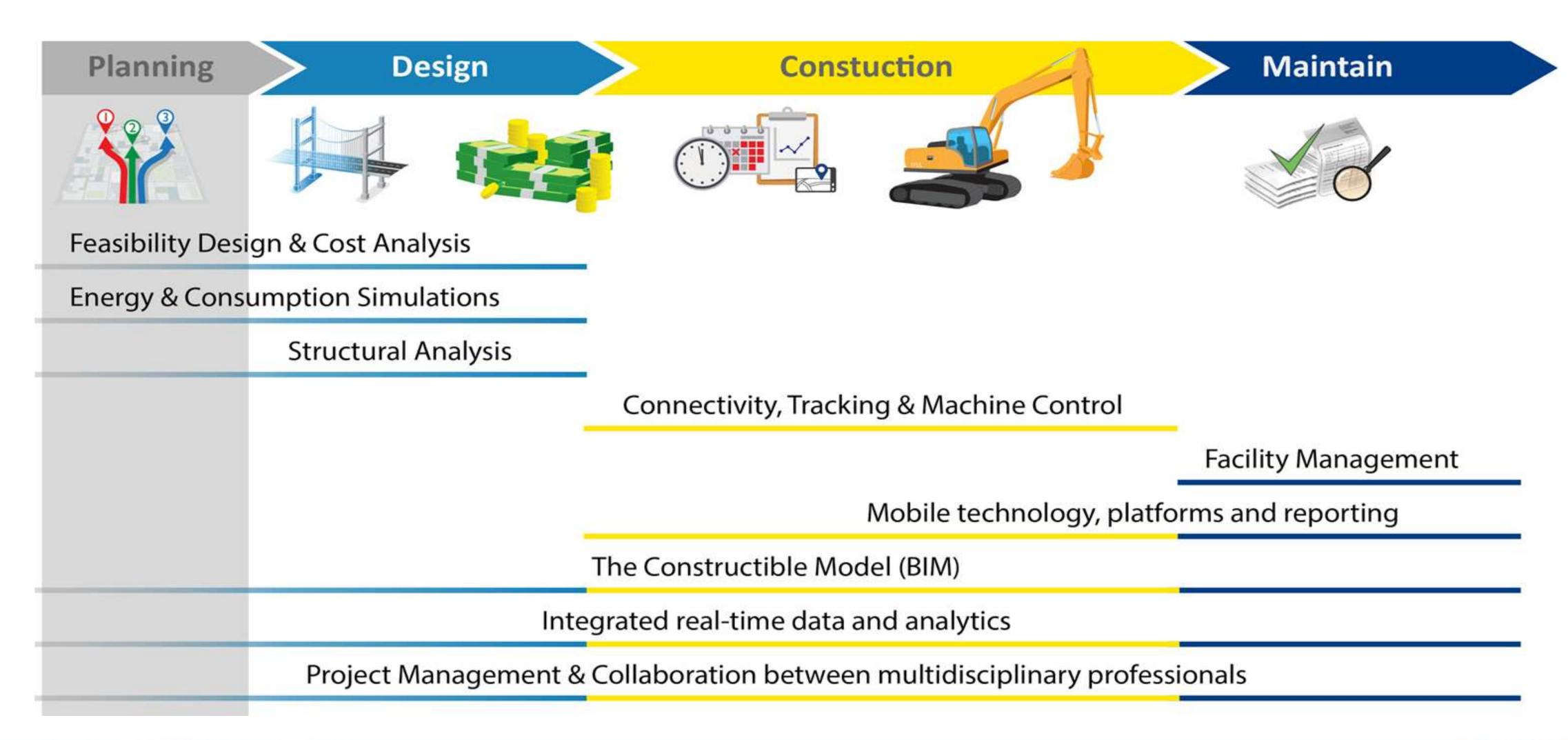




Transforming Construction

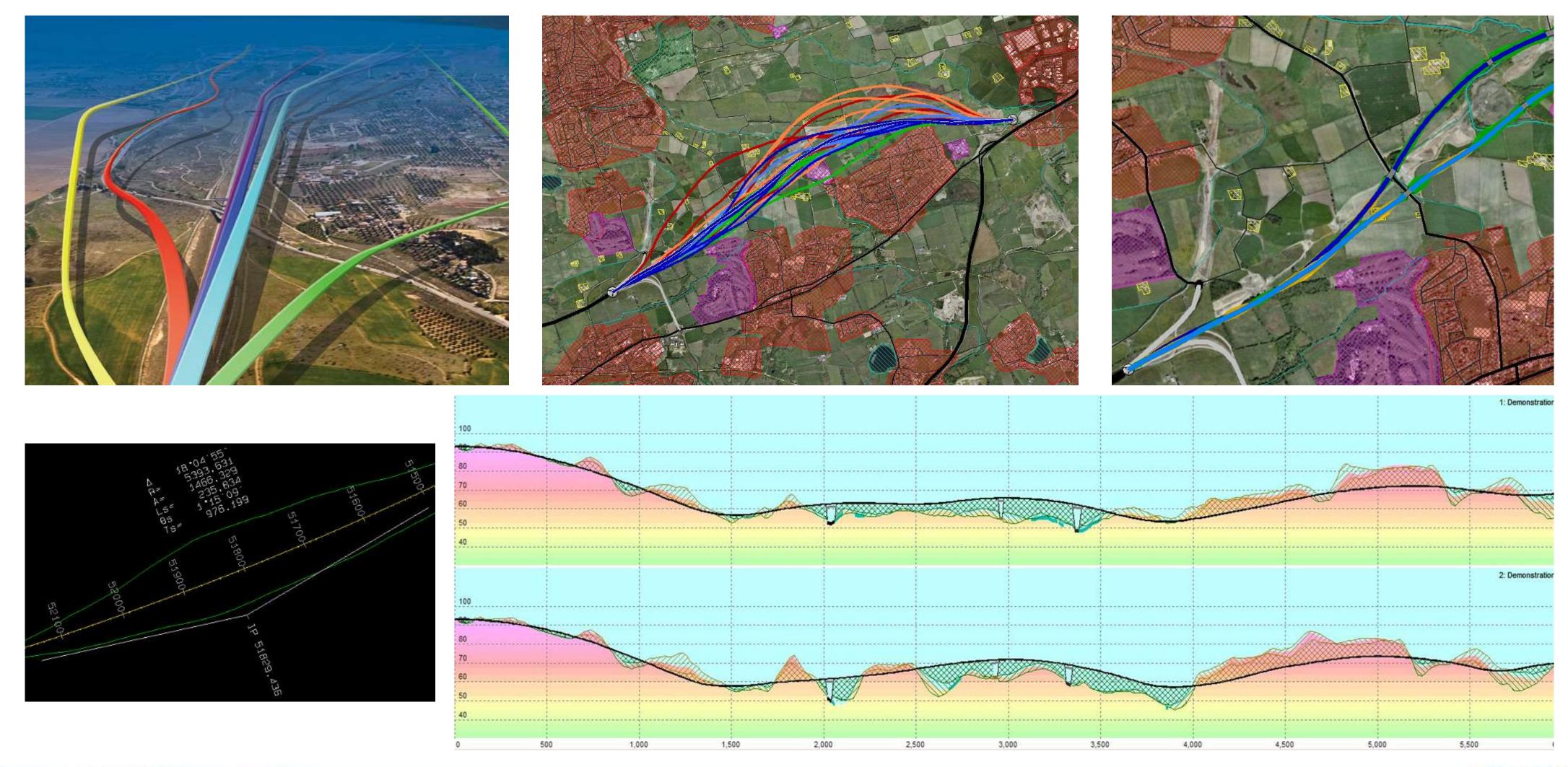
Chris Gibson

Value of Technology in Construction Process



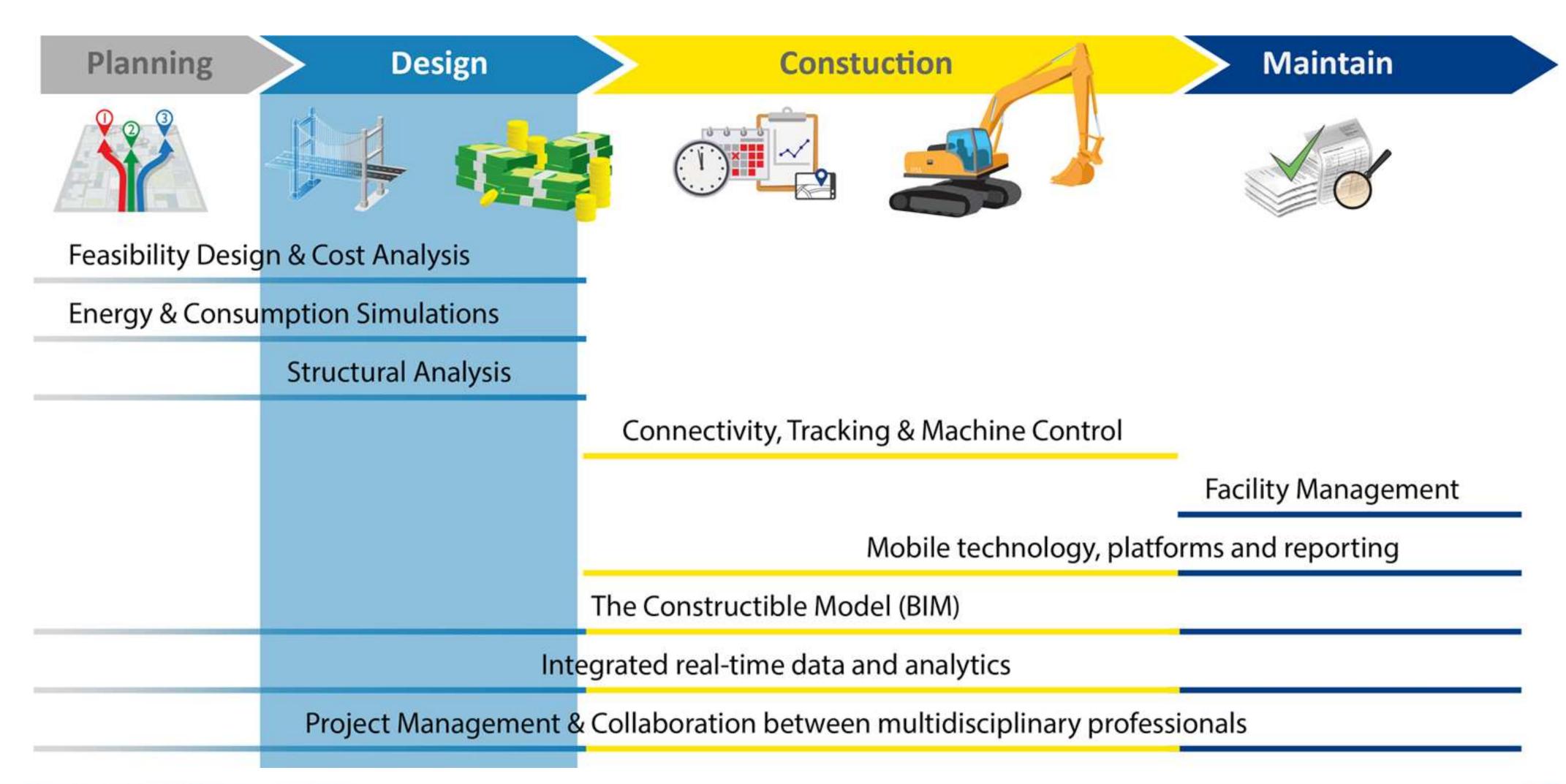


Planning: Multiple constraints managed easily





Value of Technology in Construction Process







Value of Technology in Construction

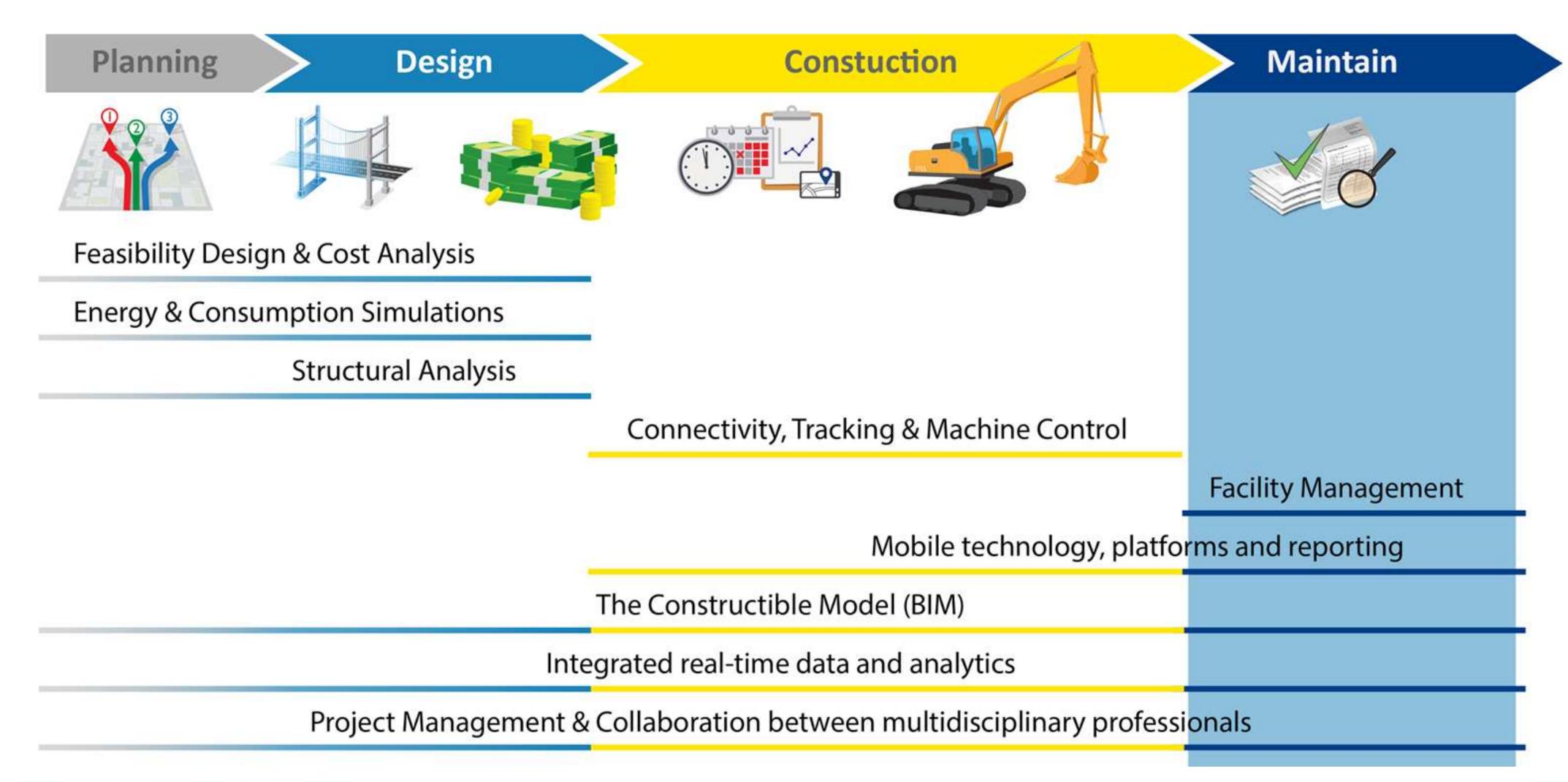
Planning Design Maintain Constuction Feasibility Design & Cost Analysis **Energy & Consumption Simulations** Structural Analysis Connectivity, Tracking & Machine Control Facility Management Mobile technology, platforms and reporting The Constructible Model (BIM) Integrated real-time data and analytics Project Management & Collaboration between multidisciplinary professionals







Value of Technology in Maintenance

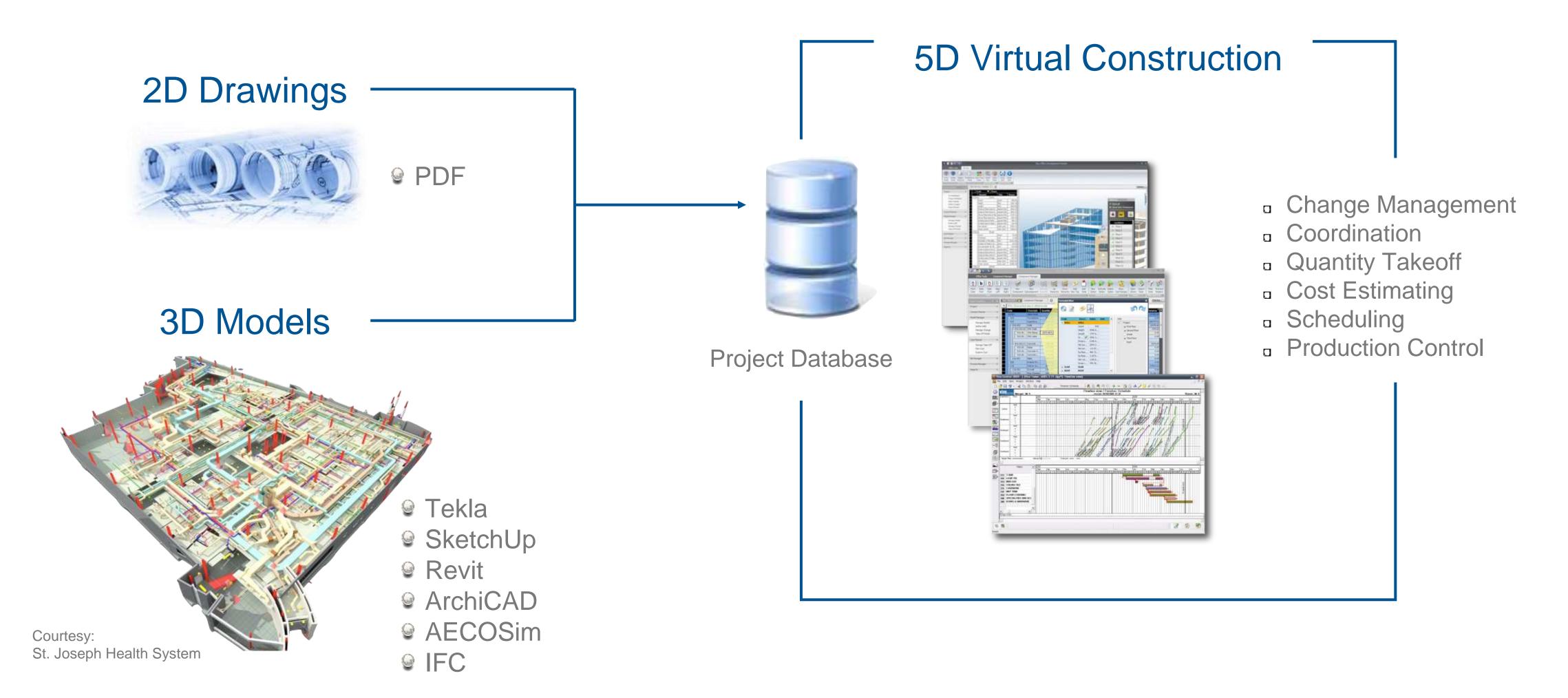




PP-017 Generator Room



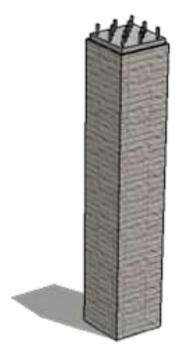
Use Many Different Design Systems as Input to the 5D Virtual Construction Process





Take each Object in a 3D model

Object



Concrete Column

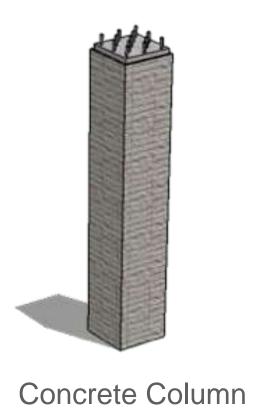


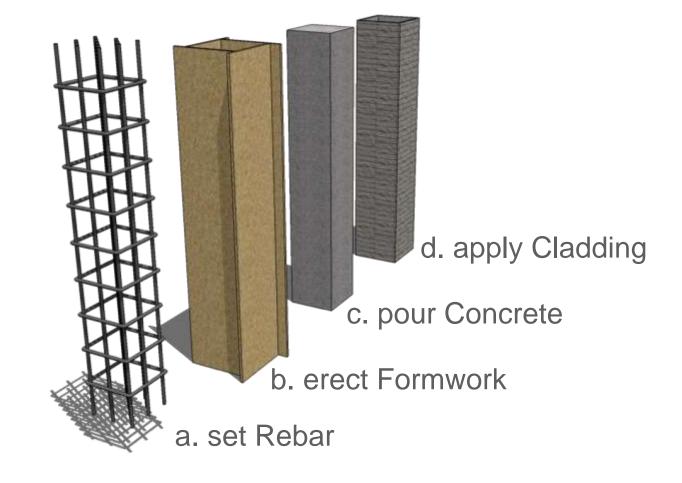
Take each Object in a 3D model

With a known sequence of Methods

Object

Methods







Take each Object in a 3D model

3D model of Methods

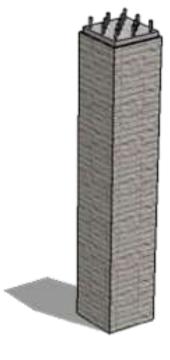
Apply your formulas to compute Labor, Equipment, and Material for each Method

f(x)

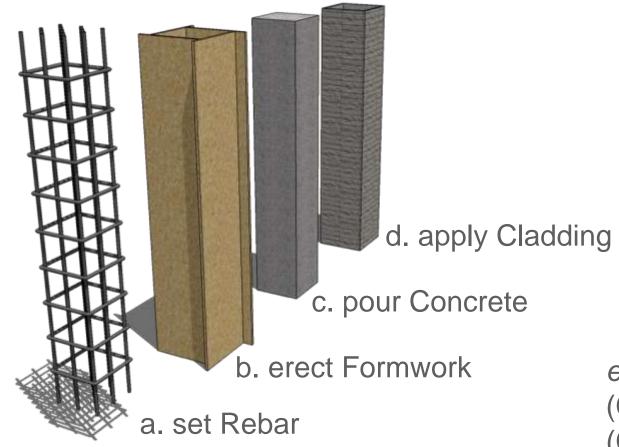
Object



With a known sequence



Concrete Column







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



Take each Object in a 3D model

Object

With a known sequence of Methods

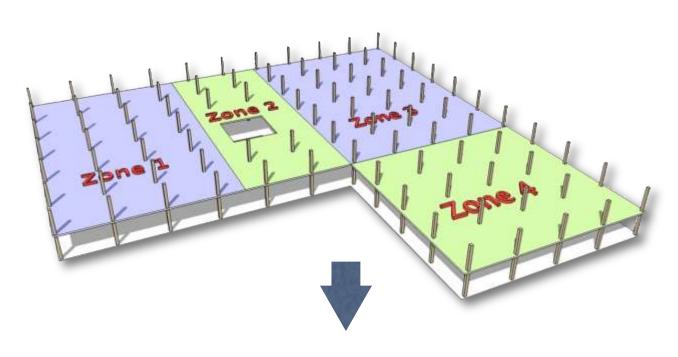
Methods

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

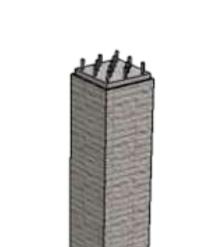
f(x)

Break the project down into Locations (or multiple Sites)

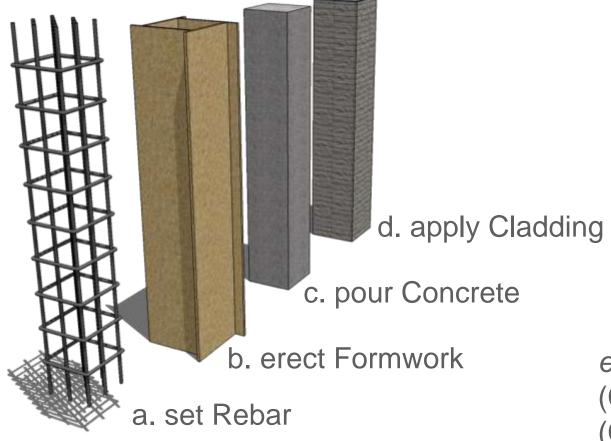
Locations



Qty's (per Location)



Concrete Column











Take each Object in a 3D model

Object

Concrete Column

With a known sequence of Methods

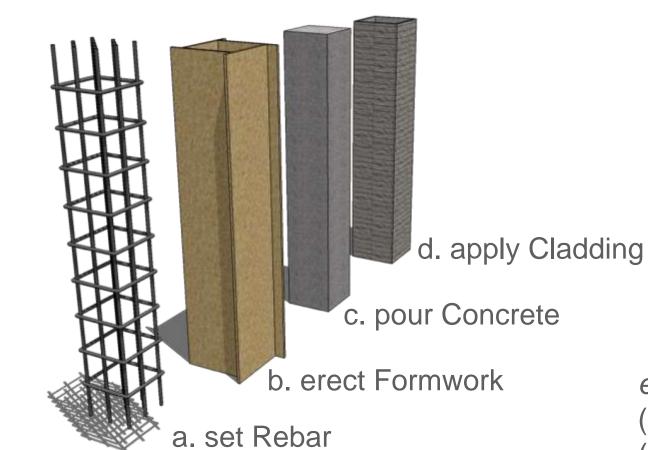
Methods

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

f(x)

Break the project down into Locations (or multiple Sites)

Locations

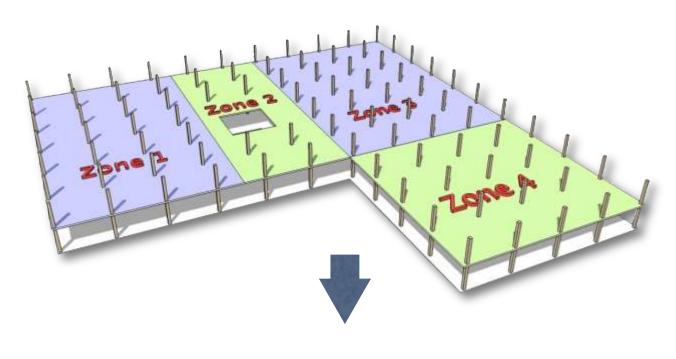












Qty's (per Location)



Unit Costs



Crew Productivity

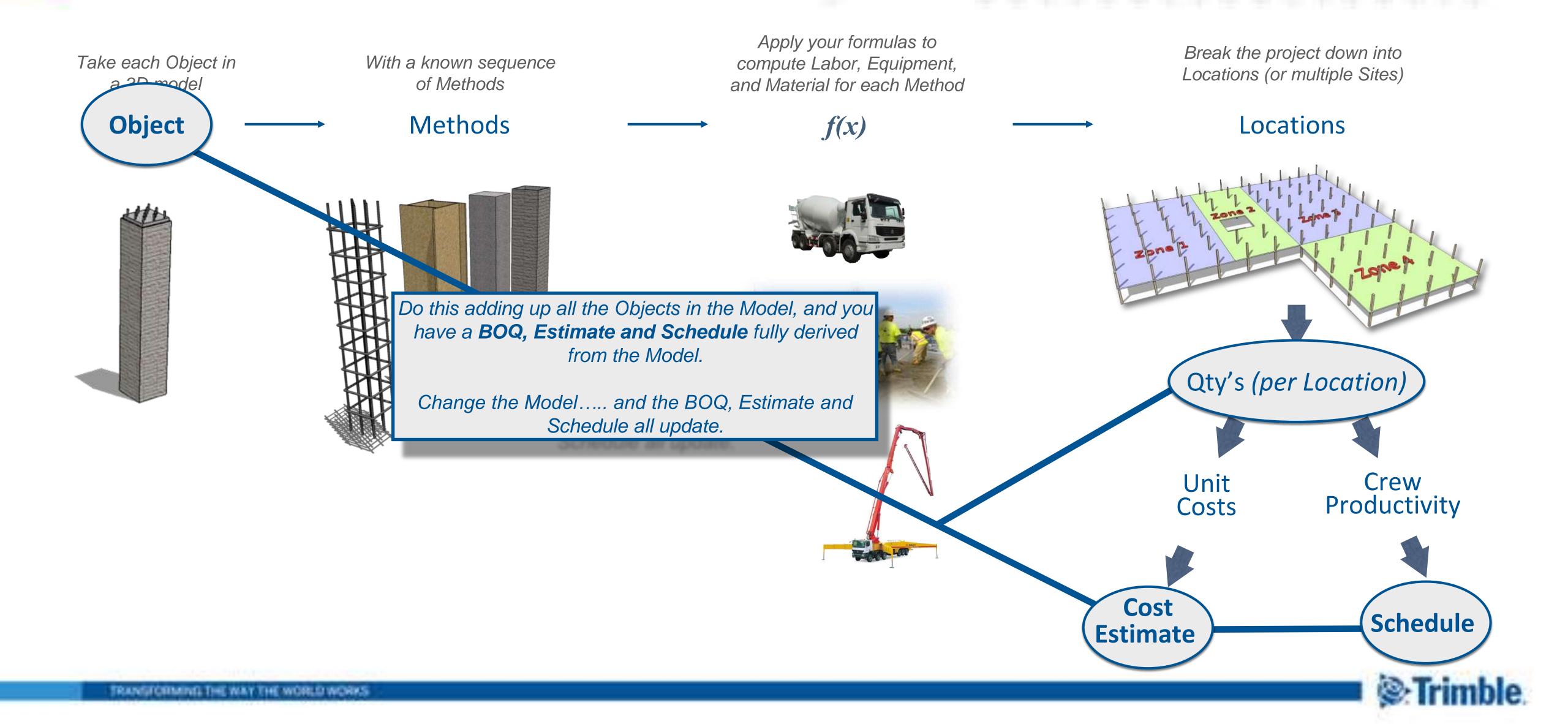


Cost **Estimate**



Schedule









Thank You

