

# Open Data and Creation of Smart Cities

11 December 2014 Hiroyasu AMANO URC



## Introduction — About Fukuoka Asian Urban Research Center

- ☐ Fukuoka Asian Urban Research Center (URC)
  - Urban Policy Studies and Advisory
  - Exchange and networking with Asian Cities
  - Building of professionals in City/Town building
  - Information Collection and dissemination



http://www.urc.or.jp/



1. Industries and Visions required to create Smart Cities

2. What we can learn from Open-data cases from other countries



# 1. Industries and Visions required to create Smart Cities

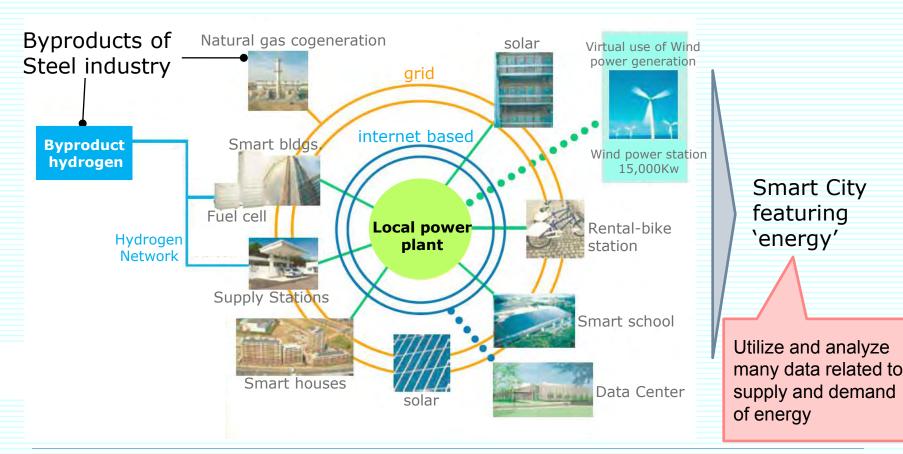
2. What we can learn from Open-data cases from other countries

## Japan's Smart City Case Kitakyushu City

## URC Hill Looks Alban Urban Research Center

## A Smart City has its own industries and visions.

- Kitakyushu City has developed on steel and chemical Industries.
- ☐ The city has created new environment related businesses to replace declining heavy industries and accelerated its moves toward Asia.



## Japan's Smart City Case Toyoda City

## A Smart City Initiative has its own industries and visions.

- HQ of Toyota Motors. Has grown around development of Toyota Motors.
- Vision realization of a low carbon society utilizing next generation automobiles.

### Traffic Lines of people

### At home

### mobility

### At destinations

### Whole living sphere

- 1 Most effective use of household level energy
- Sold 67 pilot houses
- Use of Automatic energy efficient equipment
- Power supply from EV/PHV's to homes.

- low carbon transportation system
- Large scale purchase of next generation vehicles
- IT based traffic management
- Co-existence with public transport

- (2) Establishment of (3) Most effective use of energy in commercial, public facilities
  - Battery charge functions in commercial facilities
  - · Study on battery use of EV/PHV in cases of emergency

- (4) Supports covering whole living sphere
- · Analyzing Data on **Energy** Consumption using IT
- Various Incentives to support low carbon activity

Smart cities with next generation automobiles

Utilize and analyze many data with effective use of next generation automobiles to save energy

(図表引用)豊田市資料

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# Fukuoka's Smart City Case Fukuoka City Fukuoka City's visions 'An exchange hub city to live, to visit, to work

- ☐ Fukuoka City's core businesses are retail and whole sales.
- ☐ The city envisions a city with exchange and high standards of living.

 $\sim$  Development of social information platform with emphasis on MICE Tourism  $\sim$  Opening of Fukuoka City's administration and to be world's NO.1 Omotenashi City  $\sim$ 



Priority is set on open data initiatives in relation to MICE and mobility

# Suggestions from Japan's Smart City Cases Conditions for aiming a smart city -



- ☐ The City's own Industries
  - Existing strong industries
  - Prioritized industries
  - Industries with potential growth
- ☐ The City's own vision
  - What kind of living environment should the city offer to its citizens?
  - What kind of business environment should the city offer to corporations?
  - What type of features is the city going to have?



◆ The need to build a social consensus in order to utilize data relating to above.



1. Industries and Visions required to create Smart Cities

2. What we can learn from Open-data cases from other countries



## "Open Data" has advanced since 2010.



(画像引用) http://data.gov.sg, http://data.taipei, http://data.gov.hk, http://data.seoul. go.kr



## Participatory Data Use "Visualization Challenge"

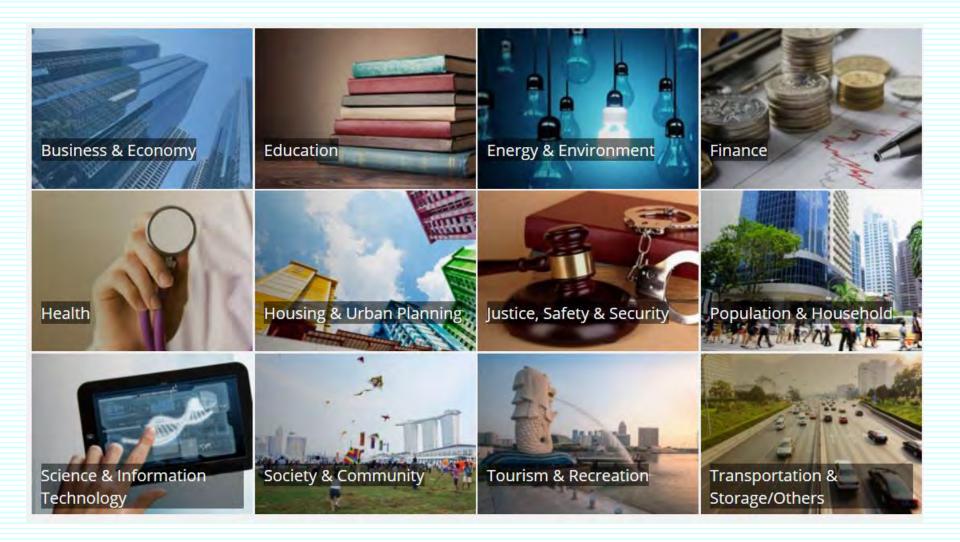
- Conducted August-October 2004
- Built around 4 themes; sustainable, economic vibrant, healthy and active nation, and global hub
- ◆ Award winning ideas will be presented in museums. Prize is approx. \$55,000



(画像引用) http://data.gov.sg

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# Applications in 12 categories using public data.

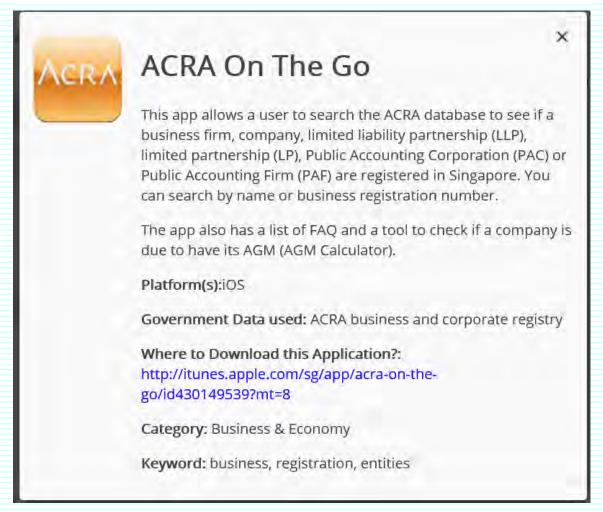


(画像引用) http://data.gov.sg 11



## Business & Economy: An example of a company search application.

◆ ACRA (Accounting Corporate Registration Agency) Company Registration Data



(画像引用)http://data.gov.sg 12



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## Health: An example of application for planning a healthy meal

Nutrition Information Data of processed Foods



# Mealplan by URBANCOOK

Powered by the URBANCOOK food engine, Mealplan helps users plan their meals and track their daily nutrition intake.

Platform(s):iOS

**Government Data used:** Product and nutrition information for retail packaged food products available for sale in Singapore (HPB)

Where to Download this Application?:

https://itunes.apple.com/sg/app/mealplan-by-urbancook/id882416354?mt=8

Category: Health

Keyword: health, recipes, fitness

(画像引用) http://data.gov.sg 13

## Hong Kong

# **Application development Contest.**



☐ Photos from the April 2014 Contest



(画像引用)data.one.hk 14

### Hong Kong

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## The consensus building for opening data is only incremental

Gold Prize: Audial news service using public news data

Spoken News
開發人員 Yu Ho Kwok
開放 iTunes 以購買和下載 App。

View in iTunes
免费
類別: 工具程式

Silver Prize: Reading of text information using public news, weather info, traffic data



Bronze Prize: The must info



Other special awards were given to traffic information systems, bus systems search, Weather forecasts, library search applications

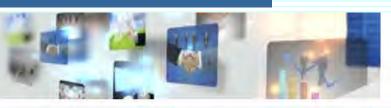
(画像引用)data.one.hk

### **Taiwan**

An initiative started in Taipei spread and expanded to a nation wide open data initiative







使用"我的E政府帳號"登入 會員服務

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關於平臺

最新消息

標準規範



## 最新資料

消費者端量測各業者縣市平均... 提供機關: 國家通訊傳播委員會

行政院推動性別平等工作重要... 提供機關: 行政院

行政院所屬各機關推動性別主... 提供機關: 行政院



## 熱門資料

不動產買賣實價登錄批次資料瀏覽人次: 34,720

iTaiwan中央行政機關室... 瀏覽人次: 34,246

CNS11643中文標準交換...

瀏覽人次: 18,554



# 活化應用

2595 - 愛我救我 流浪動物認養平臺 創作者 2595團隊

Taipei Talk Around 隨身報馬仔 創作者 NUTC-CSIE i.m.a.c社群

爸媽Home-全國最大安養護機構推 薦平台

創作者 知恩思資訊股份有限公司

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更多



## 我有話要說

### 感謝

發表日期: 103年11月06日

建議提供適合程式使用的資料格



# 我還想要...

您想要政府開放更多的資料集嗎? 請在這裏告訴我們您要什麼?

敬請開放公有土地及建物資料集(內政部地政司?)



# 交流討論

開放資料有麼應用討論次數: 0

タイキャー サルーコロン会社

(画像引用) http://data.gov.tw

### Taiwan



## The most popular data is the real estate market data



### **Taiwan**

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## Local and niche tourism information is also popular.

☐ For example, factory tour applications and best spots for farm landscapes

# E E C

水里蛇窩

可知路水源

南投觀光

170 B-1512

香里活力

STREET, SQUARE

避山茶紡

- Based on publically open factory list owned by the Economy Department, and geographical data of each factories.
- Based on landscape data owned by the Agriculture Comittee

### 全台灣觀光工廠 - 觀光景點



# 應用開放資料:

觀光丁廠名錄

創作者:

chiu

連結:

Android版

### 應用特色:

《全台灣觀光工廠 - 觀光景點 APP》彙整經濟部的觀光工廠 名錄資料集與經濟部工業局網 站上的資訊,提供觀光工廠名 稱、工廠介紹、電話預約、 GPS定位等功能。

#### 應用簡介:

周休二日,該如何歡樂度過呢? 全台灣有很多觀光工廠歡迎大 家去玩,除了參觀之外,大部 分皆有提供DIY的活動,是一個 寓教娛樂的好所在。

人名斯斯尔卡克 超小自身



### 看見台灣的美



#### 創作者:

Bibby Chung

### 連結:

台灣農場WindowsPhone

### 應用特色:

利用行政院農委會的景點資訊 OPEN DATA,提供簡單分類及 直覺的台灣農場查詢應用

### 應用簡介:

生活在台灣,我們是否真正看見台灣的美,生命應該浪費在美好的事物上,放下手邊的工作,帶著最愛的家人朋友,一起找個地方悠閒去吧!「台灣農場」利用行政院農委會的OPEN DATA,提供簡單分類及直覺的查詢應用,讓您查詢一







## What data can be open depends on each society

- ☐ A top-down approach by the central government to open huge amount of data
  - Ex. Singapore
- Negotiations among governments resulting in very few and gradual opening of data
  - Ex. Hong Kong
- □ Voices of citizens giving impact to opening of data
  - Ex. Taiwan
- □ A society very sensitive to privacy of data
  - Ex. Japan



◆ For a social consensus building of opening data requires a vision by the city government