



MEERC

- WP Industrial econ and
technology management

Associate professor Magnus Hellström

Associate professor Gøril Hannås

UIA School of Business & Law

Global construction industry



Construction matters for the world economy ... but has a long record of poor productivity

Construction-related spending
accounts for

13% of the world's GDP

...but the sector's annual productivity
growth has only increased

1% over the past 20 years

\$1.6 trillion of additional value added could be
created through higher productivity,
meeting half the world's infrastructure need

MCKINSEY GLOBAL INSTITUTE

REINVENTING CONSTRUCTION:
A ROUTE TO HIGHER
PRODUCTIVITY

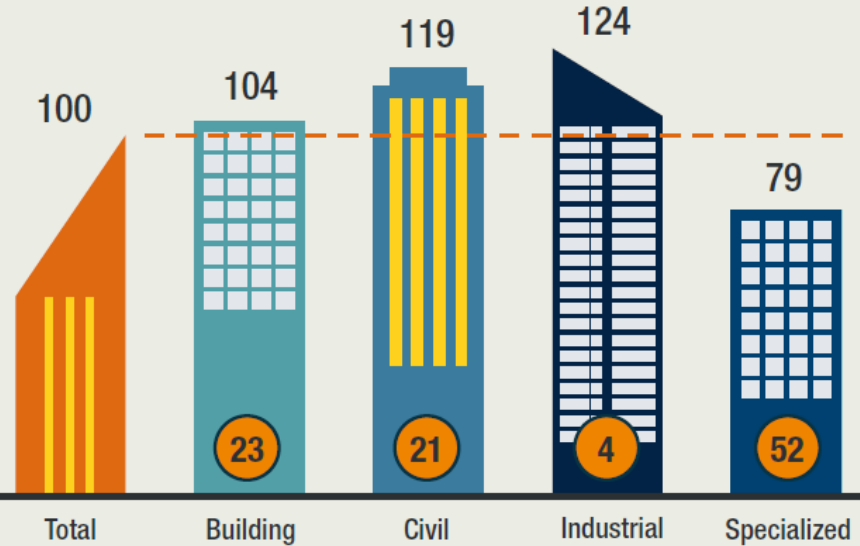
FEBRUARY 2017

Construction is a sector of two halves

Fragmented specialized trades drag down the productivity of the sector as a whole

Construction productivity by subsector
 Value added per employee, indexed total sector=100, 2013

● % of construction value added



**Action in seven areas
 can boost sector
 productivity by
 50–60%**

- Reshape regulation
- Rewire contracts ←
- Rethink design
- Improve procurement and supply chain ←
- Improve onsite execution
- Infuse technology and innovation ←
- Reskill workers

5–10X productivity boost

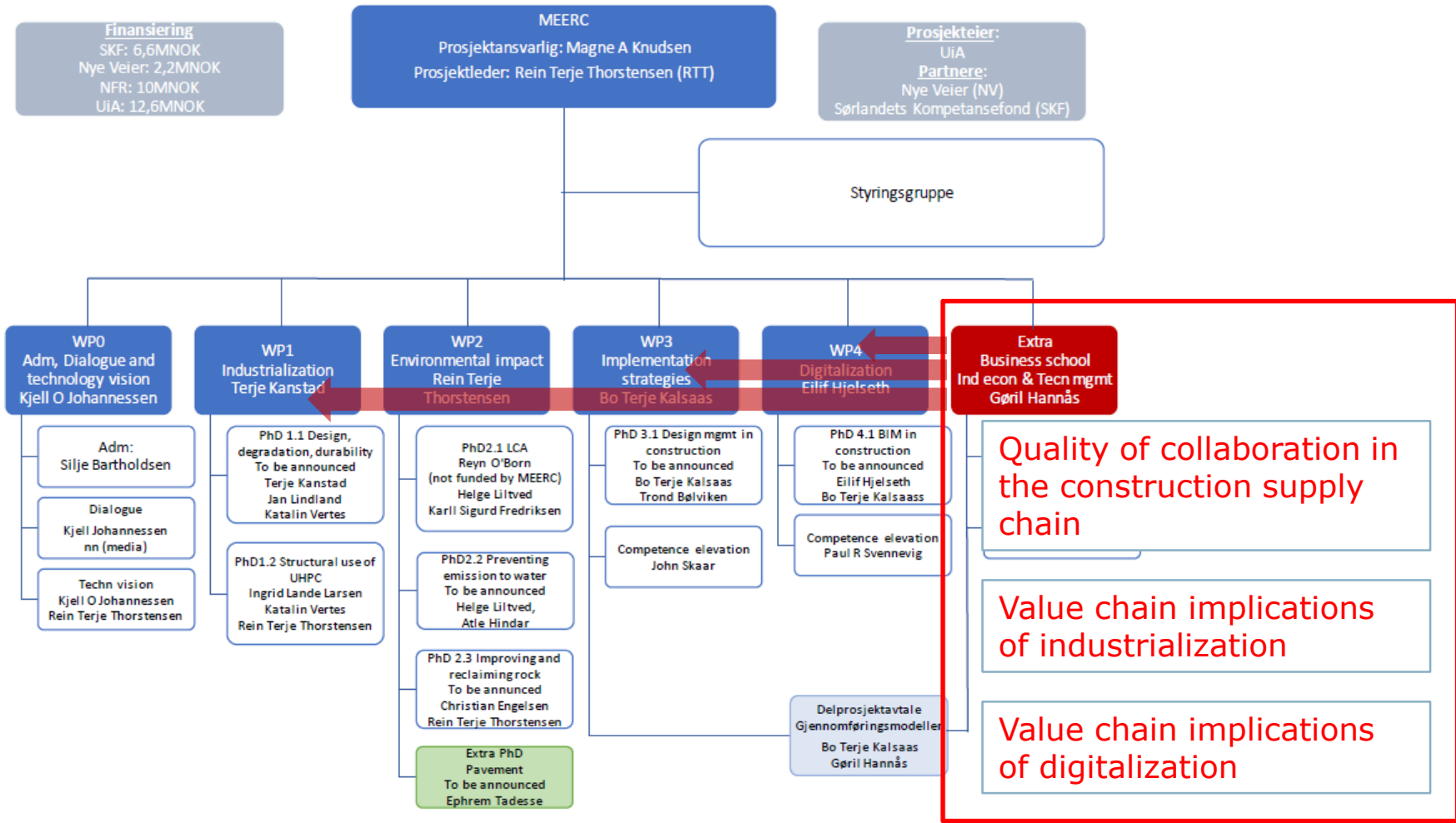
possible for some parts of the industry by moving to a manufacturing-style production system



MCKINSEY GLOBAL INSTITUTE

REINVENTING CONSTRUCTION: A ROUTE TO HIGHER PRODUCTIVITY

FEBRUARY 2017



Theoretical framework

