Current Status of Examples of Initiatives Using Open Data in Government

Yusuke Takamori*, Junya Sato, Masahiro Fujimoto, Masaki Endo, Shigeyoshi Ohno

Polytechnic University

Daiju Kato

Nihon Knowledge Co. Ltd.

Hiroshi Ishikawa

Tokyo Metropolitan University

Outline

1. Introduction

2. Prototype

3. Conclusion

4. References

1. Introduction

1. Introduction

Open Data

- Data held by private companies and other entities that are made publicly available on the internet so that anyone can use the data freely and free of charge.

- Open data are being released by governments, but the use of open data by the general public has not progressed as much as expected.

1. Introduction

Related Research

- E. Zhu et al. developed a web application to search for relevant datasets to leverage open data. [1]

- K. Höffner et al. introduce a platform for open data on government spending around the world. [2]

1. Introduction

***The First Governor's Cup Open Data Hackathon**[3]*

- Tokyo Metropolitan Government's efforts at social implementation of services that use open data to resolve administrative issues.

Quote source: https://portal.data.metro.tokyo.lg.jp/hackathon/
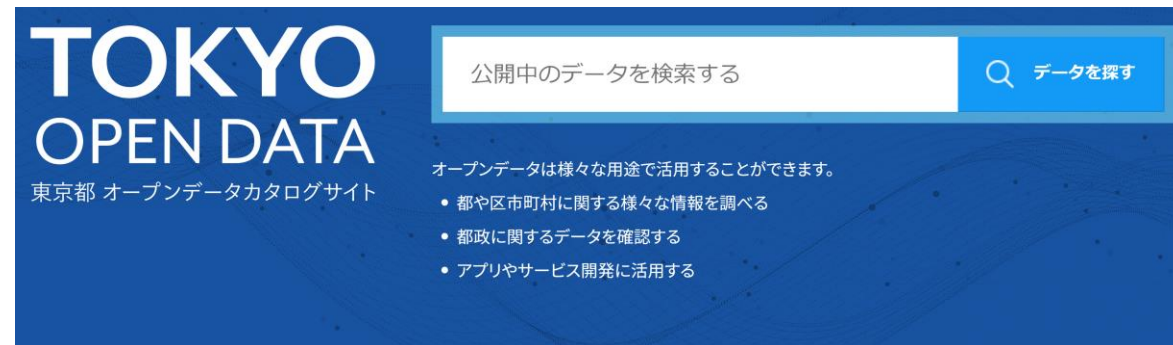
1. Introduction

Proposed Services

- Administrative problem to be solved:
  - Dilapidation of local communities

- Proposed service:
  - Services to help revitalize local communities

- Open data used:
  - Event information for cities

1. Introduction

Tokyo Metropolitan Open Data

Quote source: https://portal.data.metro.tokyo.lg.jp/

- Available from the Open Data Portal site[*4]

- Over 49,000 datasets (as of December 2021)

- Over 70% in computer readable CSV format

- Types of open data:
    - Information about public facilities
    - Information about road maintenance
    - Information about AED locations, etc.
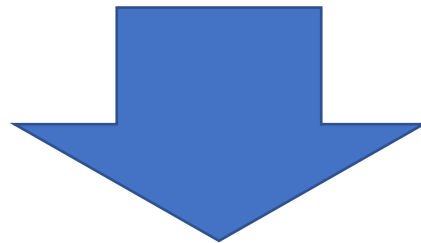
1. Introduction

Open Data Issues

- Lack of open data information:
  - Although there are 62 cities in Tokyo, only 17 of them have published event information.

- Less frequently updated:
  - Of the 17 municipalities that published event information, only 1 was updated within 1 month.

- Lack of uniformity in data format:
  - Of the 17 municipalities that published event information, 15 published in CSV format and 2 in different formats such as XML.

2. Prototype

2. Prototype

Current Administrative Issues

- Local communities are becoming fewer and fewer.
- Local community engenders smooth communication in the event of earthquakes and other disasters.

- Need to create community opportunities to keep people safe and comfortable in the community.

2. Prototype

- We developed an application that is able to serve as a catalyst for the creation of local communities.

- Target:
  - Elderly people living alone
  - People who have moved to Tokyo for higher education or employment
  - Single person in a household

- This application allows users to search for and participate in event information.

2. Prototype

Open data we used

- Open data on events in Koto-ku, Tokyo were used. [5]

- Examples of contents included open data of event information:

  - location

  - date and time

  - event details

  - contact information

Quote source: https://www.city.koto.lg.jp/foreignlanguage/en/index.html

2. Prototype

Screen Configuration

- Event information search screen to find an event that suits you.

- Screen displaying detailed information about each event.

- Event participants mutually chatting.

2. Prototype

Event information search screen:

- Users can search for events with their desired conditions from multiple search items.
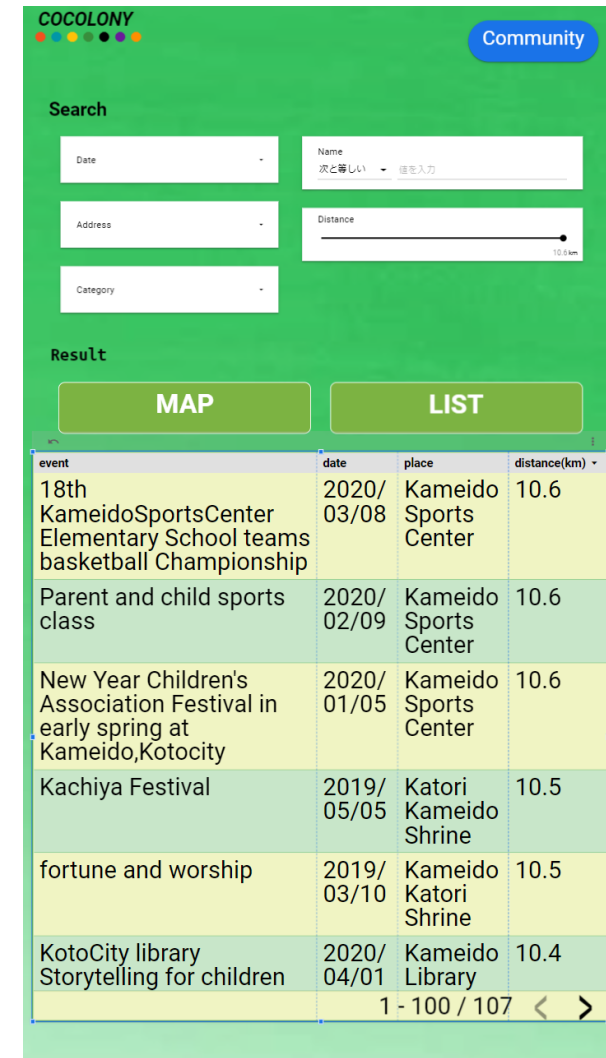

Figure 1. Search screen.

2. Prototype

Event details screen:

- Users can view detailed information as necessary to participate in events.

Figure 2. Event details screen.

2. Prototype

Chat screen:

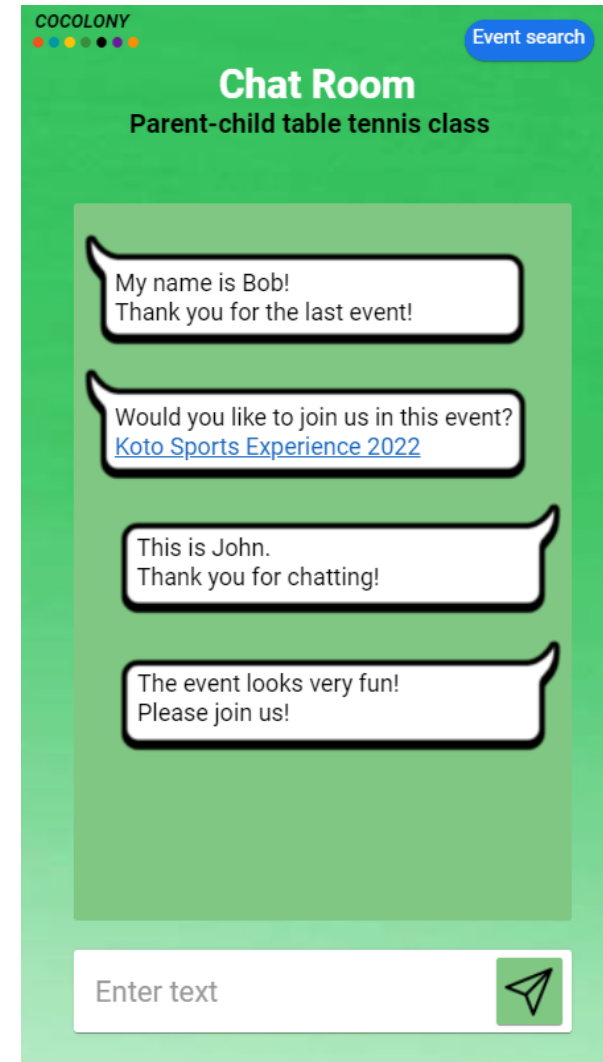- Event participants can communicate with other event participants.

Figure 3. Chat screen.

3. Conclusion

3. Conclusion

- **Lack of open data information**
  - → Only a few applications can be created for certain areas of Tokyo.
- **Infrequent updates**
  - → Inability to check real-time event information.
- **Lack of uniformity in data format**
  - → Data processing is necessary for developing applications.

- Enrichment of open data information and unification of formats are anticipated as major future challenges.

3. Conclusion

- This initiative demonstrated the possibility of resolving administrative issues through a hackathon conducted by the government.

- The Tokyo Metropolitan Government must attempt to enhance open data and set uniform standards.

- As future work, we plan to examine open data formats that are easier to use.

4. References

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5. Tokyo Metropolitan Government. *Event List - Dataset - Tokyo Metropolitan Open Data Catalog Site.* [Online]. Available from: https://catalog.data.metro.tokyo.lg.jp/dataset/t131083d0000000001 2021.08.04 [retrieved:April, 2022]