



Driving Digital Innovation

*Enabling Industry 4.0 for
Oil & Gas Operations*

Safety Moment

- Tools
- Process
- Precautions



Digital has defined the 4th Industrial Revolution

1700's

First Industrial Revolution

 **Mechanical**

Technology was steam and water powering the first factories

1800's

Second Industrial Revolution

 **Electrical**

Electricity made possible the division of labour and mass production

1900's

Third Industrial Revolution

 **Automated**

IT enabled programmable work and an end to reliance on manual labour

Today

Fourth Industrial Revolution

Connected



Cyber-physical systems, powered by IoT and fuelled by data, create a fully interconnected society

Unprecedented pace

 **35** days

For a new technology to reach a critical mass of 50m users

Extreme experiences

 **87** %

Percentage of customers looking for a more seamless experience

Connected chaos

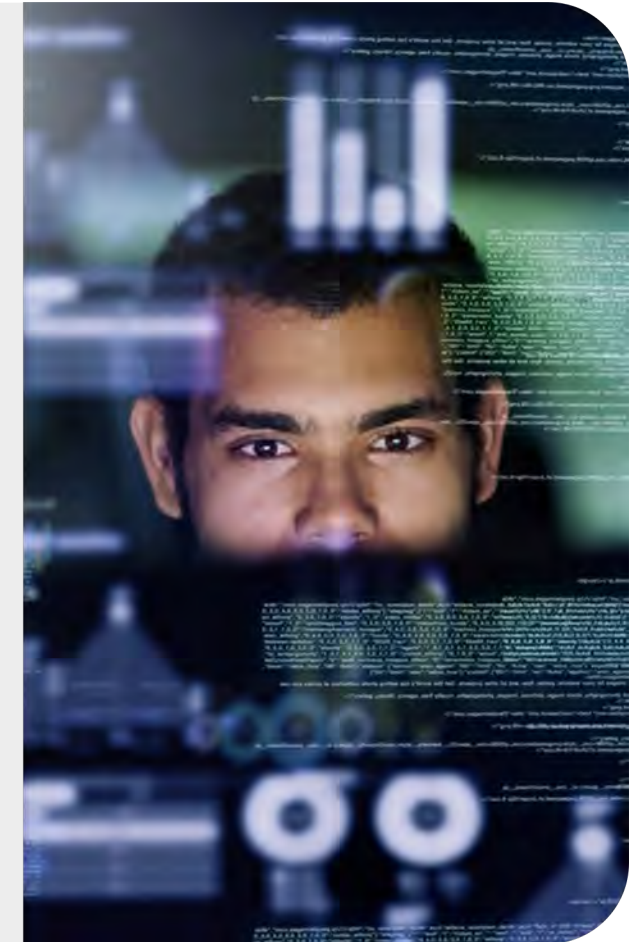
 **50**_b

Internet connected "things" by 2020** including sensors, RFID chips etc.

Digital natives

 **75** %

By 2025, the makeup of the workforce is projected to be majority digital native



3 Mega Trends



Internet

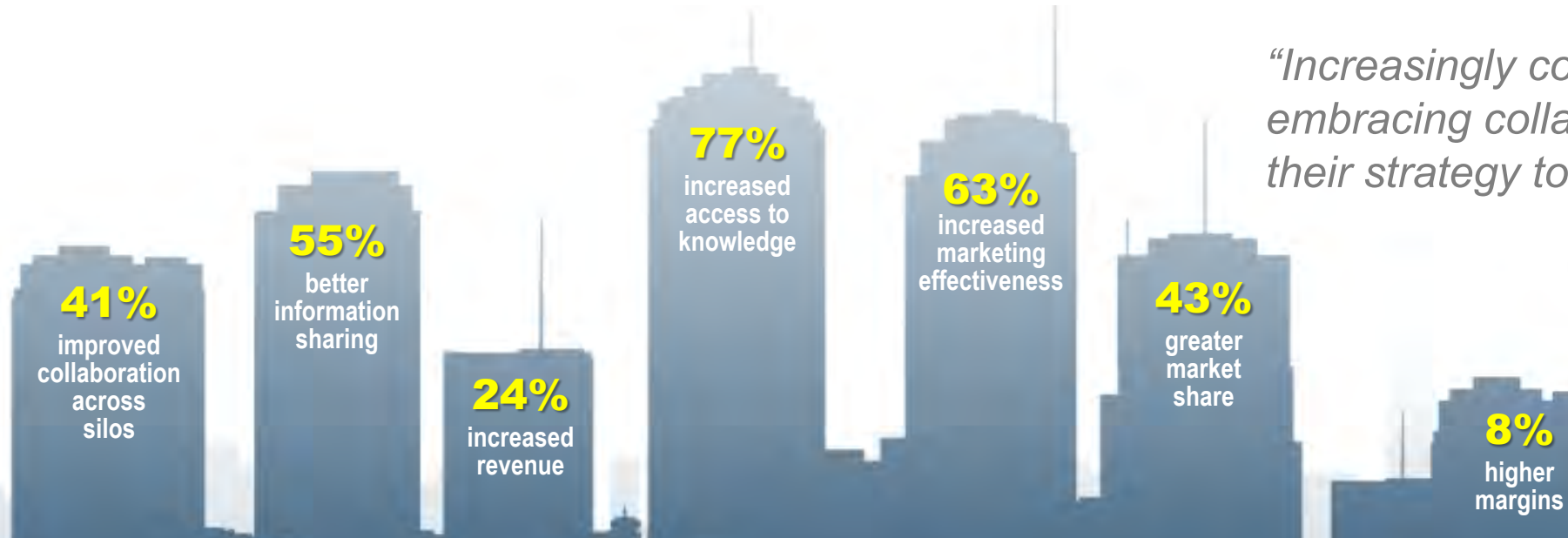
Cloud Computing

Hyperconnectivity

It has changed our lives....



...and how we do business



“Increasingly companies are embracing collaboration as part of their strategy to grow.”



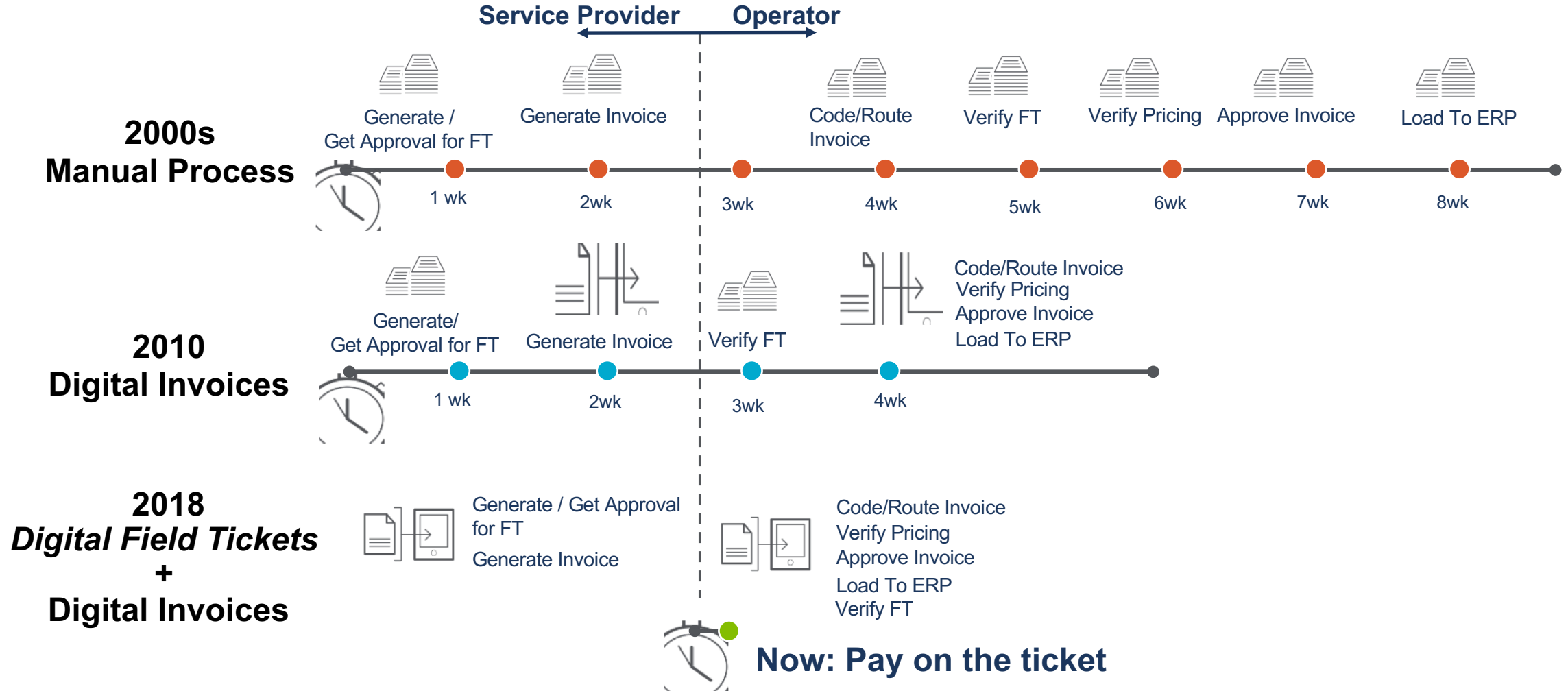
“ Networked enterprises are 50% more likely to have increased sales, higher profit margins, gain market share, and be a market leader. ”

**Value is derived from the network effect.
The more relevant the network, the stronger the platform**

Source: McKinsey & Company, “The rise of the networked enterprise, Web 2.0 finds it’s payday.” Survey of 4,394 executives. December 2010



The Digital Factory



Forbes CommunityVoice Connecting expert communities to the Forbes audience. What is This?

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Why Every Company Is A Technology Company



Forbes Technology Council ⓘ

POST WRITTEN BY

Stephenie Stone

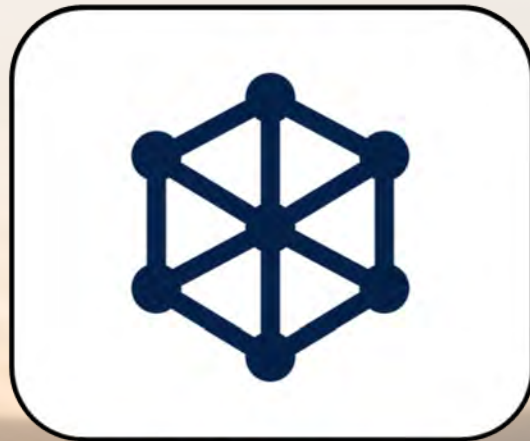
Stephenie Stone is CIO Americas at M+W Group, a global high tech design and construction firm.



Supply Chain 4.0: Evolution not Revolution



**Remote
Connectivity**



**Digital Networks
& Blockchain**



**Artificial
Intelligence**



**Smart, Connected
Devices**



Easy access to quality information, everywhere!



CONSISTENCY



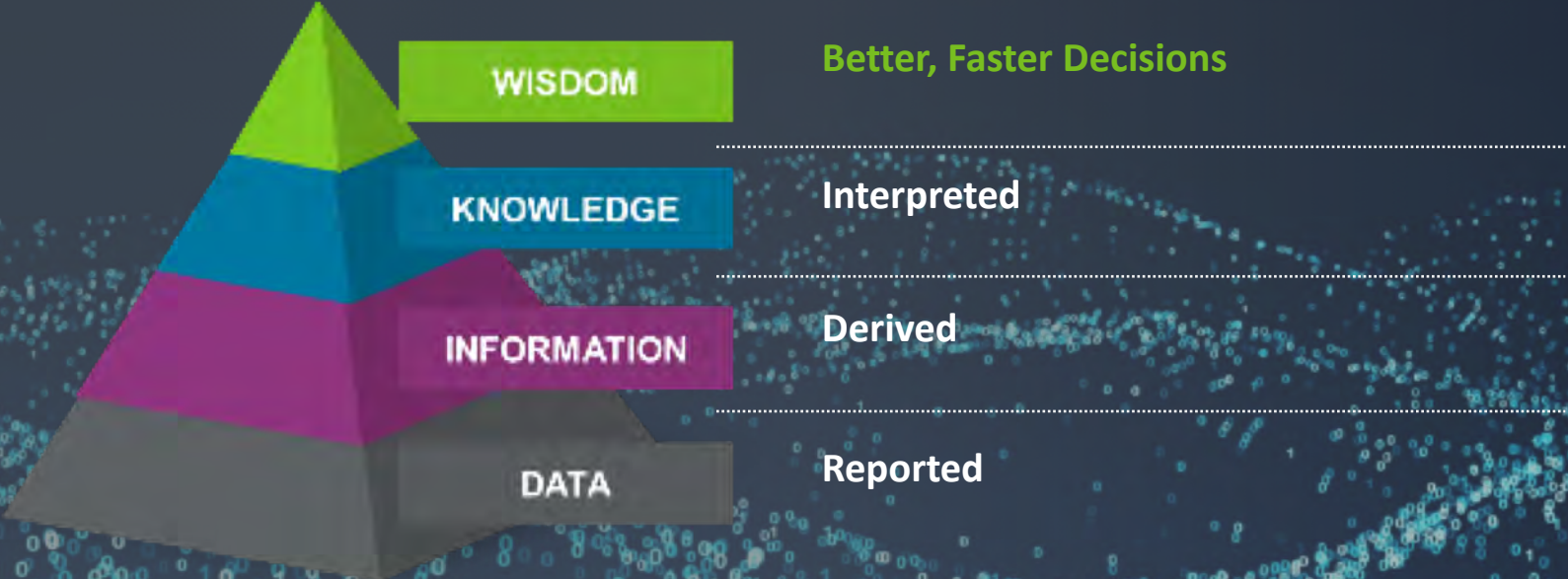
COMPLETENESS



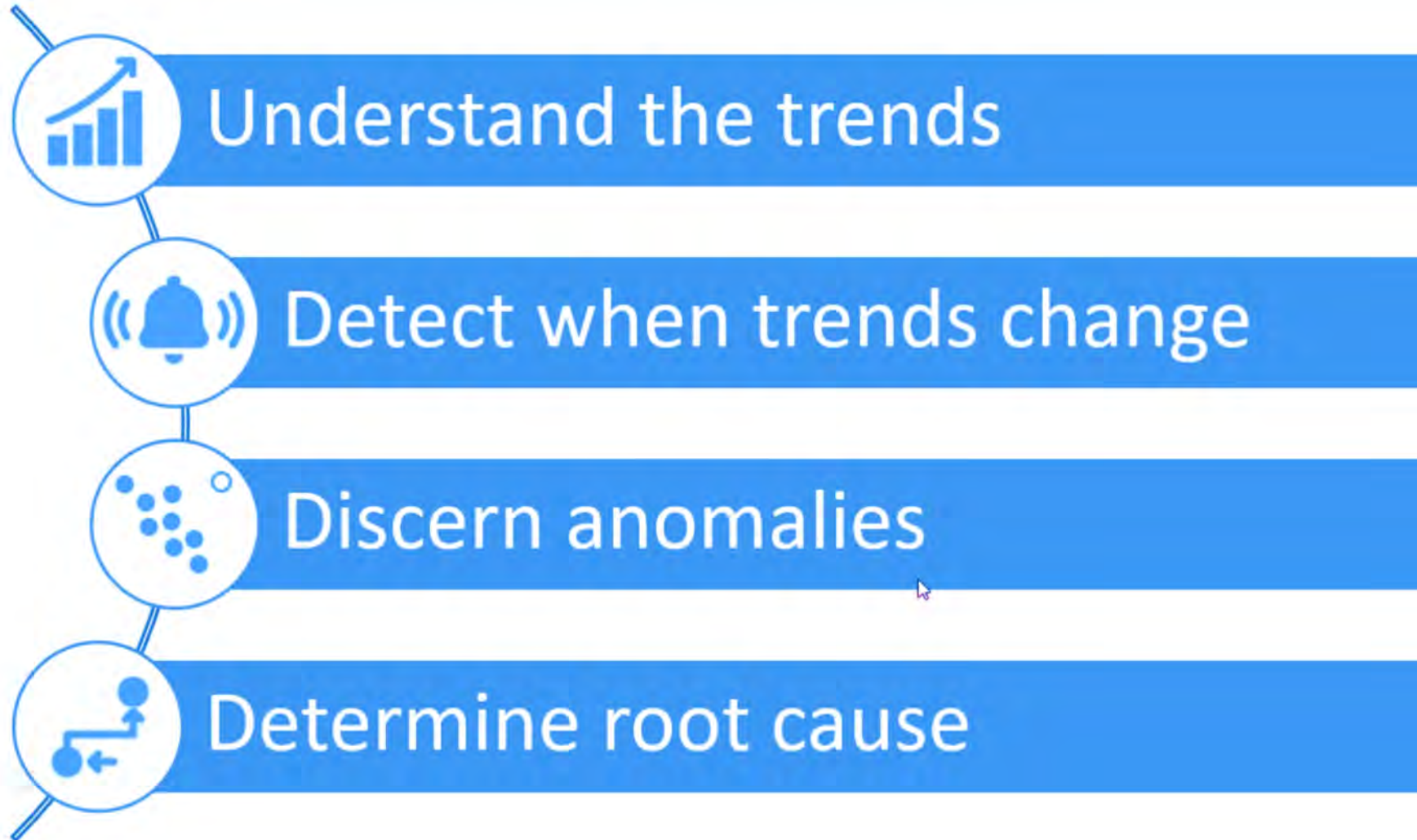
CORRECTNESS



CURRENCY



Gaining Intelligent Insight with AI



Data Driven Digital Innovation

Robotic Process Automation

- High volume, simple, repetitive tasks
 - Contract management
 - Supplier Relationship & Risk Management
 - Supplier Onboarding & Enablement
 - Tactical Buying
 - Category Management
 - Procurement Performance Management
 - Spend Management & Visibility

Virtual Assistants

- Collaborative helper
- Augment decision making
- Drive compliant processes
 - Guided Buying
 - Operational Support
- Proactive information Provider
- Knowledge Worker

Cognitive Analytics

- Cause something to happen
- Acts independently
- When do we let the computer pull the trigger itself?

“Source to Contract is becoming predictive, Purchase to Pay is becoming automated, Supplier Management is becoming proactive, and these are all empowered by analytics and strong operational management.” - [Deloitte 2017 CPO Survey](#)



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Why Every Company Is A ~~Technology~~ Company

Data-Driven



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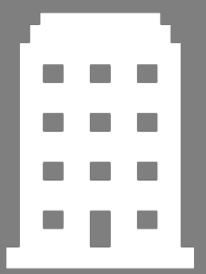
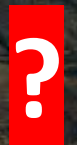
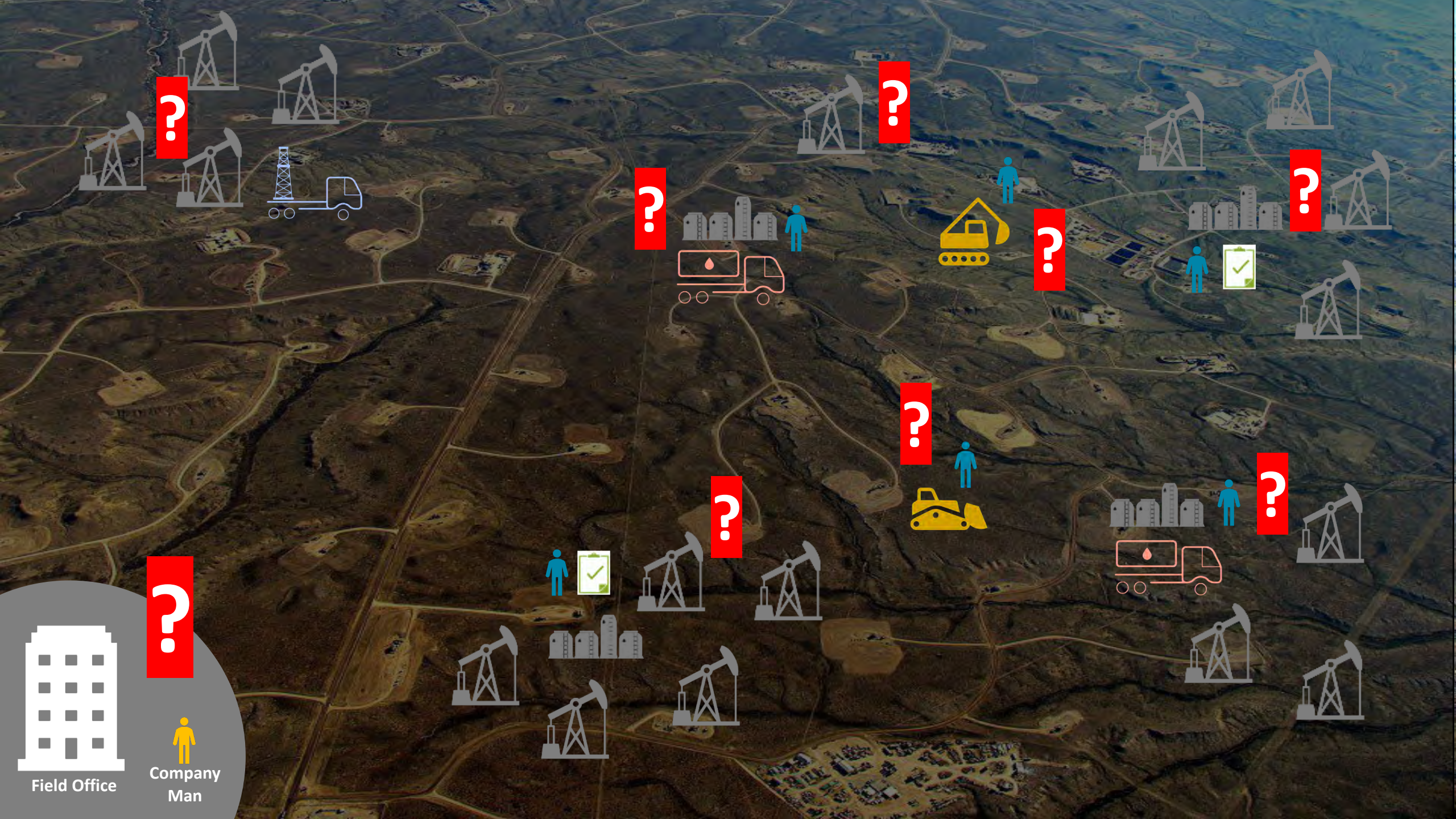




It is impossible to be data-driven without data

“Digital transformation ... is now a top business priority for a majority of oil and gas companies.”

- Gartner



Field Office

Company Man

The Virtual Company Man



Remote
Connectivity



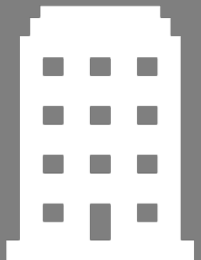
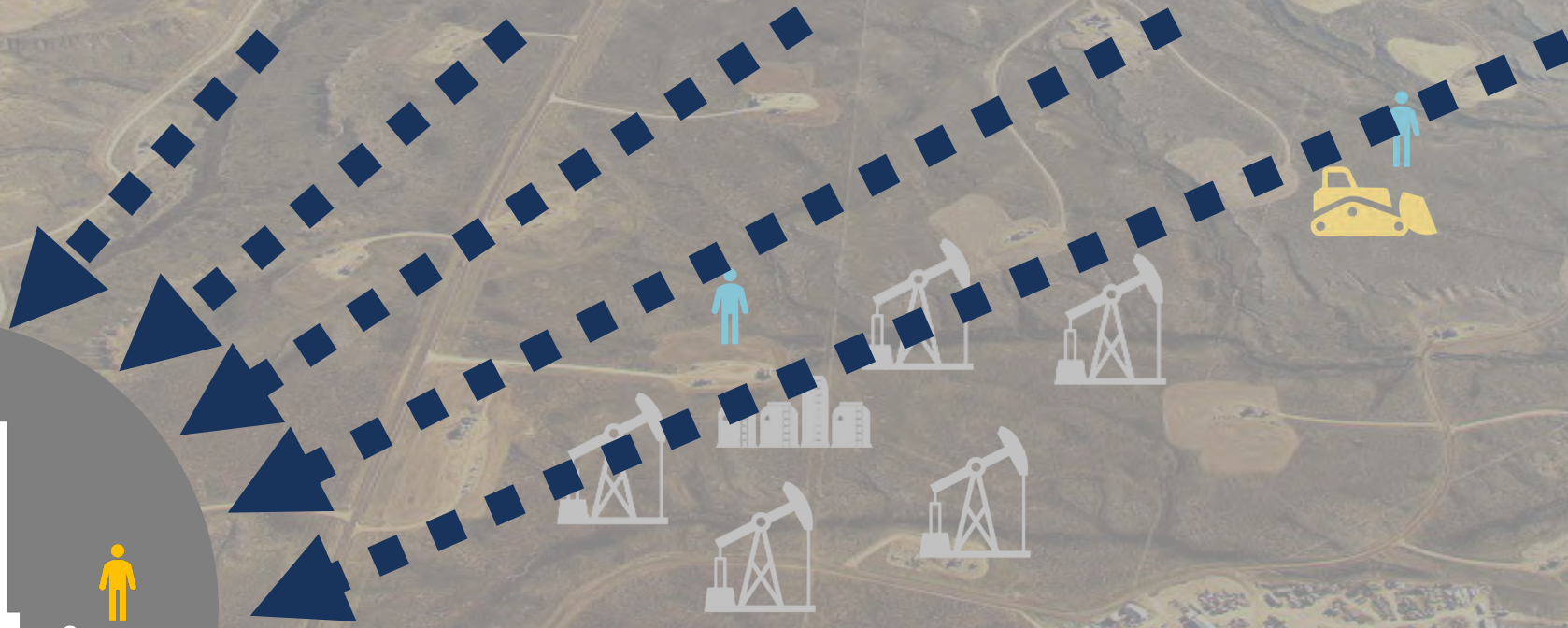
Digital Networks
& Blockchain



Artificial
Intelligence



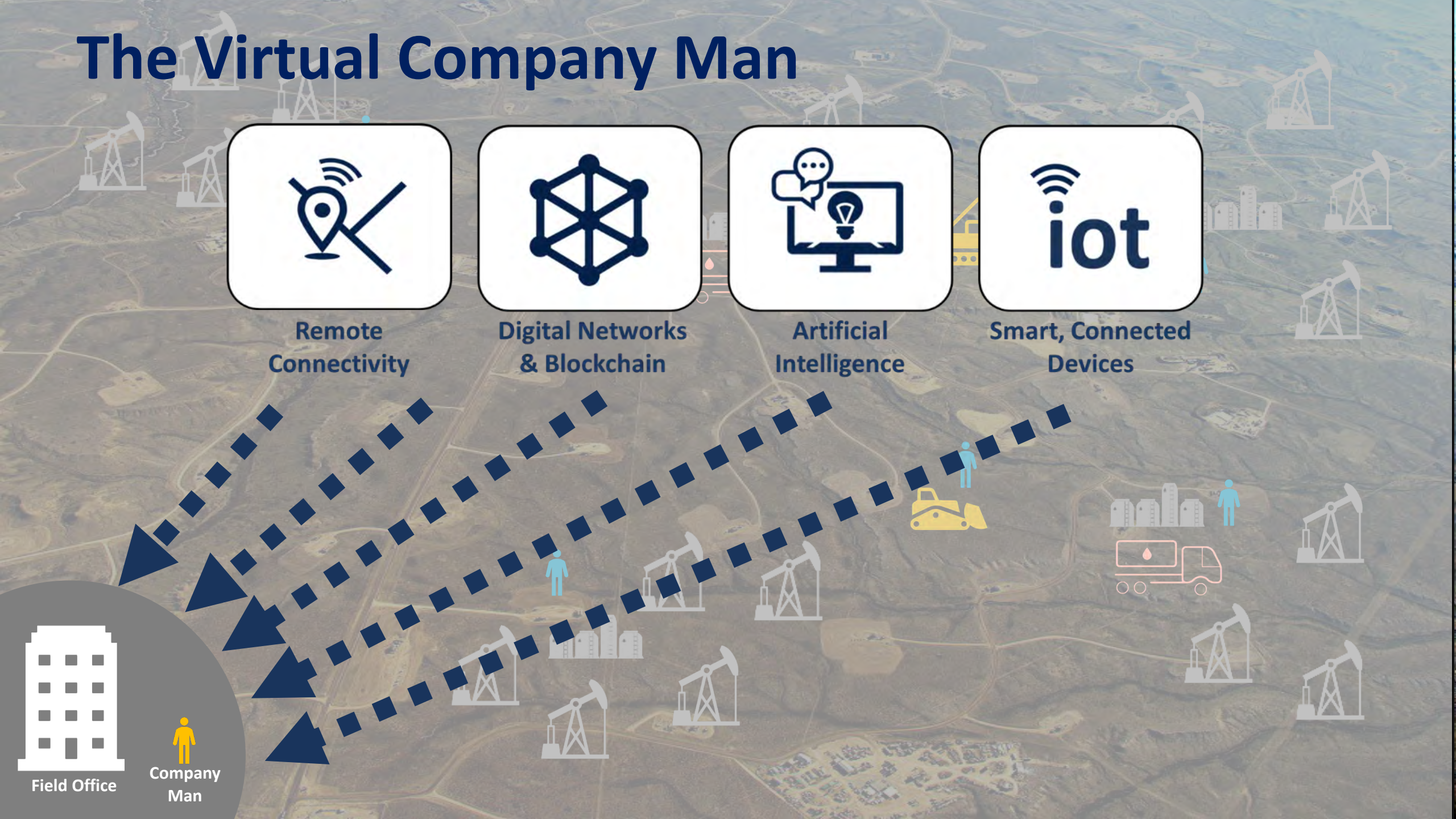
Smart, Connected
Devices



Field Office



Company
Man



Crescent Point Reduces Costs and Improves Processes with Digital Field Tickets

Situation

- Strategic initiative to use digital data to improve operations
- Paper-based tickets were costing \$2 million/year, lengthening invoice cycle times, masking billing issues, and increasing risk of duplicate and/or fraudulent billing

Solution

- Added *OpenTicket* to existing *OpenInvoice* deployment,
- Integrated *OpenTicket* with their Reporting system
- Initial roll out in South Saskatchewan

Results

- Achieving projected cost savings
- Reduced invoice processing times
- Click-of-a-button reports
- Easy monitoring of ticket lifecycle
- Process and procurement improvements
- Very positive supplier acceptance



Crescent Point

“Field Ticket is integral in getting more granularity in the data, having that detail and transparency from the vendor and our field staff. It allows us to better assess where problems are.”

Lisa Howland

Manager, Operations Accounting



Data-Driven Digital Oilfield 4.0



D&C Operations

Safety support by eliminating unnecessary travel

Digital field ticket data feeds **Morning Reports**

Rentals support

More accurate **cost management**

Better **operator/supplier relationships**



LOE Operations

Safety support by eliminating unnecessary travel

Digital field ticket data accelerates **cost and operations understanding**

“**Virtual Company Man**” concept

More accurate **accruals**

Operational information provided **as services performed**

Better **operator/supplier relationships**



Business Processes

Streamline field ticket & invoice review/coding/approval process

Fraud detection

Push processing as far forward as possible, **reducing back office effort**

Reduced knowledge worker involvement in **approval process**

Early Pay Discounts

Service Providers Get paid faster!



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