



Challenges and opportunities for wood construction industry in North America

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**Murray Grove, 29.8m
(8+1) 2008
London**



Forte, 32.2m (9+1) Melbourne 2012



Wood Innovation Design Center, 7 ½ floors Prince George 2012



Photo: FII

**Bergen, 14 floors, 56m,
Norway 2015**



Brock Commons, Vancouver, 17+1, 2016



SPEED!

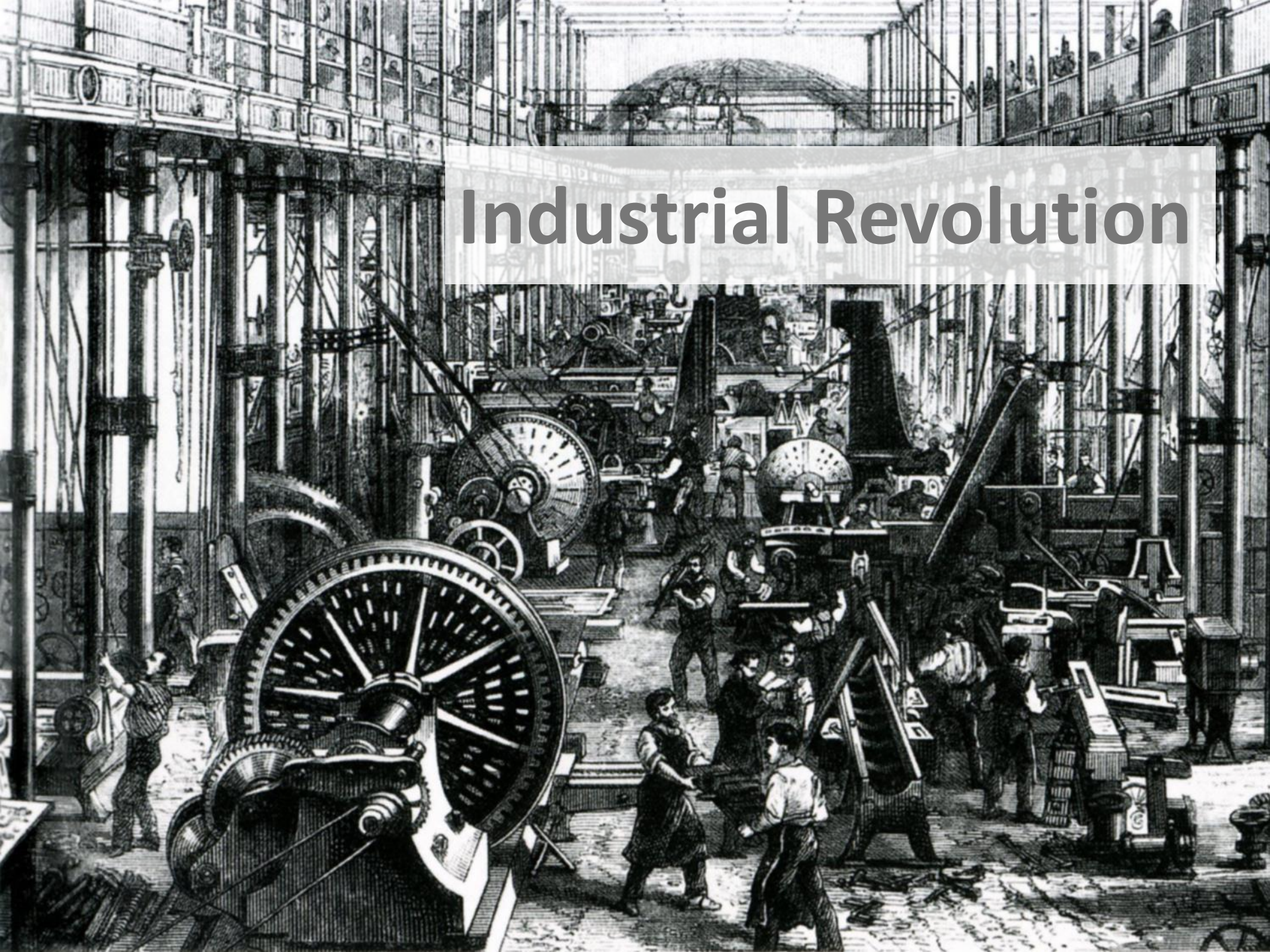
Efficiency

Viability

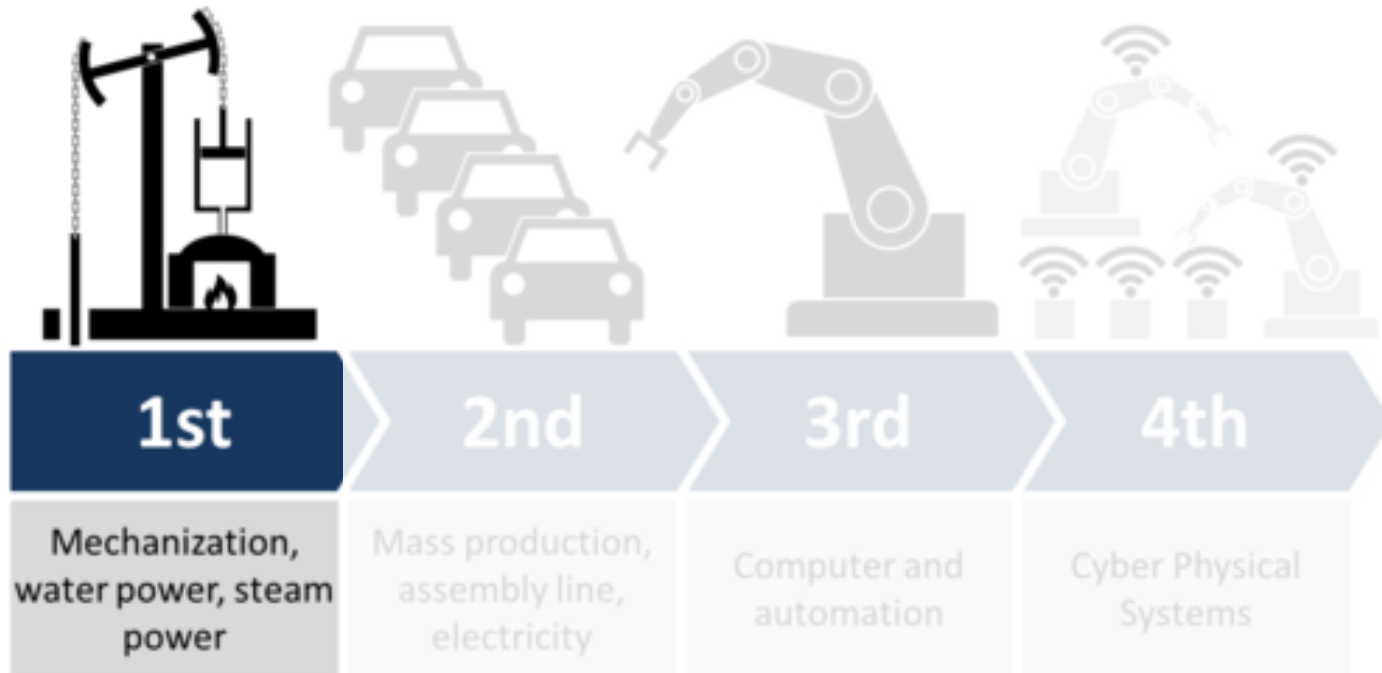
Quality

Sustainability

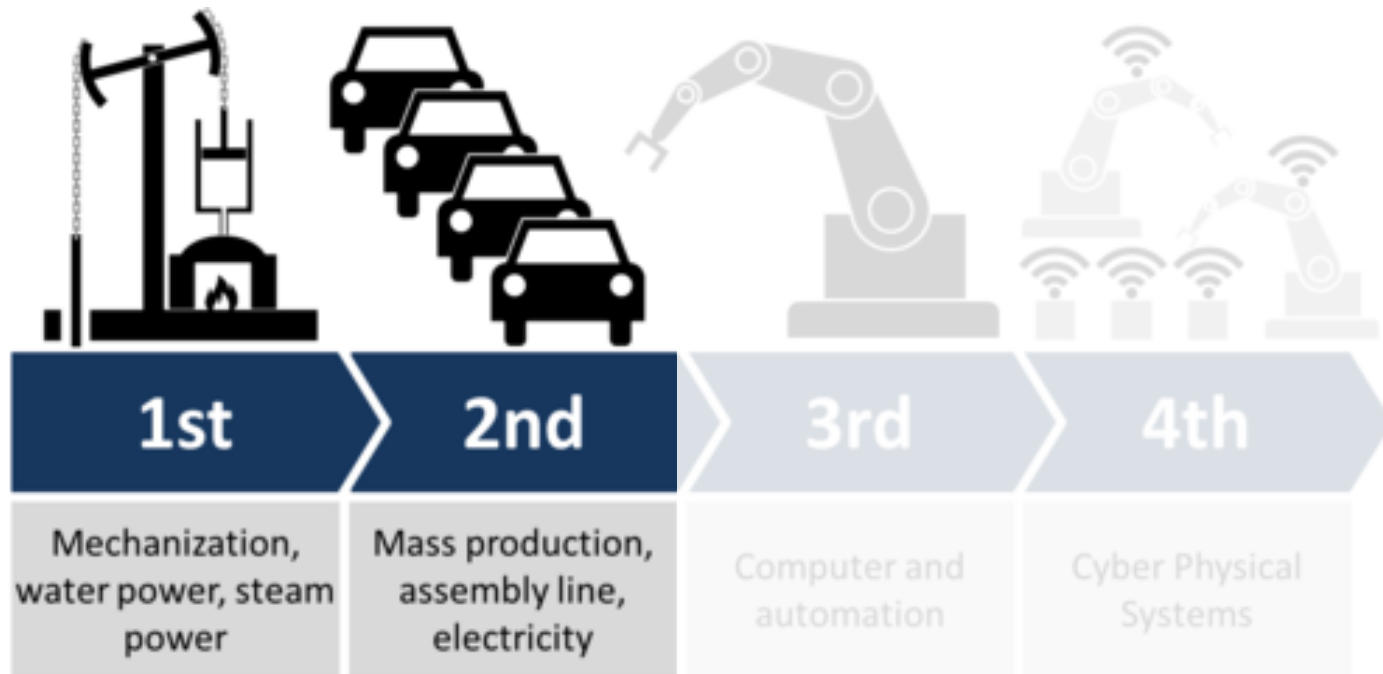
Industrial Revolution

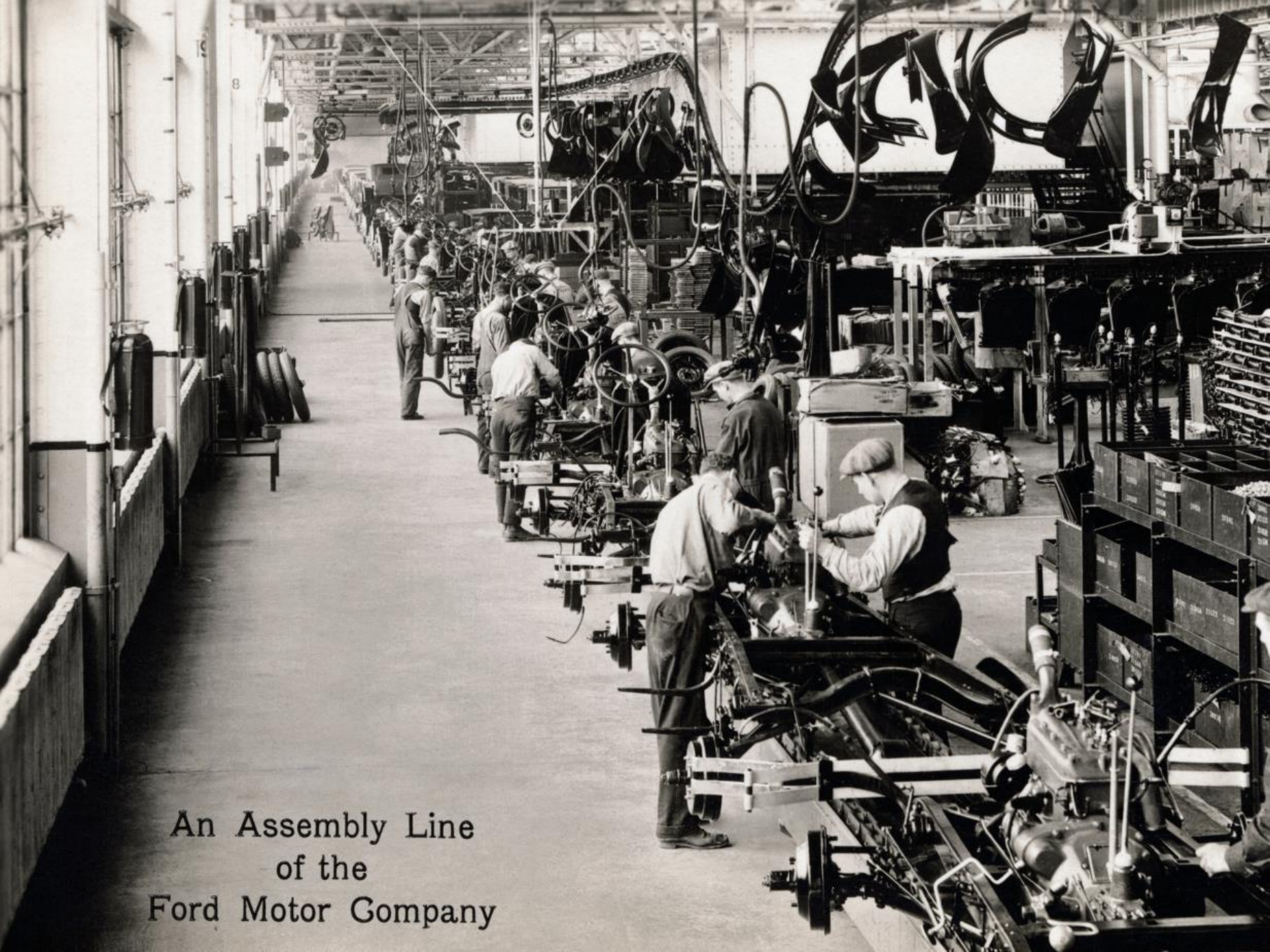


1st Industrial Revolution



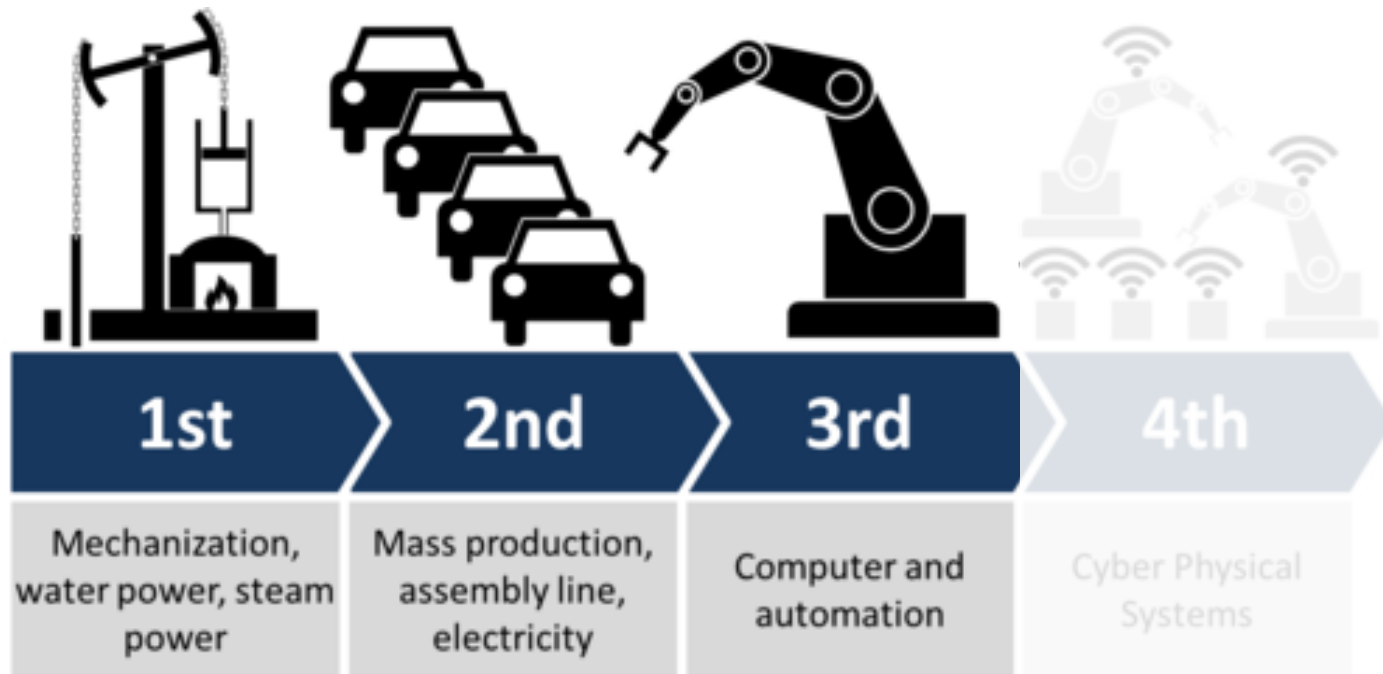
2nd Industrial Revolution





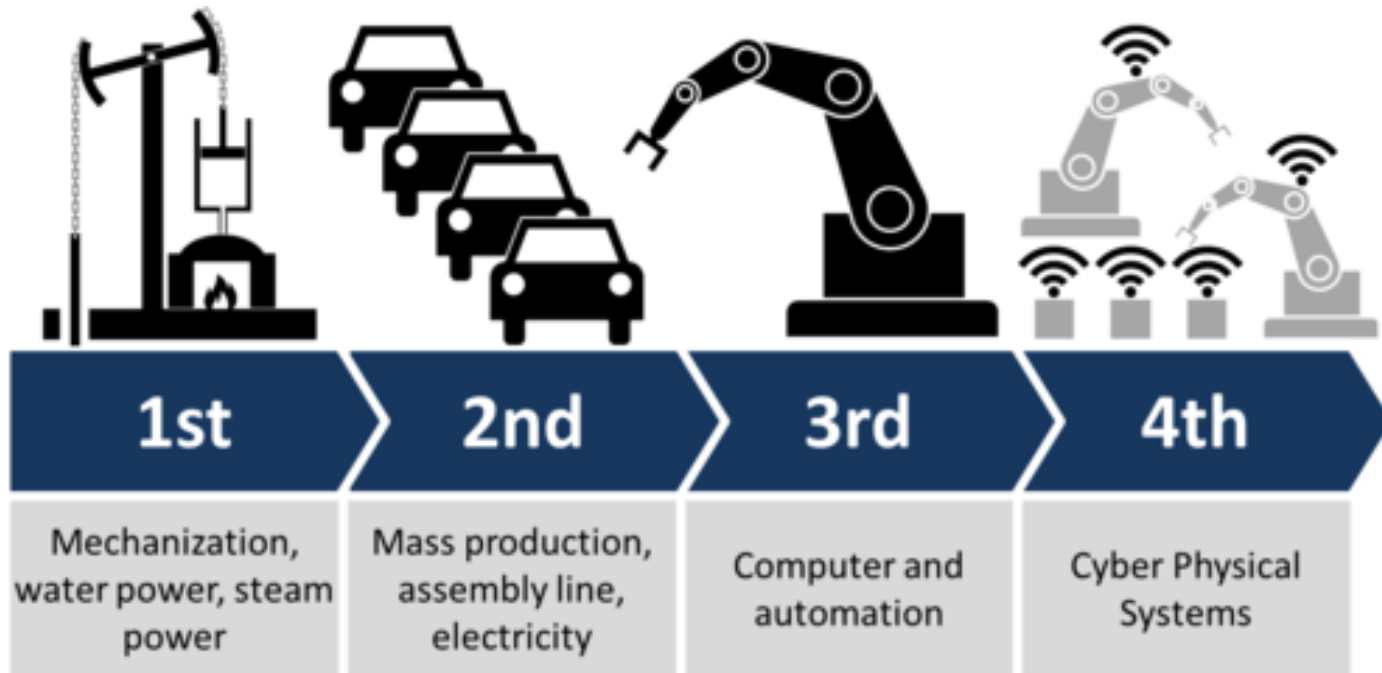
An Assembly Line
of the
Ford Motor Company

3rd Industrial Revolution





Industry 4.0





Wing Asst. Calc

1031

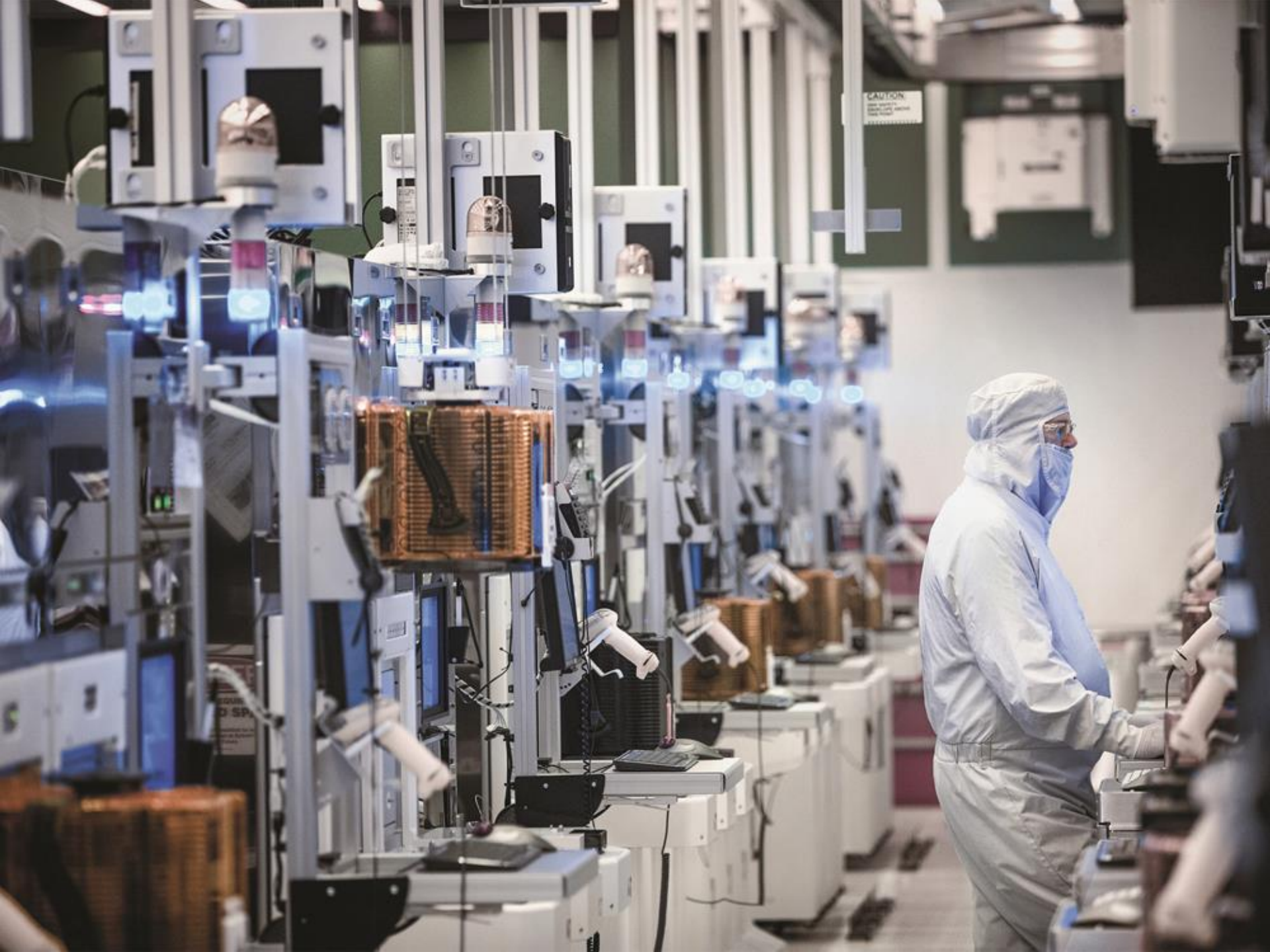




Photo: William Henry Jackson



Justin Sullivan/ Getty Images

Industry Agenda

Shaping the Future of Construction

A Breakthrough in Mindset and Technology

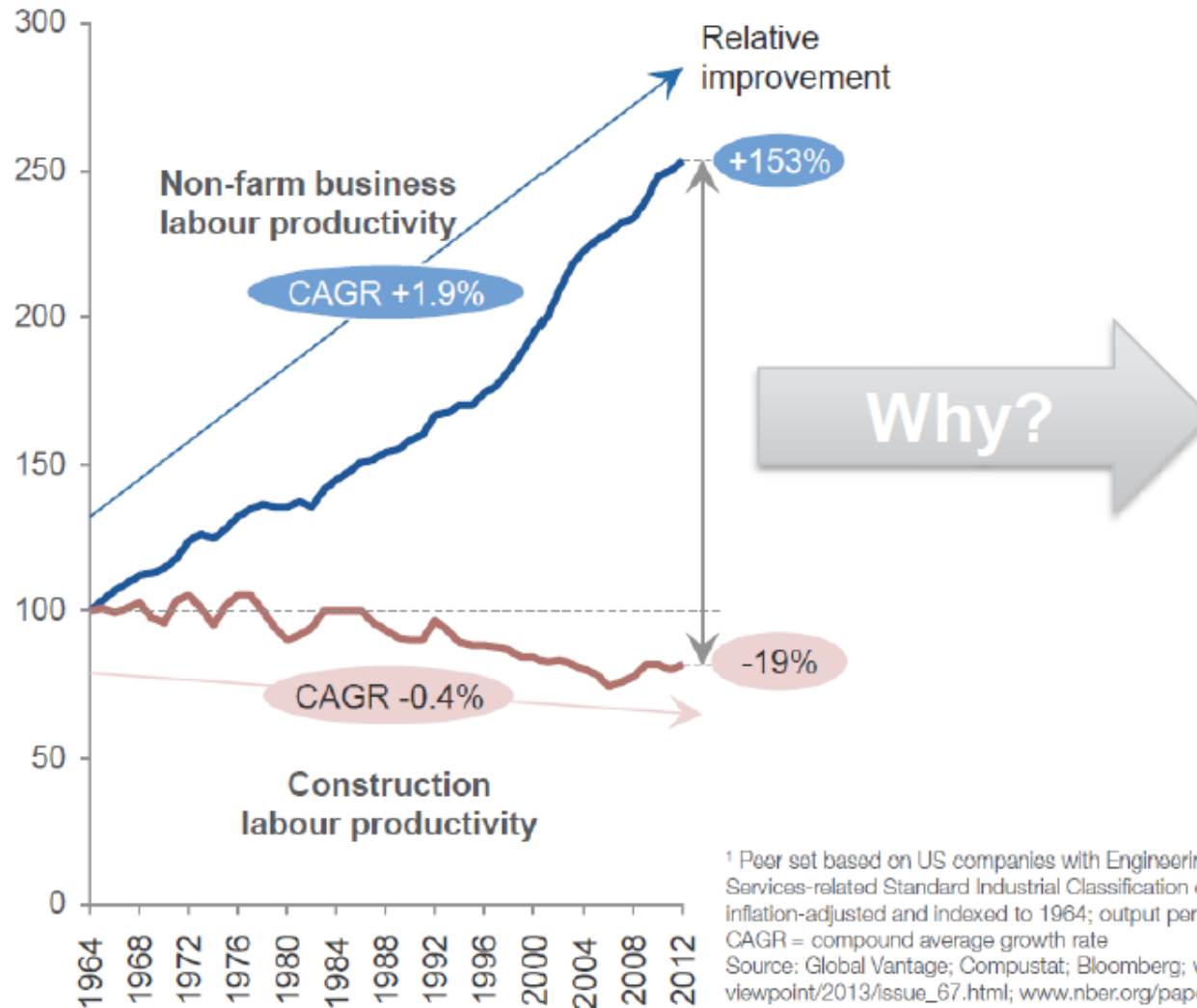
Prepared in collaboration with The Boston Consulting Group

May 2016



Why is the construction industry performing so poorly? (in US)

Index of US labour productivity¹



¹ Peer set based on US companies with Engineering, Construction and Services-related Standard Industrial Classification codes. Financials are inflation-adjusted and indexed to 1964; output per working hours.
CAGR = compound average growth rate
Source: Global Vantage; Compustat; Bloomberg; www.aecbytes.com/viewpoint/2013/issue_67.html; www.nber.org/papers/w1555.pdf; S&P Capital IQ; BCG ValueScience Center; World Economic Forum

Why is the construction industry performing so poorly?

- Lack of innovation and delayed adoption
- Informal processes or insufficient rigor and consistency in process execution
- Insufficient knowledge transfer from project to project
- Weak project monitoring
- Little cross functional cooperation
- Little collaboration with suppliers
- Conservative company culture
- Shortage of young talent and people development



Photo: Wimmers

VI BYGGER SVERIGE

ANPASSADE HUS FRÅN ORT TILL ORT

Vardgrön **Alden**
Varje hus är utvecklat för att passa in i sin omgivning och samtidigt erbjuda en modern och funktionell bostad. De är byggda med högkvalitativa material och har en lång livslängd. De är också byggda för att vara energieffektiva och miljövänliga.

**SAMMA
INSIDA
OLIKA
YTRE**

Vi bygger & lever **Kita**
Vi bygger & levererar prefabricerade bostäder till kunderna i hela Sverige. Vi har byggt hundratals bostäder och vi har många fler i plan. Vi är ett av Sveriges största byggföretag och vi har en lång erfarenhet av att bygga bostäder.

**LINDHOLMS
GRUPPEN**



Photo: Wimmers



Photo: Wimmers

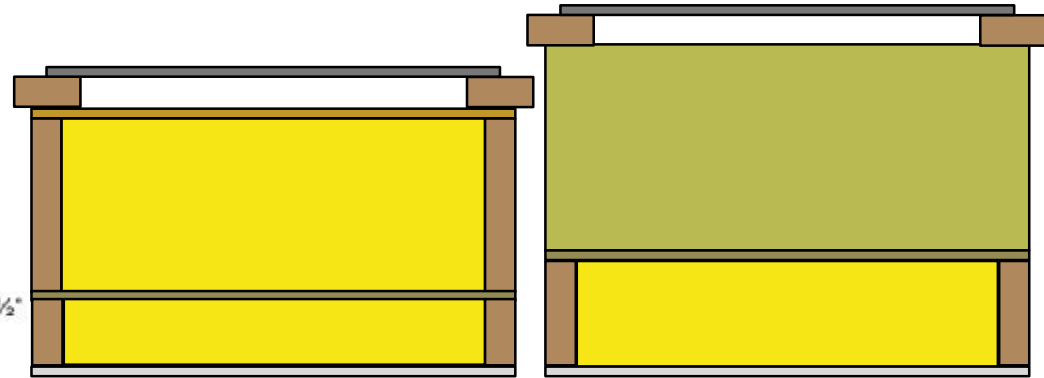
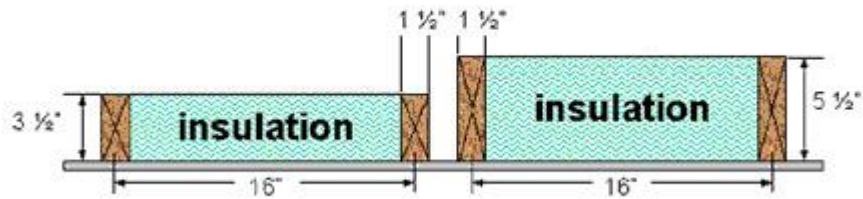


Photo: Wimmers



ENERGY
STEPCODE
BUILDING BEYOND THE STANDARD

Energy Efficient = Thicker Walls



- Energy efficient does not equal sustainable but without energy efficiency no sustainability!

PATHWAY TO 2032: PART 9 (HOMES)

2017

2032



Dramatic shift in 5-10 years!



A close-up photograph of a wooden surface, likely a tree trunk, showing concentric growth rings. A heart shape is formed by the natural undulations of the wood grain, centered in the image. The wood has a warm, golden-brown tone with some darker spots and fine cracks.

THANK YOU