

# Application of BIM design manuals: A case study

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## BIM for infrastructure vs. BIM for buildings



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## Lean principles in the Case study

- **Value creation** for customer, designer and contractor
- **Waste reduction** by improving the information flow

## Research questions

- RQ1: What is the difference between the model information requirements in the BIM design manual and the tender documents?
- RQ2: What is the difference between the model information requirements in the tender documents and the BIM model?

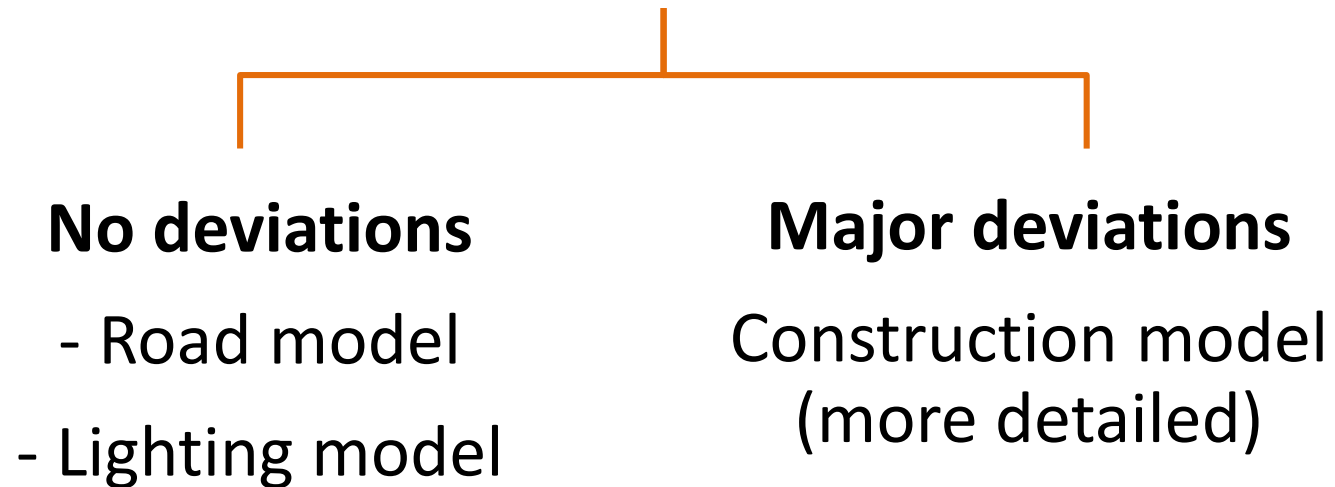
## Qualitative research design

1. Literature study
2. Document study
3. Case study

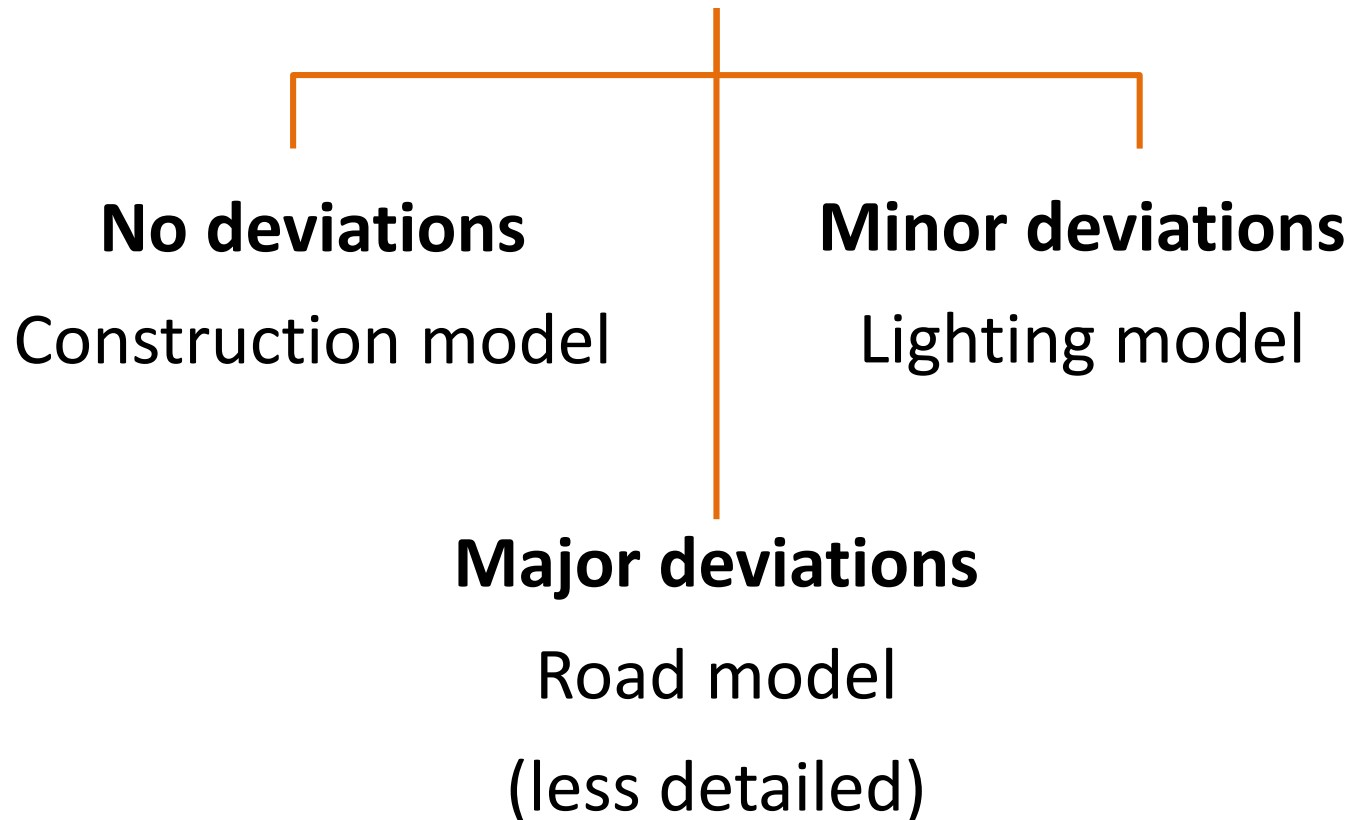
### Limitations

- One design-bid-build project in Norway
- Concept development and detailed designing phase
- Three BIM discipline models

## Difference between BIM design manual and tender documents (RQ1)



## Difference between tender documents and BIM (RQ2)



## Conclusion 1

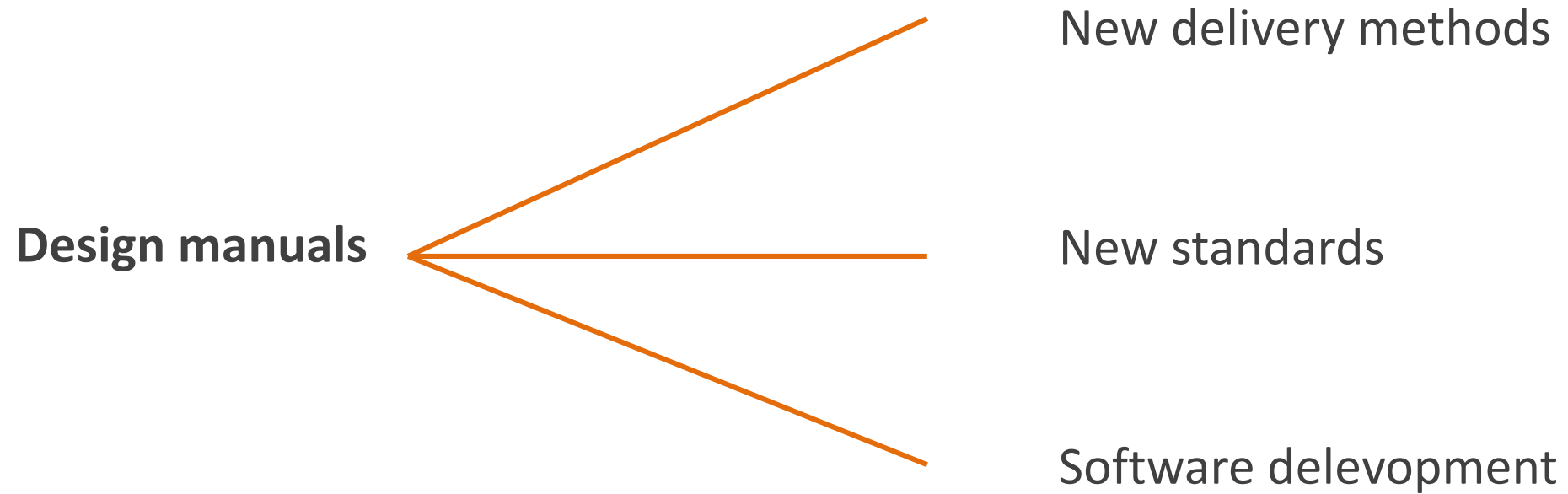
More deviations between tender documents and BIM than between design manual and tender documents



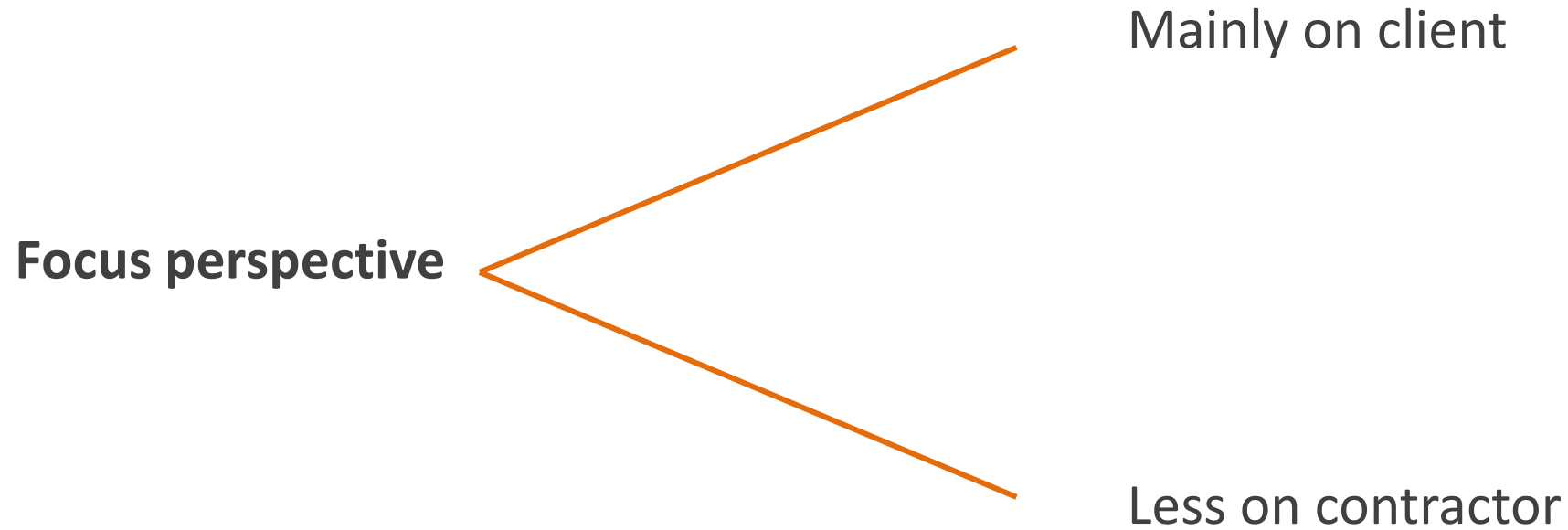
Legal requirements as both an obstacle and an opportunity



## Conclusion 2



## Conclusion 3



## Further work

Investigate the contractor's perspective in BIM based AEC projects

# Thank you for your attention!

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