



DREES &
SOMMER

USE OF BIM-TECHNOLOGY: DIGITIZATION IN ARCHITECTURE AND CONSTRUCTION INDUSTRY

bautec. Deutsch-Russischer Business-Dialog

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Partner/ General Director
Drees & Sommer
Berlin/Moscow, 20.02.2018

Ost-Ausschuss der Deutschen Wirtschaft

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USE OF BIM-TECHNOLOGY

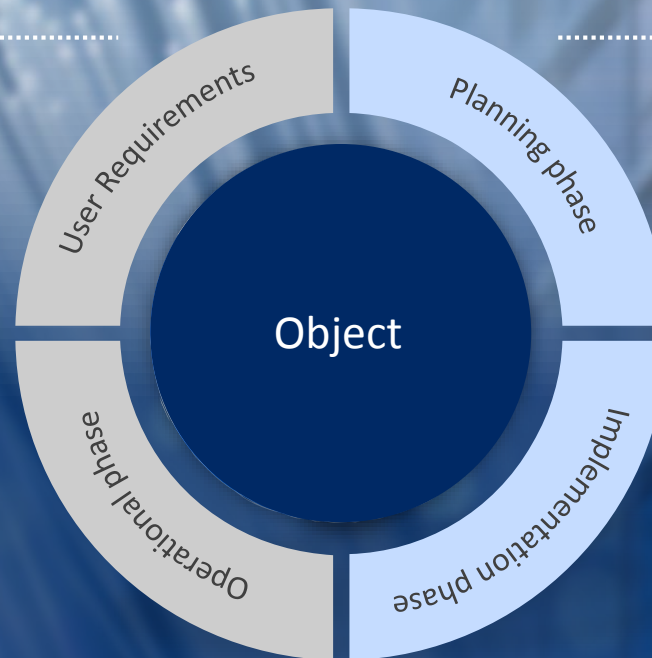
Life Cycle Approach

Step 1

User requirements:
Functions,
Processes,
Technologies,
Safety,
Security,
Energy,
...

Step 4

Maintenance,
Operation,
Refurbishment,
Re-Development.



Step 2

Conceptual Design,
Design,
Approval Documentation,
Tender Documentation,
Working Documentation.

Step 3

Procurement,
Logistics,
Construction,
Commissioning.

USE OF BIM-TECHNOLOGY

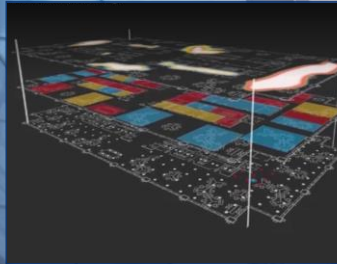
Hardware Becomes Software



BRAIN



KEYLESS ENTRY



TRACKING OF EVERYTHING



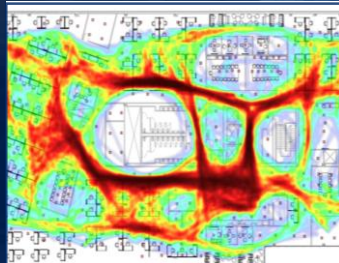
**DESK-/ROOMBOOKING/
CO-WORKING**



INHOUSE NAVIGATION



**INDIVIDUAL ROOM
CONDITIONING**



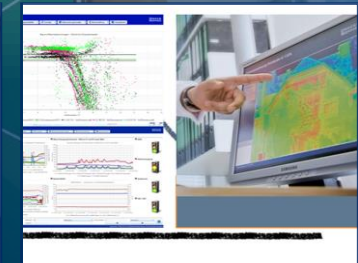
**DYNAMIC ENERGY
MANAGEMENT**



PACKSTATION



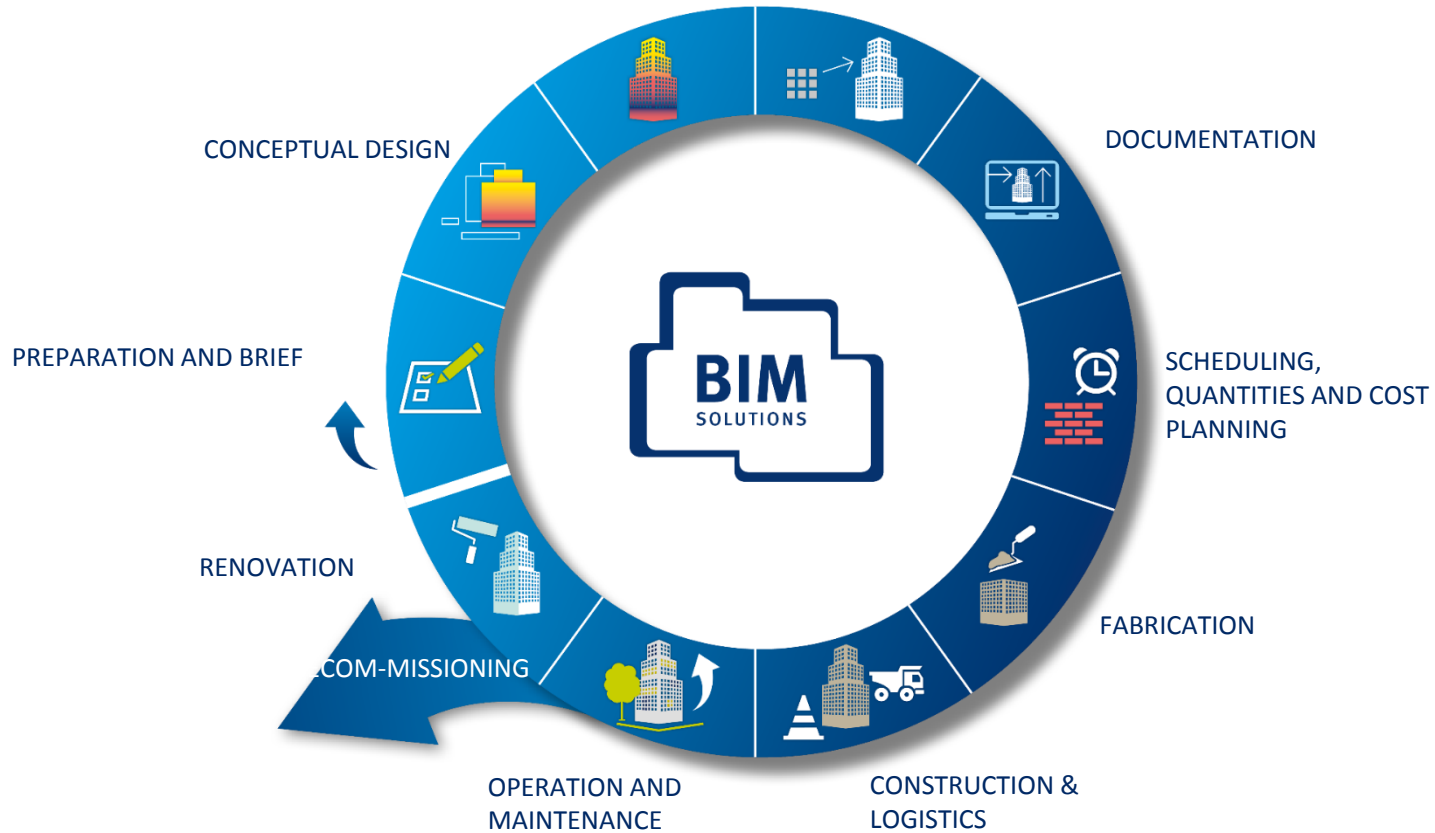
MANAGEMENT COCKPIT



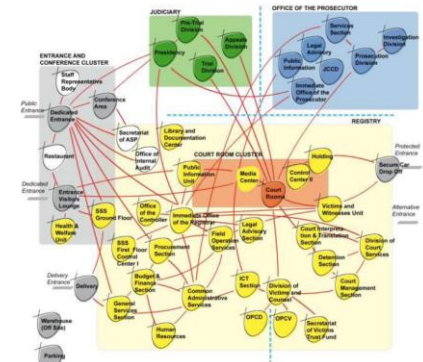
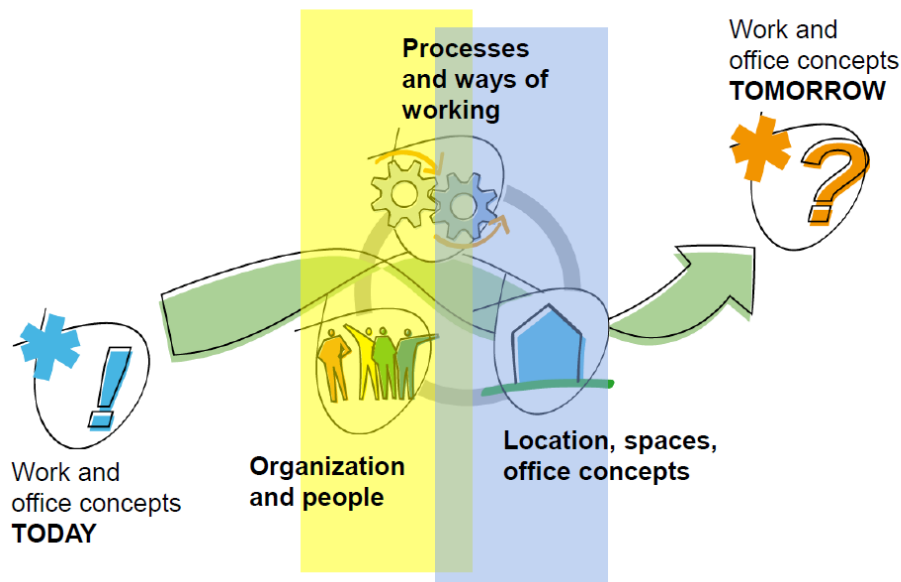
PREVENTIVE SMART FM

USE OF BIM-TECHNOLOGY

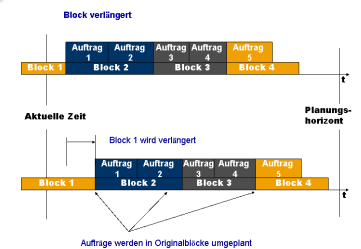
Holistic Approach



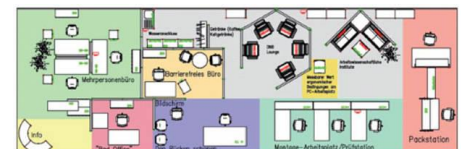
Programming – Case: European Court, De Hague/ Netherlands



Organization and People



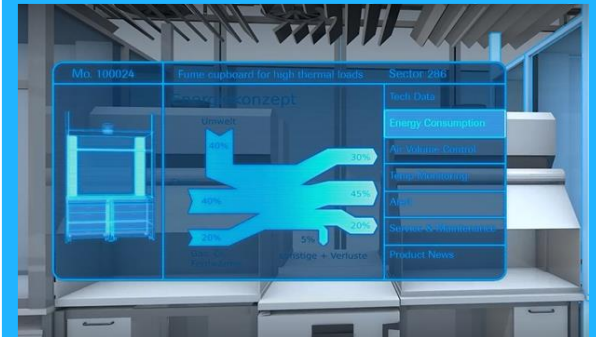
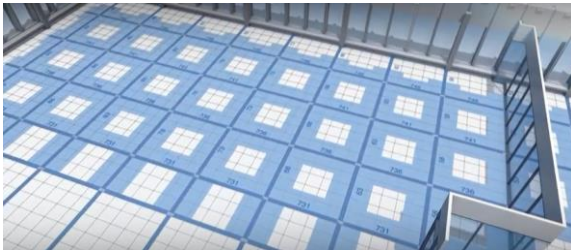
Processes and Ways of Working



Location, Spaces, Office Concepts

BIM Modules– Case: Roche HQ, Basel/ Switzerland

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USE OF BIM-TECHNOLOGY

Design and Engineering – Case: Cube, Berlin/ Germany



USE OF BIM-TECHNOLOGY

Design and Engineering – Case: Cube, Berlin/ Germany



Desk sharing



Co-working



Room booking



Conference center



Mobility concept



Park sharing

USE OF BIM-TECHNOLOGY

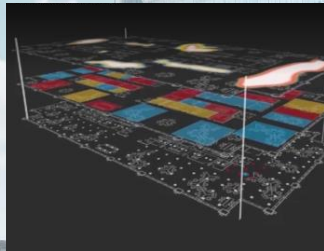
Design and Engineering – Case: Cube, Berlin/ Germany



BRAIN



KEYLESS ENTRY



TRACKING OF EVERYTHING



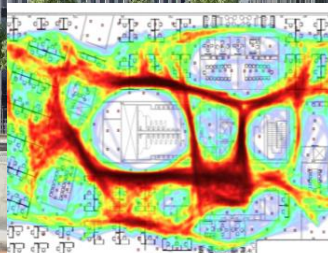
DESK-/ROOMBOOKING/
CO-WORKING



INHOUSE NAVIGATION



INDIVIDUAL ROOM CONDITIONING



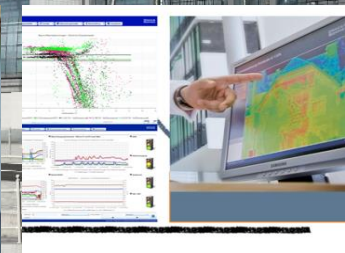
DYNAMIC ENERGY MANAGEMENT



PACKSTATION



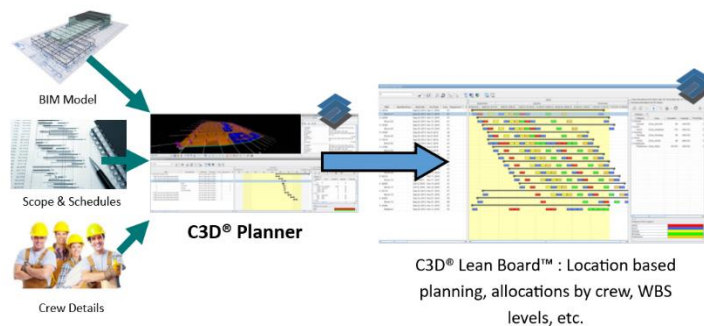
MANAGEMENT COCKPIT



PREVENTIVE SMART FM

USE OF BIM-TECHNOLOGY

BIM based Lean Board – Case: C3D by CCC + Drees & Sommer, Kazakhstan



The image shows a stack of digital planning boards. The top board is titled 'GRE Pipes' and contains the following information:

- Responsible Person: M. Odeh
- Crew Size: 15
- Work Front: WF - 17
- Location: 113 GRE
- Activity: Pipe Laying
- Description of Target: (with a QR code)

Below this, there are sections for 'Stability criteria (Please tick)' and 'Material on site'.

	Necessary	Available
Material on site	☒	☒
Equipment on site	☒	☒
Area is ready	☒	☒
Special safety measures	☒	☒

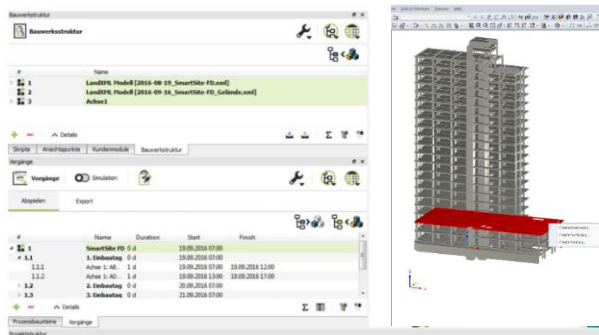
At the bottom, there is a 'Crew size' table:

Crew size	QTY	✓ QTY
Pipe Fitter	4	
Laminator	2	
Helper	8	
Riggers		
Charge Hands	1	



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BIM based LCM Site Management – Case: SMART SITE, Germany



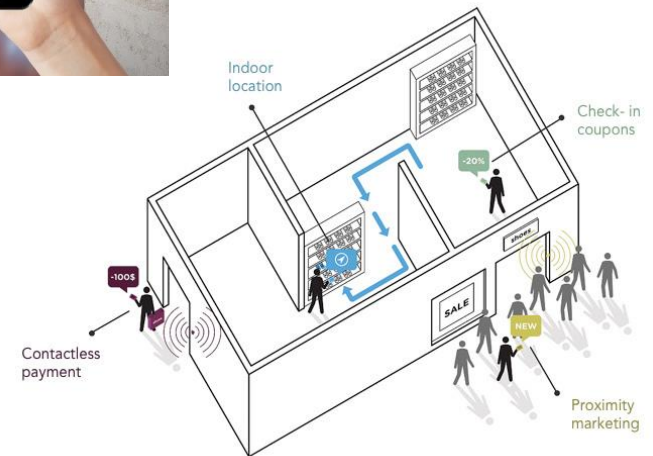
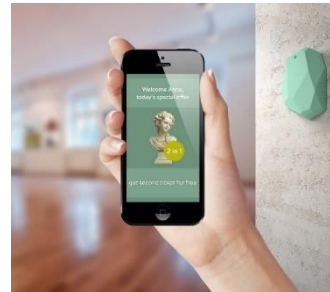
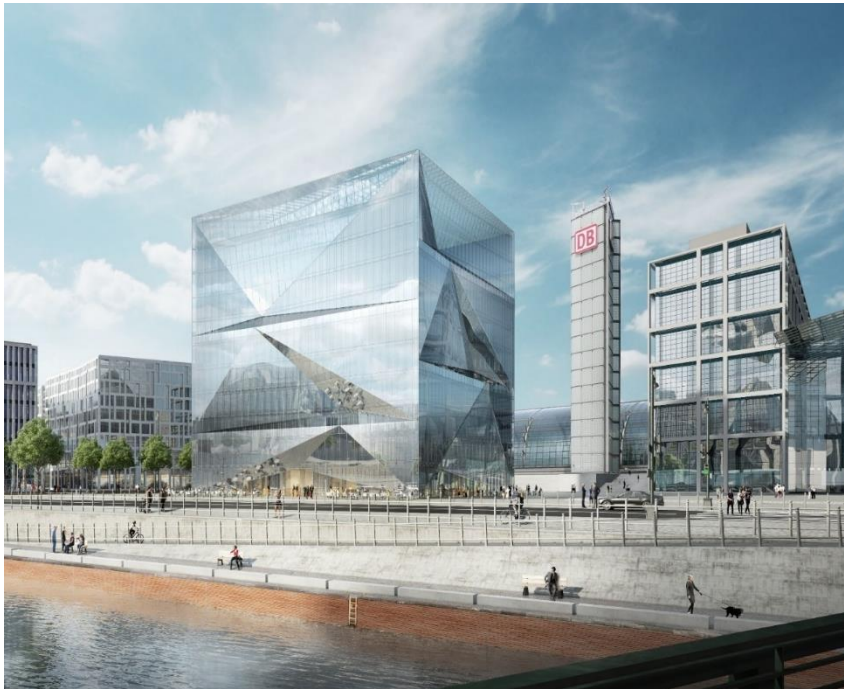
USE OF BIM-TECHNOLOGY

BIM based Interactivity of Buildings



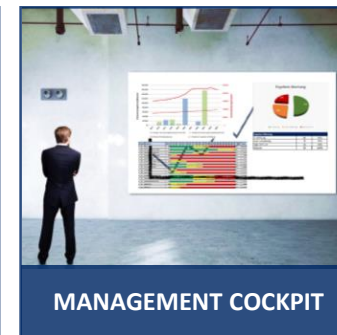
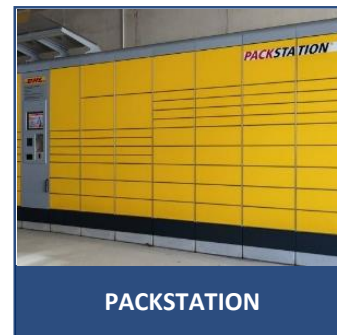
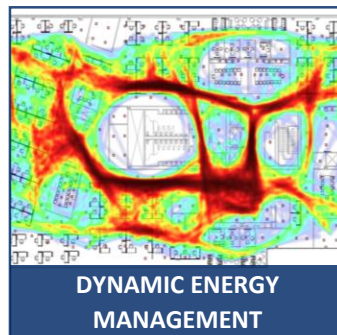
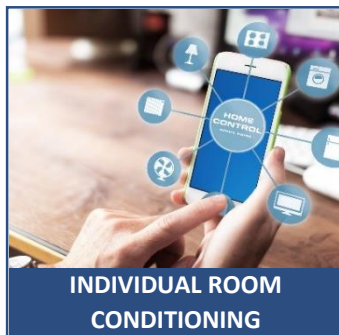
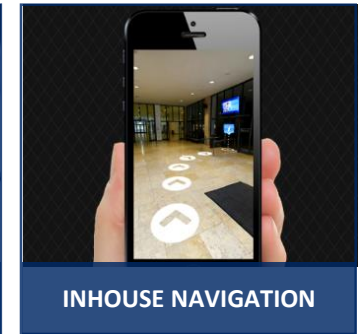
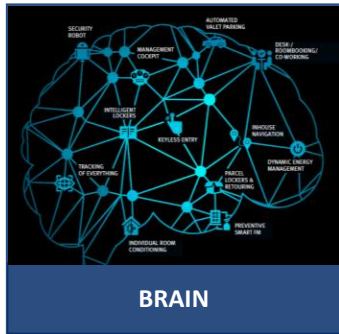
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BIM based Interactivity of Buildings



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BIM based Interactivity of Buildings



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