

EDUCATION, FREEDOM AND INEQUITY IN THE CONTEXT OF THE CURRENT CHALLENGES OF ARTIFICIAL INTELLIGENCE AND SUSTAINABILITY

Prof. Otilia MANTA, PhD ^{1,2}

¹*Romanian Academy, Financial and Monetary Research Center
“Victor Slăvescu”, Bucharest, Romania;*

²*Mountain Economy Center CE-MONT Vatra Dornei, Romania
email: otilia.manta@icfm.ro or otilia.manta@rgic.ro*

ABSTRACT: Education, Freedom and Inequity in the Context of the Current Challenges of Artificial Intelligence and Sustainability.

In the current context of the challenges generated on the one hand by multiple crises, and on the other hand by the current digital and green eras, the general principles governing the Convention on the Rights of Persons with Disabilities, 2007, are among the most present in all programs and strategies at the level of the states, education, freedom and inequity, being the most sensitive themes due to the impact they have on the economies of the states. Moreover, a figure from 2021, namely approximately 1.3 billion people - approximately 16% of the total global population - facing significant disabilities, attracts our attention, which leads us at our level of research in the financial field to seek to develop innovative financing tools that support these vulnerable people towards a normality, including using innovative artificial intelligence tools both for education and for the outcome of medical problems.

Therefore, in this paper, we propose to highlight the elements of both global regulation and innovative solutions regarding the direct support of these people in need and in accordance with the principles of ACID (atomic, coherent, innovative and sustainable).

Keywords: *education, inequity, artificial intelligence, sustainability.*

Introduction

The general principles governing the *Convention on the Rights of Persons with Disabilities, 2007*, are: respect for the inherent dignity, individual autonomy, including the freedom to make one's own choices, and the independence of individuals; non-discrimination; full and effective participation and inclusion in society; respect for difference and acceptance of people with disabilities as part of human diversity and humanity; equal opportunities; accessibility; equality between men and women; respect for the developmental capacities of children with disabilities and respect for the right of children with disabilities to retain their identities.¹

According to *Article 4 General Obligations*², states parties undertake to ensure and promote the full realization of all human rights and fundamental freedoms for all persons with disabilities without discrimination of any kind on the basis of disability, respectively: to adopt all appropriate legislative, administrative and other measures to put in place application of the rights currently recognized in the Convention; take all appropriate measures, including legislation, to amend or abolish existing laws, regulations, customs and practices that constitute discrimination against persons with disabilities; take into account the protection and promotion of the human rights of persons with disabilities in all policies and programmes; to refrain from engaging in any act or practice that is inconsistent with this Convention and to ensure that public authorities and institutions act in accordance with this Convention; take all appropriate measures to eliminate discrimination on the basis of disability by any person, organization or private enterprise; undertake or promote universal research and development of goods, services, equipment and facilities designed as defined in Article 2 of this Convention, which should require the least possible adaptation and lowest cost to meet the specific needs of an individual with disabilities, to promote their availability and use and to promote universal design in the development of standards and guidelines; undertake or promote research and development and promote the availability and use of new technologies, including information and communication technologies, mobility aids, devices and assistive technologies, suitable for persons with

1 Ioan-Gheorghe Rotaru, *Om-Demnitare-Libertate (Human-Dignity-Freedom)*, Cluj-Napoca, Risoprint Publishing, 2019, pp. 201-205.

2 *Convention on the Rights of Persons with Disabilities*, UN, 2007.

disabilities, giving priority to technologies at an affordable cost; to provide accessible information to persons with disabilities about mobility aids, assistive devices and technologies, including new technologies, as well as other forms of assistance, support services and facilities; to promote the training of professionals and staff who work with people with disabilities in the rights recognized in this convention, so to better offer the assistance and services guaranteed by these rights. Another article on which it is necessary to reflect is article 24 Education, in which the responsibilities of the state's parties that recognize the right of people with disabilities to education are highlighted. States Parties shall ensure an inclusive education system at all levels and lifelong learning aimed at: the full development of human potential and a sense of dignity and self-esteem and the strengthening of respect for human rights, fundamental freedoms and human diversity; the development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their maximum potential; enabling people with disabilities to effectively participate in a free society. States Parties shall enable persons with disabilities to learn life and social development skills to facilitate their full and equal participation in education and as members of the community.

Moreover, states parties shall take appropriate measures, including: facilitating the learning of Braille, alternative scripts, augmentative and alternative modes, means and formats of communication and orientation and mobility skills and facilitating peer support and mentoring; facilitating the learning of sign language and promoting the linguistic identity of the deaf community; ensuring that the education of persons, particularly children, who are blind, deaf or deaf-blind is delivered in the languages and modes and means of communication most appropriate for the individual, and in environments that maximize academic and social development.

To help ensure the realization of this right, States Parties shall take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in sign language and/or Braille and to train professionals and staff working at all levels of education. Such training must incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities.

States parties shall ensure that persons with disabilities are able to access general tertiary education, vocational training, adult education and

lifelong learning without discrimination and on an equal basis with others. To this end, States Parties shall ensure that reasonable accommodations are provided to persons with disabilities.

Another vitally important item is *Article 27 Work and employment*³ in which the states parties recognize the right of persons with disabilities to work, on an equal basis with others. States Parties shall protect and promote the realization of the right to work, including for those who acquire a disability during employment, by taking appropriate measures, including through legislation, to, inter alia: prohibit discrimination on the basis of disability with respect to all matters relating to all forms of employment, including conditions of recruitment, employment and employment, continuation of employment, career advancement and safe and healthy working conditions; protecting the rights of persons with disabilities, equally with others, to fair and favourable working conditions, including equal opportunity and equal remuneration for work of equal value, safe and healthy, working conditions, including protection against harassment and redress of grievances; to ensure that persons with disabilities are able to exercise their labour and trade union rights on an equal basis with others; enable persons with disabilities to have effective access to general technical and vocational guidance, programs, placement services and vocational and continuing education; promoting employment opportunities and career advancement for people with disabilities on the labour market, as well as assistance in finding, obtaining, maintaining and returning to work; promoting opportunities for self-employment, entrepreneurship, developing cooperatives and starting one's own business; employ people with disabilities in the public sector; promoting the employment of persons with disabilities in the private sector through appropriate policies and measures, which may include affirmative action programs, incentives and other measures; ensure that reasonable accommodations are provided to persons with disabilities in the workplace; promoting the acquisition by persons with disabilities of work experience on the open labour market; promotion of occupational and vocational rehabilitation, job retention, and return-to-work programs for persons with disabilities.

3 *Convention on the Rights of Persons with Disabilities*, UN, 2007.

Within *Article 32. International cooperation*⁴, states parties recognize the importance of international cooperation and its promotion, in support of national efforts to achieve the purpose and objectives of this Convention and will undertake appropriate and effective measures in this regard, between and among States and, as appropriate, in partnership with relevant international and regional organizations and civil society, especially disability organizations. Such measures could include, among others: ensuring that international cooperation, including international development programs, includes and is accessible to persons with disabilities; facilitating and supporting capacity building, including through the exchange and sharing of information, experiences, training programs and best practices; facilitating cooperation in the field of research and access to scientific activities and technical knowledge; providing, as appropriate, technical and economic assistance, including facilitating access to and sharing of accessible materials and technology assistance and technology transfer.

Research methodology

The research methodology is mainly based on the research tools based on the existing empirical studies at the international level on Education, freedom and inequity in the context of the current challenges of artificial intelligence and sustainability.

Moreover, the existing strategic support documents at the level of the *United Nations*, at the level of the *European Commission*, of the *World Health Organization* are the ones that have outlined the clear elements of global regulation of people with disabilities.

At the same time, in terms of financial innovations and tools generated by means of artificial intelligence, we have identified at the level of *scientific databases open sources* of studies that have elements of specificity aimed at these people in need.

Results and discussion

According to the *Global report on health equity for persons with disabilities* published in 2022 by the *World Health Organization*, the COVID-19 pandemic has revealed and exacerbated the health inequities faced by many people

4 *Convention on the Rights of Persons with Disabilities*, UN, 2007.

around the world. Many people with disabilities and their families have been disproportionately affected by social movement restrictions, physical distancing requirements and the prioritization of certain health services – all of which have affected their access to essential services that are critical to maintaining health and functioning. As the world continues to recover from the COVID-19 pandemic and prepare for future health emergencies, we have an opportunity to make health systems more inclusive for people with disabilities through a primary health care approach. This must be part of each country's journey towards universal health coverage and the other health-related targets of the *Sustainable Development Goals* the *Global Disability Health Equity Report* presents the evidence base for more systematic, comprehensive and sustainable change in the sector health⁵.

The *Constitution of the World Health Organization* establishes a series of principles and obligations, including that „the enjoyment of the highest attainable level of health is one of the fundamental rights of every human being without distinction as to race, religion, political beliefs, economic or social status”⁶. People with disabilities have equal rights to the highest attainable standard of health as anyone else. This right is inherent, universal, and inalienable and is enshrined in international law through human rights treaties and in domestic legal frameworks, including national constitutions. International disability policy and policy frameworks have evolved over time, beginning with the *World Program of Action*⁷.

Estimates of disability prevalence in 2021⁸, respectively, approximately 1.3 billion people - 16% of the global population - have a significant disability. Of these people, approximately 142 million suffer from severe levels of disability. Almost 80% of the 1.3 billion people with disabilities live in low-income families and middle-income countries of the world, as opposed to 20% in high-income countries. However, the prevalence of disability is highest in high-income countries (21.2%) and lowest in low-income countries (12.8%) (*Figure 1*). This *Global Report on health equity for people with disabilities* the difference can be explained by two factors: (1) On the one hand, certainly very prevalent health conditions, such as musculoskeletal or

5 *Global report on health equity for persons with disabilities*, World Health Organization, 2022.

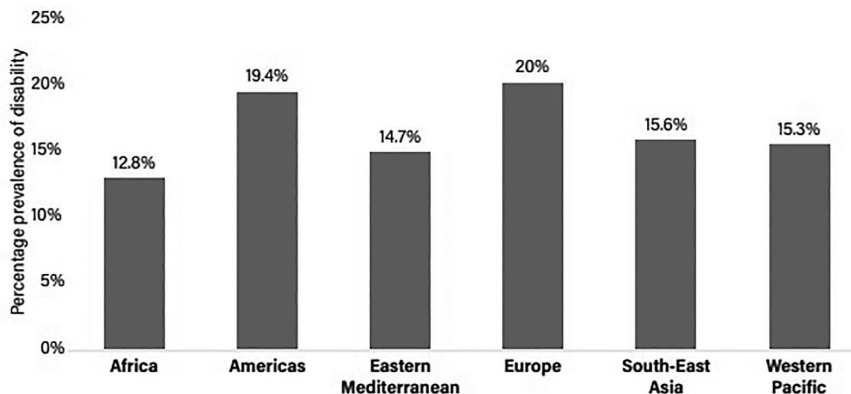
6 *The World Health Organization - Council on Foreign Relations*, World Health Organization, 2010.

7 *Global report on health equity for persons with disabilities*, World Health Organization, 2022.

8 *Ibidem*.

neurological conditions are more widespread in countries with high-income than in low-income countries, (2) On the other hand, underdiagnosis and underreporting in low-income settings may lead to an underestimation of the number of people with disabilities in many countries.

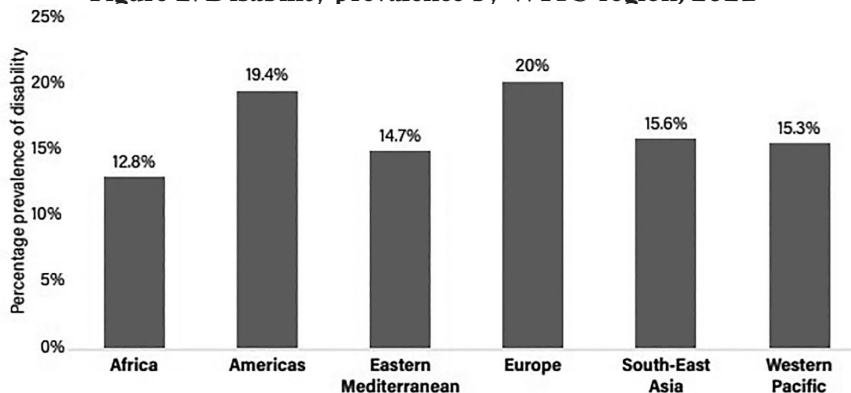
Figure 1. Disability prevalence by World Bank income group, 2021



Source: Global burden of disease data, 2021

The prevalence of disability varies between WHO and European regions. The Region with the highest (20%), followed by the Americas Region (19.4%); The African region has the lowest prevalence of disability at 12.8% (Figure 2). These results are consistent with the findings by income group, with a substantial proportion of countries in the European Region being in the high-income category, while in the African Region - there are more - and middle-income countries.

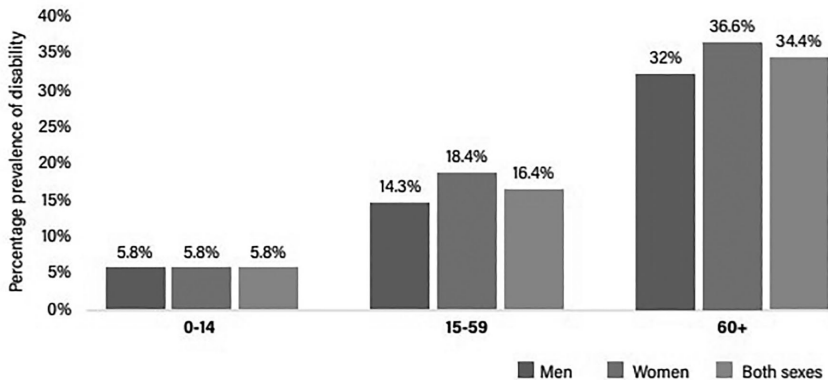
Figure 2. Disability prevalence by WHO region, 2021



Source: Global burden of disease data, 2021

The overall prevalence of disability increases with age, rising from 5.8% in children and adolescents aged 0–14 years to 34.4% among adults aged >60 years (Figure 3). This indicates that 1 in 3 older adults is a person with a disability. Regarding gender differences, women have a higher prevalence of disability compared to men. Estimates show that 14.2% of the male population has a disability compared to 18% of the female population.

Figure 3. Prevalence of disability, by age and gender, 2021

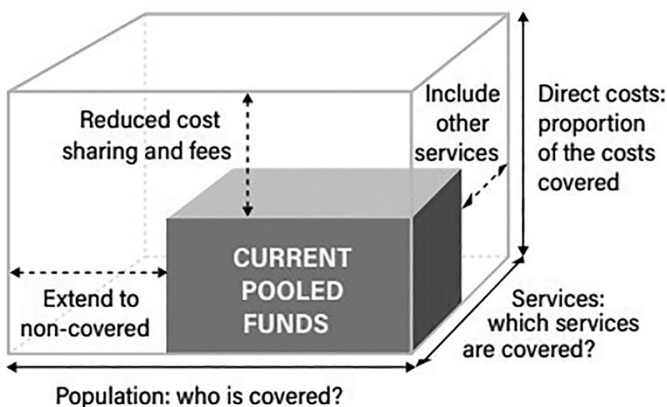


Source: Global burden of disease data, 2021

Universal health coverage

Universal health coverage (UHC) means that all people have access to the health services they need, when and where they need them, without financial hardship. UHC must be understood in a comprehensive way, because it takes into account not only the provision of quality services, but also the strengthening of the entire health system and intersectoral action.

Figure 4. Universal health coverage cube



Source: *Global report on health equity for persons with disabilities*, World Health Organization, 2022.

Education and employment levels

The lower socioeconomic status of people with disabilities is highlighted by widespread disparities in education and employment rates. UNICEF data shows that globally one in three children with disabilities are out of school, compared to one in seven children without disabilities. More specifically, children with disabilities at different ages are 25% less likely to attend early childhood education; 16% less likely to read or be read to at home; 42% less likely to have basic reading and numeracy skills; 49% are more likely to have never attended school; and 47% more likely not to attend primary school. As such, it is not surprising that adults with disabilities have low literacy rates, which is one of many factors that hinder access to health information, tools, and resources.

These disparities extend to all levels of the education system, affecting long-term employment and income-generating opportunities. Similar trends can be seen in terms of employment. In many countries, unemployment rates for people with disabilities are higher than for people without disabilities, and the employment-to-population ratio is, on average, almost half that for people without disabilities. Furthermore, in all regions, women with disabilities are less likely to be employed than men with disabilities or people without disabilities. Employment to population ratios for women with disabilities are lowest in North and West Africa (14%), where women are five times less likely to be employed than men without disabilities.

In the official document *Towards equal rights for persons with disabilities - European Commission, 30.11.2022-2022/2026 (INI)* all regulatory references regarding Education, freedom and inequity are presented, among which we highlight the following: *UN Convention on the Rights of Persons with Disabilities (CRPD)*, and its entry into force on 21 January 2011 in accordance with Council Decision 2010/48/EC of 26 November 2009 concerning the conclusion, by the European Community, of the United Nations Convention on the Rights of Persons with Disabilities [1], General Comments on the CRPD as the authoritative guidance on its implementation, in particular General Comments No 2 of 22 May 2014 on

accessibility, No 3 of 25 November 2016 on women and girls with disabilities, No 4 of 25 November 2016 on the right to inclusive education, No 5 of 27 October 2017 on living independently and being included in the community, No 6 of 26 April 2018 on equality and non-discrimination, and No 7 of 9 November 2018 on the participation of persons with disabilities, including children with disabilities, through their representative organizations, in the implementation and monitoring of the Convention, the Code of Conduct between the Council, the Member States and the Commission setting out internal arrangements for the implementation by and representation of the EU relating to the UN Convention on the Rights of Persons with Disabilities [2], Regulation (EU) 2021/818 of the European Parliament and of the Council of 20 May 2021 establishing the Creative Europe Program (2021 to 2027) and repealing Regulation (EU) No 1295 /2013[7], the regulations laying down the rules on EU funding programs under the multiannual financial framework, in particular the European Social Fund, the Youth Employment Initiative, the European Regional Development Fund, the European Agricultural Fund for Rural Development, the Erasmus program and the Just Transition Fund, all of which provide EU financial assistance for improving the situation of persons with disabilities, and others that regulate both status, fiscal and financial facilities, as well as innovative support solutions regarding both education and the right to work. Currently, there are approximately 87 million persons having some form of disability in the EU, including over 24 million persons with severe disabilities; and according to the EU's Strategy for the Rights of Persons with Disabilities 2021-2030, more than 1 million children and adults with disabilities below the age of 65 and more than 2 million adults aged 65 and older live in institutions; whereas there is a link between the increase in the number of persons with disabilities and the aging European population, and this should be taken into account in EU policies.

Artificial intelligence and its role for people with disabilities

Human-centered Artificial intelligence can offer: a set of tools for humans according to the study *“Professional Resources. The Toolkit”*, published in December 2021. Artificial intelligence (AI) has gained considerable attention and excitement in recent years. Broadly defined as the effort to program

computers to take on human-like cognitive processes, the recent prominence of AI is closely linked to the success of machine learning (ML), an approach to development. AI systems using real-world examples. The ML approach is applicable to a surprisingly wide variety of use cases; therefore, there is a proliferation of AI-based tools in every sector of the economy and life.

Indeed, by one count, there are over 250 different commercial AI-powered HR tools available. These tools offer a lot of promise and excitement. Beyond their ability to quickly process information, these tools have the potential to improve HR processes, leading to better decisions and results. Their reflects the creativity and innovation spurred by recent advances in AI, as their creators seek to both address long-standing challenges in HR and expand capabilities in new directions of exploitation. At the same time, this proliferation and variety of tools creates a confusing landscape to navigate, especially since most HR professionals do not feel they have the technical expertise to evaluate these tools.

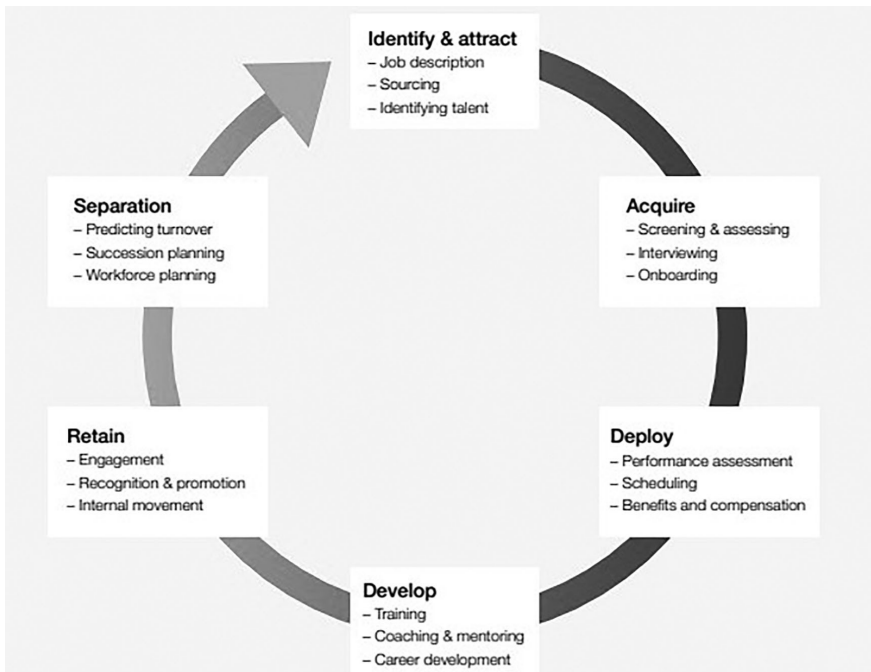
The first goal of this toolkit, therefore, is to equip HR professionals with a foundational understanding of AI to aid them in their efforts to evaluate AI-based tools.

The second goal of the toolkit is to provide guidance on the responsible and ethical use of AI in HR. Awareness of the ethical challenges that AI Systems can present has increased in recent years, concerns that are particularly acute in the context of human resources. There is a growing global consensus on broad principles for the ethical use of AI, including confidentiality, fairness, transparency and explainability, but only limited guidance on how to operationalize these principles.

This toolkit is part of a broader effort by the *Center for the Fourth Industrial Revolution* to help organizations put the principles of responsible AI into practice.

The ultimate goal of the toolkit is to help organizations effectively use AI-based HR tools. Many of the organizations involved find their AI investments fall short of their expectations because the tools are adopted for the wrong reasons, they don't anticipate the work required to integrate the tool, or because they haven't gained enough buy-in from the people who should have use it or are affected by it. The toolkit and especially the accompanying checklists therefore focus on the assessment of AI products and the organizational practices needed to support their use.

Figure 5. Developers are creating AI tools for almost every stage of the HR lifecycle



Source: the study “Professional Resources. Toolkit”, published in December 2021

ML systems lack a key element of human intelligence: the ability to learn lessons and apply them to new situations. In this sense, ML systems are not truly intelligent and will only work for the specific task they are trained for. However, unlike traditional programming, it can be a surprisingly complex task. An AI system that can truly learn (sometimes called artificial general intelligence) does not yet exist. For the foreseeable future, therefore, it will be necessary to train AI algorithms for a given task. Training data determines how an ML system will perform; therefore, it is essential to consider the source and content of the training data.

Table 1. Strengths and weaknesses of human decision-making and ML

Human	Machine learning
Basis for understanding the world	
<i>Life experiences</i>	<i>Training data</i>
✓ Can make educated guesses in novel situations	✓ Makes decisions based upon training data rather than assumptions
✓ Has "common sense"	✓ Can identify patterns overlooked by humans
✓ Better at perceiving causal relationships	○ Won't work as well in contexts that differ from training data
✓ Ability to recognize when conditions have changed or when cases are special	○ May struggle with unusual cases not represented in training data
✓ Can envision fundamental changes to processes	○ Can't check that a decision "makes sense"
○ Overreliance on "gut" feelings and assumptions	○ Limited to considering inputs specified in the algorithm
○ Can bring in irrelevant information	○ Can learn and amplify human bias reflected in data
○ Unconscious and conscious bias can lead to discriminatory or harmful decisions	-

Source: the study "Professional Resources. Toolkit", published in December 2021

Another relevant study by the author Redacción MAPFRE, *Can Artificial Intelligence make life easier for people with disabilities?*, INNOVATION, 2021, in which several relevant aspects are highlighted, among which we mention the following:

- *Technology has changed the world, bringing knowledge within reach and expanding a range of opportunities. People with disabilities can benefit enormously from such advances, but too many do not have access to these essential tools.* These words were spoken by former UN Secretary-General Ban Ki-moon in 2014 and remain as relevant today as they were then. Ban Ki-moon also emphasized that technology could help people with disabilities realize their full potential in their communities and workplaces and make the most of their capabilities. Six years later, progress has been made and technologies such as Artificial Intelligence have made major strides forward, so much so that it is shaping up to be a key tool

for including people with disabilities in a society that tends to segregate them.

- *Inclusion versus exclusion:* There is no doubt that advances greatly help people with physical, sensory or mental disabilities (of which many examples will be covered later), however, it is also true that the same technology can often end up excluding these people even more if they are not considered. According to the article “*Inteligencia Artificial y Personas con Discapacidad desde una visión exigente de derechos humanos*” (Artificial Intelligence and People with Disabilities from an Exigent Vision of Human Rights) of the Comité Español de Representantes de Personas con Discapacidad (CERMI - Spanish Committee) of the Representatives of Persons with Disabilities, (2020), there are risks involved in the use of Artificial Intelligence, because they detected “*discrimination against social groups whose rights such as gender, race or immigration status are more exposed to violation*”, to which they added that “*recent studies shows that disabled people, both women and men, are not strangers to this phenomenon, very often through multiple and transversal discrimination*”. “*Discriminatory*” artificial intelligence. CERMI points out both the main dangers of exclusive use of AI and the great benefits of inclusive use, i.e., encouraging separation or moving towards ever greater inclusion.
- *Risks include:* using AI systems to justify genetic selection of non-disabled people. Identification or discrimination of persons with disabilities. Creating systems based on standardization models that exclude or do not take into account the needs, views and diversity of people with disabilities.
- *Designing AI systems based on data that includes disability stereotypes, biases and prejudices.* Using systems that do not allow disabled people to make decisions for themselves or through their representative organizations. Joan Pahisa, Ph.D. in computer science and accessible technology and research and development expert at Fundación ONCE, also spoke about this potential reality, saying that both technology in general and AI in particular tend to succumb to common societal biases. The fact is that if programmers are barely aware of the reality of people with disabilities, the resulting artificial intelligence will suffer from that

ability to learn, so it will end up excluding people with disabilities. Inclusive AI Despite these logical fears, new technologies undoubtedly offer a fantastic opportunity to improve the lives of people with disabilities. CERMI emphasizes numerous benefits, of which the following are the most notable: Facilitating access to information and communication itself in all media and formats. Facilitating decision-making. Improving environmental accessibility. Programming robots that facilitate personal assistance.

- *Technical assistants are present in the daily life of a disabled person, and artificial intelligence (AI) is already helping in many ways.* Taking a look at our everyday companion, the smartphone, we see that many AI-powered applications are already in use even if we don't recognize them as such. Speech, pattern or image recognition are some of the technologies used by blind and visually impaired people or people with limited mobility. Let's also consider the so-called smart canes for the blind or smart wheelchairs for people with reduced mobility.

Customization and personalization. From apps and websites to ticket machines and ATMs, AI-based technology can adapt interfaces to the needs of the person who or sitting in front of a screen. These adjustments can result as reactions to environmental influences, such as low light or sunlight on a screen. But what if a machine could recognize if someone is blind? An interface can then switch to a speech- or text-based mode, applying different contrasts and sizes to elements on the screen. In this way, an AI-based system could learn how to better adapt and present app content in a personalized manner. This would affect not only people with learning or cognitive disabilities, but also a growing part of our aging society. In 2030, almost 25% of Europe's population will be over 60 years old. But do users really know what kind of assistive technology they need? This time, the answer is "No": Sometimes machine learning exhibits an inherent bias that is often carried over from the past to the present. Such a bias could lead to unexpected discrimination because of disability, but also because of gender, age, migration origin and so on. Because the concept of disability is not based on a small number of possible values, and the dimensions of intensity and impact often change over time, it cannot be reflected in a simple check-list. Automatic customization can help a blind

person adapt the system to their needs, but the system will then know that there is a blind person in front of them. Artificial intelligence has opened up new and easier ways to manage our daily activities. With great potential for automating tasks that typically require human intelligence, such as speech and voice recognition, visual perception, predictive text functionality, decision making, and performing a variety of other tasks, AI can help people with disabilities by making a major difference in their ability to get around and take part in activities of daily living. Artificial intelligence can be a game-changer for people with disabilities, facilitating the creation of interactive tools that support physical accessibility and independence. Let's go through some useful applications of artificial intelligence in this field and see how it can be used to improve the lives of the disabled in several ways.

Communication and human connection AI voice-assisted technologies such as Echo, Google Home, Alexa have created new means of accessibility for people with disabilities. As Artificial Intelligence plays an important role in communication and interaction, the use of this technology allows people with disabilities to access information much more easily, all just by talking to their devices⁹.

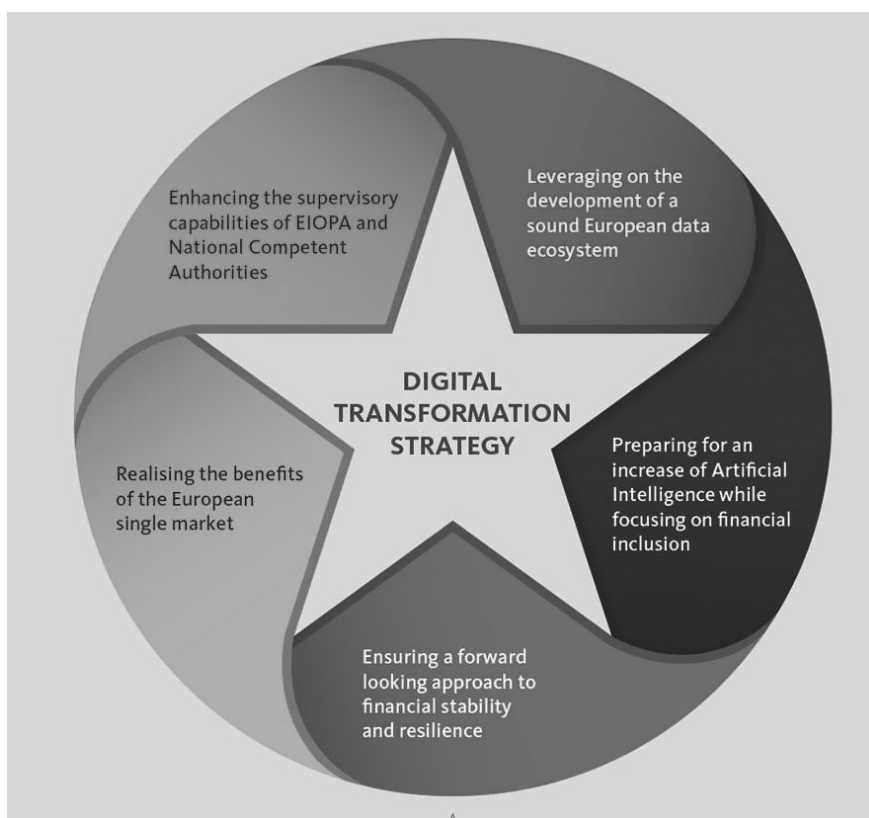
Innovative financial instruments support for people with disabilities

InsurTech is constantly evolving, and developments must be closely monitored, especially as it becomes a financial support tool for people with disabilities. Authorities should continue to consult with each other and exchange experience with each other and with *The European Insurance and Occupational Pensions Authority (EIOPA)*, given the growth of new technology-based business models (e.g. P2P), the use of new technologies (e.g. artificial intelligence (AI), Distributed Ledger Technology (DLT)) and ongoing licensing/supervision of highly digitized insurers to avoid supervisory arbitrage (e.g. through different sensitivities to the use of crypto-assets to pay claims and/or premiums). This is essential to prepare for emerging risks. EIOPA-Promoting sound technological progress on insurance and pensions for the benefit of EU citizens and businesses Rapid technological

⁹ *How AI Can Improve the Lives of People with Disabilities*, <https://smartclick.ai/articles/how-ai-can-improve-the-lives-of-people-with-disabilities/>

developments are changing the way insurance and pension products are developed and the way consumers shop. These developments bring benefits to businesses and consumers, but can carry certain risks. This fast-changing landscape brings opportunities and challenges to supervisors. EIOPA keeps pace with different aspects of innovation to make sure that the regulatory and supervisory frameworks account for both the opportunities and risks that innovation brings. EIOPA proactively assesses these changes so that it and its members are ready to address impacts for insurance and pensions sectors.

Figure 6. Digitalisation and financial innovation



(Digital Transformation Strategy) EOIPA

Sursa: https://www.eiopa.europa.eu/browse/digitalisation-and-financial-innovation_en

A new industrial model for insurtech

When considered comprehensively, these three trends pave the way for a new industry model, where insurers and carriers work closely together to drive the industry's digital transformation. *Partnership for competitiveness*- What the winning model of collaboration will look like remains to be seen, but it is clear that it will require a combination of traditional strengths from established insurers and new skill sets brought by insurtechs (exhibit).

The capacity of insurtech industries

Insurance 360°: benchmarking insurance costs and performance, covering the entire value chain, from product development to operations and support. *Global Insurance Groups*: A comprehensive database recording global figures on insurance premiums, assets, profits and growth.

Insurance Technology: A dedicated team of insurance technology experts working with clients to transform IT, transform insurance companies and transform insurance ecosystems. Detailed benchmarking for claims, distribution and productivity across lines of business, market, customer and risk segments that are used to identify opportunities for optimization and shape implementation strategies.

Conclusions and personal remarks

At the global level, there is a very solid regulatory framework regarding disabled persons, but the action plan and continuous monitoring processes regarding the implementation of regulatory packages, action plans and specific programs and strategies are very important. Moreover, they must be seen in the political, economic and social context, as well as according to the developments regarding the regulation of AI at European and global level. AI-powered financial tools come as a complement to government support packages for people with disabilities. Moreover, the financial resources concentrated through the programs both at the European level and at the global level, must be carefully monitored, and for this purpose, I mention that yesterday 04.07.2023 the EU Payments Observatory was launched for the first time, it monitors the trends and developments regarding the performance and payment behaviour in EU commercial transactions. The European Commission has contracted CEPS, in partnership with VVA, to set up the EU Monitor for Payments in Commercial Transactions (EU

Payments Monitor) to support the implementation of the new Late Payments Directive. The Observatory collects, analyses and disseminates data, provides a repository of relevant initiatives and policy documents and, through its regular activities, presents an overview of trends and developments in payment behaviour in the EU.

These aspects are essential especially for disabled personnel who must receive the financial resources necessary to carry out the daily activities specific to a normal life within the established term. At the same time, we believe that through scientific progress, building an environment governed by the 5 P's (personal, planet, peace, partnership and prosperity), can be our way to support and promote the building of inclusive and friendly cities, carrying out integrated and friendly activities with the environment and beneficial to society, including in areas such as integrated education and applied research.

Once again, I congratulate you for this special initiative, I wish you success in all your work, as well as determination to build a world based on ACID principles (atomic, coherent, innovative and sustainable), as well as on values (financial and social inclusion, green, wisdom, friendship and tolerance) for an equal world with accessibility without barriers, in the current context of existing challenges and opportunities at European and Global level.¹⁰

Bibliographical references

- *Convention on the Rights of Persons with Disabilities*, UN, 2007.
- *Digitalisation and financial innovation (Digital Transformation Strategy) EOIPA*, https://www.eiopa.europa.eu/browse/digitalisation-and-financial-innovation_en
- *Global report on health equity for persons with disabilities*, World Health Organization, 2022.
- *How AI Can Improve the Lives of People with Disabilities*, <https://smart-click.ai/articles/how-ai-can-improve-the-lives-of-people-with-disabilities/>

10 Ioan-Gheorghe Rotaru, "Plea for Human Dignity", *Scientia Moralitas. Human Dignity - A Contemporary Perspectives*, The Scientia Moralitas Research Institute, Beltsville, MD, United States of America, 2016, 1, pp. 29-43.

- *Inteligencia Artificial y Personas con Discapacidad desde una visión exigente de derechos humanos»* (Artificial Intelligence and People with Disabilities from an Exigent Vision of Human Rights) of the Comité Español de Representantes de Personas con Discapacidad (CERMI - Spanish Committee) of the Representatives of Persons with Disabilities), 2020, <http://www.convenciondiscapacidad.es/2020/03/15/el-impacto-de-la-inteligencia-artificial-en-las-personas-con-discapacidad-objeto-de-un-pronunciamiento-politico-del-cermi-para-el-3-de-mayo/#:~:text=En%20el%20borrador%20de%20pronunciamiento%20p%C3%ABblico%20del%20CERMI%2C,amenazas%20que%20caracterizan%20una%20interacci%C3%B3n%20no%20siempre%20pac%C3%ADfica>.
- *Professional Resources. Toolkit*, published in December 2021.
- Redacción MAPFRE, *Can Artificial Intelligence make life easier for people with disabilities?*, INNOVATION, 2021.
- ROTARU, Ioan-Gheorghe, "Plea for Human Dignity", *Scientia Moralitas. Human Dignity - A Contemporary Perspectives*, The Scientia Moralitas Research Institute, Beltsville, MD, United States of America, 2016, 1, pp. 29-43.
- ROTARU, Ioan-Gheorghe, *Om-Demnitate-Libertate (Human-Dignity-Freedom)*, Cluj-Napoca, Risoprint Publishing, 2019.
- *Sustainable Development Goals the Global Disability Health Equity Report*, World Health Organization, 2020.
- The World Health Organization - Council on Foreign Relations, World Health Organization, 2010.