

EFFECTS OF INTEGRATED PROJECT DELIVERY (IPD) IN NORWAY

A CASE STUDY OF THE TØNSBERG PROJECT

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Background

Table 1 – Problems with traditional delivery models (Matthews & Howell, 2005)

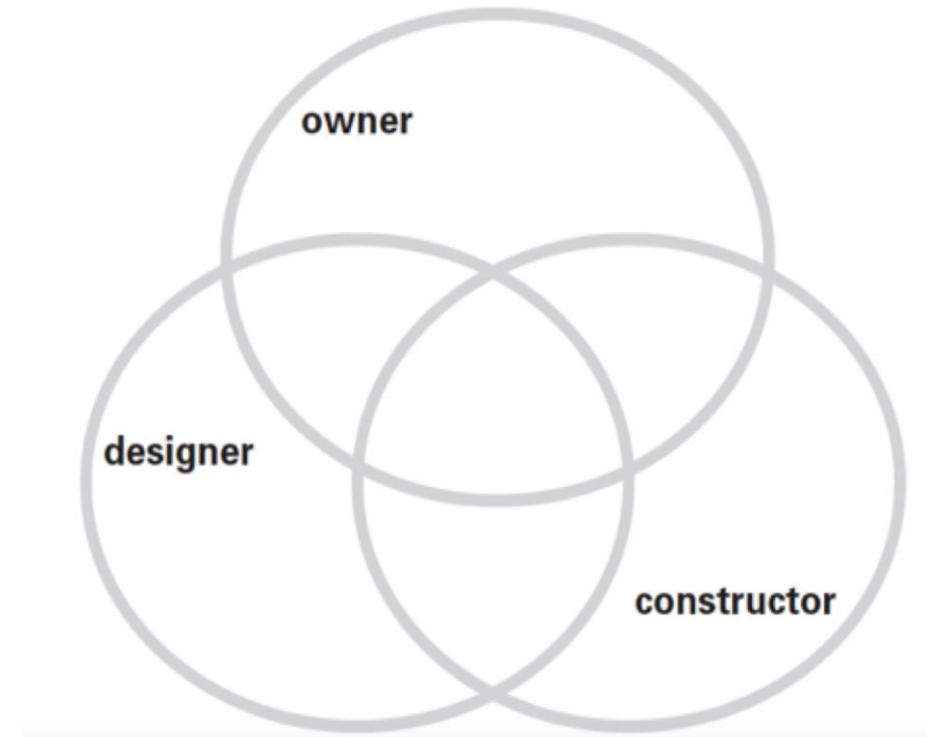
Problem	Result of problem	Solution using IPD
Good ideas are held back	Loss of time and opportunity for innovation later in the process.	Shared risk and reward Increased innovation
Contracting limits cooperation and innovation	Minimal (if any) innovation and collaboration across stakeholders.	Multiparty contracts Encourage collaboration and innovation
Inability to coordinate	Unexpected clashes between the stakeholders	Holistic coordination
Pressure for local optimisation	Focus on companies' own interests, while neglecting the project's interests.	Commonly defined goals Global optimisation

Research methods – qualitative

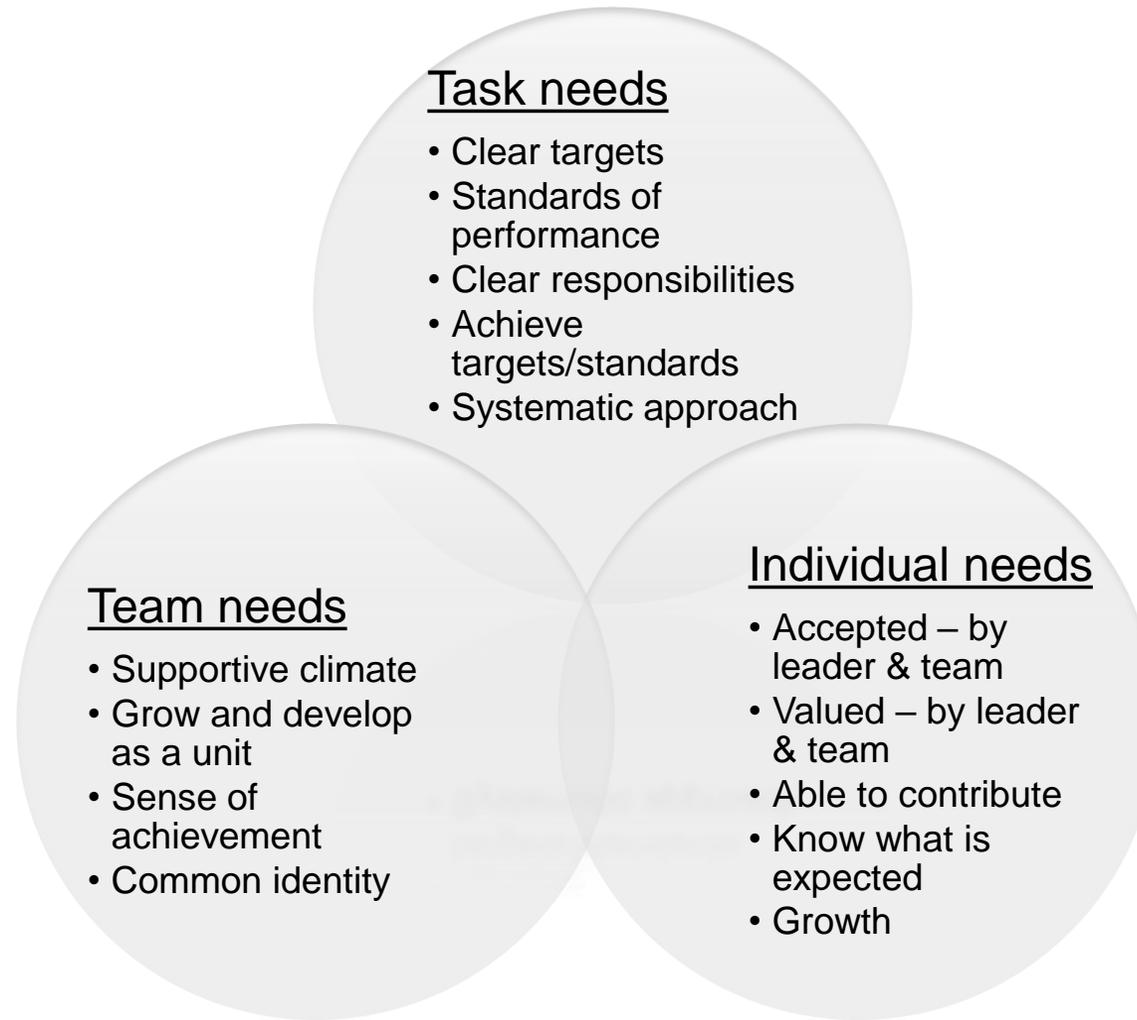
- Literature review preceded the case study
- Single case study: The Tønsberg Project
 - Document study
 - 3 in-depth semi structured pilot interviews
- Triangulation
- Master thesis by Maren H. Skoglund and Sarah H. F. Simonsen

The Tønsberg Project – ongoing hospital project in Norway

	Psychiatric building	Somatic building
Area	11 406 m ²	33 062 m ²
Start preliminary project	June 2016	
Start of construction	March 2017	April 2018
Planned completion	March 2019	May 2021
Total cost	335 million USD (2 730 million NOK)	



Theoretical framework: Task-, team- and individual needs in a project



Findings within IPD elements

Table 2 – IPD elements in various literature, adapted from Aslesen et al. (2018)

IPD elements	(AIA 2007)	(Kenig et al. 2010)	(Ghassemi and Becerik-Gerber 2011)	(Lee et al. 2014)	(Pishdad-Bozorgi and Beliveau 2016)
Contract					
Multiparty contract		X	X	X	X
Shared risk and reward	X	X	X	X	X
Early involvement of key participants	X	X	X	X	X
Intensified planning	X	X			X
Collaborative decision making	X	X	X	X	X
Collaborative goal definition	X	X	X		X
Liability waivers		X	X	X	X
Financial transparency				X	X
Technology and processes					
Lean				X	X
BIM				X	X
Integrated information	X			X	X
Culture					
Mutual respect and trust	X	X		X	X
Willingness to collaborate				X	
Open communication	X	X		X	X
Co-location					X

Table 3 – Summary of task, team and individual needs in the Tønsberg project

	Contract								Technology and processes			Culture			
Fulfilled needs	Multiparty contract	Shared risk and reward	Early involvement of key participants	Intensified planning	Collaborative decision making	Collaborative goal definition	Liability waivers	Financial transparency	Lean	BIM	Integrated information	Mutual trust and respect	Willingness to collaborate	Open communication	Co-location
Team	X	X		X	X		X	X				X	X		X
Individual				X	X		X		X			X		X	
Task				X				X	X	X					X

Conclusions

- New delivery model, new organisation and new elements gave challenges in production
- Easy to fall back on the traditional ways of doing things
- Lack of communication regarding IPD between upper and lower levels of the involved organisations
- Great potential with maturing, learning and practice – everyone wanted do another IPD project



Thank you for your attention!

