

ISHIZAWA LAB.



Upscaled Social Use of Building Information Model

Department of Human and Society
Interspace Research Center

Building Information Modeling
Department of Architecture, Graduate School of Engineering

<https://ishizawa-lab.notion.site>

Unlocking the Potential of Architectural Information to Inherit Our Memory

Buildings can serve for more than a human lifetime. Throughout their extensive lifecycle, from conception, design, and construction to operation and eventual demolition, buildings are created through the collaboration of numerous individuals. While this process generates diverse types of architectural information, much of it remains inadequately integrated into building users' experiences and urban and mapping data. The Ishizawa Laboratory focuses on "information" as a fundamental element of architecture, exploring the potential for its secondary utilization to develop innovative approaches to architectural information that address societal challenges.

Key Research Questions Around Building Information Modeling (BIM)

Human & Technology

Research on improving architectural processes through building information, focusing on collaboration among diverse stakeholders. Areas include BIM log mining and construction robotics.



BIM log mining to visualize project collaboration. [2021]



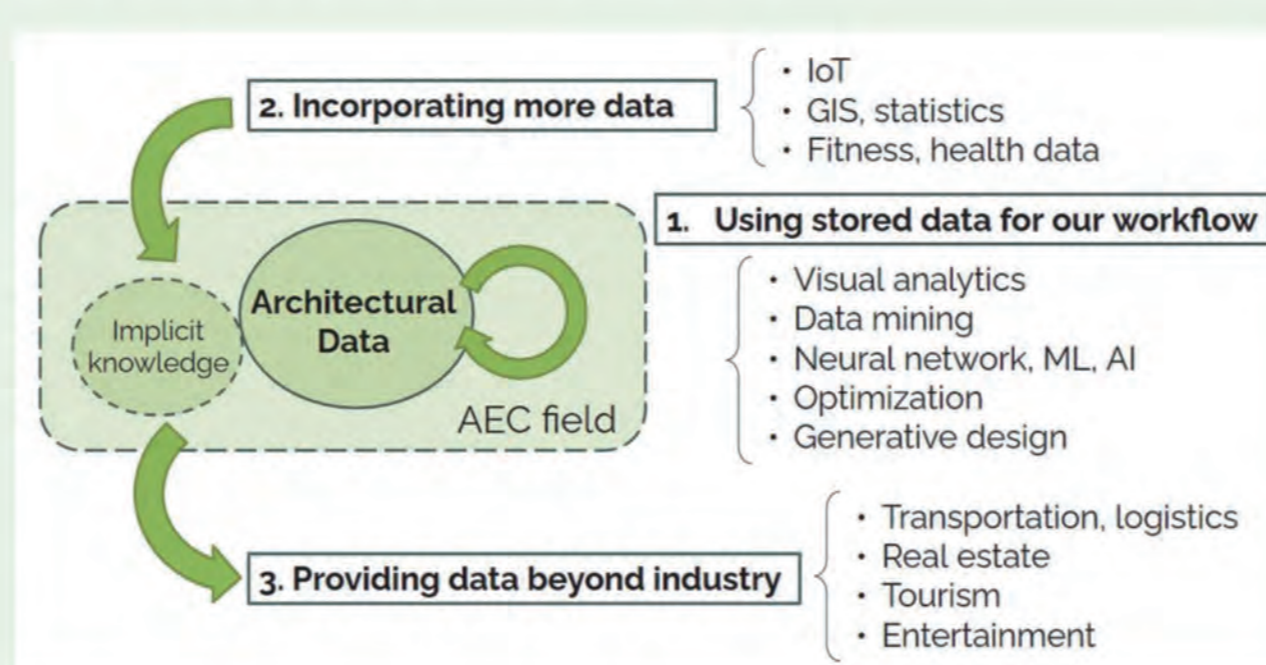
Exoskeleton to assist the construction work. [2025]

Selected Publications

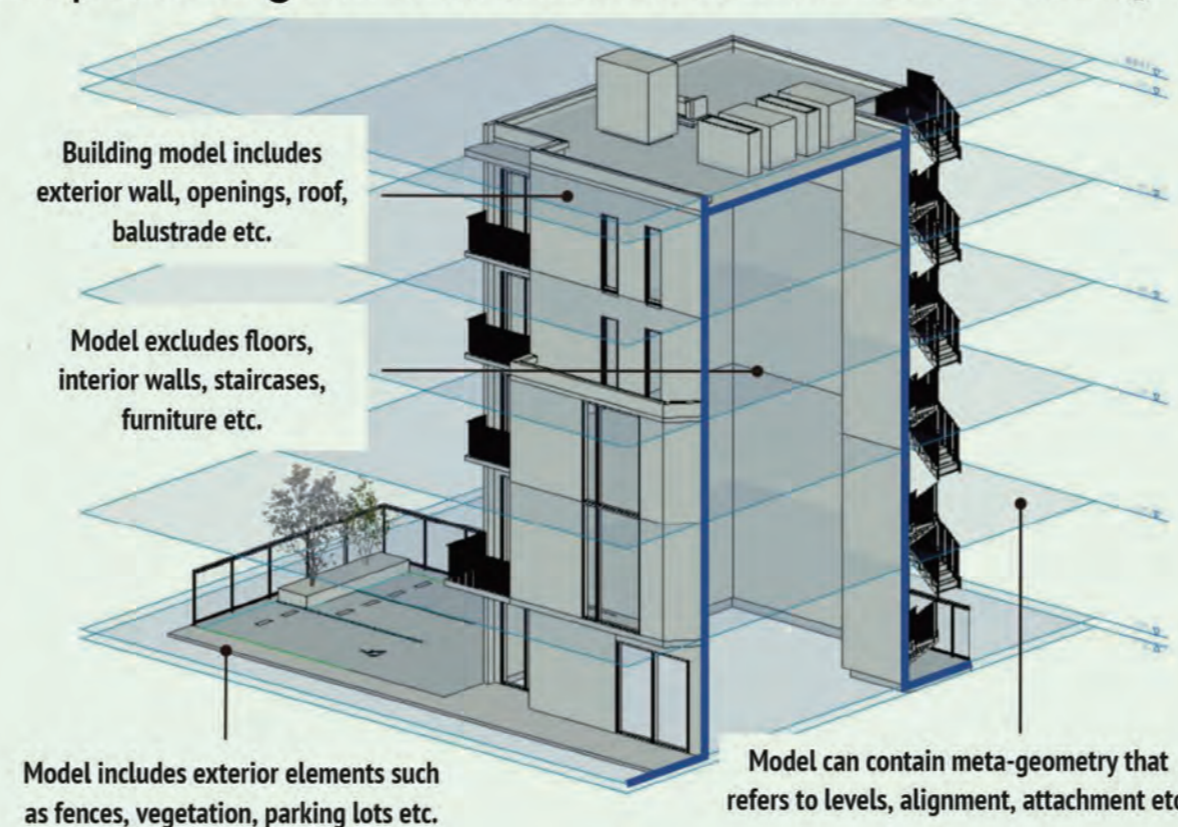
- Ishizawa, T., & Ikeda, Y. (2021). Visual log analysis method for designing individual and organizational BIM skill. DOI: [10.50926/ais.11_a](https://doi.org/10.50926/ais.11_a)
- Natsuki, R., & Ishizawa, T. (2024) Exploring the Frontier of Construction Robotics by the Cyborg Matrix.

Value & Economics

Fundamental research on information sharing frameworks addressing challenges in rights management and value assessment for the utilization and distribution of architectural information.



Conceptual diagram of architectural information flow. [2021]



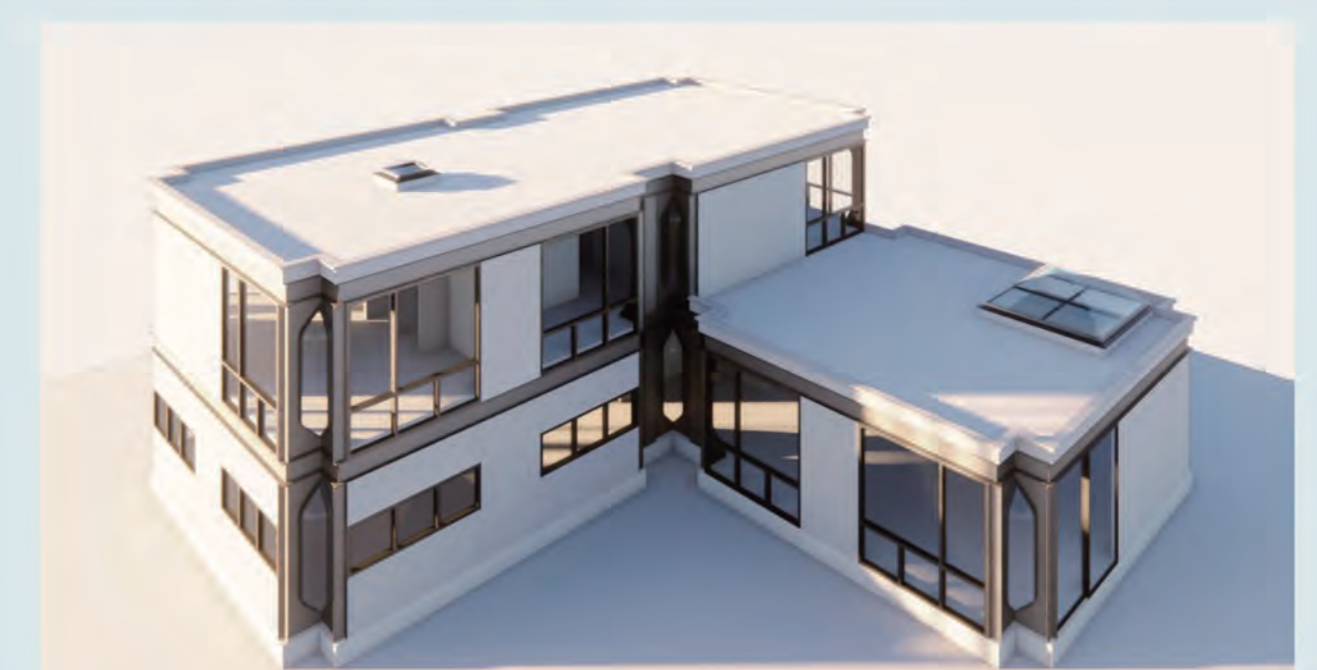
Concept of "ExBIM" to assess the building externality. [2021]

Selected Publications

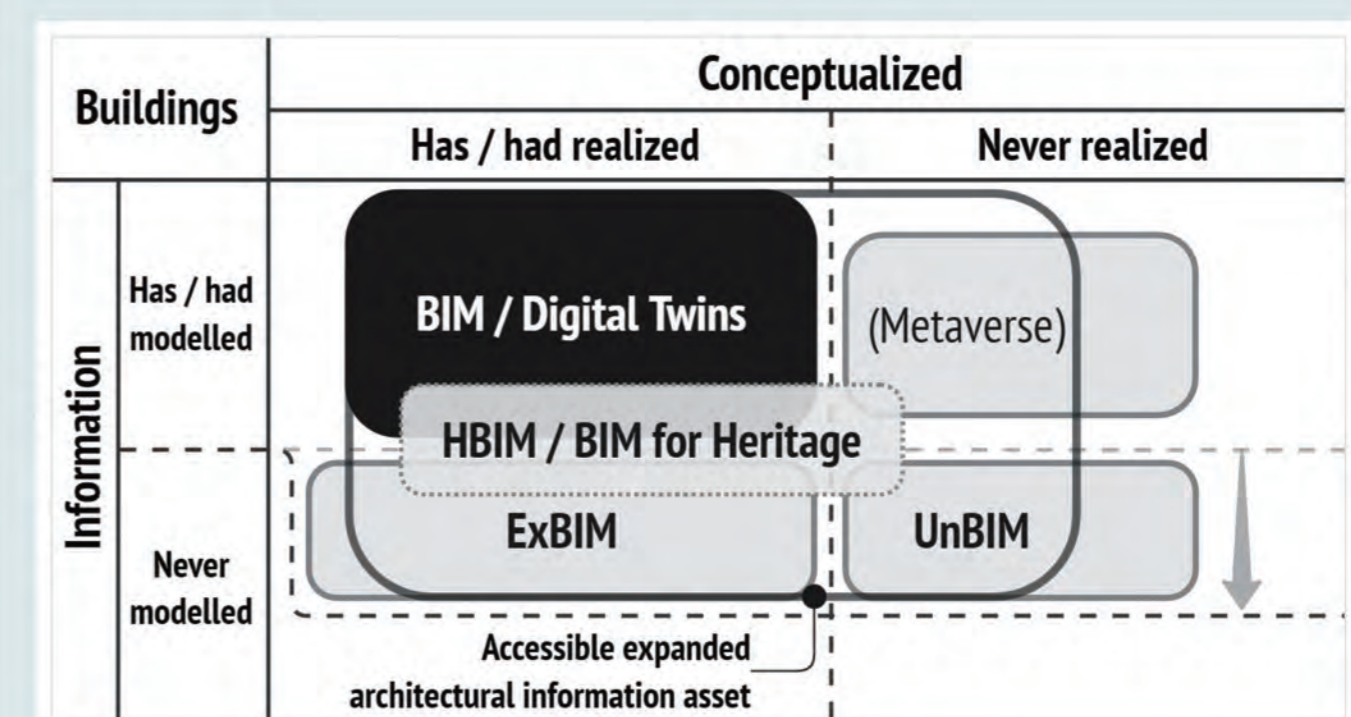
- Ishizawa T., Murai H., & Toyoda K. (2025). "ExBIM": A Proposed Modeling Method to Assess the Building Externality, DOI: [10.11188/seisankenkyu.7797](https://doi.org/10.11188/seisankenkyu.7797)
- Ishizawa, T. (2022). Keystone Players in Collaborative Building Information Modeling. DOI: [10.36680/jitcon.2022.034](https://doi.org/10.36680/jitcon.2022.034)

Heritage & Memory

Research on architectural information management, including HBIM (BIM for Heritage) and unbuilt models, for valorizing currently existing, demolished, and unrealized buildings.



Exploring the informational value of unbuilt. [2025]



BIM log mining to visualize project collaboration. [2021]

Selected Publications

- Ishizawa, T. (2023) Metaverse Expands the Common Data Environment. DOI: [10.52842/conf.caadria.2023.1.677](https://doi.org/10.52842/conf.caadria.2023.1.677)
- Kasai, A., & Ishizawa, T. (2024) More Words From Facility Operation Managers: Text-Based Building Information for Inclusive Accessibility. DOI: [10.52842/conf.caadria.2024.1.241](https://doi.org/10.52842/conf.caadria.2024.1.241)