

The **future** started  
yesterday, and we're  
already late. JOHN LEGEND

**BUILD 4.0**

**USER INVOLVEMENT AND  
DIGITAL DESIGN-PROCESSES**

**RAMBOLL**

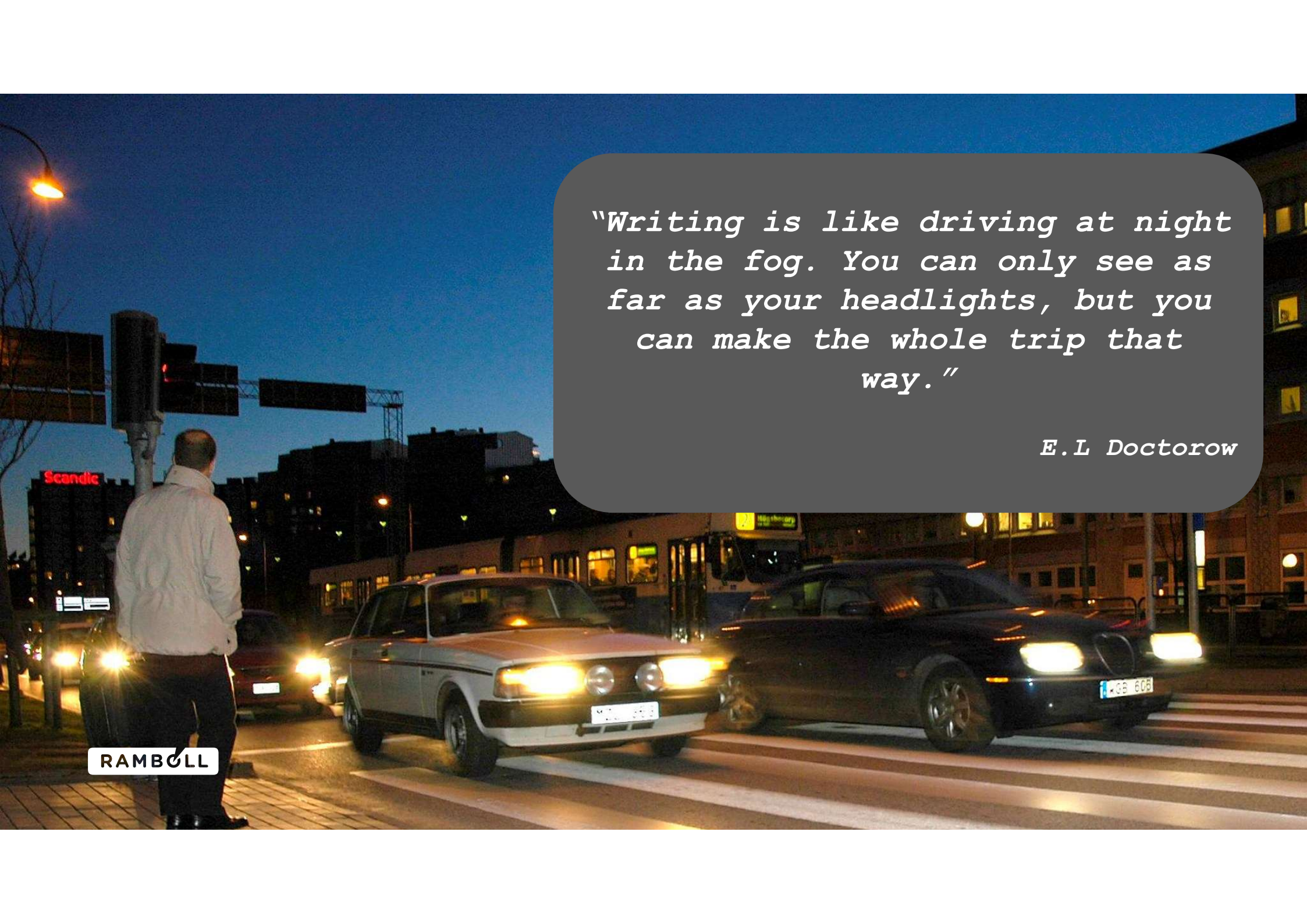
## RAMBOLL

- Buildings, Transport, Environment, Water, Energy, Oli & Gas, Management
- +13.000 Employees
- 35 countries
- 300 offices
- +40.000 projects

RAMBOLL

RAMBOLL



A night street scene with cars and a person. A man in a white jacket stands on the sidewalk, looking towards a white car and a dark car with their headlights on. A bus is visible in the background. The sky is dark blue, and city lights are visible. A quote is overlaid on the right side of the image.

*"Writing is like driving at night  
in the fog. You can only see as  
far as your headlights, but you  
can make the whole trip that  
way."*

*E.L Doctorow*

RAMBOLL



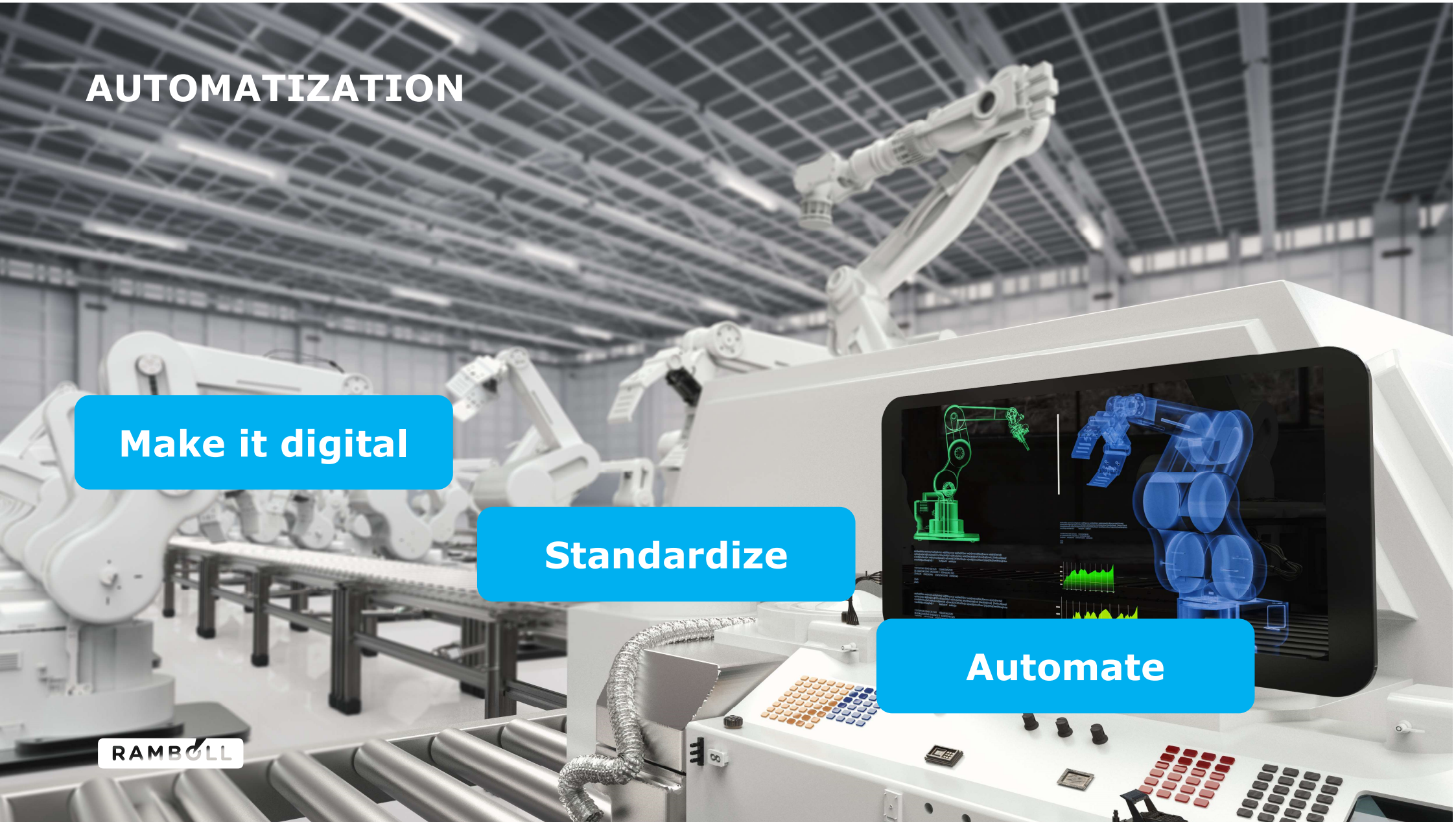
# AUTOMATIZATION

Make it digital

Standardize

Automate

RAMBOLL





**FROM WATERFALL MODEL...**



**RAMBOLL**

... TO INTEGRATED DESIGN

RAMBOLL





**DIGITALIZATION -  
DOING SOMETHING DIFFERENT....**



**RAMBOLL**

# INNOVATION IS....

**Invention**

**Creating  
Value**

**Utilization**



# DIGITAL INNOVATION

Productivity

Incremental

Radical

RAMBOLL

*Inspired by  
Clayton M. Christensen,  
Harvard Business School*

**Client  
engagement**

**Traditional  
engineering services**

**Client  
Expectations**



**Client  
engagement**

**Traditional  
engineering  
services**

**Client  
Expectations**

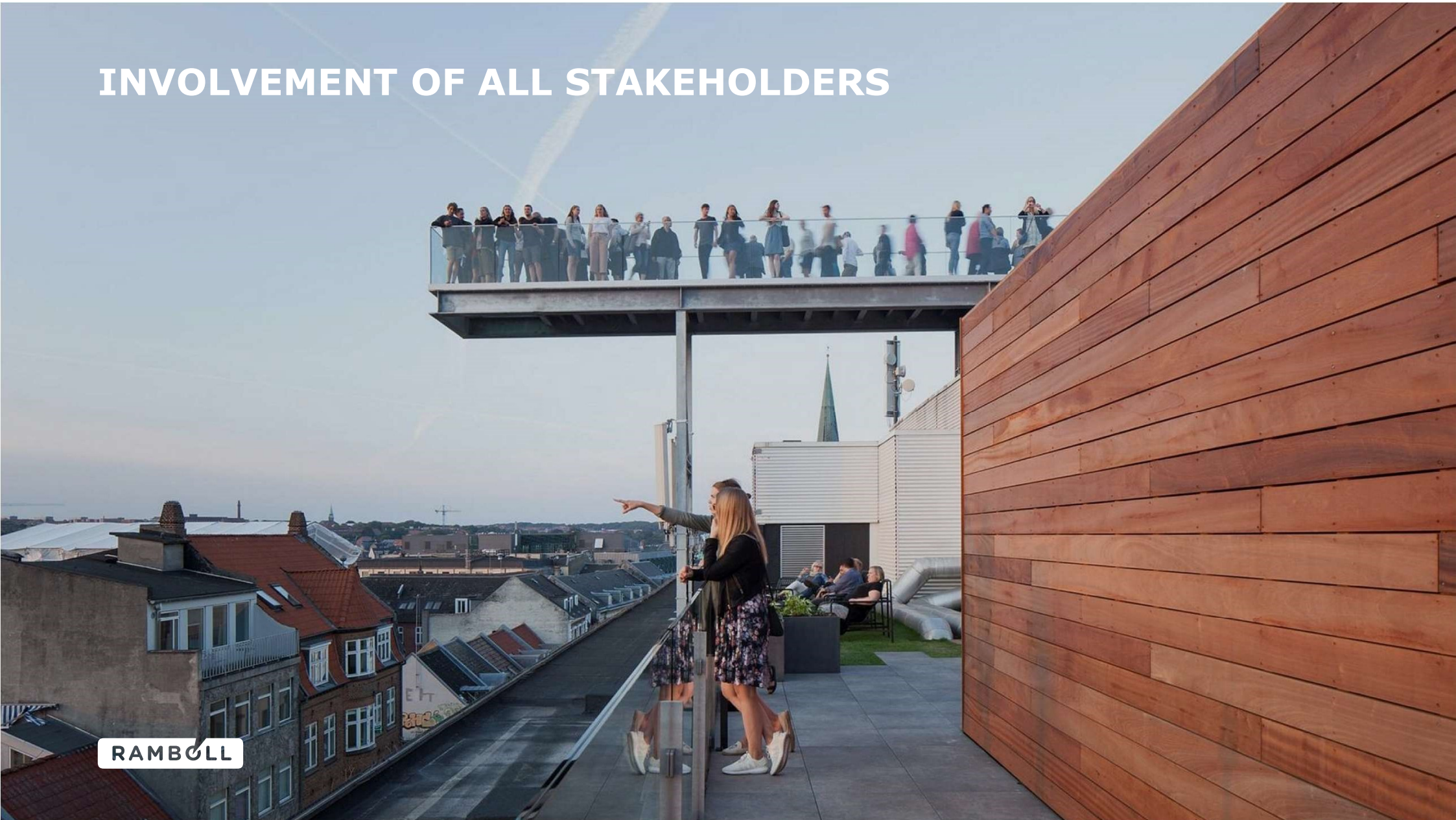


# CLIENT FOCUS





# INVOLVEMENT OF ALL STAKEHOLDERS



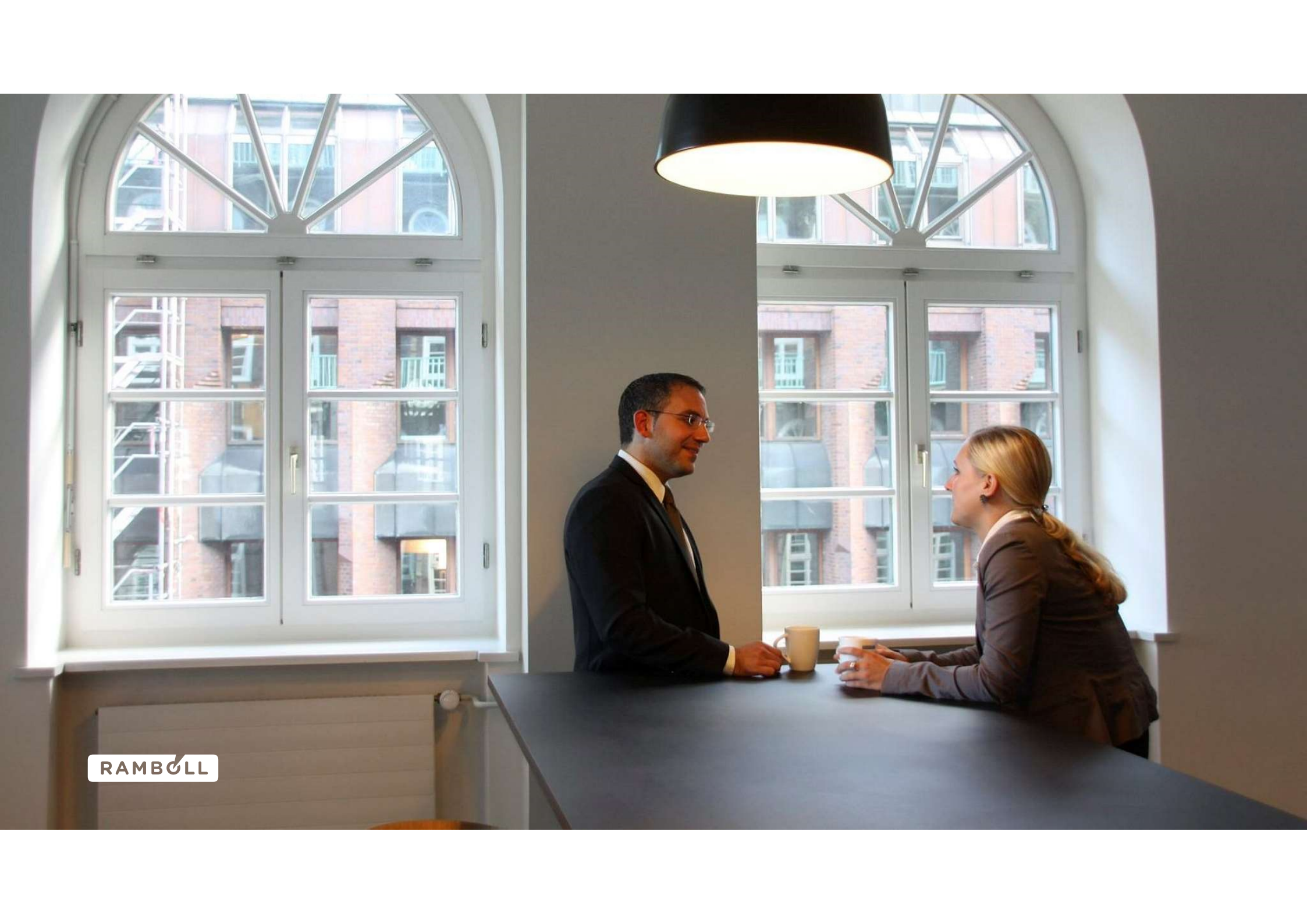
RAMBOLL





RAMBOLL





**Input**

**Output**

**Outcome**



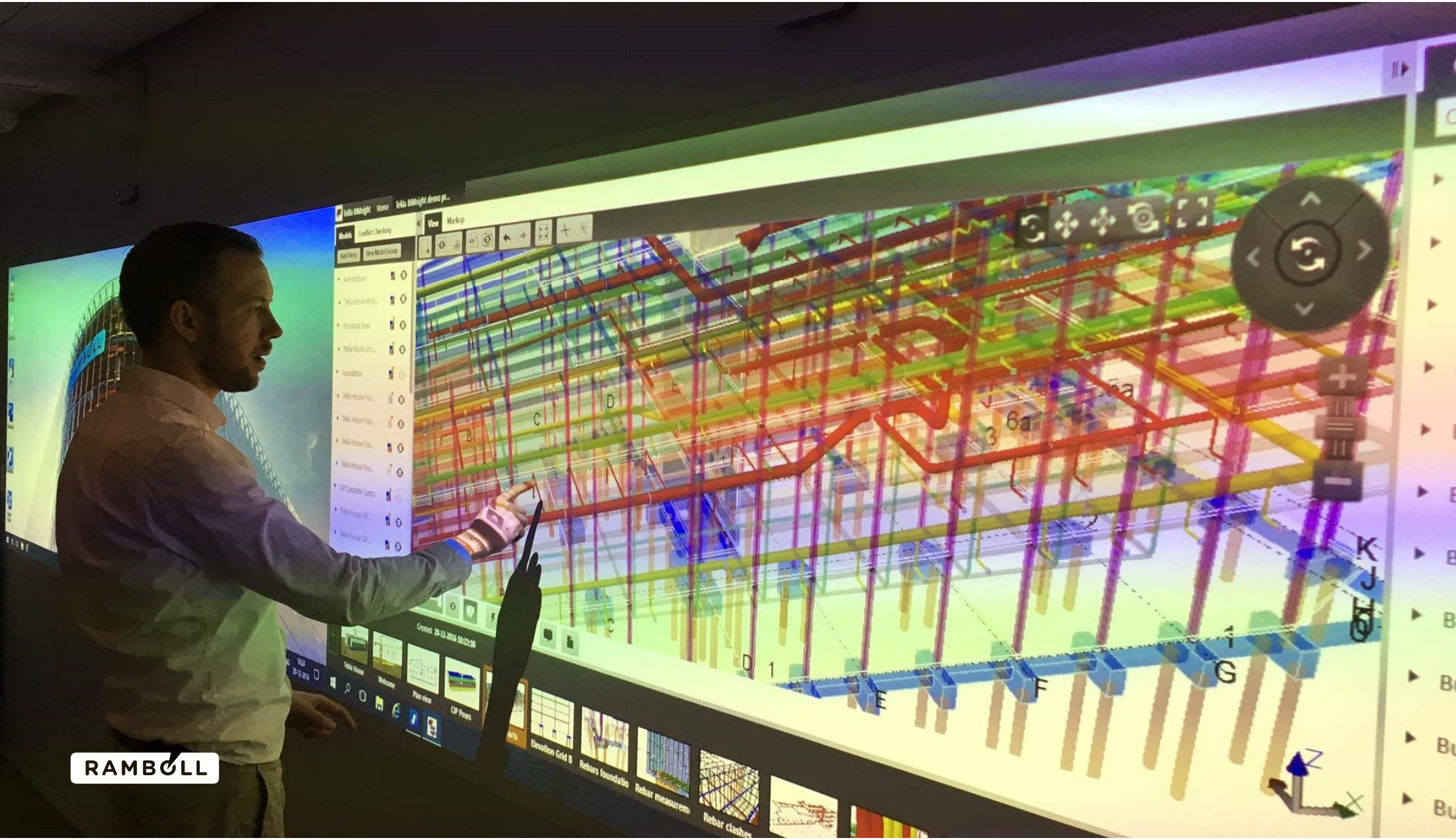
# CUSTOMER EXPERIENCE MANAGEMENT

RAMBOLL



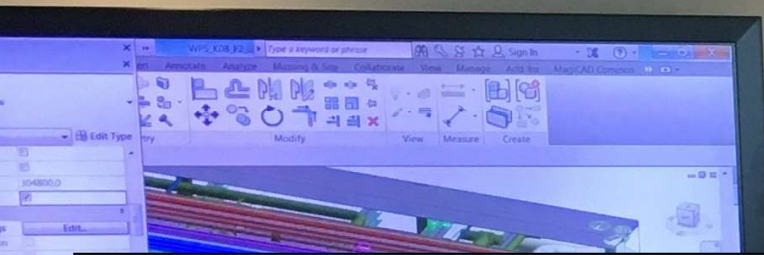






RAMBOLL





RTP2 board - Agile Board

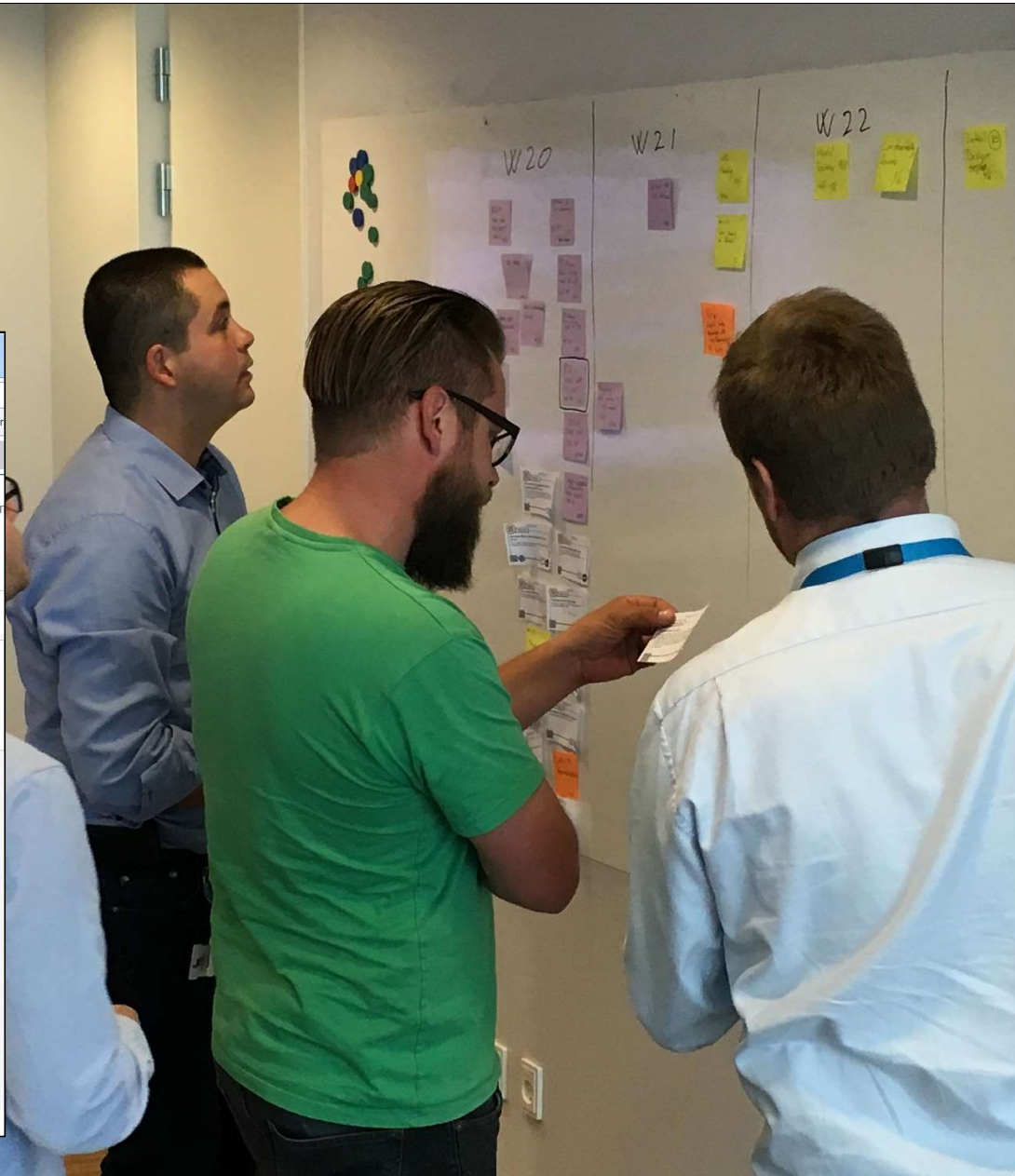
www.projectplanner.dk/secure/RapidBoard.jsps?rapidView=28&selectedIssue=RTP2-35

MBØLL Dashboards Projects Issues Boards Create Search

RTP2 board 0 days remain

QUICK FILTERS: My Issues Only Design Data Only Clarification Only Change Requests Only Hide Actions and Information Hide Closed Issues

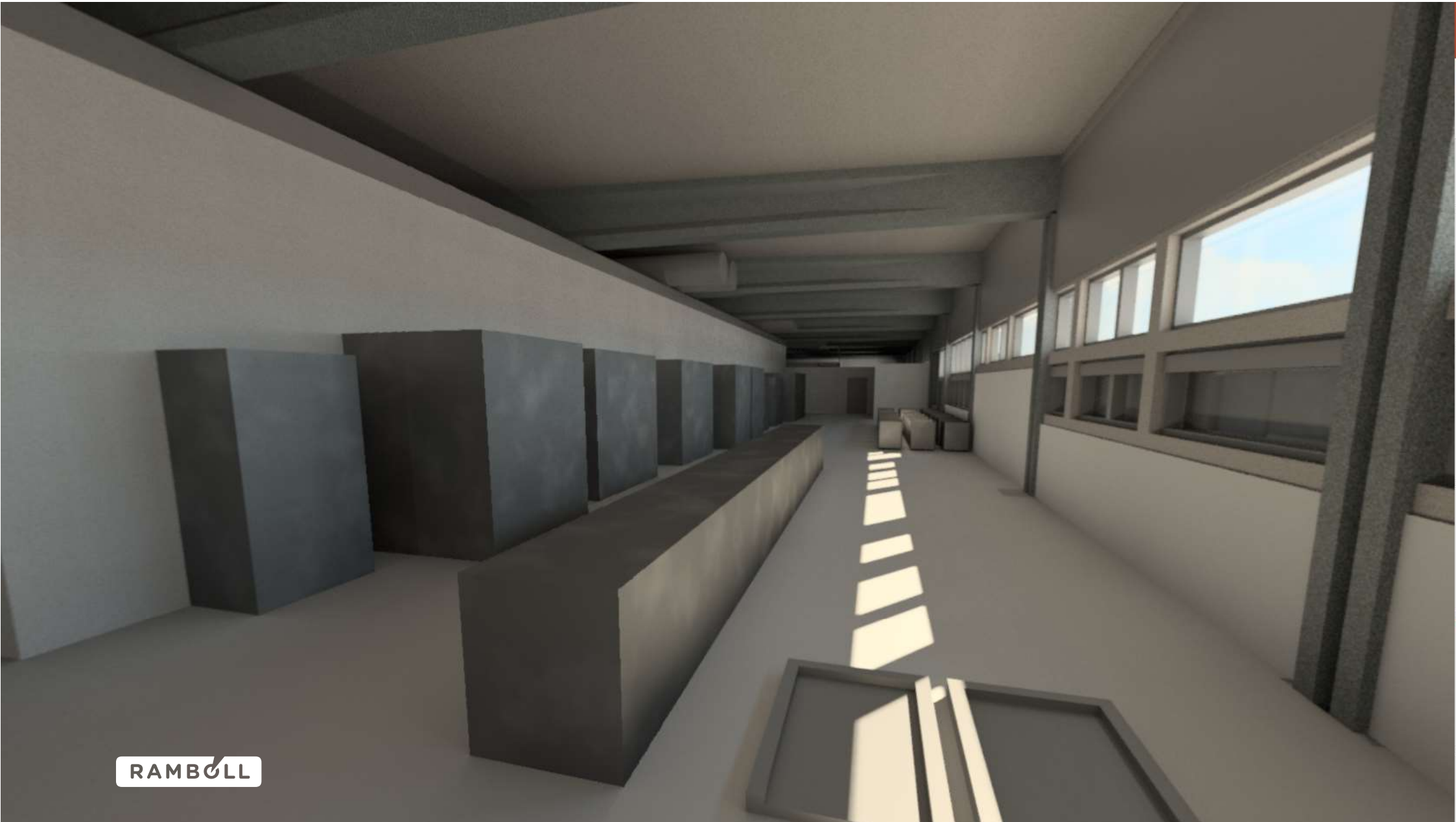
To Do	In Progress	For Client	For Implementation
<p>RTP2-36 Need for cooling beams in executive offices? HVAC None</p>	<p>RTP2-3 Vent requirements for room 435 HVAC None</p>	<p>RTP2-38 Input om Waste Tank ARCH None</p> <p>RTP2-35 Rune skal overveje om det er en god ide til hans project PM None</p>	<p>RTP2-12 Do we need balconies? ARCH None</p>







RAMBOLL



RAMBOLL



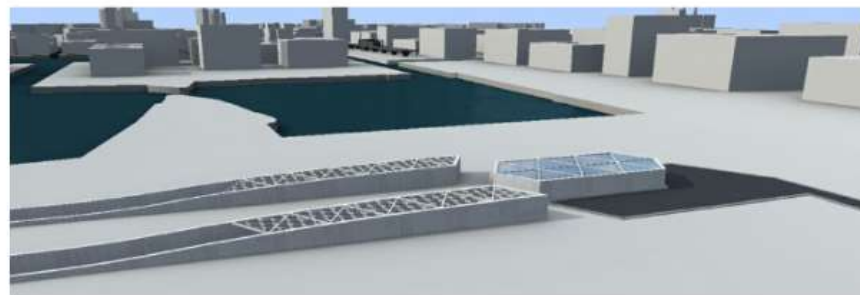


### Nordhavn Metro

Ramboll is planning advisor for the North Harbour Metro extension in Copenhagen, in a joint venture with Arup and COBE as sub-contractors.

GEO 360 VR AR

On Device



### Nordhavn Tunnel

EIA study for a road tunnel from the existing Nordhavnsvej Tunnel to Nordhavn (North Harbour). Project is currently only presented as an overall design model without other content.

AR

On Device



RAMBOLL

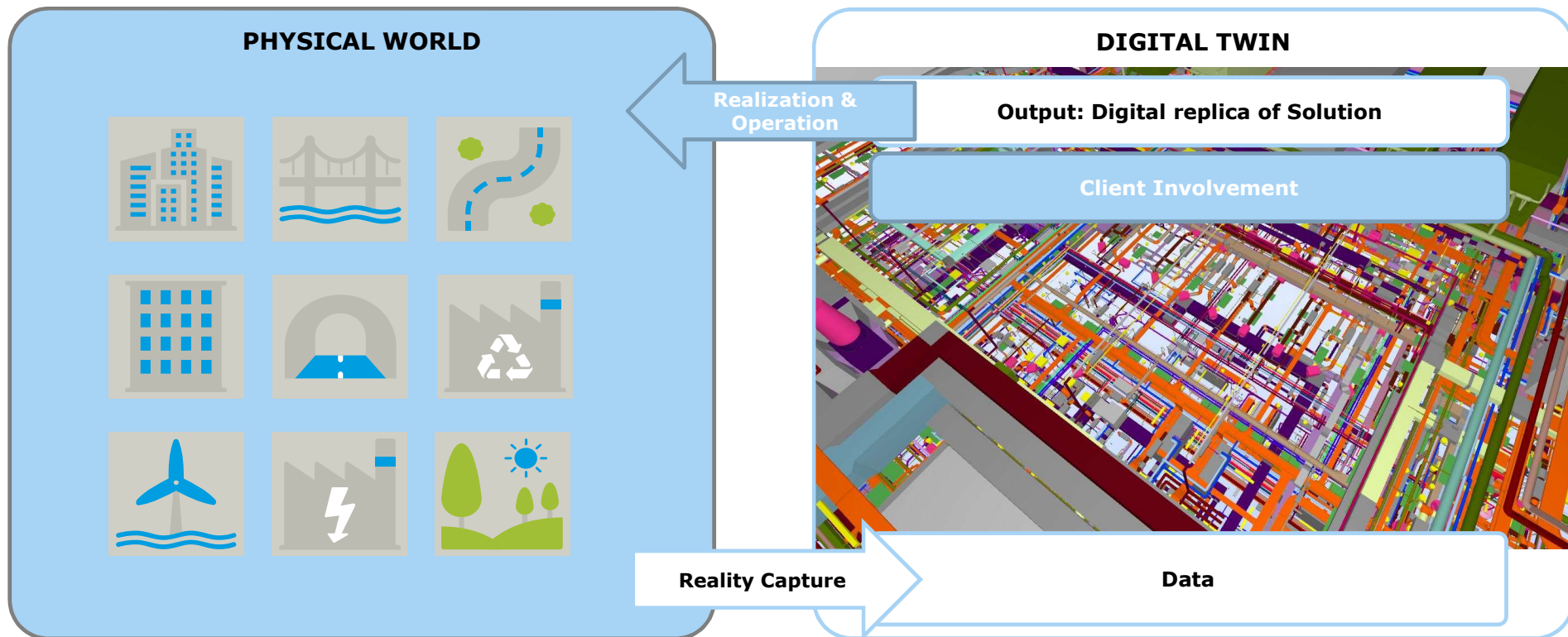


# BRIDGE IN VEJLE



# DIGITAL TWIN

– BRINGING VALUE TO THE CLIENT





# VEJLE HAVNEPLADSEN

VISUALISATION BY



#life together




\*3D View X \*Top View



Dashboard X Inspector X

Page 0

**Areal efter anvendelse**




Color	Area (m²)
Yellow	~25,000
Red	~55,000
Purple	~27,543

**Bebyggelsesprocent**  
338 %

**GrundAreal**  
31'771

**Atage Areal**  
107'543 m²

**Procentfordeling - Anvendelse**



107'543

**Erhverv**  
52 %

**Beboelse**  
23 %

**Retail**  
25 %





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**RAMBOLL**