

Study Group 'AI governance and its Evaluation'
Report on the Session #8 (Phase II)

1. Introduction

The Japan Deep Learning Association establishes study groups as a forum for deepening knowledge and discussing domestic and international policy trends related to artificial intelligence (hereafter AI) and Deep Learning (hereafter DL). This study group, 'AI Governance and its Evaluation,' defines 'governance' as a system of management and evaluation by various actors and launched a study group in July 2020 to investigate what forms of governance are possible to help build trustworthy AI systems, and the phase II began in September 2021.

The eighth session of the study group (June 3rd, 2022) was a summary of phase II and the phase II report on "Who manages and evaluates the AI governance ecosystem," was also presented and discussed.

2. The Phase II report, "Who Manages and Evaluates the AI Governance Ecosystem."

The vice chairperson Matsumoto summarized the contents of the phase II report with particular consideration of the activities of this phase and of future developments. In this phase, further diversification and enhancement of the concept of an AI governance ecosystem, as proposed in the phase I, were aimed for, which was done by ① considering possible updates for the AI governance ecosystem and ② carrying out case studies for the AI governance ecosystem.

For point ①, the addition of the function and role elements to the ecosystem were made based on common issues of actors identified via the external environment discussions which took place in the first half of this phase.

For point ②, a case study in centered on HR functions was carried out in the second half of this phase. The key functions and roles were emphasized based on the results of surveys.

3. Discussion

Feedback about topics deliverable from researchers and members of the discussion group who participated in the case study and discussions was collected. A summary of the main points appears below.

- From this phase, a rough idea of the necessary rules, systems and structures was obtained, however, further research into specific areas is still required. For example, in the HR area,

specific discussions about the *whats* and the *wheres* need to be undertaken with the support of citizens when their input is identified as being necessary.

- The value of a service needs to be clearly visible to users. Therefore, it is important to have a framework that fosters satisfaction among users, providers and everyone involved.
- Progress is not something that can be achieved with big data and tools alone, rather the aims require the proper organization and application of KPIs before big data and tools are applied.
- To solve a problem, the problem must first be identified. As such, problem-solving as mentioned in the report should be thought of as problem discovery and solving and the report updated to reflect this.
- The use of MLOps and the implementation of controls is significant to reduce risks and costs as well as maximize profits.
- Companies and citizens who provide data may not necessarily be designing their data from a problem-solving perspective. Should data scientists be more aware of this, they may be able to improve their skills in the areas of designing data and compensating for the shortcoming of data, thus leading to an overall improvement in problem-solving and the meaningfulness of data utilization.
- There is no guideline for auditing AI systems at the moment although there is some movement towards doing so. Even in internal audits, questions remain about how far auditors can delve into certain issues, particularly around AI system quality and ethical sensitive areas. For ethical issues, an internal auditing approach that only evaluates and rates risks from a process development perspective may have merit. The existence of an evaluation cycle for each learning step is also important.

Written by the JDLA Secretariat

Translated by David Shield

<The 8th Session of the Study Group>

Date/Time: July 3rd (Friday) 16:00-17:30 (On Zoom)

Contents:

- The Phase II report on “Who Manages and Evaluates the AI Governance Ecosystem”
- Discussion