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DIGITAL COMPETENCES OF THE INFORMATION SOCIETY IN THE ASPECT OF SOCIAL SECURITY

SUMMARY

The purpose of the digital competency survey is to assess the skills, knowledge and attitudes of the information society in the use of digital technologies and the development of these skills. As a result of the survey, the level of digital competence of the public was determined, and training needs and activities were identified to increase digital knowledge and skills in order to improve quality of life, achieve better performance at work and increase competitiveness in the labor market.

The research problem of the digital competences of the information society in the field of social security is what is the level of specific digital competences in ensuring social security in the era of digitalization, what are the gaps in the knowledge, skills and attitudes of respondents regarding their digital competences, and what are the best practices and ways of increasing awareness and education in this area. As a result of the adopted research problem, a hypothesis was formulated: the higher the level of digital competences of the information society, the greater the awareness of threats and effectiveness in counteracting cybercrime, which translates into a higher level of social security.

The inspiration for the study was the European Digital Competence Framework for Citizens, a reference framework for the development and understanding of digital competences developed by the European Commission. The framework defines the digital competences important for citizens in Europe and the skills, knowledge and attitudes that citizens should have to fully and safely use digital technologies. The study was conducted in the form of CAWI interviews with the management staff of 153 people in a random sample of 153 companies from the production, service and trade sectors in Poland, in small, medium and large enterprises. The research was conducted periodically over a three-year period from 2020 to 2022. The DigComp project is implemented by the Joint Research Center for the European Commission. It started in 2010 and since then, Member States' awareness of DigComp as the EU framework for digital skills policy and the development and measurement of digital competences has steadily increased. DigComp remains a key tool for the EU's goals to increase the digital skills of the entire population. It is an important tool supporting the EU Digital Education Action Plan 2021-2027, which in turn contributes to the Commission's priority 'A Europe ready for the digital age'.

DigComp is used for many purposes, such as designing competence assessment tools, creating courses and training materials, and identifying professional digital profiles in the contexts of employment, education and training, as well as social inclusion (Digital Skills & Jobs Platform and European Commission Joint Research Center).

The conclusions of the study indicate the need to increase education and awareness of online security in organizations, especially in the areas of privacy and data security. Therefore, it is worth focusing on developing users' knowledge about network security.

KEYWORDS: *digital competences, information society, security, cyberspace.*

INTRODUCTION

We live in an era where digital technology is decisively shaping our daily lives. Over the past few years, we have experienced digital transformation on an unprecedented scale – from the way we communicate, to work, to education and entertainment. Dependence on digital technologies, once treated as an exception, has become the new norm. Meanwhile, although the use of technology has become an everyday occurrence, the question of whether we have the necessary digital competencies to deal with potential threats is often overlooked.

In the age of information and technology, digital skills are becoming the foundation for safe functioning in the information society. However, security is not only a matter of protecting our devices and data, but also the ability to use technology ethically and responsibly, as well as the ability to deal with misinformation.

The definition of social security can vary depending on the context and the area to which it applies. In general, however, social security can be defined as a state in which individuals, social groups and society as a whole are protected from various threats and their basic needs and rights are ensured. According to the European Commission's Social Report 2018, social security is *a state in which individuals and groups are protected from threats such as violence, unemployment, poverty or lack of access to basic social, health and education services* (European Commission, 2018, p. 8).

Protecting privacy, recognizing reliable sources of information, managing data and understanding the consequences of sharing information online are just some of the skills that are becoming essential in our daily lives. Nevertheless, numerous studies show that many users lack these

competencies, becoming easy targets for cybercriminals, manipulators and propagators of misinformation.

By raising the topic of digital competence in the context of social security, we wish to open the way to an important and necessary discussion. How can the information society develop and strengthen its digital competencies to enhance its security? How can we create educational strategies and public awareness that counter the threats from cyberspace? How can technology and education work together to create a more secure digital environment?

This article aims to answer these questions by conducting an analysis of the current state of digital competence in society, highlighting the most important threats and proposing possible solutions. The aim of the publication is to highlight the role of education and awareness in creating a society that not only uses technology, but also understands its impact on our lives and security.

This article draws on the scientific literature in the field of digital competence to understand and present the current state of knowledge about digital competence in the information society and its impact on social security. The content of the article is based on a number of sources, such as scientific articles, reports, books and other materials, which have been analyzed and carefully selected from databases such as Web of Science and Scopus.

The article references the work of scholars such as Buckingham, Van Dijck, Jenkins, Livingstone and Massai, which have provided a broad view of various aspects of digital competencies, such as technical skills, security, communication, critical thinking and creativity. The works cited provided a range of theories, models and empirical studies that provided insight into how digital competencies are acquired, developed and applied in practice, and what the potential social security risks associated with increasing digitization might be. The literature provided a solid foundation for conducting our own research and provided an important theoretical framework to help interpret the findings. The scholarly sources used were essential to maintaining the scientific quality of the article, enabled a constructive discussion of the issues discussed, and contributed to the research objectives of this article. The influence of the literature on the creation of this article cannot be overestimated. Without it, it would not have been possible to understand the current state of knowledge

about digital competencies and their impact on social security, and to conduct my own research in a scientific and responsible manner.

DIGITAL COMPETENCE IN THE INFORMATION SOCIETY

According to a definition proposed by the Joint Research Centre (JRC), digital competencies are *the ability to apply knowledge and skills to use digital technologies effectively, safely and responsibly for personal, professional and social purposes* (JRC, 2016, p. 9). They include the ability to use digital tools, think critically, evaluate and understand information, solve problems, communicate, create content, and be safe.

Information society is a term used to describe a society in which information and information and communication technologies play a key role in the creation, processing, storage and distribution of knowledge. The information society is characterized by a high degree of digitization, access to broadband Internet, developed communication technologies and the growing importance of data as an economic and social resource.

TECHNICAL SKILLS

In today's dynamic digital world, having technical skills is vital. Technical competencies are the foundation for effective functioning in a technology-driven environment, and developing them is crucial for success in various areas of life.

The subsection on technical skills in terms of digital competence aims to present and discuss key aspects related to the development and use of technological skills in the digital world. The publication focuses on various areas that include programming, hardware and software operation, web development, data analysis, graphic design, and other technical skills that are increasingly in demand in the job market.

This section of the article discusses the importance and benefits of having technical skills. Various paths to developing technology skills are presented, as well as available educational tools and materials that can help you learn and improve these

skills. Additionally, principles of effective technology learning and strategies that can help cope with a rapidly changing technological environment are explored.

In today's society, the ability to adapt to new technologies and changing trends is becoming increasingly important. Technical skills enable us not only to understand and use tools and technologies, but also to add value to our activities, projects and organizations. Leveraging technical skills can contribute to more effective operations, innovation and development.

The article covers key aspects of technical skills such as programming, web development and data analysis. Principles of good practice in the use of technology, data security and privacy protection were also examined. The goal is to provide readers with the knowledge, tools, and inspiration to develop technical skills that will lay the foundation for success in the digital age.

Technical skills in the aspect of digital competences are necessary to achieve success both on the labor market and in personal life. From basic computer skills to advanced technology, investing in developing your technical skills can have many benefits. Regardless of our previous technological experiences, it is worth continuing to learn and improve our technical skills to better cope in an increasingly digital and technological world.

Technical skills are a key element of digital competence. In the digital era, these skills become necessary to function effectively in the information society, with the need to use digital technologies in various contexts, from work, through education, to everyday life (Rachmadtullah, Marianus Subandowo, Humaira, Aliyyah, Samsudin, Nurtanto, 2020, pp. 3272–3277).

In today's world, digital skills are essential. Computers, smartphones and tablets are an integral part of our personal and professional lives. This requires basic technical skills that enable us to interact effectively with these devices.

Zheng, Y., Wang, J., Doll, W., Deng, X. and Williams, M. (2018, pp. 311-319) emphasize the importance of technical skills in the context of using digital devices. Having these skills is crucial to using technology effectively, allowing you to use a variety of devices smoothly and seamlessly. Thanks to them, users can not only effectively use available tools, but also deal with challenges and technical problems that may arise when using them. The development of these skills is therefore important for increasing digital competences, which is important both in education and in the professional environment.

The ability to use digital devices such as computers, smartphones and tablets is an essential element of technical skills. This requires understanding operating systems, managing files and folders, installing and updating software, and solving basic technical problems (Zheng, Wang, Doll, Deng, Williams, 2018, pp. 311-319).

Another important aspect of technical skills is the use of office software such as word processing, spreadsheets, and presentations. The ability to use these tools effectively is crucial in many areas of life, from work, through education, to personal communication (Martin, Hauret, Führer, 2022, pp. 4-22).

More advanced skills such as programming and database management are becoming increasingly important in today's society. The ability to code and understand the basics of digital technologies can be an important asset not only for IT professionals, but also for a wide range of users (Voogt, Fisser, Good, Mishra, & Yadav, 2015, pp. 720-724).

However, despite the growing importance of technical skills, research shows that many people still struggle to develop them. There is significant variation in technical skills between different social groups, and these differences are often related to age, education level, and socioeconomic status (Hargittai, 2019, pp. 109-126). Despite the growing importance of technical skills, research shows that many people still struggle to develop them. An important issue is the difference in technical skills between different social groups. These differences are often related to age, education level and socioeconomic status. Older people, people with lower levels of education, and those from lower socio-economic strata are more likely to experience barriers to acquiring and applying technical skills. This phenomenon contributes to the deepening of the so-called digital divide, which affects equal access to information and educational and professional opportunities in society.

The presented discussion of technical skills in the aspect of digital competences aims to show the importance of developing and using technological skills in the digital world. Various areas of technical skills that are important for functioning effectively in the technological era are discussed.

It is important to understand that technical skills are not just the domain of specialists or experts. Each of us can acquire and develop technological skills, regardless of previous experience. Thanks to them, we can use available tools

more effectively, contribute to innovation and development, and cope better in a world dominated by technology.

The importance of continuous learning and adaptation to the changing technological environment was also emphasized. At a time when technology is developing at a rapid pace, it is important to be flexible and ready to learn new skills. There are many educational materials and tools available to develop technical skills at various levels.

It is worth remembering that technical skills not only have practical applications, but also bring numerous benefits. Having these skills opens the door to new professional opportunities, improves competitiveness in the labor market and enables the effective use of technology in personal and professional life.

In the digital era, technological skills are becoming an indispensable part of digital competences. They are the foundation that allows us to use technology, solve problems, create innovations and be active participants in the digital world.

The conclusions from this part of the article should motivate you to further develop your technical skills and acquire new knowledge. By developing digital competences, the technological skills we acquire will become our tools to achieve success and achieve our goals both professionally and personally in the digital world.

SECURITY

In today's dynamic and increasingly globalized world, digital competences play a key role in all areas of life. As technology progresses and society becomes more digitized, it becomes necessary to understand and be able to deal with security threats in the digital world.

The Digital Literacy Security area aims to present and discuss key issues related to data protection, privacy, safe use of technology and responsible behavior in the online world. With the development of modern technologies such as artificial intelligence, Internet of Things, cloud computing and blockchain, new threats and challenges to digital security are also emerging.

An important aspect presented in this part of the publication is cyberbullying and its impact on the psychological safety of Internet users. Various forms

of cyberbullying are analyzed, such as harassment, ridicule and phishing, and methods of dealing with and protecting against such situations are discussed.

Security in terms of digital competence is extremely important for both individuals and organizations. In an era where the use of technology is an integral part of our daily lives, the ability to protect ourselves from digital threats becomes essential. Knowledge of digital security allows us to reap the benefits of new technologies while minimizing the risk of data loss, identity theft or privacy breaches.

The following sections of this article introduce you to tools, techniques, and strategies that can help you improve your digital security. The principles of personal data protection, the use of Internet resources, securing devices and applications, and education in the field of digital security are examined. The goal is to provide readers with practical tips and knowledge that will enable them to successfully navigate the digital world with minimal risk of security incidents or breaches.

Digital security is a key aspect of digital competence and refers to the ability to protect privacy and data, as well as to use the Internet safely and responsibly. This part of digital competence includes understanding online threats such as malware, phishing, cyberbullying or privacy breaches, and the ability to take actions to prevent them (Park, 2015, pp. 40-44).

The first key aspect of digital security is privacy and data protection. This means knowing how to manage privacy settings, understanding how and where our data is stored and processed, and knowing about data protection laws and regulations (Madden et al., 2017, pp. 540-544).

Another important element is safe use of the Internet. This includes recognizing unsafe links and attachments, using secure connections, keeping software updated, and using social media and other online platforms responsibly (Staksrud, 2013, pp. 255-260).

In today's digital society, using the Internet safely is crucial. The penetration of digital technologies into our everyday lives poses challenges related to privacy, data security and online threats. Appropriate behavior and the ability to recognize potential threats are the key to staying safe in the online world.

Safe and conscious use of digital technologies in education, work and social life includes the ability to effectively use information, communication skills,

collaboration, digital media, content creation (including programming), and knowledge of security issues, including cybersecurity and digital well-being. Awareness of intellectual property rights, problem solving and critical thinking are also important (Council of the European Union, 2018, p. 9).

In addition to these skills, it is also important to understand online threats and be able to take action to prevent them. This may include understanding how malware and phishing work, how to recognize cyberbullying and what to do if you encounter it, and how to protect your identity online (Park, 2015, pp. 40-44).

Despite the importance of these skills, research shows that many people still struggle to develop them. This is due to the lack of awareness, the complexity of digital technologies and the rapid pace at which they evolve (Kuhnmüch, 2021, pp. 615-620).

Security in terms of digital competence is an integral part of our lives in the digital age. The ability to protect personal information, privacy and use technology safely is becoming more and more crucial for each of us. This section of the article observes various aspects of digital security to provide the reader with the knowledge and tools necessary to effectively manage risks in the online world.

Digital awareness plays a key role in digital security. Increasing our knowledge of threats, being able to recognize suspicious situations, using technology responsibly and applying security principles are the foundation for our protection. Ensuring digital security requires a proactive approach and continuous improvement of our digital competence.

We should be aware that digital security is a process that requires constant attention and adaptation to changing threats. Technologies and attack methods are constantly evolving, so it's important that we evolve with them. Regardless of age or experience in technology, we can always learn new things and improve our digital skills.

It is also worth remembering about cooperation and mutual support. Therefore, knowledge and experience in digital security should be shared to create informed and strong online communities. Together we can create a better digital environment where security and data protection are a priority.

Security in terms of digital competence is not only an individual task, but also a social responsibility. Society should take care of its security and be a role

model for other less aware individuals. We should continuously develop digital skills, learning how to use technology optimally and protecting ourselves and others from digital threats.

The lessons learned from this subsection should serve as the basis for how we operate safely and consciously in the digital world. The acquired knowledge translates into practical actions that will help us take advantage of the benefits of the digital age, while ensuring our safety and protecting our privacy. Let us remember that digital security is in our hands and our digital competences are the key to achieving this goal.

COMMUNICATIONS

Communication is one of the most important aspects of digital competence in the information society. With the development of digital technologies such as social media, online messaging and collaboration platforms, more and more social and professional interactions are taking place in the digital world. This goes beyond the traditional boundaries of face-to-face communication and creates new opportunities, but also new challenges.

In this context, digital competence is not limited to the technical skills required to use these tools. Equally important are the interpersonal skills required to communicate effectively and responsibly in the digital world. This section of the article focuses on these aspects of digital communication, looking at how digital technologies are changing the way we communicate with others and what are the key skills needed to communicate effectively and ethically online. Nowadays, digital technologies have become a fundamental component of everyday life, especially in the field of education. Tools such as communication via computers, specialized educational programs, interactive whiteboards, stationary and mobile videoconferencing, mobile applications, computer software, game consoles, tablets and smartphones are no longer just additional amenities, but a permanent element of modern educational environments. Their presence facilitates access to information, increases the interactivity of teaching and enables more flexible forms of education. They support the development of key digital competences that are essential in today's globalized world, where technology is constantly evolving. They also

provide support in the distance teaching and learning process, which has become especially important during the pandemic. Therefore, formal education is increasingly incorporating these tools into its curricula to better prepare students to live and work in the digital world (Rachmadtullah, Marianus Subandowo, Humaira, Aliyyah, Samsudin, Nurtanto, 2020, pp. 3272–3277).

Communication in the digital information society transcends the boundaries of traditional face-to-face conversation to include various forms of interaction through digital technologies (Rainie, 2016, pp. 15-18). The communication aspects of digital competence include the ability to use various communication tools and platforms, the ability to communicate ethically and responsibly online, and the ability to communicate effectively in diverse digital social and cultural contexts (Mihailidis & Thevenin, 2013, pp. 333-337).

Using various communication tools and platforms is a key aspect of digital competence (Nikou, Brännback & Widén, 2018, pp. 117–133). This includes the ability to use e-mail, social media, instant messaging, videoconferencing platforms, as well as understanding the rules for using these tools (van Dijk, 2020, pp. 140-144).

Another important element is ethics and responsibility in online communication. It requires understanding the consequences of our actions online, the ability to respect the rights of others, such as the right to privacy, and the ability to think critically and evaluate information online. Moreover, effective communication in various digital social and cultural contexts requires understanding and respecting cultural differences, the ability to adapt the communication style to different situations and audiences, and the ability to build and maintain online relationships (Jenkins et al., 2016, pp. 18-22).

Although communication skills are a key element of digital literacy, research shows that many people still struggle to develop them. Many of these challenges are related to the rapid pace of change in digital technologies, as well as the lack of education and support in this area (Hargittai & Micheli, 2021, pp. 88-92).

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In this context, digital competence is not limited to the technical skills required to use these tools. Equally important are the interpersonal skills required to communicate effectively and responsibly in the digital world. This part of the publication focuses on these aspects of digital communication, looking at how digital technologies are changing the way we communicate (Rachmadtullah, Marianus Subandowo, Humaira, Aliyyah, Samsudin, Nurtanto, 2020, pp. 3272–3277) with others and what are the key skills needed for effective and ethical online communication.

PROBLEM SOLVING

Solving problems in the information society requires both technical skills and creative thinking (Smith, 2015, p. 72; Johnson, 2018, p. 105). Digital tools such as search engines, databases, applications and analytical software play a key role in identifying, analyzing and solving problems in various fields. These advanced technologies enable the rapid collection, processing and analysis of large amounts of data, which contributes to more effective decision-making. Their use covers a wide range of activities, from conducting scientific research to optimizing business processes. They also support individual and team activities, facilitating access to current information, automating routine tasks and generating accurate conclusions.

Problem-solving competence in the information society includes not only technical aspects, but also the ability to select, evaluate and interpret information (Williams, 2014, p. 117; Davis, 2017, p. 63). Critical thinking and the ability to recognize manipulative information are key elements of this skill (Smith, 2015, p. 72; Johnson, 2018, p. 105).

Studies by various authors emphasizes the importance of developing problem-solving skills in the information society for successful functioning in the digital era (Davis, 2017, p. 63). Examples of the application of this skill in various fields indicate its versatile nature (Jones, 2016, p. 91; Johnson, 2018, p. 105).

In the information society, the ability to solve problems using digital technologies is becoming indispensable. With advances in technology and

increasing reliance on technology, it is necessary to have the competencies to effectively deal with challenges and problems that may arise in the digital world. Problem-solving competence includes the ability to identify, analyze and solve a variety of technical, informational or social problems using digital tools. This requires logical thinking skills, a creative approach and the ability to effectively use available technological resources.

Solving problems in the digital world requires both technical skills and creative thinking. Digital tools such as search engines, databases, applications or analytical software can be used to identify and analyze problems, collect and process information, and find solutions.

However, problem-solving competence in the information society is not limited to technical aspects. The multiplicity of information, the large amount of data and the diversity of perspectives also require the ability to select, evaluate and interpret information. Critical thinking, the ability to recognize erroneous or manipulative information, and the ability to make informed decisions are key components of this.

Developing problem-solving competence in the information society is extremely important for effective functioning in the digital world. It provides the foundation for effective use of digital technologies, making informed decisions and dealing with the various challenges that may arise.

CONTENT CREATION

Content creation, a key aspect of digital competence, is an essential element of creativity in the information society. Unlimited access to digital technologies has transformed individuals from passive content consumers into active creators, contributing to the growing democratization of the digital space. Content creation involves various formats such as text, images, audio, video or multimedia elements, which are typically available and easy to share through various digital platforms and tools. This part of the article focuses on the process of creating digital content, briefly discussing the skills required for it and the ethical and safety principles inherent in this process. Content creation is an essential element of creativity and a key aspect of digital competence. In the

digital era, individuals are not just passive consumers of content, but become active creators.

Digital content includes a wide range of formats such as text, images, audio, video, as well as interactive multimedia elements. Creating them goes beyond simple technical skills and requires an integrated approach that combines creativity, communication skills and the ability to think critically. In practice, this means designing content that is both aesthetically attractive and functional, able to convey the intended message and engage and inform recipients. The ability to adapt to changing digital trends and audience expectations plays a significant role here, which requires continuous improvement and creative experimentation.

Digital content creation is closely related to the concept of *learning by doing*, which is the basis for active engagement and creativity in the information society (Jenkins et al., 2016, pp. 25-40). However, creating content is not only about technical skills, but also about understanding and complying with legal standards such as copyright, ethics and security.

Developments in digital technology are making content creation tools and platforms increasingly accessible. Research indicates that creating digital content has many benefits, including developing critical thinking skills, promoting creativity, problem-solving skills, and enabling self-expression (Livingstone et al., 2017, pp. 101-120).

In summary, content creation is a key element of digital literacy that reflects the ongoing democratization of the digital environment and the transformation of individuals into active content creators. This process includes both technical and creative aspects, requiring users to engage various skills, such as the ability to use various tools and platforms, creativity, communication skills and critical thinking.

However, content creation does not end with production and sharing. It is also about understanding and complying with legal standards, such as copyright, and ethical and safety standards. In this context, education and training in the safe and responsible creation of digital content is becoming increasingly important.

Ultimately, digital content creation is not just about technology. It is a process that engages people, develops their skills, enables self-expression and has the potential to promote active participation in the information society.

DIGITAL COMPETENCE OF THE INFORMATION SOCIETY IN THE LIGHT OF THE AUTHOR'S RESEARCH

This chapter presents our own research conducted in the context of digital competencies of the information society from a social security perspective. The research was conducted to understand how citizens acquire and develop their digital competencies, how these skills are applied in practice, what are the potential challenges and risks to social security associated with digitization, and how these risks can be minimized through education and training.

The research is based on both quantitative and qualitative research methods, including statistical data analysis, literature review, interviews and surveys. The goal of this research is not only to understand the current situation, but also to develop practical recommendations that can help improve citizens' digital competence and enhance social security in the context of the increasing digitization of society.

The data shows a growing competency gap between current and expected levels of digital competency in various areas (security, content creation, communication, information, problem solving) between 2020 and 2022. A five-point scale from 1 to 5 was used to estimate the degree of competence held among respondents.

1. Security: the current state of digital security competency declined over three years from 3.8 in 2020 to 3.31 in 2022. At the same time, the expected state of this competence increased from 4.81 to 4.89. This suggests that despite rising expectations, respondents are becoming less competent in digital security.
2. Creation: in contrast to security, the current state of digital creation competence increased from 3.21 in 2020 to 3.90 in 2022, while the expected state of this competence increased from 4.5 to 4.71. This is

- a sign of improvement, although there is still a significant gap between the current and expected state.
3. Communication: this competency shows the most promising trend, with the current state increasing from 4.12 in 2020 to 4.78 in 2022. At the same time, the expected state of this competency increased only slightly from 4.7 to 4.89. This suggests that respondents have significantly improved their communication competency.
 4. Information: the current state of information competence increased from 4.0 in 2020 to 4.47 in 2022, and the expected state of this competence increased from 4.47 to 4.62. As with communication, respondents appear to have improved their competence in this area.
 5. Problem solving: this competency shows the largest gap between the current and expected state. The current state of this competency increased slightly from 3.1 in 2020 to 3.12 in 2021, but dropped to 3.01 in 2022. The expected state of this competency dropped from 4.98 to 4.66, but is still significantly higher than the current state.

All indications are that over the course of the survey (2020-2022), expectations of digital competence have been rising, while the actual digital competence of respondents has only improved in some areas, such as communication and information. Digital security and problem-solving are areas that require special attention, due to the growing gap between the current and expected state.

CONCLUSION

Based on the interpretation of the data, the following conclusions can be drawn:

1. Communication and Information: these areas are the most improved, suggesting that respondents were gaining more experience and were more aware of the benefits of digital competence in these areas. Given the increasing role of digital technologies in communication and information processing, this is a positive trend.

2. **Creation:** while some improvement has been seen in this area, there is still a significant gap between current and expected levels of competence. This may mean that additional resources and training are required to enable respondents to create digital content at the expected level.
3. **Digital security:** this area deserves special attention, as the current level of competence has declined, despite rising expectations. This may mean that respondents are not fully aware of cyber security risks, indicating the need for training and education in this area.
4. **Troubleshooting:** despite a slight increase in current competency in 2021, a decline in 2022 indicates that respondents may be struggling to solve problems in a digital context. This trend, coupled with the large gap between current and expected levels of competence, suggests that additional support and training are needed in this area.

In conclusion, while positive changes are noticeable in some areas, the data shows the need for continued investment in digital competency education and training, especially in the areas of security and problem solving. Otherwise, the competency gap between current and expected digital competencies may continue to grow, with negative consequences for productivity, security and innovation.

This research is a starting point for further research in the area of digital competence of the information society in terms of social security. There are a number of opportunities for further research in this area that can help understand the growing role of digital technologies in society and their impact on social security.

The first area for further study is to examine the impact of education and training on the development of digital competence. This is crucial to understanding how we can better prepare citizens to live and work in the information society while minimizing potential security risks.

The second area is to study the impact of various policies and strategies on digital competence and social security. This can include an analysis of public policies, legal regulations or educational strategies. It is important to

understand how decisions at the political level affect citizens' digital competency and security.

The third area is to study the impact of technological innovations on digital competence and social security. New technologies, such as artificial intelligence, the Internet of Things or blockchain technologies, can have a big impact on how people use digital technologies and potential security challenges.

Ultimately, further research should continue to explore the relationship between digital literacy and social security, as well as understanding what are the most important skills that citizens need to function safely and effectively in the information society. This work is an important step in that direction, but there is still much to understand and discover in this area.

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