

Freeing Up Boundaries

With Digital Engineering

BC QUAH

Head of Marketing Asia-Pacific

Who is **FARO**?



Founded in 1981 NASDAQ since 1997 Global technology company



Offering a range of
3D Portable Measurement and Imaging Solutions,
that are DISRUPTIVE
in Pricing, Features and Design



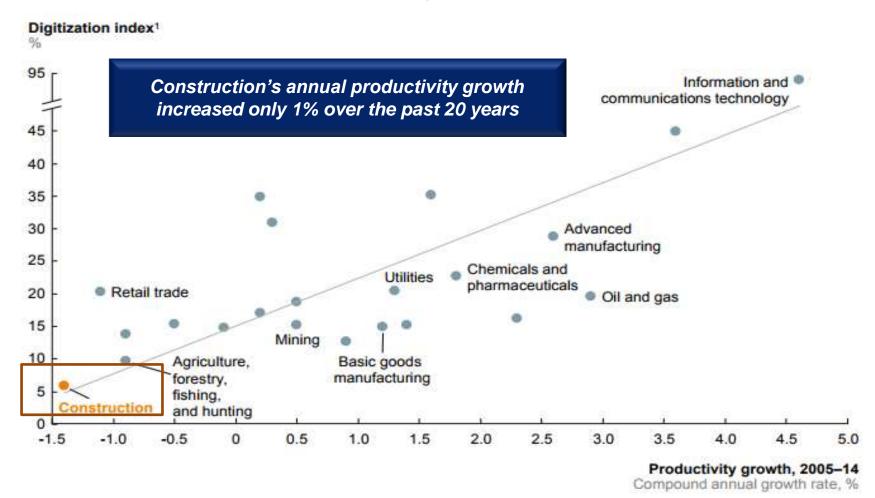
"The world is likely to spend \$14 trillion on construction by 2025 to keep up with global demand"



Construction matters, but it has a long record of poor productivity

Underinvestment in Digitalization

Construction industry underinvests in digitalization and innovation



¹ Based on a set of metrics to assess digitization of assets (8 metrics), usage (11 metrics), and labor (8 metrics); see technical appendix for full list of metrics and explanation of methodology.

SOURCE: BEA; BLS; US Census; IDC; Gartner; McKinsey social technology survey; McKinsey Payments Map; LiveChat customer satisfaction report; Appbrain; US contact center decision-makers guide; eMarketer; Bluewolf; Computer Economics; industry expert interviews; McKinsey Global Institute analysis

Technological Adoption Constraints – Construction

- Transparency & Traceability Restriction
- Schedule & Budget Overrun
- Archival & Retrieval Limitation
- Static Analytics
- Inefficient Building Techniques

Lack real-time data to optimize decision making

Digital Disruption in Construction

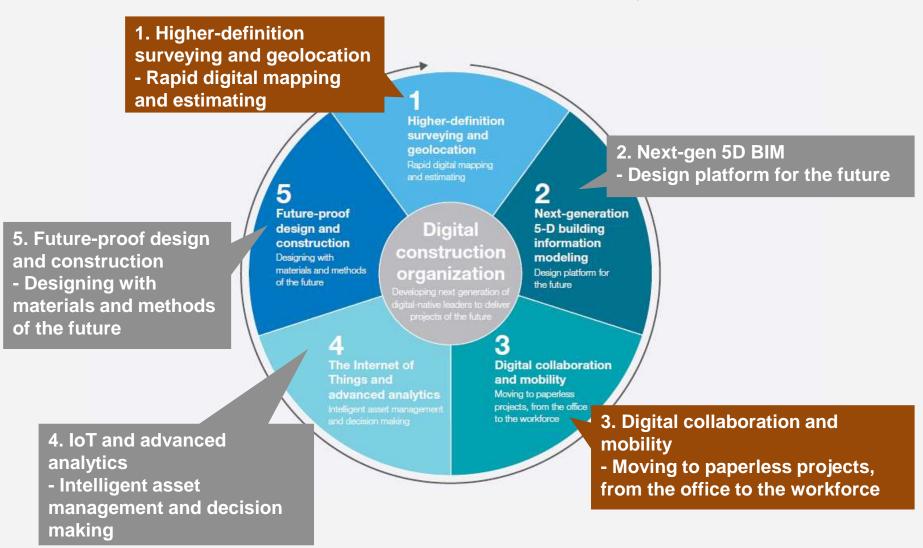
5 Trends to Overcome Constraints



Source: McKinsey Global Institute

Digital Disruption in Construction

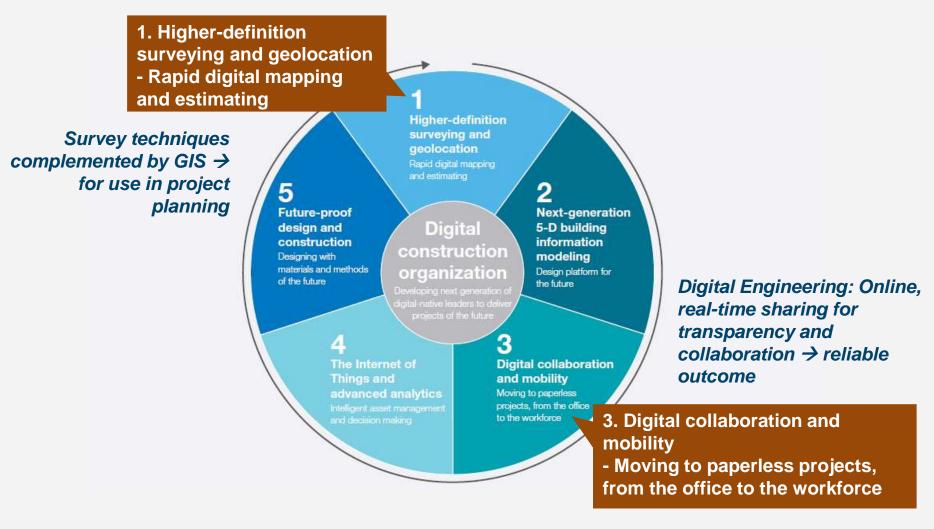
5 Trends to Shape Construction Projects



Source: McKinsey Global Institute

Digital Disruption in Construction

5 Trends to Shape Construction Projects



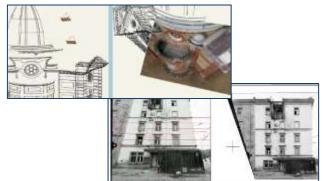
Source: McKinsey Global Institute

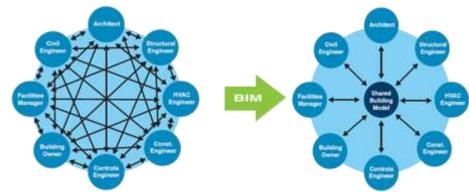


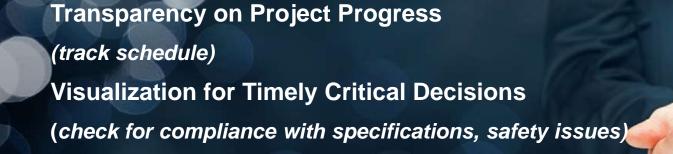
Building Project

Digital Engineering via Tools (eg. BIM)

Common Platform to Access Single
 Data Set



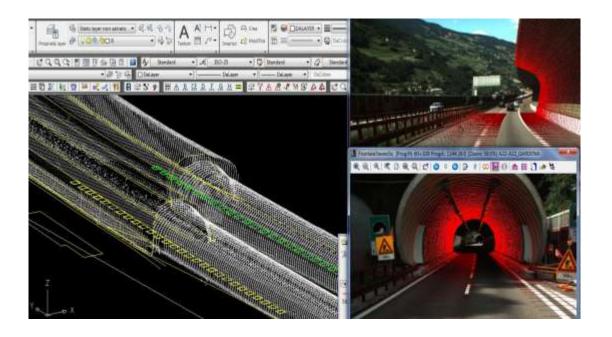




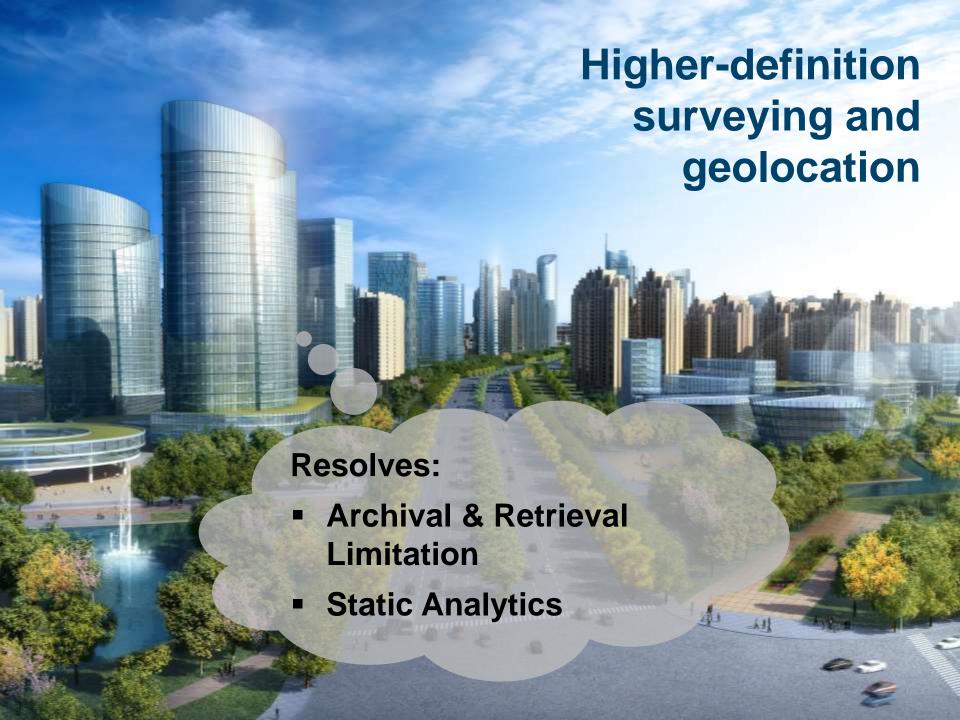
Infrastructure Maintenance

Digital Engineering via Tools (eg. BIM)

- Common Platform to Access Real Time Data



Monitoring with Data Analytics
(Deformation analysis of tunnel elements; ground stability monitoring)



Smart City

Globally, 1,000+ Smart City Pilots Planned



Smart City Digital data empowers decision making



Constructing Children's Paths

 Improve safety with safe walking and biking paths for children

Real-Time Data to Understand Current Conditions to Build Optimal Routes

- re-visit at regular intervals



Digital Engineering Adoption

5 Trends: Bringing Down Barriers to Improve Productivity

Real-time Digital Collaboration for a "Single Source of Truth"

- Transparency & Traceability on Project Progression
- Visualization for Effective Decision-making
- Monitoring with Data Analytics



Digital Engineering Adoption Empowers **Stakeholders** with Real-Time Data to Make Critical Decisions

3-DEFINE YOUR WORLDTM