

Integrated methodology for design management

Learning across trades

Integrated Methodology For Design Management – a Research Project

- 01.10.13 – 01.10.17
- Partners:
 - The Norwegian University of Science and Technology
 - Department of Architectural Design and Management
 - Department of Civil and Transport Engineering
 - Social Research
 - University of Agder
 - Department of Working Life and Innovation
 - Veidekke
 - Cowi
 - Nymo
 - Ulstein International



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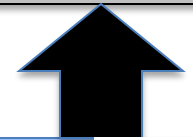
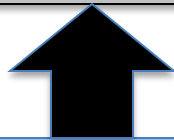
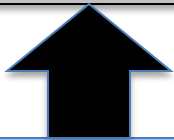
COWI





Goal: Integrated Methodology for design management

Theoretical understanding of the design management process



1: Designing as a learning process



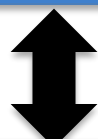
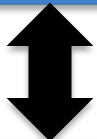
2: Knowledge transfer in the design process



3: Process understanding. Organization of planning and decision systems.



4: Mutual assessments



Theoretical foundation



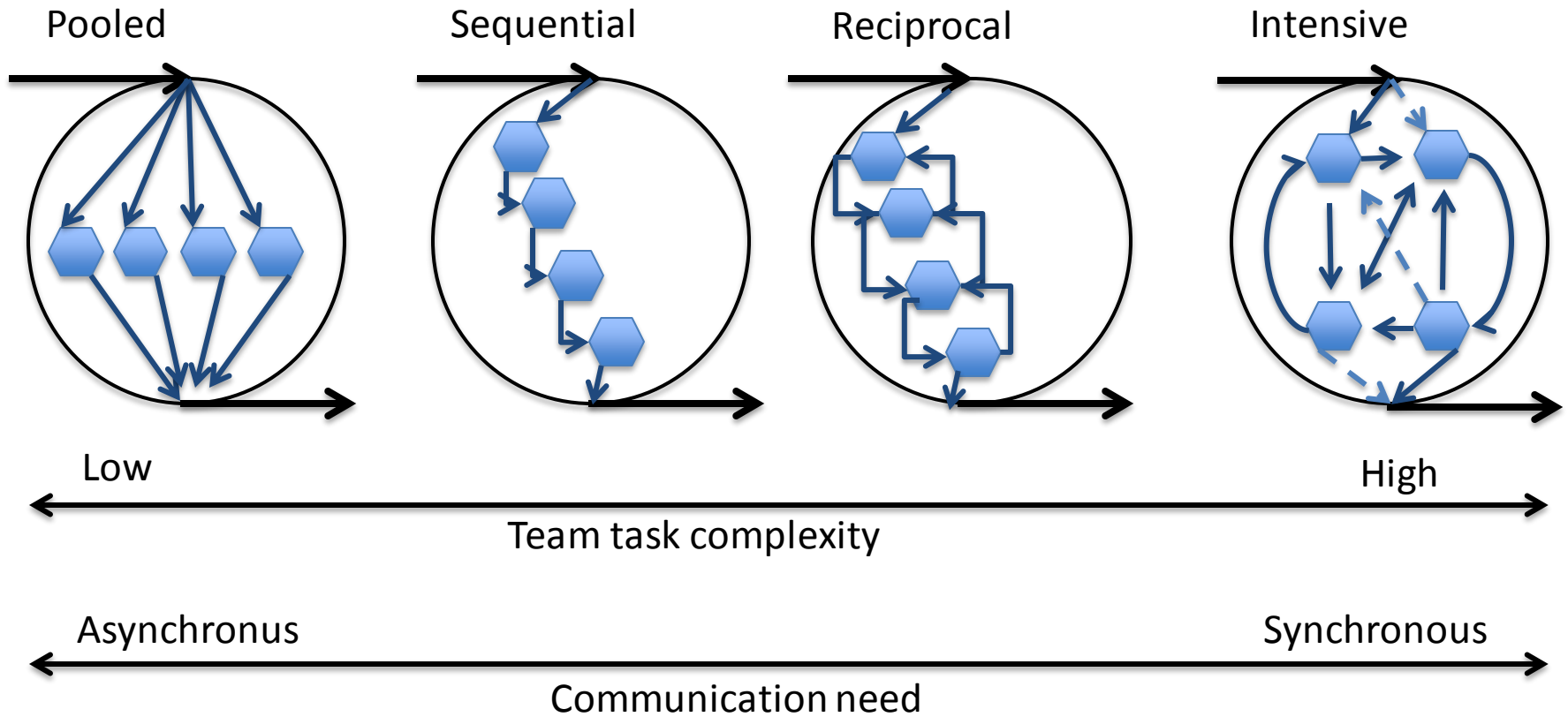
Innovation ←

→ empiric



Learning Across Trades

- Design Management in different trades
- Complexity of Design management

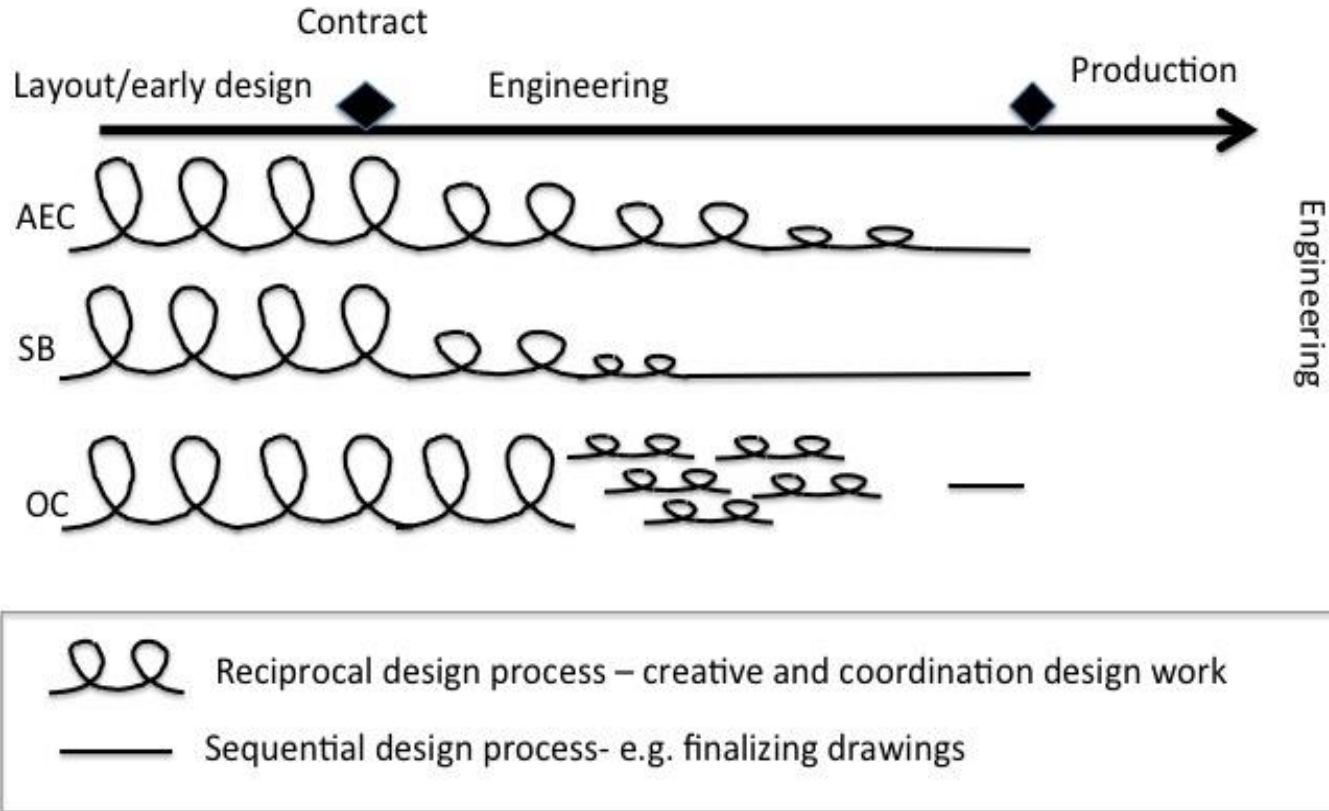


Interdependence	Pooled	Sequential	Reciprocal	Intensive
Coordination	Standardization	Plan	Mutal adjustment	Mutal adjustment/ negotiation
Design management		Last Planner	VDC	VDC

Key characteristics of the trades

	AEC	OFFSHORE	SHIP-BUILDING
Project-based production	Yes	Yes	Yes
Unique products	Yes	Yes	Yes
Use of Sub contractors	Yes	Yes	Yes
Own design team	No	Mostly	Mostly
Common production site	No	Yes	Yes
Prefabrication	Some	Yes	Yes
Contracts	DB	EPC	EPC
Competition	Local	Global	Global
Professional Clients	Mostly	Yes	Yes

The design process in the different trades



Norwegian chapters



Improving productivity, efficiency and effectiveness

- Performance measurement
- BIM
- Big data



Innovation through socio-technical approaches

- Cross-disciplinary planning
- Ethical guidelines, regulations



Realising the value of the building through use

- Value for owner and end-users
- Planning focus on the buildings lifetime