

TRANSFORMING TRAIN STATIONS INTO DESTINATIONS THROUGH DATA-DRIVEN COMMUNITY ENGAGEMENT

CONTEXT

This challenge is organised by Stellar Lifestyle, a business arm of SMRT Corporation Limited, with their partner Japan East Railway Company (JR East) to address challenges faced by retail and transit operators in Singapore and Japan.

- Stellar Lifestyle is the largest managing agent of retail and advertising spaces in Singapore's rail network and their growing portfolio includes mall management and outdoor media & digital engagement platforms. They have invested in new businesses such as co-working spaces, unmanned concepts and dark stores, with a vision to grow them into a new core.
- JR East is the operator for trains including Shinkansen (high speed bullet train) in eastern Japan. It is the largest passenger railway company in Japan, serving about 13 million passengers daily. JR East Group also operates a variety of lifestyle businesses such as shopping malls, retail shops, restaurants, hotels, as well as office building management. Outside Japan, JR East has a presence for its lifestyle business unit with the establishment of Japan Rail Cafe in Singapore and Taiwan.

Through this joint innovation programme, Stellar Lifestyle and JR East are seeking solutions to support online transformation, online-to-offline customer engagement, develop a vibrant environment inside train stations to improve commuter experiences, and introduce new last-mile robotics delivery platforms for retailers and F&B merchants, within SMRT and JR East-operated train stations.

SMRT aims to enhance the services and experience for train commuters, and actively design stations around the profile of user communities. Their goal is to create a mutually beneficial situation for commuters, tenants and SMRT, by leveraging existing data of commuters to understand their behaviour patterns and related needs. They aim to create communities around commuters who travel to the same destinations, spend time around the same stations, and share the same interests and lifestyles. As they recognise these communities – either through existing or new opportunities to actively build such communities – they also want to connect them with relevant offerings to create a deeper sense of belonging/ownership to a particular station. Ultimately, the goal is to have more SMRT stations with a distinct identity in the community of users, and in this way continuously develop stations as destinations known for their identity and profiling.

Through this challenge, Stellar Lifestyle and JR East want to explore how they can reimagine train stations as community destinations rather than pass-through points. This could involve profiling the station based on commuter behaviour, adjusting the station's look and feel, and carefully selecting retailers and other service providers in a way that aligns with the interests of the particular community. Data-driven insights can also be shared with SMRT's partners, such as shopping centres connected to the train stations, who can also adjust their profiling and offerings to customers accordingly. This project will serve as a proof of concept for enabling their strategic planning and decision making to be more data-driven and user/community-centric.

PROBLEM STATEMENT

How might we transform train stations into destinations that will appeal to the commuting community, using data-driven insights about their interests?

WHAT ARE WE LOOKING FOR?

Stellar Lifestyle and JR East are looking to leverage relevant existing data and create actionable insights to build and better serve communities revolving around certain train stations, through a strategic data innovation project that could achieve win-wins with other partners who already possess demographic-rich data and have expertise in consumer analytics.

The Problem Solver should take into consideration:

- Leverage existing data. The solution should not require Stellar Lifestyle to collect new data but instead tap on existing data sources (e.g. ridership for train, taxi and buses) to develop possible seeds for communities (demographic, need, interest or behaviour-based) that are already gathering in certain stations at particular times/days of the week. Such data points could include:
 - Commuting patterns. Deriving patterns based on information on the time of the day commuters arrive and depart, and frequency of visits to these stations.
 - Location data and people flow. Understanding commuter movement within the station to determine which areas they frequent and the amount of time spent in each area.
 - Consumption patterns. Determining the amount of money these communities might be willing to spend, and the types of services and experiences they would be willing to pay for.
- In-depth understanding of communities. The solution should be able to generate rich insights into who these communities are and their needs, to help Stellar Lifestyle capture the lifestyle(s) surrounding the station, and curate their station offerings to be more targeted to these communities, including partnering with nearby business and stakeholders (e.g. urban farming and gardening around the Botanic Gardens station).

There are no restrictions on the geographical location of the problem solvers who may choose to apply to this challenge. However, the prototype must be demonstrated in Singapore.

POSSIBLE USE CASES

1. Creating a sense of community among commuters within train stations. Brandon plays the guitar and likes to spend time hanging out in musical instruments shops. While passing through a SMRT station, he noticed an ad for a music event taking place the following weekend. He attended the event which connected him to a community of like-minded people who share his same interest in music. Brandon is eager to continue engaging with the station's offerings and the community it has fostered. He learned that the nearby studios offer various activities and events (e.g. instrument demonstrations/live performances/music workshops) that cater to his interests and decided to return to explore further. The solution had identified music as an interest for a significant community at the station, and had suggested this as a theme. This thus helps to promote the station as a destination rather than a pass-through spot to Brandon.
2. Sharing of data/insights. Lisa, who works as a developer of retail spaces in a shopping mall next to an SMRT station, has a meeting with May from Stellar Lifestyle, who manages the SMRT station retail space. They have identified a group of people who are passionate about climate sustainability, based on their purchasing behaviour and other data, and discussed the potential for developing additional services to cater to this community. They determined that a pop-up event would test and validate their hypothesis. Lisa and May work together to plan by identifying potential partners and service providers that can help them offer events/services related to sustainability (e.g. screening of a sustainability-themed documentary or movie, organising swap events allowing commuters to exchange clothes or books).

They gather feedback and data from attendees during the event to determine what services were most popular and how these attendees were engaged. Based on the results, they can validate their hypothesis and develop a plan. The solution thus helps them leverage their insights to validate their hypotheses about the communities, and create partnerships with other businesses or stakeholders to offer a broader range of services and experiences.

WHAT'S IN IT FOR YOU

- Up to SGD55,000 of prize money for each winner of this challenge (see Award Model)
- Access to IMDA’s innovation consultancies (e.g. Design Thinking, Digital Storytelling, UI/UX) and PIXEL corporate innovation hub (e.g. hot-desking, project studios, ARVR, usability, 5G test labs) for prototyping and commercialisation
- Aside from grants, shortlisted innovators will be provided with the Innovation Support and Resource Package comprising of mentors, consultants, workshops, labs, co-working offices, incubation platforms and more provided by SMRT, Singapore University of Technology and Design (SUTD), and JR East detailed below

Figure 1: SMRT – HIVE by Stellar Lifestyle @ Esplanade & Staytion Co-working Spaces



Incubation Hub to help innovators validate, commercialize and scale

- Corporate Mentors
- Subsidized Rent
- HIVE Studio & Kitchen
- Free & Extensive PR / Marketing



Co-working Space as Office Solutions

2023 Locations: Marsiling, Paya Lebar, Dhoby Ghaut, Woodlands, Jurong East

Includes POC validation and commercialization opportunities



Figure 2: SUTD Innovation & Entrepreneurship Programmes

Shortlisted innovators will be invited to participate in the SUTD ARISE Program and SUTD ESG Impact Lab. The ARISE Program consists of a series of workshops that facilitate innovators to bring their technology to venture creation. Participants will develop business strategies, operation plans, financial projections and pitching strategies during the workshops. The SUTD ESG Impact Lab is a series of masterclasses to develop the awareness of innovators on developments and opportunities in ESG and how they can achieve their corporate social responsibility goals.



Figure 3: JR East – Opportunities and Support to expand into the Japan Market



Language Barrier Support



Mentorship for integration into the Japan Market



POC Validation Platforms in the Japan Rail Club ecosystem



Coworking Space by JR-EAST

Access free Co-working Spaces in SG

EVALUATION CRITERIA

The evaluation process shall take place over two stages. Proposals shall be evaluated based on the evaluation criteria set out for the first stage. Thereafter, shortlisted proposals shall be subjected to a second stage evaluation in the form of an interview / pitch, and the scoring shall be based on a re-defined assessment criteria for the selection of the challenge finalist(s).

Solution Fit (30%)	<u>Relevance</u> : To what extent does the proposed solution address the problem statement effectively?
Solution Readiness (30%)	<u>Maturity</u> : How ready is the proposed solution to go to the market? <u>Scalability</u> : Is there any evidence to suggest capacity to scale?
Solution Advantage (20%)	<u>Quality of Innovation</u> : Is the solution cost effective and truly innovative? Does it make use of new technologies in the market, and can it potentially generate new IP?
Company Profile (20%)	<u>Business Traction</u> : Does the product have user and revenue traction? <u>Team Experience</u> : Do the team members possess strong scientific/technical background?

AWARD MODEL

The prize money will be awarded to each selected finalist based on milestones agreed upon between Problem Owner(s) and the solver. Prize money will be inclusive of any applicable taxes and duties that any of the parties may incur.

Note that a finalist who is selected to undertake the prototype development process will be required to:

- Enter into an agreement with Problem Owner(s) that will include more detailed conditions pertaining to the prototype development;
- Complete grant application form(s) with Stellar Lifestyle and its partners that will require more financial and other related documents for potential co-funding support.

Teams with public research performers are required to seek an endorsement from their respective Innovation and Enterprise Office (IEO) and submit the IEO form together with the proposal.

DEADLINE

All submissions must be made by **9 June 2023, 1600 hours (SGT/GMT +8)**. Problem Owner(s) and IMDA may extend the deadline of the submission at their discretion. Late submissions on the OIP, or submissions via GeBIZ, will not be considered.