

# Minisymposium System Engineering in de Infra en Bouw

ZINVOL OF ONZIN

Stadsontwikkeling Rotterdam

J.G. de Gijt namens R.R. Zandbergen

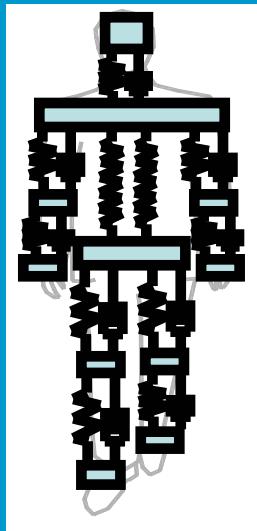
19 januari 2012

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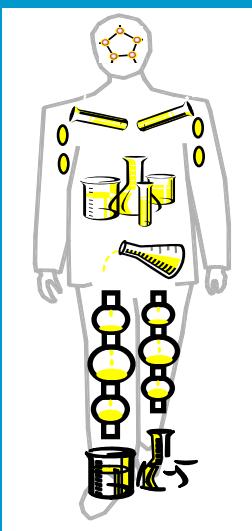
# Welkom bij Gemeentewerken /Stadsontwikkeling

- Rotterdam druk bezig met BIM en SE
- Wordt nu regelmatig toegepast
- Integraal ontwerpen
- Risico analyse

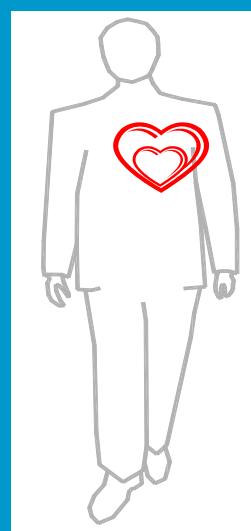
# Mensenwerk



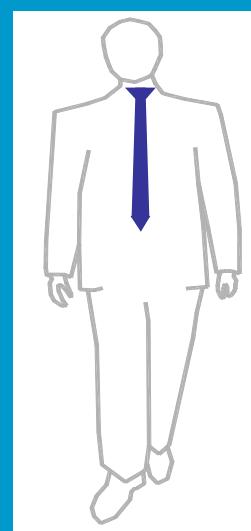
**Mechanical  
man**



**Chemical  
man**



**Emotional  
man**



**The lawyer**

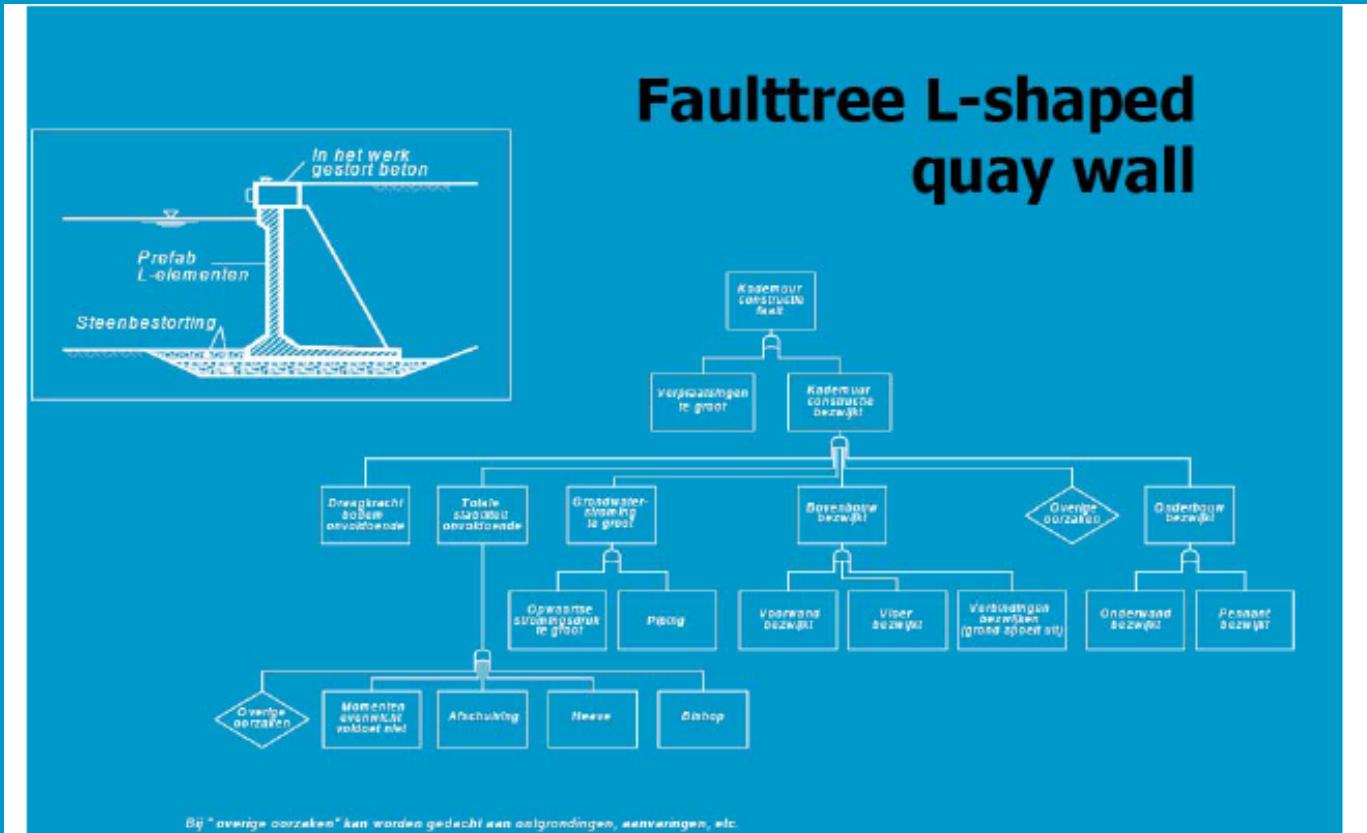
- structural engineer
- designer
- specialist
- project engineer
- lawyer
- financial engineer

In the past one person had all the expertise. Presently for every discipline a specialist will be employed.

Threads:  
Lack of overview / Increased insecurity  
/Lack of communication.

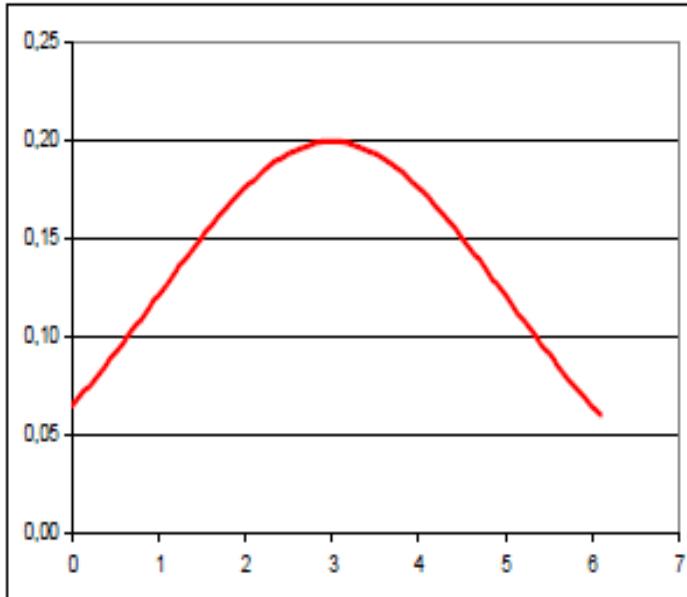
Team work required & A means of communication

# FOUTENBOOM

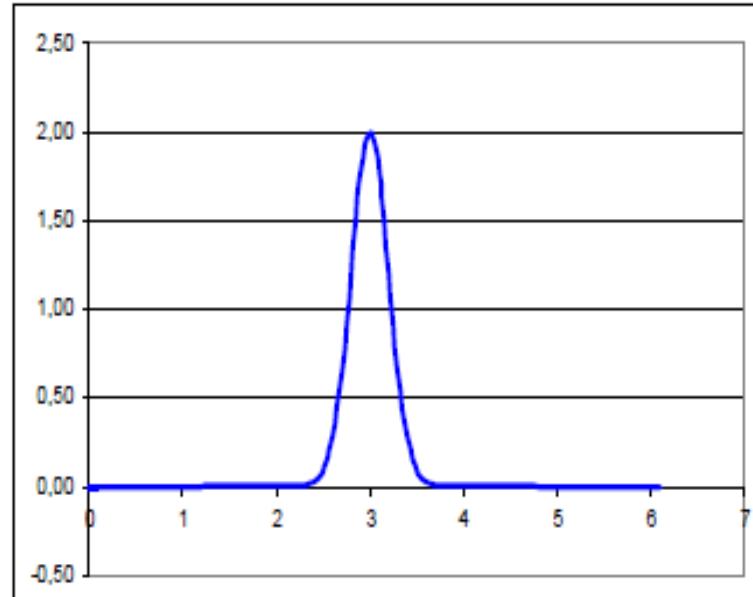


Figuur2:Foutenboom L-vormige kademuur

# Maak je druk om de goede zaken!!



Figuur 3: Gauss kromme menselijk gedrag



Figuur 4: Gauss kromme materiaal gedrag