# Welcome to The JCT Povey Lecture 8th November 2018





#### **Neil Gower**

**JCT Chief Executive** 





#### **Richard Saxon CBE**

**JCT Chairman** 





## Connected, Collaborative and Cool

How technology and governance could transform the impact, efficiency and image of the construction industry.

**Sixteenth JCT Povey Lecture 8 November 2018** 

Richard Threlfall Global Head of Infrastructure KPMG









#### Technology is impacting every stage of the asset lifecycle

#### **Data-driven investment decisions**





Optimised asset maintenance











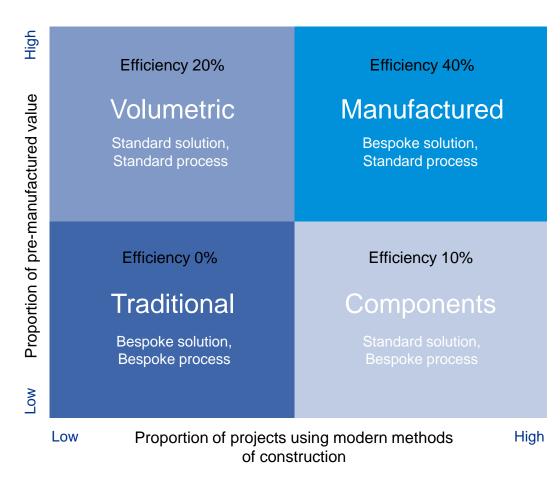




Digital-enabled manufacture and construction

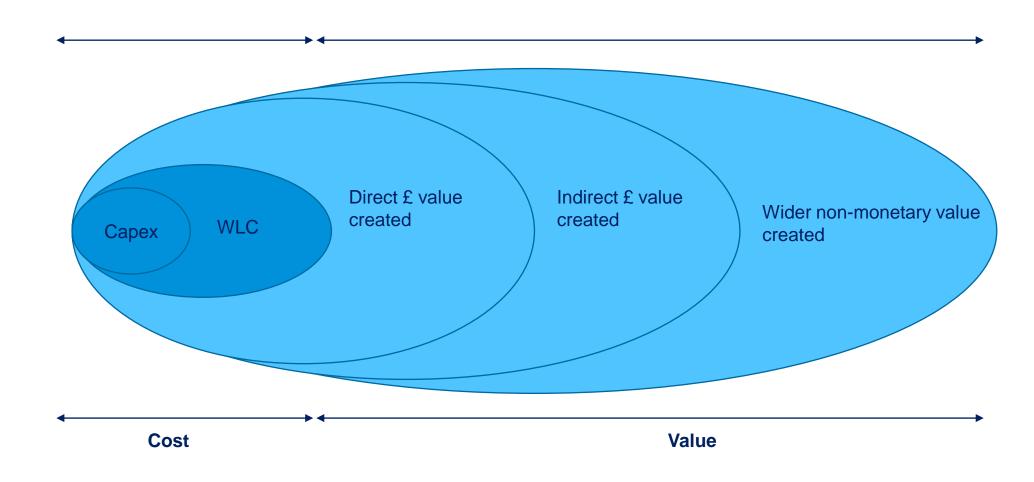


#### Building: moves to manufactured and / or components

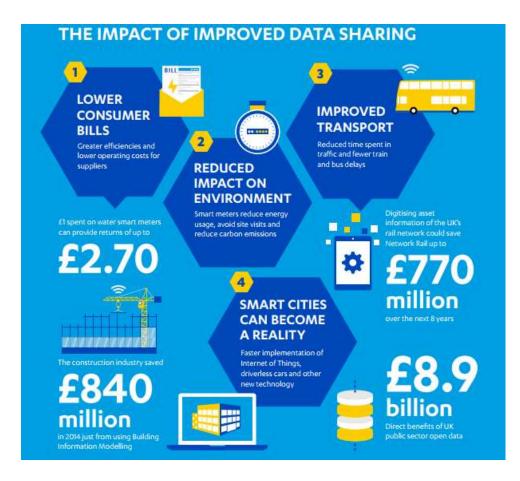


Source: Transforming Infrastructure Performance. IPA. November 2017

#### Maintaining: we can optimise over whole life



#### Operating: the value is in the data











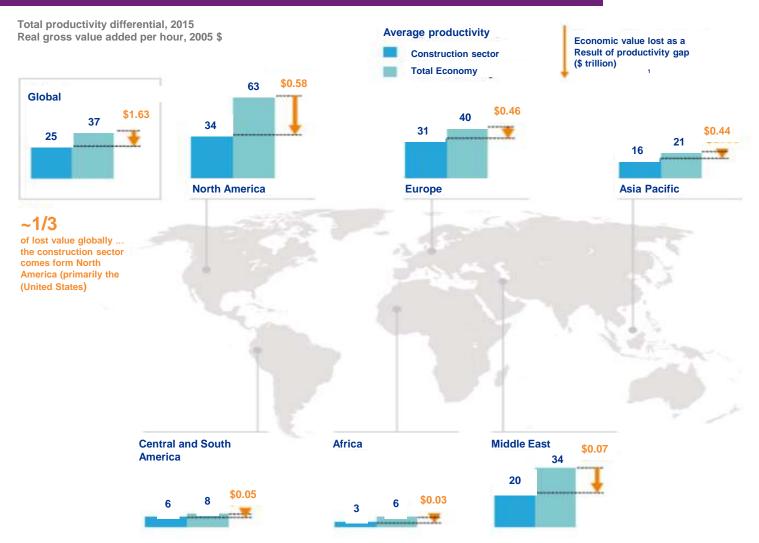
Source: National Infrastructure Commission / Designit.com







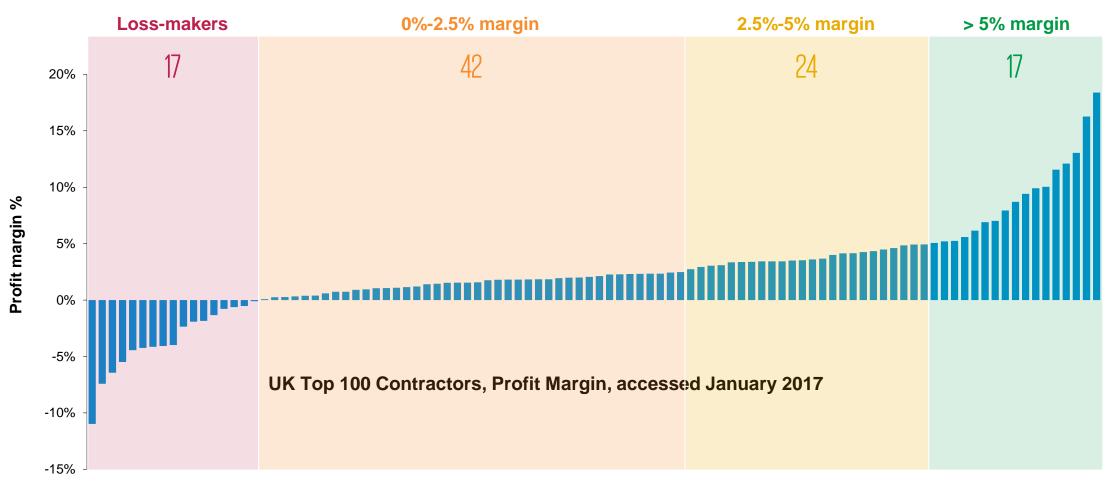
#### Construction productivity is woeful



1 Assumes construction sector output remains constant and current workers are re-employed in other sectors at the total economy productivity rate

Source: OECD; WIOD; GGCD-10; World Bank; BEA; BLS; Turkish National Statistics Bureau; Singapore National Statistics Agency; Malaysian Statistics Agency; Rosstat; IHS; ITF; GWI; McKinsey Global Institute analysis

#### Because margins are vanishingly small



Source: The Construction Index

### Change requires a shift in our thinking

| From Growth                            | To Maturity   |
|--|---|
| Focus on asset creation                | Focus on asset management and operation                 |
| Focus on cost of initial build         | Customer focus on long term performance                 |
| Outputs for Clients                    | Outcomes for the ultimate customers                     |
| Traditional constructed solutions      | Innovative integrated digital/physical solutions        |
| Fragmented, siloed organisations       | Improve Productivity Integrated enterprise team         |
| Limited reward for developing skills   | Incentivised to improve skills and staff productivity   |
| Purchase scope                         | Reward outcomes + performance                           |
| Short term transactional relationships | Sustainable Industry  Long term sustainable enterprises |
| Transfer risk                          | Incentives joint performance                            |

#### Embedded through governance reform

Public and private sector ecosystems & the P13 roles

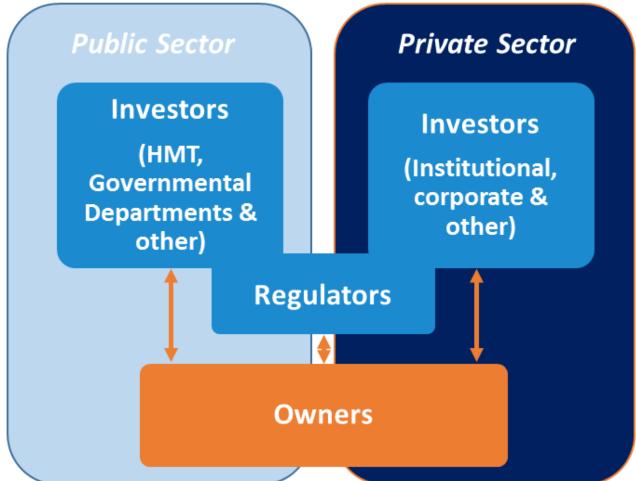
P13 Governance Workstream Aims

Investors and
Regulators enable
Owners to embrace P13
principles and ways of
working

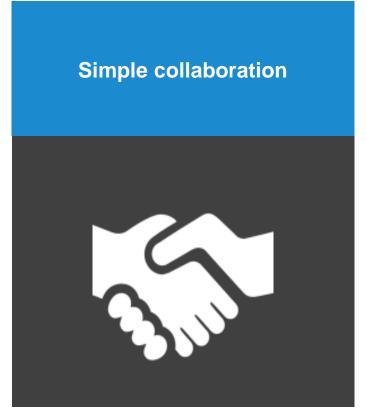


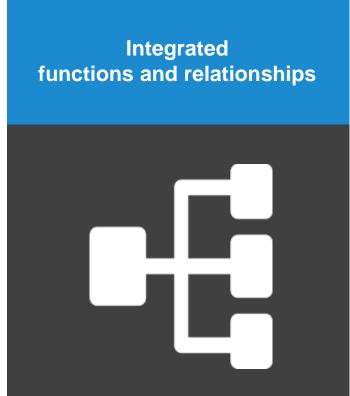
Owners embrace P13 principles and ways of working

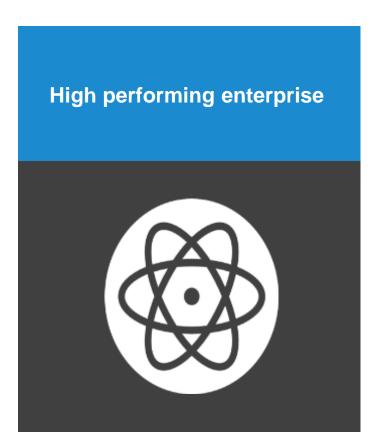




#### Measured though three stages of maturity

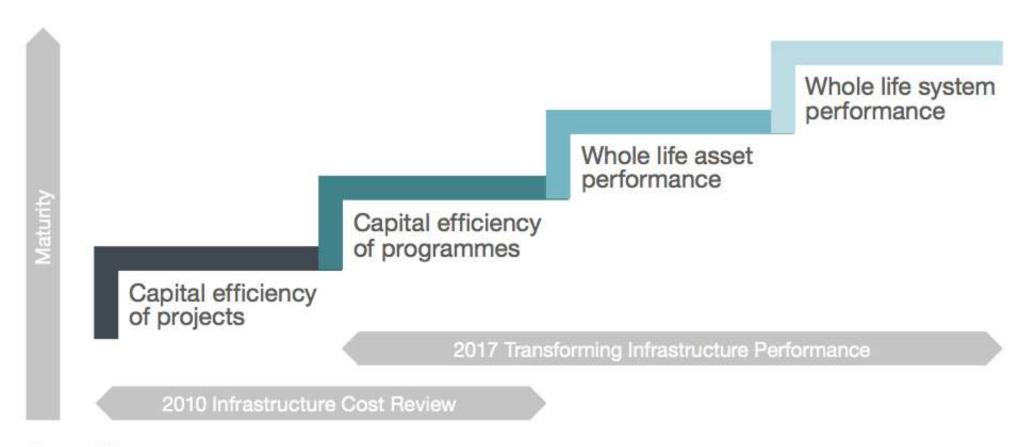






Source: Institution of Civil Engineers – Project 13

#### Focussed on whole system performance



Source: Transforming Infrastructure Performance. IPA. November 2017

#### Aligning system, network, asset and project

Objectives Measures Productivity, growth UK GVA, jobs & **System** low carbon, Industrial apprentices, SME Strategy & NIC objectives proportion, carbon intensity High performing networks Customer satisfaction. Network capacity, resilience, network performance. availability, interconnected availability & resilience Asset performance, benefit delivery, Whole life cost & carbon, benefit Asset availability, sustainability, resilience, delivery, availability, resilience, user technology enabled satisfaction Safe, on-time, on-budget, low carbon, Cost, schedule, quality, health & safety, skills, **Project** digitally enabled delivery supplier performance, carbon

Source: Transforming Infrastructure Performance. IPA. November 2017





### SUSTAINABLE G ALS





































Source: United Nations



#### **Q&A Session**

Richard Saxon CBE, JCT Chairman

**Richard Threlfall** 





#### **The JCT Povey Lecture**

8<sup>th</sup> November 2018



