



Geo-intelligence,
Building Multi-dimensional Foundation

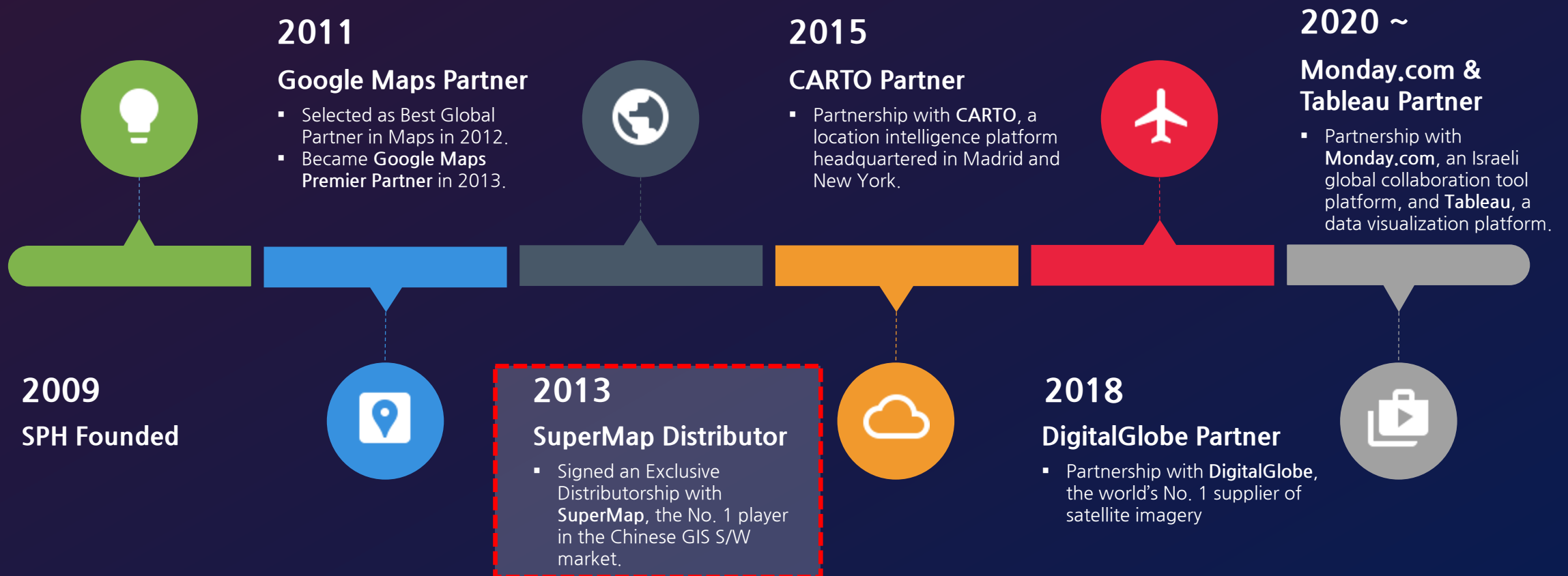
The Utility Management and Pipeline Analytics based on GIS in City GAS Industry

Hyojin Lee

Global Marketing Manager, SPH

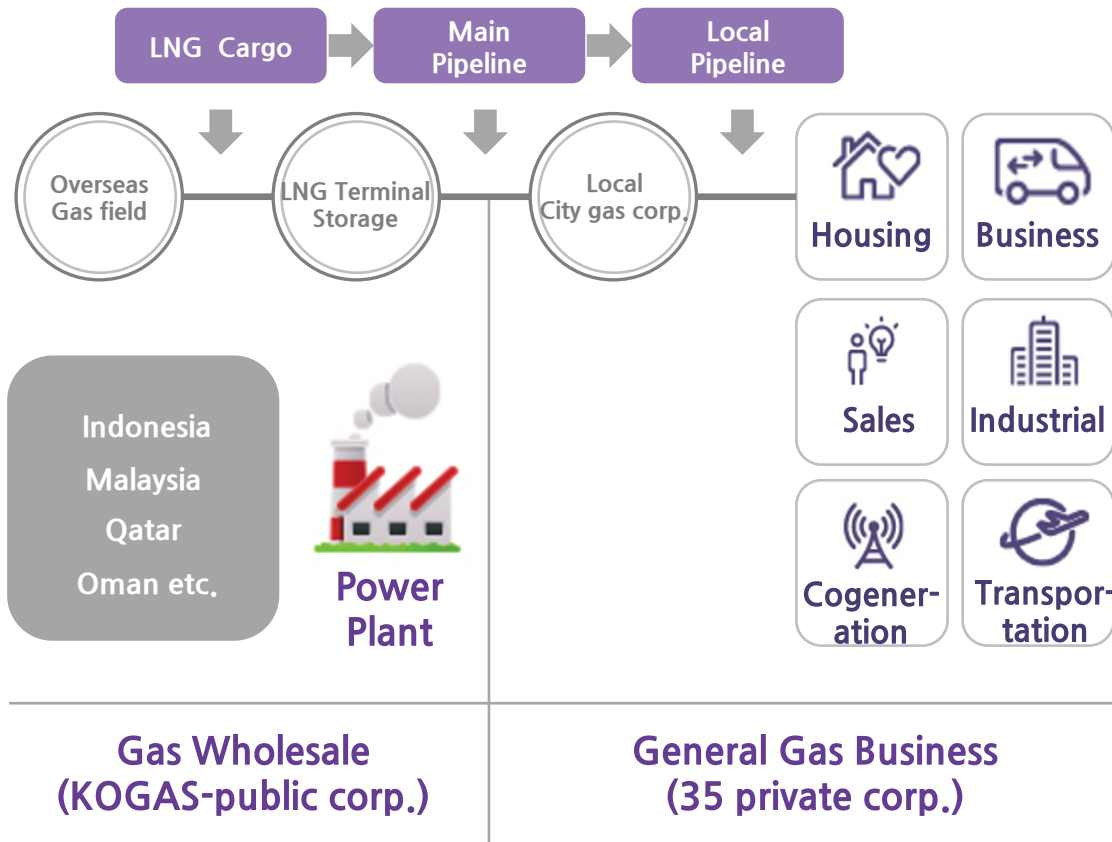
SPH History

“Making a Story of Human and Place with Technology.”



Current Status of City Gas in Korea

Supply System



Field of Use



Housing



Business



Transportation



Industrial

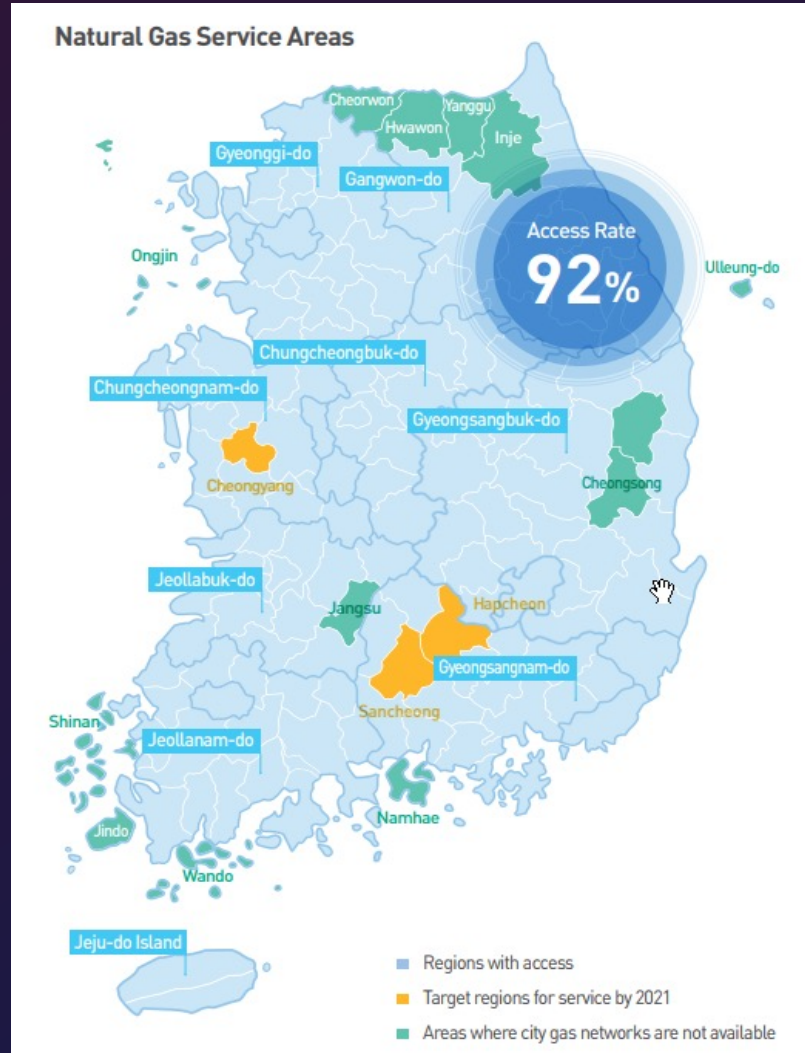


Cogeneration



Cold-heating Industries

Current Status of City Gas in Korea



36 Korean corporates supply city gas
(KOGAS and **35 city gas companies**)

► Pipeline Extension

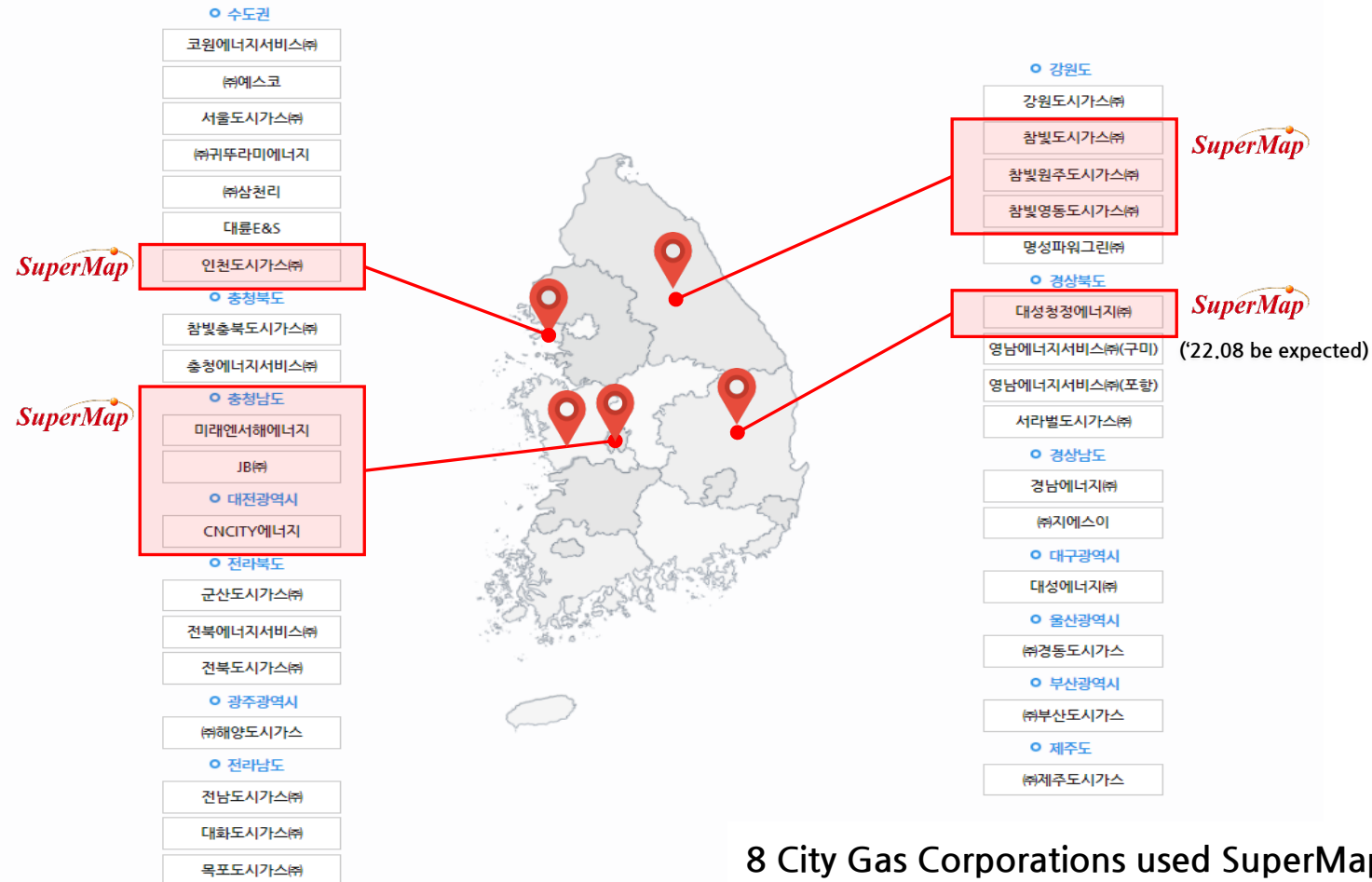
KOGAS

4,945km

35 City gas corp.

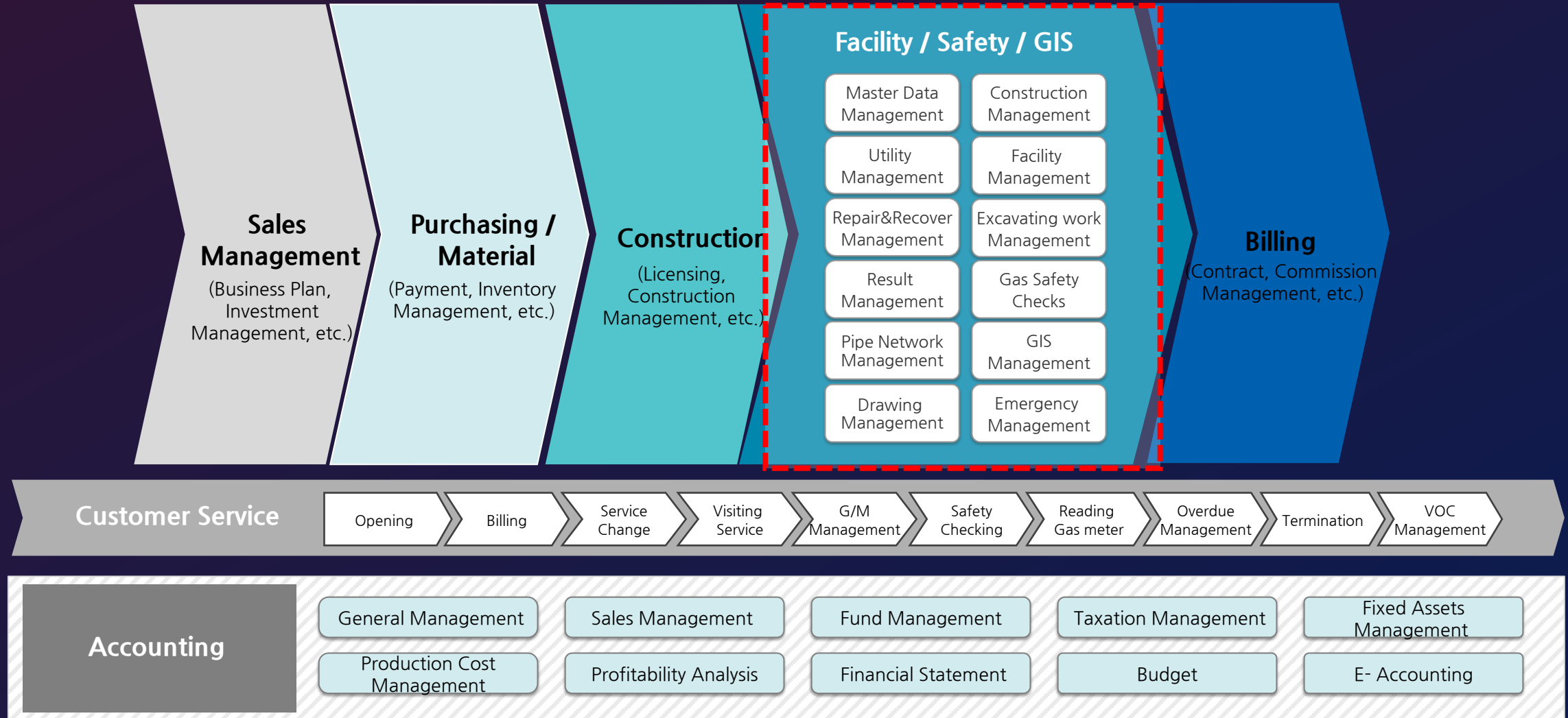
280,567km

Current Status of City Gas in Korea

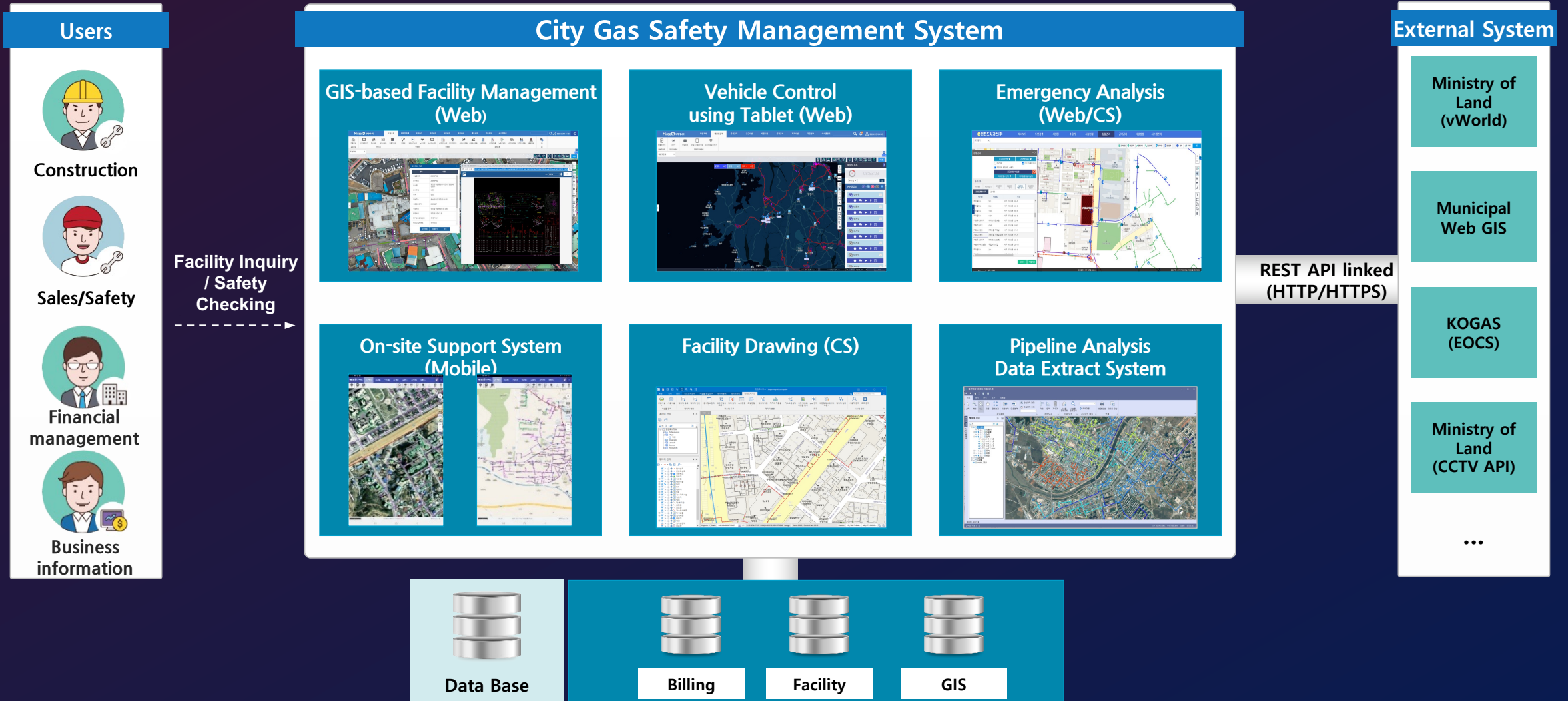


8 City Gas Corporations used SuperMap-based City Gas Safety Management System (06.2022)

Overall Process of City Gas Business

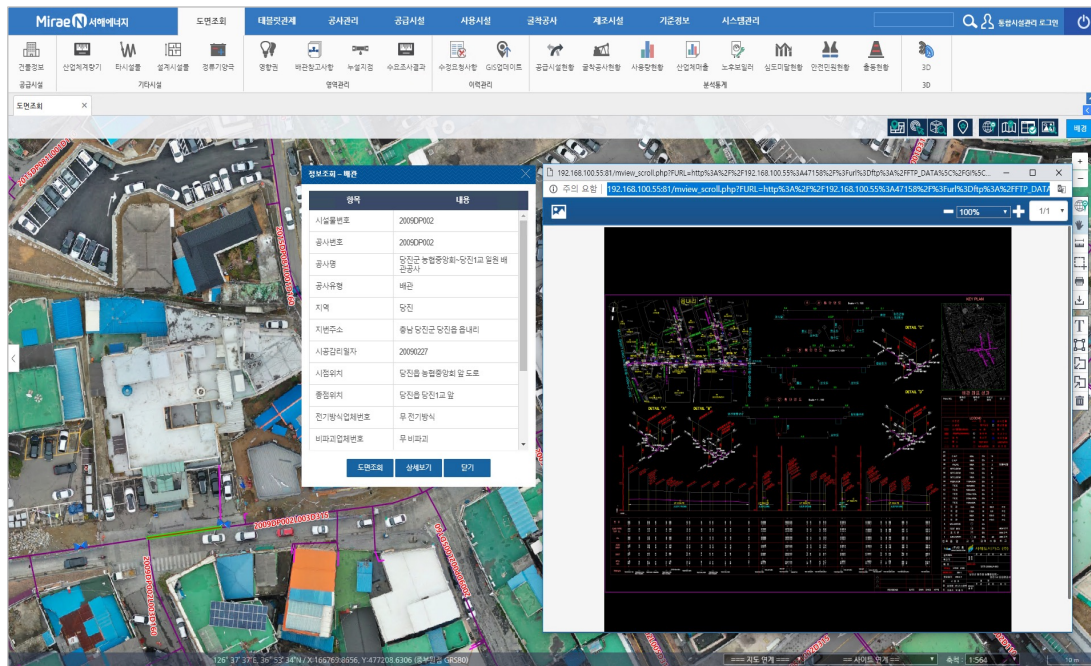


City Gas Safety Management System



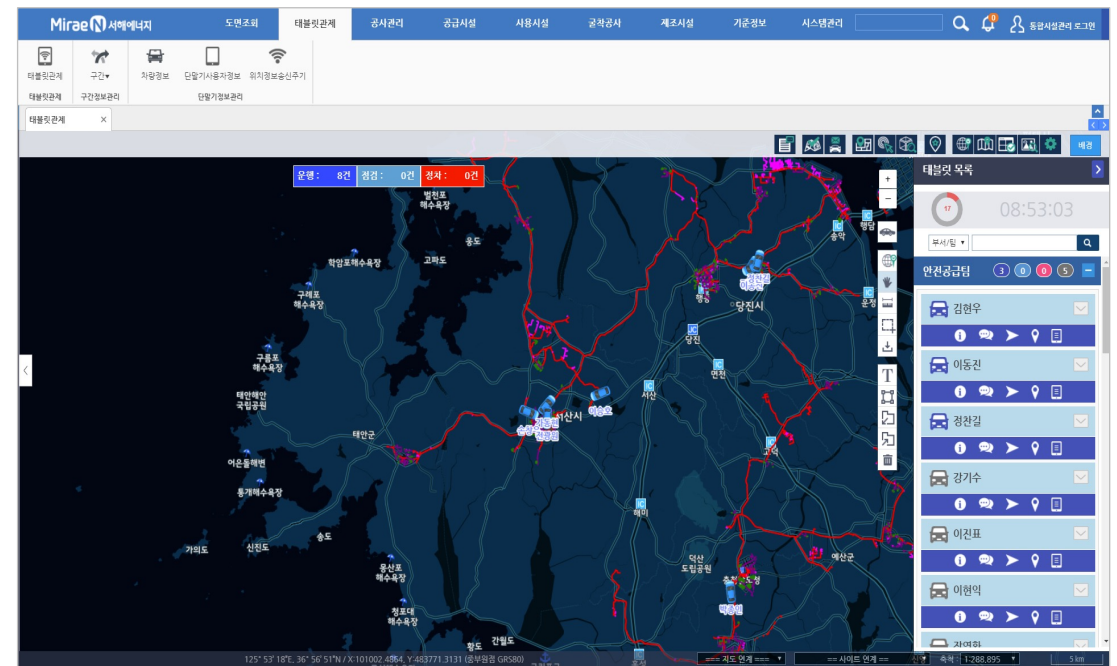
City Gas Safety Management System

GIS-based Facility Management (Web)



- Check and manage the location and properties of the City gas facilities such as pipelines and valves on the web browser.

Vehicle Control System using Tablet (Web)



- Monitor real-time location and record of workers, and send message in case of emergency using on-site support system.

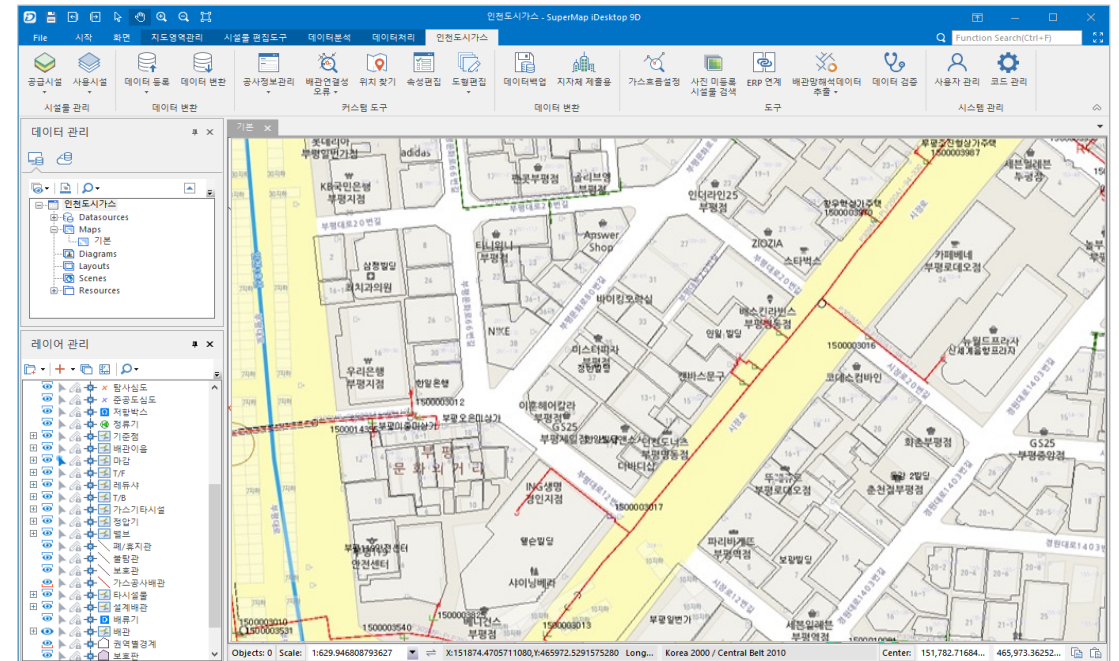
City Gas Safety Management System

Emergency Analysis (Web/CS)



- Analysis of shut-off valves, out of supply buildings and customers in case of a pipeline accidents.

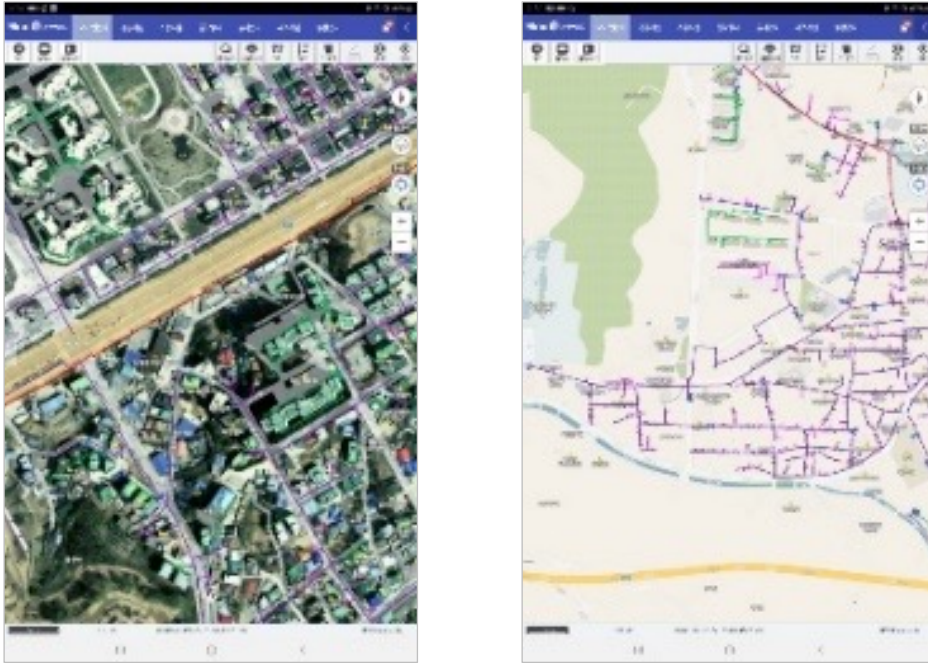
Facility Drawing System (CS)



- Design and draw facility layout of CS format.

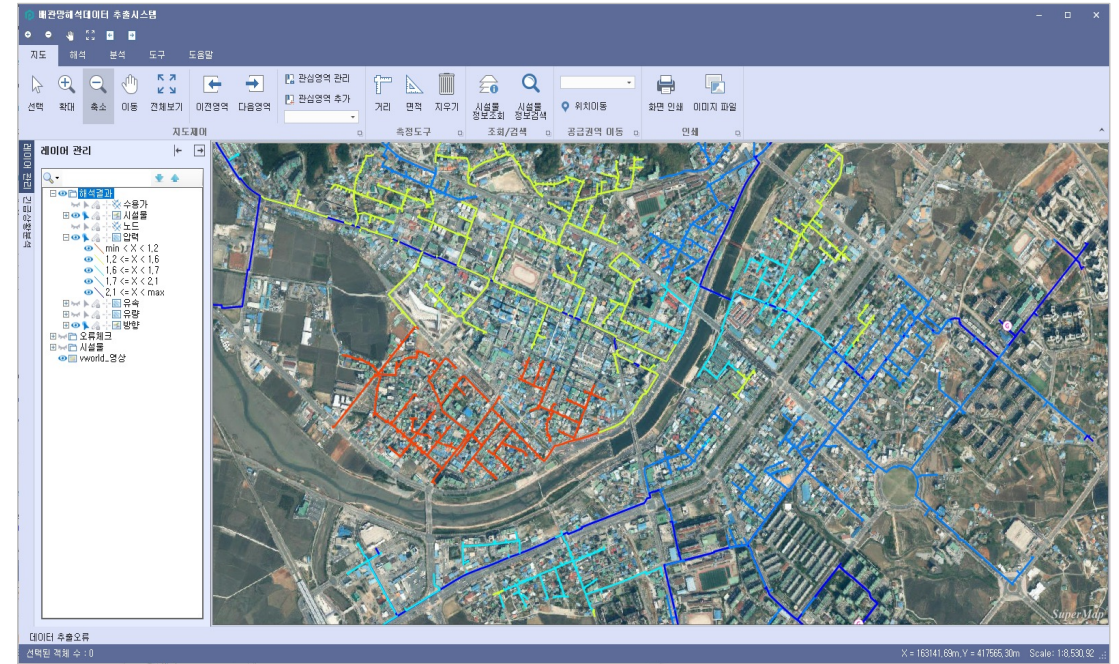
City Gas Safety Management System

On-site Support system (Mobile)



- Manage and check facilities such as pipelines and valves in the field using a tablet.

Pipeline Analysis Data Extract System



- Data generation for pipeline analysis and visualization the analyzed results.

Demo video of GIS-based Facility Management





태블릿관제



구간▼



차량정보



단말기사용자정보



위치정보송신주기

태블릿관제

구간정보관리

단말기정보관리

도면조회

X

태블릿관제

X



배경

운행 : 10건 점검 : 0건 정차 : 0건

Demo video of Vehicle Control System using Tablet

태블릿 목록



08:41:57

부서/팀

안전공급팀 4 0 0 6 +

서부안전팀 4 0 0 7 +

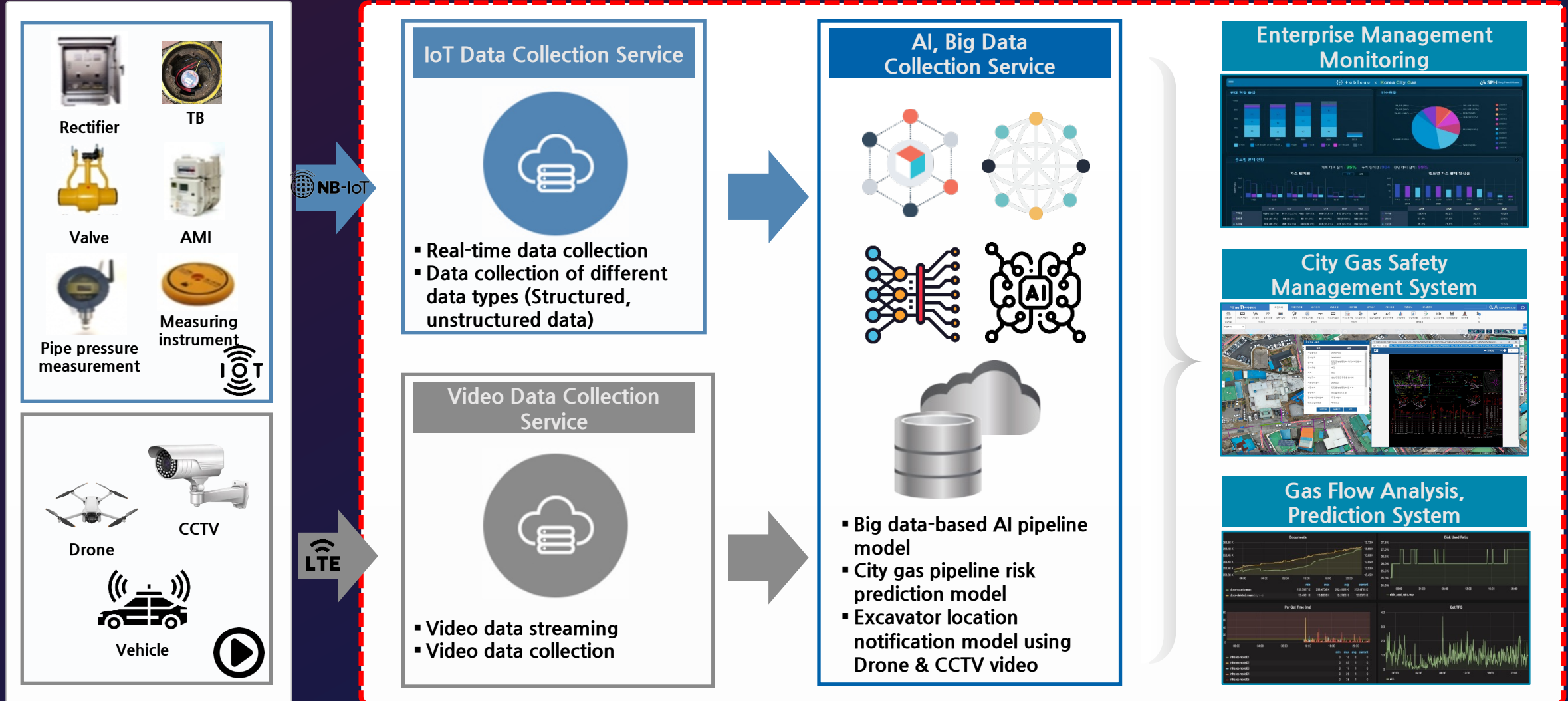
남부안전팀 2 0 0 7 +

경영정보팀 0 0 0 1 +



Demo video of Emergency Analysis System

Evolving into an Intelligent City Gas Safety Management Platform





Geo-intelligence,
Building Multi-dimensional Foundation

Thank You !



5th GIS Software Technology Conference (GTC 2022)