FACILITY DATAFICATION:
Maximizing the Value of Your Building Portfolio with BIM

Dave Fano, CASE
Colleen Kasprzak, CASE
What if this floor is difficult to maintain properly? Which of the 11,1000 Starbucks need to replace it?
If Gap released a new display standard, which of the 3,263 stores need to update their front of house?
Westfield owns 104.4 million sqft. How are they validating proximity based lease compliance?
We’ve been doing BIM
Available Building Information

Companies need to be able to navigate all levels of their BI

BLDGS = DATA

<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Building</th>
<th>Floor</th>
<th>Space</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties of any real estate manager or owner</td>
<td>Physical address for a single structure</td>
<td>A single level within a building</td>
<td>A volume that holds business activity</td>
<td>A physical thing that sits within a building</td>
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Building Information Examples
Each has its own value, but the aggregate has the most
BLDGS = DATA
Building Information Timeline
The resolution of BI changes over time
BLDGS = DATA

Time

Planning  Design  Construction  Operations
Building Information Timeline

The resolution of BI changes over time

BLDGS = DATA

Planning
Design
Construction
Operations

Time

Amount of Building Information
Building Information Timeline

BI has a compounded effect as a Building Portfolio grows

BLDGS = DATA
Building Information Timeline

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Building Information Timeline

BI has a compounded effect as a Building Portfolio grows

BLDGs = DATA
The real opportunity is leveraging building data to create and deliver building wisdom.
Now, let’s see it!
Data for Master Planning
Single Source of Truth For Planning + Operations
Client: Ennead Architects
Data for Space Planning
Occupancy + Usage Data Visualization
Client: Plastarc
Data for Predictive Planning
User Path + Interaction Analysis
Client: NBBJ

TEST FIT: BEST PRACTICE
BUBBLE DIAGRAM

9:00

TEST FIT: LAW
BUBBLE DIAGRAM
Data for Knowledge Insight

Content Harvesting

NBBJ
Data for Design Integration
Design Application Data Translation
Client: DIALOG
Data for Business Analysis

Business Intelligence + Project Performance

CASE
Data for Operations
BIM-based Asset Tracking + Operations Database
Client: Hoar Construction
Data for Delivery
BIM Data Aggregation & Analysis Platform
CASE
Data for Existing Buildings
Automated Model Creation from DGN
Client: Large Retailer
Data for Property Management
Bi-Directional Integration from BIM to ERP
Client: Mall Developer
Data for Portfolio Management

Building Management Tools

CASE

Project Portfolio

Projects by City

Projects by City

Portfolio Square Footage

Active Project Schedule

36 Broadway

Floor Plan

Lg Conference Room 1

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<tr>
<th>Product Name</th>
<th>Vendor Name</th>
<th>Cost</th>
<th>Quantity</th>
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#BIMForumED
So, what’s next?
Spatial Scanning
Beyond Coordination + Clash Detection
Mature Technology

Source: http://www.youtube.com/watch?v=SIOUhjL5fKI#t=23
Spatial Usage Metrics
BMS, SIMS, CAFM, Sensors + Controls
Mature Technology
Occupancy Awareness

Indoor Positioning

Early stage technology

Source: http://estimote.com/indoor
Building APIs
Open platforms for improving building performance
Provocation
Building Information

Graph Schema

BLDGS = DATA

$ MATCH (a:Campus)−(b:Building)−(c:Level)−(d:Space)−(e:Asset) WHERE
a.name = "San Francisco State University" AND e.name = "Chair A" RETURN
"c,d"
Data is a raw renewable resource

Those that use it to deliver value will drive performance

Thanks!
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http://content.case-inc.com/bimforum
bldgs = data