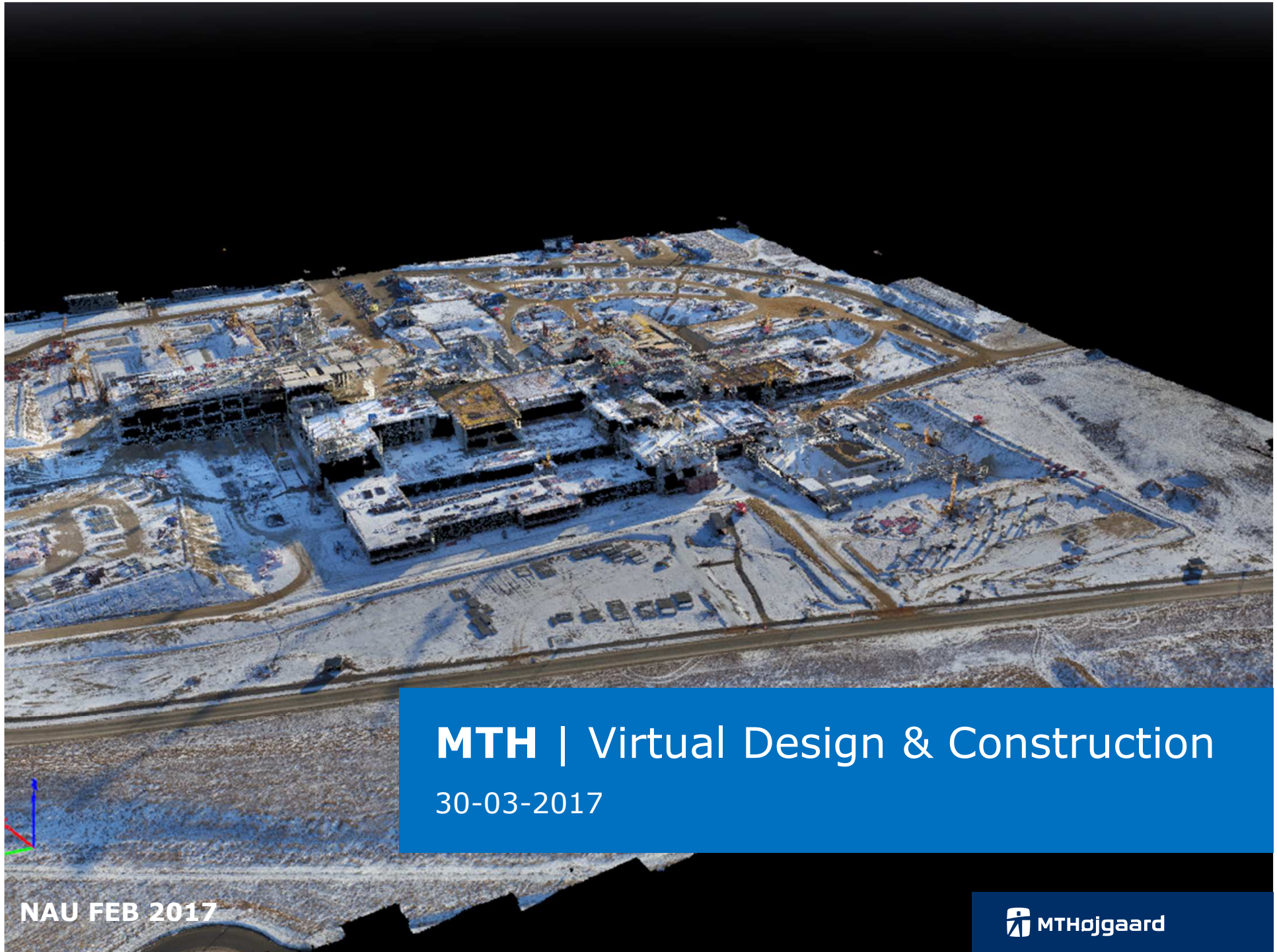




MTH | Virtual Design & Construction

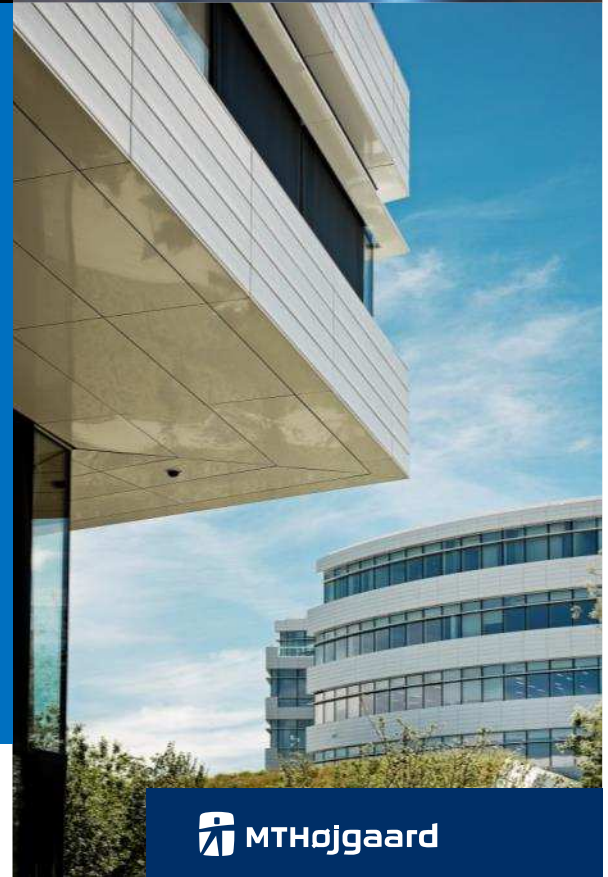
30-03-2017

NAU FEB 2017

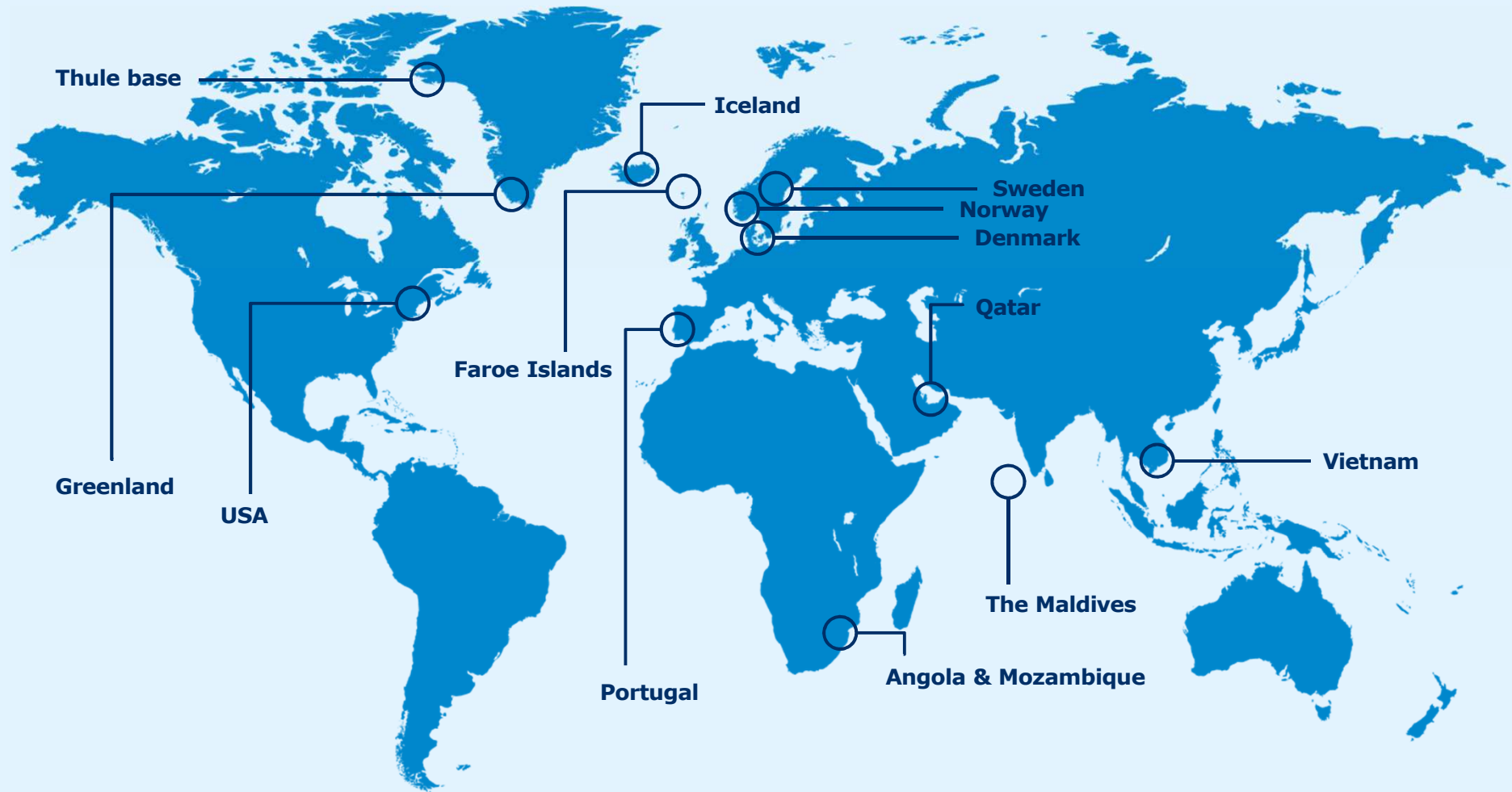


I næsten 100 år har MTH skabt de rum,
hvor vi lever, arbejder og rejser...

- Kontorer, boliger og shoppingcentre
- Hospitaler, skoler og sportsfaciliteter
- Beton- og stålbroer
- Lufthavne, havne, veje og jernbaner
- Vindmøllefundamenter m.m.



Geographical platform





Virtual Design and Construction

Vi bygger virtuelt før, vi bygger i virkeligheden



VDC | Koncernens strategiramme

Vision

Den mest produktivitet fremmende koncern i bygge- og anlægsbranchen

Krav

5% EBIT som minimum i alle
forretningsområder og dattervirksomheder
Positivt cash flow

Mål

Kundetilfredshed indeks 76
60% omsætning fra nøglekunder
Medarbejdertilfredshed indeks 76
Ingen fejl og mangler
Maks. 14 ulykker pr. 1 mio. arbejdstimer
Løbende produktivitetsforbedring

Projekter fra
samfund til drift

Best in class
VDC

Udnytte
koncernsynergier

Styr på driften

Medarbejdere,
ledelse, kultur
og værdier

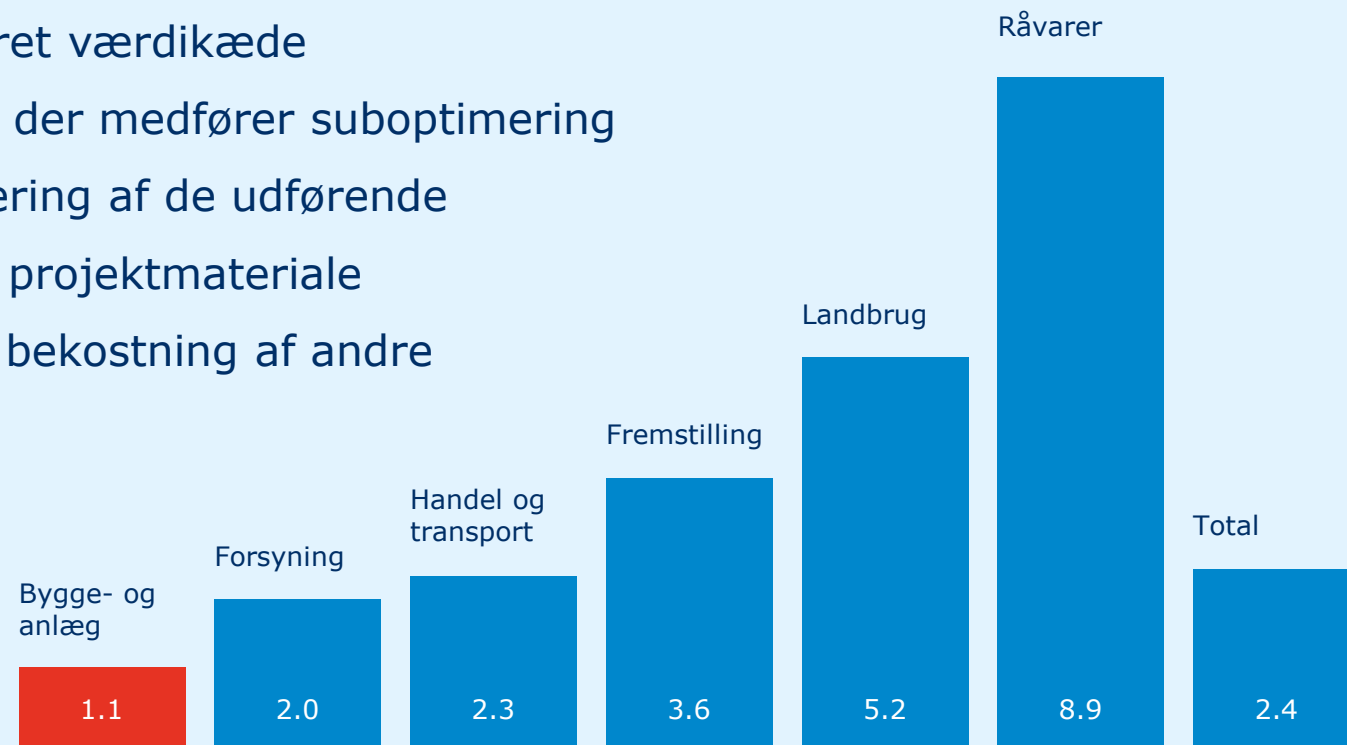
Projekt- og
prisoptimering

Marked og
kunder

Koncernstrategi

Byggeindustrien har været lavproduktiv i 50 år

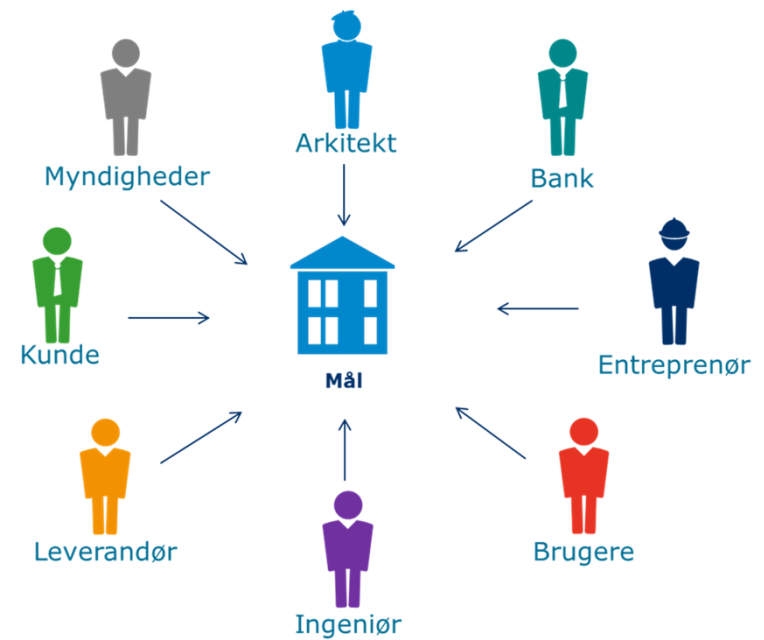
- Manglende fælles mål og incitament
- Fragmenteret værdikæde
- Kontrakter, der medfører suboptimering
- Sen involvering af de udførende
- Manglende projektmateriale
- Gevinst på bekostning af andre



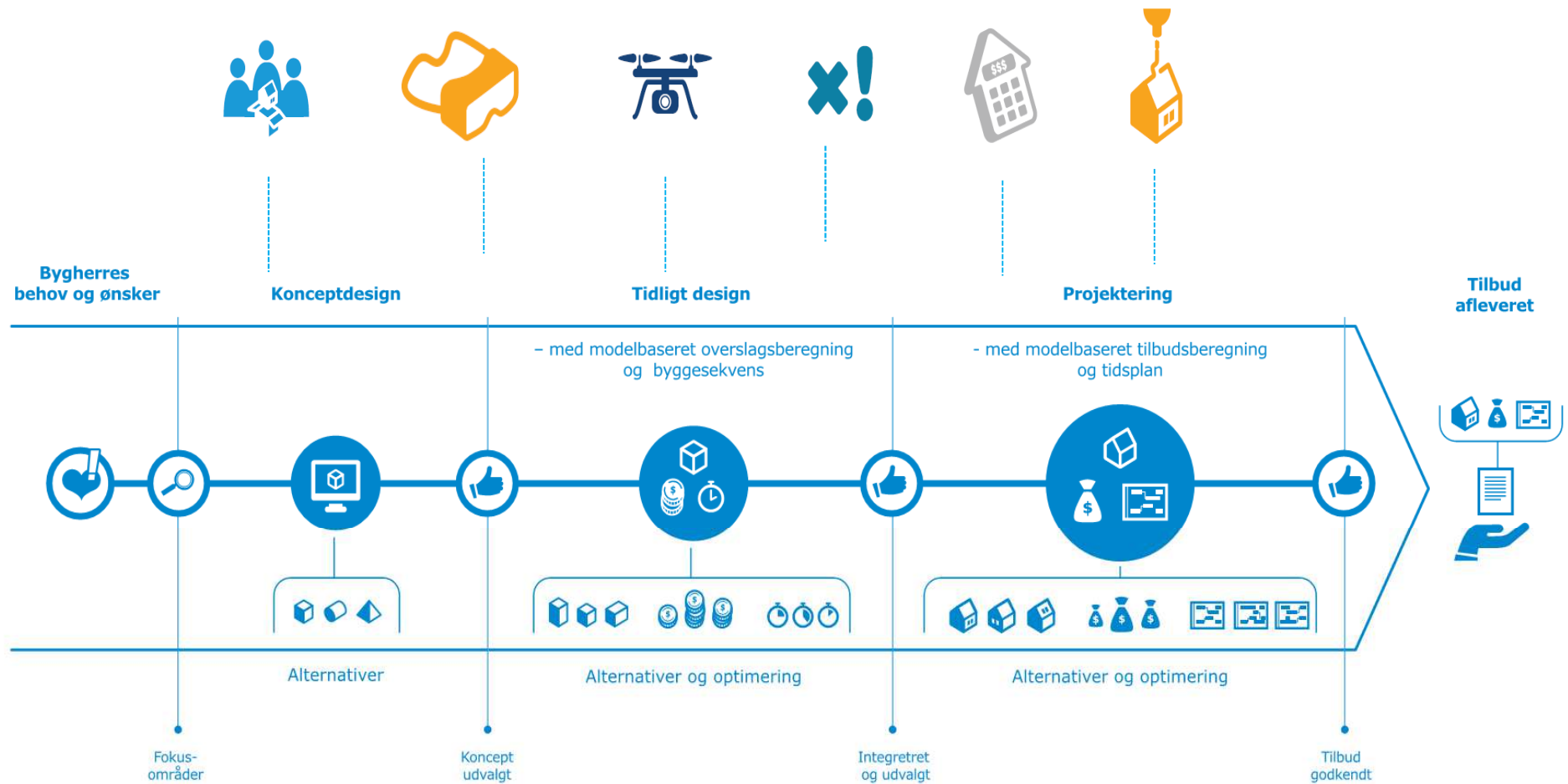
Gennemsnitlig vækst i produktiviteten i udvalgte industrier i perioden 1967-2011

Kilde: Danmarks Statistik

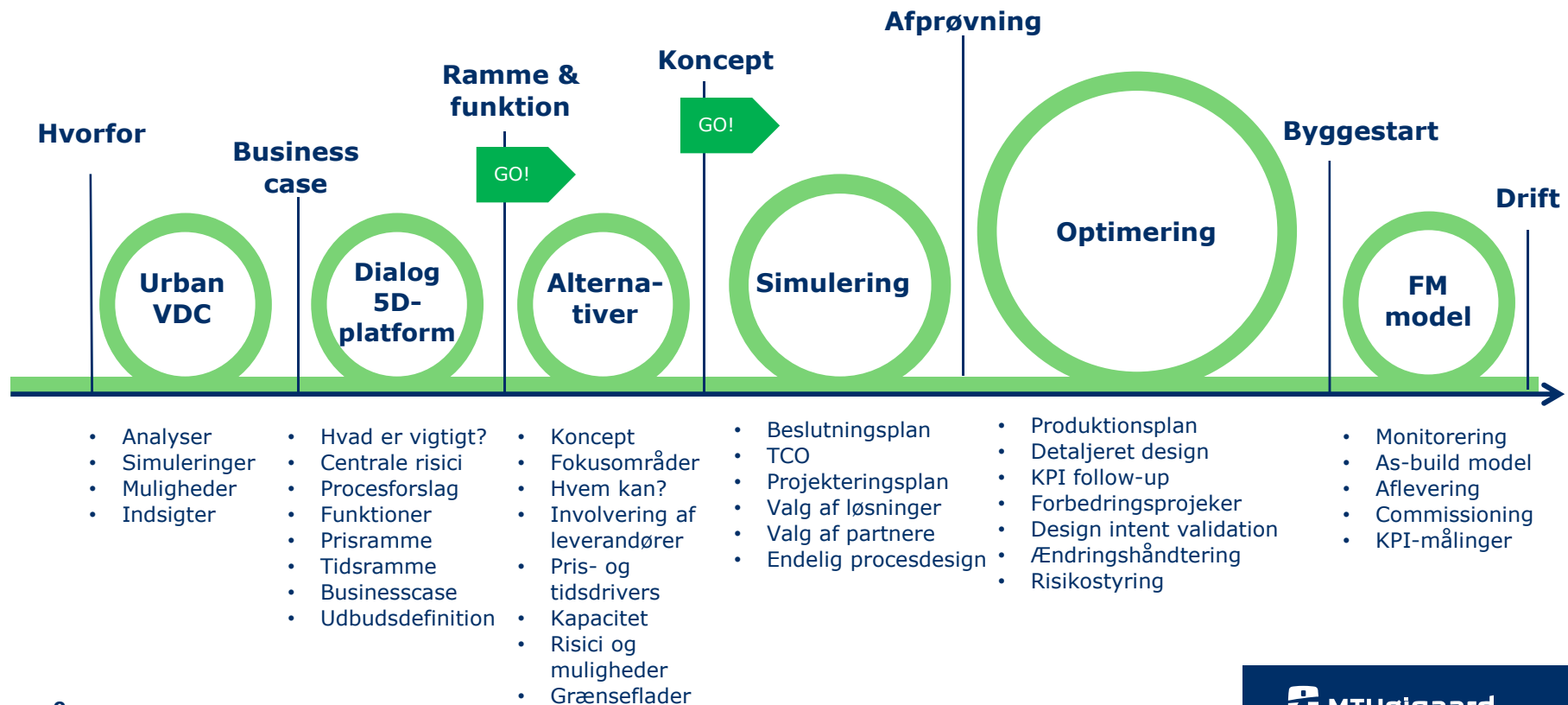
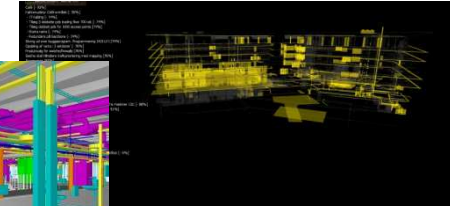
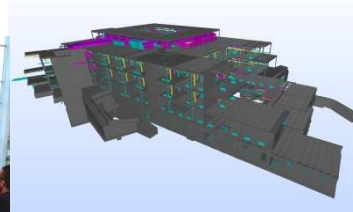
VDC| Værdikæden vs. værdinetværket



VDC | Ny samarbejdsmodel



Produktivitet | VDC-samarbejde





Vi går efter tidligt eksklusivt samarbejde med kunderne



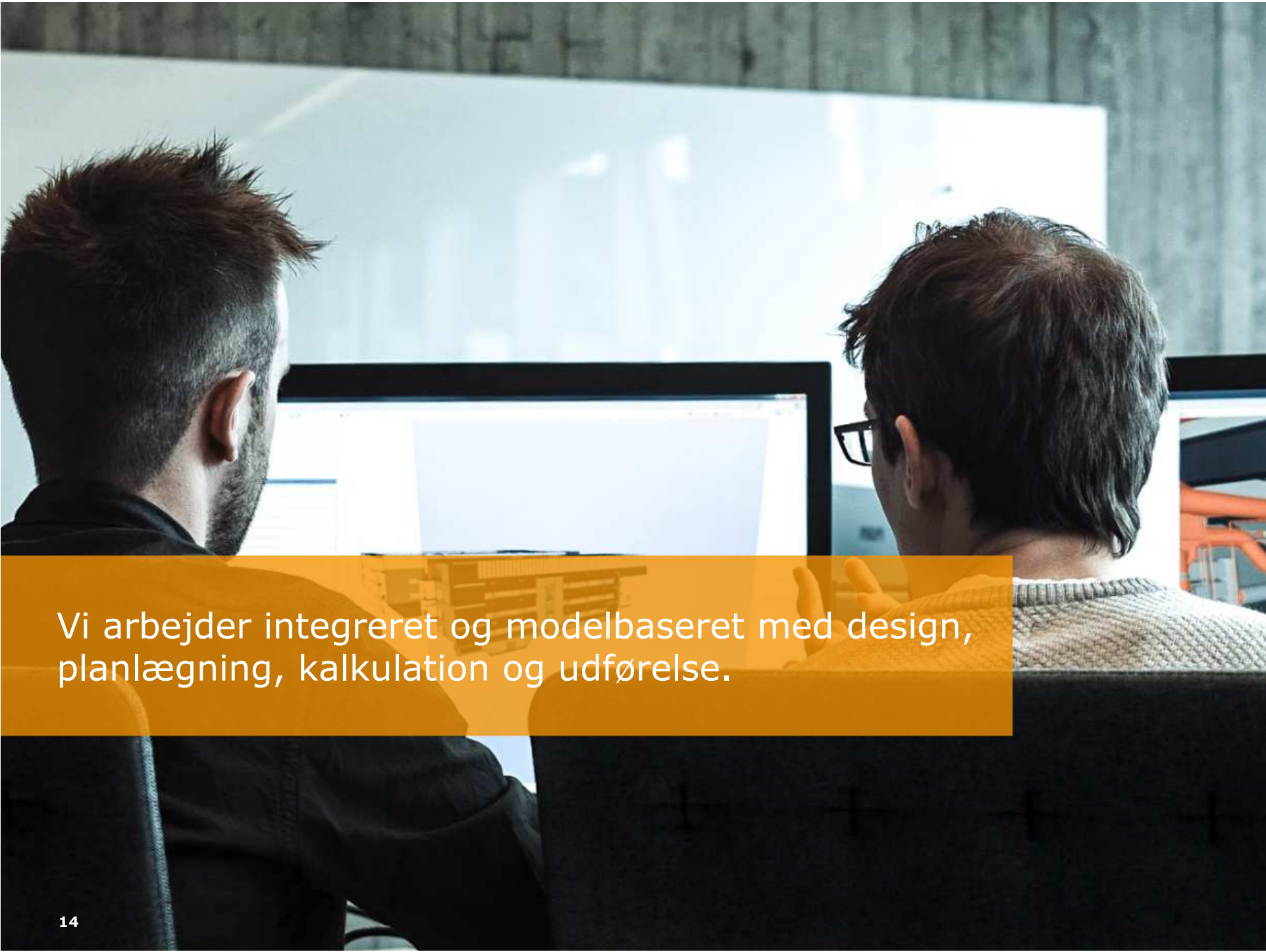
Vi tilpasser vores indsats ud fra projektets kommercielle mål og strategiske fokusområder

A photograph of four men in a modern office setting. They are gathered around a white table, looking at and pointing to various documents and colorful sticky notes. The man on the far left is wearing a dark blue jacket with white 'X' patterns. The man next to him is in a dark blue polo shirt with a logo. The man in the center is wearing a light blue button-down shirt and is leaning over the table. The man on the far right is wearing a white button-down shirt and glasses. A white bowl of fruit sits on the table in the foreground. A semi-transparent blue banner with white text is overlaid on the middle of the image.

Vi inddrager relevante kompetencer tidligt, og
optimerer projektet i fællesskab

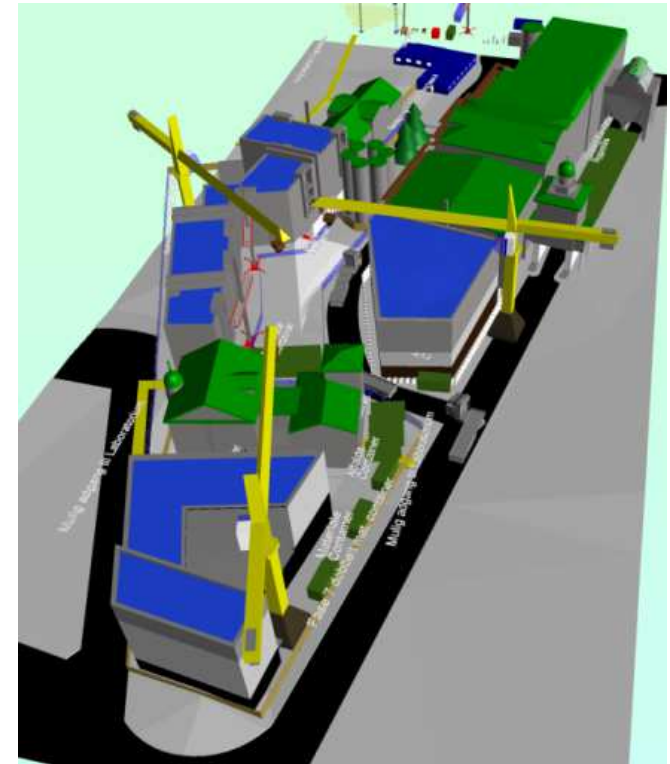
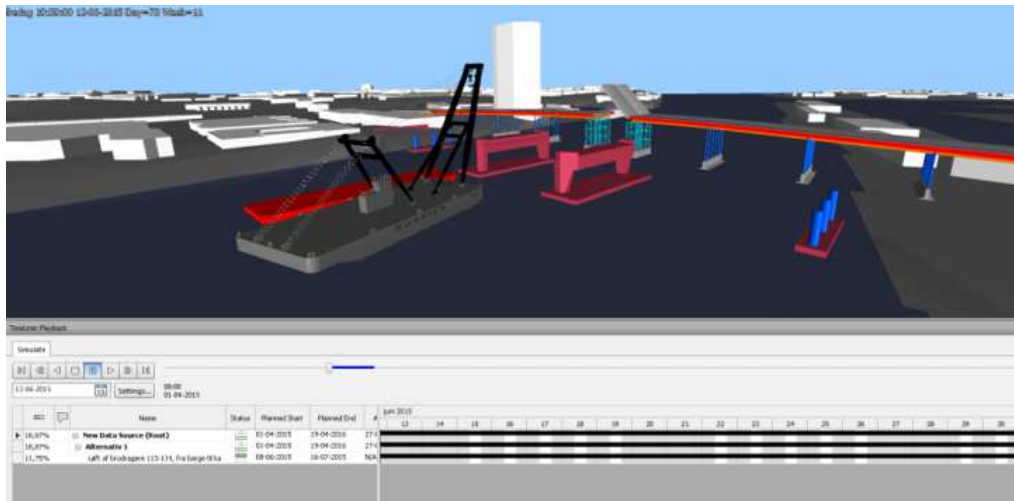


Vi arbejder med alternativer og korte iterationer

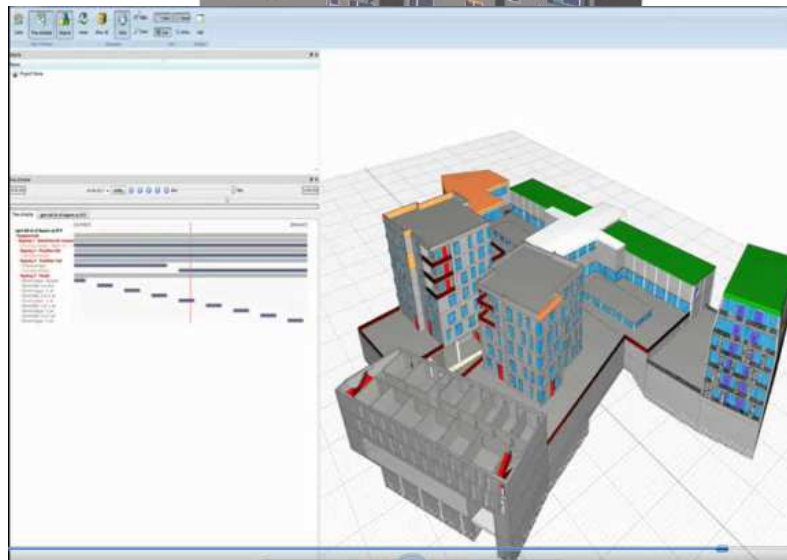
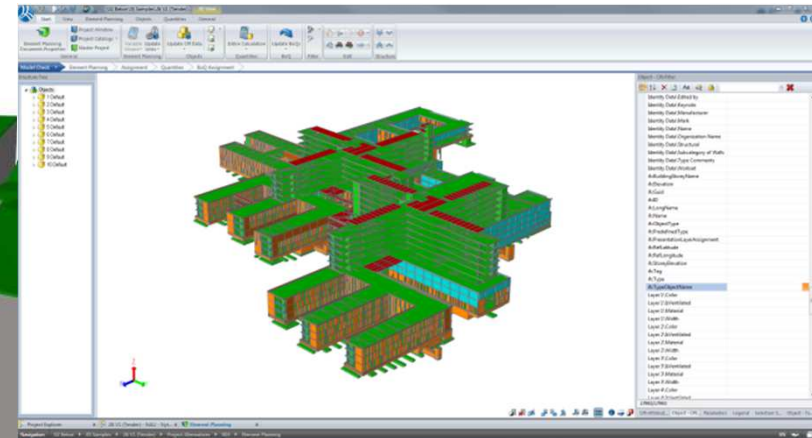
A photograph showing two men from behind, sitting at a desk and looking at a computer monitor. The man on the left has short, spiky brown hair and a beard, wearing a dark jacket. The man on the right has dark hair, wears glasses, and a grey sweater. They are in a modern office with a large window in the background showing a cityscape. An orange semi-transparent banner is overlaid on the lower part of the image.

Vi arbejder integreret og modelbaseret med design,
planlægning, kalkulation og udførelse.

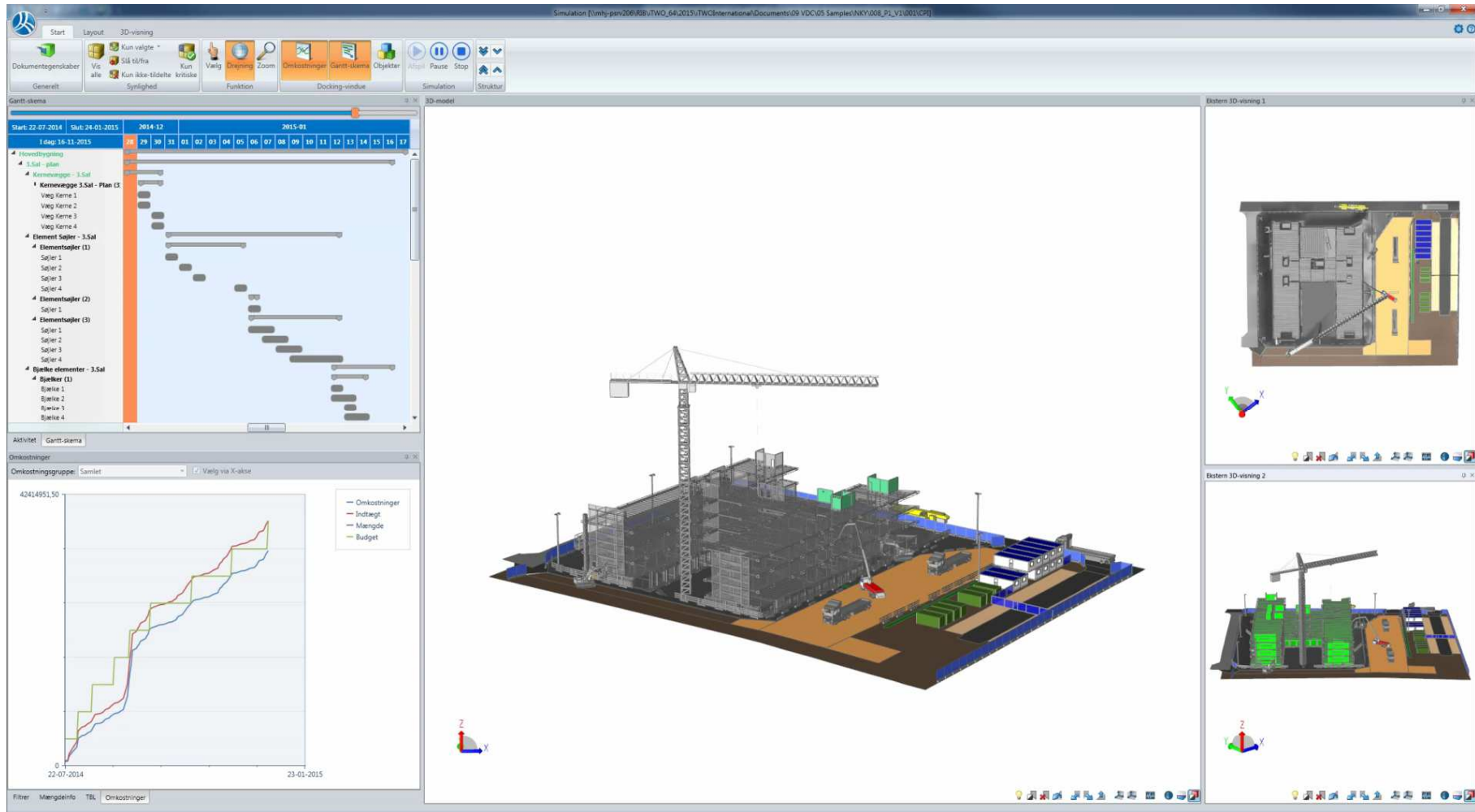
VDC | Tidlige modeller



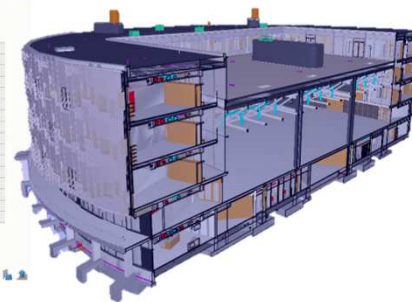
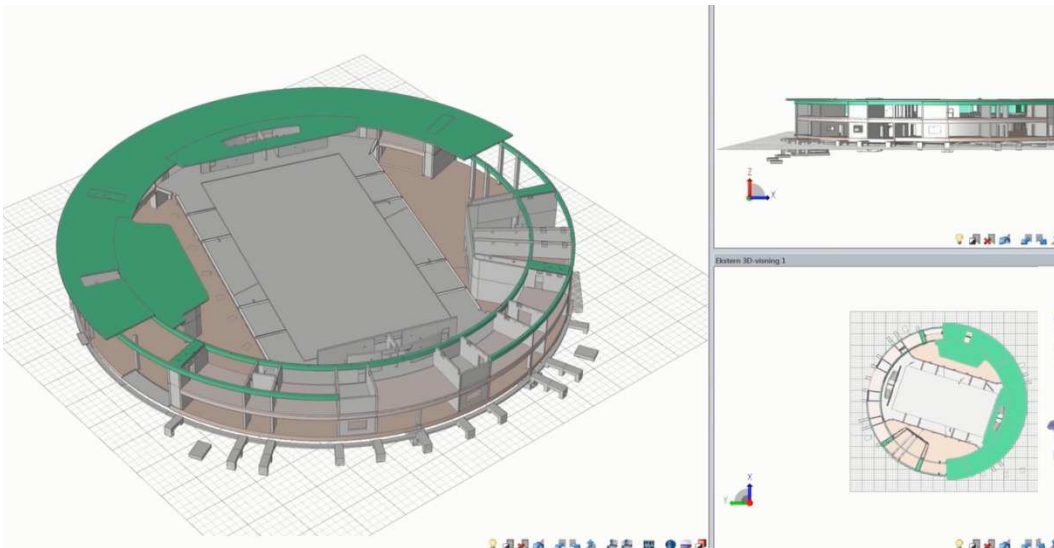
VDC | Modelbaserede kalkulationer

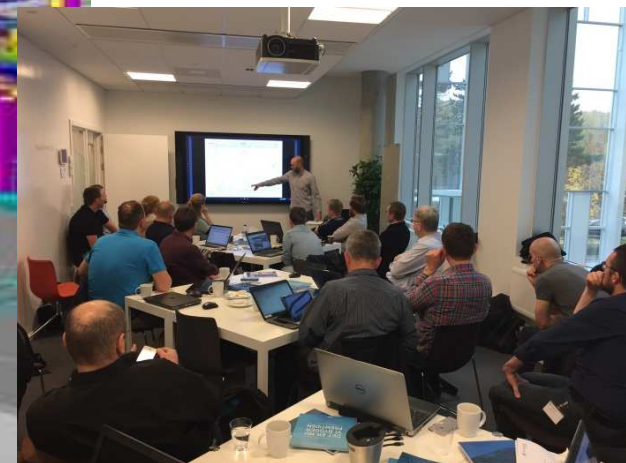
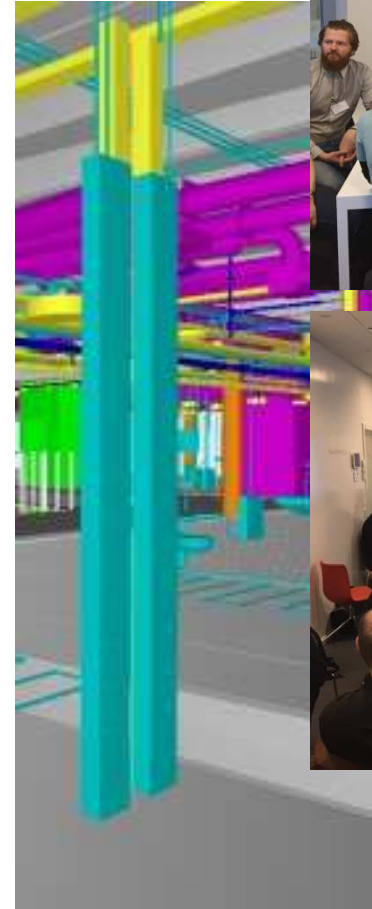
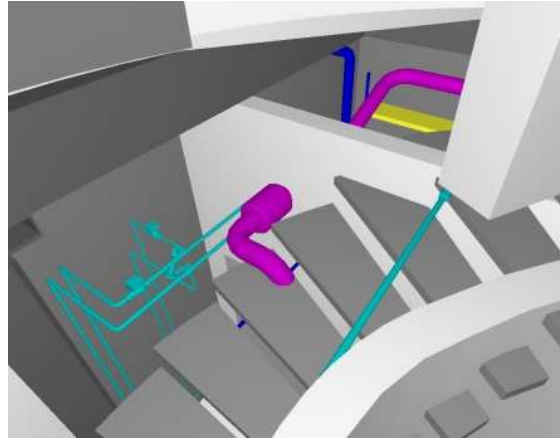
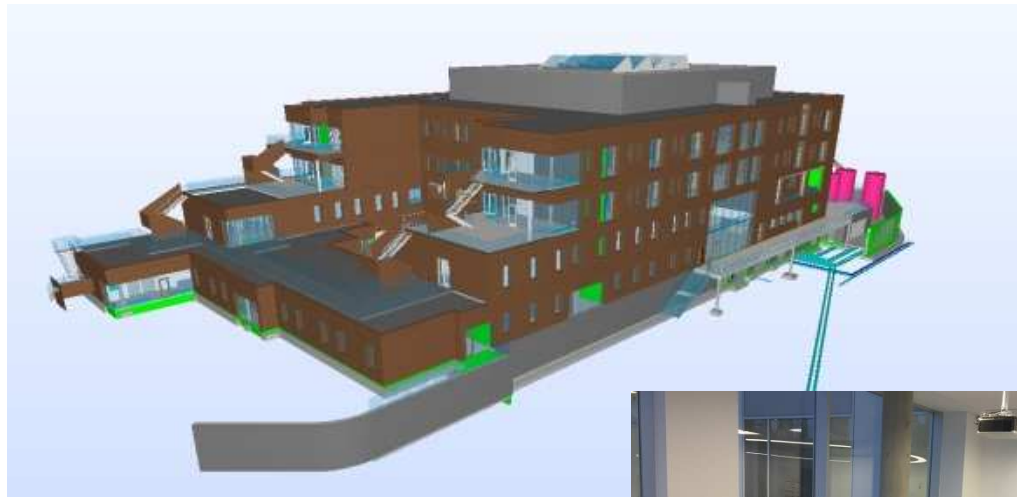
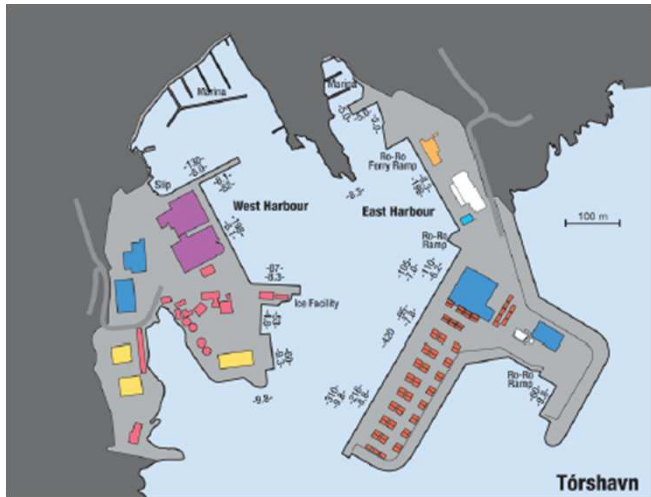


VDC | 5D-modeller og alternativer

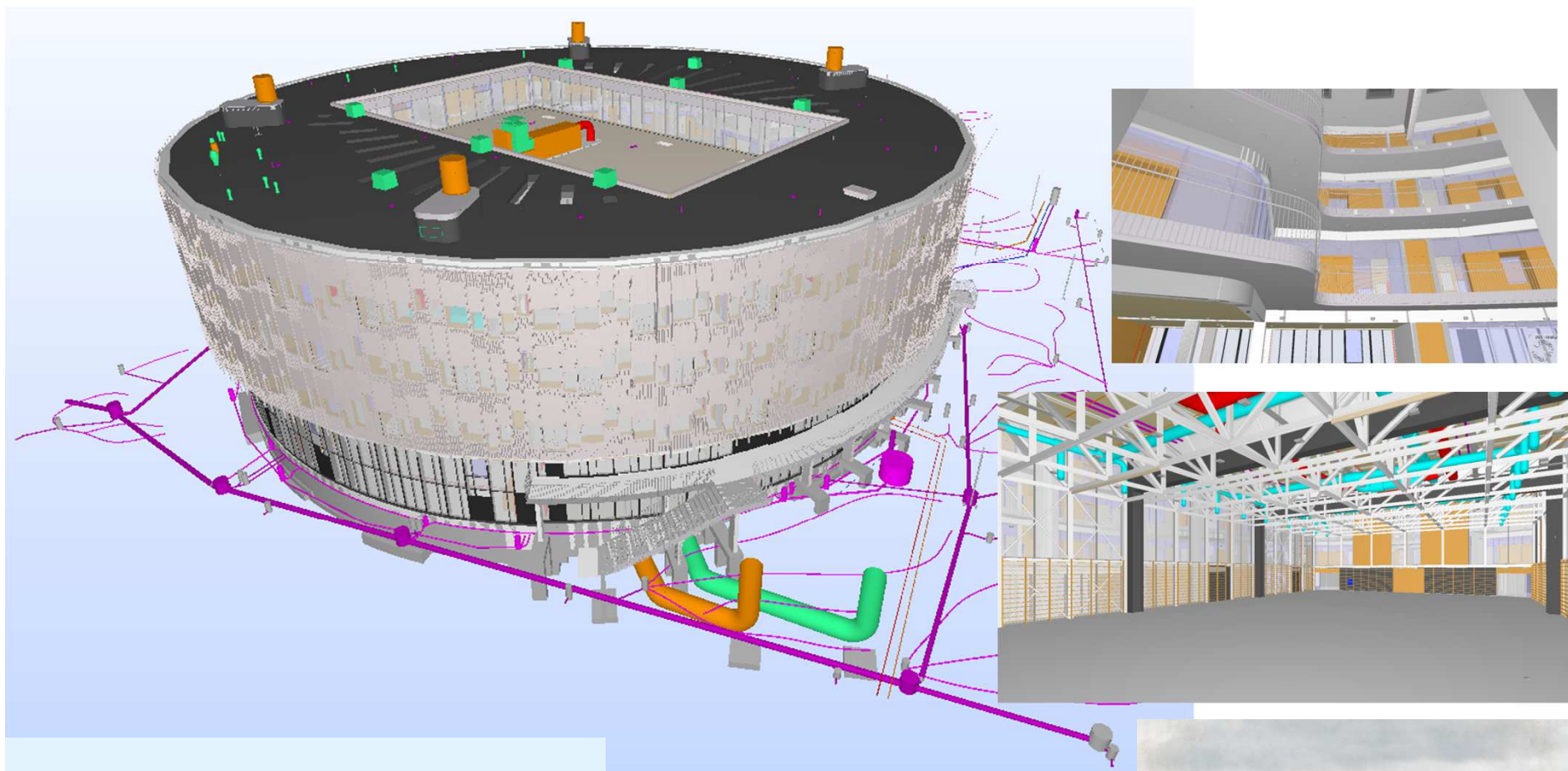


VDC-lab sessions | Simulering og optimering





Tórshavn Landssygehuset Tidlig involvering



Kalvebod Fælled Skole

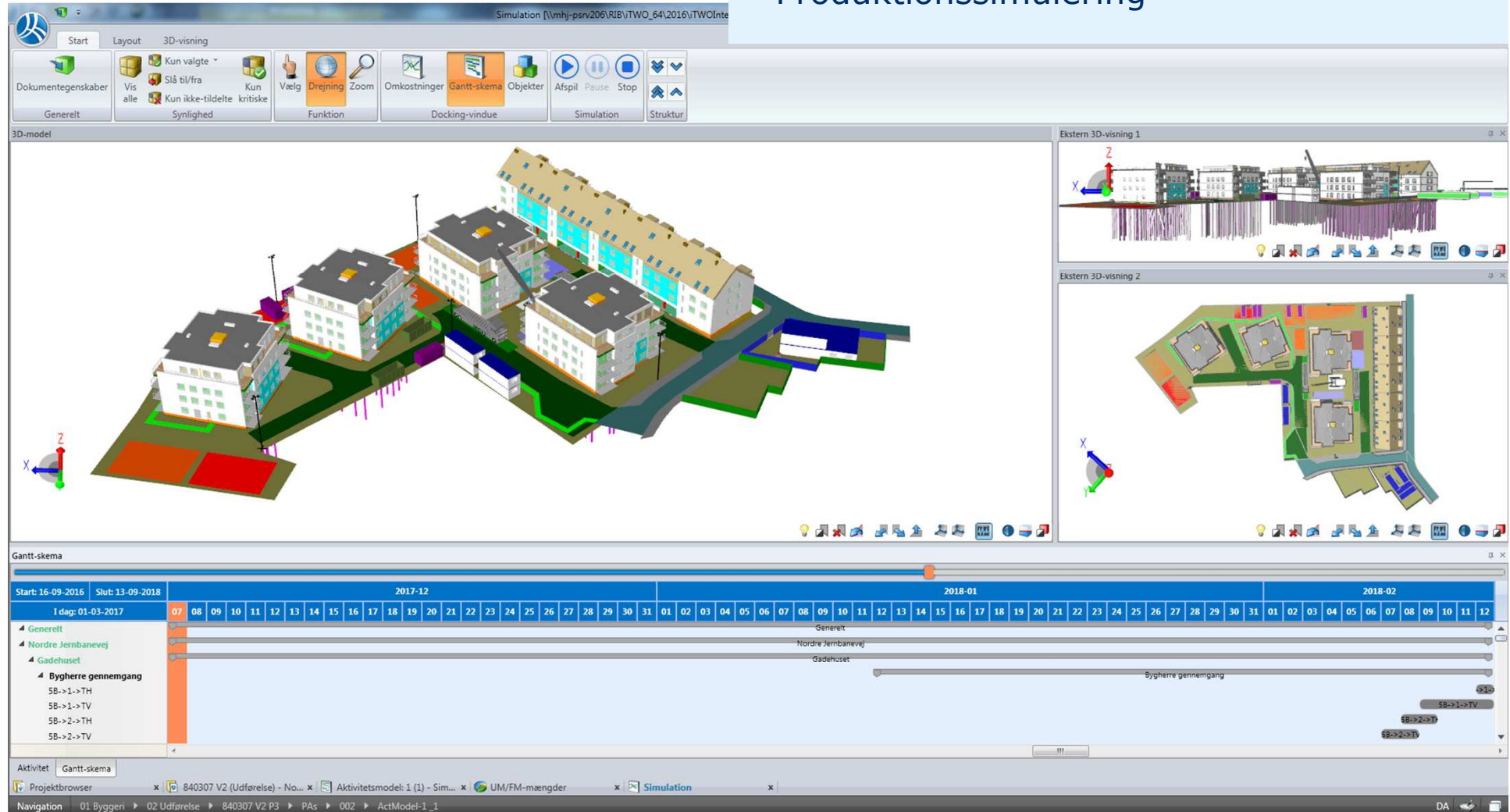
Simulering og optimering

NAU Nyt Aalborg Universitetshospital

Modellerne ud på pladsen



Nordre Jernbane Vej Produktionssimulering



Nordre Jernbane Vej

Digitalt produktionsgrundlag

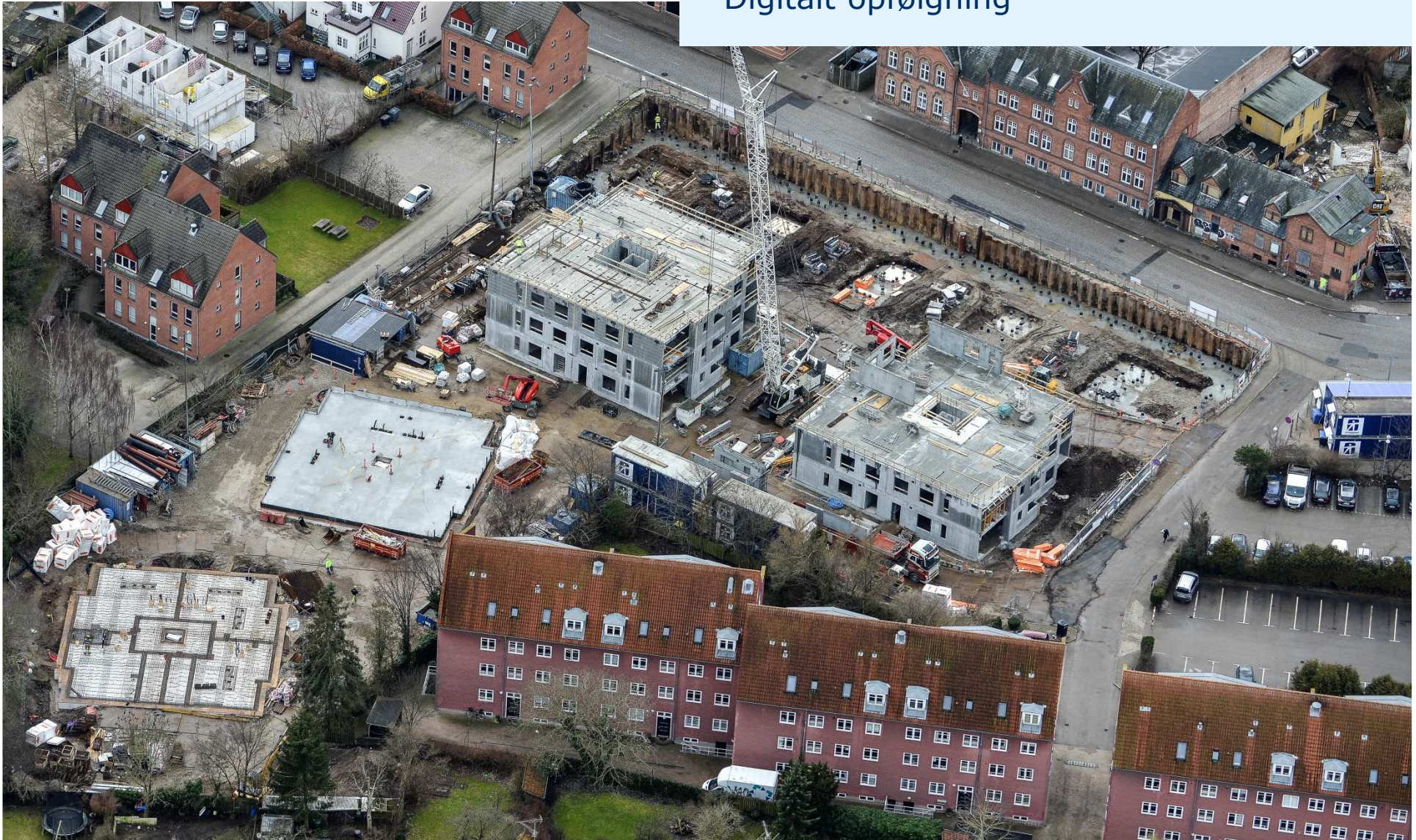




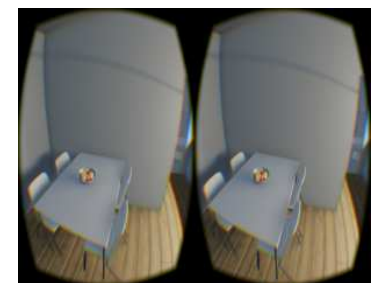
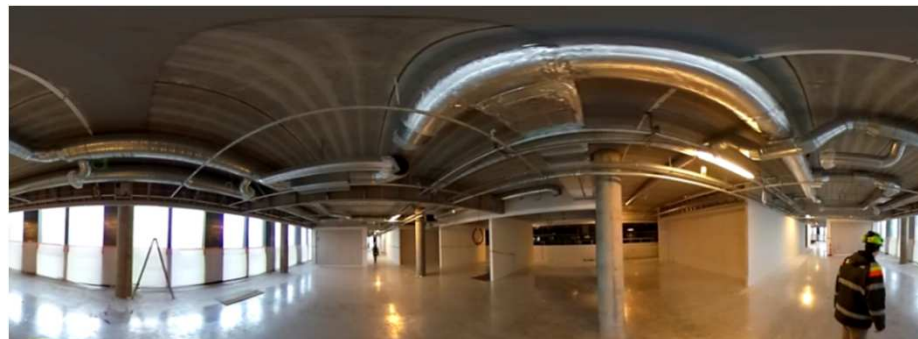
Nordre Jernbane Vej

Digitalt opfølgning

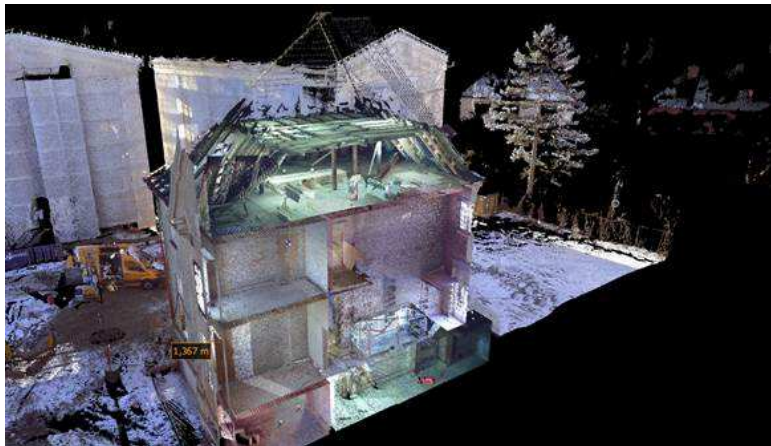
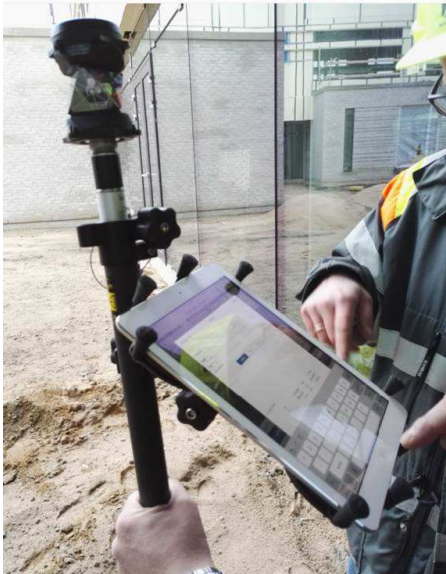
Nordre Jernbane Vej Digitalt opfølgning



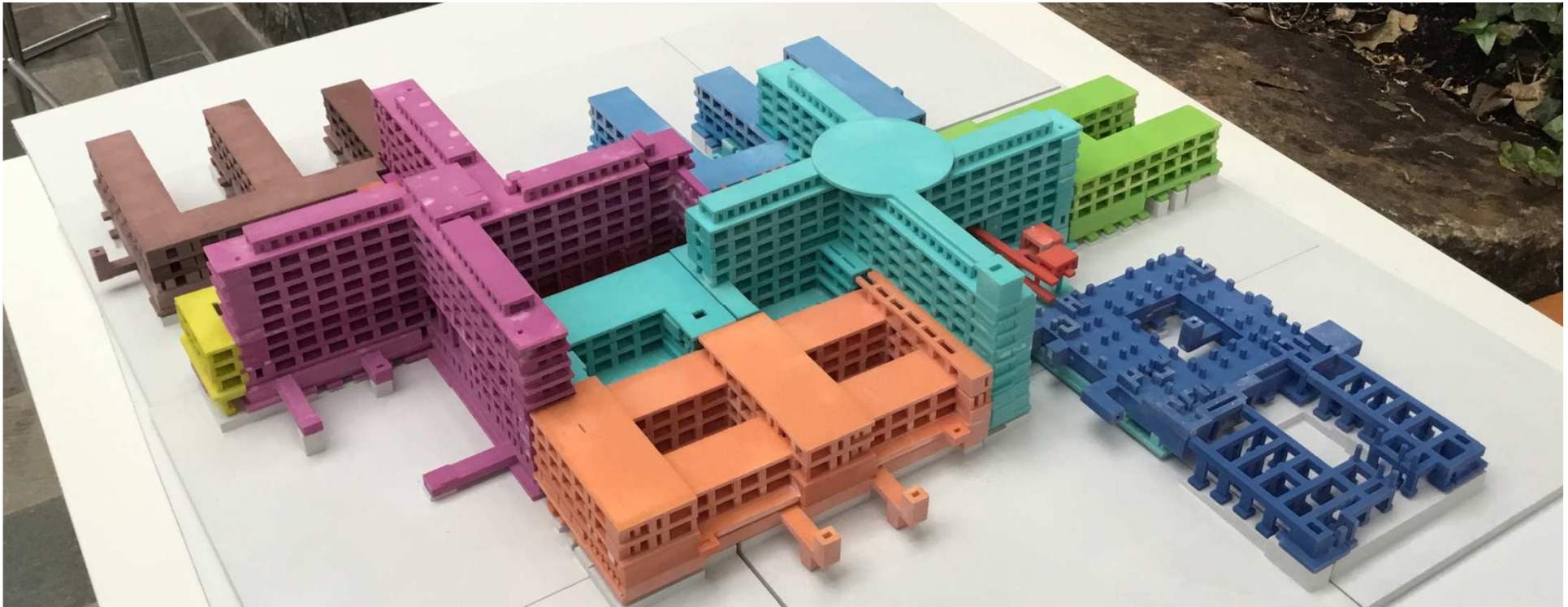
VDC | Virtual reality



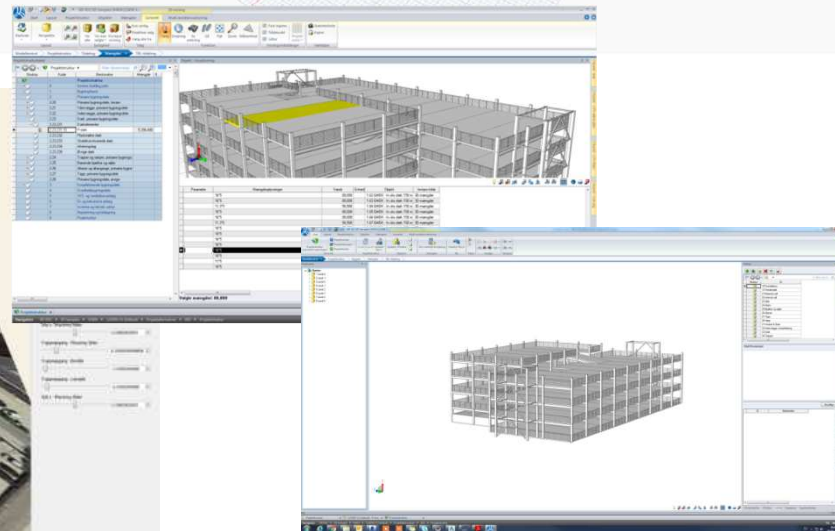
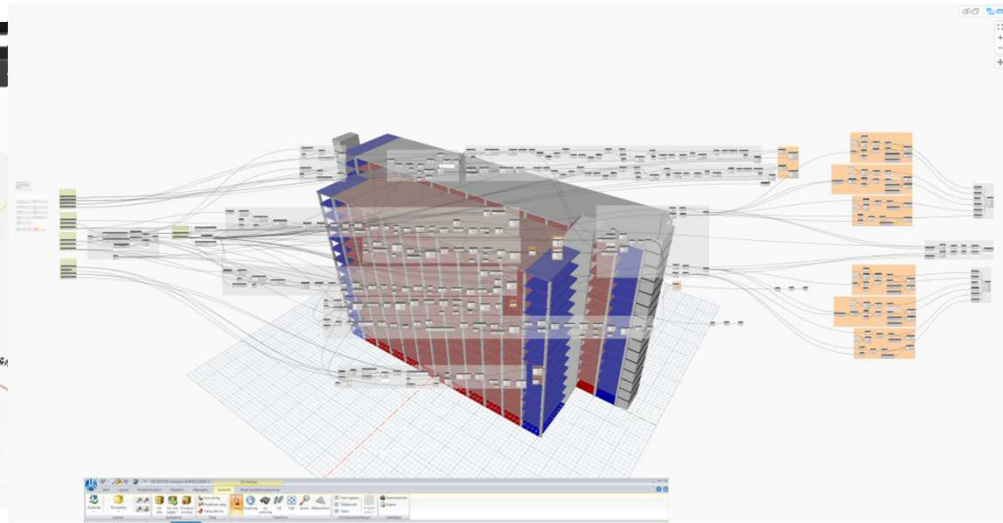
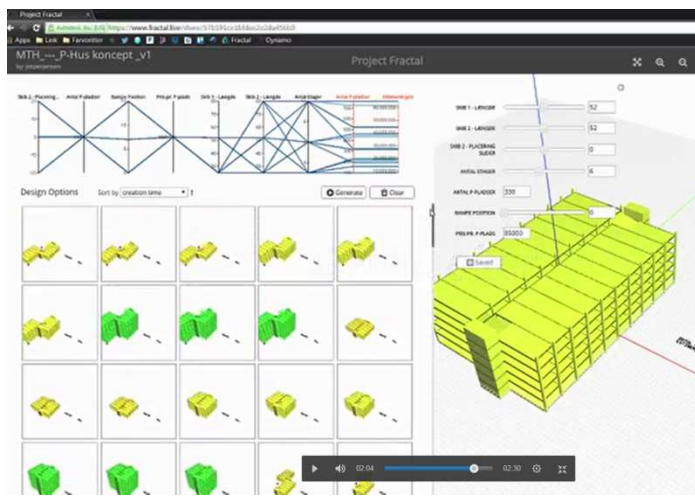
VDC | Højopløselige data droner og scans



VDC | 3D print – første gang vi bygger



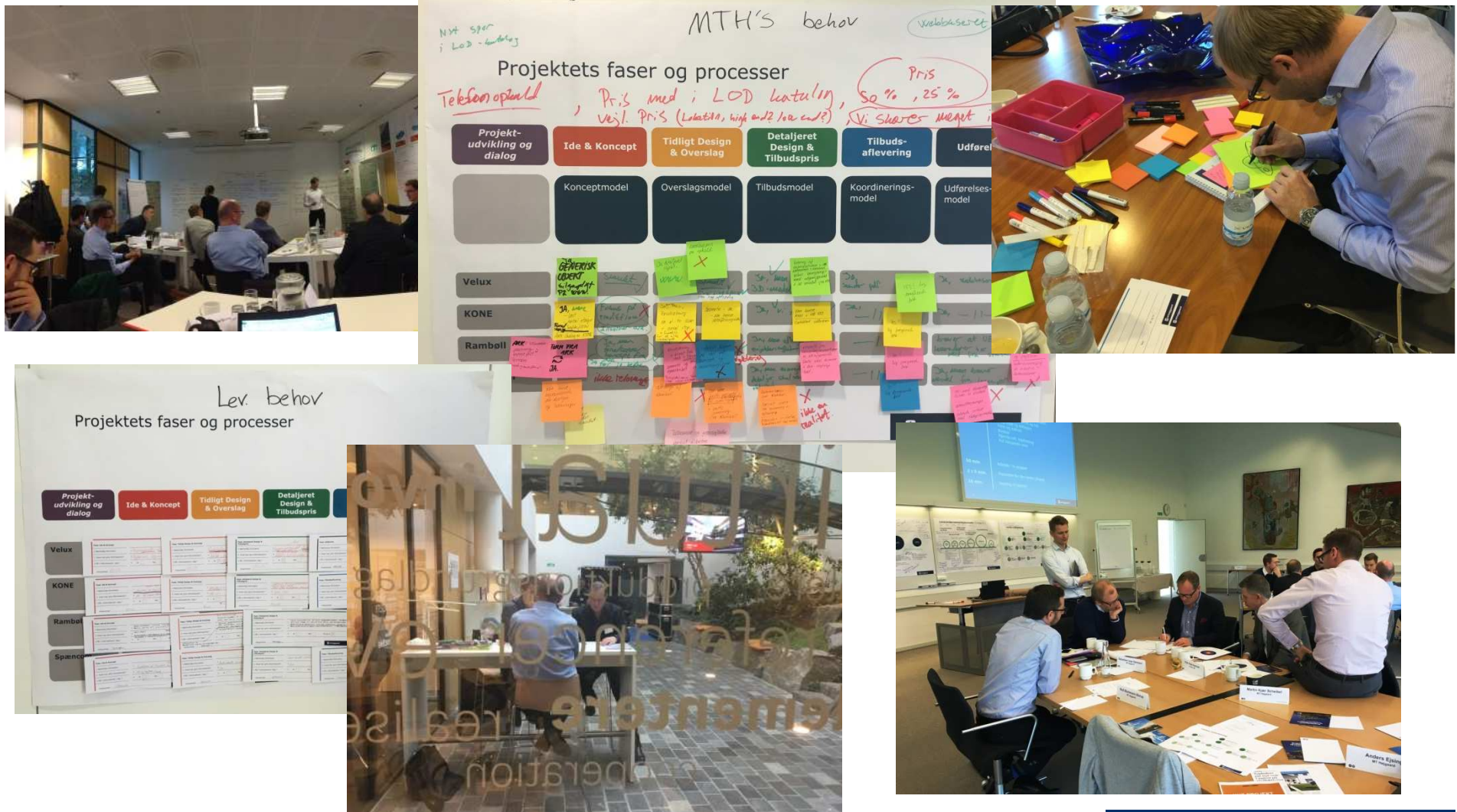
VDC | Computational Design



VDC | Robotter



VDC | IMPACT workshops og leverandørinvolvering



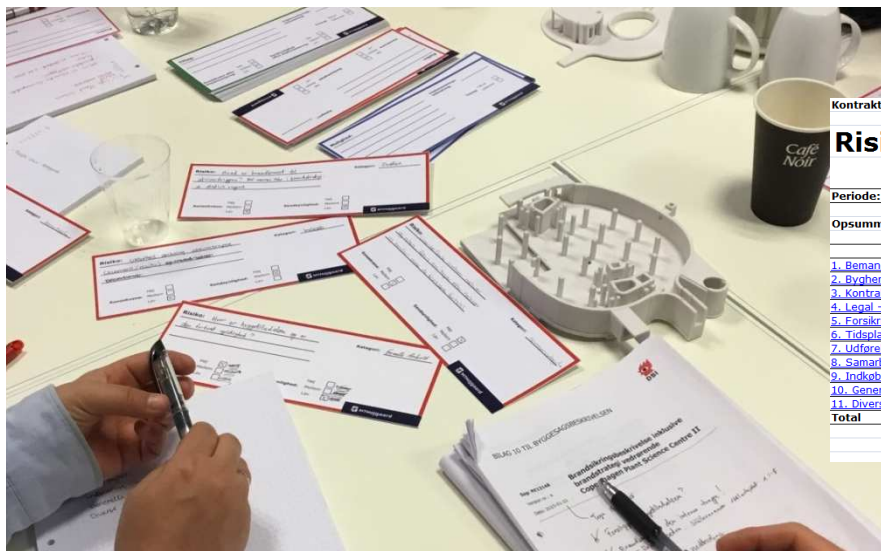
VDC | Risikoworkshop



Risici

Muligheder

Alternativer



Kontrakt nr.: Navn:

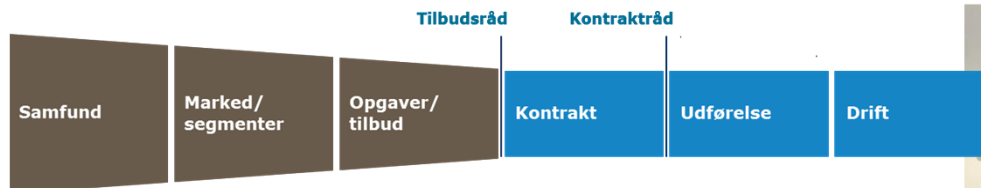
Risikoskema

Periode:

Opsummering

Risiko analyse i tilbudsfasen	
1. Bemanding	1.212
2. Bygherre	770
3. Kontrakt	0
4. Legal - Jura	0
5. Forsikring	0
6. Tidspen	0
7. Udførelsesforhold	0
8. Samarbejdsforhold	0
9. Indkøb & UJ	0
10. Generelle	0
11. Diverse	0
Total	1.982

Indeværende måned risiko art 9291



VDC | Målbare resultater

