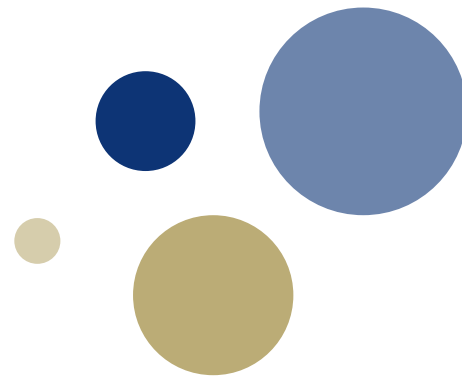




NTNU

Kunnskap for en bedre verden



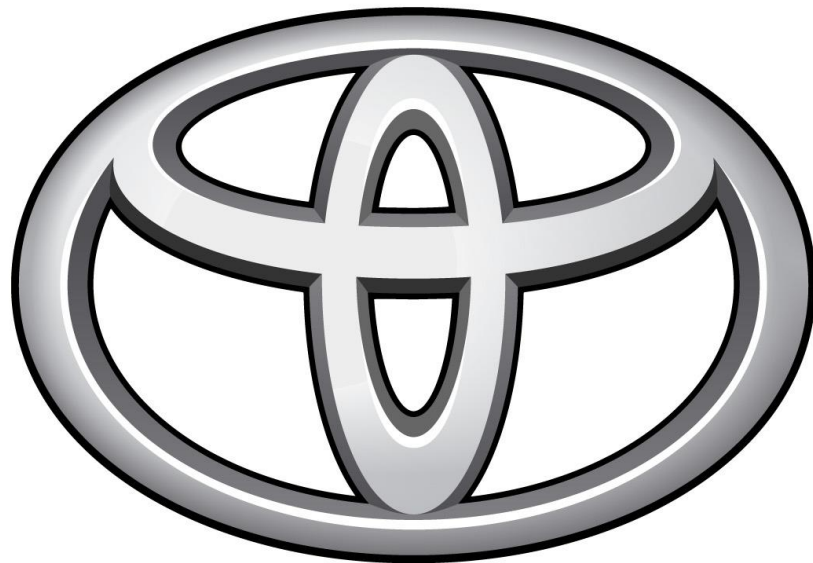
# Lean Construction

Hva er det og hva er state-of-the-art

*Frode Drevland*

*Førsteamanuensis*

*Institutt for bygg- og miljøteknikk*



**TOYOTA**

# Lean construction



**Hva er  
det da?**



# Lean

En ledelsesfilosofi  
definert av **idealet**  
den søker,  
**prinsippene** man  
følger i søken etter  
idealet, og metodene  
man bruker for å  
implementere  
**prinsippene**

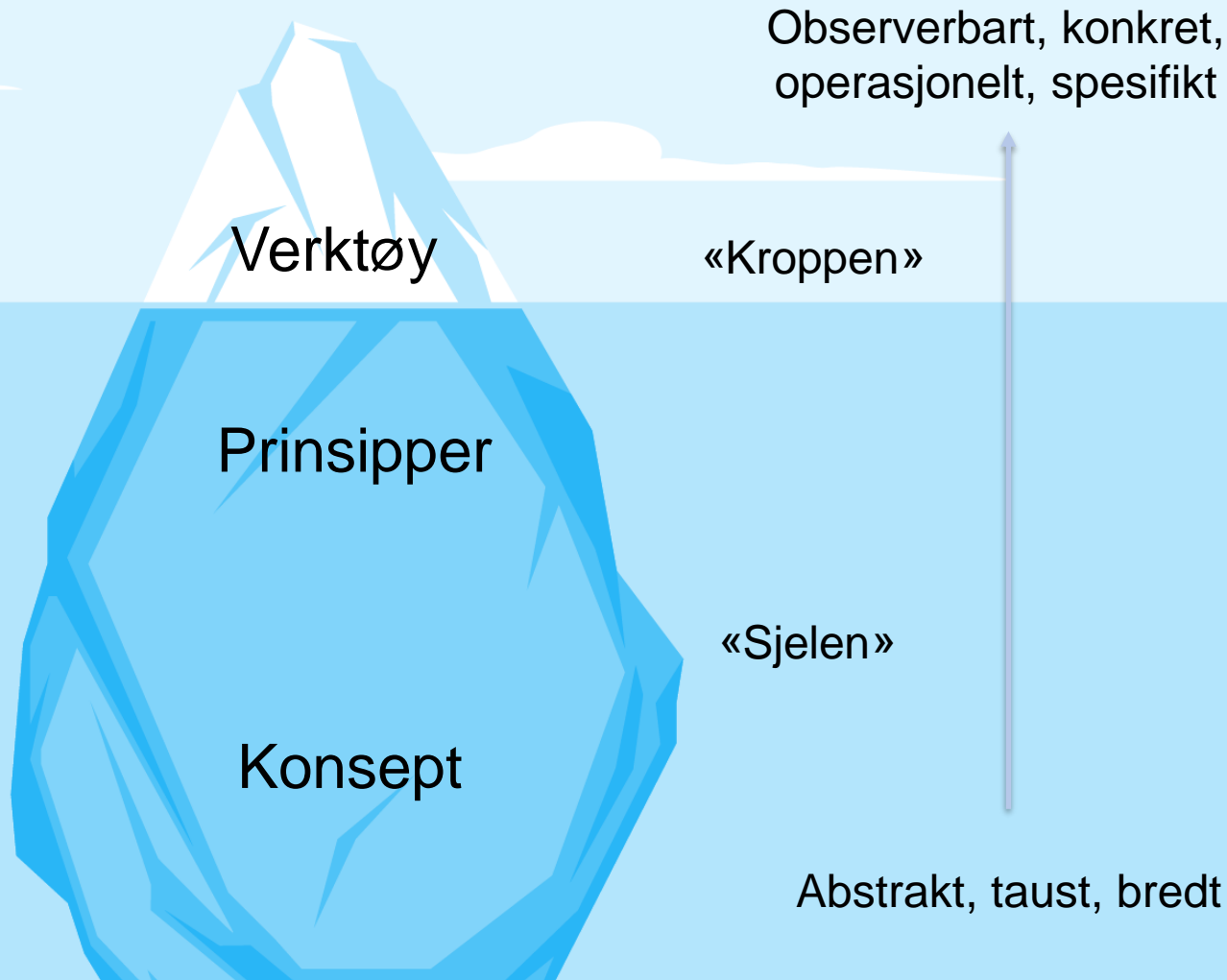
*Glenn Ballard*

# Idealet i lean

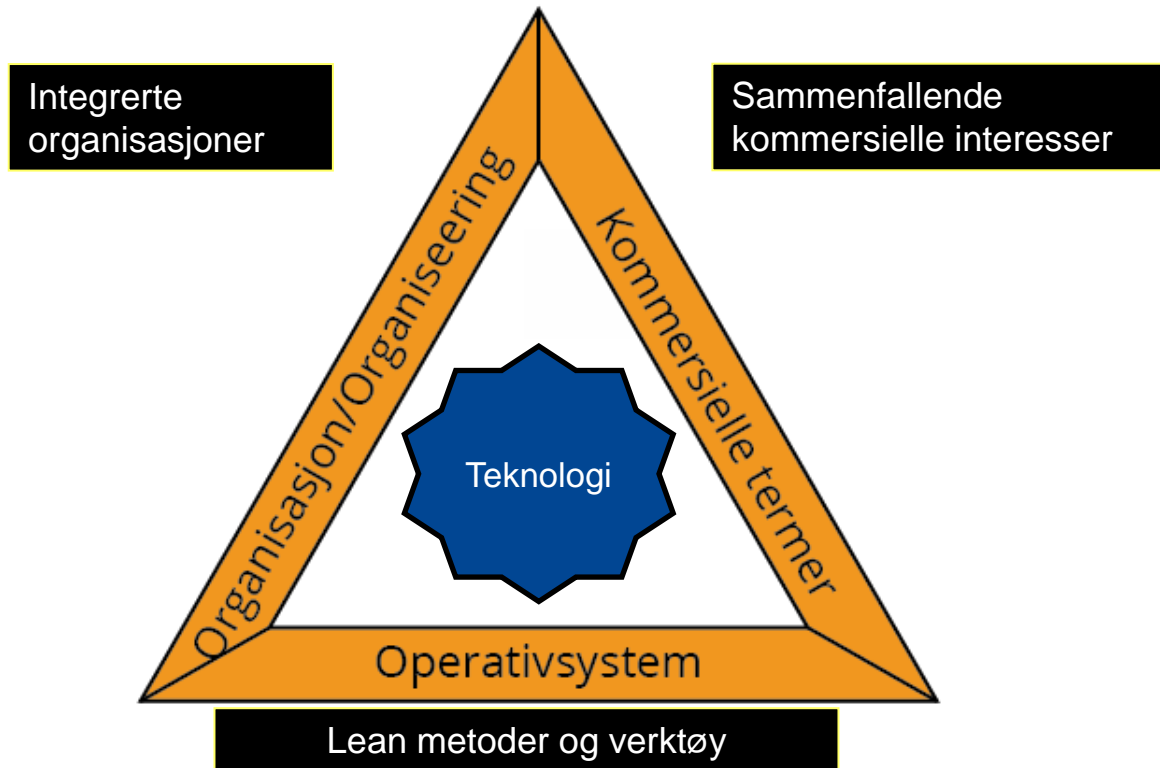
Gi kundene, interne og eksterne, det de trenger for å oppnå sine formål – uten sløsing



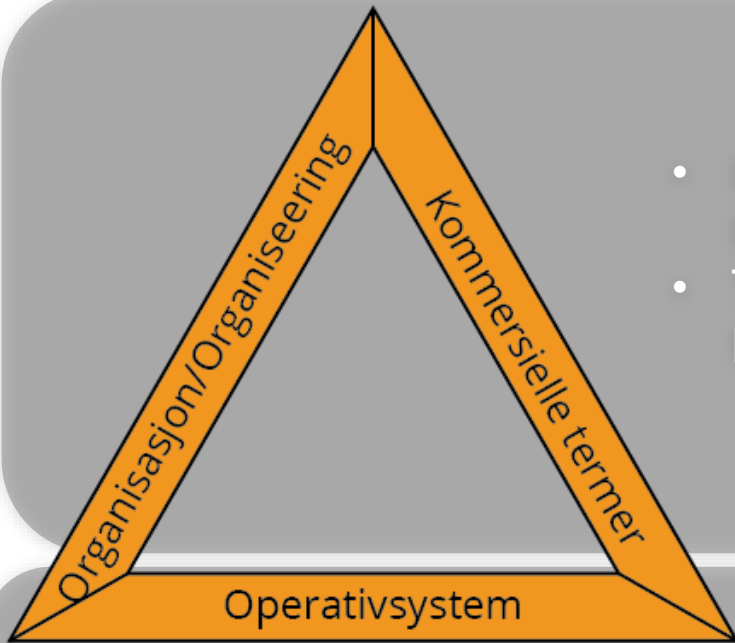
# Lean isfjellet



# The Lean Construction Institute Triangle for Project Delivery







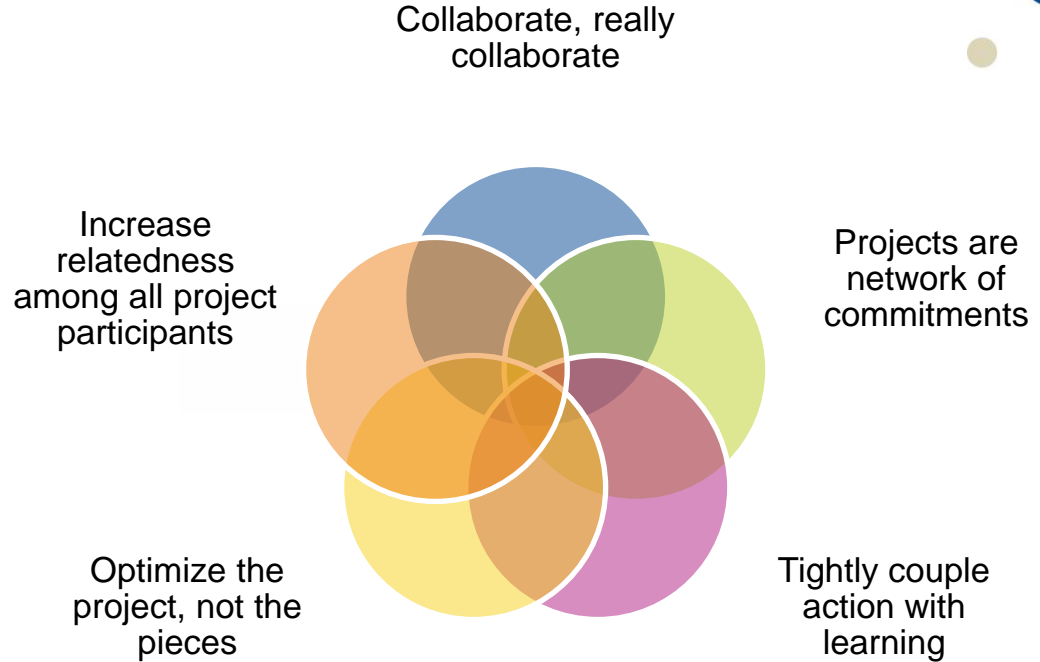
- IPD – Integrated Project Delivery / IPL – Integreert prosjektleveranse
- TVD – Target Value Delivery / MVL - Målverdileveranse

- Last Planner System OG Taktplanlegging
- Choosing by Advantages
- Kontinuerlig forbedring
- Visuell styring
- ++++++

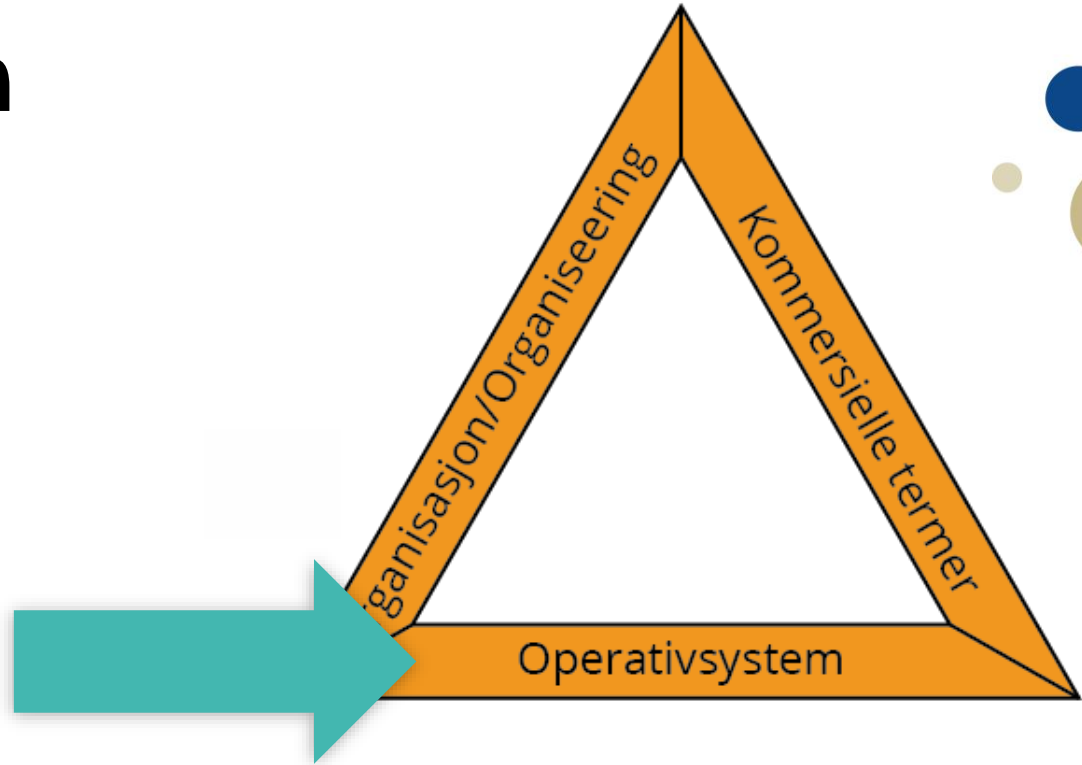
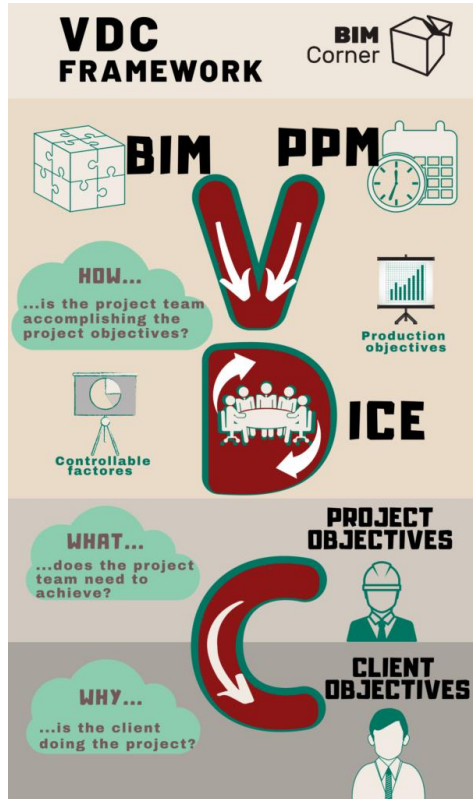
# Kultur og kompetanse



# 5 big ideas of Lean Construction



# VDC vs Lean





*She End*