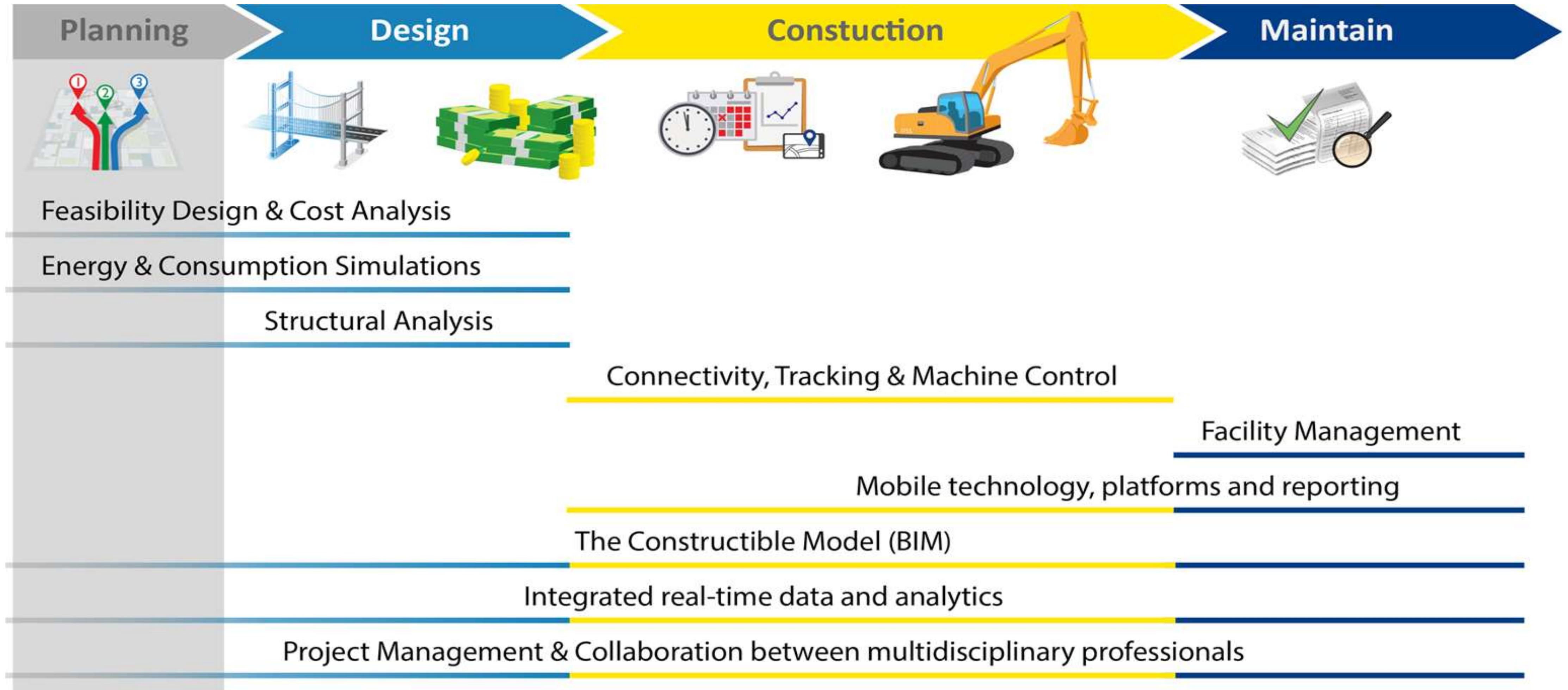




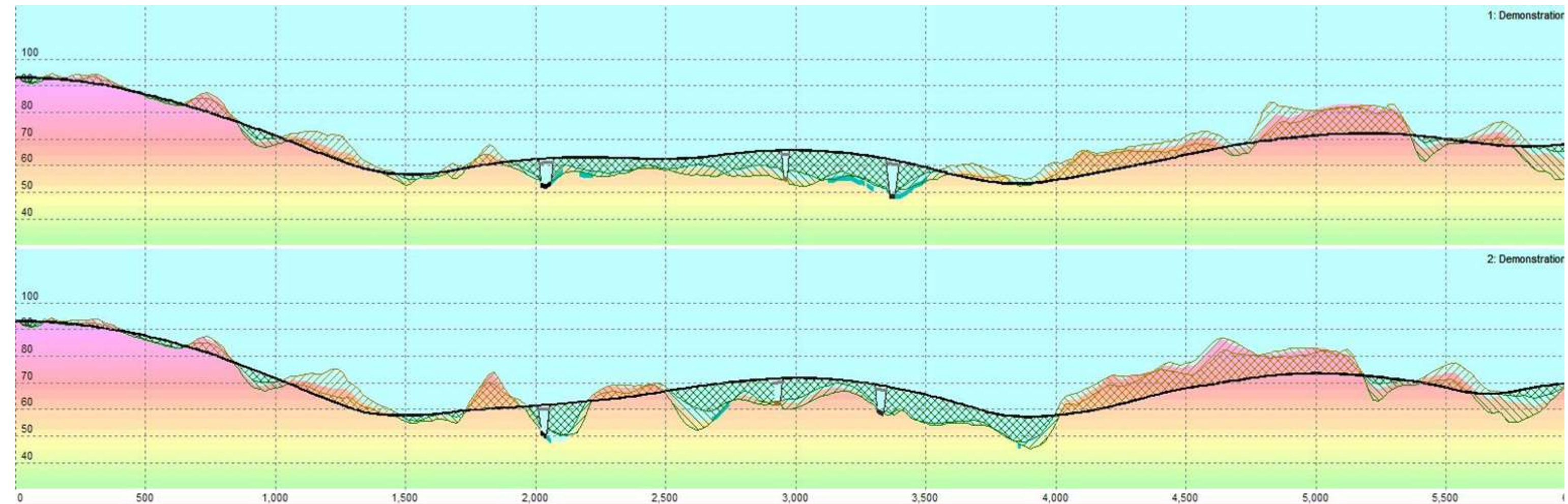
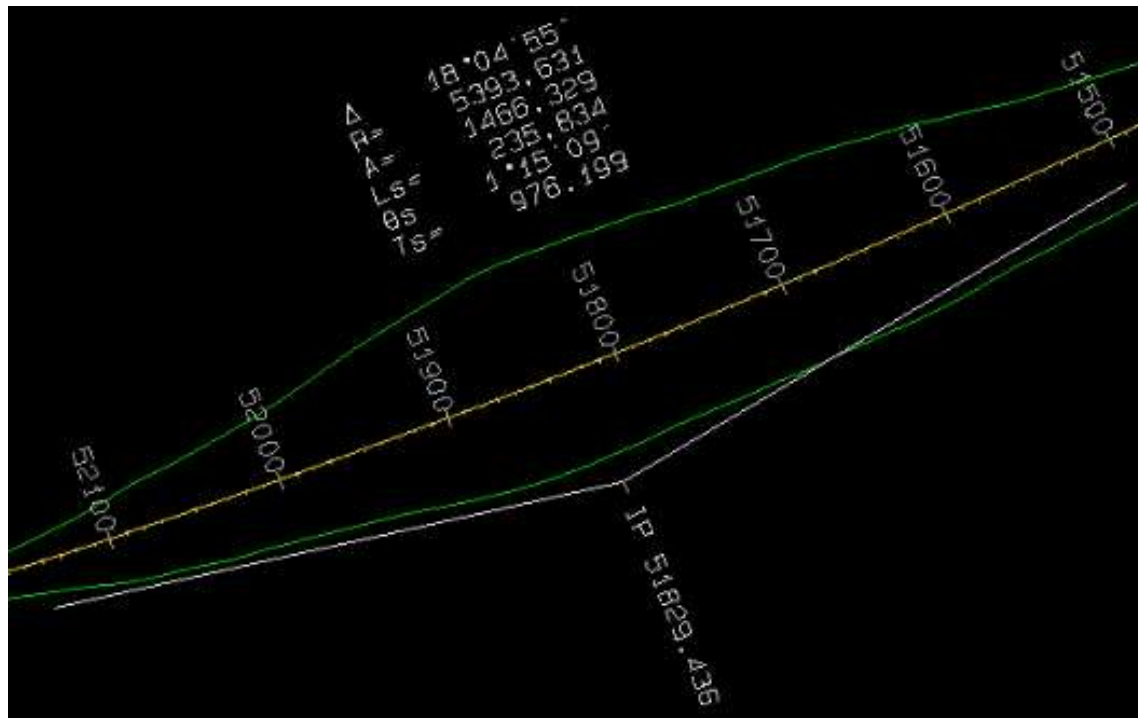
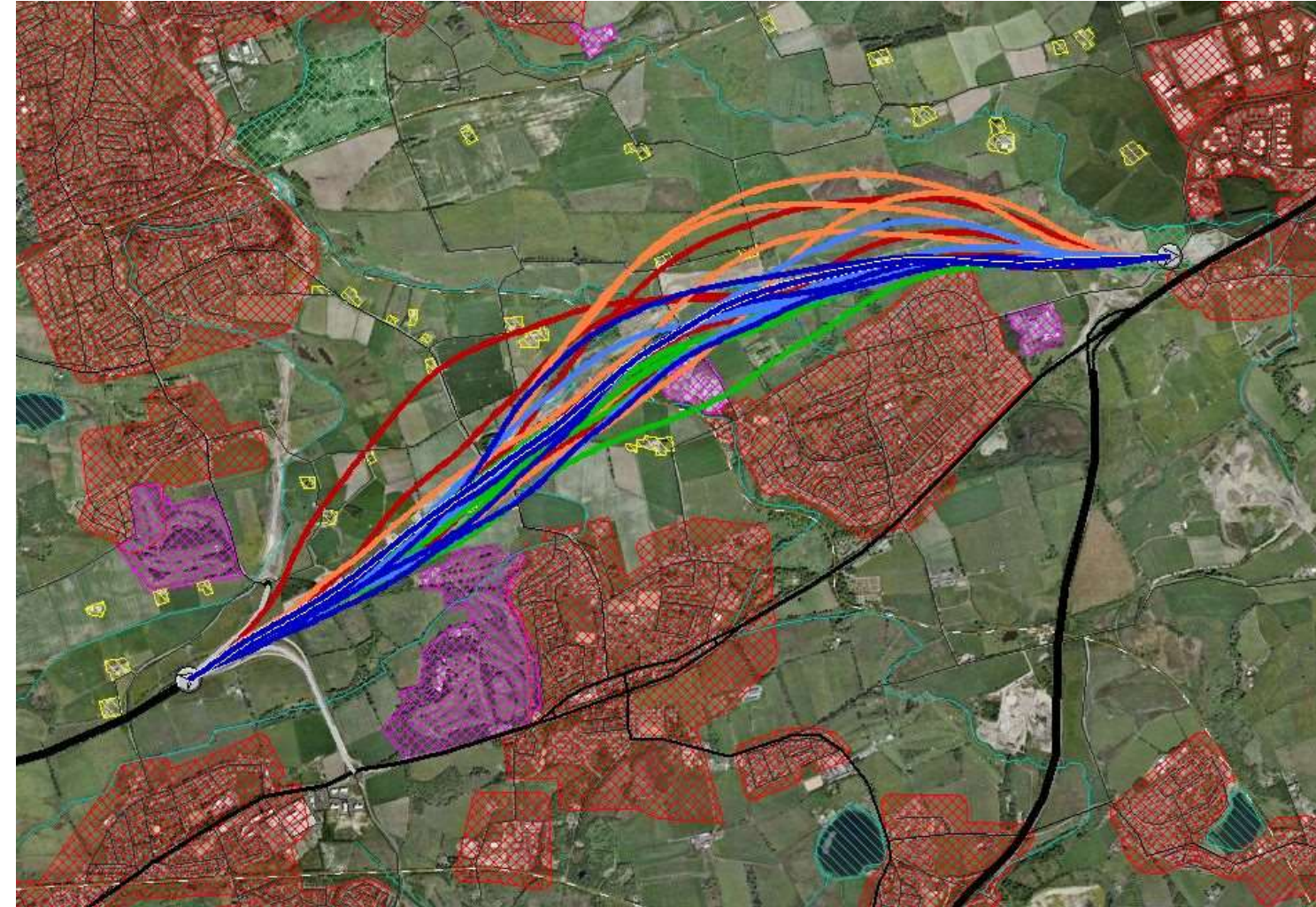
# Transforming Construction

Chris Gibson

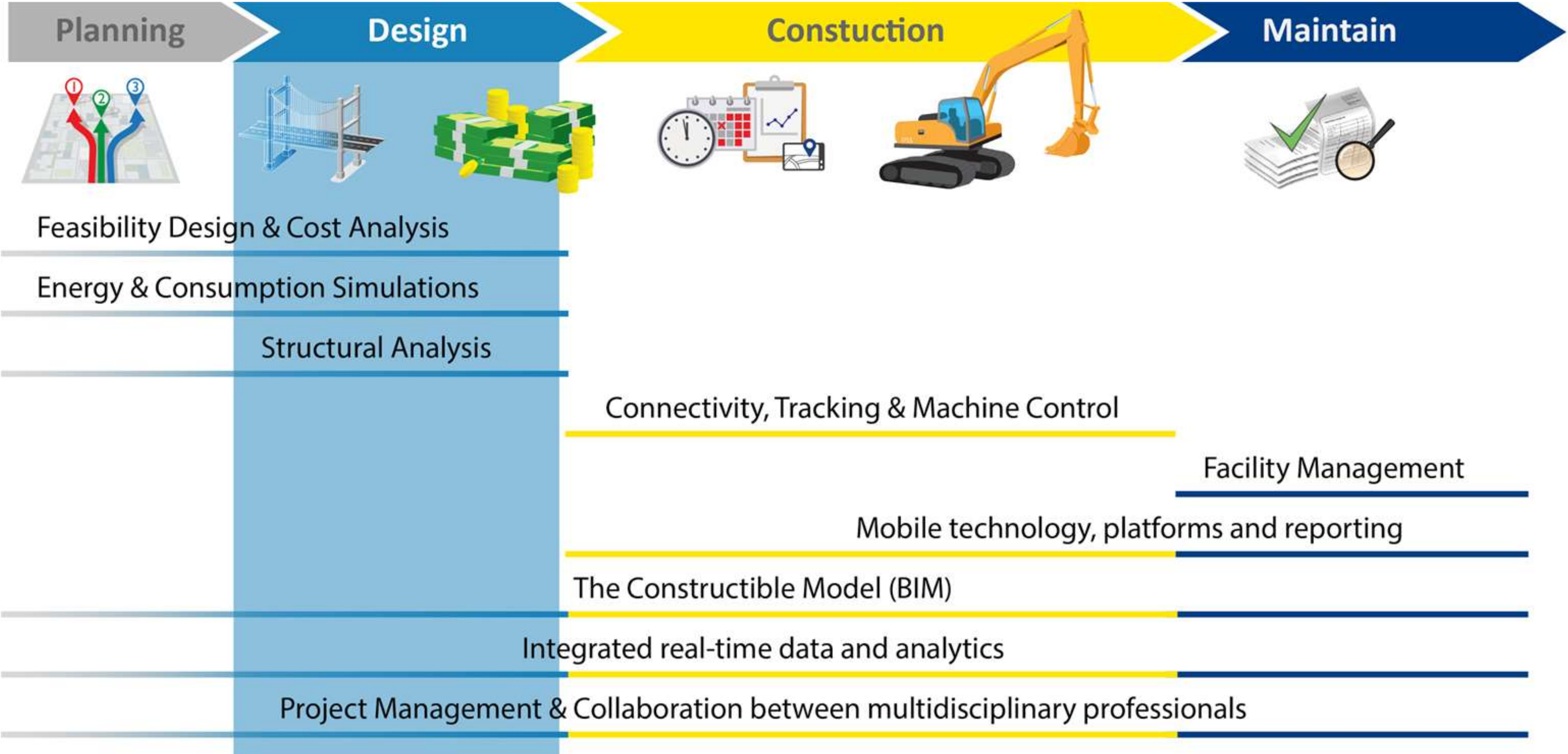
# Value of Technology in Construction Process



# Planning: Multiple constraints managed easily



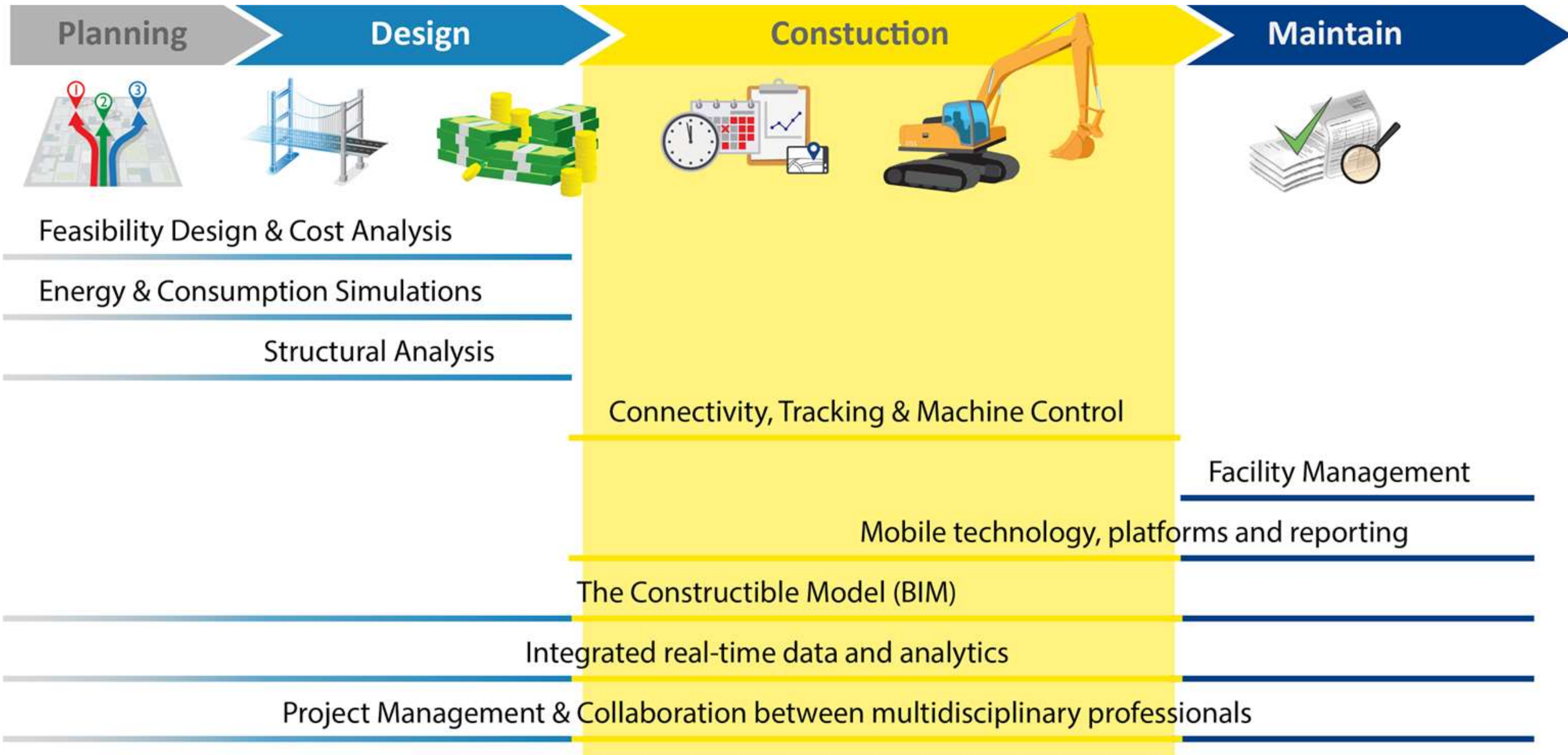
# Value of Technology in Construction Process



# The Engineer AECOM



# Value of Technology in Construction





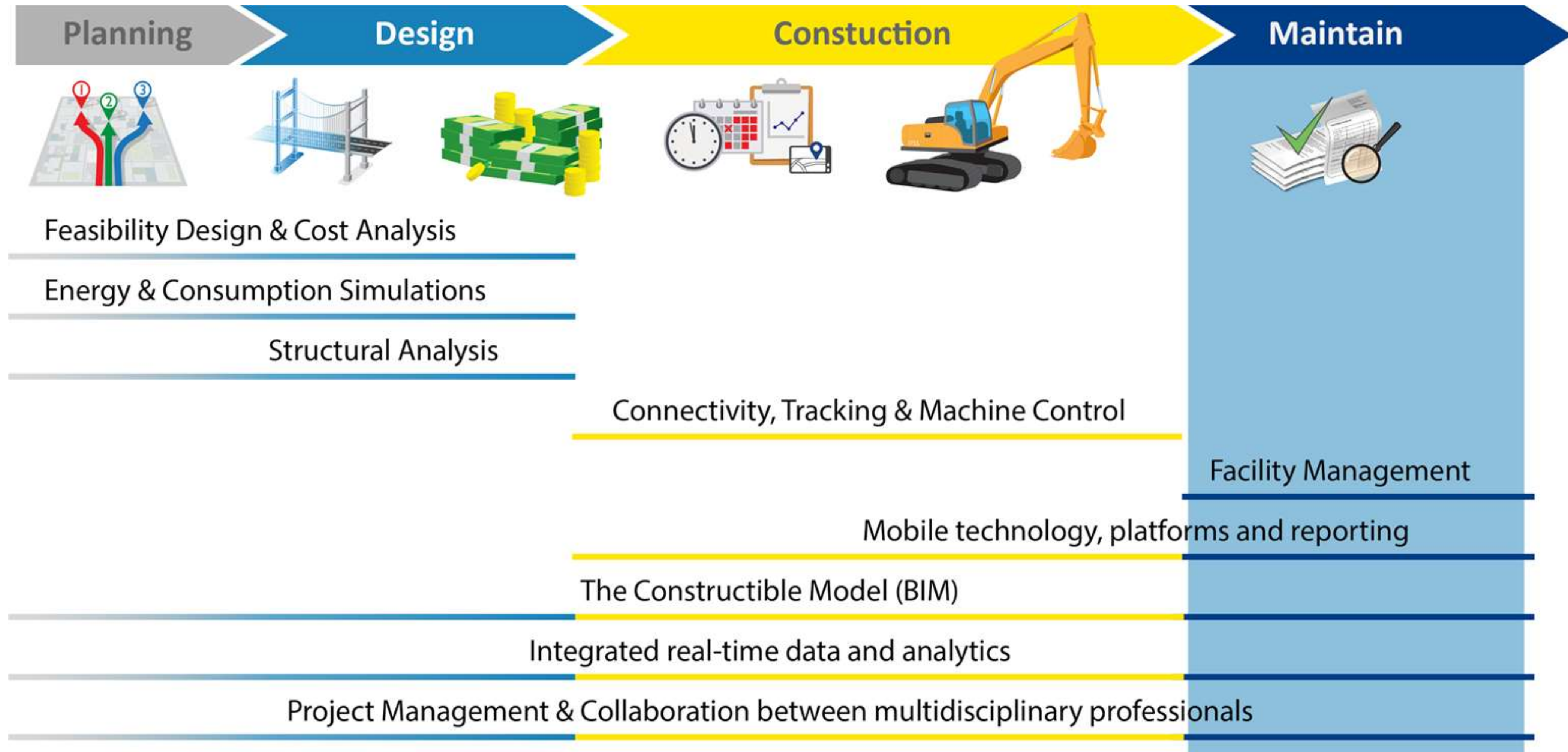
# The Contractor NCC



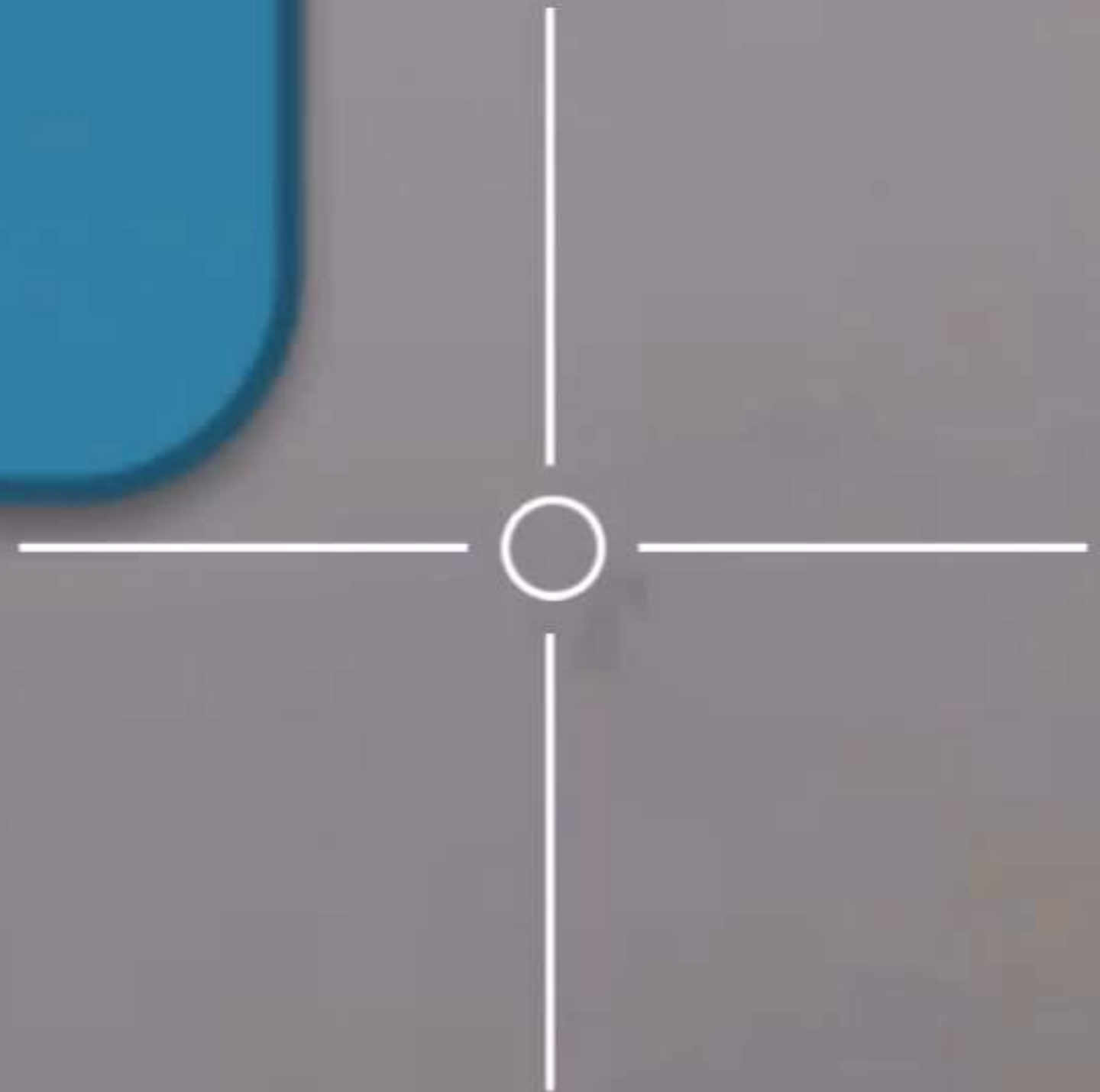
MERGING 3D MODEL  
THREAD



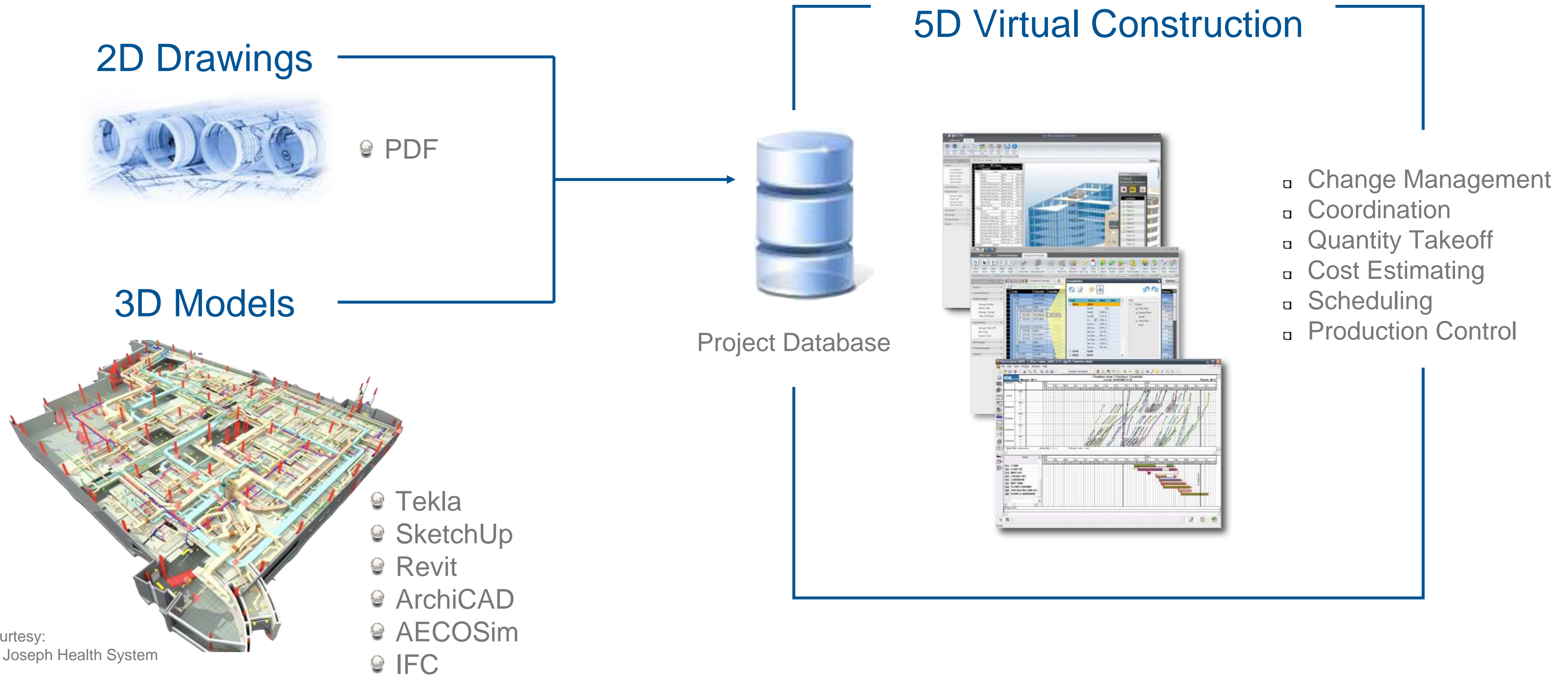
# Value of Technology in Maintenance



PP-017  
Generator Room



# Use Many Different Design Systems as Input to the 5D Virtual Construction Process



Courtesy:  
St. Joseph Health System

# How 5D Virtual Construction Works

Take each Object in  
a 3D model

**Object**



Concrete Column

# How 5D Virtual Construction Works

Take each Object in  
a 3D model

With a known sequence  
of Methods

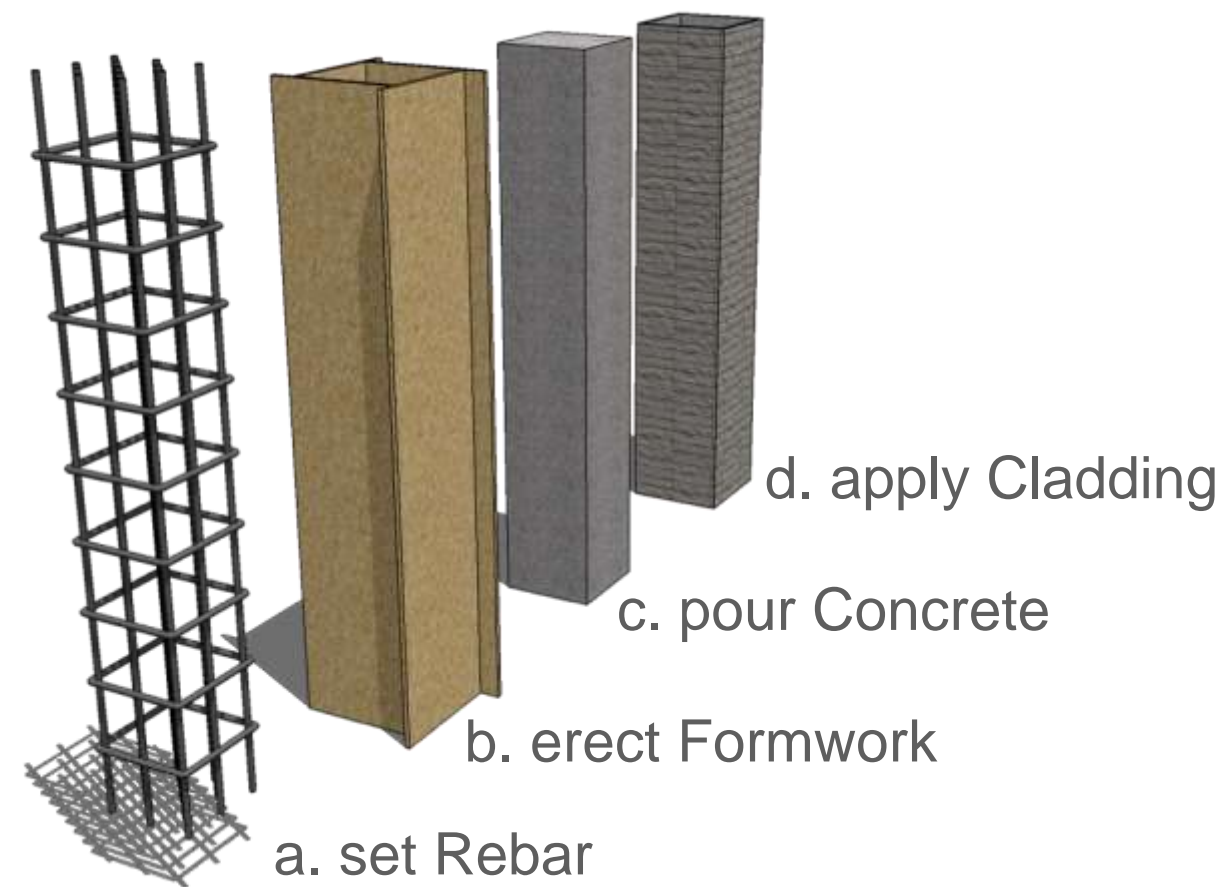
**Object**



**Methods**



Concrete Column



# How 5D Virtual Construction Works

Take each Object in a 3D model

With a known sequence of Methods

Apply your formulas to compute Labor, Equipment, and Material for each Method

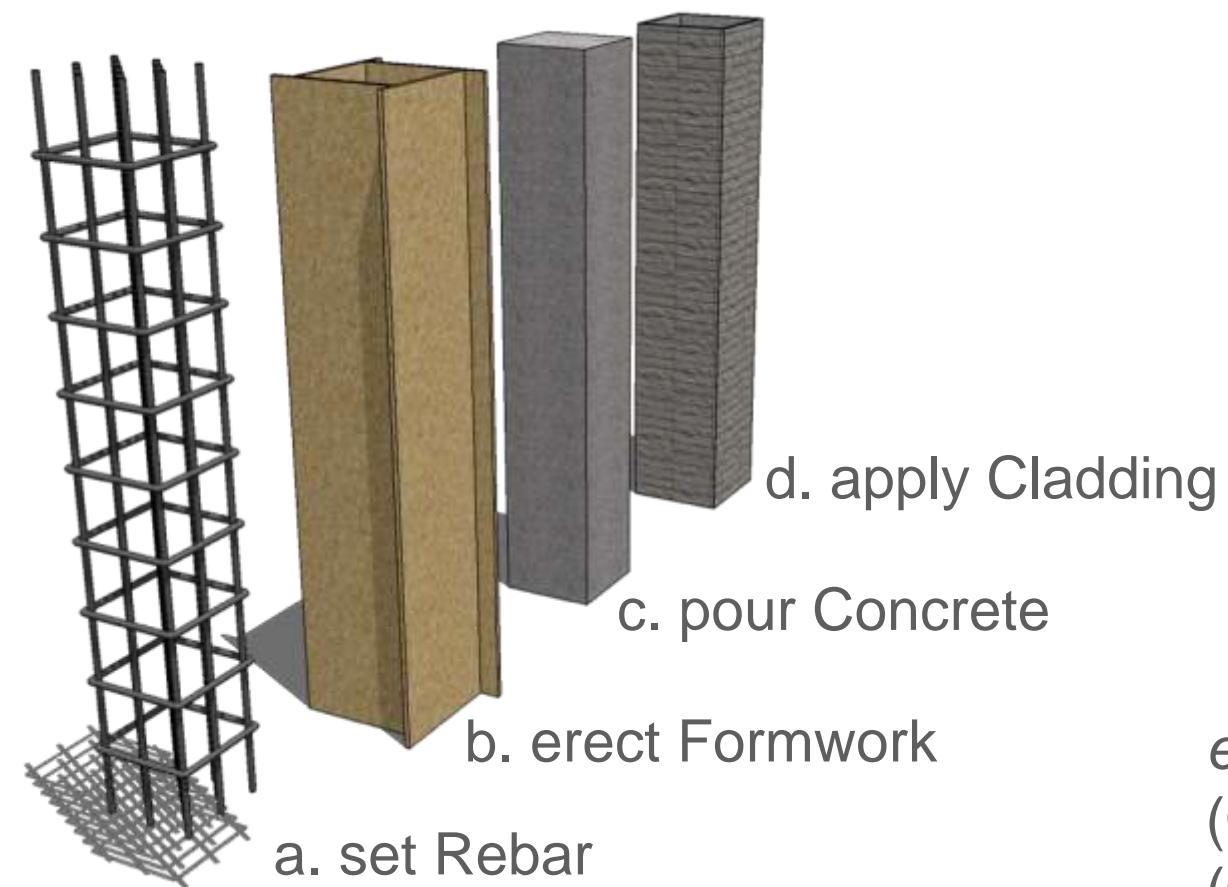
**Object**

**Methods**

$f(x)$



Concrete Column



e.g.  
(Concrete) Material  
(Concrete) Labor  
(Concrete) Equipment



# How 5D Virtual Construction Works

Take each Object in a 3D model

With a known sequence of Methods

Apply your formulas to compute Labor, Equipment, and Material for each Method

Break the project down into Locations (or multiple Sites)

**Object**

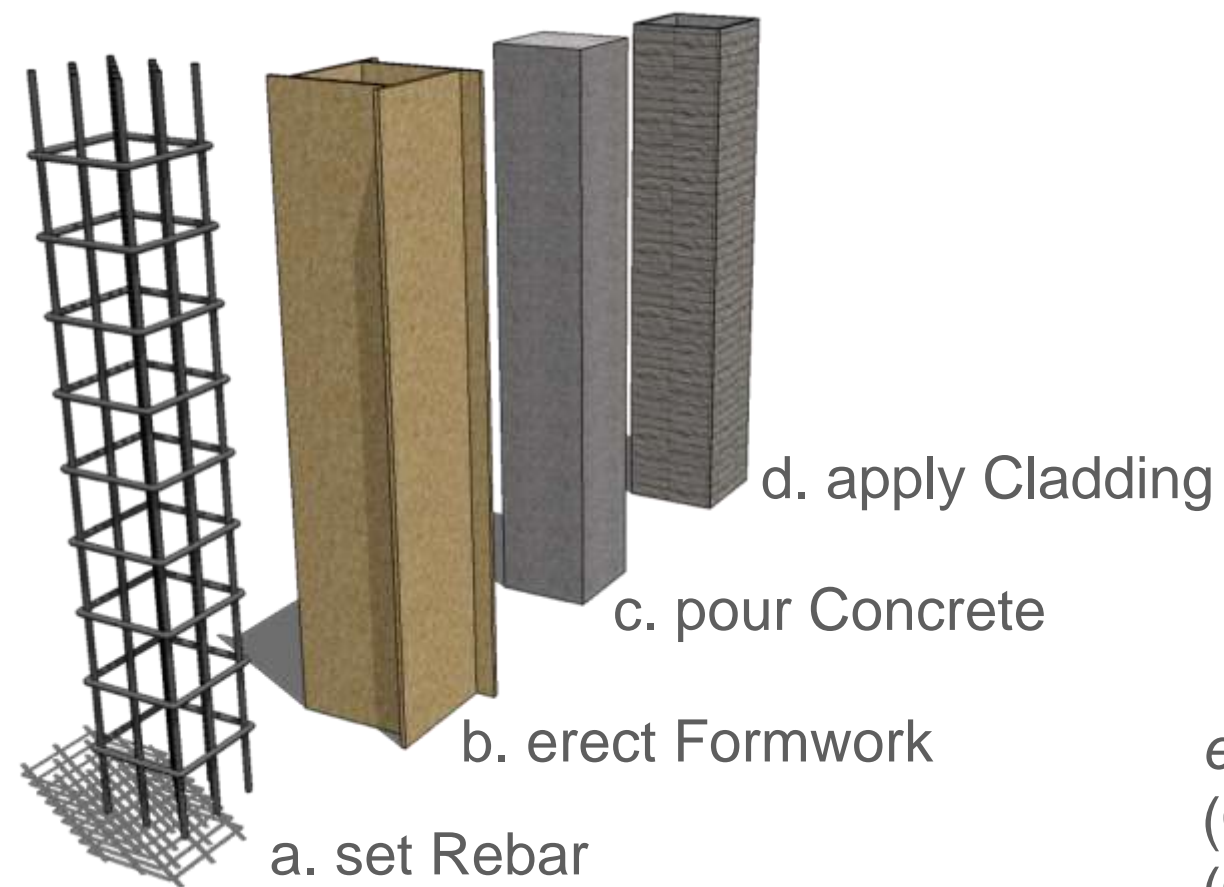
**Methods**

$f(x)$

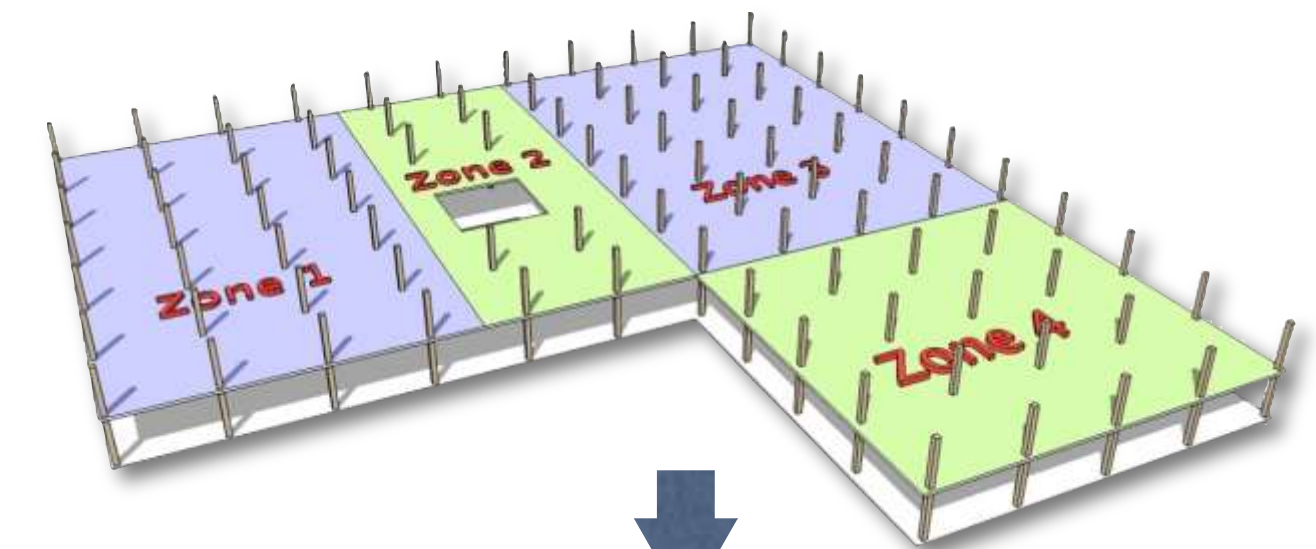
**Locations**



Concrete Column

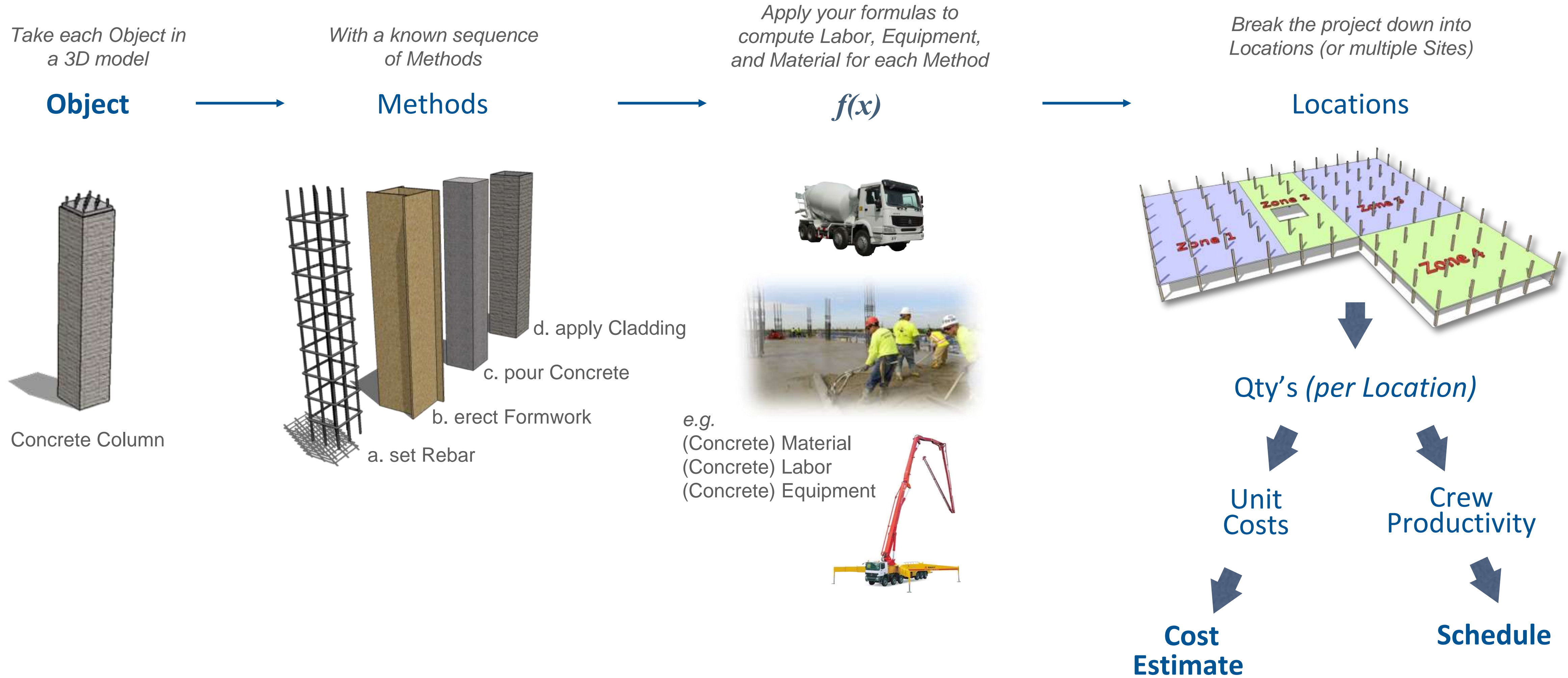


e.g.  
(Concrete) Material  
(Concrete) Labor  
(Concrete) Equipment



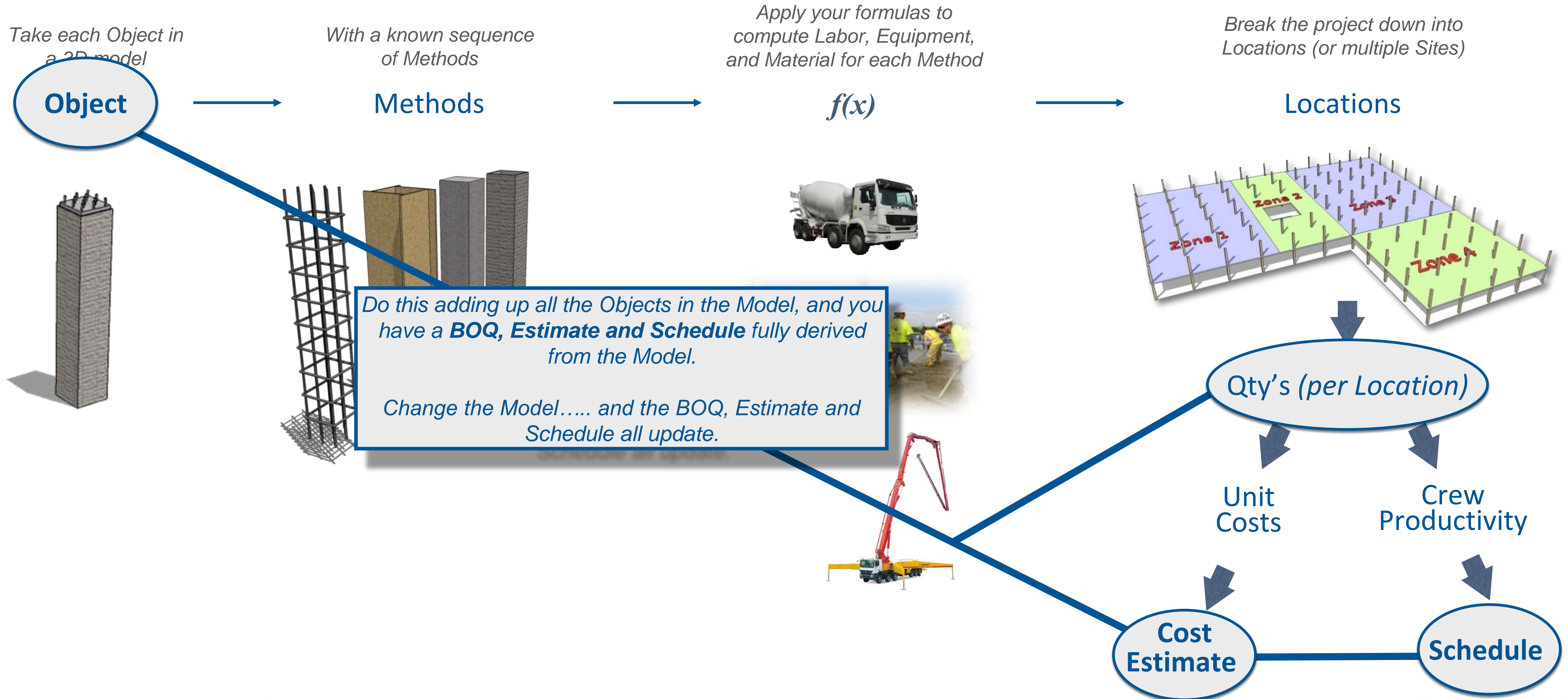
Qty's (per Location)

# How 5D Virtual Construction Works





# How 5D Virtual Construction Works







# Thank You