

# Centre for Infrastructure & Construction Industry Development Department of Civil Engineering The University of Hong Kong

# Integrated Working Arrangements for Building Information Modeling

**Summary Powerpoint** 

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### Introduction to the research

#### **Research Goal:**

To develop possible feasible solutions to reduce the conflicts/barriers in BIM implementation and advance current BIM implementation towards more collaborative and integrated working arrangements, with expected broader benefits in the context of Hong Kong industry.

Non-technical issues related to: collaborative working, organizational, process, people centered issues.

**Integrated Working Arrangements:** (a) organization structures, (b) information exchange mechanisms, and (c) operational processes.



# Findings from questionnaire survey

### Introduction to the questionnaire survey

Objectives:

- a) Extents and levels of BIM adoption in the Hong Kong industry,
- b) Gaps and constraints that retard collaborative working in the BIM environment,
- c) Potential proposals to advance the current state of BIM implementation

#### Summary of delivery and feedbacks

From 10 May 2012 to 17 September 2012: **822** questionnaires were issued and 68 responses received of which **31** were usable.



## Findings from interviews

# Changes compared with the traditional ways in terms of integrated working arrangements

a) Project process: no big changes

Current situation: BIM is just a small part of a whole project.

Stakeholders are unwilling to change processes and workflows to match BIM system

to match BIM system.

Existing process needs to be changed to maximize the benefits from BIM

b) Information flow: BIM model usually works as a supportive tool to help revise the 2D design and correct errors before construction.



# Findings from one case study

### Two phases of BIM implementation in this case

1) Tendering BIM in the design phase

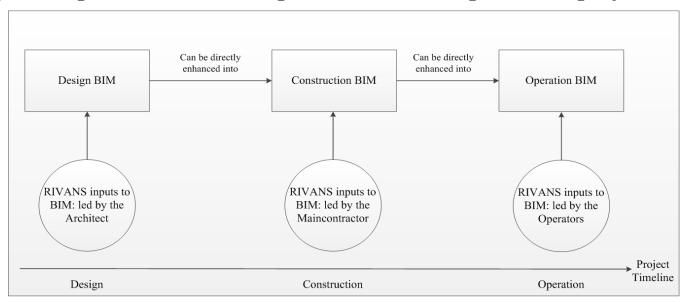
2)Construction BIM in the construction phase



## Proposed long term IWA for BIM

# The process of optimising BIM with the RIVANS based project teams

The general process of BIM implementation in a particular project is:



**RIVANS inputs**: To achieve Best Overall Value for Project and built asset by integrated team workings.



# Proposed short term IWA for BIM: Specific measures for participants

### Proposed specific measures for participants

Specific measures

Client

Architect

Main Contractor

MEP Contractor

Software Vendor

The industry

The government

BIM Consultant



# Closing

### Thank You!