



VDC – BIM – DfMA – Structural Precast

Presenter

Karthik V- Bybitech

Lead BIM Process Manager &
Faculty - Building and Construction
Authority(BCA), Singapore





BYBITECH LLP

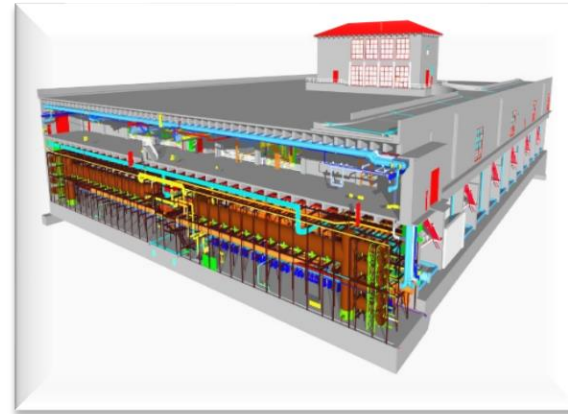
“Built and Deliver every Bytes & Bits of technology to help AEC”



BYBITECH ACADEMY

“Better Built with BIM”

Our Iconic Projects



Project: T202 MRT Station & Tunnel
 Discipline : Architectural, Structural, MEP & Civil
 Stage : Tender

Project: CWRP
 Discipline : Structure & MEP
 Stage : Constructio

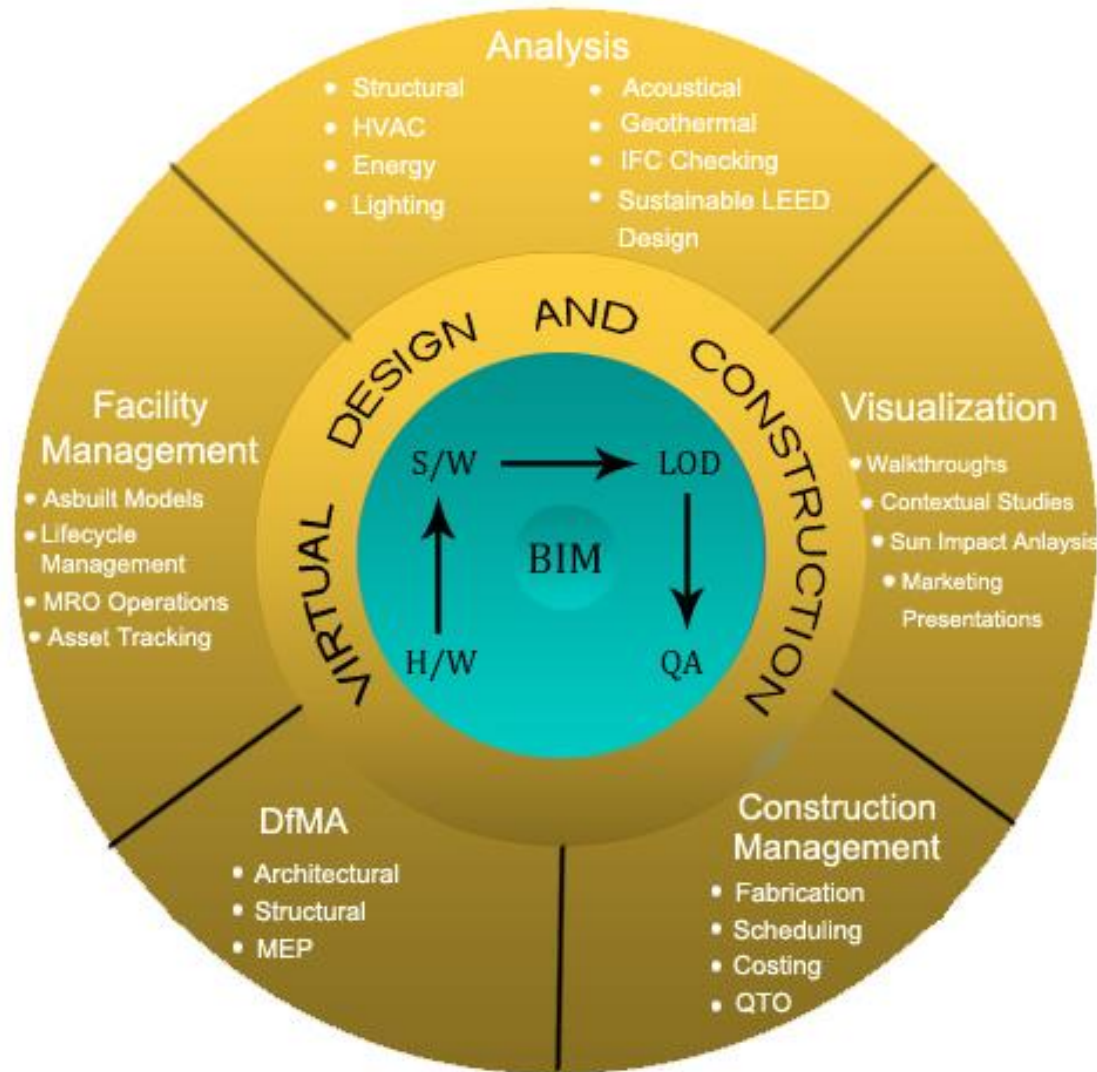
Project: National centre of Infectious Disease (NCID)
 Discipline : Architectural, Structural, MEP & BIM Coordination
 Stage : Detail Design



Project: Project jewel
 Discipline: ACMV, Irrigation & Water feature
 Stage : Design & Build

Project: Global Indian International School (GIIS)
 Discipline : AEC
 Stage : Detail Design

VDC - BIM



Design for Manufacturing and Assembly (DfMA)

Using software with proper standards

Design for



Off - site and Automation

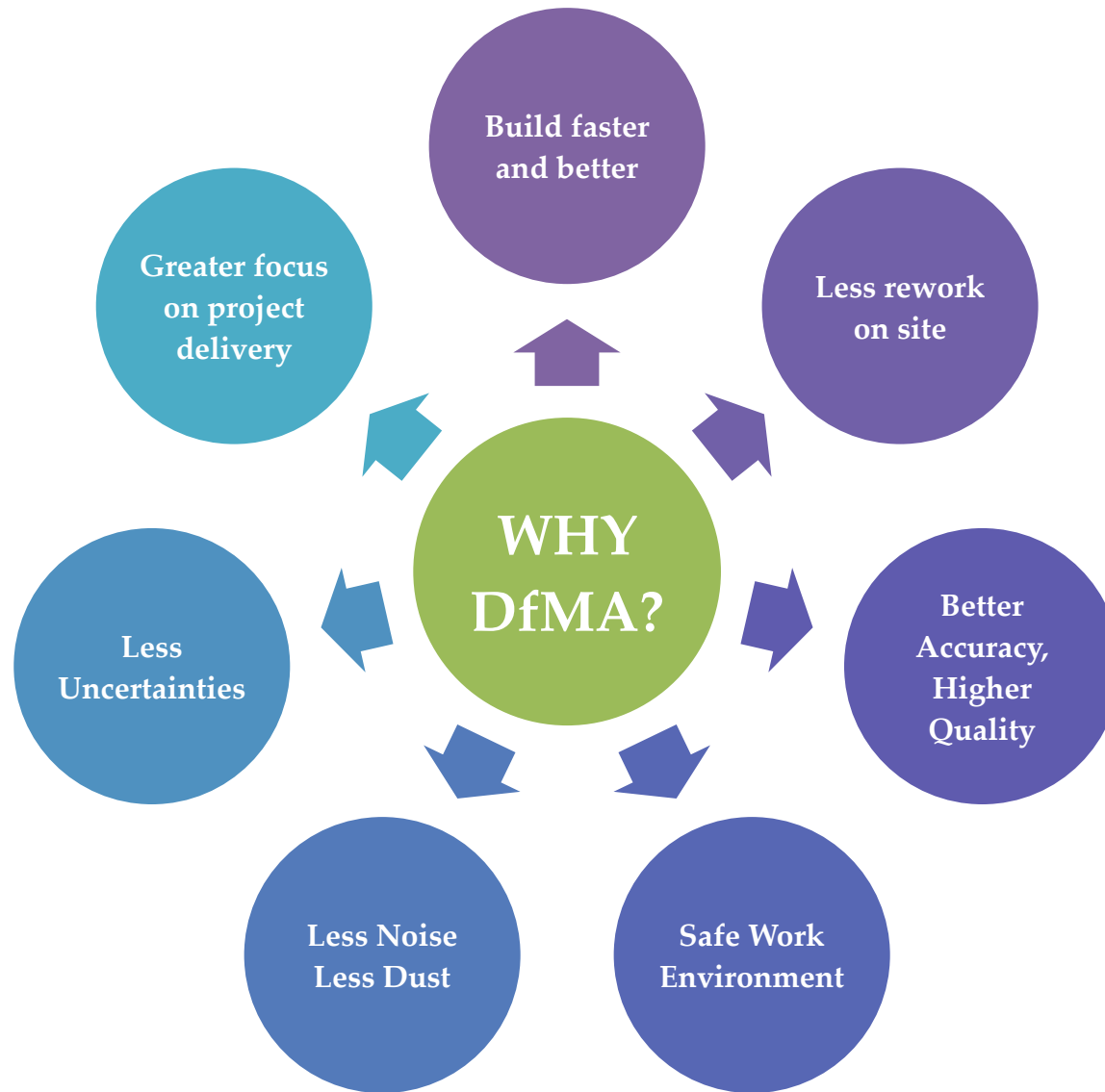
Manufacturing



On-site

Assembly







BIM



**Will Change
the way AEC
Industry
Constructs**



DfMA



BUILD

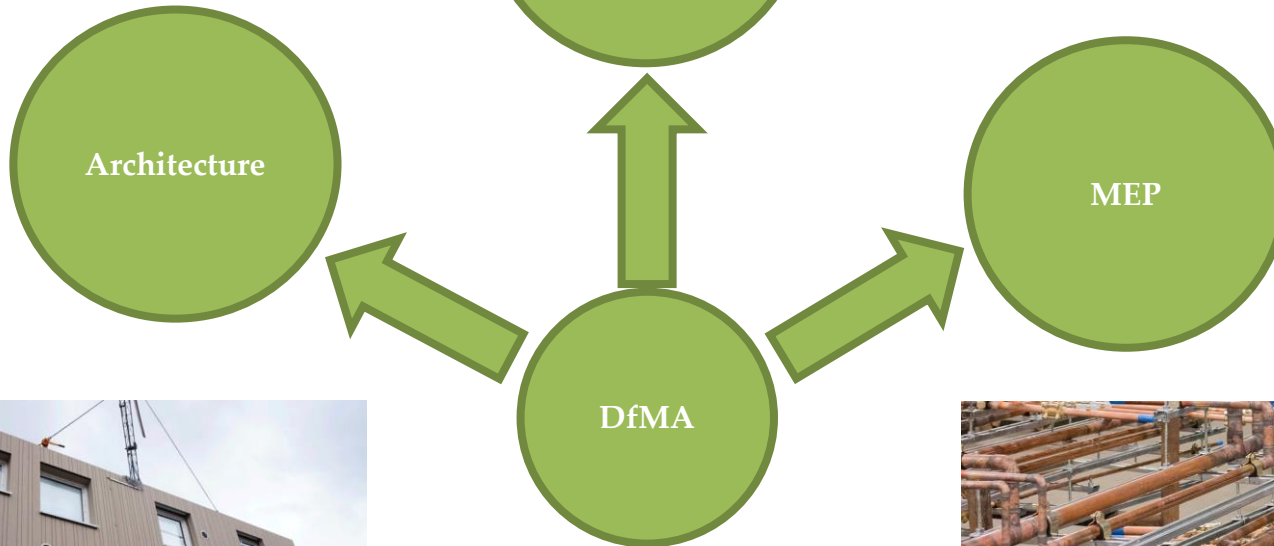
- Smart
- Efficiently
- Green

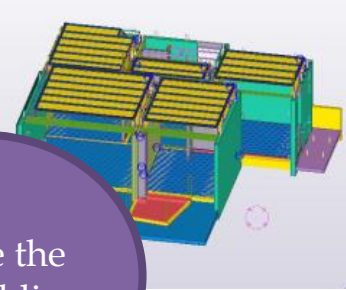
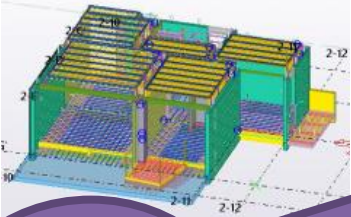


Reinforced Concrete



Steel Structure





Start Modelling using Software

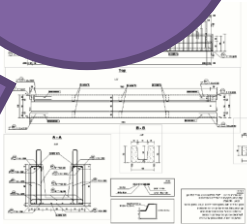
Develop the model according to the standards

Create the Assemblies

Get the drawing

Structural Precast

Prepare the CIS drawings



Digital Fabrication (BIM to Machinery)



Tracking Assembly (using RFID)

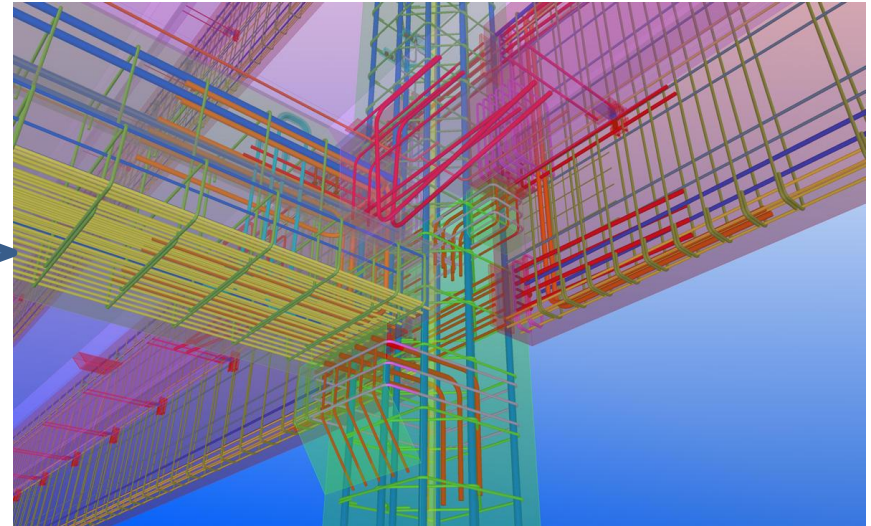
Manufacturing & Placing



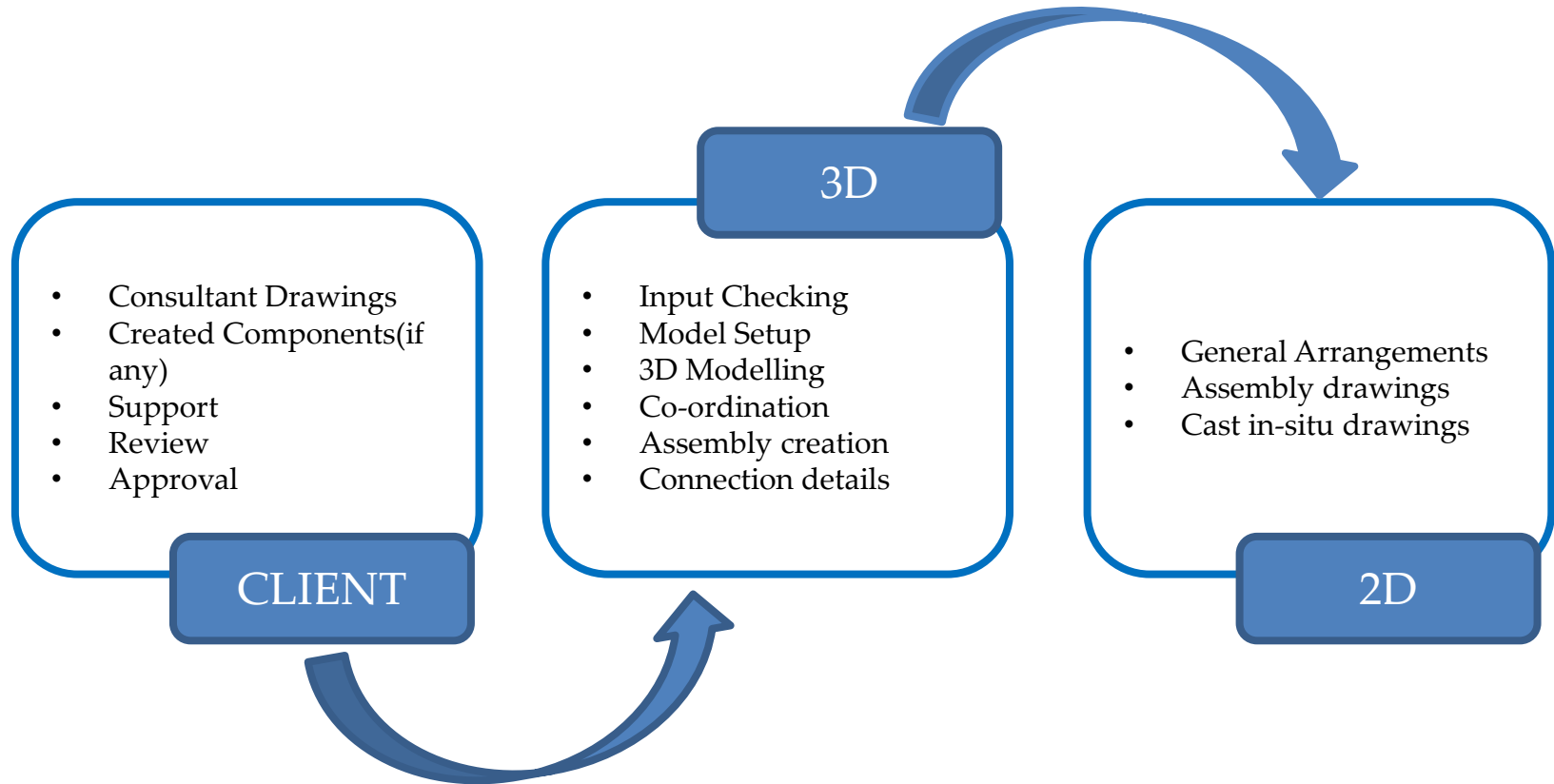
Benefits of Structural Precast

- Reduce waste and cost
- Manage Risk
- Avoids errors and minimizes rework
- Transfer information efficiently
- Enhance communication and coordination.

Coordination
required here

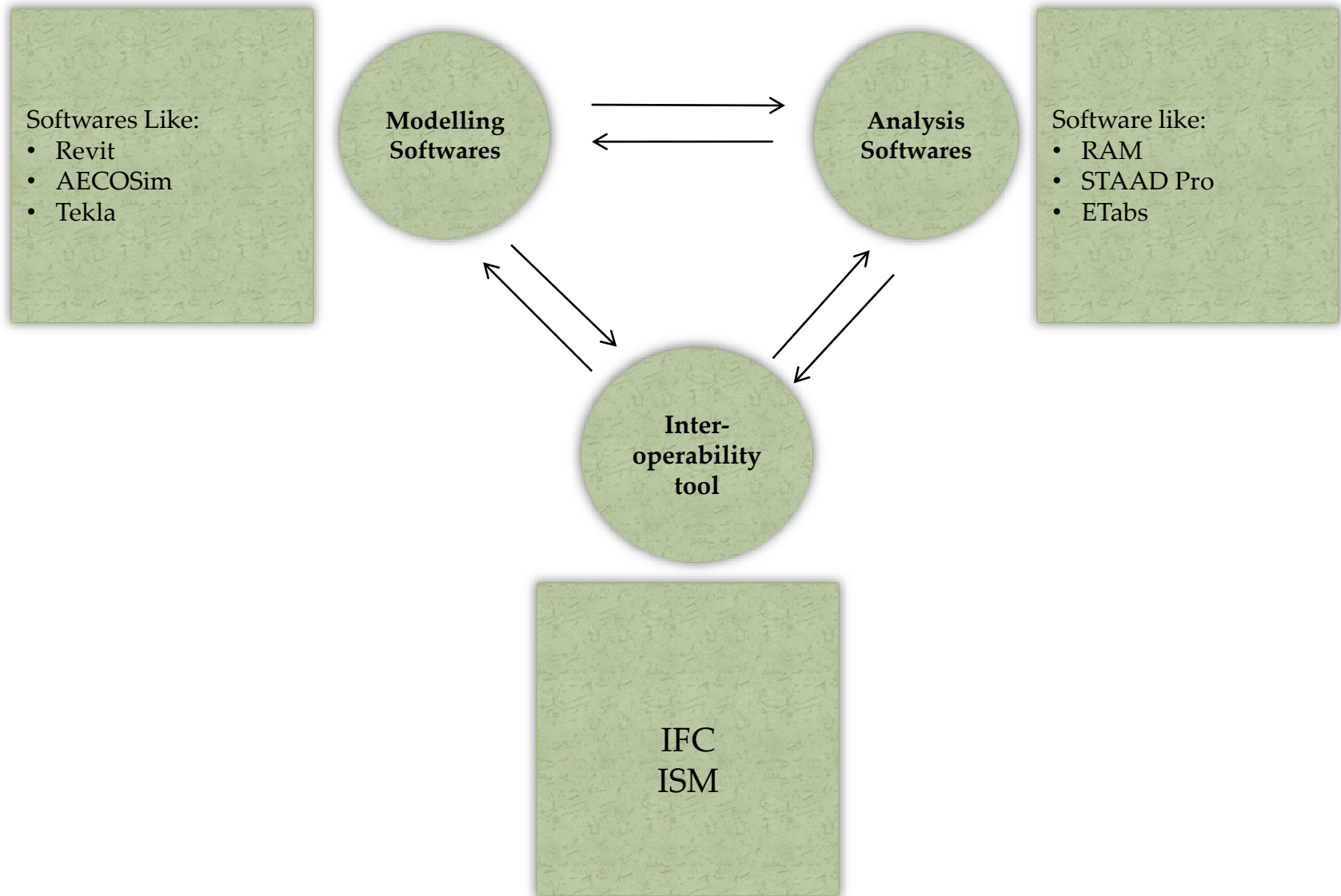


How should be the workflow?

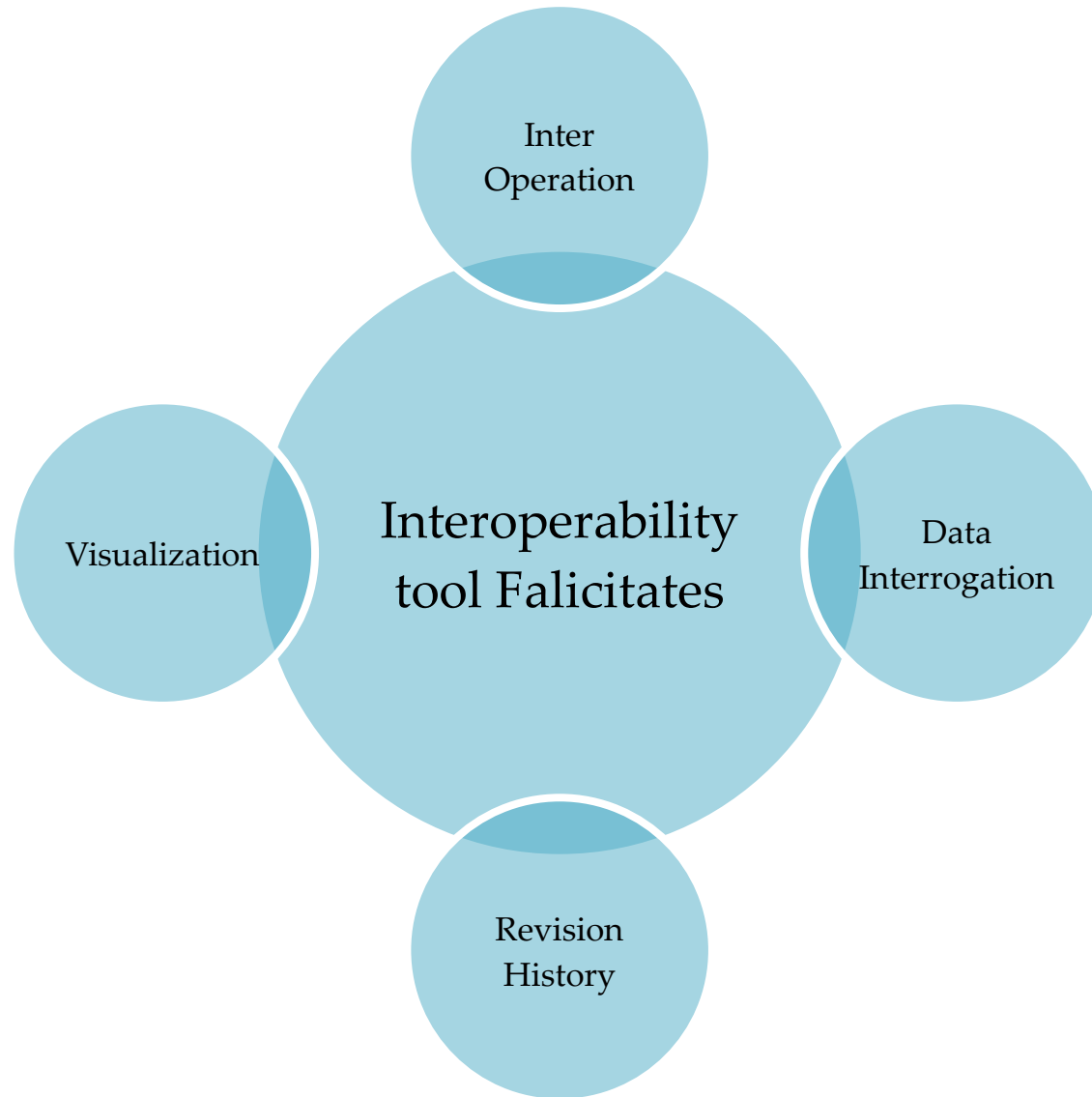


What is the Future VDC Precast Technique???





Why ISM?



Thank
you

