

Abstract

In the era of the 4th industrial revolution, data-based digital management is on the rise regardless of public and private sectors. In private sector, various form of data is collected, processed, stored, and analyzed to operate the organization, while the public sector seeks solutions to social problems to lay the foundation for creating new economic added value by improving people's quality of life and spreading data-based industrial ecosystems. KOICA also establishes and implements a digital strategy for both agency management and development projects, recognizing the need for data-based digital transformation. A variety of data is generated in the process of development project operation, and the project data can be defined as verification indicator values measuring input, activity, output, outcome and impact. In the midst of the necessity growing, KOICA should be able to answer how to collect and utilize project data that will continue to be accumulated. Based on this question, the study aims to suggest internal and external utilization of the project data, especially focusing on the outcome data.

The survey on KOICA employee's perception of data utilization found the absence of data-oriented system and underutilization of data itself. Meanwhile, USAID which is leading in digitalization established a systematic data storage and disclosure system under the U.S. Government's Open Government Directives. Once the data is collected and assessed, it is registered with DEC and DDL, the systems for data storing and publishing. Workforce for data management also plays a key role in securing appropriate data from generation to registration, which ultimately enables the collection, storage, publishing, and re-use of data.

Data utilization of KOICA is suggested in three ways; 1) strategy plan and project management, 2) evaluation, 3) open data. First, project data plays a key role in assessing needs in developing countries and implementing evidence-based policies

and projects. In terms of organization management side, it enables effective operation and decision making. KOICA intends to promote digital transformation in 2020 that will change overall management, including project models, processes and organizations. This requires that quality data be collected and managed. Secondly, evaluation to prove project effectiveness and scientific evidence of impact crucially contributes to learning and adaptive project management. Since the demands for accountability increases as KOICA project scale grows, it is significant to present justification and effectiveness of the project impact. If project data is sustainably measured, evaluating such values and adapting the results will be possible. Lastly, opening public data is to build quality and cost-effective evaluation environment and to respond to government-driven open data project. Open data for development projects induces participation in various partnerships and seeks benefits both inside and outside the institution through the creation of new values. However, information security and ownership in publishing data for ownership, personal information protection and prior consent must be addressed further ahead.

As we are facing the era of predicting the future based on the data analysis, data is increasingly essential. To actively utilize development project data, it will be necessary to identify what data is produced through the project, and to be collected and managed according to its purpose. To carry into effect, in the short term, study recommends to establish a data management system for each type of data, starting with defining and standardizing the data, along with the security standards required for further data opening. In the long term, this should be established as a whole system, and staffing for data management is guaranteed to ensure sustainable utilization of the system. With such effort, KOICA will be able to provide convincing grounds for strategy plan, decision-making, evaluation in development projects, and also contribute to the expansion of development cooperation industrial ecosystem by involving more stakeholder through publishing the data.