Balfour Beatty
Construction Services U.S.

CIB
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IDDS
Westin Arlington
Gateway Hotel
Ballston, VA

Where Physical Meets Digital

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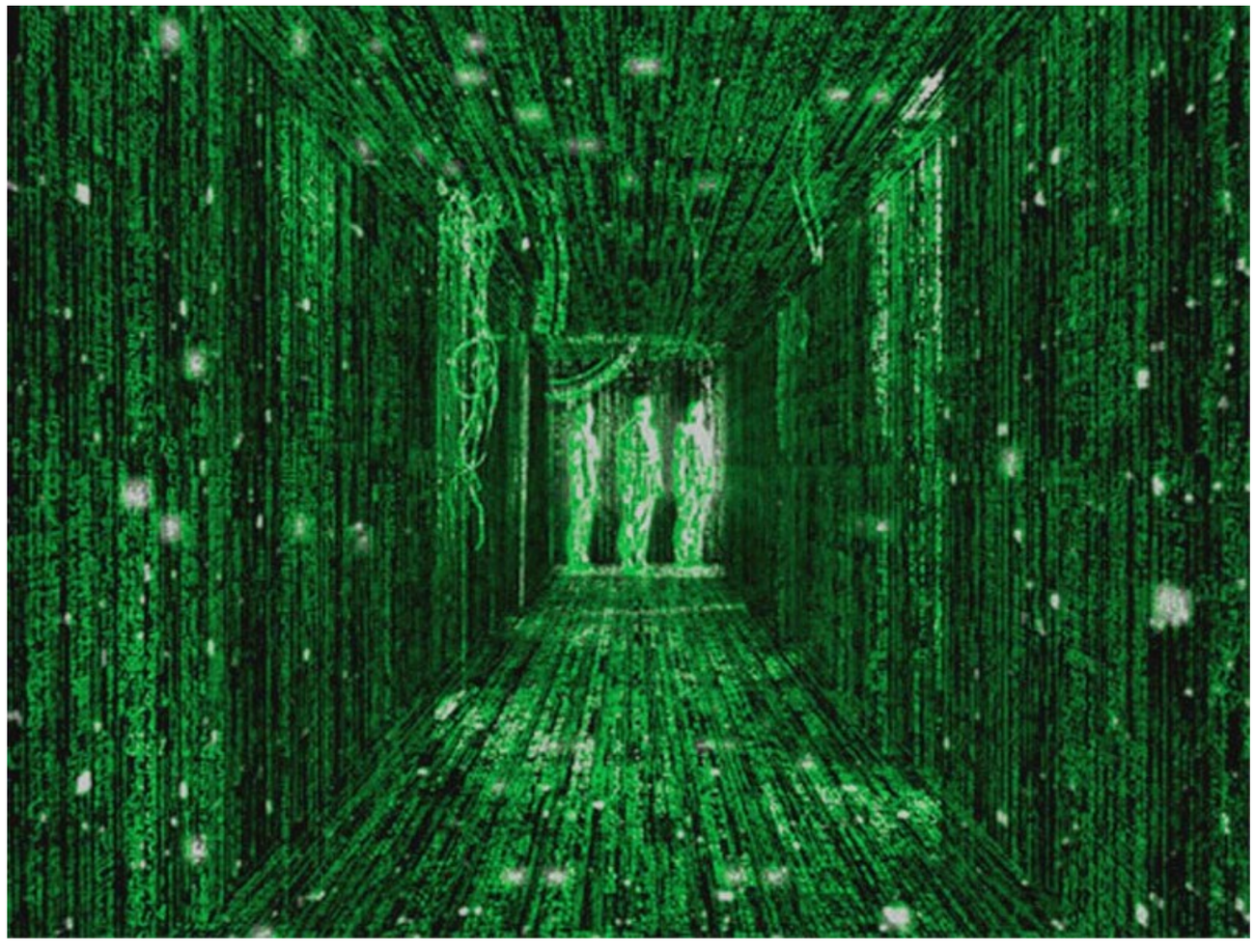
Information is the world's next natural resource



Technological advances have opened the door for a new order of intelligent infrastructure inside our cities.
In city buildings, thousands of wireless sensors monitor everything from motion and temperature, to humidity, precipitation, occupancy and light.
Sensors, meters and RFID tags are being embedded in cars, roads, pipelines, and the wheels on a train. Analytics tools then sift through the collected information to help cities respond in real time to changing conditions and keep everything running safely and efficiently.
And from central command centers, cities can manage not only their IT and data centers but also physical assets like water mains, office equipment, heating systems, and fire hydrants.

You

manufacture

Tools

Teams

Data

Collaboration

Lean

Economy

byte

engineering

Environment

Integration

Values

Product

Risk

analysis

Barriers

bim

culture

Service

Waste

Delivery

Process

Technology

ipd

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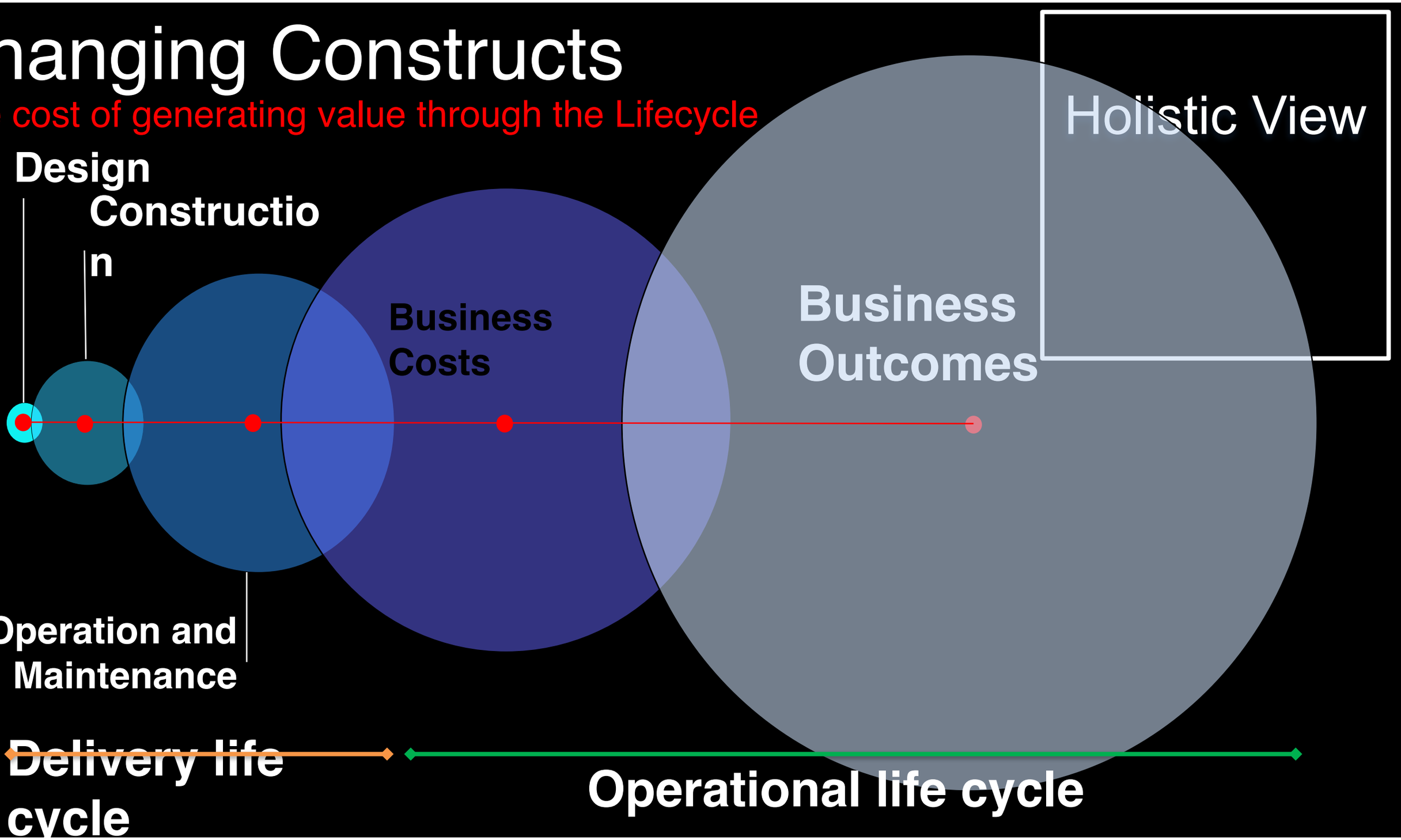
Changing Constructs

The cost of generating value through the Lifecycle

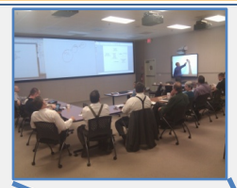
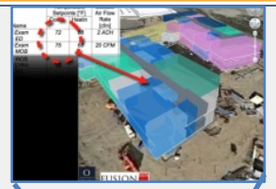
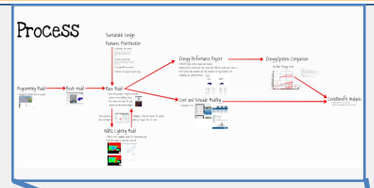


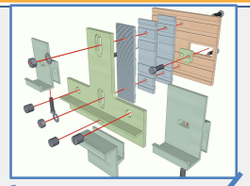
Integration Issues we Face

- “Seams”
- Unwind the silos
- Make R&D front burner
- May mean we have to lead differently
  - “system think”
  - Culture of analytics
  - New forms of collaboration and automation

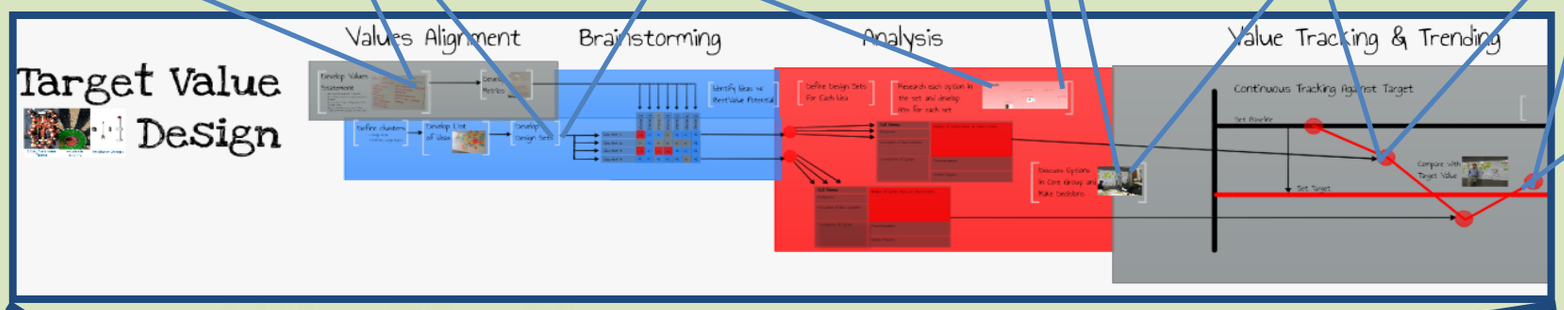
Where Physical Meets Digital

Innovations

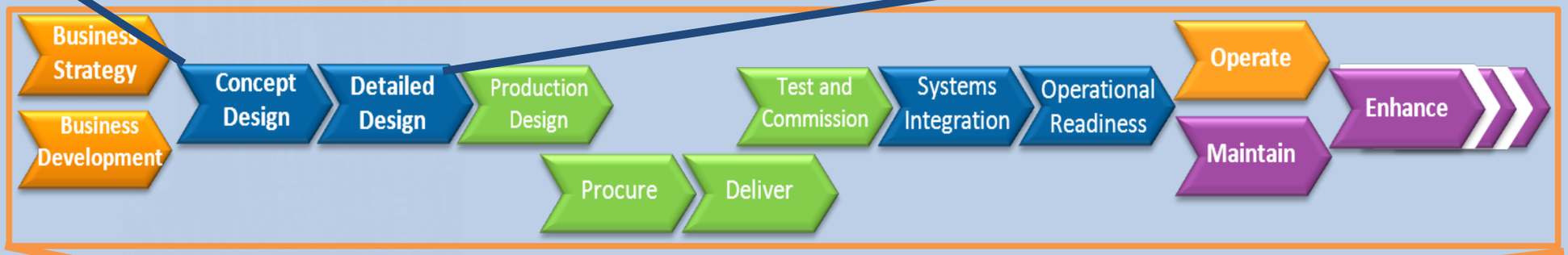






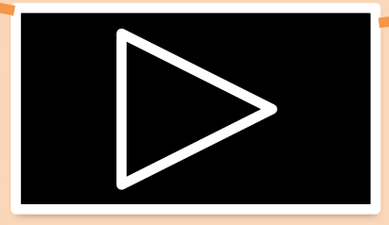
Delivery Process



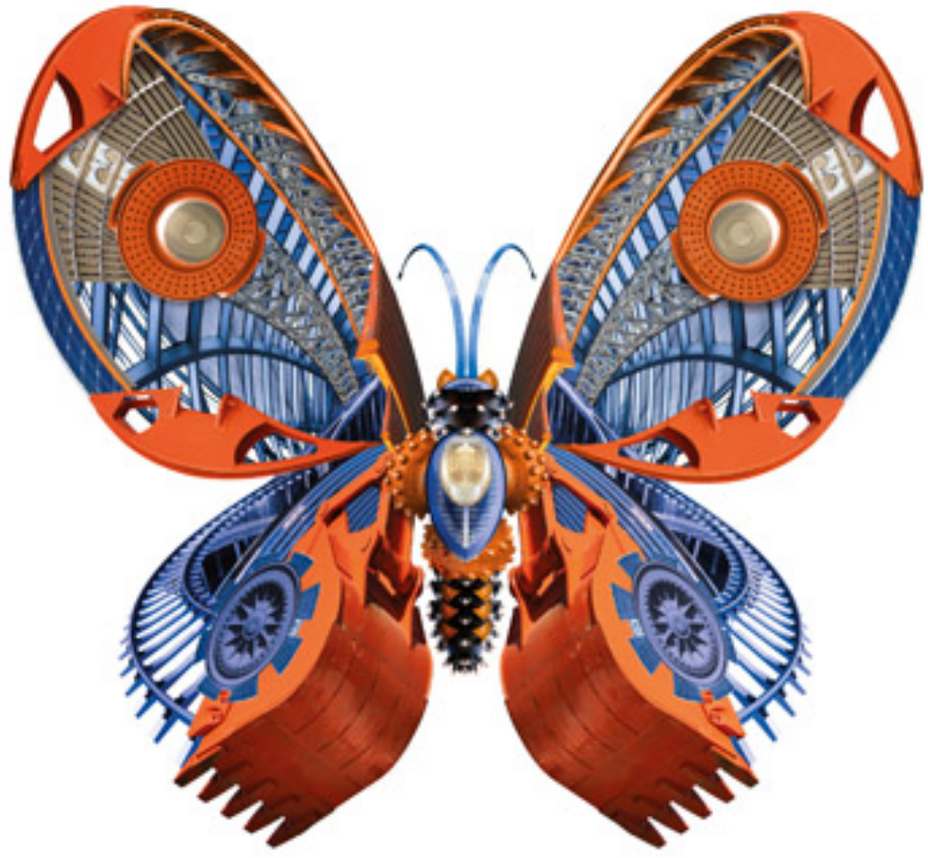
Asset Lifecycle



Automation



- Collaborate to Learn
- Apply to Innovate
- Instrument to Manage
- Integrate to Analyze
- Optimize to Automate



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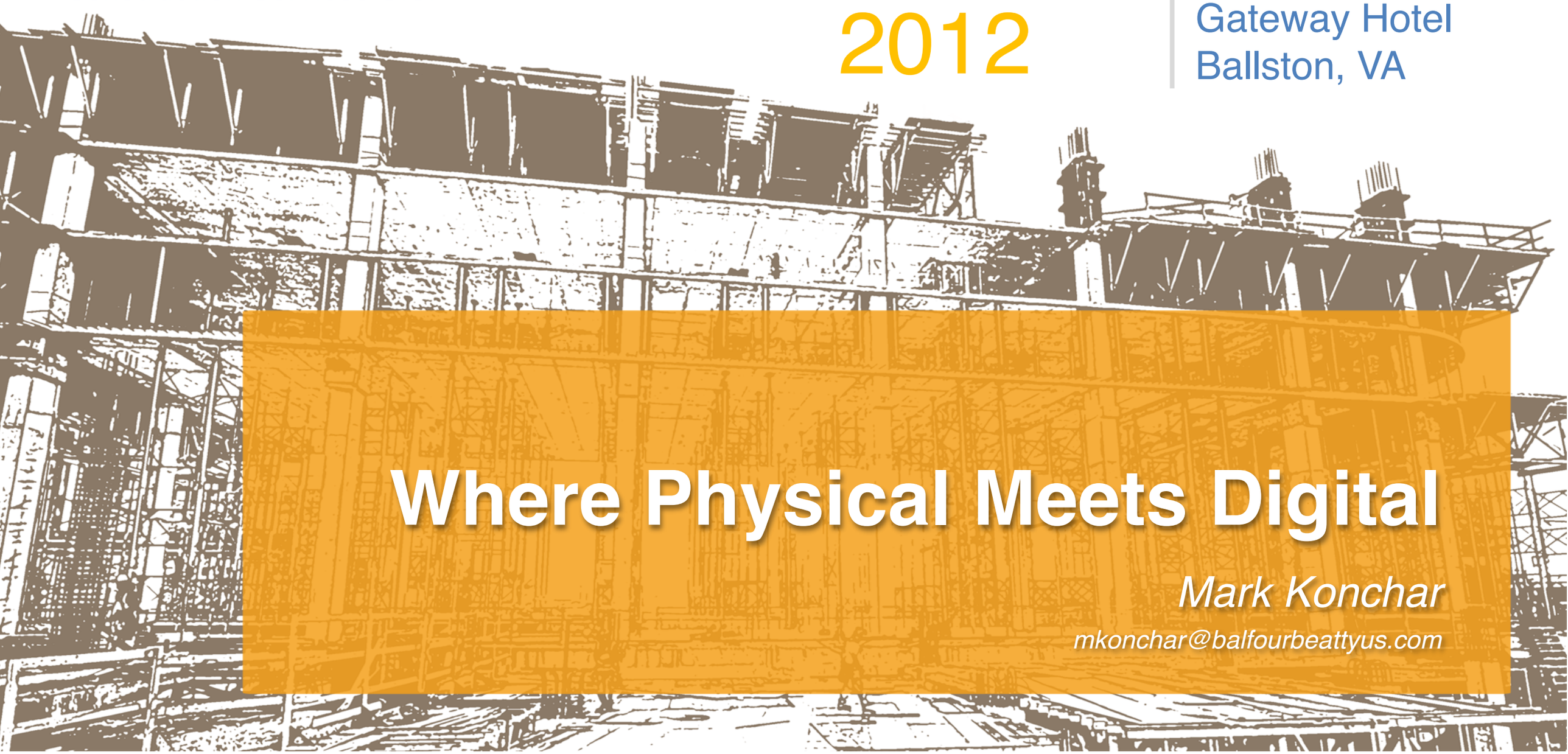

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