

IPHA Technical Seminar 2015

October 21-22, Malmö - Sweden

i-Theses FloorOffice and BIM

what it is and what it can be



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INTERNATIONAL PRESTRESSED
HOLLOWCORE ASSOCIATION

in cooperation with

StruSoft



Building Information Modeling??

- “BIM is a process for building design. It is a way to design, construct, and operate buildings that involves creating and using intelligent 3D models. ”
- “BIM is an intelligent model-based process that provides value across the lifecycle of a project. Any project.”

Building Information Modeling??

Design

Operate

Construct

- “BIM is a process for building design. It is a way to design, construct, and operate buildings that involves creating and using intelligent 3D models.”

Lifecycle

- “BIM is an intelligent model-based process that provides value across the lifecycle of a project. Any project.”

Model

Project

Intelligent

Tools??

Products

Revit

IFC

COBie

Interfaces

Databases



Goals??

- **Exchange data**
- **Visualization**
 - Clash detection

- **Multi-platform**
- **Multi-specialties**
- **Multi-format**

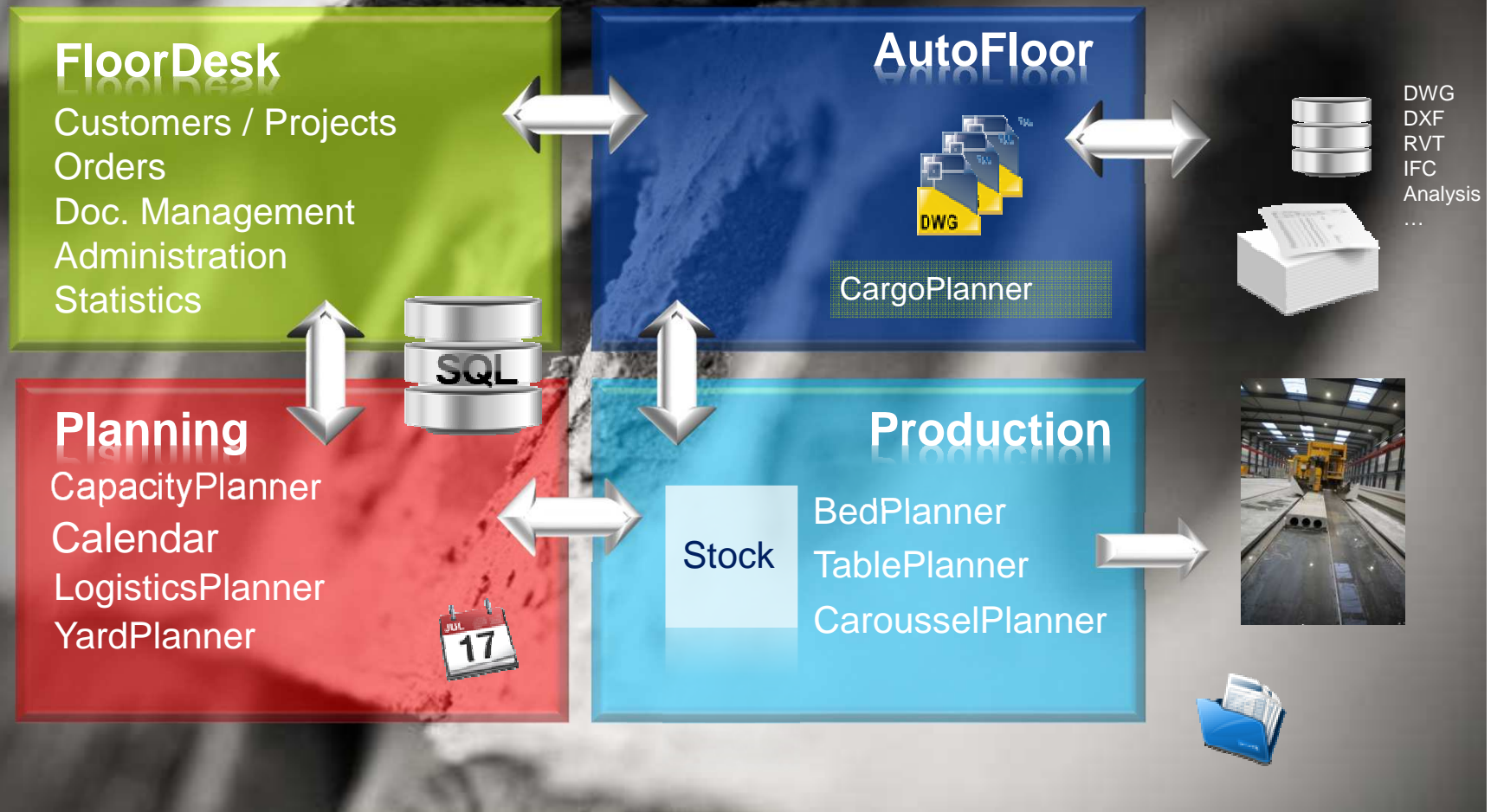
- **Which stages?**
- **Which data?**
- **Which detail?**

i-Theses



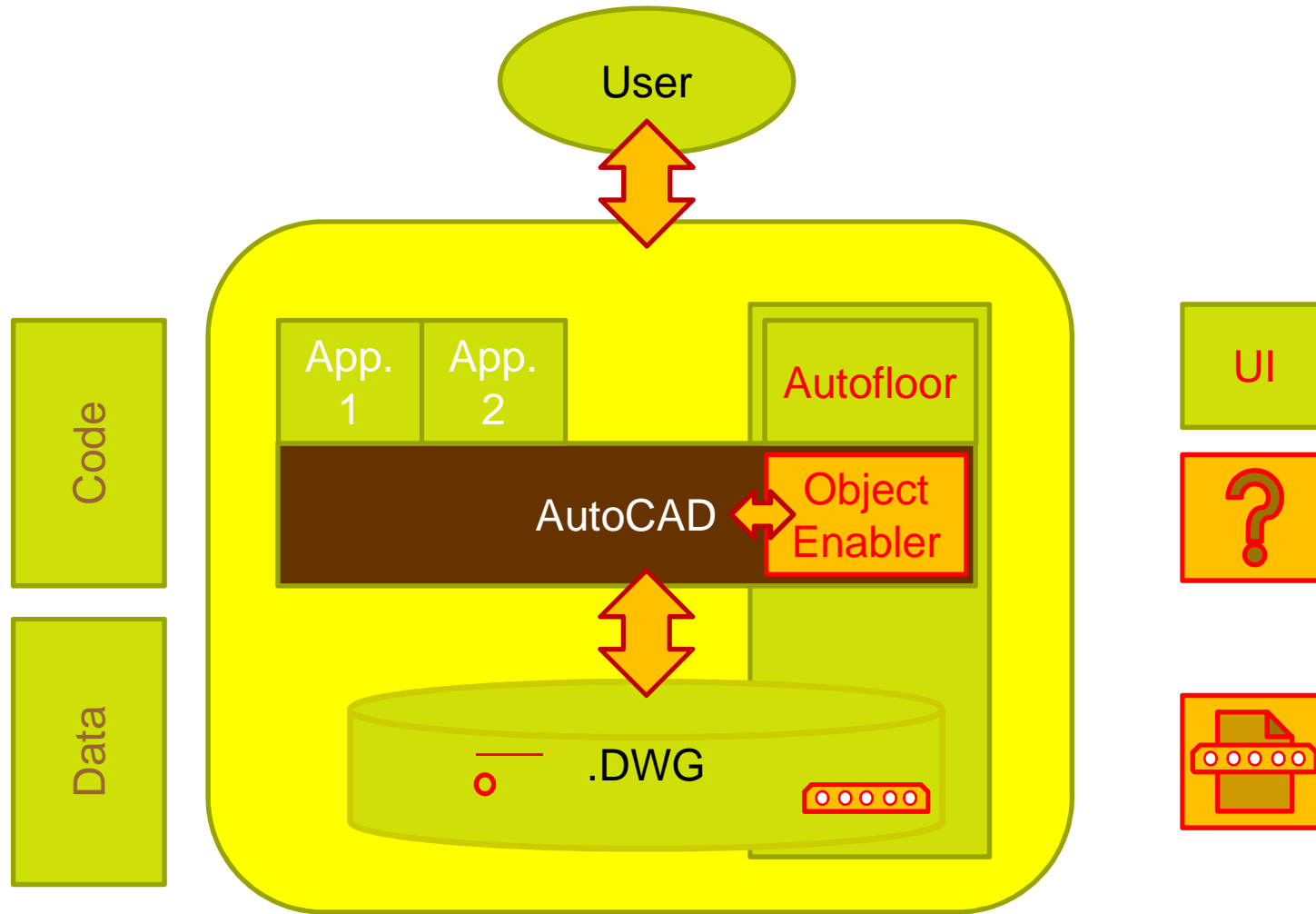
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FloorOffice Chart

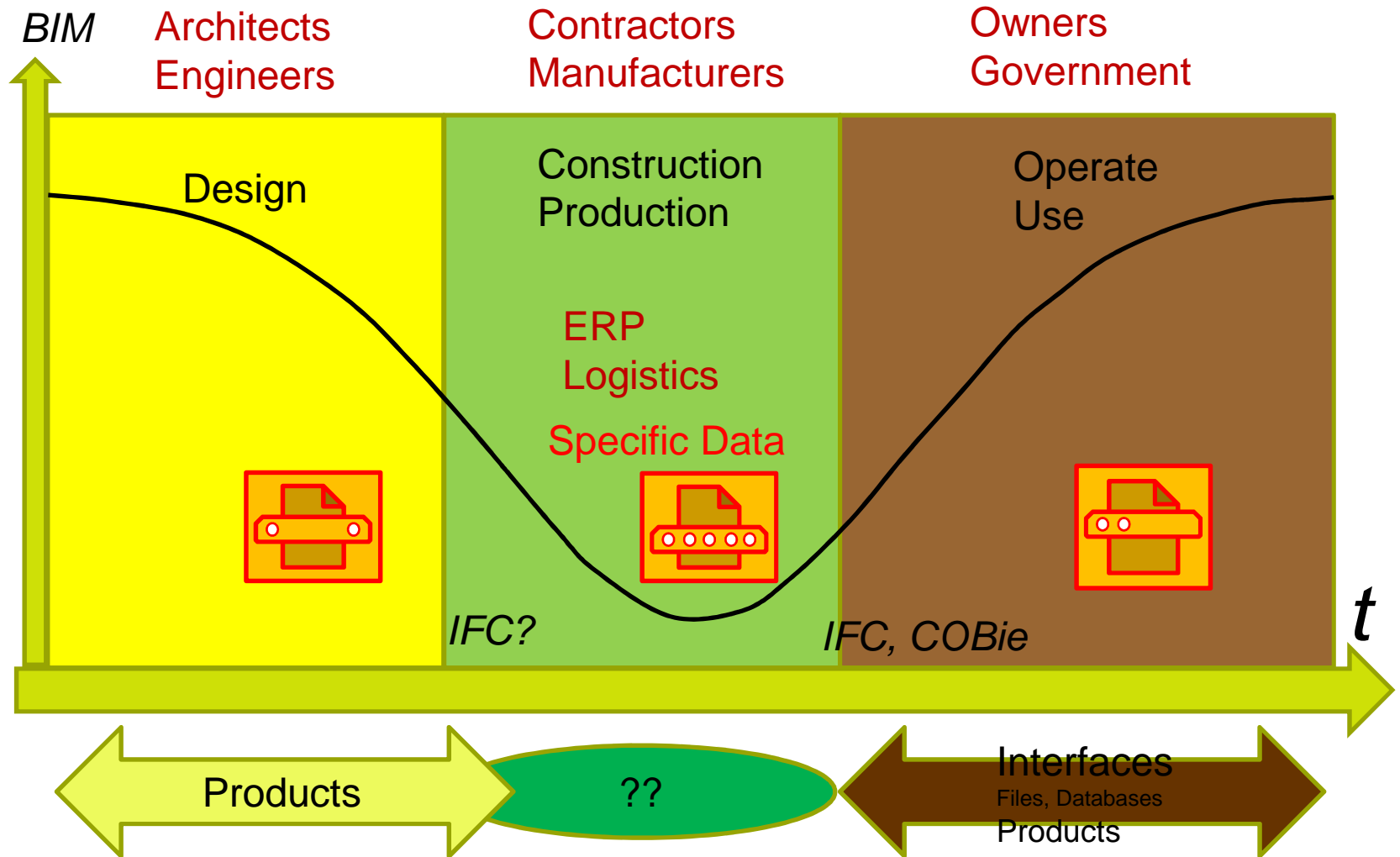


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i-Theses... Object Enablers



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- **Production : specific data!**
- **= our differentiation**
- **≠ product**
- **≠ database**

(always loss of information)

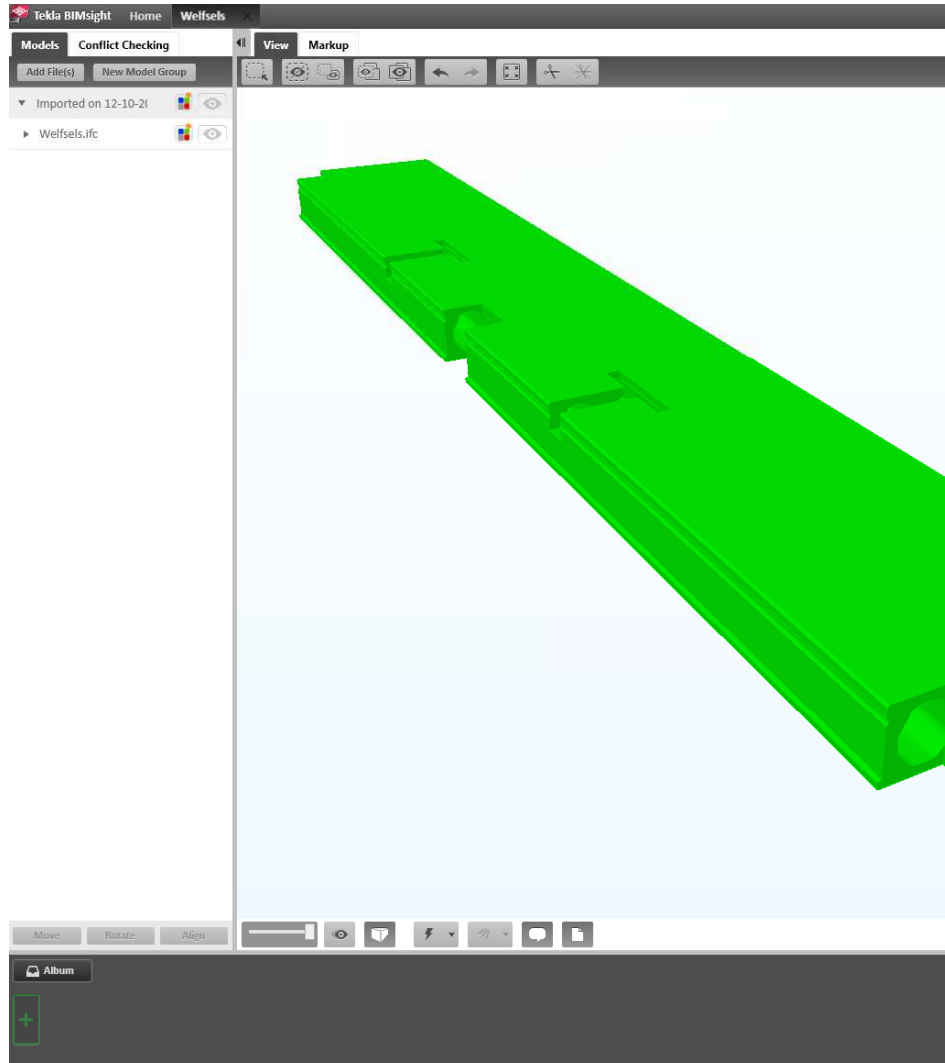
BTW

1 product

1 database

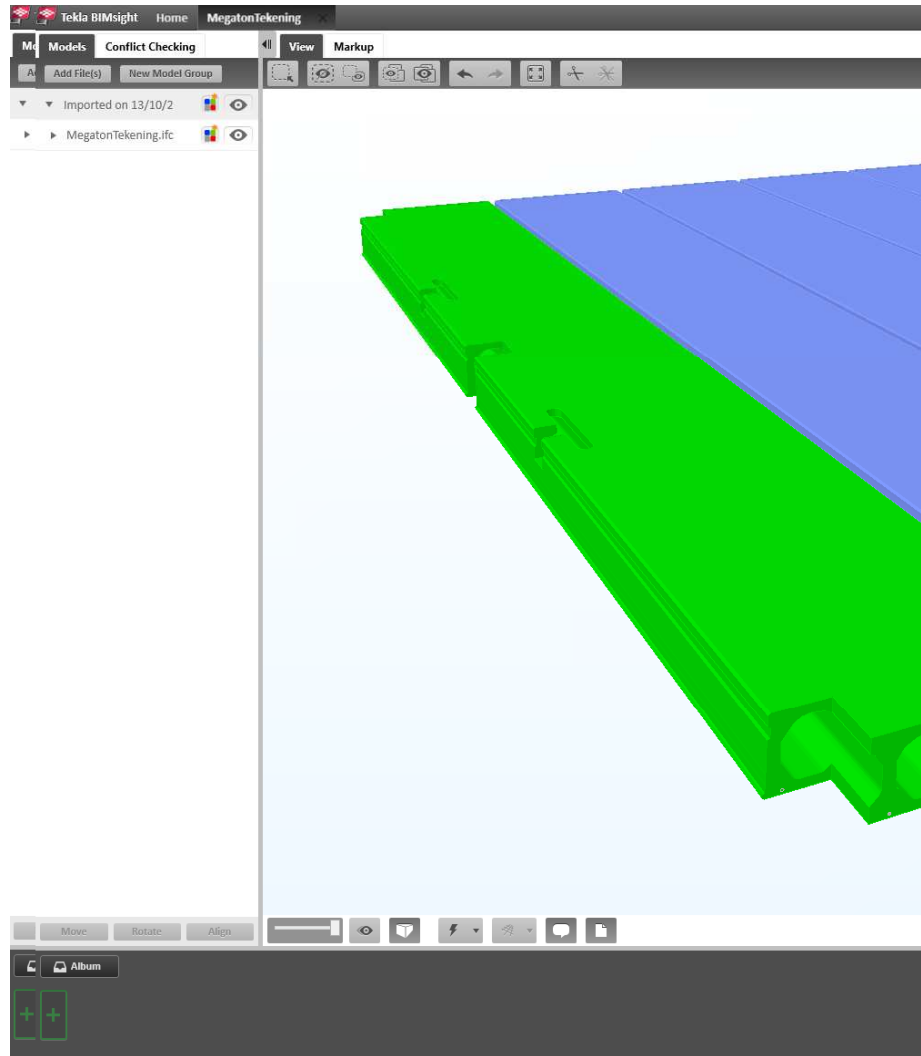
commercially interesting ?

... - IFC



Color :	
ReferenceObject	
GUID:	1JhHGI0002SZ4qC3CuDJkt
File Format:	Ifc
Common Type:	Beam
Geometric Classification:	Solid
Volume:	1.7 m3
Ifc2X3Product	
Product Name:	Welfsel
Product Description:	WXT320-1200
Product Object Type:	WXT320-1200
Owning User:	
Creation Date:	13-10-2014 07:28:10
Change Action:	NoChange
State:	Undefined
Application:	
IfcMaterial	
Material:	CONCRETE/C45/55
BaseQuantities	
Length:	8670 mm
OuterSurfaceArea:	0.00 m2
NetVolume:	1.7 m3
NetWeight:	4.008 t
Net weight:	4.008 t
Gross weight:	3.548 t
Weight:	3.548 t
Net volume:	1.7 m3
Gross volume:	1.5 m3
Gross footprint area:	9.37 m2
Area per tons:	0.00 m2
Net surface area:	51.08 m2
Gross area:	0.00 m2
Height:	320 mm
Width:	1196 mm
Length:	8670 mm
Center of gravity Z:	3388 mm
Center of gravity Y:	-7401 mm
Center of gravity X:	60840 mm

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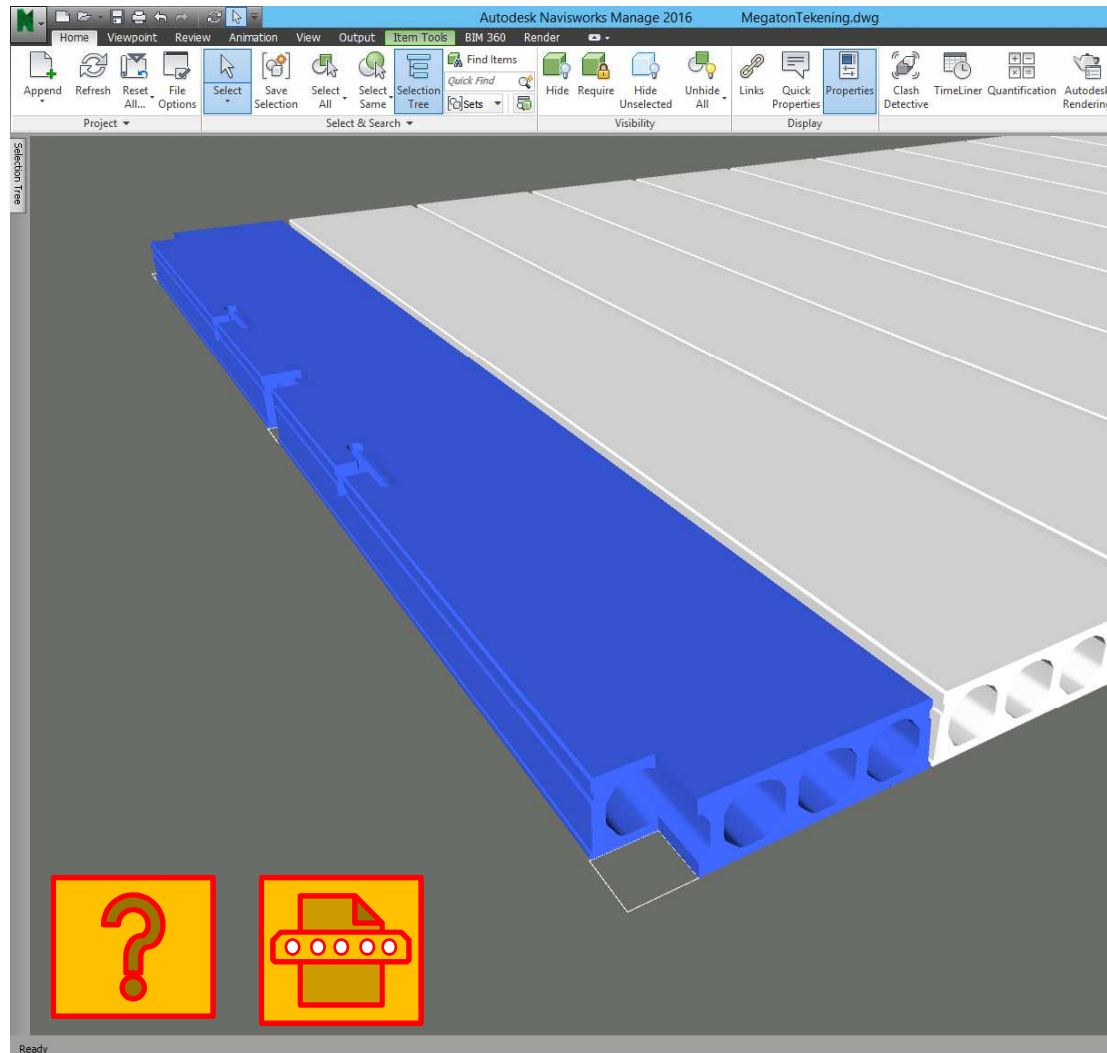
GUID:	3FIGOIkHfEe3bzbkH7stfQ
File Format:	Ifc
Common Type:	Slab
Geometric Classification:	Solid
Volume:	1.6 m3
IfcArbitraryClosedProfile	
Profile:	2
Ifc2X3Product	
Product Name:	2
Product Description:	
Product Object Type:	2
Owning User:	Robin@i-ThesesCAD AutoFloor
Creation Date:	12/10/2015 16:41:14
Change Action:	NoChange
State:	Undefined
Application:	i-ThesesCAD AutoFloor (AutoFloor v20.24 (x64))
i-Theses TSB_PlateBase	
Area:	A
Number:	2
UniqueNumber:	8
Locked:	False
Type:	WXT
Width:	1200 mm
Standard Width:	1200 mm
Thickness:	320 mm
Length:	8670 mm
Weight:	4.073 t
Cargo:	1
Stack:	1
StackOrder:	8
Level:	7
Rotated:	False
Deadline:	
Phase:	0
Adjust Positions:	False
Reinforcement Value:	T5
Reinforcement Key:	P
Reinforcement Description:	
Reinforcement Length:	8670 mm
PresentationLayers	
Layer:	IfcSlab

IFC

- **Visualization** ✓
- **Intelligence** ?

- **Always loss of intelligence**
- **Always restrictions**
- **No guarantee about data**

i-Theses - Navisworks

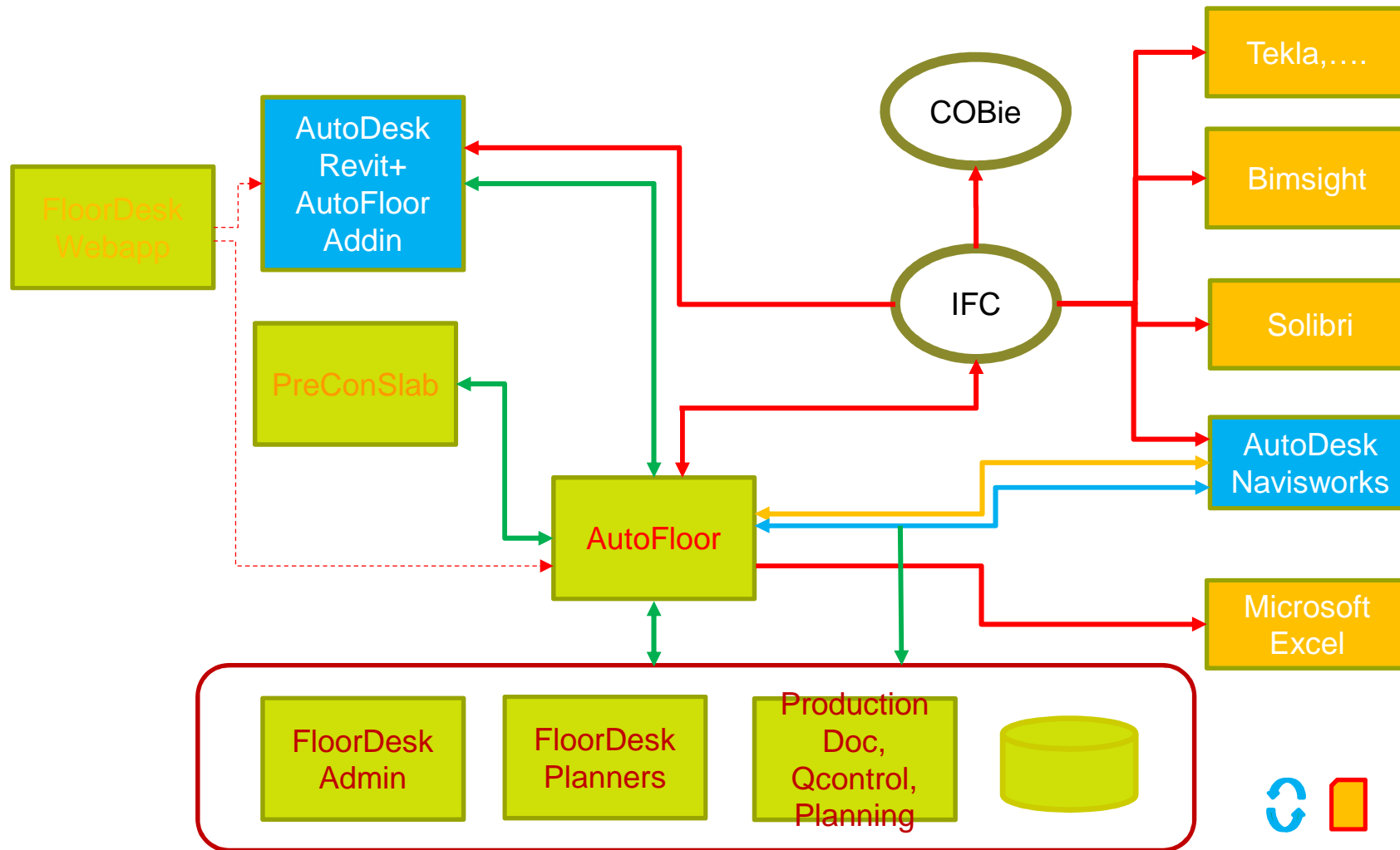


Properties				
Item	Material	Entity Handle	TimeLiner	AutoCad
Property	Value			
Entity Transparency	ByLayer			
Material	ByLayer			
Number	2			
Locked	Yes			
Width Type	ByArea			
PlateWidth	1200,000			
Thickness	320			
Weight	4073			
Length	8670			
Cargo	1			
LvlNr	7			
PileOrder	7			
Pile	1			
Rotated	Yes			
Deadline Type	ByArea			
OverLength	0			
OverLength	0			
Remarks Type	ByArea			
Status Type	ByArea			
Fase Type	ByArea			
Fase	0			
Adjust Positions Ty...	ByArea			
Adjust Positions	No			
Type	WXT			
UniqueNumber	8			
StandardWidth	0			
Fraction Type	-1			
MaxFraction	0			
ShowLength	Yes			
Type	Global			
Value	T5			
Key	P			
Length	8670			
Shoring	ByArea			
Shoring	ByArea			
Fixed	No			
RoundedLength...	BySetting			
RoundedLength	1			
Reinforced	No			
Production	Yes			

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i-Theses solution



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i-Theses solution (ESC)

Tp TerraBase

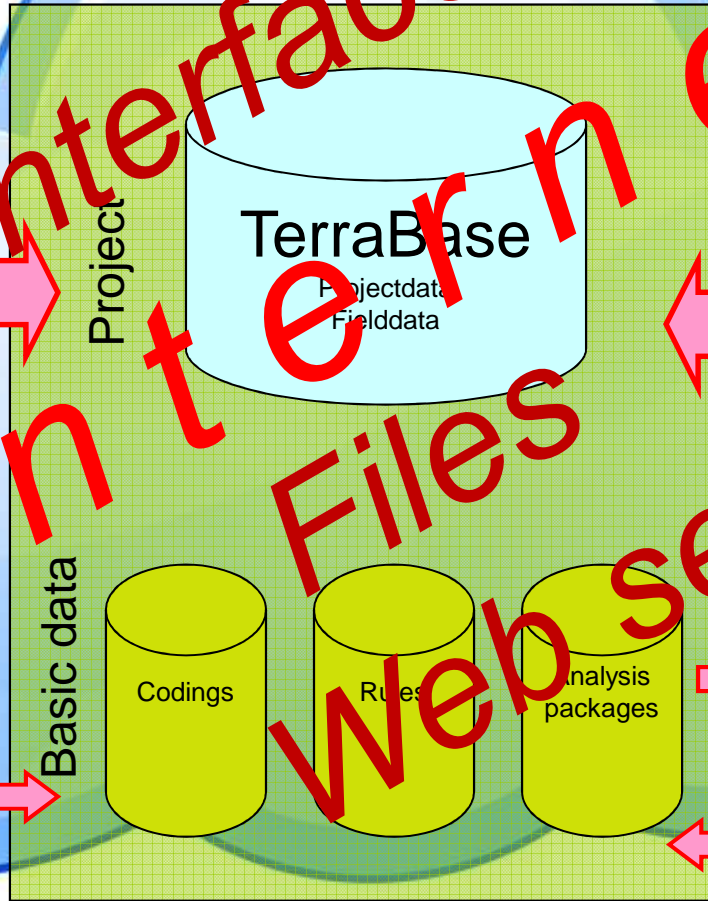
Field



Lab

Ta TerraBase

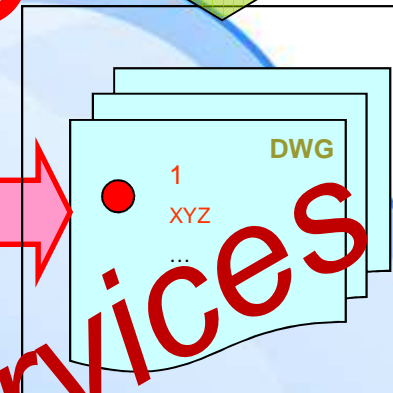
Engineering Office



Tc TerraBase

CAD

XYZ ?



Interfaces

IBD SIKB

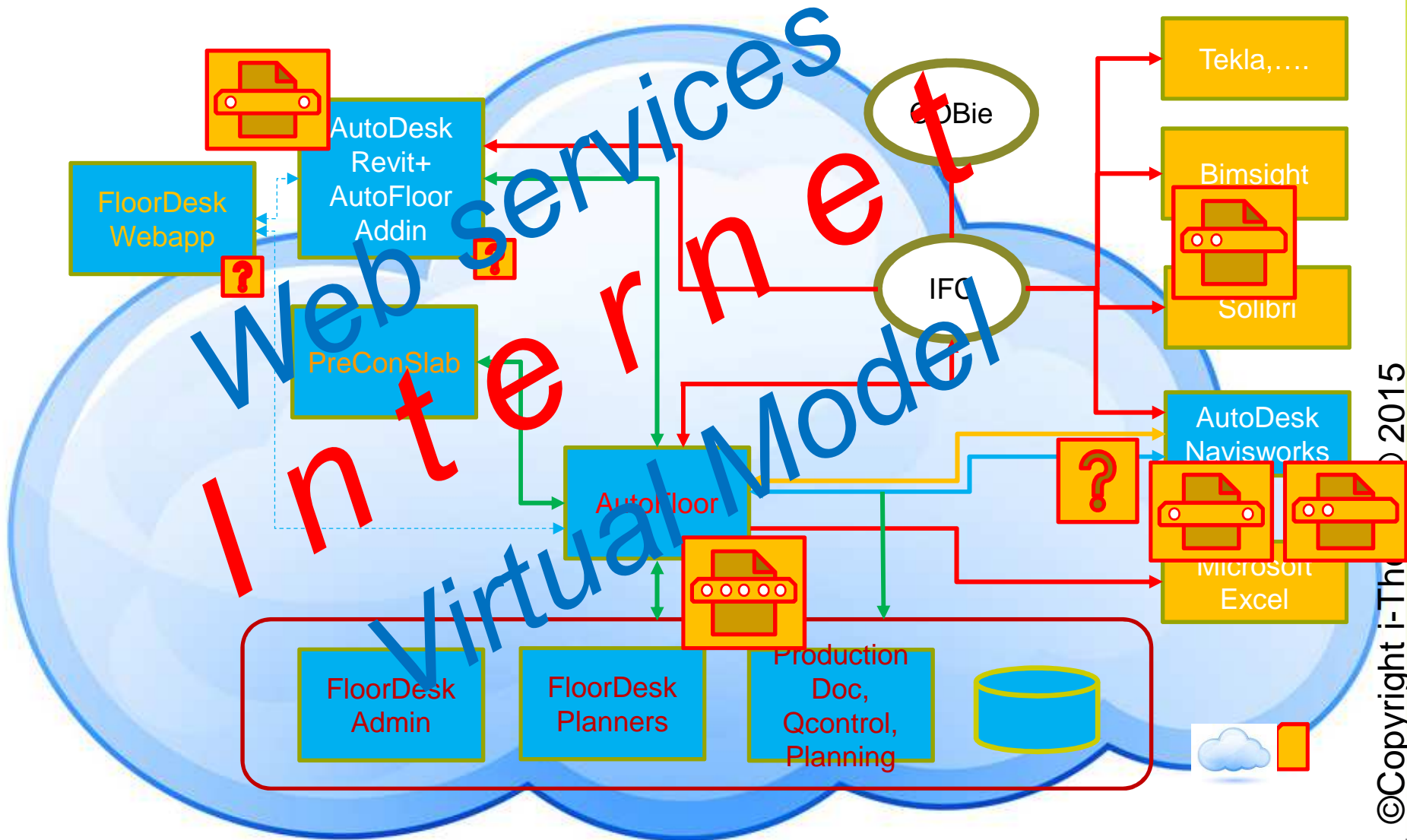
Mistral

...

Interfaces
Internet
Files
Web services

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i-Theses solution

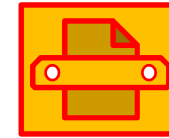


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Conclusion 1

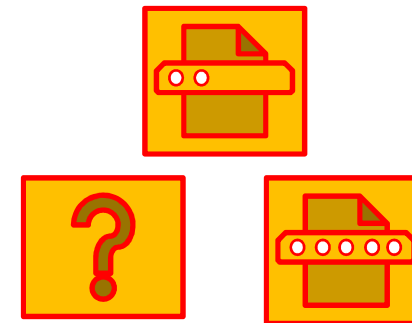
YES WE CAN !

- Revit pre-processor (design)
- 3D
- IFC (2 directions)
- Cobie



BUT WE CAN MORE !

- Intelligent Viewers
- Original files (no loss of info) (.dwg)
- Plug-ins - Navisworks

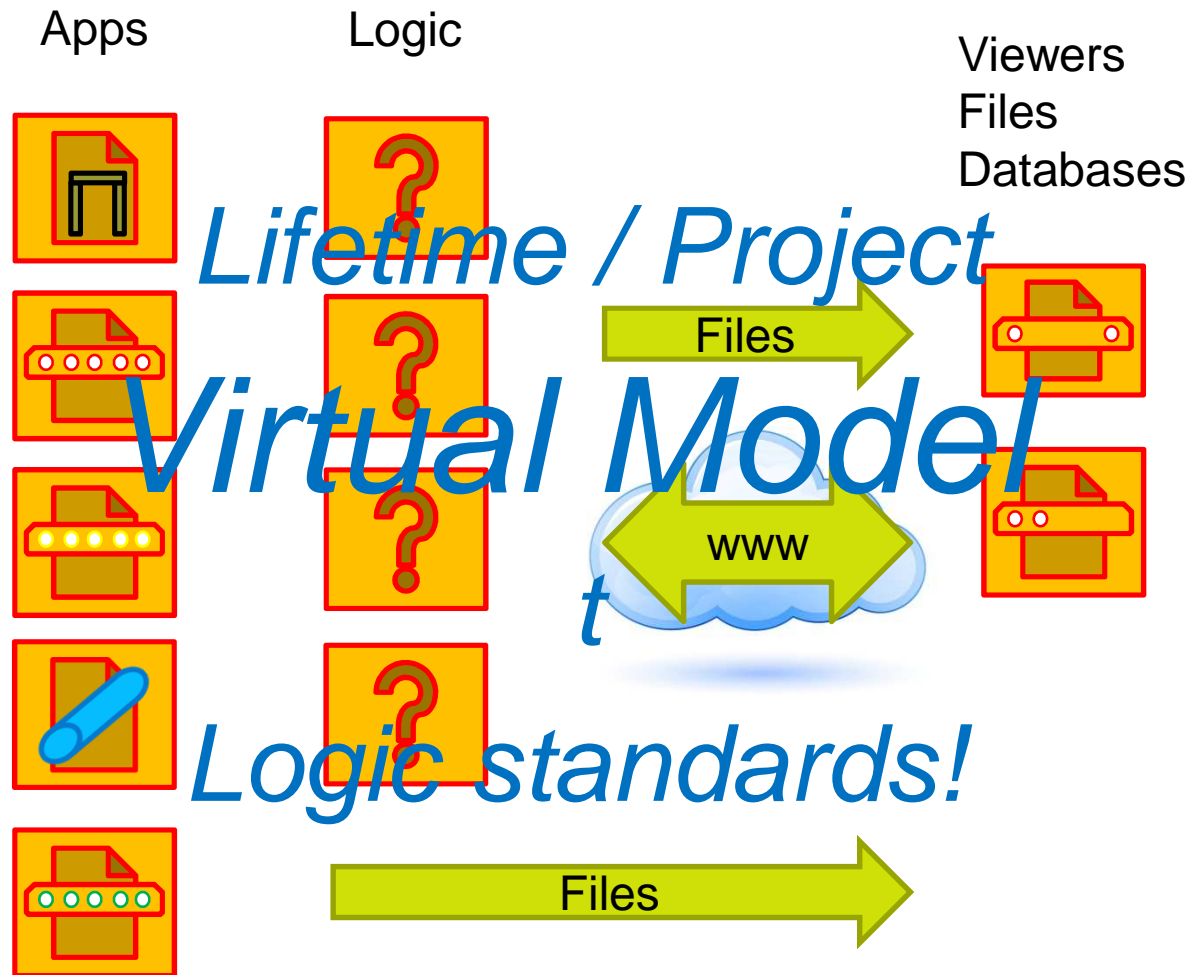


Autodesk products

- BIM360, ...



Conclusion 2



More info...

FloorOffice

FloorOffice consists of AutoFloor and FloorDesk. AutoFloor is the general name for the drawing suite. FloorDesk is the general name for the administrative pack.

AutoFloor is the only AutoCAD based application on the market for drawing up plans of tapered schemes, that can be inserted for hollowcore slabs/beam and block floors and wide slabs. AutoFloor is a brand new object-orientated development. Thanks to a strong automation in the development stage, plans are designed in no time. With one simple click, detail sheets and fabrication drawings are generated. AutoFloor connects seamless to the FloorDesk applications and is 100% fully integrated in the AutoCAD Userinterface. All known editing functions (copy, mirror, stretch, etc. ...) are executed by AutoCAD functions. This way the learning curve is reduced and extra menus are limited.

AutoFloor consists of following modules:

- AutoFloor LayoutPlan
- AutoFloor Workshop
- AutoFloor LoadPlanner

FloorDesk provides a complete ERP solution based on an open SQL database. The FloorDesk software consists of a complete project succession from offer to invoice up to floor. This all-in-one solution communicates one by one with the AutoFloor applications. This way a seamless project-passthrough is established without loss of data. Double input and the chance of errors being to the past.

FloorDesk consists of following modules:

- FloorDesk Admin
- FloorDesk LanePlanner/TablePlanner
- FloorDesk CapacityPlanner

Download the FloorOffice productbrochure
For more information: www.flooroffice.eu

www.i-theses.com

FloorOffice

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ORANMORE PRE-CAST LTD

AutoFloor

AutoFloor, an AutoCAD-based application, enables you to draw your layout plans for precast floors in no time at all, and this for hollow core slabs and wide slabs. Design plans in 2D and 3D are obtain a perfect fit with intelligent exchange books and elevations with the BIM work process.

Read more >>

FloorDesk Admin

Perhaps somewhat less known as the second pillar in the FloorOffice software is FloorDesk. FloorDesk is the ERP software that (seamless) connects to the AutoFloor applications and offers you the possibility to complete all administrative and planning tasks.

Read more >>

FloorDesk Planners

The FloorDesk planners are built modular and can be bought separately. The first group of modules for the production planning (LanePlanner, TablePlanner, CapacityPlanner). The second group for the time planning (CapacityPlanner and Calendar).

Read more >>

[Click here to read the brochure](#)

www.flooroffice.eu

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