

# A Performance Assessment Model for Cadastral Survey System Evaluation

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## In a Cadastral Survey System

- Key player: Cadastral surveyors
- Core function: Provide spatial-related cadastral datasets to society
- Role: An indispensable land administrative function





## Cadastral system evaluation

#### 1990s ~ 2010s

FIG7 continuously benchmarked cadastral systems

#### 2014~

We build an self-assessment platform to

- Evaluate the performance of **individual** cadastral survey system; and
- Compare understandings from involved stakeholders.



### Two highlighted principles

1) Williamson (2000) defined

Key performance indicators for a successful cadastral system / land administration system are :

- whether it is **trusted** by general populace
- whether it is extensively **used** by stakeholders

Williamson, I.P. (2000). Best practices for land administration systems in developing countries. *International Conference on Land Policy Reform*, 25-27 July, Jakarta Indonesia.





### 2) Enemark et al. (2014) defined

The land administration system should be **fit-for-purpose** 

- Flexible
- Inclusive
- Participatory
- Affordable
- Reliable

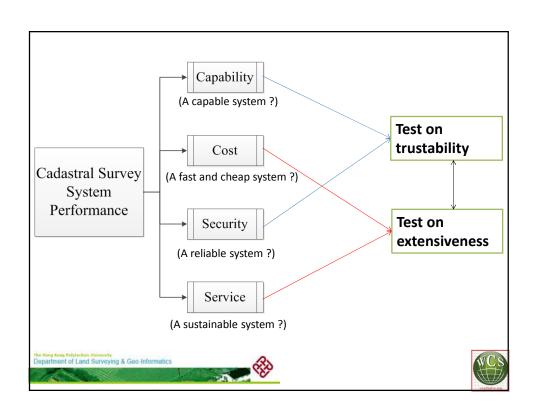
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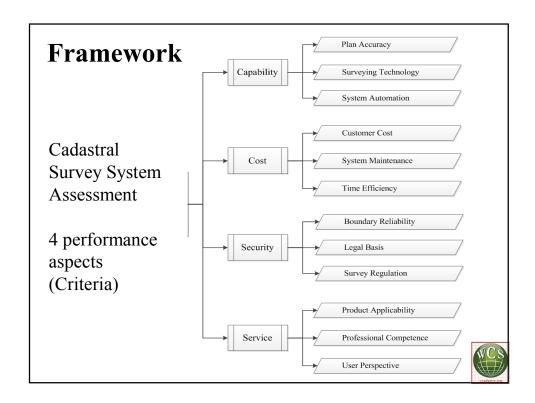
 $Enemark,\,S.,\,Lemmen,\,C.,\,\&\,\,McLaren,\,R.\,\,(2014).\,\,Building\,\,fit-for-purpose\,\,land\,\,administration\,\,systems.$ 

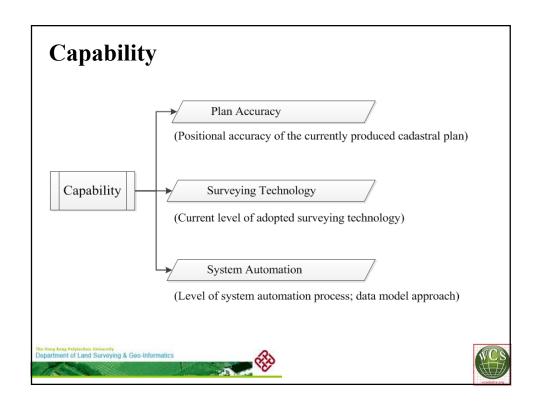
Proceedings of the XXV FIG International Congress, 16-21 June, Kuala Lumpur Malaysia.

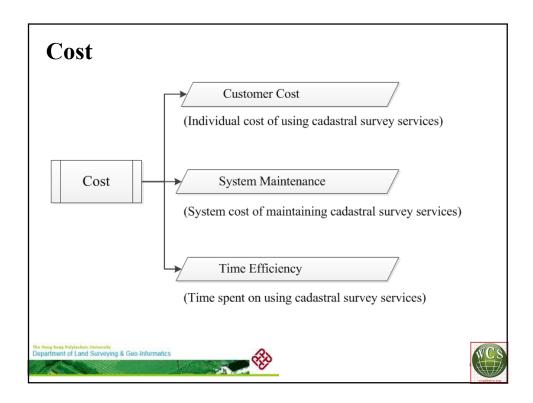


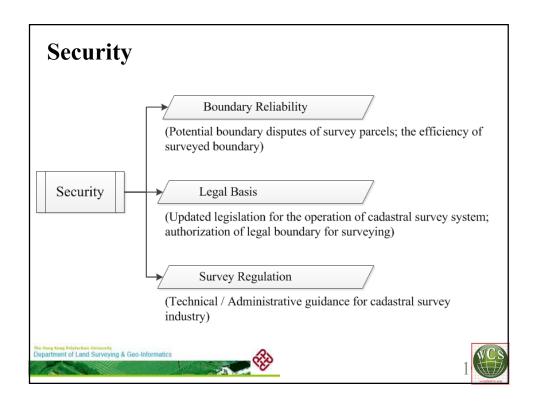


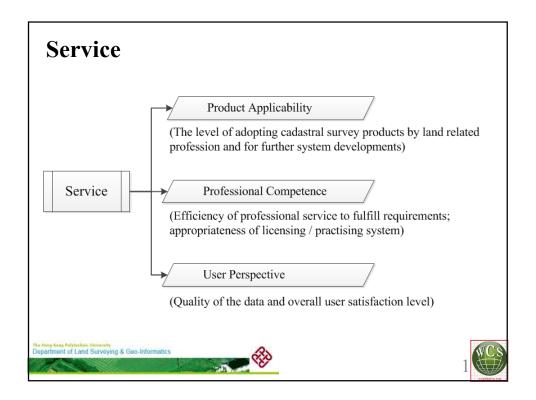










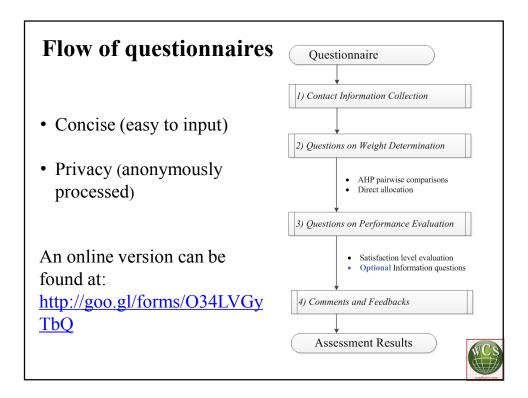


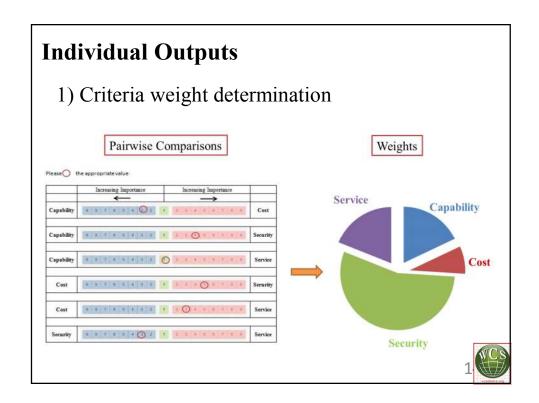
### **Assessment Method**

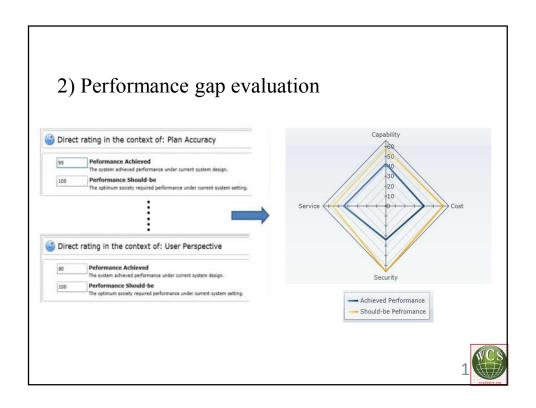
- Collect sufficient inputs from involved stakeholders
  - On-line Questionnaire
- Analytic Hierarchy Process (AHP) to evaluate the judgements of participants
  - Pairwise comparisons

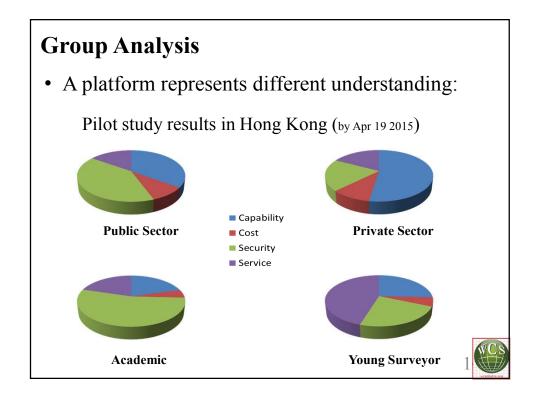
Saaty, T. L. (1980). The analytic hierarchy process: planning, priority setting, resource allocation. Texas: Mcgraw-Hill.











## **Model Implementation**

#### **Case Study in Hong Kong**

- 1. International Expert Panel Comments on Methodology and Criteria
- 2. HKIS LSD Members Online Questionnaire

(Hong Kong Institute of Surveyors, Land Survey Division)

3. Invited Stakeholders – Online Questionnaire or Interview



### **International Cooperation**

1. Endorse the project by FIG Commission 7

Endorsed as 2015-18 activity in 2014 FIG7 Annual Meeting, Quebec City, CANADA

- 2. Invite FIG7 members to join
- 3. Provide this testing package to all FIG7 institutional members for their operation



