

Best Run Oil & Gas Company Roadmap

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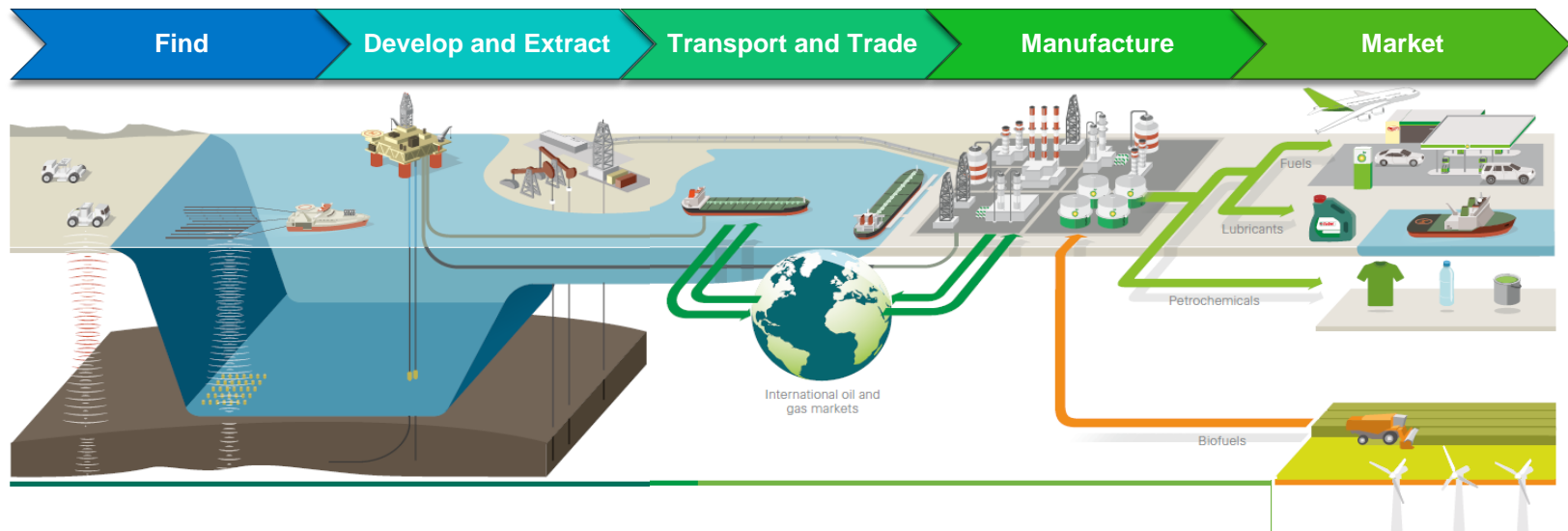
Agenda

- **Business Imperatives for Oil and Gas Industry**
- **SAP's Solution Offering**
- **Suggested transformation roadmap**

Imperatives for Oil and Gas Companies

In this challenging business environment

- Control project delays & cost over-runs
- Improve operational insights bridging silos
- Promote profitable production
- Reduce downtimes and deferrals
- Reduce risk for trading and improve profitability
- Reduce supply chain disruptions
- Increase in-country value
- Improve gross refining margins
- Improve situational awareness, reduce safety incidents
- Improve plant availability
- Improve on-time delivery



Expectations

¥ \$ € Optimize Capital Spend



Maximize Return On Assets



Improve profitability



Ensure sustainable operations

54% Higher Procurement Savings

1.9X Higher Return On Assets

60% Higher operating margin

60% Lower recordable accident frequency

Note: In comparison to average performers; Source: SAP Performance Benchmarking. All KPI benchmarks are for Oil and Gas Industry
*Oil and Gas value chain illustration taken from BP annual report

Unmatched SAP expertise and traction



>70 million

Barrels per day of oil is produced by SAP's oil and gas customers

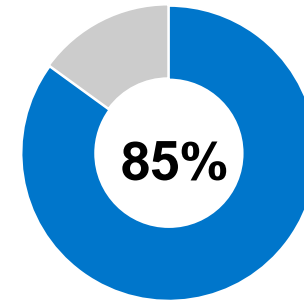
800+ O&G customers worldwide

Industry-driven: robust advisory councils ensure alignment

Deep industry-specific capabilities

Clear industry road map

40 years of delivering value to O&G



Fortune 2000
Oil & Gas

Largest O&G Companies

ExxonMobil	Statoil
Royal Dutch Shell	Rosneft
PetroChina	Lukoil
Chevron	ConocoPhillips
Gazprom	CNOOC
BP	Ecopetrol
Petrobras	Schlumberger
Total	Reliance Industries
Sinopec	Phillips66
ENI	Repsol YPF

Source: SAP analysis of Forbes 2000 rankings (May 2013) and SAP customer database as of May 2013

Solutions for the Oil and Gas Industry

SAP Value Map 2015

Capital and Spend Effectiveness	Integrated Digital Oilfield Operations	Hydrocarbon Supply Chain	Operational Integrity
Capital Planning	Hydrocarbon Production Management	Hydrocarbon Supply and Distribution	Risk Analysis and Governance
Portfolio and Project Management	Hydrocarbon Revenue Management	Hydrocarbon Processing Visibility	Workforce Competency
Strategic Sourcing and Supplier Management	Field Logistics	Commercial Sales and Marketing	Asset Integrity
Procure To Pay and Business Network		Secondary Distribution and Fuels Retailing	Environment, Health, and Safety
		Convenience Retailing	

Enterprise Information Management	Data Architecture and Integration	Information Governance	Content Management	Information Archival		
Human Resources	Core Human Resources and Payroll	Talent Management	Time and Attendance Management	Workforce Planning and Analytics		
Finance	Financial Planning and Analysis	Accounting and Financial Close	Treasury and Financial Risk Management	Collaborative Finance Operations	Enterprise Risk and Compliance Management	
Platform and Technology	Enterprise Technology	Analytics Technology	Mobile Technology	In-Memory Technology		

Capital and Spend Effectiveness

Drive integrated portfolio planning and project execution, supported by effective supply base



Enabling Solutions

Capital Planning

Align capital investment programs with business strategy and ensure transparency across the portfolio

Planning, Building, and Commissioning Assets

Drive program execution and operational readiness through real time visibility into progress and costs

Strategic Sourcing and Supplier Management

Drive visibility into spend and supplier contract performance

Procure To Pay and Business Network

Drive compliant purchasing and automated collaboration and leverage comprehensive supplier catalog and aggregate data for timely insights on supply base

Business Impact¹

22%

Higher asset productivity where asset life cycle is optimized through long term financial planning, utilization, upgrade and replacement plans

30%

Higher annual savings where for oil and gas companies, where software aggregates purchase across business units for accurate global analysis of supplier spend data

Best-Run Customers

20%

Fewer mistakes in purchasing documents



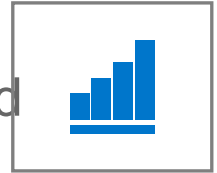
“The SAP Supplier Relationship Management application helped us optimize our procurement processes and establish transparency. It also helped us increase our supplier base and sped up the purchasing process by eliminating paperwork.”

Beltiukov Ivan Vsevolodovich, Director of Procurement and Contracts, LUKOIL MID-EAST LTD.

Source: SAP Performance Benchmarking

Integrated Digital Oilfield Operations

Manage convergence of production, maintenance, engineering, and financials at all enterprise levels



Enabling Solutions

Field Data Capture and Surveillance

Streamline data collection, validation, surveillance, and notification processes.

Integrated Planning and Performance Analysis

Integrate production, maintenance, engineering, and revenue

Field Logistics for Operator Companies

Enable field personnel to order, schedule, deliver, and confirm operational services efficiently and accurately

Field Logistics for Service Companies

Achieve real-time collaboration among field employees by planning projects accurately

Hydrocarbon Accounting

Increase visibility into production and allocation data, reconcile venture accounting and partner billing

Best-Run Customers

4% higher asset utilization

Large NA Oil Field Services Company

“We are focused on capturing efficiencies through our supply chain and in the field through the reinvention of our service delivery platform.”

Chairman, President and Chief Executive Officer

Business Impact¹

50%

Less maintenance rework time for organization that improve / automate asset performance data collection

17%

Higher return on assets where asset management systems are fully integrated with inventory management, MRO purchasing, engineering and finance

Hydrocarbon Supply Chain

Increase visibility into hydrocarbon supply chain and downstream operations



Enabling Solutions

Commodity Management

Integrate commodity sales, procurement and risk management

Hydrocarbon Processing

Coordinate operational performance by providing visibility into operational and manufacturing support activities

Hydrocarbon Supply and Distribution

Enable real-time visibility and insight into each step of the hydrocarbon supply chain

Secondary Distribution

Distribute fuel products faster and more profitably

Commercial Sales and Retailing

Analyze customer demand from various channel and respond in real time

Best-Run Customers

2 days Shorter order-to-cash process

Business Impact¹

40%

Lower supply chain planning cost where what-if scenarios are used extensively to evaluate different problem resolution approaches

32%

Lower expedited transportation spend (% of revenue) where allocated or available quantities are calculated for each location based on the latest master supply plan and are used to drive distribution planning



“SAP Business One has helped our organization streamline business processes while providing total transparency into our operations, resulting in reduced workloads and increased profitability.”

Greg Cunningham, CEO, Apex Fuels

Source: SAP Performance Benchmarking

Operational Integrity

Integrate enterprise operations with standardized EH&S and risk management system



Enabling Solutions

Risk Analysis and Governance

Enable risk-based planning and monitoring of critical enterprise processes and data

Operational Risk Management

Proactively manage worker safety and regulatory compliance through increased visibility into EHS risks

Asset Integrity

Integrate, automate & unify all asset performance and maintenance-related data, processes & reporting

Environmental Stewardship

Embed compliance controls across purchasing, engineering, operations and distribution

Workforce Competency

Improve visibility into training effectiveness and skill gap, to train, certify and secure talent pool

Business Impact¹

49%

Lower unplanned downtime reported by organizations that monitor and maintain internal and external personnel skills and certifications for regulatory requirements, safety and efficiency

79%

Lower accident frequency rate reported by organizations that establish and monitor strong safety measures for people and assets

Best-Run Customers

63% Reduction in environmental incidents

\$8 M Annual savings in energy usage per plant



“As we look to meet the evolving operational needs of our business, SAP offerings were a natural selection to deliver an efficient, dependable solution that increased transparency and reporting across our operations with demonstrable success.”

Hal Zesch, CIO and Senior Vice President, Valero Energy Corporation

Source: SAP Performance Benchmarking

Analytics solutions from SAP

Release the power of collective insight – engage, visualize, and predict



Engage

Rapidly **connect individuals**, data, and processes and drive better decisions.



Visualize

Intuitively explore and present data in 3D to **reveal new insights** across the full hydrocarbon value chain at a glance.



Predict

Confidently drive **better business outcomes** to preserve the working lifetime of equipment and prevent failures and downtime.

Typical results

6x Faster financial consolidation (Statoil)

94% Faster average queries (Engen Petroleum Ltd.)

50% Improvement in return on revenue (Concho Resources)

57% Reduction in time to generate reports¹

60% Oil and gas companies using Big Data for geophysical modeling, demand forecasting, and equipment maintenance²

75% Of people in an organization having access to analytics by 2020³

Sources: 1. SAP Performance Benchmarking 2. Bloomberg 3. Nucleus Research

Mobile solutions from SAP

Change how people learn, work, and engage



Mobile apps built with

SAP Fiori apps for personal productivity

SAP Lumira software for analytics on the go

SAP Mobile for mission-critical tasks in the oil patch

Solutions from hybris, an SAP company, to delight consumers at the pump

And powered by

SMP | SAP Mobile Secure | SAP Messaging Services

Typical results

10% reduction in refinery turnaround ³

50% increase in labor productivity ²

10-20% increase in work capacity ²

80% higher margins reported by process manufacturing companies deploy mobile solutions for managing assets ²

65% of O&G executives say mobile technologies are particularly helpful to decision-makers' real-time understanding and response to preventing failures ¹

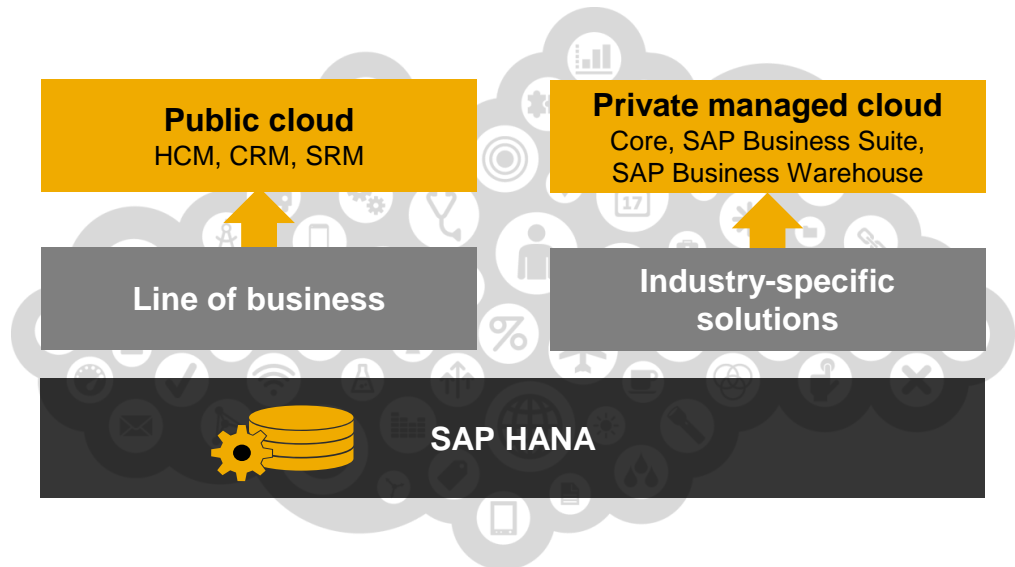
Sources: 1. The Economist Intelligence Business Unit 2. SAP Performance Benchmarking 3. A global leader in oil and gas

Cloud solutions from SAP

Rapidly deploy on shore, off shore, globally, and across your value chain

Reach your workforce, partners, and consumers at the pump.

- **Shorter time to value**
- **Cost reduction**
- **Lower barrier to innovation**
- **Scalability**



Typical results

40% Greater ability to utilize Big Data to gain insights with a well-established analytics and data-modeling¹

30% Lower total cost of ownership over on premise across industries²

51% Of total savings realized in the first year across industries¹

16% Of companies have a 360-degree view of their customers¹

39% Higher operating effectiveness with ability to monitor business in real time¹

90% Improvement in implementation time across industries²

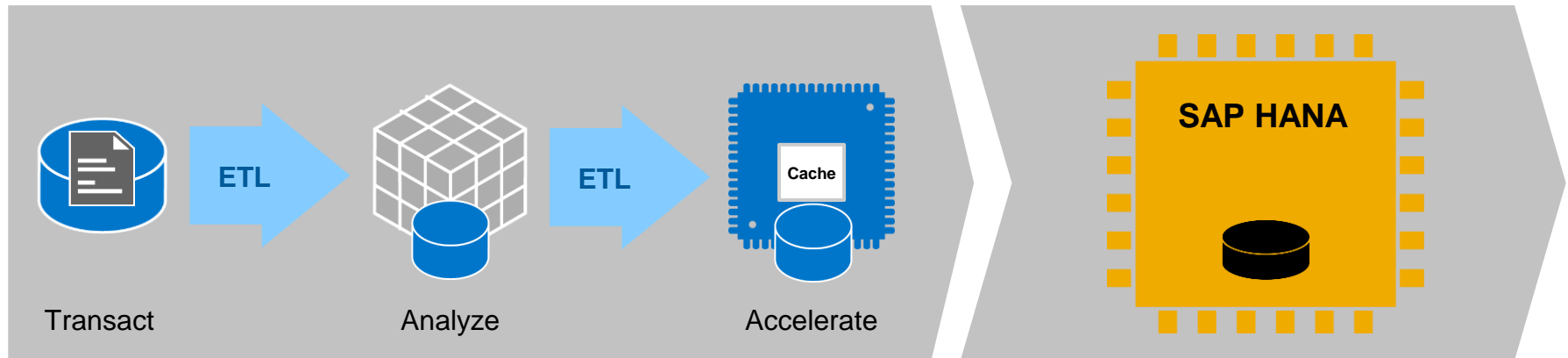
Sources: 1. SAP Performance Benchmarking 2. "SAP Managed Cloud as a Service (MCaaS); "VMS AG , July 2014.

The SAP HANA platform

Unleash Big Data in real time

From **multiple copies** of data for transactions, analysis, and process acceleration

To a **single in-memory** atomic copy of data for real-time transactions and analysis



Typical results

94% faster average queries, 87% data compressions, 2 weeks rapid-deployment solution (**Engen**)

2 months go-live, 2x increase in fleet size over next 3 years (**Pacific Drilling**)

8x Faster Opening and Closing periods from work data (**Statoil**)

10x Faster data loading (**Marathon Oil**)

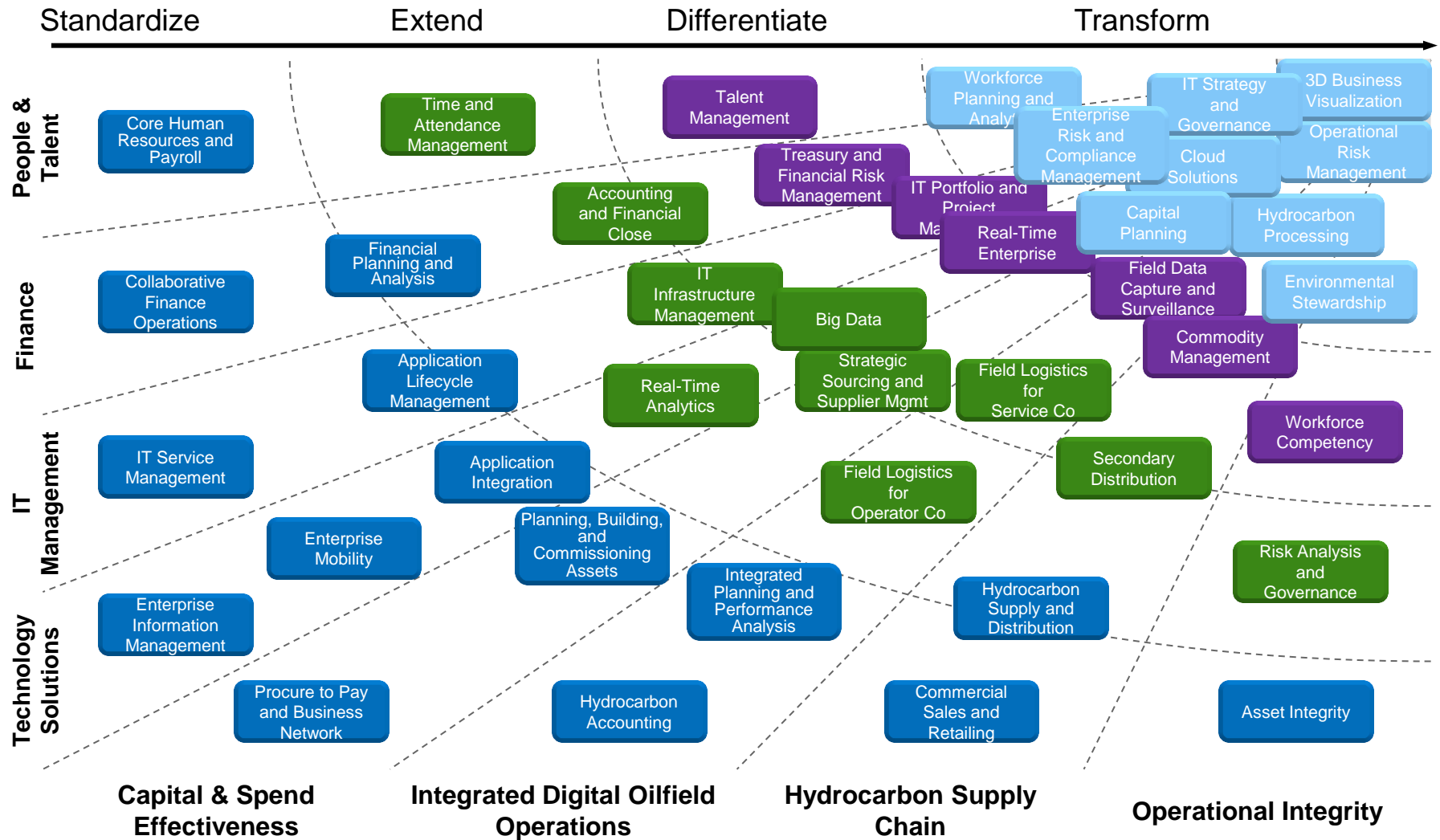
14,000x faster reporting from 8 hours to 2 seconds (**Surgutneftegas**)

HANA startup partner solution example: Fultura Safety 360 - Oil & Gas: [Demo video](#)

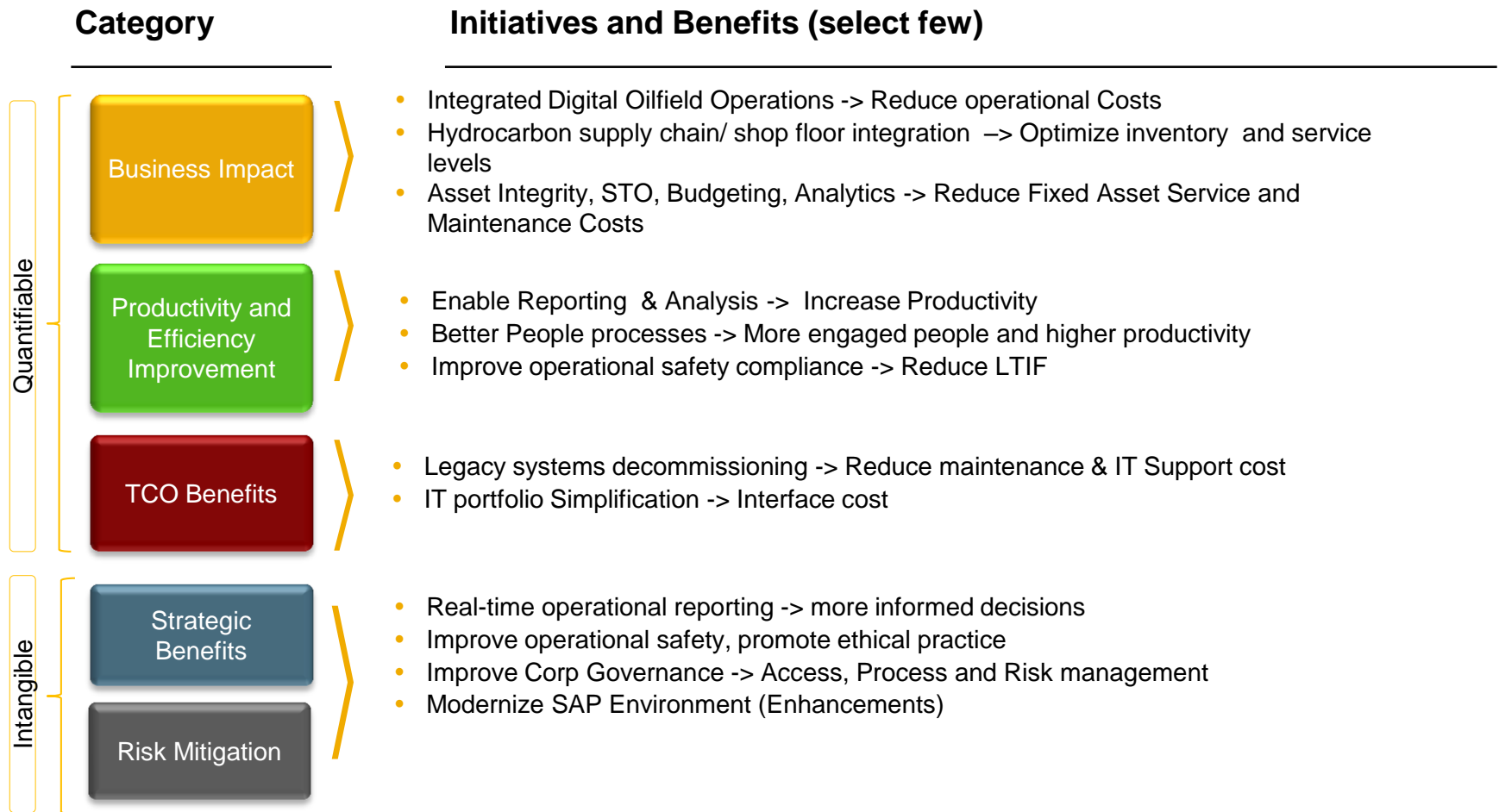
Roadmap for “Best-Run Oil & Gas Company”

A transformational journey based on value map survey

**GAC Survey
Priorities**



Value of being a “Best-Run Oil & Gas Company”



Thank You!



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with SAP in Design thinking workshops
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Initiate

the benchmarking process with a free Value Assessment at valuemanagement.sap.com