


**THE WORLD  
CADASTRE  
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## 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

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## 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.

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

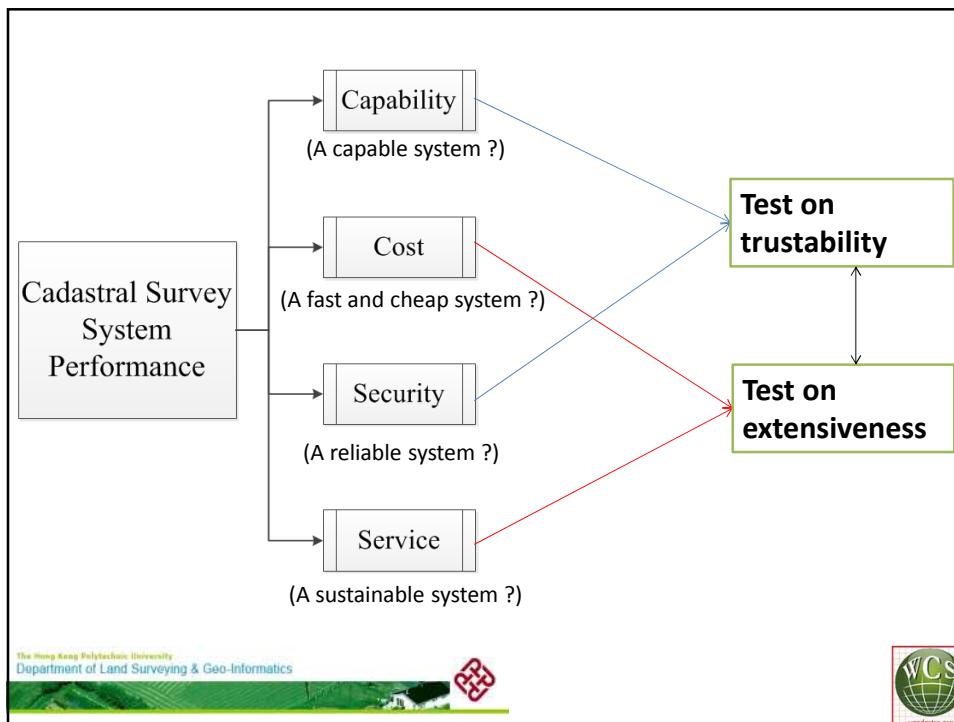
The land administration system should be **fit-for-purpose**

- Flexible
- Inclusive
- Participatory
- Affordable
- Reliable

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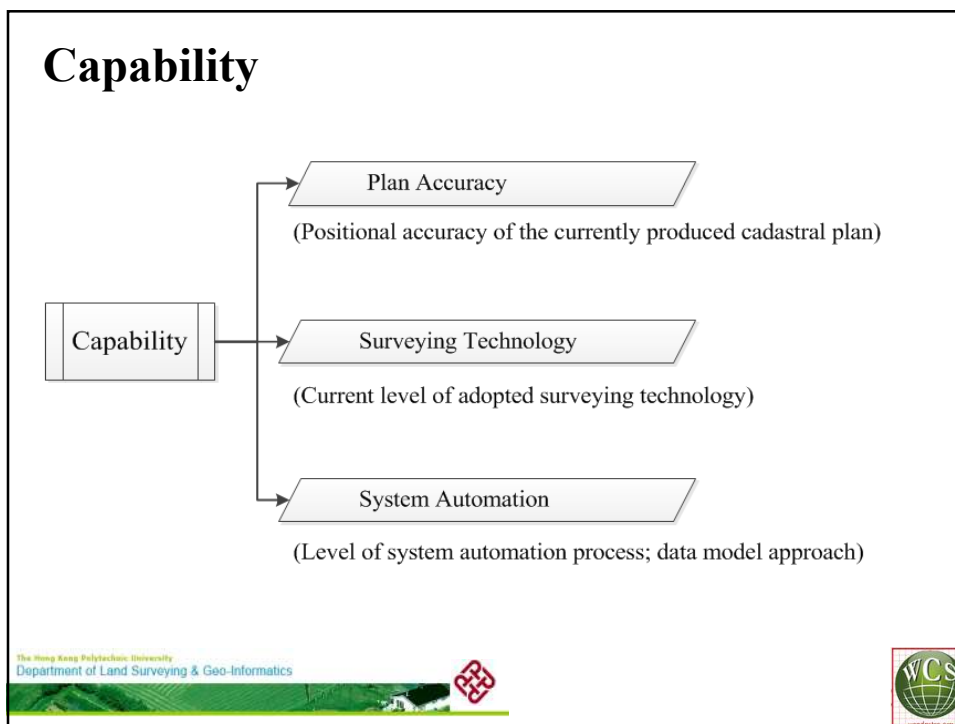
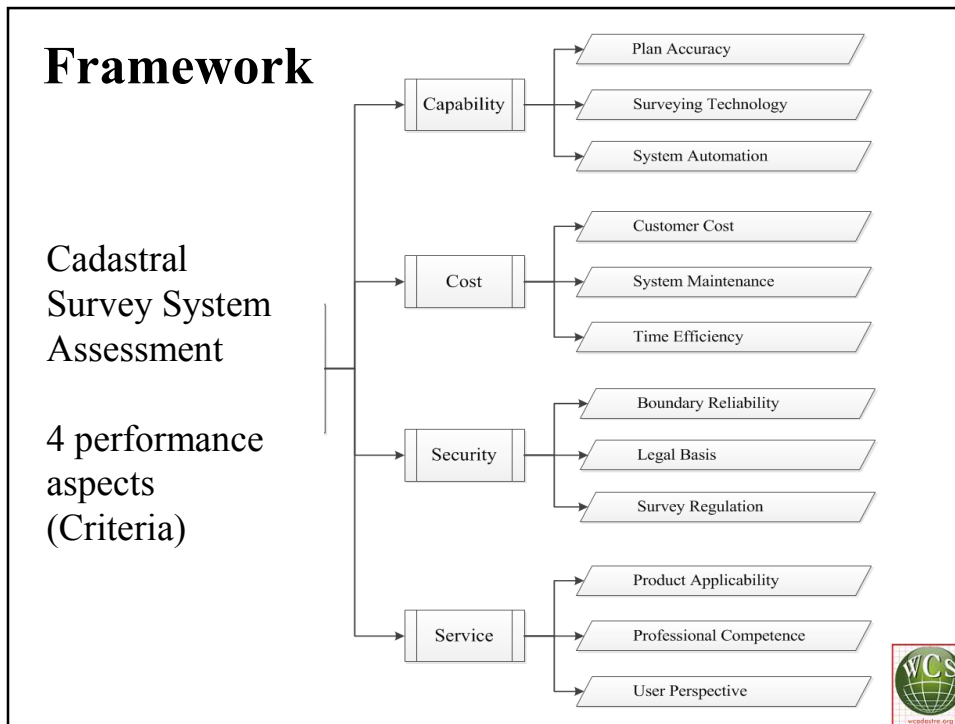
Enemark, S., Lemmen, C., & McLaren, R. (2014). Building fit-for-purpose land administration systems. Proceedings of the XXV FIG International Congress, 16-21 June, Kuala Lumpur Malaysia.

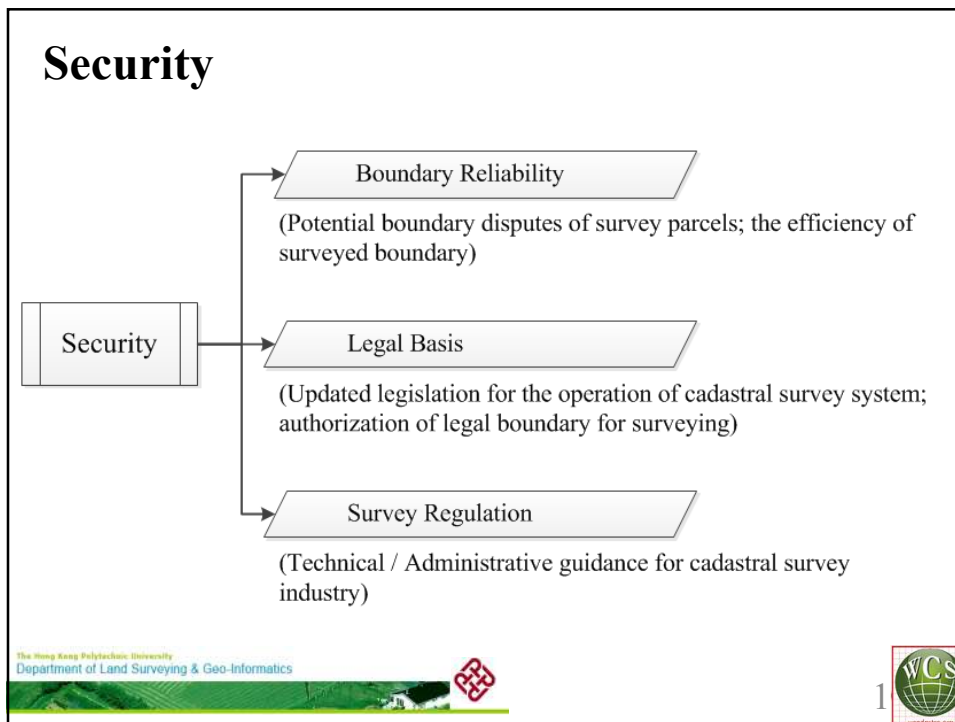
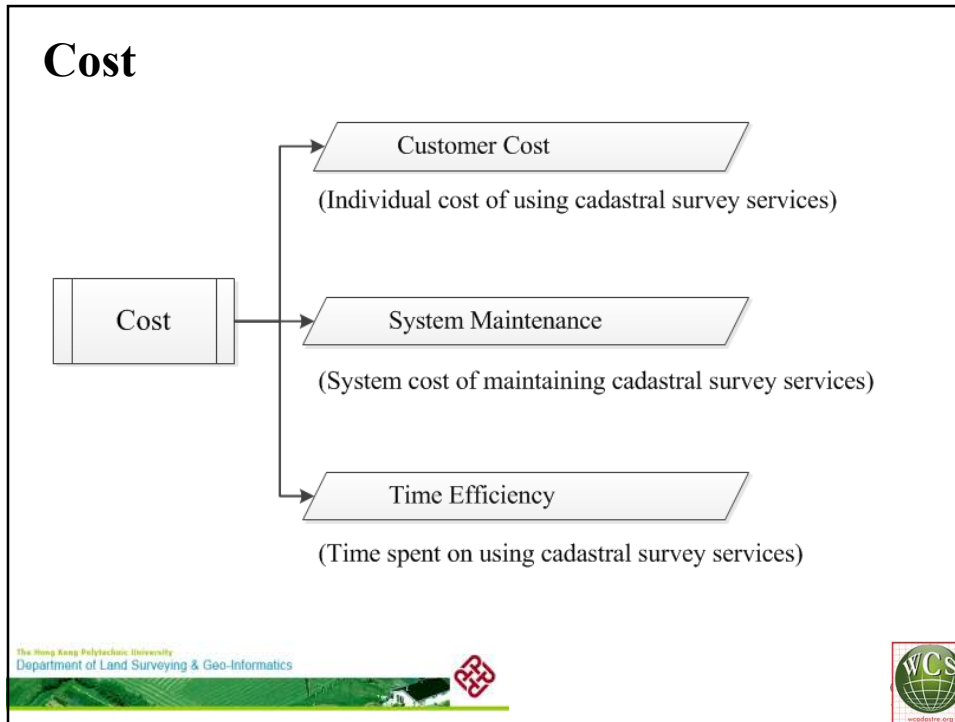
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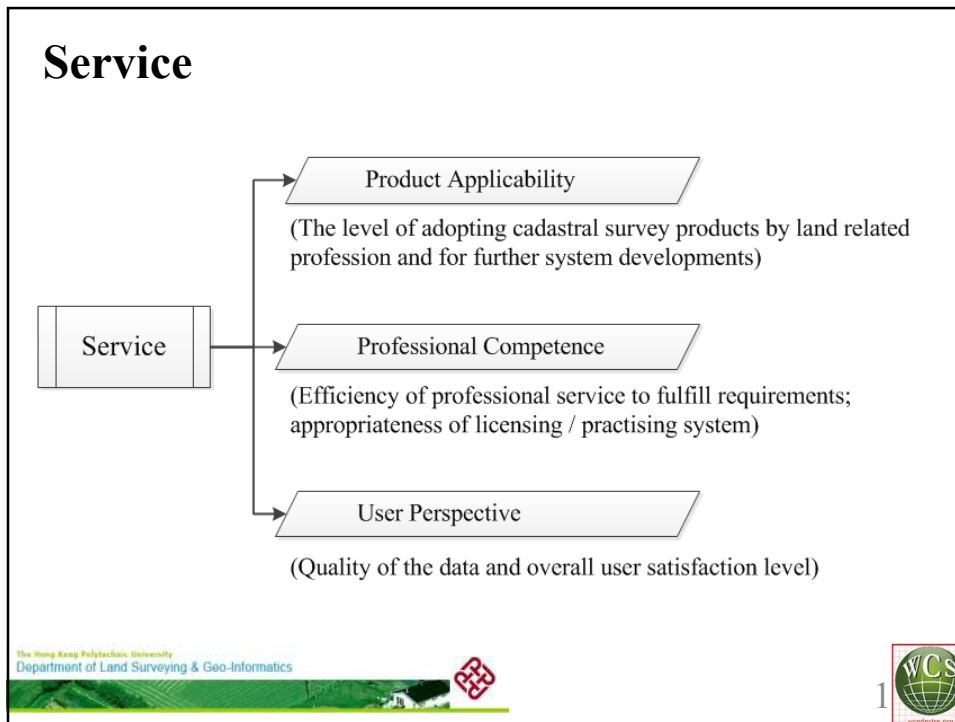


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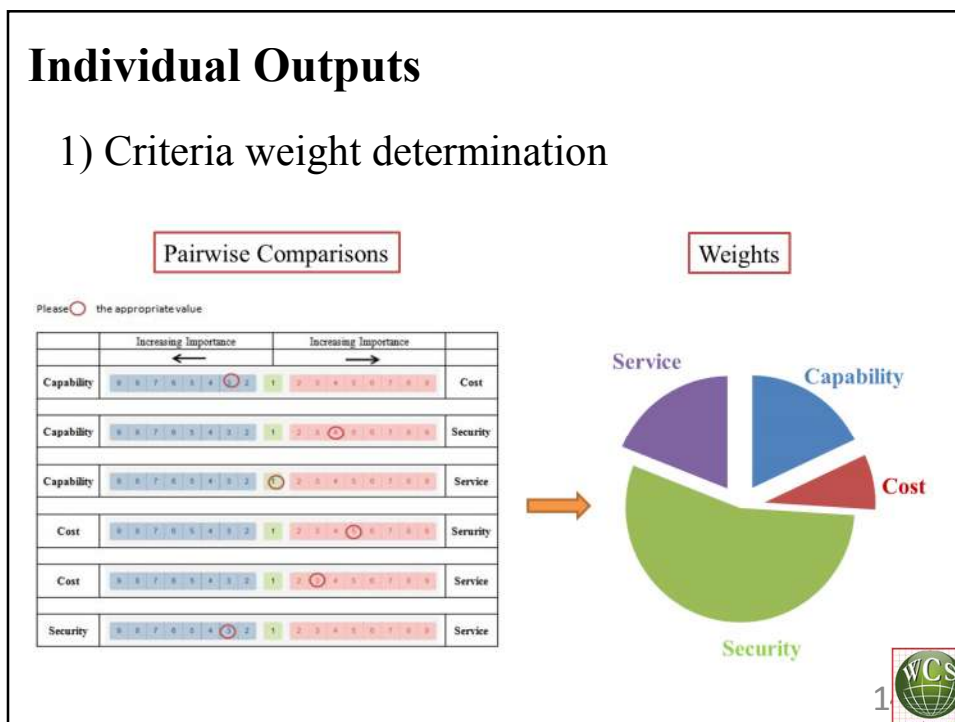
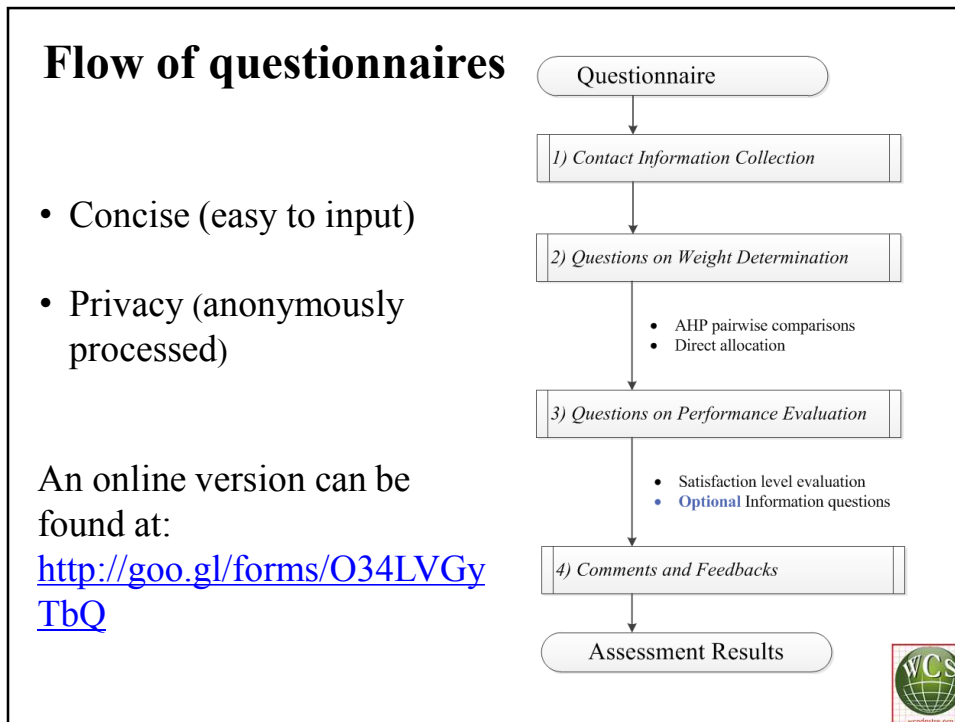


## Assessment Method

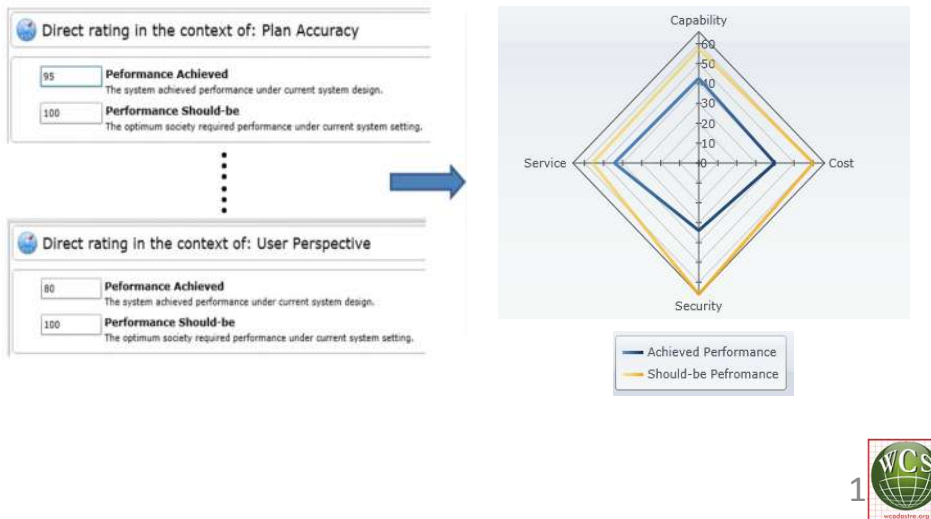
- Collect sufficient inputs from involved stakeholders
  - On-line Questionnaire
- Analytic Hierarchy Process (AHP) to evaluate the judgements of participants
  - Pairwise comparisons

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





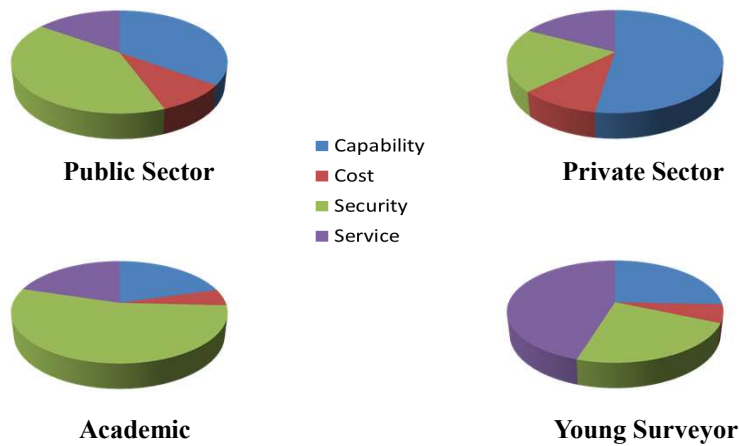
## 2) Performance gap evaluation



## Group Analysis

- A platform represents different understanding:

Pilot study results in Hong Kong (by Apr 19 2015)





## **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



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**THANK YOU**

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