MBSE for SME

November 2025

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Every Retirement isn't just a goodbye, it's a library closing

What if we could keep the books?

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A supplier asks to change a dimension, what are your next steps?

Imagine knowing instantly what that change affects.

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Losing knowledge isn't just losing data >>

it's losing time, trust, and often, customers

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You are a MBSE user !

» You exhibit systems thinking approach!

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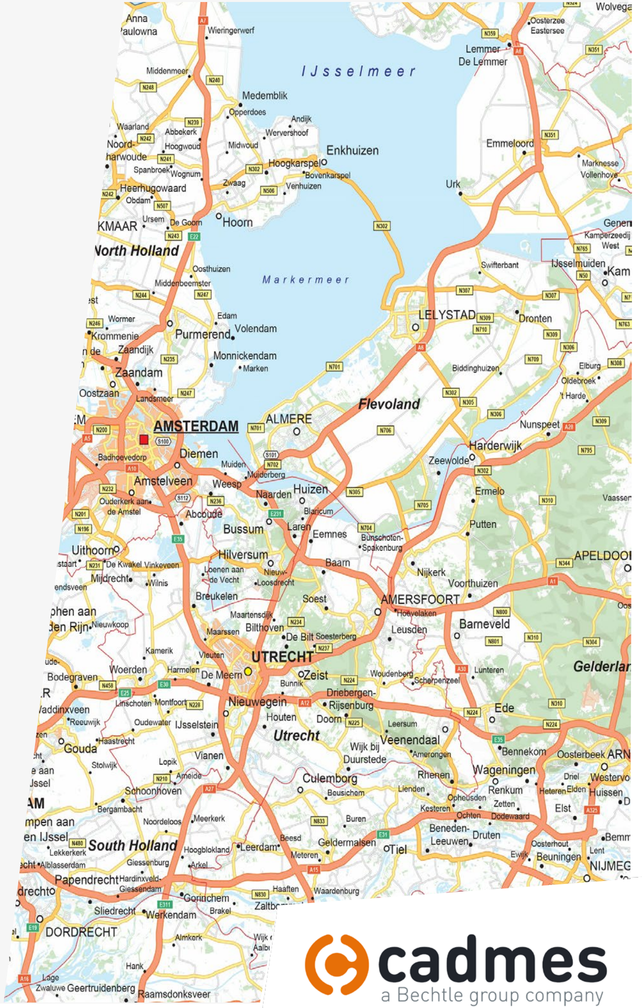
Static vs Dynamic Models

- A physical map is also a model, but it's a static model
- It does not reflect or adapt to new changes
- You can use it, but with the following assumptions:
  - Nothing has changed since the map has been created
  - There are no chance of having roadworks
  - No natural disaster, accidents

Basically, you are working in **SILOS**



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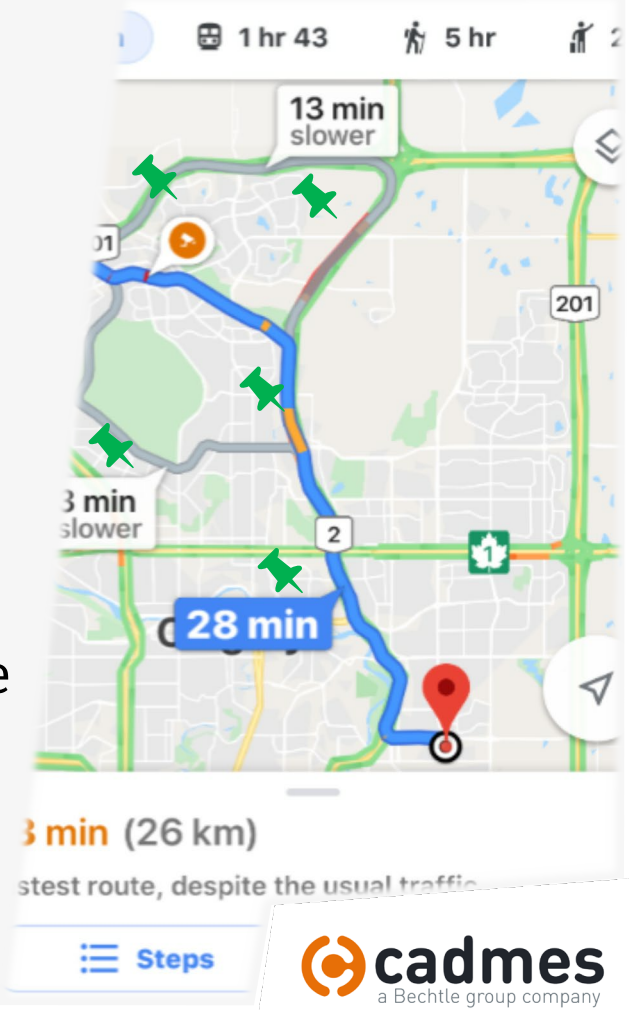
Static vs Dynamic Models

- It reflects and **adapts** to new changes, such as road closures or traffic conditions.
- You can use it **without assuming** nothing has changed since it was last updated.
- It provides **real-time updates** on traffic, roadworks, and accidents.
- The model is continuously adjusted based on live data from *satellites*, *sensors*, and ***user reports***.



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Methodology

What do you want?

Requirements

- Specify the current location
- Able to enter destination
- Give live updates, different route options

What should the system do ?

Functional

- Time estimation
- Route calculation

How should did it do?

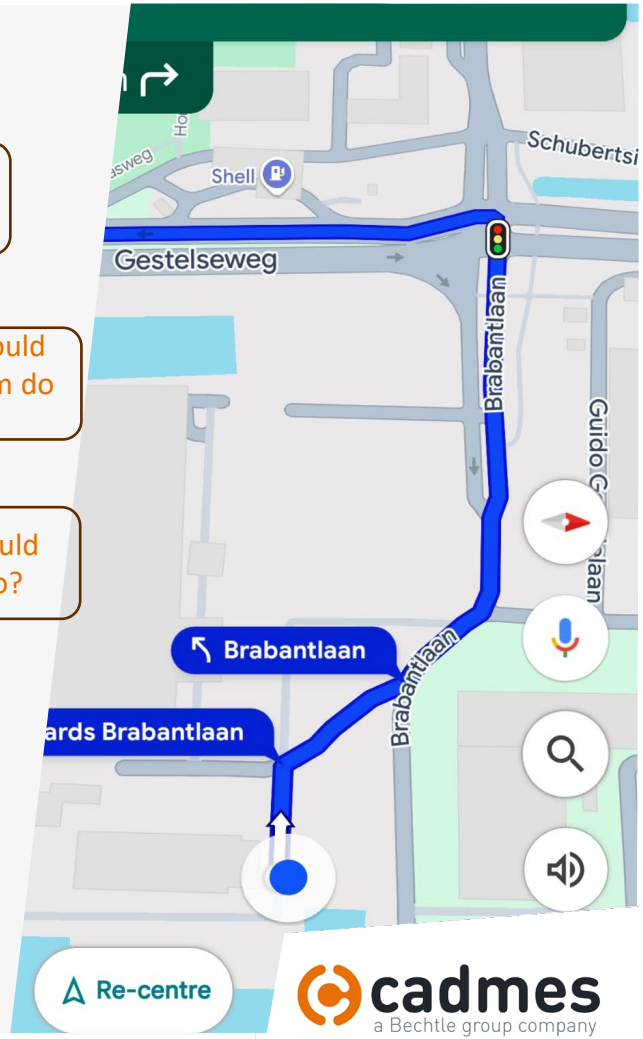
Logical

- Routing algorithms
- Traffic algorithms

Physical

- Display panel
- Microchip,gps modules

What are the actual components?



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Let’s look at a machine

Coffee machine

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What we don't see

- REQUIREMENTS VIEW
- STRUCTURAL VIEW
- BEHAVIOUR VIEW
- PARAMETRIC VIEW

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CHANGE ?

“2D drawings work just fine, why complicate things with 3D?”

“We don’t have time to learn a whole new system.”

“Our customers don’t ask for 3D models, why should we bother?”

“3D modeling will slow down our engineers. We’ll lose productivity”

“We’ve been designing in 2D for 30 years, why change what works”

Losing knowledge isn't just Losing data >>

it's losing time, trust, and often, customers

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Managing knowledge isn't just Managing data >>

it's gaining time, trust, and often, customers

Curious how your company product can benefit?

Let's explore together

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