

PerspECCtive

Theme:

The Next 50 Years: Capturing Transformational Possibilities

Game Changing Digital Transformation

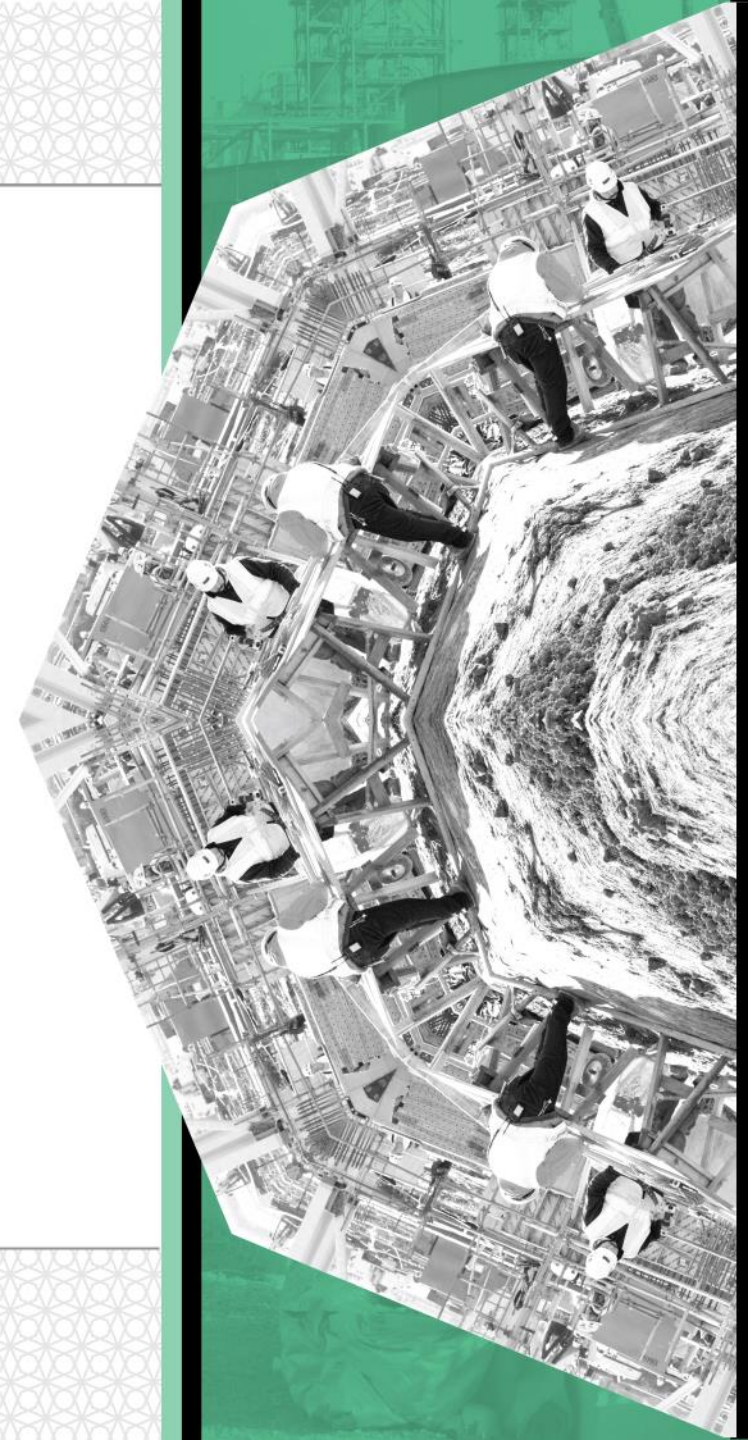
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**JW Marriott Hill Country
San Antonio, TX**



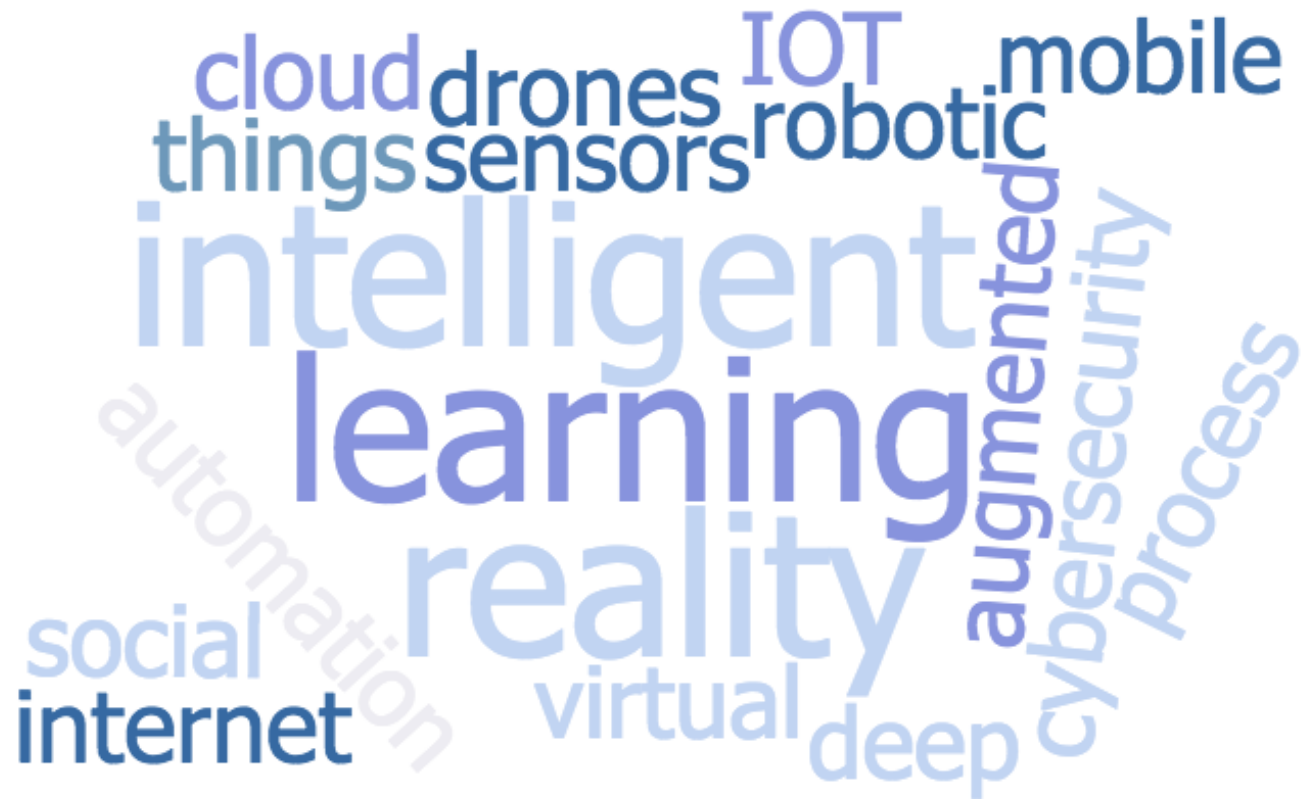


What is Digital?

Game Changing Digital Transformation

What is Digital?

“Digital” is nothing more than the convergence of technologies that we use in our daily lives.



Digital in Our Everyday Lives: Calling a Cab



Mobile: Customer uses the Uber app to book a car. Uber notifies the driver and customer of booking and location.



Cloud: Uber tracks cars in real-time on the app and in the cloud.



Analytics: Uber provides estimated prices based on distance, traffic, demand, etc.



Visualization: You can track real-time car and passenger location.

Digital in Our Everyday Lives: Controlling Home Temp



Mobile: Customer uses the Hive app to adjust house temperature.



IoT/Sensors: Real-time temperature sensor sends info to Hive hub and instructions to heating system via WiFi Internet.



Cloud: Hive tracks home temperature on its “Hub” on the Cloud.



Analytics: Customer gets heating statistics/charts from Hive on their phone or computer.

Digital in Our Everyday Lives: Personal Assistant



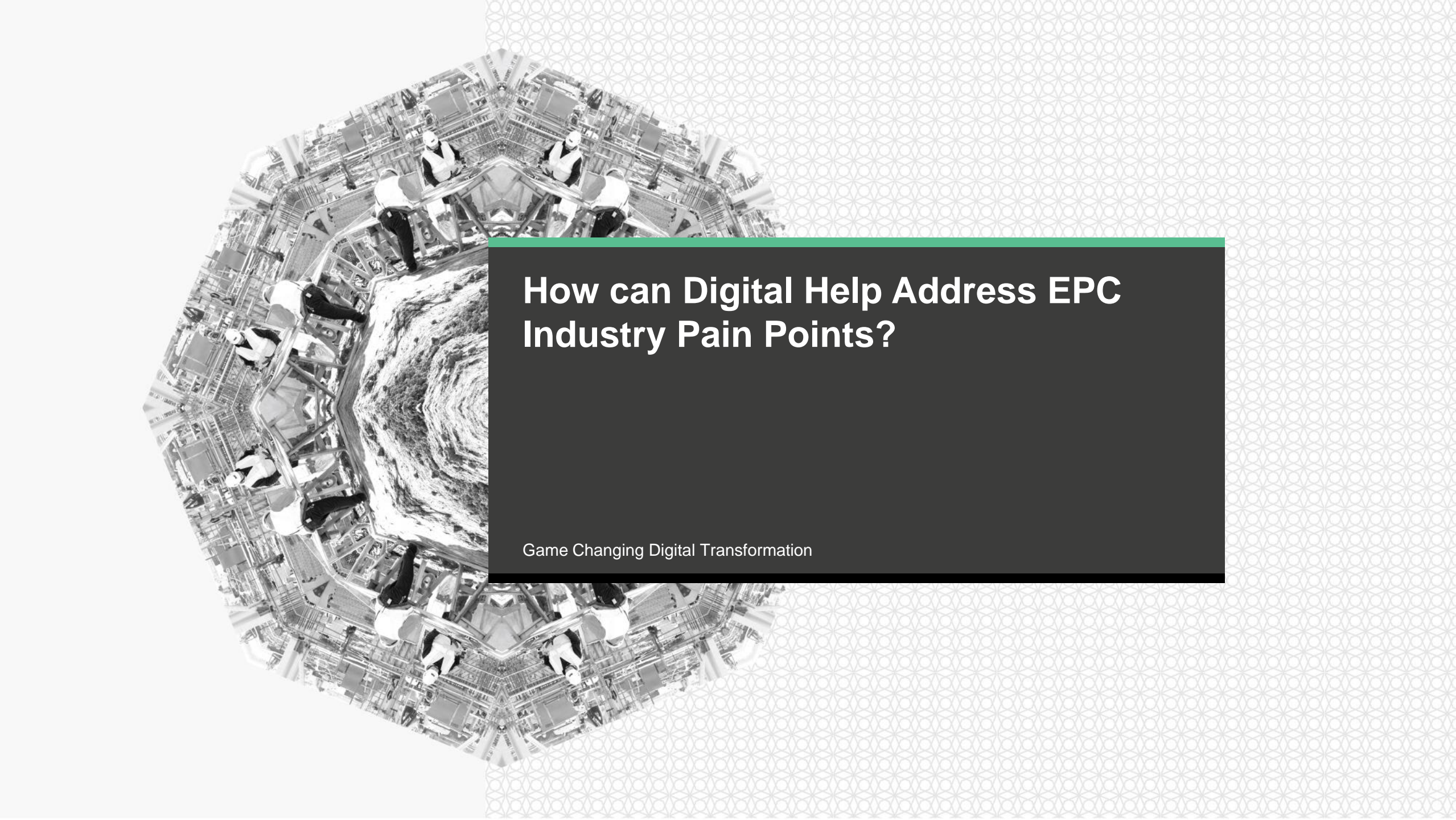
Speech Recognition: Alexa listens to human voice requests.



AI and Machine Learning: Alexa responds to requests, e.g. searching the web and providing info on the best Chinese food in Chicago.



Internet: Alexa is connected to the Internet on WiFi with intelligent devices in your home.

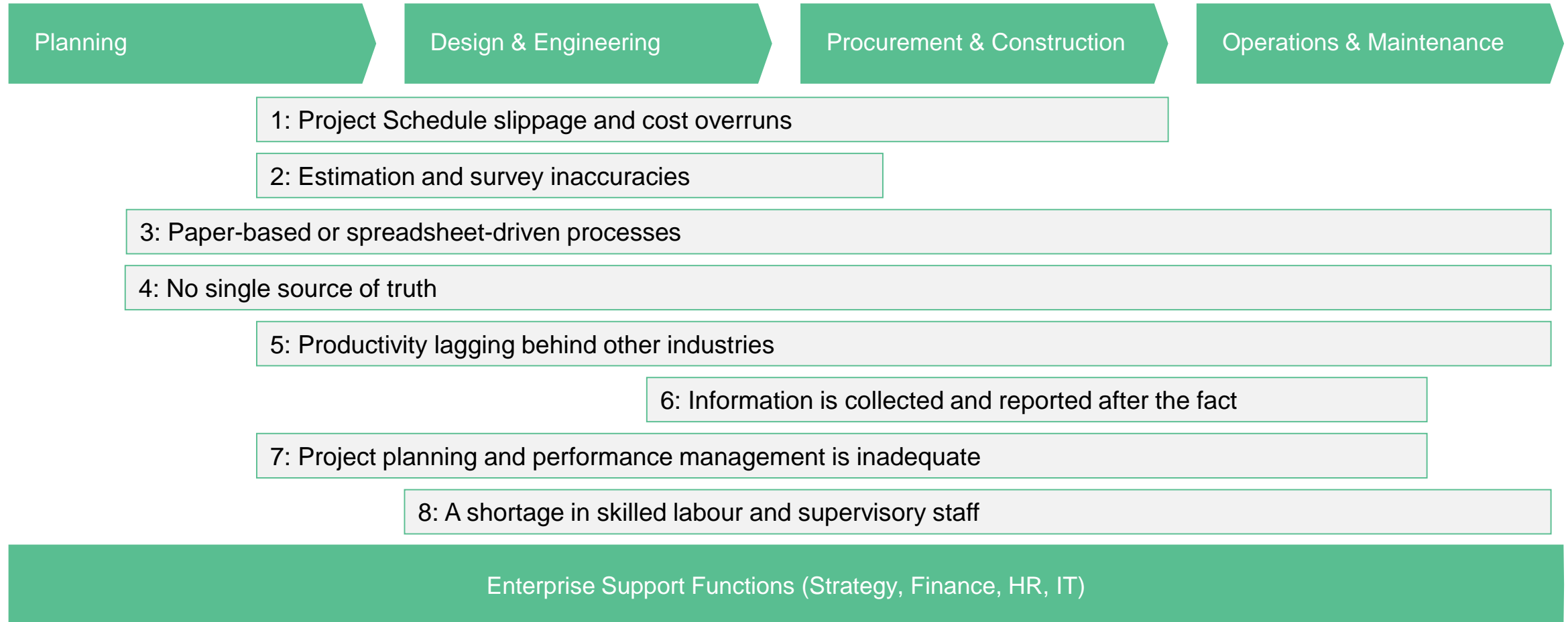


How can Digital Help Address EPC Industry Pain Points?

Game Changing Digital Transformation

Pain Points Along the EPC Industry Value Chain

Project slippages, cost over-runs, project complexity, low productivity and slow adoption of technology

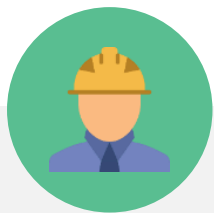


What is Digital's Relevance for the EPC Industry?



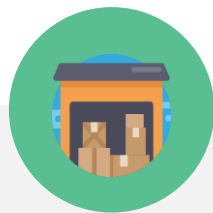
Connected Ecosystem

Accurate view of shared information with external ecosystem stakeholders for better alignment in design, planning and execution



Smart Field Worker

Empowering field workers with mobility tools and augmented information at the right time and location to enhance safety, productivity and cost efficiency



Efficient Enterprise

Accurate and real-time view of critical information enabling management and experts to make faster and better operational decisions

Enablers

INTERNET

MOBILE

CLOUD

IOT

CYBERSECURITY

AL & ML

RPA

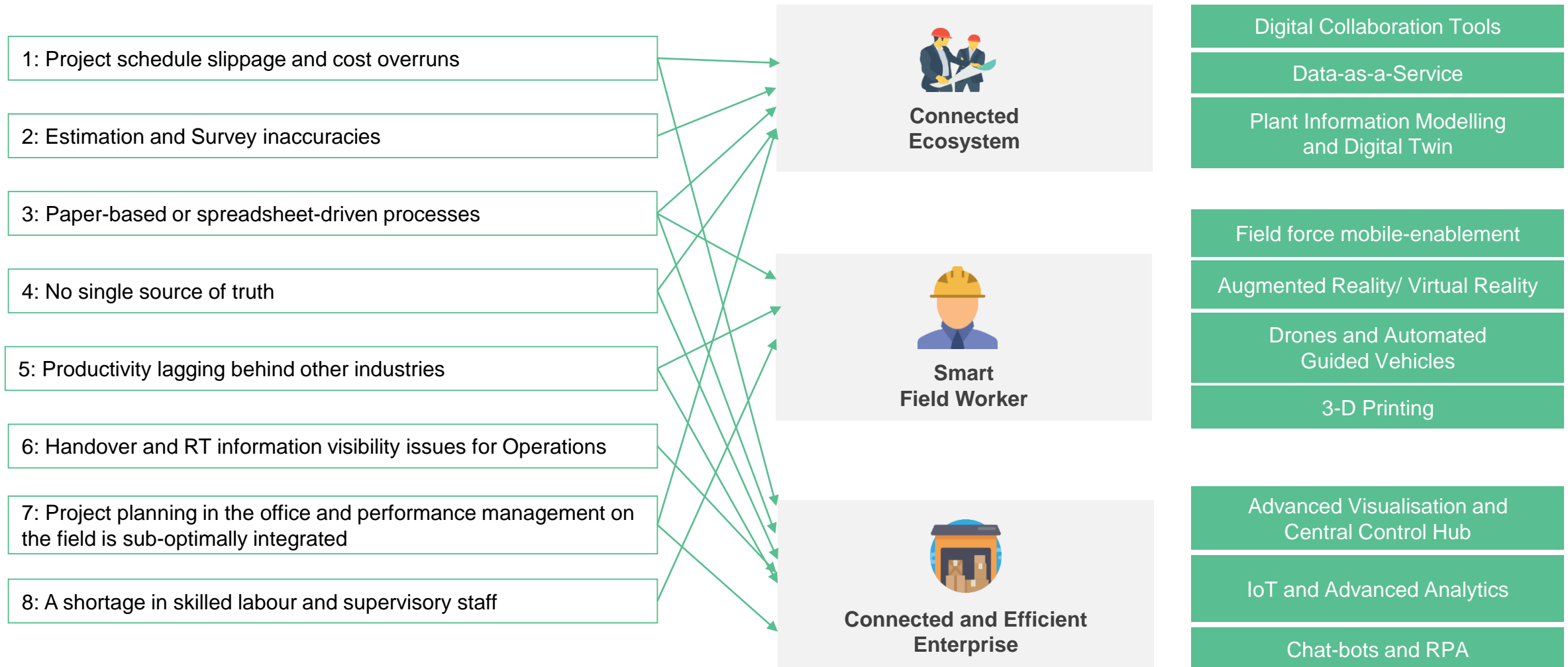
DRONES

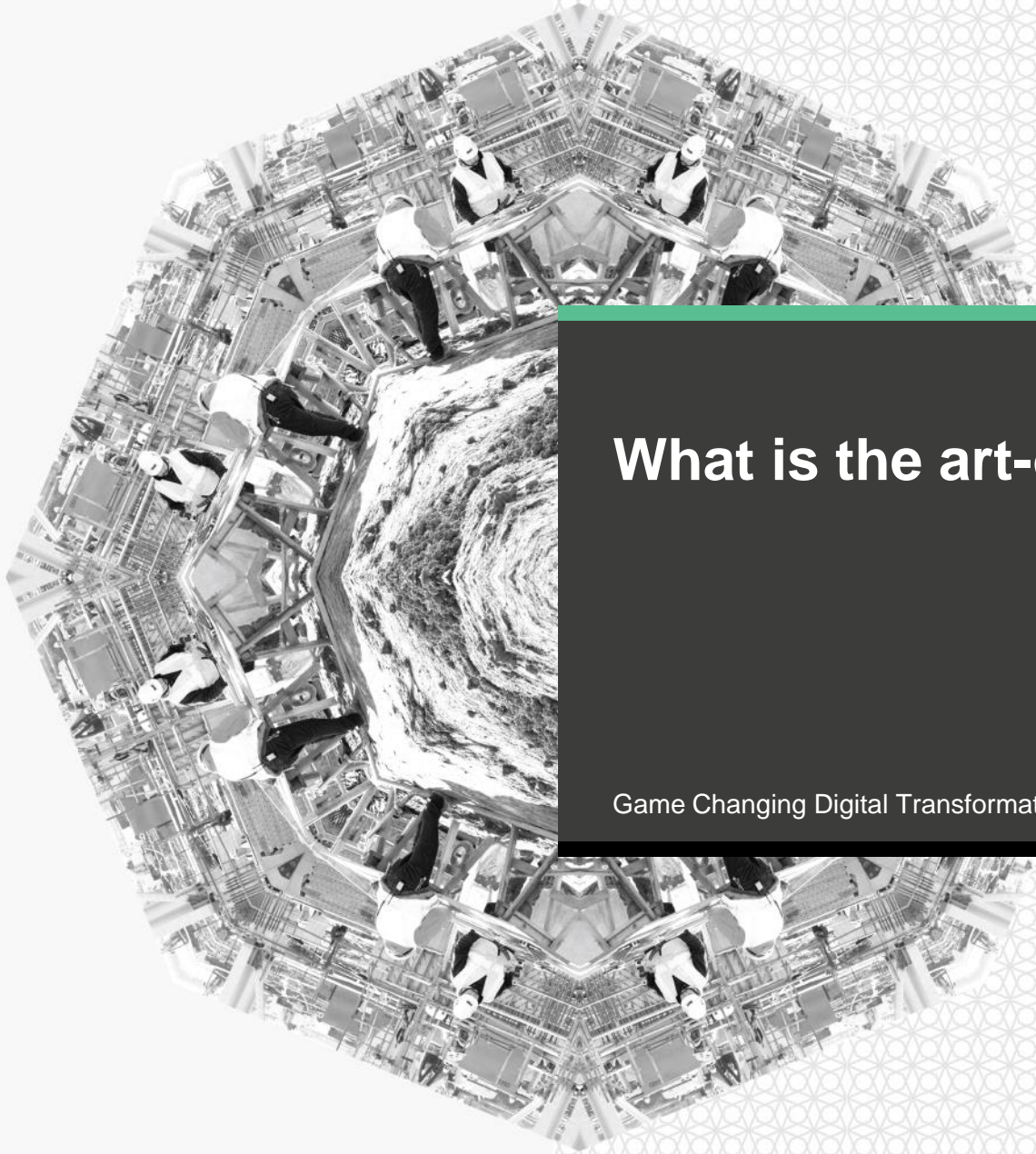
ANALYTICS

AR & VR

Digital Can Address Many of the Industry Pain Points

The real power comes from the smart combination of the digital tools and solutions





What is the art-of-the-possible?

Game Changing Digital Transformation

“Smart Maintenance” of Critical Equipment Demo



Combining IOT, Advanced Analytics, Visualisation, Digital Twin, Mobility, AR, Remote Collaboration

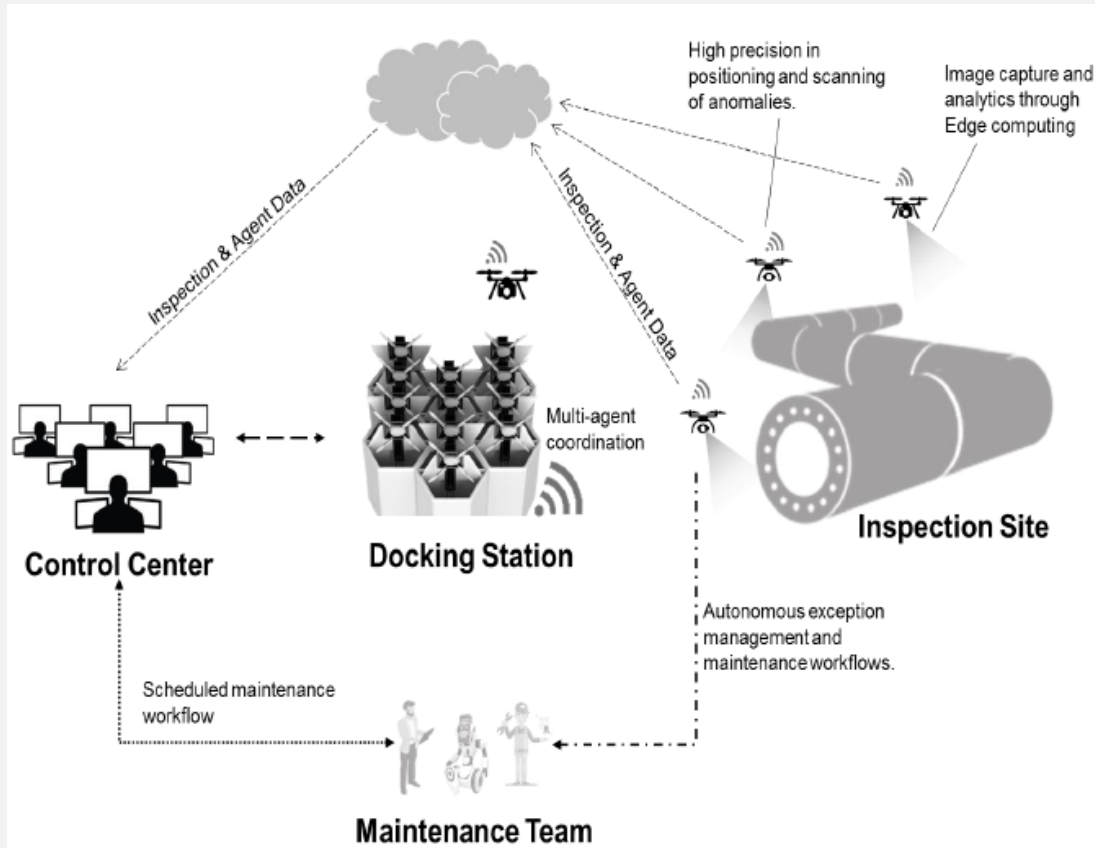
How a control room maintenance operator remotely monitors the health of equipment with the use of real-time information from sensors and data analytics

How s/he digitally assigns the job to and interacts digitally with the field worker to triage the issue

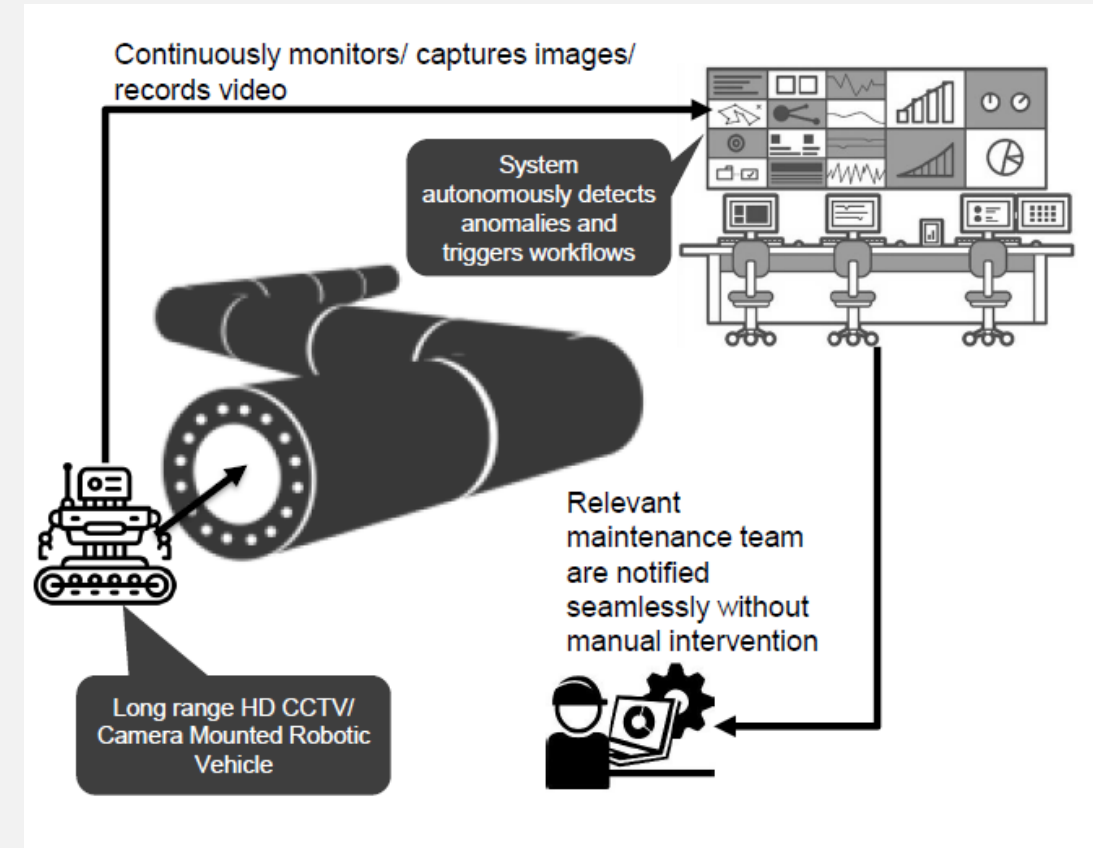
How the field worker is empowered with digital mobility tools and augmented reality aids to diagnose the issue, procure the spare and fix/close the issue safely and efficiently

“Smart Monitoring” of Pipeline System Scenario

Overground Pipeline



Underground Pipeline





Where will the value come from?

Game Changing Digital Transformation

Digital Can Have Significant Impact on Key Industry Value Levers

Benefits accrue across several value levers, amplifying value when implemented in combination

	On Time Execution	Productivity Enhancement	Cost Efficiency	Asset Utilisation	Quality & Safety	Improvement Estimates
Digital Twin of Asset			✓	✓	✓	5-10% increase in asset utilization 15-25% reduction in rework 15-25% increase in productivity Up to 20% reduction in travel costs Up to 10% saving in contract value
Drones and Automated Guided Vehicles		✓	✓			
Advanced Analytics and Data-as-a-Service	✓	✓	✓	✓		
Central Control Hub/ Collaboration Centre	✓	✓	✓	✓	✓	
Augmented Reality/ Virtual Reality		✓	✓	✓	✓	
Plant Information Modelling & Digital Twin	✓	✓	✓		✓	
Digital Collaboration Tools	✓	✓	✓		✓	
Chat-bots		✓	✓		✓	

Source for Improvement Estimates: Infosys research and project experience



What do we need to change?

Game Changing Digital Transformation

What Organisations Need to Do to Get on the Digital Journey

Digital-first | Customer-centric | Fail-fast 'MVP' Culture | Flexible business and IT operating models



Organizational Design, KPIs/Incentives & Governance

Organisation designs, governance and KPIs to reward the workforce for digital innovation and adoption



Customer-Centric Business Operating Model

Investing in 'digital-first' internal and external 'customer' journeys supported by technology in collaboration, mobility, chat-bots, VR and AR



Minimum Viable Product (MVP) Mind-set and 'Fail Fast' Culture

Changing how digital projects are screened and financially governed to allow agile development with many small-scale proofs of value with fluid scope, as opposed to the more traditional large capex model



Flexible and New IT Architecture and Operating Model

New IT operating models – flexible and de-coupled technology architectures, innovative data strategies



Q&A