Business Technology
Case Challenge 2014

Business Case Package
This case is written by Sithu Kyaw, Brindha Menon, Thandar Wai Myint, and Lee Chiang Fong, undergraduates at the Singapore Management University (SMU) School of Information Systems, with advice from Associate Professor (Education) Benjamin Gan Kok Siew, SMU School of Information Systems.

This case is prepared solely for use in the InnovateIT Business Technology Case Challenge 2014 and is not intended to serve as an endorsement, source of primary data, or illustration of effective or ineffective management.

© Copyright 2014 Singapore Management University. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means without the permission of SMU.
Smart Solutions | Smarter Communities

“Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it is the only thing that ever has.” —Margaret Mead

Background

Despite being one of the densest countries in the world, Singapore has consistently ranked amongst the most liveable cities in the world\(^1\), reflecting the high quality of life that its residents enjoy. However, as Singapore projects growth to a population of 6.5 to 6.9 million by 2030\(^2\), it will become increasingly challenging for it to remain a liveable city that is an appealing location for residents and visitors alike. Last year, Singaporeans observed increasing strain on the country’s transport and healthcare systems, from the increased pressures on their handling capacity. As the population density continues to rise, there is a pressing need for innovations to address the pressures on the city’s overall liveability.\(^3\)

As part of the response to this situation, the government is firmly committed to leveraging technology to ensure that Singapore continues to be an attractive and inclusive city, having developed the infocomm infrastructure and industry as part of the iN2015 Masterplan.\(^4\)

Amongst other initiatives, the Ministry of National Development (MND) and National Research Foundation launched the Land and Liveability National Innovation Challenge (L2 NIC)\(^5\) in late 2012, calling for R&D project proposals to optimise land usage while enhancing liveability and environmental quality. In its initial phase, of particular relevance are the two preliminary focal areas\(^6\) of creating highly liveable residential towns, and leveraging IT to support their efforts on improving land usage and liveability.

The Infocomm Development Authority’s Smart Cities Programme Office also launched two call-for-collaborations (CFC) in 2013, for Smart Cities Capability Development\(^7\), and the Smart & Connected Jurong Lake District\(^8\). While the former focuses more on developing technical platforms for data analytics and decision support, the latter seeks to pilot solutions to create a smart and sustainable living environment in the Jurong Lake District.

While these initiatives focus on developing liveability-enhancing technology and achieving environmental sustainability in the longer term, there is a pressing need to develop solutions to improve Singapore’s liveability in the near future.

---

\(^1\) [http://www.mfa.gov.sg/content/mfa/media_centre/singapore_headlines/2012/201210/news_20121011.html](http://www.mfa.gov.sg/content/mfa/media_centre/singapore_headlines/2012/201210/news_20121011.html)
\(^3\) [http://www.ura.gov.sg/skyline/skyline13/skyline13-02/article-06.html](http://www.ura.gov.sg/skyline/skyline13/skyline13-02/article-06.html)
\(^5\) [http://app.mnd.gov.sg/LandLiveabilityNIC/AboutL2NIC.aspx](http://app.mnd.gov.sg/LandLiveabilityNIC/AboutL2NIC.aspx)
\(^6\) [http://app.mnd.gov.sg/Portals/0/L2NIC/1%20Infosheet%20(L2%20NIC%20First%20Call),_Final.pdf](http://app.mnd.gov.sg/Portals/0/L2NIC/1%20Infosheet%20(L2%20NIC%20First%20Call),_Final.pdf)
Challenge Statement
The Ministry of National Development, with its agencies, has invited industry partners to conceptualise solutions that creatively and effectively harness the power of IT to create **Smart Communities**, with a specific focus on increasing their liveability, to complement other efforts on achieving sustainability. They are looking both for solutions that address a specific community, as well as those that can be deployed at various sites across Singapore.

Your task
You are a startup that has been developing technology to enhance liveability over the past year, and have come up with a plan to transform an existing community into a smart community. Before pitching your concept to the Ministry for island-wide implementation, you need a smaller region to act as a pilot program or testbed first, to validate and demonstrate the merits, feasibility and impact of your concept outside a lab environment.

As such, you are now pitching your plan to a group of community leaders, whose approval you need before you can implement your plan in their area. They may be limited in terms of the financial resources or support that they can offer you, but what they have is a group of real people, in a real environment, which will produce significantly more convincing validation of your concept than any usability test lab or focus group discussion.

Geographical communities to consider may include new growth areas that Singapore will be developing in the coming years, as well as existing towns that will be rejuvenated. While you are not limited to the mentioned areas, you are advised to focus on a specific community and address the specific liveability problems or issues that they face.

Your solution should be implementable now, or in the near future (1–2 years) as technology matures. You are not expected to create a working prototype or model, but you may wish to produce user interface mockups to communicate your vision, if applicable. You should also cover various aspects of your proposal, including the technologies used, scale, expected impact, target audience, implementation plan and funding strategy.

Definitions
“Community” — people in a geographic location (e.g. a Planning Area[^9]) or any group of people who share something in common, as part of a wider geographical community[^10].

“Smart Community” — a community that leverages technology innovations to make it a more liveable place for its residents, resulting in a higher quality of life, beyond merely optimising resource usage and ensuring sustainable development.

“Liveability” — reflects the well-being of a community and represents the many characteristics that make a location somewhere people want to live now and in the future.[^11]

Judging Criteria
Your proposal will be judged based on the following criteria:

- **Innovation (20%)**
  - Is the idea original, unique or creative?

- **Effectiveness (20%)**
  - Does the idea solve the identified problem in the target community? How beneficial is the idea to the target community?

- **Business and IT Alignment (20%)**
  - Is the technology choice sound? Does it contribute towards solving the identified problem?
  - Are the implementation plan and funding strategy plausible?

- **Feasibility (20%)**
  - Is it technically feasible to implement this solution in the next 2 years?
  - Is the target audience IT-savvy enough to use and benefit from the solution?

- **Presentation (20%)**
  - Did the presentation flow?
  - Was the idea presented clearly, and with confidence?

Contact Information
Please direct any enquiries to InnovateIT@smu.edu.sg.