HKU CICID Workshop: Lean Construction for Improving Productivity in the Hong Kong Construction Industry

BIM and Mobile Technology for Construction Wastage Reduction

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Minimize the 7 Wastages by 4D BIM Virtual Construction Simulation

Transportation (e.g. from one laydown area to another)

Waiting (e.g. for materials, sign off, previous work)

Inventory (e.g. over-ran/due)

Overproduction (e.g. not on critical path)

Over processing (e.g. painting 3 times when 1 will do)

Motion (e.g. to worksite/materialed)

Repair/rework (e.g. re-welding rectifying)

Eliminate the Non-Value Added Operations

MTECH Consulting Services
As-Construction BIM Simulation of the 6-day Cycle

Hong Kong Housing Authority Project
6 Days Cycle Co-ordination

Objectives
- Construction sequence analysis
  - Human resources planning
  - Productivity forecast
- Site layout for logistic and inventory
- Conflict management
- Safety analysis
- Co-ordination
First Time Quality – Mobile Apps for Construction Management

www.aproplan.com
Streamline the Working Process by Mobile and Cloud Computing

ZERO TIME

ZERO DISTANCE

Instant Collaboration

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Framework for Getting Simple

**Complete on Clarity**
- Change how time is used
- 3D for ALL
- Engaging everyone

**Smart Design Work**
- Simpler to know, use, do & succeed
- Acting and thinking in the “living reality”

**Lead Through Navigation**
- Structure the project operation according to the questions people ask – Working Dashboard
IT'S ONE THING TO HAVE THE TECHNOLOGY AT YOUR FINGERTIPS AND USE IT TO IT'S FULL EXTENT. SOME PEOPLE JUST LIKE TO DO THINGS THE WAY THEY HAVE ALWAYS DONE IT, EVEN IF IT'S INEFFICIENT, COSTLY AND NOT VERY ACCURATE.