

Asia Digital Transformation (ADX) projects(2022) Selected Projects

Thailand

Company Name	Company Size	Project Name
FUJIFILM Corporation	Large	Demonstration project related to the construction of a gastrointestinal cancer diagnostic platform in Thailand
gsport,inc.	Small/medium	Project for the online multilingual platform of physical functions assessment for care prevention DX
Kao Corporation	Large	The Project to build the prediction model of mosquito-born virus spread by using AI technology and improve the forecast system as UX for preventing dengue fever cases in Thailand
Melody International Ltd.	Small/medium	Development of a platform for improving the prenatal checkup rate in rural Thailand using mobile fetal monitors
Harada Vehicle Design Co., Ltd.	Small/medium	Project of Marine Debris Tracking System in Thailand
Naturanix Co., Ltd.	Small/medium	Development & demonstration of a data platform for next-generation rapid charging system that enables electric motorcycles to be charged within a few minutes in Bangkok, Thailand.
Nomura Research Institute, Ltd.	Large	Introduction demonstration of SCOPE3 data sharing solution (NRI-CTS) in the ASEAN region
NITA CONSULTANT Co.Ltd	Small/medium	Development and implementation of DX promotion tools for Tourism SC (Supply Chain) resilience considering the risk of natural disasters.
GLODAL, Inc.	Small/medium	Services on HRD of AI for space utilization to accelerate digital industries in Thailand
AI inside Inc.	Large	Development and introduction of AI-OCR contributing to business automation in Thailand

FUJIFILM Corporation



FUJIFILM

- Address: Minato-ku, Tokyo
- Employees: 36,279 (consolidated)
- Established in 1934
- Business: Providing products and services related to healthcare, materials, and imaging

<https://www.fujifilm.com>

Outline of the demonstration project

- Demonstration project related to the construction of a gastrointestinal cancer diagnostic platform in Thailand

Cooperation with local companies/governments

- Local Partners: Thai Association for Gastrointestinal Endoscopy (TAGE), J.F. Advance Med, Science Engineer International, K Performance
- Details of cooperation and collaboration: Pilot study and roadmap development for building a diagnostic PF



Targeted economic/social issues

- In Thailand, there is a growing need for endoscopic diagnosis and treatment, but due to the shortage and maldistribution of specialists and inefficient clinical workflows, efficient diagnosis and treatment are not possible.

Details of demonstration

- In collaboration with TAGE, the Ministry of Health, etc., we organize a project team related to the construction and operation of a diagnostic platform.
- Utilizing endoscopes and IT systems, we build a PF that enables sharing and analyzing of case and medical data, while reducing the workload of endoscopists.
- A pilot study is conducted at a local hospital to verify the effectiveness of workflow improvement and data sharing/analysis.

Expected outcome of beneficiary effects

- Achieve efficient medical care, and contribute to early detection and treatment of gastrointestinal cancer, and reduce mortality
- Through the utilization of medical data, it is possible to make policy proposals and train endoscopists to improve cancer treatment.

gsport, inc.



- Address: 2-2-17 Sotokanda, Chiyoda-ku, Tokyo
- Employees: 10
- Established in 2000
- Business: Software R&D and global distribution

<https://www.gsport.co.jp/en/>

Outline of the demonstration project

- Project for the online multilingual platform of physical functions assessment for care prevention DX

Cooperation with local companies/governments

- Local partners: Hitachi High-Tech (Thailand) Ltd. Healthcare Workshop Co., Ltd.
- Details of cooperation and collaboration: Market research and technology & know-how transfer of the proposed platform through trials



Targeted economic/social issues

- Thailand's population is aging rapidly, with per capita health care costs increasing from US\$152 in 2008 to US\$276 in 2018 (WHO 2021).
- The Second National Plan for the Elderly has identified the urgent need for long-term care prevention, which encourages citizens to prepare for aging.

Details of demonstration

- Develop a multilingual platform for online posture and movement assessments and exercise guidance for DXing of care prevention to reduce the burden on instructors at senior centers and rehabilitation centers at a low cost.
- Conduct market research and trials of the above platform with long-term care prevention facilities operated by municipalities and/or private companies.

Expected outcome of beneficiary effects

- Contribute to mid- to long-term policies for the elderly by spreading the importance and necessity of long-term care prevention in Thailand.
- Confirmation of regulations related to the promotion of this project, discovery of potential bottleneck issues, and their application in other fields such as product development.
- Deploy the results of this project in Thailand to other ASEAN countries with similar aging populations.

Kao Corporation



- Address: Chuo-ku Tokyo, Japan
- Employees: 8,505
- Established in 1887
- Business:
Manufacturing Industry

<https://www kao com/global/en>

Outline of the demonstration project

The Project to build the prediction model of mosquito-born virus spread by using AI technology and improve the forecast system as UX for preventing dengue fever cases in Thailand

Cooperation with local companies/governments

■ Local partners:

- DDC Department of disease control under Ministry of Public Health
- NECTEC National Electronics and Computer Technology Center

■ Details of cooperation and collaboration:

Construction of a prediction system for dengue fever sources and provision of informing to consumers



Targeted economic/social issues

- While facing COVID-19 pandemic, dealing with dengue virus in tropical regions is also an urgent issue. The number of people infected with dengue fever in Thailand is 50,000 to 150,000 every year. High-risk areas include densely populated Bangkok and its surrounding areas, and industrial areas. Also, school children between the ages of 4 and 15 are the most commonly infected. Avoiding health and physical risks of young people and in urban areas contributes not only to the foundation of stable economic growth, but also to the realization of a healthy and sustainable society. In addition, dengue fever is a common issue among ASEAN countries, and solving social issues has a great ripple effect.

Details of demonstration

- Build an early and accurate prediction model of the spread of dengue fever via mosquitoes through the analysis of the dengue fever cases from DDC and the acquisition/AI analysis of monitoring information on dengue virus prevalence in mosquitoes.
- In order to inform consumers about the risk of dengue fever through communities such as hospitals and schools and encourage preventive actions, establish and install a high UI/UX forecast system in collaboration with NECTEC, which develops and operates an application that provides information on affected persons data to consumers.

Expected outcome of beneficiary effects

- Reduction in the number of dengue fever cases by improving risk awareness and preventive behavior, reduction of Thai government's dengue fever countermeasure costs, and awareness-raising in ASEAN countries, etc.
- Contribution to the market expansion/creation with the increase of usage/frequency of repellents by raising awareness of preventive behavior (secondary effect).



Melody International Ltd.



Melody
International

- Address: Takamatsu, Kagawa 761-0301 JAPAN
- Employees: 19
- Established in 2015
- Business: Manufacture, development, and sale of telemedicine service platforms and medical devices

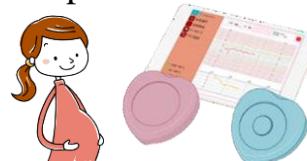
<https://www.melodyi.net/>

Outline of the demonstration project

- Development of a platform for improving the prenatal checkup rate in rural Thailand using mobile fetal monitors

Cooperation with local companies/governments

- Local partner: CHIANG RAI PROVINCIAL PUBLIC HEALTH OFFICE (“MOPH”)
- Details of cooperation and collaboration:
Establishment of a platform that contributes to improving the rate of prenatal checkups using fetal monitoring for the purpose of promoting DX in the field of perinatal care, and on-site operational support and verification.



Targeted economic/social issues

- The prenatal checkup rate in Chiang Rai Province has been declining, and according to a survey by the local Ministry of Health, only about half of pregnant women have received a checkup at least once by 12 weeks of pregnancy.
- Furthermore, only 7.2% of pregnant women received a total of 5 prenatal checkups (the standard in Japan is 14) by 2022, indicating that poor access to checkups is contributing to the worsening perinatal mortality rate.

Details of demonstration

- By using iCTG, a highly portable delivery monitoring device compared to conventional ones, fetal monitoring can be widely conducted even in rural areas where there are no specialist doctors, making it possible for midwives and nurses to determine which expectant mothers require medical intervention based on their measurements, which will lead to a safe and secure delivery.

Expected outcome of beneficiary effects

- In the future, by promoting the use of inexpensive iCTG, we can expect new introductions of the device at clinics that are currently unable to install such equipment due to its high cost, thereby expanding the market and raising the level of quality of medical care.

Harada Vehicle Design Co., Ltd.



- Address: Miyoshi-shi, Aichi Prefecture
- Employees: 100 people
- Established in 1998
- Business: Manufacturing Solution Provider

<https://www.hvd.co.jp/>

Outline of the demonstration project

- Project of Marine Debris Tracking System in Thailand

Cooperation with local companies/governments

- Local Partner: Asia Technology Industry Co., Ltd.
- Details of Cooperation and Collaboration:
Establishment of demonstration system and carrying out the experiment. Building a cooperative relationship with the local government and Chulalongkorn University.



Targeted economic/social issues

- It is estimated that about 8 million tons of marine plastic waste is discharged every year, with about 30% of this coming from Southeast Asian countries. In Thailand, use LPWA (Low Power Wide Area - low power consumption and long-distance communication) to track and collect garbage.

Details of demonstration

- The unique and differentiating features of the products and services developed in this project are the inexpensive public network service developed by Sony that utilizes GNSS, and the connection of various devices over a wide area.
- Efficient survey and collection of marine debris is realized by releasing drifting PET bottles loaded with GNSS receivers and LPWAs from rivers to grasp the inflow routes, drifting/casting ashore and the abundance of marine plastic waste within a 100 km radius.

Expected outcome of beneficiary effects

- If the demonstration experiment confirms its effectiveness, it will open up a new business market for collecting marine plastic litter in Thailand and other ASEAN countries. It is expected to spread by providing low-cost services.

Naturanix Co., Ltd.



<https://naturanix.co.jp/>

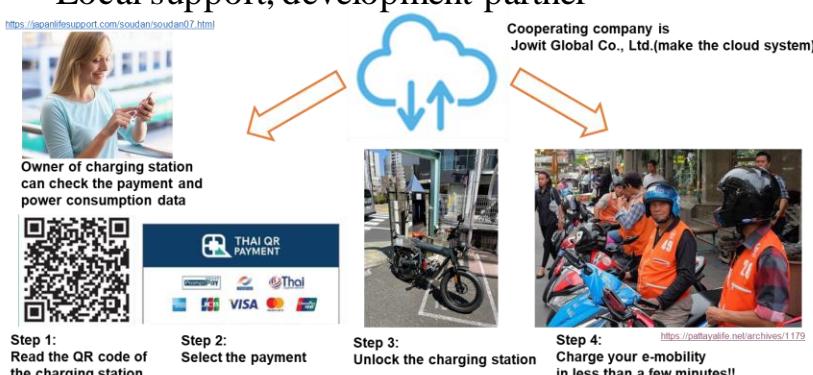
- Address: Sumida-ku, Tokyo
- Employees: 5
- Established in 2015
- Business: Development and sales of electric parts for e-mobility

Outline of the demonstration project

- Development & demonstration of a data platform for next-generation rapid charging system that enables electric motorcycles to be charged within a few minutes in Bangkok, Thailand.

Cooperation with local companies/governments

- Local Partner: Jowit Global Co., Ltd.
- Details of cooperation and collaboration:
Local support, development partner



Targeted economic/social issues

- The number of registered motorcycles in Bangkok exceeds 20 million for a total population of about 68 million, and the percentage of households owning motorcycles is the highest in the world in 2019.
- There is an urgent need to electrify motorcycles in order to reduce CO2 emissions.

Details of demonstration

- From April 2022, we will demonstrate the reduction of charging time for electric motorcycles using our battery packs and charging stations that can be fully charged in a few minutes, which we have started demonstrating in Sumida-ku, Tokyo.
- By managing the charging reservations at charging stations in the cloud, the power required for charging is stored in the batteries at the charging station in advance, reducing the load on the wiring network. We aim to promote the electric motorcycle infrastructure business.

Expected outcome of beneficiary effects

- Spread of electric motorcycles in ASEAN countries, enabling the calculation of the amount of CO2 reduction.
- Equalization of the power load on the grid due to the high power consumption of quick-charging stations.
- Promotion of the spread of electric motorcycles even in areas where electricity is unstable without a power distribution network.

Nomura Research Institute, Ltd.



Nomura Research Institute

- Address: Chiyoda-ku, Tokyo
- Employees: 6,488
- Established in 1965
- Business: Consulting & IT Solutions

<https://www.nri.com/en>

Outline of the demonstration project

- Introduction demonstration of SCOPE3 data sharing solution (NRI-CTS) in the ASEAN region

Cooperation with local companies/governments

- Local partner:
SCG LOGISTICS MANAGEMENT CO., LTD.
- Details of cooperation and collaboration:
Visualization of CO2 emissions (Scope 3) from trucks using data from SCG Logistics Management's Connected Service on NRI's carbon tracking system.

SCG Connected Service



Visualization of CO2 emissions (Scope3)

NRI-CTS



Targeted economic/social issues

- Thailand plans to achieve "Carbon Neutrality by 2050" based on the bio-circulation green (BCG) economic model. For this goal, in the transportation sector where CO2 emissions are high, small and medium sized logistics companies have to grasp their CO2 emissions, which is a big burden for them and needs to be reduced.

Details of demonstration

- In order to reduce the work for CO2 emission reporting by small and medium sized logistics companies in Thailand, NRI-CTS and SCG Logistics Management's Connected Service will be linked each other. This combined solution will apply for logistics companies.

Expected outcome of beneficiary effects

- This combined solution is expected to reduce the work required for visualizing CO2 emissions in the manufacturing supply chain ASEAN.
NRI-CTS from Japan will be able to contribute to carbon neutralization of manufacturing sector in ASEAN.

NITA CONSULTANT Co.Ltd



- Address: Tokushima Pref.
- Employees: 133 persons
- Established in 1954
- Business: Construction consultant

<https://www.nita.co.jp/company/profile/>

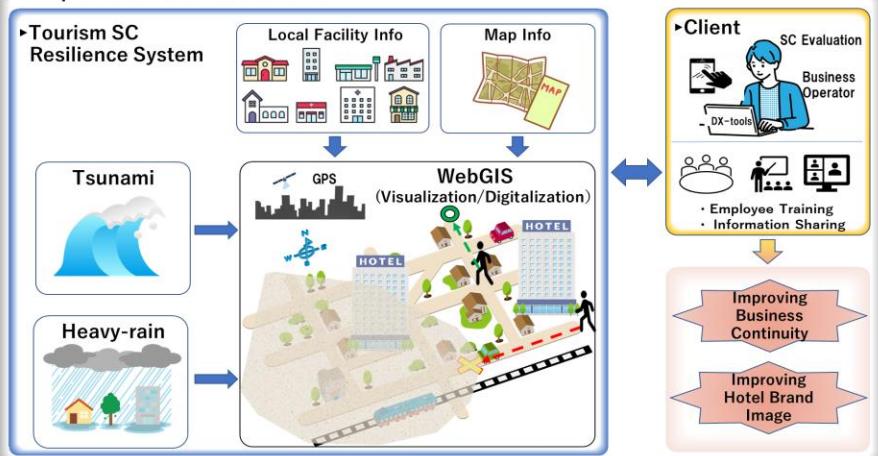
Outline of the demonstration project

- Development and implementation of DX promotion tools for Tourism SC (Supply Chain) resilience considering the risk of natural disasters.

Cooperation with local companies

- Local partner: TK9 Engineering Co., Ltd.
- Details of cooperation and collaboration:
A local agent working for information gathering, translation, interviews, business development, etc.

DX promotion business scheme



Targeted economic/social issues

- Reduction of indirect damage such as reduced hotel occupancy rates after a tsunami or heavy rain inundation.
- Improvement of the tourism SC resilience through a clear evacuation system and emergency response training.
- Visualization and digitalization of inundation risk is an urgent task as a solution.

Details of demonstration

- Analyse inundation from tsunami/heavy rain and display the maximum inundation area and depth in digital data.
- Visualize inundation risk by superimposing inundation range and inundation depth distribution on WebGIS with local facility information.
- Develop a detection tool for vulnerable parts of the Tourism SC that can be used to study countermeasures and share risks.

Expected outcome of beneficiary effects

- Provide more comprehensive Tourism SC resilience system through optional services by request and maintenance service such as updating information.
- Expected to develop as a phase-free platform that can be used not only for disaster response but also for everyday use.
- Improving the hotel's brand in terms of safety against natural disasters.





GLODAL, Inc.



GLODAL

- Address: Yokohama, Kanagawa
- Employees: 1 with 17 overseas contractors
- Established in July 2020
- Business: R&D, HRD, and consultation on AI

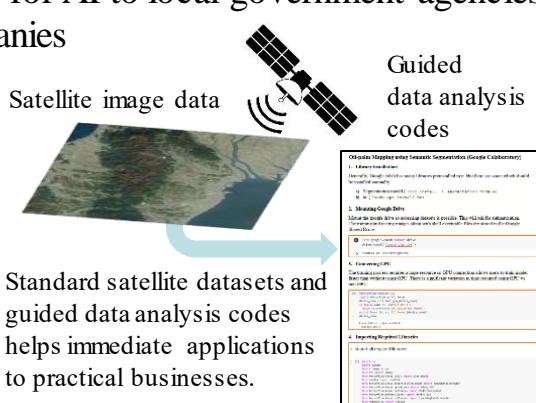
<https://glodal-inc.com/en/>

Outline of the demonstration project

- Services on HRD of AI for space utilization to accelerate digital industries in Thailand.

Cooperation with local companies/governments

- Local Partner: PASCO (Thailand) Co., Ltd.
- Details of Cooperation and Collaboration: Provision of HRD programs for AI to local government agencies and private companies



Targeted economic/social issues

- Although the Thai government focuses on digital industry, the opportunities to learn core AI technologies are limited, delaying the expansion of the base.
- While Japan-Thailand cooperation is accelerated, there is a lack of HR in the field of satellite data applications.

Details of demonstration

- Demonstration of HRD programs on AI for space utilization finely designed in line with client operations, which helps minimizing learning costs.
- Designing of HRD programs with technical specifications finely tuned based on our experience of R&D and HRD for satellite data utilization in a wide range of fields, including urban planning, disaster prevention, logistics, tourism, and agriculture.
- Demonstration of HRD programs at the Land Development Department (LDD) of the Thai government and perform marketing activities for potential customers in Thailand.

Expected outcome of beneficiary effects

- Enhancement of AI human resources in Thai industries to promote DX and improve productivity.
- Japan-Thailand cooperation to integrate space industries from satellite manufacturing to data utilization.
- Promotion of regional capacity development to achieve economic growth where no one is left behind in DX.

AI inside Inc.



<https://inside.ai/en/>

- Address: Shibuya-ku, Tokyo
- Employees: 116
- Established in 2015
- Business: Development and provision of artificial intelligence and related information services

Outline of the demonstration project

- Development and introduction of AI-OCR contributing to business automation in Thailand

Cooperation with local companies/governments

- Local Partner: C.S.I. (THAILAND) COMPANY LIMITED
- Details of corporation and collaboration: Verification of the introduction of AI-OCR to end-users in Thailand.



Targeted economic/social issues

- If the country neglects efforts to upgrade its industrial structure and technological innovation, it will fall into the "middle-income country trap," which Thailand is already facing.
- In addition, the rapid aging of the population is expected to aggravate labor shortages, making the introduction of automated systems and measures for an aging society an urgent necessity.

Details of demonstration

- Promote the development and commercialization of AI-OCR which converts all kinds of information into digital data.
- Build an infrastructure based on local laws and business customs, including security, and create a foundation for market development, first targeting structured-type formats for automated business operations.
- Next, a highly versatile AI model will be developed for unstructured-type formats to achieve further business automation.

Expected outcome of beneficiary effects

- By automating labor-intensive data entry and other tasks, the project will encourage a shift to knowledge-intensive goods and services and contribute to the promotion of DX.
- Business scalability is also expected through linkage with PRA, ERP, accounting software, electronic medical records, and other business software, as well as expansion into other ASEAN countries.