

Smart Infrastructure Management System (i-DREAMs®)

Système intelligent de gestion des infrastructures (i-DREAMs®)

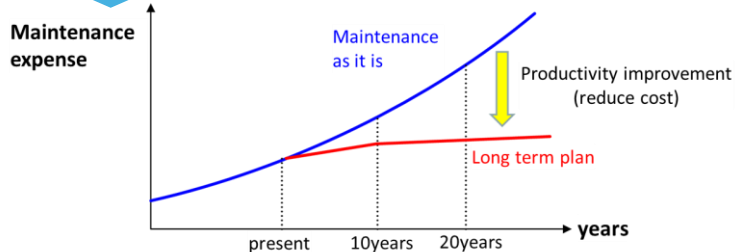


■ The Future of Maintenance and Management through Increased Productivity

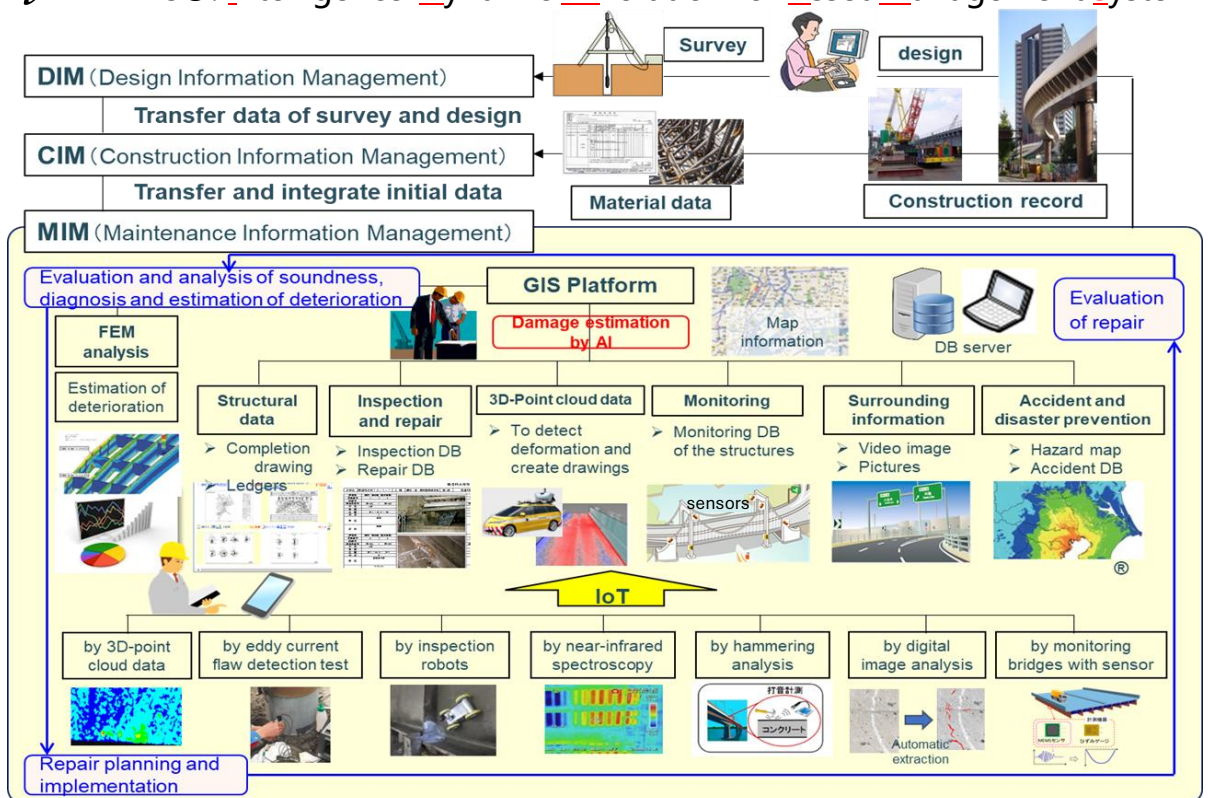
- If the infrastructure continues to be maintained as it is, significant maintenance costs will be required due to the increasing deterioration and damage caused by aging.
- There is also concern about a shortage of engineers, inspectors, and other human resources, as well as increased costs, due to the declining population.

The development of innovative infrastructure management systems such as i-DREAMs® is expected to be required to accurately and efficiently perform an ever-increasing number of maintenance tasks with limited resources in terms of people, budget, materials, information, and time, and to dramatically improve productivity.

As a result, the efficiency and productivity of maintenance and management would be improved. Sustainable infrastructure management would be achieved.



■ Architecture of "Smart Infrastructure Management System" i-DREAMs®: i-ntelligence-D-ynamic REvolution for A-sset M-angement s-ystem



■ Practical use and function of i-DREAMs®

- Intelligent search from GIS platform
- Site condition survey from the system
- Creation of 2D/3D CAD drawings
- Simulation on 3D space
- Damage detection of structures
- Automatic pavement damage evaluation and repair plan
- Prediction of structural deterioration using AI and structural simulation
- The knowledge obtained from maintenance can be fed back to the design and construction phase.

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