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Artificial Intelligence and Innovative Medical Devices Are Needed In the Healthcare Sector with New Technologies

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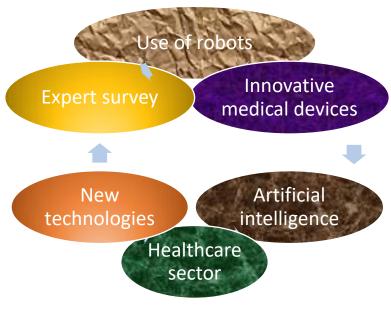
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ABSTRACT: Healthcare and medicine are subjects of life and death, not like other subjects. What are the specific legal challenges when using Artificial Intelligence in the health sector in general? Do we need new laws to protect new medical devices like apps etc.? An expert survey conducted in November 2019 identified the common challenges of artificial intelligence, robots, and large-scale data in the healthcare sector and the potential for errors along with data misuse and privacy invasion. Mass data allows insurance companies to set prices based on the prevalence of illness and individual lifestyles. Fear exists of stigma, social stratification, discrimination, and manipulation, especially as doctors and health workers are already concerned about losing their jobs and noticing problems with new technologies.

Due to the pyramids of increasing age, it is expected that the robots will soon be used as part of the care of the elderly but are chronologically ill for a long period. Pilot tests show that the robots are popular with the whole family. Internationally, the robot is legally considered semi-human. The extent to which legal status can be applied to citizens for robots is currently being tested. The first robot was also given citizenship of Saudi Arabia. Ethical questions follow - such as demarcation problems in a stratified population and when one thinks about and takes into account the overgrowth problems and the eternal life of robots.

KEYWORDS: New technologies, Healthcare sector, Artificial intelligence, Innovative medical devices, Expert survey, Use of robots.



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I. INTRODUCTION

The use of robots in the medical context will benefit unstable and corruption-free, rational decision-makers. Historical legal codes declining in diverse citizenship rights may serve as the basis for legal and regulatory measures concerning robots with citizenship, active in voting for slaves as well as slaves in Athens in the first democracy and there were separate citizenship classes with passive rights. Roman law defines compensation and taxation for slaves who were simultaneously citizens and market participants without citizenship. The Code Napoleon sees men and women as citizens, but they differ fundamentally in terms of their ability to participate in economic life. Based on these legal constructions, robots should be viewed as citizens for their safety and to maintain positive social norms in society in general. However, they should not be allowed to exercise the privilege of full citizenship such as the right to vote, property, and public office, but to seek a diverse society of humans and robots. The use of robots in the medical context will benefit unstable and corruption-free, rational decision-makers.

II. HEALTHCARE AND MEDICINE ARE THE SUBJECTS OF LIFE AND DEATH.

Healthcare and medicine are subjects of life and death, not like other subjects. Health determines well every day like hardly any other condition. From an economic point of view, medicine is the highest discipline with the highest margin, as people are ready to give everything for their health. When it comes to many great things personally and financially, serious questions of liability arise.

Common questions of liability currently arise in the field of telemedicine - namely diagnosis through the Internet and applications. For example, who should be called to take responsibility in the event of wrongdoing and limit the loss? Besides, self-diagnosis through Internet information is greater than ever, making it more difficult for liability carriers in global and collectively developed information networks.

III. ARTIFICIAL INTELLIGENCE AND NEW TECHNOLOGY DEVELOPMENT PROCESS-

To force entry into the market of artificial intelligence, one can use ancient Roman law, which detailed the compensation and taxation of slavery as market participants without citizenship. To ensure the slaves' market activity, their masters were required to immediately write down all the money given to slaves by personal bookkeeping. Victims were protected by preventive measures because they were explicitly assured that the master had theoretically already spent the money used by slaves in the market when handing over slaves. Similarly, one can also plan for advanced insurance for artificial intelligence. When entering the market, manufacturers should book money in advance for damage limitation purposes, not only pay when the damage has occurred and the company can avoid liability through bankruptcy.

Extinct slaves were extradited to victims under ancient Roman law, which could limit punishment against slaves. The White House directive of the United States already provides for the regulation of artifacts. With a high degree of intelligence, the entire population must be included. In the future, population groups damaged by artificial intelligence can also be used as a decision-making plenum to assess the extent of punishment in the event of failure or misconduct of artificial intelligence. For example, damaged groups may decide whether to develop or eliminate artificial intelligence forever. This can lead to the developmental regulation process of artificial intelligence and semi-democratically chosen new technology development processes.

IV. GLOBAL DATA EXCHANGE AND NETWORK TECHNOLOGIES ARE CURRENTLY GROWING RAPIDLY.

To what extent does the law take health into account today? Is there a legal framework for this outside of GDP? What happens to the legal void practically, so what legal rules do we need, and what happens? Subject to legal and regulatory guidelines. Connectivity also does not know any national boundaries. Global data exchange and network technologies are currently growing rapidly. State-of-the-art data analysis methods provide unique opportunities to gain insights and forecasts from large-scale data. Taxation of data transfer has rarely been possible as the value of the information also depends on the recipient, which is difficult to measure. The more information is already available, the easier it is to conclude from further information. While the European Commission is planning a new type of taxation of digital profits of 3%, nation-states are still unclear about its implementation. Austria has been playing a leading role in the



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effort to tax data transfers, as reported by the New York Times. With the planned digital tax, one can set international standards worldwide. Taxation can also curb innovation and give rise to monopoly. Any country or place that would suffer the first to implement data tax. So what would be needed is a Europe-wide or international tax data implementation. So that no nation dares to take the first step to not lose in the normal competition. One who loses unpublished data to commercialization is the general population, as the taxation of data transfers can mitigate the negative consequences of market penetration of artificial intelligence.

V. CURRENTLY, ROBOTS AND ARTIFICIAL INTELLIGENCE ARE HANDLING WORK PROCESSES.

New technologies also largely go hand-in-hand with the commercialization of privacy and discrimination based on knowledge derived from data, as well as socially costly market disruptions. This is already evident in trends such as trends and globalization. While production was often outsourced to low-wage countries, production is now approaching the consumer. Currently, robots and artificial intelligence are handling work processes that are rendering obsolete human workers obsolete. Income inequality between skilled workers and those who do not have complex skills has never been of much use. In such a climate, tax revenue from data transfers can prevent market losses from the use of new technologies. Financial strength can help create an institutional framework to reorganize workers and engage with new technologies and train citizens to use them successfully. At the same time, financial resources can offer the necessary training opportunities for consumers to make careful decisions about digital information exchange and knowledge gains over the Internet. The protection of particularly vulnerable population groups, such as the sick and mentally vulnerable, is another concern that should be taken into account in the human and ethical introduction of new technologies.

VI. EDUCATED POPULATION ABSORBS INTERNATIONAL TECHNOLOGICAL INNOVATION EFFICIENTLY AND QUICKLY

- Digitization is advancing so quickly. How to maintain slow legislation? Given this discrepancy, how can we ensure that Artificial Intelligence is implemented within our legal and ethical standards in the health sector? I see vacant space as a regulatory sandpit, in which you take a look at what is happening on the free market and only then put a legal corset on successful innovation products and give them a moral face. Something similar has been going on in the transfer of knowledge between America and Europe for a long time.

Innovations and new technologies are often developed in the United States. The well-educated population absorbs international technological innovation efficiently and quickly but also breathes a moral sense into capitalist-generated progress - for example when one thinks of the more conservative approval of drugs in Europe. Medicines benefit European society through free and democratic access through UN cutting-edge medicine. What are the rules for sovereignty over health data when using Artificial Intelligence? Or does it have to be regulated in an individual contract? To what extent do basic and human rights play a role here?

VII. PROPOSED GUIDELINES IN EARLY 2020 FOR REGULATORS OF ARTIFICIAL INTELLIGENCE.

Individual contractual rules appear incapable of dealing with global problems. The Internet knows no national boundaries. It takes international and international institutions, such as the European Union or the United Nations, to define global standards. In the healthcare sector, the European Union is currently working on a list of ethics guidelines, with a focus on artificial intelligence, robots, and large-scale data. The OECD has already defined guidelines for dealing with new technologies such as artificial intelligence. Following an executive order, the United States proposed guidelines in early 2020 for regulators of artificial intelligence. The United Nations will have the best position for international standards and to pronounce internationally recognized basic and human rights in Internet data transfer. However, the United Nations has not yet incorporated artificial intelligence with all the potential to improve the world think of telemedicine and decentralized energy production, for example - in the Sustainable Development Goals (SDGs).

To enable ethical data capitalization, the European Union should institutionalize the fifth freedom of data. Artificial intelligence used to improve artificially tested preventive medicine, in contrast to the United States, where this consumer behavior is more prevalent in the general consumer sector, is largely derived from tax-free information



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benefits from data Can. The 5th Freedom of Data should include positive market incentives for information sharing as well as legal means to combat discrimination and human rights violations.

In the health care system, the knowledge gained from large-scale data should only be presented selectively, not to reduce the potential for discrimination — for example, the labor of health dissemination of certain population groups or residential areas must be used in the market approach. There is an advantage here, as the population is relatively homogeneous and general inequality without inequality has always strived to remain in the social model. However, to avoid stigma based on retrospective information, only beam extracts of information should be publicly available. Data scraping or mining, i.e. conscious collection or merging of information, should be stopped for commercial purposes and by private individuals.

VIII. PROTECTION AGAINST DISCRIMINATION THROUGH TECHNOLOGICAL DEVELOPMENT -

Such as virtual anonymous twins - for anonymous data extrapolation should be considered. At the same time, it is advisable to institutionalize the training of communication in the digital age in all eras. Self-judgment must be learned playfully through the perception of the value of privacy at school age to raise awareness at an early stage of the ability to analyze publicly shared information and future preferences. To achieve confidentiality, the taxation of data transfers can increase the financial resources needed to reduce the social disadvantages and social costs associated with artificial intelligence, robots, and large-scale data penetration, but at the same time through training Forces the prevention of risk. To what extent are other elements of artificial intelligence protected by patent law?

IX. COPYRIGHT CAN PROTECT SPECIFIC IMPLEMENTATIONS.

In particular, software codes may be protected by copyright. Copyright can protect specific implementations, but not computer code. Protection through patent law is possible or has always been controversial and is handled differently internationally. Many countries limit software patents and there is no uniform legal definition of software patents. Here the practice is not uniform and the judiciary does not have the same viewpoint. For example, in the United States, patent rights for abstract ideas are not possible, often used as a reason for exclusion in the case of software. Even in Europe, computer programs are excluded from patents unless the program has no natural effect. Multilateral treaties, however, allow software patenting - as defined, for example, by agreement on intellectual property rights (TRIPS) or trade-related aspects of the European Patent Convention. The pioneers in software patenting are the US and Great Britain, where software has grown rapidly since the 1980s.

The Patent Convention excludes programs of data processing systems from patenting but does not explicitly define software. Software patents are generally permitted, but programs are included for computers without any technical added value or interference at any additional cost. A registered invention may include a computer program, but the subject of the invention must provide a so-called technical contribution. However, innovation and inventive activity do not have to lie outside the program, namely that a new and inventive algorithm, which innovatively controls robots, is patentable. In early 2002 the European Commission proposed a guideline for computer-implemented inventions to harmonize patent granting practices in member states, in addition to European directives, which still have national regulations, such as in Germany, where software is patentable if it solves a technical problem by technical means.

X. CONCLUSION

Currently, there is a trend towards patenting software in countries. Software patents are also allowed in Canada. Patent rights are economically and legally appropriate means of guaranteeing protection in the field of artificial intelligence. Demonstration of the patent application and patent product infringement is costly, which leads to a natural monopoly on the market for software patents. In practice, therefore, personal license agreements are awarded - think of commercial software such as Microsoft. When using free software, the underlying code is often not made public, for example, with Google, Facebook, or Instagram having appropriate data transfer interfaces.



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REFERENCES

- 1-Arius-Ortiz, Constance (2014). Virtual learning environment (. T.) Analysis of geometry as a facilitator of teaching and learning processes in secondary education. Journal of Education and Development.
- 2-Barrera-Osorio, F., & Linden, L. L. (2009). Computer use and abuse in education. Evidence from a randomized experiment in Colombia. Policy Working Research Paper.
- 3-Barrow, L., Markham, L., &Roes, C. E. (2008). Increasing educational benefits of technology of computer-aided instruction. National Bureau of Economic Research, Working Paper 14240.
- 4-Darling-Hammond, L. Teacher Education and Student Achievement Review of State Policy Evidence", Archives of Education Policy Analysis, Vol. 8, no. 1, pp. 1–45, 2000.
- 5-Gaviria, a. And Barrientos, J. (2001). Determinants of quality of education in Colombia, Archive de Economy, 159, National Planning Department, Bogota.
- 6-Hanushekhar, e. a. (1997). An update assessing the effects of school resources on student performance. Educational Evaluation and Policy Analysis, 19 (2), 141–164.
- 7-Ptm. (2017). Information about the Saber 11 test Evaluation of the IL face Colombian Institute for Education. Online, ppm.v.v. Is available here. 2017, is
- 8- https://www.oecd.org/publications/artificial-intelligence-in-society-eedfee77-en.htm
- 9-https://federalnewsnetwork.com/artificial-intelligence/2020/01/white-house-releases-first-of-its-kind-set-of-binding-ai-principles-for-agency
- 10-regulators /? Fluid = IwAR1SHdPaaGpj9FMlKtBGUrsQDBisqxpluoBtM7c8pyUW61qYSlnhVVj80wE









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