



The Hong Kong Institute of
Building Information Modelling
香港建築信息模擬學會

The Hong Kong Institute of Building Information Modelling (HKIBIM)

Building Information Modelling (BIM)
Awareness Seminar

Agenda

- Introduction of BIM
- General BIM Application for the industry
- Hong Kong and International BIM Adoption
- BIM Implementation
- HKIBIM
- Q & A





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Why BIM?

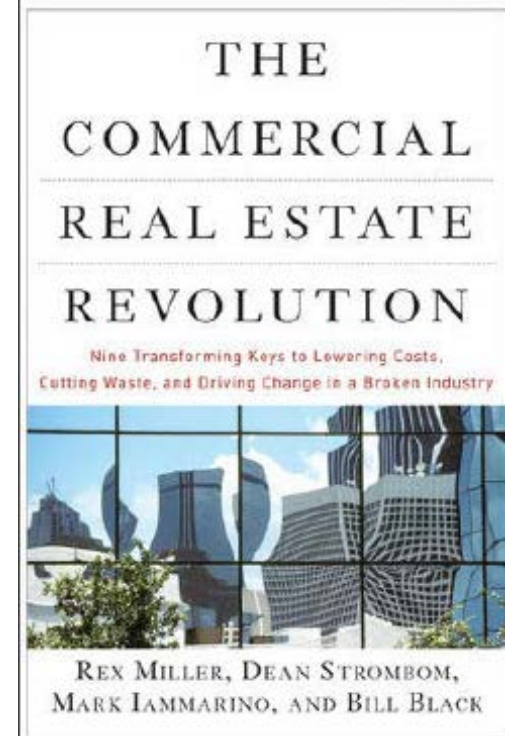
Industry Challenge

- More efficient communication
- Fragmented Information
- Lack in total visibility
- Documentation defects

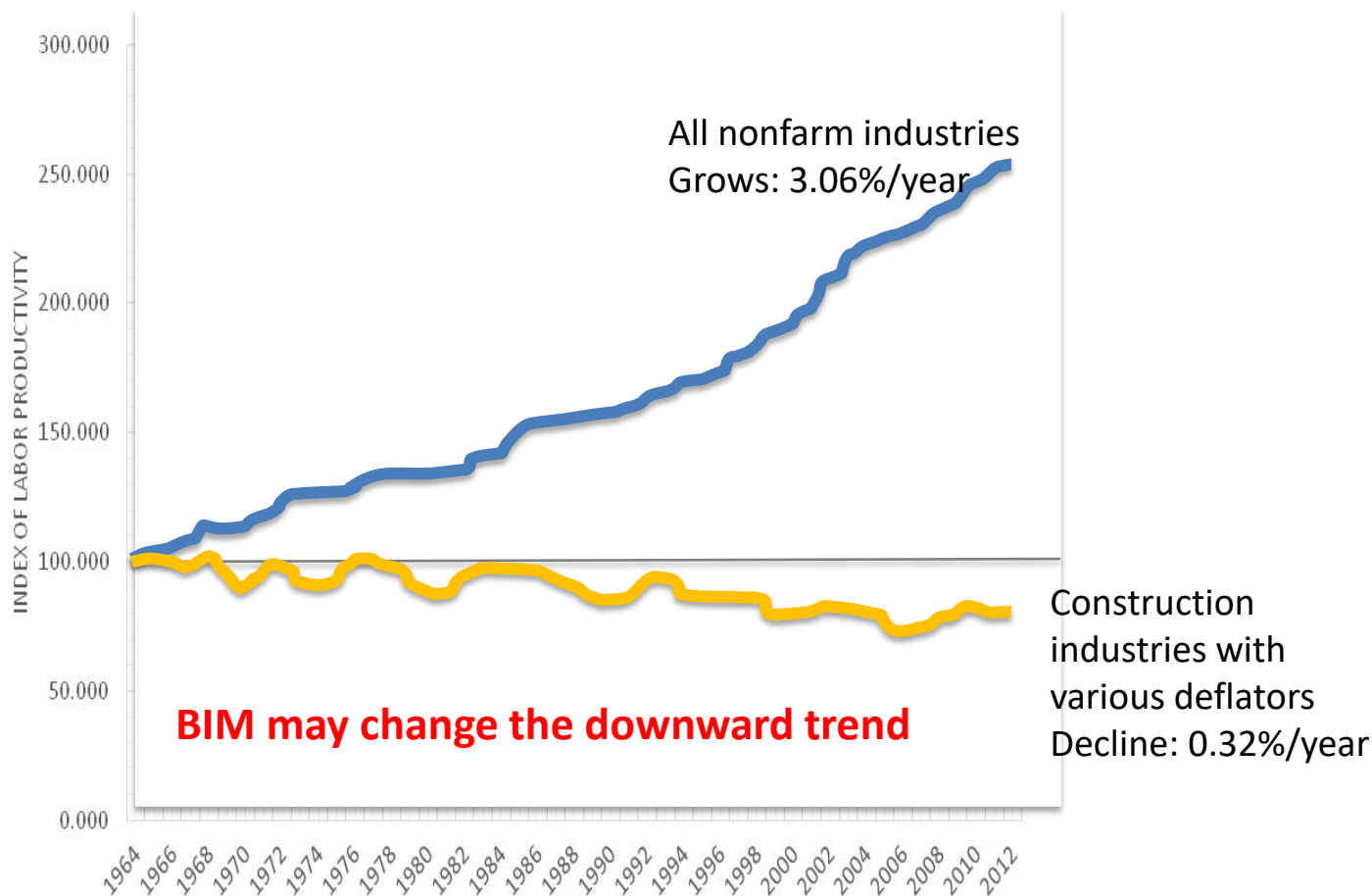


Results...

- “The cumulative effect of the current model produces buildings that cost almost **twice** as much as they should ... [and] that **create 48% of carbon dioxide emissions** ...”
- 72% of projects are completed **over budget**
- 70% are completed **behind schedule**
- **75% of those late projects are at least 50% over initial contract price.**
- Construction **workers are 2 ½ times as likely to die** compared to other



Results – productivity in United States



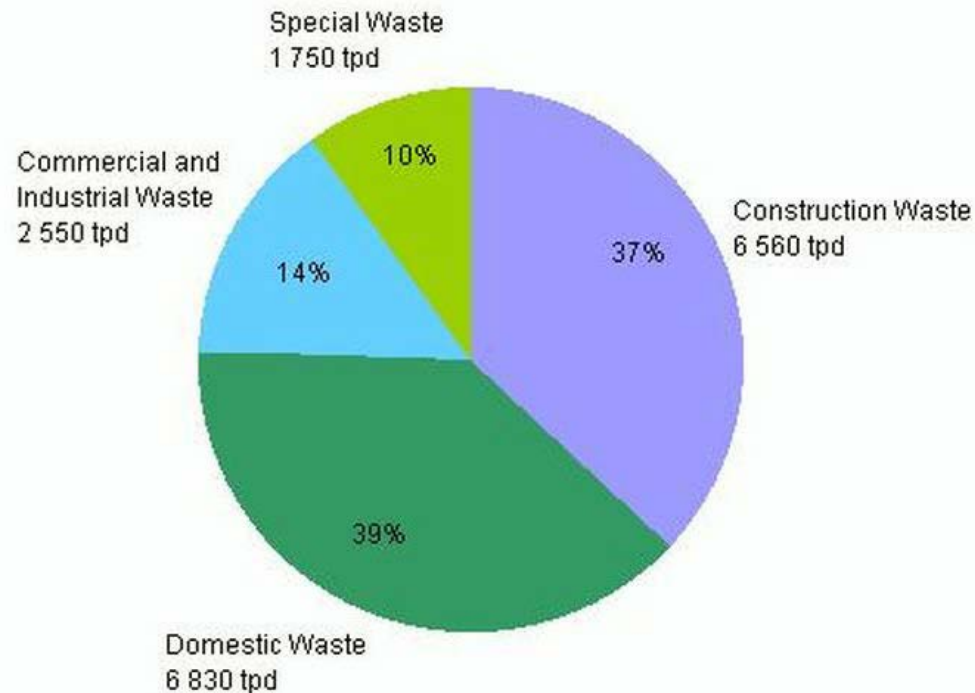
Construction Labor Productivity, 1964-2012 based on various deflators vs. Productivity for Nonfarm industries.
(Source: Census Bureau, BLS. Graphics from: http://www.aecbytes.com/viewpoint/2013/issue_67.html)



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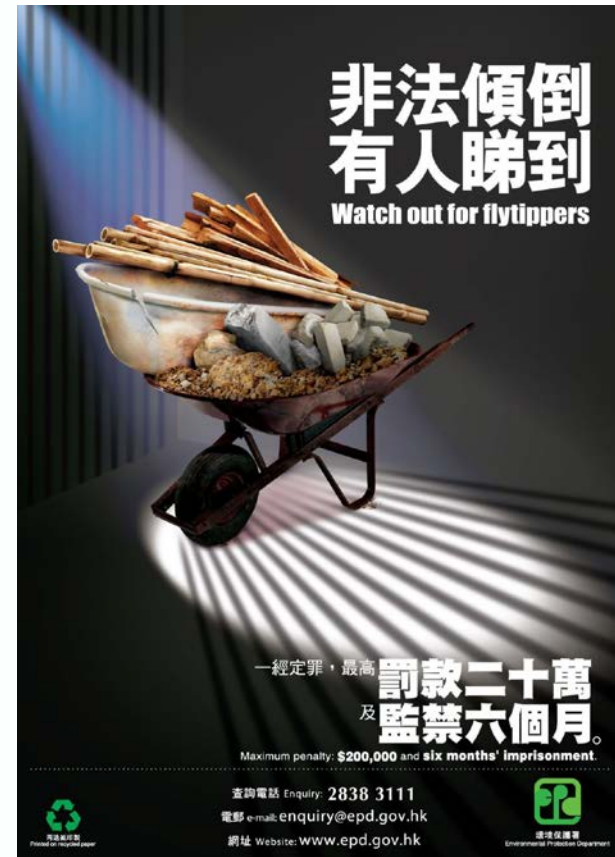
Results...

Types of Solid Waste Disposed of at Landfills in 2005



Total: 17 680 tonnes per day

Note: Figures may not add up to total due to rounding off.

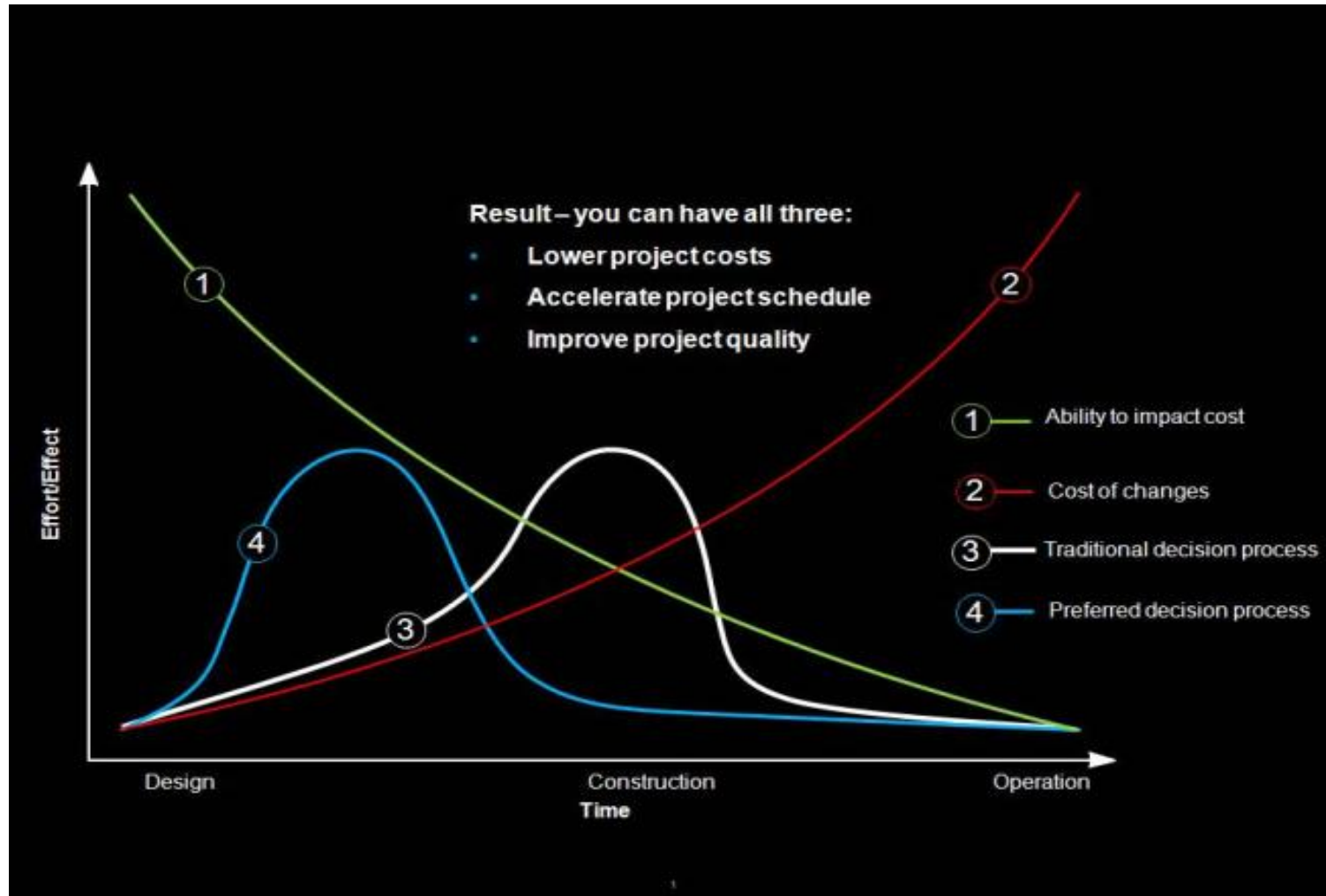


What BIM could help?

- BIM is a digital mockup
- BIM provides early warning
- BIM provides effectiveness
- BIM improves our communication
- BIM improves our productivity, Rehearsal the future!



BIM innovate a new workflow (Source: Pike Research)

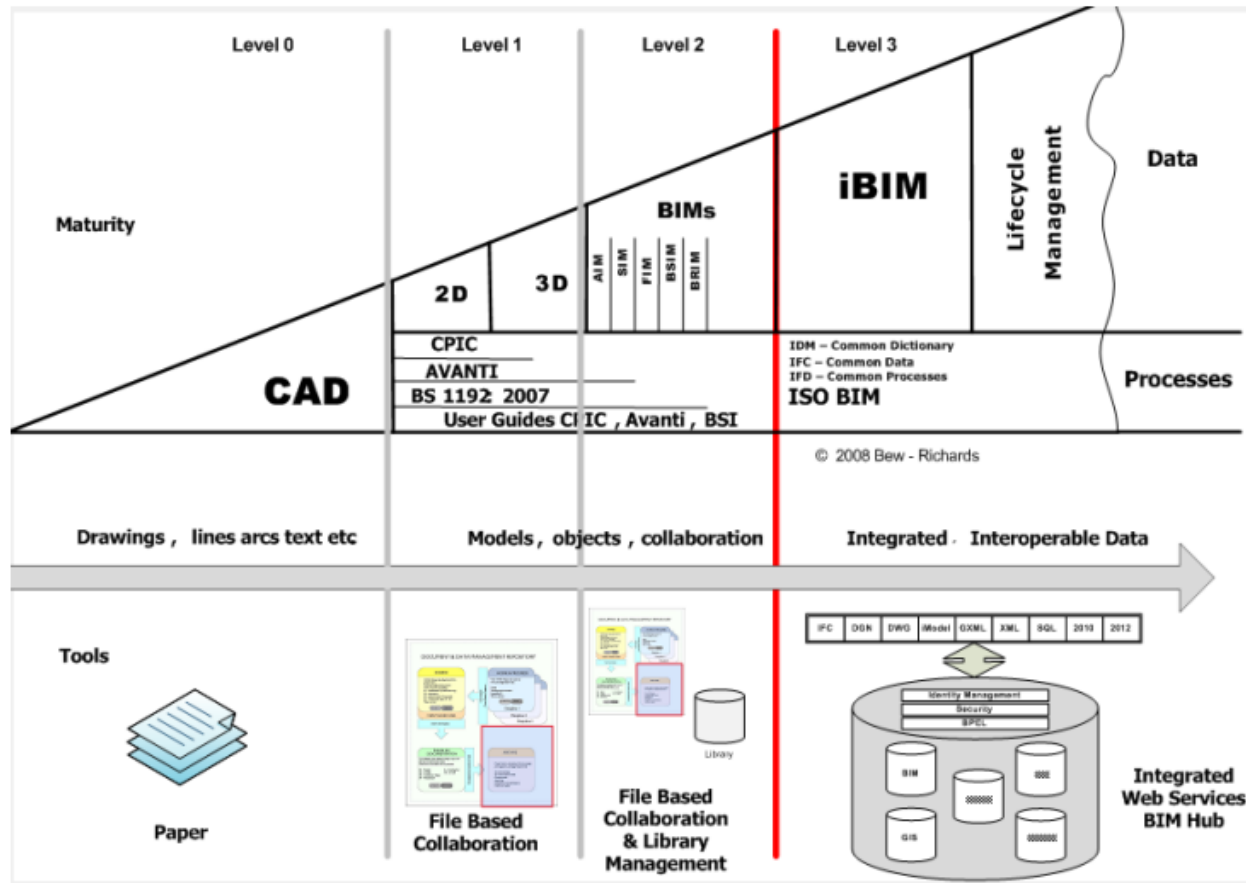


What is BIM

- BIM = Building Information Modelling
- Virtual Design & Construction
- Software of design, construction, and facility operation
- BIM is a process Not a software!
- Data-Rich Computer Model



What is BIM?





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General BIM Application for the industry

- Visualization
- Design Coordination (Clash Checking)
- 4D Simulation
- Construction Simulation
- 5D Simulation
-
- ..





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Hong Kong and International Adoption of BIM

International BIM Adoption

- BIM Roadmap
 - China: 12th 5 year plan (May 2011)
 - Singapore: 2011 – 2015
 - UK: 2011 – 2015
- Mandatory BIM
 - USA (GSA – Government Projects): 2007
 - Singapore: 2015
 - UK: 1016



Current Status of BIM Adoption in Hong Kong

- BIM Project Since 2007
- Private Sectors:
 - Developers
 - Cathay Pacific, Chinachem, Disneyland, Henderson Land, Hysan, Kerry Properties, New World, Swire, ...
 - Corporation
 - Airport Authority, HK Jockey Club, MTR, HKTSP, WKCDA, ...
 - Government
 - HKHA, Highway, ...



BIM Education in Hong Kong

- CUHK Architecture
- HKU Architecture
- HKU Civil Engineering
- HKU Space
- PolyU Building
- IVE Building and Real Estate





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BIM Implementation

BIM Implementation

- Different in various organization
 - Developer, Designer, Engineer, Contractor etc
- Top Management Support
- Infrastructure
 - Hardware and Software
- Training
 - BIM Manager, BIM Engineer, BIM Modeller
- Workflow





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HKIBIM

HKIBIM

- The Hong Kong Institute of Building Information Modelling, HKIBIM, (香港建築信息模擬學會)
- Established in Jan 2009
- To uphold and advance the standard of competence for the profession and to promote the interests and recognition of its members within the industry and community;
- The Institute works on the behalf of its members:
 - To promote and advance the general education, understanding, appreciation and interest of and in building information modelling management;
 - To foster general awareness, understanding and concerted efforts in the community towards the advancement of the Objects and the issues thereof;
 - To establish and advance standards of building information management practice in the industry.
 - To establish links with relevant institutes of tertiary education, Government Bureaus/Departments, Statutory bodies and other organizations;
 - To research, facilitate and promote the means of better management of building information for improving communication, co-ordination, management, productivity, delivery time, cost, and quality throughout the whole building life cycle;
 - To provide guidance on careers in building information management profession.



HKIBIM

- CPD
- Networking Seminar
- Hong Kong BIM Conference
 - This year will be held on 29 October 2014
@AsiaWorld-Expo
- BIM Project Specification
- <http://www.hkibim.org/>





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Q & A