

ELSI Co-creation research utilizing knowledge from the humanities and social sciences

Research Center on Ethical, Legal and Social Issues

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Abstract

In order to research, develop, and introduce emerging science and technology such as AI, it is necessary to address a series of issues called “ethical, legal, and social issues (ELSI)” in addition to the issues of the technology itself. In other words, innovation requires not only science and technology in the narrow sense, but also “socio-cultural technology” such as tools, know-how, and procedures to deal with ELSI. Since its establishment in April 2020, the Research Center on Ethical, Legal and Social Issues (ELSI Center) has collaborated with various organizations both within and outside the Osaka university, and various ELSI co-creation studies have been born out of these collaborations.

on Ethical, Legal and Social Issues (ELSI Center) has been consulted by various businesses since its establishment in April 2020. In the joint research projects, we have co-created Code of Conducts and privacy policies for data use, conducted Privacy Impact Assessments (PIAs) for projects, developed ELSI training course, upgraded research ethics review process, developed AI ethical principles and checklists, and conducted public workshops and technology assessments for specific technologies. Some of these results are available on the ELSI Center website.

Background & Results

When implementing emerging science and technology in society, there are many cases in which simply complying with current laws and regulations is not acceptable to society, and conversely, there are many cases in which current laws and regulations are not sufficient to deal with the technology. These are inevitable consequences of the fact that the speed of technological innovation exceeds the speed of amendments to laws and regulations. Efforts to utilize knowledge from the humanities and social sciences in technological innovations are addressed as “convergence of knowledge” in the Sixth Science, Technology, and Innovation Basic Plan. There has not been much industry-academia co-creation in the field of humanities and social sciences, and the potential need is extremely large. The ELSI center is accumulating knowledge and experiences of ELSI co-creation activities and aims to formalize and visualize the know-how obtained.

Numerous hurdles must be overcome before emerging technologies can be introduced to society.



It will be necessary to address each of E(ethical)-L(legal)-S(social) issues.



Significance of the research and Future perspective

ELSI is an acronym for Ethical, Legal and Social Issues, and was originally the name of a research program initiated in 1990 when the project to decode the human genome was launched in the United States, with the aim of anticipating and responding in advance to its potential social impact. Although ELSI research had been conducted also in Japan in the field of life and medical sciences, in recent years, it becomes necessary to consider ELSI on every emerging science and technology from R&D to social implementation. While the speed of technological development is increasing, there are more and more cases in which laws and regulations are not revised in time, and public opinion toward new technologies is unstable. When dividing ELSI issues into E (Ethics), L (Law), and S (Society), the role of E (Ethics) is relatively increasing, and this is reflected in the fact that more and more businesses are establishing ethical principles for the use of AI. In addition, an increasing number of business organizations are attempting to establish research ethics review processes. However, in many cases, corporate organizations do not have personnel or departments in charge of E (ethics). Against this background, the Research Center

Research Center on Ethical, Legal and Social Issues (ELSI Center)

Three divisions and four functions



Development of ELSI Human Resources
The above three divisions collaborate to develop diverse ELSI educational programs. The educational programs are not limited to the university, but are also widely extended to industry, and play a function to create ELSI human resources

Patent

Treatise

URL

Keyword

Kishimoto, Atsuo. Visualization and bridging the gap between science and policy: Contribution of knowledge on risk research, *The Journal of Science Policy and Research Management* 36(2), pp.116-127. (2021)(in Japanese)
Kishimoto, Atsuo. How to identify and manage emerging risks, *Trends in the Sciences* 25(12), pp.26-29. (2020)(in Japanese)
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technology assessment, ethical, legal and social issues (ELSI), risk governance, privacy impact assessment