, always looking for avenues to develop further	Sets the gold standard for self-enhancement, creating ripple effects of growth and improvement in the community

## Leadership

Definition: Leadership represents the act of inspiring and guiding individuals or groups toward achieving shared goals. It involves setting a clear vision, modeling desired behaviors, empowering others, and fostering a culture of mutual respect and collaboration.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Inspirational vision	Can articulate a basic goal but struggles to inspire others with a broader vision	Sets clear objectives and can sometimes convey a compelling vision that resonates with some	Consistently paints a clear and motivating vision, often inspiring others to join the journey	Has an infectious vision that captivates, energizes, and aligns entire teams or organizations
Behavioral modeling	Occasionally demonstrates desired behaviors but lacks consistency	Often acts as a role model in key situations but may miss some opportunities to lead by example	Regularly exemplifies desired behaviors, setting a consistent example for others	Always personifies the gold standard of behavior, influencing others to elevate their actions
Empowerment of others	Understands the importance of delegation but may be hesitant or inconsistent in empowering others	Delegates tasks effectively, occasionally providing opportunities for others to grow and lead	Consistently empowers team members, fostering their growth, autonomy, and leadership skills	Masterfully elevates others, cultivating a culture where everyone feels empowered and valued
Collaborative culture	Recognizes the importance of collaboration but may not always foster a collaborative environment	Often promotes teamwork and respect but can struggle in challenging team dynamics	Regularly nurtures a culture of mutual respect and collaboration, addressing any team conflicts efficiently	Always fosters a thriving culture of collaboration, where every voice is valued, and synergy is evident
Goal achievement	Sets general goals with occasional follow through	Often sets and meets goals, but occasionally lacks in execution or alignment with the broader vision	Consistently sets and achieves goals that align with the vision, guiding the team toward success	Expertly navigates toward goal completion, ensuring alignment with the vision and maximizing team potential

**Negotiating**

Definition: Negotiating lies in reaching mutual agreements through dialogue and discussing and adjusting positions in pursuit of a shared outcome. It encompasses understanding varying perspectives, leveraging persuasion, and employing strategic tactics to achieve beneficial terms for all involved.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Viewpoint appreciation	Rarely appreciates the viewpoint of others during negotiations	Occasionally understands different viewpoints but might not always consider them	Usually understands and considers varying perspectives, leading to more informed discussions	Always grasps and deeply empathizes with different perspectives, ensuring all parties feel understood
Strategic Persuasion	Relies on basic persuasion tactics, often resorting to repetition	Employs a moderate range of persuasion strategies, tailoring approaches based on the situation	Demonstrates a strong repertoire of persuasion techniques, adapting to various negotiation contexts	Masterfully leverages an extensive array of persuasion techniques, effectively swaying discussions while maintaining respect
Tactical employment	Has limited knowledge of negotiation tactics or when to use them	Uses some negotiation tactics but not always appropriately or effectively	Regularly employs effective negotiation tactics, enhancing the quality of discussions	Strategically selects and employs advanced tactics, ensuring optimal outcomes for all parties
Adjustment and flexibility	Struggles to adjust positions or approaches during negotiations	Shows some flexibility, adjusting when provided with clear rationales or incentives	Demonstrates good flexibility and regularly adjusts positions based on the flow of discussion and emerging insights	Seamlessly adjusts and recalibrates strategies as required, ensuring the negotiation process remains fluid and productive
Collaborative outcome focus	Focuses primarily on personal gains in negotiations	Strives for mutual benefits but may occasionally prioritize personal interests	Often aims for win-win outcomes, valuing the benefits to all involved	Consistently and strategically drives for shared benefits, ensuring all parties find value

### Positive Attitude Toward Challenges and Problems

Definition: Positive attitude toward challenges and problems entails viewing difficulties not as setbacks but as opportunities for growth, learning, or innovation. It encompasses optimism, resilience, and the belief that solutions can be found with the right mindset and approach.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Challenge perception	Often sees challenges as hindrances, with a tendency to avoid or delay	Recognizes challenges but may still see them as problematic. Shows glimpses of positive outlook	Usually identifies challenges as opportunities, maintaining a generally constructive viewpoint	Unfailingly perceives challenges as beneficial, welcoming them with enthusiasm and assurance
Optimistic outlook	Struggles with maintaining a positive view during difficulties	Occasionally manages to keep an optimistic outlook in the face of adversity but can be inconsistent	Often remains upbeat and optimistic even when confronted with significant hurdles	Constantly maintains a sunny disposition and inspires others through optimism
Embracing growth	Primarily focused on overcoming the immediate challenge rather than seeing its potential for growth	Starts to perceive the growth opportunities in some challenges, though not consistently	Regularly leverages challenges as growth opportunities, reflecting on them constructively	Always uses challenges as platforms for personal and professional evolution, encouraging others to do so
Solution-driven approach	Frequently requires guidance to find solutions	Shows initiative in problem-solving, although might occasionally need assistance	Consistently derives solutions from challenges, relying on experience and intuition	Seamlessly finds innovative solutions and aids others in developing their problem-solving skills
Learning orientation	Tends to move on from challenges without much contemplation	Sometimes takes time to reflect on challenges and derive learnings	Frequently assesses challenges post-event to glean insights and improve for the future	Distills wisdom from challenges, ensuring continuous learning and sharing experiences with others

**Problem-Solving**

Definition: Problem-solving lies in identifying issues, analyzing their root causes, and methodically determining effective solutions. It encompasses critical analysis, innovative thinking, and a structured approach to break down challenges and arrive at efficient outcomes.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Issue identification	Occasionally recognizes issues but may miss subtler problems	Consistently identifies apparent problems but may overlook deeper underlying issues	Routinely discerns both obvious and underlying issues, drawing on observation and feedback	Has an innate knack for pinpointing problems, even those that are not immediately obvious, utilizing a comprehensive understanding of the context
Analytical thinking	Understands the surface of issues but struggles with deep analysis	Breaks down most issues effectively but can sometimes skip critical analysis	Regularly delves deep into issues, using a methodical approach to understand root causes	Demonstrates masterful analytical skills, ensuring a comprehensive understanding of any problem's breadth and depth
Innovative solutions	Often relies on conventional methods to solve problems	Occasionally thinks outside the box, resulting in unique solutions	Frequently crafts innovative solutions, blending traditional and novel approaches	Continually develops groundbreaking solutions, setting new benchmarks for problem-solving
Structured approach	Addresses problems in an ad-hoc manner, lacking consistent strategy	Usually follows a systematic approach but may deviate when faced with complex issues	Applies a consistently structured methodology to problems, ensuring thoroughness and clarity	Implements a faultless structured approach, even in the most complex scenarios, often serving as a template for others
Outcome efficiency	Achieves solutions, but they might not always be the most efficient	More often than not, arrives at efficient solutions but occasionally might miss the optimal route	Regularly crafts efficient outcomes, optimizing resources and time	Always ensures the highest level of efficiency in solutions, maximizing effectiveness while minimizing waste of sources

## Resilience

Definition: Resilience represents an innate capacity to bounce back from adversities, setbacks, or hardships, maintaining an unwavering spirit and optimism. It encompasses endurance through challenges, acceptance of change, and emerging stronger from experiences.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Recovery from setbacks	Struggles with recovering from minor setbacks; often requires external support or intervention	Recovers from minor setbacks with some effort; occasionally needs guidance or support for major setbacks	Demonstrates a consistent ability to recover from a wide range of setbacks independently	Bounces back from any setback rapidly, often emerging stronger and with a clear plan for moving forward
Positive perspective	Maintains a neutral or sometimes pessimistic perspective; needs reminders of potential positives	Often sees the brighter side of situations but can occasionally be swayed by negative circumstances	Consistently maintains a positive outlook, even when faced with challenges	Unwaveringly optimistic, always searching for and finding the silver lining, even in the toughest situations
Endurance through challenges	Struggles with persistent effort during prolonged challenges; needs frequent motivation	Persists through some challenges but might waver as complications increase	Demonstrates endurance through many challenges, driven by inner determination	Faces prolonged challenges head-on, showing unwavering commitment and determination
Strength in adversity	May falter or show hesitation when confronted with challenges, needing external support to persist	Demonstrates some ability to persevere through minor challenges but may waver during larger obstacles	Shows consistent strength in the face of most adversities, drawing on past experiences and lessons to overcome challenges	Demonstrates unwavering strength, facing any adversity head-on and using every challenge as a stepping stone toward growth
Capacity for change	Finds changes unsettling and avoids them when possible	Accepts change only when necessary while preferring stability	Accepts change when it arises, viewing it as a part of life	Actively embraces change, seeing it as an opportunity for growth and learning

**Self-Awareness**

Definition: Self-awareness lies in a profound introspection and recognition of one’s emotions, strengths, weaknesses, drives, and values. It encompasses understanding how one can be perceived by others.

Dimensions/Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Emotional recognition	Has basic knowledge of personal emotions but struggles to identify or express them accurately	Recognizes and describes a range of personal emotions but occasionally misinterprets them	Has a clear and nuanced understanding of personal emotions and how they influence behavior	Demonstrates a deep understanding of even subtle emotional responses and can predict them in various contexts
Personal strengths and weaknesses	Is vaguely aware of some strengths and weaknesses but may lack specifics or clarity	Can identify several personal strengths and weaknesses but might lack a comprehensive view	Clearly recognizes and can articulate a wide range of personal strengths and weaknesses	Possesses a profound understanding of strengths and weaknesses, often seeking feedback to further refine this understanding
Motivational drives	Has limited insight into what motivates or drives personal behavior	Understands some primary motivators but may not be aware of deeper or conflicting drives	Demonstrates a clear understanding of personal motivators, both obvious and nuanced	Has an intricate grasp of multi-faceted drives, even those that might be contradictory or complex
Values and beliefs	Possesses a rudimentary understanding of personal values but may not live by them consistently	Can articulate personal values and beliefs and usually acts in line with them	Lives in accordance with a well-defined set of values and beliefs, often reflecting upon them	Not only deeply understands and embodies personal values and beliefs but also actively explores and challenges them for personal growth
Perception by others	Rarely considers or is aware of how others might perceive them	Recognizes that others might see them differently but may lack a clear understanding of those perceptions	Regularly contemplates and often correctly predicts how others perceive them	Actively seeks feedback and possesses a comprehensive understanding of how they are perceived in diverse contexts and communities

**Self-Control**

Definition: Self-control involves governing one’s emotions, behaviors, and desires, especially in challenging or tempting situations, enabling decisions that are in line with long-term goals and values.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Emotional restraint	Occasionally manages to control immediate emotional reactions but can be overwhelmed by intense feelings	Often keeps emotions in check, especially in familiar situations, but may struggle when faced with unexpected challenges	Consistently manages and moderates emotional responses, even in unfamiliar or stressful situations	Demonstrates exceptional mastery over emotional reactions, maintaining composure even under extreme pressure
Behavioral regulation	Shows basic discipline in routine situations but can be easily swayed by external influences	Often resists temptations and avoids impulsive actions but might occasionally slip in high-pressure scenarios	Routinely demonstrates restraint in behaviors, making decisions that align with long-term objectives	Exhibits an unwavering ability to control behaviors, even in the face of strong temptations or provocations
Desire management	Recognizes some personal desires but may struggle to prioritize or delay gratification	Can occasionally delay gratification and prioritize long-term desires over immediate ones	Consistently evaluates and prioritizes desires based on long-term goals and values	Masterfully manages and redirects desires, always aligning them with overarching goals and principles
Decision alignment	Sometimes makes decisions based on immediate wants rather than long-term goals	Often considers long-term implications but may occasionally be swayed by short-term benefits	Routinely makes decisions that are congruent with long-term objectives and values	Demonstrates unwavering commitment to decisions that are in perfect alignment with long-term visions and ethical values
Resistance to external pressures	Can be easily influenced by peer pressure or societal norms, leading to deviations from personal goals	Usually stands firm against external pressures but can be influenced in particularly challenging situations	Consistently resists external pressures, ensuring actions and decisions are in line with personal beliefs	Is not only impervious to external influences but also inspires others to stay true to their values and goals

**Self-Motivation**

Definition: Self-motivation lies in an internal drive that propels an individual to set, pursue, and achieve objectives without the need for external reinforcement. It encompasses personal ambition, passion, and a vision for what is possible and desirable.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Internal drive	Demonstrates occasional bursts of motivation for specific interests or short-term goals	Often displays a sustained drive for familiar or personally interesting tasks without much external prompting	Consistently showcases a deep-seated drive, initiating and pursuing goals even in unfamiliar or less personally appealing contexts	Possesses an unwavering and unparalleled internal drive, always eager to push boundaries and venture into uncharted territories
Goal setting	Sets simple or short-term goals, occasionally needing guidance	Regularly sets and works toward personal and professional goals, though might benefit from occasional external guidance	Systematically sets, revisits, and refines both short-term and long-term objectives, ensuring alignment with broader visions	Expertly crafts a roadmap of comprehensive and ambitious goals, inspiring others with their vision and dedication
Passion pursuit	Shows enthusiasm for activities that align with immediate interests	Often channels passion into action, even if obstacles are present	Sustains passion over extended periods, utilizing it as fuel for persistent action and learning	Embodies boundless passion, continually seeking out and immersing in endeavors that align with personal and professional aspirations
Independence from external validation	Seeks frequent validation and encouragement to maintain motivation	Can work independently but appreciates occasional affirmation	Largely derives motivation from within, with minimal need for external praise or validation	Is completely self-reliant in sustaining motivation, rarely if ever requiring external validation, and often serving as a source of motivation for others

(continued)

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Visionary thinking	Occasionally visualizes future possibilities based on immediate interests	Often projects forward-thinking ideas and plans based on current goals and experiences	Regularly envisions a broad range of future scenarios, strategizing on how to bring them to fruition	Consistently exhibits visionary thinking, conceptualizing grand and transformative ideas, and creating pathways to achieve them

**Self-Regulation**

Definition: Self-regulation lies in the capacity to modulate one’s emotional responses, behaviors, and impulses, ensuring alignment with personal values and societal norms. It involves introspection, feedback assimilation, and continuous adaptation to maintain harmony and effectiveness.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Emotional alignment	Recognizes primary emotions and occasionally restrains overly strong reactions	Demonstrates consistent control over most emotional reactions, especially in familiar situations	Manages a wide range of emotions effectively, including in unexpected or high-pressure scenarios	Consistently achieves emotional mastery, ensuring that emotional responses always align with values and the current situation
Behavioral modulation	Occasionally adjusts behavior to align with societal norms or personal goals	Often refrains from impulsive actions, especially when reminded of values or consequences	Demonstrates consistent control over behaviors, aligning actions with personal values and societal expectations	Embodies behavioral excellence, always acting in alignment with deeply held values, even in the face of strong external pressures
Impulse control	Recognizes certain impulsive tendencies but struggles to consistently control them	Controls common impulses with occasional lapses, especially in high-stress situations	Demonstrates strong impulse control in a variety of situations, rarely acting without consideration	Exemplifies impeccable impulse control, even in the most tempting or challenging scenarios

(continued)

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Feedback integration	Accepts feedback but may not consistently act on it	Often acts on feedback to improve, though might need reminders or reinforcement	Regularly integrates feedback into actions and strategies for personal growth	Actively seeks out feedback, integrating it seamlessly into ongoing personal development strategies
Continuous evolution	Evolves behavior in response to major or recurring events, though may revert to old patterns over time	Regularly refines behaviors and responses based on new experiences or knowledge	Consistently and proactively tweaks behaviors, emotional responses, and strategies in light of evolving situations and insights	Is a paragon of continuous evolution, constantly transforming and redefining self in pursuit of harmony, effectiveness, and personal growth

**Teamwork**

Definition: Teamwork consists of the coordinated effort of a group of people who are aiming to achieve a common goal. Significant for teamwork is the awareness and perception of the importance of a common goal, understanding one’s own team role and the roles of other team members, understanding team dynamics, subordinating individual goals to team success, and also coordination with other team members, awareness of mutual dependency in the team, acceptance of shared responsibility, effective management of shared resources, active involvement, and support of a harmonious and synergistic atmosphere.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Awareness and valuation of common goals	Acknowledges common goals but may prioritize personal objectives	Understands and occasionally prioritizes common goals over individual ones	Consistently values and pursues common goals, rarely prioritizing personal objectives above them	Unwaveringly prioritizes common goals, fully integrating them into personal objectives and actions

(continued)

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Understanding roles and navigating team dynamics	Recognizes roles and basic team dynamics but struggles to navigate them effectively	Performs own role and navigates common dynamics, facing difficulties in more complex team scenarios	Successfully manages own role and understands others' roles, ensuring smooth team functionality in varied contexts	Elevates own role while deeply understanding and facilitating the roles of others, expertly navigating all team dynamics and contributing to optimal functionality
Coordination and mutual dependency	Acknowledges the need for coordination but may struggle to synchronize with the team	Coordinates effectively in straightforward contexts, occasionally struggling with complex team tasks or dependencies	Ensures tight coordination in varied contexts, maintaining team sync and addressing dependencies proficiently	Masterfully coordinates with the team in all contexts, ensuring seamless interaction and handling of dependencies, even in complex situations
Management of shared resources	Understands the concept of shared resources but may struggle to manage them effectively	Manages shared resources adequately in stable conditions	Effectively manages shared resources in most situations, occasionally challenged by resource scarcity	Exemplifies exceptional management of shared resources, ensuring optimal utilization even in scenarios of scarcity
Fostering a harmonious and synergistic atmosphere	Recognizes the importance of harmony but may struggle to contribute to a synergistic environment	Contributes to a harmonious atmosphere in stable conditions, with occasional difficulties in turbulent times	Usually fosters a harmonious atmosphere, navigating through team discord effectively	Consistently and proactively ensures a synergistic and harmonious team atmosphere, even navigating through the most challenging discord with adeptness

**Time Management**

Definition: Time management involves the strategic allocation and utilization of time to prioritize tasks, achieve objectives, and balance multiple responsibilities. It encompasses planning, setting goals, prioritizing tasks, and employing techniques that optimize productivity and efficiency.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Task prioritization	Recognizes and lists tasks but may struggle to effectively prioritize them based on urgency or importance	Regularly categorizes tasks based on importance and deadline, achieving most critical tasks on time	Consistently distinguishes between urgent-important tasks and non-urgent tasks, effectively handling competing demands	Masterfully manages a dynamic task list, ensuring all tasks, irrespective of their nature, are appropriately prioritized and completed in a timely manner
Time-bound planning	Occasionally sets timeframes for tasks but doesn't consistently follow through	Often outlines a clear timeline for tasks and generally adheres to it	Consistently sets and follows a structured timeline for both short-term and long-term tasks	Proactively plans tasks with meticulous timing, ensuring each task is completed within its designated timeframe and making adjustments when necessary
Time allocation	Allocates time to tasks but may frequently deviate from the planned schedule	Allocates time slots for tasks with occasional overruns, resulting in mostly achieved daily objectives	Efficiently allocates and adheres to time slots for diverse tasks, rarely deviating from the day's plan	Perfectly allocates time, taking into account potential disruptions, and consistently achieves daily goals with time to spare
Productivity techniques	Is aware of a few productivity techniques but might not regularly use them	Employs basic techniques like to-do lists or the two-minute rule, enhancing daily productivity	Uses a variety of advanced techniques (e.g., Pomodoro, time-blocking) to optimize work flow and minimize distractions	Seamlessly integrates a tailored mix of productivity techniques into daily routines, constantly iterating for peak efficiency
Balancing responsibilities	Manages main responsibilities with occasional lapses in managing concurrent tasks	Balances primary responsibilities, occasionally incorporating secondary tasks without major conflicts	Effectively juggles multiple responsibilities, ensuring all are given adequate attention and completed to standard	Masterfully balances a plethora of responsibilities, ensuring none are neglected and each is executed at a high standard

**Understanding of Societal Realities**

Definition: Understanding of societal realities lies in grasping, interpreting, and responding to the diverse societal contexts and structures one encounters. It involves recognizing societal nuances, dynamics, and disparities, and employing this awareness to navigate interpersonal and communal interactions.

Dimensions/ Levels of manifestation	Fundamental	Competent	Proficient	Excellent
Recognition of societal nuances	Displays minimal awareness of societal nuances, often generalizing diverse contexts	Recognizes some societal nuances but may not fully understand the complexities	Usually identifies and appreciates the diversity and intricacies within various societal contexts	Deeply understands and intuitively grasps the multifaceted nuances present in diverse societal settings
Dynamics comprehension	Has a rudimentary understanding of societal dynamics, often missing the underlying causes	Understands common societal dynamics but may overlook subtle interplays	Demonstrates a keen understanding of the various forces and dynamics at play within societies	Possesses an in-depth and insightful understanding of societal dynamics, forecasting trends, and shifts.
Disparity awareness	Rarely acknowledges or recognizes disparities in societal structures	Is aware of evident societal disparities but may not understand the full extent or implications	Usually identifies and understands various societal disparities, advocating for equity	Actively seeks to understand the root causes and broader implications of societal disparities, working toward inclusive solutions
Interpersonal navigation	Struggles to apply societal understanding in personal interactions, often leading to misunderstandings	Uses basic societal understanding to navigate personal interactions but may still encounter occasional missteps	Effectively uses societal insights to foster genuine interpersonal relationships and reduce conflicts	Masterfully navigates interpersonal situations by leveraging a profound understanding of societal contexts
Communal interaction management	Rarely employs societal understanding in communal settings, leading to potential friction	Applies some societal knowledge in group contexts, fostering decent communal interactions	Usually utilizes societal insights to ensure harmonious communal interactions and collaborations	Expertly manages and influences communal interactions, creating cohesive and inclusive communities

## 7.1 The Categorization of the Twenty-First-Century Soft Skills

Categorizing soft skills helps to understand how these skills relate to and support each other. By understanding which soft skills are related, individuals and organizations can create more focused and efficient development strategies. Understanding which soft skills go together allows for the creation of programs that address multiple, interrelated skills simultaneously, resulting in more comprehensive skill development. The categorization of the soft skills for the twenty-first century was based on the grouping of related thematic elements identified in the definitions of soft skills (the method is described in Chap. 5). The soft skills were grouped into four categories whose names reflect their common theme: intrinsic skills, navigational skills, connectivity skills, and visionary skills.

### *Intrinsic Skills*

These skills are intrinsic as they originate from within the individual and are crucial for personal and emotional growth. They involve a deep understanding of oneself, managing one's emotions and behaviors, and a constructive approach to challenging situations. Included here are:

- Self-awareness
- Self-control
- Self-motivation
- Self-regulation
- Emotional Intelligence
- Grit
- Growth Mindset
- Ethics
- Resilience
- Positive Attitude Toward Challenges and Problems

### *Navigational Skills*

These skills are unified by their focus on navigating through challenges and uncertainties in various environments. They involve the capacity to analyze and act effectively in situations that are complex, uncertain, or rapidly changing. Included here are:

- Adaptability
- Flexibility

Complexity Management  
Coping with Uncertainty, Ambiguity, and Risk  
Critical Thinking  
Exploratory Thinking  
Problem-Solving  
Time Management

### ***Connectivity Skills***

The skills in this category are centered around effective interaction with others. They emphasize the importance of understanding and relating to people from diverse backgrounds. Included here are:

Active Listening  
Communication  
Collaboration  
Negotiating  
Conflict Resolution  
Cultural Intelligence  
Empathy  
Teamwork  
Understanding of Social Realities

### ***Visionary Skills***

These skills are future-oriented and involve thinking beyond the current norms. They emphasize the importance of envisioning new possibilities, leveraging technological advancements, and leading others toward innovative directions. Included here are:

Creativity  
Digital Literacy  
Leadership

## **7.2 The Tree Model of the of the Twenty-First-Century Soft Skills**

Integrating the categories of soft skills into a coherent model supports a holistic view of soft skills. Such a model shows how different soft skills are related and influence each other. This interconnectedness is a fundamental aspect of a holistic view,

emphasizing that the whole is greater than the sum of its parts. Such a model captures the complexity of soft skills, supporting a more complete picture of human behavior and interactions. The metaphor of a tree, reflecting dynamic interdependencies and growth over time, as suggested by Sala et al. (2020, p. 21), was chosen to be modified and applied to the twenty-first-century soft skills and their categories.

The Tree Model of Soft Skills for the twenty-first century illustrates the interconnectedness and hierarchical nature of the soft skills categories. The idea is to present a metaphor that visually and conceptually organizes these categories in a way that emphasizes their significance and interrelation. Trees are holistic entities with different parts that play distinct yet interrelated roles, much like the distinct yet interrelated soft skills. In the metaphor of the tree (Fig. 7.1), the categories of the soft skills symbolize these parts of the tree:

### ***Intrinsic Skills: Roots***

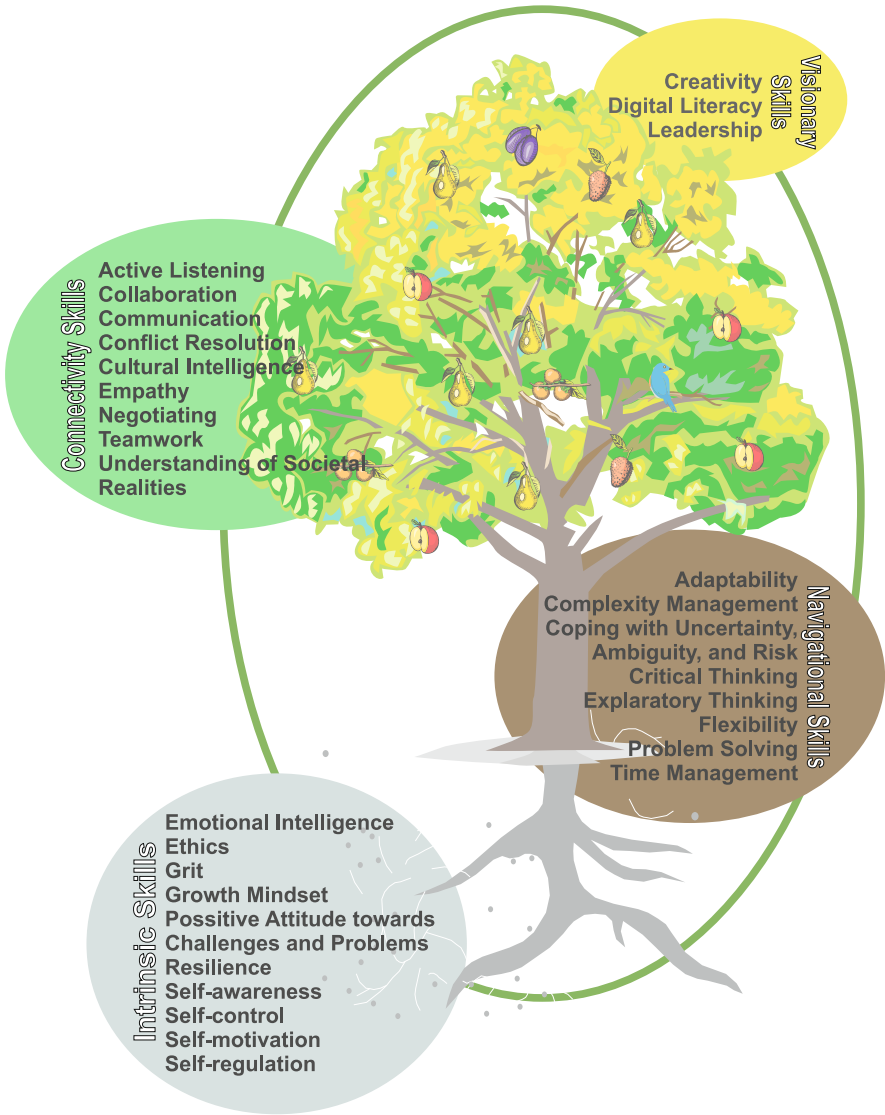
The roots anchor the tree into the ground and provide essential nutrients. They represent the intrinsic skills – foundational personal attributes. Just as roots provide stability and sustenance to a tree, intrinsic skills are what ground us and drive our core behaviors.

### ***Navigational Skills: Trunk***

The trunk provides the main structure for the tree. It stands for the navigational skills that help us navigate everyday life, manage complexities, and make decisions. Just as the trunk supports the entire tree, these skills support our daily actions and choices.

### ***Connectivity Skills: Branches***

The branches reach out in various directions, connecting the tree to its surroundings. These signify connectivity skills that help us interact, communicate, and collaborate with others. Each branch may have different lengths and directions, representing the diversity of our interactions and relationships.



**Fig. 7.1** The tree model of soft skills for the twenty-first century

### ***Visionary Skills: Leaves and Fruits***

The leaves capture sunlight and are vital for the tree’s growth, while fruits represent the tree’s contribution to the world. Together, they embody visionary skills, the skills that allow us to innovate and produce meaningful outcomes.

In essence, while each category of soft skills serves a specific function, their true power is realized when they are combined and utilized in synergy. This interconnectedness underscores the importance of a holistic approach to soft skills development. Rather than focusing on one category in isolation, individuals and organizations benefit from fostering a balanced skill set across all categories.

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# Chapter 8

## Conclusion



We are witnessing a revolutionary era characterized by significant societal shifts, most notably the integration of AI-based tools into our professional and personal lives. This transition is reminiscent of the Internet's profound impact on work and daily life three decades ago. Today, we are experiencing a similar paradigm shift driven by the widespread availability of AI technologies. Although it is challenging to fully prepare for these changes, responding swiftly is crucial for the sustainable development of global society. In light of these developments, it is imperative to reassess various phenomena, including soft skills, which have long been recognized as vital for individual success and societal prosperity.

The importance of soft skills in an AI-supported world reflects the timeless essence of human nature. AI, with its computational prowess, represents the zenith of our rational, logical capabilities. Soft skills, inherently human, encapsulate the art of harmonious living and working with others, navigating complex human emotions, and making ethical decisions. They form the bedrock of meaningful human interactions and societies, anchoring us in a world increasingly mediated by technology. These skills, deeply rooted in emotional understanding and human connection, stand as a reminder of the unique qualities that define us as human beings in an era increasingly shaped by technology.

This book builds on available academic and practical knowledge on soft skills. It highlights that the problem in terms of their use for the development and assessment of soft skills is both their ambiguity and their broad scope. It also argues in favor of a new perspective on which soft skills are the most important and what their essence is in the part of the twenty-first century that is already and will be associated with the widespread use of AI-based technologies. By sequentially applying various research methods and scientific approaches, the book provides straightforward yet clear definitions of the concept of soft skills itself and of thirty specific soft skills assessed as particularly important in the twenty-first century. These soft skills are categorized and arranged in a tree model. The categorization and the model are used to understand the relationships between soft skills, which is important when designing soft

skills development programs whether in schools, businesses, or other institutions. Another tool developed are rubrics for each of the soft skills.

Forming a set of the thirty most essential soft skills can be considered a simplification compared to the existing extensive databases of skills and competences. On the other hand, this simplicity and clarity is precisely an advantage for practical use. The research on which the outputs are based has a number of limitations, both in terms of the sources used and the methods and will continue. The authors welcome any insights. Nevertheless, they believe that the book has the potential to support the development of soft skills as an important and necessary complement to current technological development.

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## Chapter 9

# Summary



The book *Soft Skills for the Twenty-First Century* provides a nuanced, scholarly exploration of the concept of soft skills in today's era of rapid technological advances and evolving workplace dynamics. It begins with a critical examination of the various definitions and interpretations of soft skills in the academic, policymaking, professional, and public arenas. Recognizing the lack of consensus, the book focuses on a more refined and consensus-based understanding of soft skills.

Central to the book is a step-by-step application of scientific methods such as the Delphi, content analysis, and nominal group technique, which resulted in the identification of three dozen key soft skills that are clearly defined, as is the term soft skills itself. As a tool to support the preparation of development and evaluation activities, a rubric is created for each of the soft skills. Furthermore, these soft skills are classified into categories and arranged in an innovative tree model, which supports the understanding of the interconnectedness of the soft skills system.

Finally, it is argued that despite the increasing automation of many technical tasks supported by widely available AI-based tools, soft skills remain irreplaceable and are an important complement to technologies in a society striving for sustainable human-centered development. The book discusses the implications of its findings for various stakeholders, including educators, employers, and policy makers. It emphasizes the need for a systematic approach to the development and assessment of soft skills in light of their growing importance in a wide range of professional and personal contexts.

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