

Nippon Koei Co., Ltd.

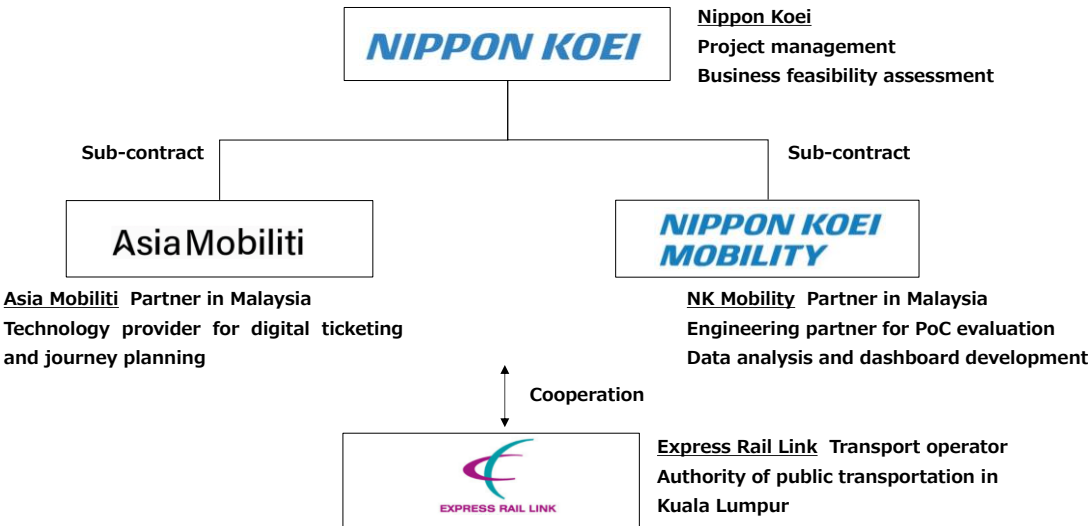


Mobility as a Service project in Kuala Lumpur by multi-modal integration between mass transit and feeder transport

Objective of the project

This project aims to enhance convenience through the integration of public transport in Kuala Lumpur. It is a proof-of-concept project to enable seamless use of existing public transport such as railways and buses with demand responsive transport (DRT) to promote public transport usage. As part of the project, we tested digital ticketing and route search functions integrating DRT and public transport, and also developed a data analysis dashboard for optimizing public transport operations.

Cooperation with local companies/governments

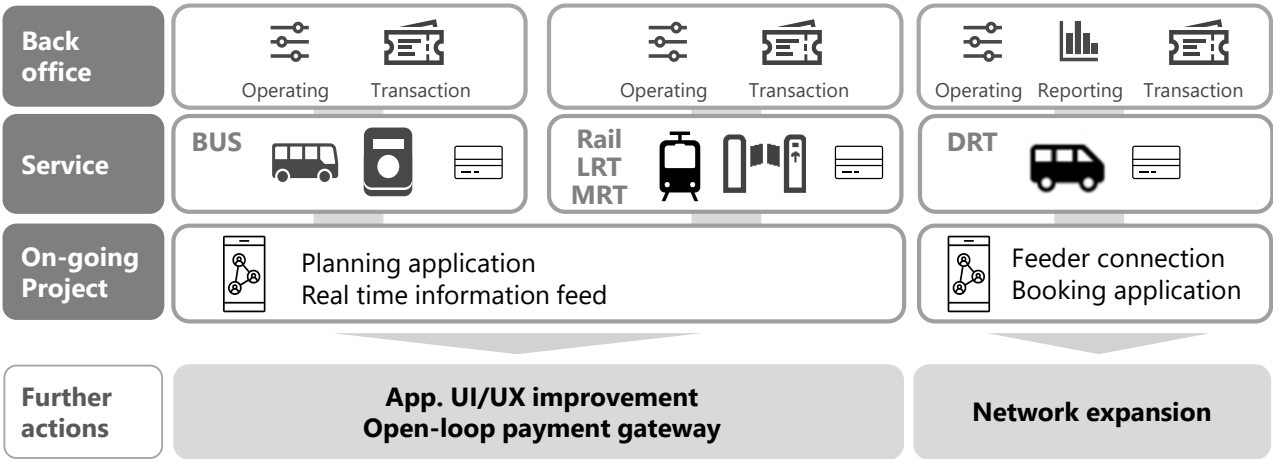


Targeted economic/social issues

Kuala Lumpur (KL) is highly dependent on automobiles and rapid urbanization has led to worsening its traffic congestion, which could become a hindrance to future economic growth and quality of life. The lack of adequate first-/last-mile transport options has resulted in low convenience of public transport.

The efforts to enhance the public transport accessibility including the introduction of route search applications integrating rail and bus, as well as pilot programs for DRT as a first-/last-mile solution have been implemented.

In conjunction with these initiatives, this project aims to optimize transport services across the entire metropolitan area and promote public transport usage.





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Demonstration period

August 2023 – January 2025

Details of demonstration

1. To improve transfer convenience by issuing digital tickets that integrate DRT tickets with railway transport tickets.
2. To provide appropriate transfer routes between first-/last-mile transport and public transport by implementing route search function integrating DRT and existing public transport in the DRT user app.
3. To develop a dashboard that aggregates data on travel demand, including the usage patterns of first-/last-mile transport and existing public transport, and mobility big-data, with the aim of supporting transport operation improvement.



Project outcome / Future plans

We implemented digital ticketing and route search functions to assess the potential and expectations for improving the convenience of public transport.

The KPI evaluation results are as follows:

Number of Route Searches: it steadily increased in correlation with DRT users.

Digital Ticket Sales: they were low due to a lack of relevant DRT ridership. The user survey, including awareness-raising activities was conducted and confirmed demand for tickets covering multiple transport modes.

Data Dashboard: three use cases for utilizing data to improve transport service operations were proposed after discussing with the DRT operator (Asia Mobiliti).

As DRT services continue to expand in KL, the demand for the services and functions demonstrated in this project is expected to increase.

Moving forward, the project members will collaborate with public transport operators (such as Prasarana) to conduct business development activities for the implementation and integration of these functions. Additionally, the dashboard developed in this project can be proposed as a value-added service aimed at improving first-/last-mile transport and public transport operations. Furthermore, proposals of MaaS initiatives in other regions are being planned.