

ANNEX B – DESCRIPTION AND PROBLEM STATEMENTS FOR FORCUS AREAS

1. The following illustrates problem statements and examples of applications using government data in each of the focus areas.
2. Participants may propose applications that solve any of the problem statements below, but can also other applications outside the given examples below.
3. “BUSINESS PLANNING” FOCUS AREA
 - 3.1 The Business Planning focus area enables organisations and/or individuals to have strategic insights and information to aid in their business activities such as planning, strategising and process optimisation.
 - 3.2 Problem Statements include:
 - a. How to help businesses gain better understanding of the market / customers for improved customer relationship management, targeted marketing or product development;
 - b. How to help businesses better optimize their resources and investments in the area of supply chain management, investment portfolio management etc.;
 - c. How to help businesses better optimize their resources and investments in the area of supply chain management, investment portfolio management etc.;

- d. How can companies' aggregate data (private & public) to operate new business models through monetisation of data e.g. analyse mashed data to release reports, provide data analysis services.

3.3 Example of Application

A geospatial application incorporating the demographic information on households that would allow business consultants to better advice clients on the suitable locations for business ventures reaching out to specific target segments such as families with young children.

3.4 Government data under the focus area on "Business Planning" include the following, but are not limited to:

- a. Demographics;
- b. Economic Statistics;
- c. Business Registration Information;
- d. Street Maps; and
- e. Transport Maps.

4. "CONSERVATION & ENVIRONMENT" FOCUS AREA

- 4.1 The Conservation & Environment focus area aims to present end-users with information in innovative manners that allow informed decisions to be made on a daily basis such in areas such as weather, conservation of electricity, flora and fauna, in the anticipation of changes in the environment.

4.2 Problem Statements include:

- a. How to use data to create awareness on conservation and environmental issues to reduce wastage, increase recycling and reuse resources;
- b. How to enable tracking of usage of resources that can have adverse effects on the environment (e.g. electricity, carbon emissions); and
- c. How to create better awareness and appreciation of our natural resources.

4.3 Example of Application

An application that uses energy consumption data for end-users to monitor their home or office energy consumption and identify areas of high usage to implement measures for reducing them.

4.4 Government data under the focus area on “Conservation & Environment” include the following, but are not limited to:

- a. Locations of Recycling Bins;
- b. Energy Consumption Information;
- c. Parks’ Amenities; and
- d. Weather Data

5. “OPTIMISED MOBILITY” FOCUS AREA

5.1 The Optimised Mobility focus area aims to harness both road and public transport networks even through unwarranted situations such as traffic incidents or adverse weather conditions, and for various segments such as general commuters, the mobility-challenged and business enterprises.

5.2 Problem Statements include:

- a. How to personalise and optimise travelling route to reach one's destination based on real-time traffic info, modes of travel, cost, time, comfort, weather;
- b. How to enhance and optimise business productivity by making use of street maps and real-time traffic data to do effective route planning for its fleet; and
- c. How to optimise route planning for diverse commuter groups (e.g. mobility-challenged, cyclists, pedestrians, etc.).

5.3 Example of application:

A route planning application involving real-time traffic information for a courier company to optimize route planning for its fleet.

5.4 Government data under the focus area on "Optimised Mobility" include the following, but are not limited to:

- a. Traffic incident information;
- b. ERP charges;
- c. Traffic camera data; and
- d. Street maps.

6. “HEALTHY LIFESTYLE” FOCUS AREA

6.1 Combine and present data in the areas of health such as nutritional foods, public health and healthcare facilities to empower individuals to make appropriate choices when necessary.

6.2 Problem Statements include:

- a. How can gamification be used in health promotion programmes to make them more engaging for all life stages, and enhance the support and sustainability of the modified behaviour;
- b. How does the local food environment (concentration and type of eateries and wet markets/food shops) where one works or lives affect their dietary intake/pattern;
- c. How to provide consumers individualised meal plans based on preference and needs (e.g. health condition);
- d. How to set baseline of health literacy in Singapore and a monitoring tool; and
- e. How to best engage parents-to-be/parents with young children on child health and services for better health outcomes through an integrated solution.

6.3 Example of Application

An application that helps to find the nearest clinic, the online registration for a queue number, and tracking of waiting time at government clinics and hospitals using map data and relevant data from healthcare institutions.

6.4 Government data under the focus area on “Healthy Lifestyle” include the following, but are not limited to:

- a. Nutritional Database;
- b. List of healthcare providers;
- c. List of treatments and charges at healthcare institutions; and
- d. Real-time updates on queue numbers at clinics.

7. “CONTEXTUAL CONTENT, CONNECTING PEOPLE” FOCUS AREA

7.1 Besides physical books, the library is growing its content (digital content, Singapore content, programmes, metadata, audio-video (“AV”) materials, catalogues, etc.) and services (information search, curation, preservation, etc.). There is a need to link up all various libraries’ content and services, as well as connecting with external resources (www, blogs, etc.) to give context to content. Such content connections can be extended to people (social networks, mobile, etc.), allowing multiple feedback and contribution channels. The Library aims to develop such information ecosystem for greater handling of information and better discovery experience for consumers.

7.2 “Problem Statements include:

- a. How to offer intuitive discovery experience and find-ability of information through mash-ups of various content (text, metadata, images, audio, video, etc.) and touch points (web, touch capability, mobile, etc.);

- b. How to connect people with well-connected content by implementing and capturing social component (feedback, sharing, tags, etc.) in this information ecosystem; and
- c. How to better serve and understand customer needs by collecting and analysing behavioural data.

7.3 Example of Application

A mobile application that allows users to browse NLB's catalogue and uses social media technology to tag book reviews to specific books.

7.4 Government data under the focus area on "Contextual Content, Connecting People" include the following, but are not limited to:

- a. Library Catalogue; and
- b. New Arrivals.