February 2022

JDLA

Study Group ‘AI governance and its Evaluation’

Report on the Session #3 (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.

In the 3rd meeting (November 19, 2021), Mr. Yuta Itagaki of the NTT Data Institute of Management Consulting, Inc. spoke on “The conversion of accessibility information into open data” in the first half. In the second half, Mr. Koichi Ohta of Shiojiri City in Nagano prefecture spoke on “KADO, a teleworking platform for short term workers,” This report is a reconstruction of these topics and a record of the discussion.

2. The conversion of accessibility information into open data

Mr. Itagaki of the NTT Data Institute of Management Consulting, Inc. spoke on “The conversion of accessibility information into open data” in the first half of the session.

Outline of "Pedestrian movement support project utilizing ICT (Ministry of Land, Infrastructure, Transport and Tourism)."

We are working on developing information around accessibility, using open data to create an environment where everyone, including wheelchair and stroller users, can move about easily. This project aims to convert accessibility information in possession of governments and companies into open data that can be continually maintained and updated by residents and thus, provide a variety of services. We then hope to utilize this data to promote better accessible route selections for navigation as well for the location of amenities.

This project is a collaboration between Kanagawa Prefecture and various companies that have signed SDGs promotional agreements carried in the last year to make accessibility information into public data.

Issues and controls for open data

As most companies and governments store data in their own individual format, in order to create open data, first, the stored data must be converted into a universal format.

In order to increase consistency, the Ministry of Land, Infrastructure, Tourism and Transport has created a unified data format for its open data catalogue to reduce transfer and usage costs of data.

Issues and reliability concerns associated with open data

There are four issues related to open data that need to be considered.

① Data Permission: Some companies may have concerns about sharing their data due to problems such as receiving low ratings or not having up-to-date data.

② Converting Information into Open Data: The source data may vary in format, such as being paper, pdf, GIS or similar, and the contents, such as the labels for restrooms and toilets, may vary. This necessitates the presence of management procedures to utilize the different kinds of data.

③ Data Utilization: Data cleansing is required to make the entries unique. For example, duplicate data needs to be merged into a single entry. Furthermore, data standardization needs to be done with care as the selection of necessary data can be difficult, leading to problematic data deletion.

④ Data Updates: Data needs to be updated frequently, and when data is updated by users, its accuracy needs to be verified, which can be difficult.

3. KADO's public-private partnerships

In the latter portion of the session, Mr. Ohta of Shiojiri City spoke on "KADO, a teleworking platform for short term workers."

Overview of KADO

KADO is part of a civic revitalization project in Shiojiri city that combines public crowdsourcing with self-employment and telework. KADO allows people with limited time or who can only work unusual hours to work in a new way in a horizontal model that can expand into other cities. KADO operates with the 100% city-owned Shiojiri City Promotion Corporation to assign work. Workers are treated as sole traders and work in an outsourcing arrangement with the Shiojiri City Promotion Corporation. There, an environment is created which forms a team for each individual project. The team has a director who coordinates with the team and communicates with the client.

The majority of the work currently consists of creating labelled data for image recognition AI and 3D mapping data for self-driving vehicles. It has received work from

roughly twenty companies over the course of the year.

The objective of KADO

The primary purpose of KADO is to provide a place to work for people who want a change and have motivation but also have time constraints. While KADO provides no guarantees of work and sets limitations on payment, it hopes that people will acquire new skills and self-confidence and go on to be employed by local businesses.

Future plans

KADO hopes to expand AI・DX related business and build a system that can take smart city-related orders for these services. Instead of people parachuting in from other urban cities into areas to perform services, we aim to build a local production-local consumption model whereby the local people build and use the services themselves.

4. Organizer's summary of the main comments from the participants

In the third session, data distribution practices were discussed. The following questions and answers were raised based on the topics discussed.

Discussion on "The conversion of accessibility information into open data" by Mr. Itagaki

- Open data format
  - ✓ Service providers need to adopt a degree of flexibility when using the Ministry of Land, Transport and Tourism format rather than just unilaterally adopting it. The NTT Data Institute of Management Consulting group thinks that it is necessary for companies and users to be involved in discussing their individual needs with the ministry and is encouraging this integration. In the interests of users updating this data, it is important that the open data is easy for users to update in addition to being in an easy-to-read format.
- Technical points for creating consistency across multiple open data sources
  - ✓ It's not realistic to expect individual companies to reformat their data to convert it into open data every time there is an update. Instead, a tool that links and references data across multiple companies is more practical.
- Providing services for non-Japanese speakers
  - ✓ Currently, we cannot provide the same services we can get in Japanese in other languages. Currently, we believe that by using technology such as machine translation, it is possible to create multilingual services for information.
- Restrictions and regulations for the creation and use of open data

- ✓ Even data that is correct when converted to open data can become outdated. So, rules about creating a date of creation are necessary. There can also be differences in perception around data, so responsibility needs to be clearly defined.
- ✓ Currently, there are no rules to prevent the misuse of open data. Even though a portion of facility data is converted to open data, that does not mean that a company wants to include all of its data, so actions such as deleting a portion of the data is necessary.
- ✓ User literacy is also important for open data to be used correctly. To prevent data from being used outside of its original intent, guidelines will be necessary at some point in the future.

Discussion on "KADO public-private initiatives" by Mr. Ohta

- ➢ Ensuring data quality
  - ✓ Currently, the director is holding much of the burden, but we believe that staff education and knowledge sharing are issues that need to be addressed to assure the quality of data. Recently there have been more occasions of directors speaking about their successes and failures with each other.
- ➢ How non-Japanese speakers can access services
  - ✓ The analogue nature of many services in Japan is a barrier to multilingualization. We believe that digitization can change this.
- ➢ Matters for consideration for the use and processing of personal information when expanding DX
  - ✓ It is important to not only receive data from residents but provide valuable information and security in return. There is also information that should not be shared among local residents, such as city hall staff's incomes, and this is also an issue that needs to be looked at in the future. In case of the above example, it might be best for other local bodies to handle this type of information.
- ➢ Restrictions and regulations for the creation and use of data
  - ✓ It is necessary to clearly show the benefits of uploading data to citizens. While it would be best for the national government to take charge of regulations for utilization, it may end up being local governments that take the lead on this. In truth, businesses in Shiojiri City are working together to consider how to use MaaS related traffic data.

The discussion of AI Governance domestically and internationally will continue through this study group.

Written by Xu Anyang

Translated by David Shield

＜The 3rd Session of the Study Group＞

Date/Time：Friday, November 19th, 15:00-17:00（On Zoom）

Contents：

- Topic 1: “The conversion of accessibility information into open data” provided by Mr. Yuta Itagaki (NTT Data Institute of Management Consulting, Inc.)
- Topic 2：”KADO, a teleworking platform for short term workers” provided by Mr. Kochi Ohta (Shiojiri City, Nagano Prefecture)
- Questions and Discussion