

IBM's Smarter Cities Challenge

Ho Chi Minh City

Summary report



Results:

Urban management system

HCMC has already begun working to improve the core systems within the city around food safety, water management, transportation, and hi-tech skills. The city is currently engaged in technology pilots in each of these areas to build a foundation for data capture and analytics, while feeding into a larger, interconnected data model that will help the city leaders take a systematic view across all areas to improve higher level decision making.

The opportunity

The leaders of Ho Chi Minh City (HCMC) envision their city becoming among the top cities in Asia, a vision that is captured by the slogan “Ho Chi Minh City – The Pearl of Asia”. City leaders recognize that to achieve this vision, a high-impact program of improvements is essential to create a quantum shift in several of the city’s major underlying systems.

Following the three-week partnership with various Ho Chi Minh City representatives, the IBM team outlined the following as areas where the city can be among the top in Asia:

- Improve water quality by addressing factors such as flooding and pollution.
- Build-out an efficient and attractive public transportation system that minimizes pollution.
- Ensure a safe food supply for the city with a responsive system to quickly identify and shut down contamination events..
- Partner with the university system to create a workforce that can staff a smart city.

Recommendations

The IBM team’s vision for Ho Chi Minh City is to build a comprehensive IT-based urban management system to enable the city to leapfrog its peers to become a true Smarter City. This “Smarter City Framework” would bring together all available data from various systems within the city and create an advanced analytics capability for real-time decision-making as well as medium and longer-term city planning. Specifically, such a framework would form the foundation for:

- Collection, storage and integration of existing data sources such as traffic cameras, magnetic loop sensors, water availability and quality data, as well as new data sources such as RFID location sensors, weather modeling, and water quality sensors.

- The use of data analytics to improve decision-making, enabling the presentation of insights, using a range of data to city stakeholders (citizens, businesses, government departments and employees).
- Deploying various methodologies, such as simulations, to evaluate how various city systems impact each other, enabling a more proactive approach toward improving city planning.
- Control of the city's actuators such as traffic lights, street lights, and watering systems, as part of a planned, data-driven response to events in the city.

The team sees the city's e-Government system as the foundational platform for this vision, which can be enhanced with the integration and advanced analytics capabilities described above.

Additionally, there is a compelling need to accelerate the creation of a hi-tech ecosystem and skilled workforce to sustain the longer-term growth of the city's systems.

If HCMC is able to achieve this level of city wide functional and technical integration and collaboration, HCMC has a real opportunity to become the "Pearl of Asia."

For more information

To learn more, send an email to smartcc@us.ibm.com or visit smartercitieschallenge.org

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