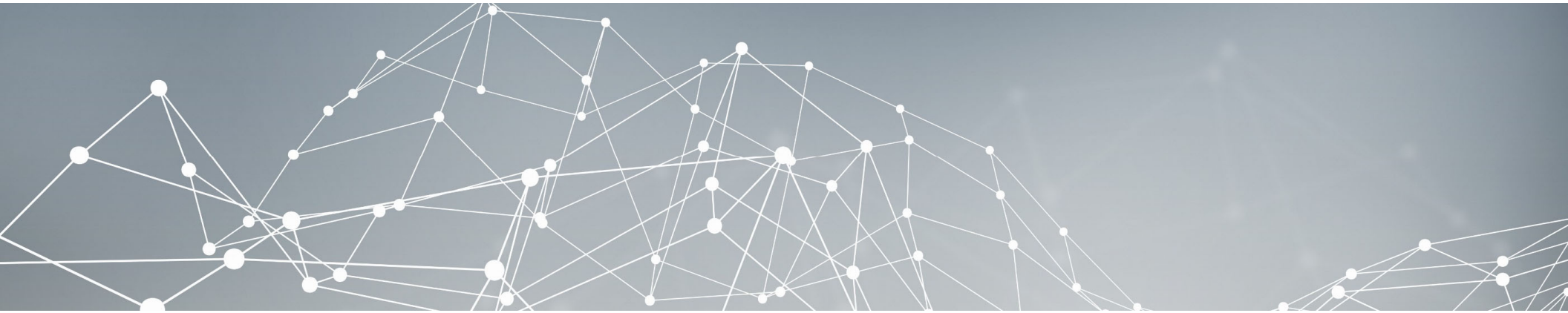


## OUR VISION



### Connecting **People**

**Aucerna's vision is to provide the golden thread** of information that connects decision makers from operations to the boardroom in the modern energy industry.

# AUCERNA STACK

## Aucerna



Most Trusted  
Market Leading  
Integration  
Expertise

## Execution



AFE Management  
RTx Workflows  
Budgeting & Forecasting  
Operations Scheduling

## Planning



Field / Asset Development Planning  
Exploration & Appraisal Risk  
Strategy & Decision Analysis  
Business Planning

## Reserves



Technical Forecasting  
Reserves Estimation  
Reserves Management  
Petroleum Economics

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# Upstream Oil & gas industry Software Paradigm

	Maturity	Legacy Incumbent	Design	Build	Operate
<b>Investment Layer</b> (Back Office)	<b>Mature</b>		ERP, budgeting and related systems focused on historical financial analysis	Supply chain management, logistics, procurement and business performance management	 Production accounting, allocations and reserves management
<b>Business Layer</b> (Front Office)	<b>Early-Stage Growth</b>	<b>None</b>	 Strategic planning, asset development, economics, and risk / uncertainty analysis	 Capital management, operational scheduling, activity planning, and well lifecycle management	Field data gathering (SCADA, RTC, IoT) and integrated asset management
<b>Physical Layer</b> (Technical Office)	<b>Late-Stage Growth</b>	 	 Technical reserves assessment, reservoir modeling / simulation, earth modelling, and geosciences	Surface infrastructure design, facility design / simulation, well design, and drilling	Flow assurance, surveillance, and well maintenance execution

# Global Footprint



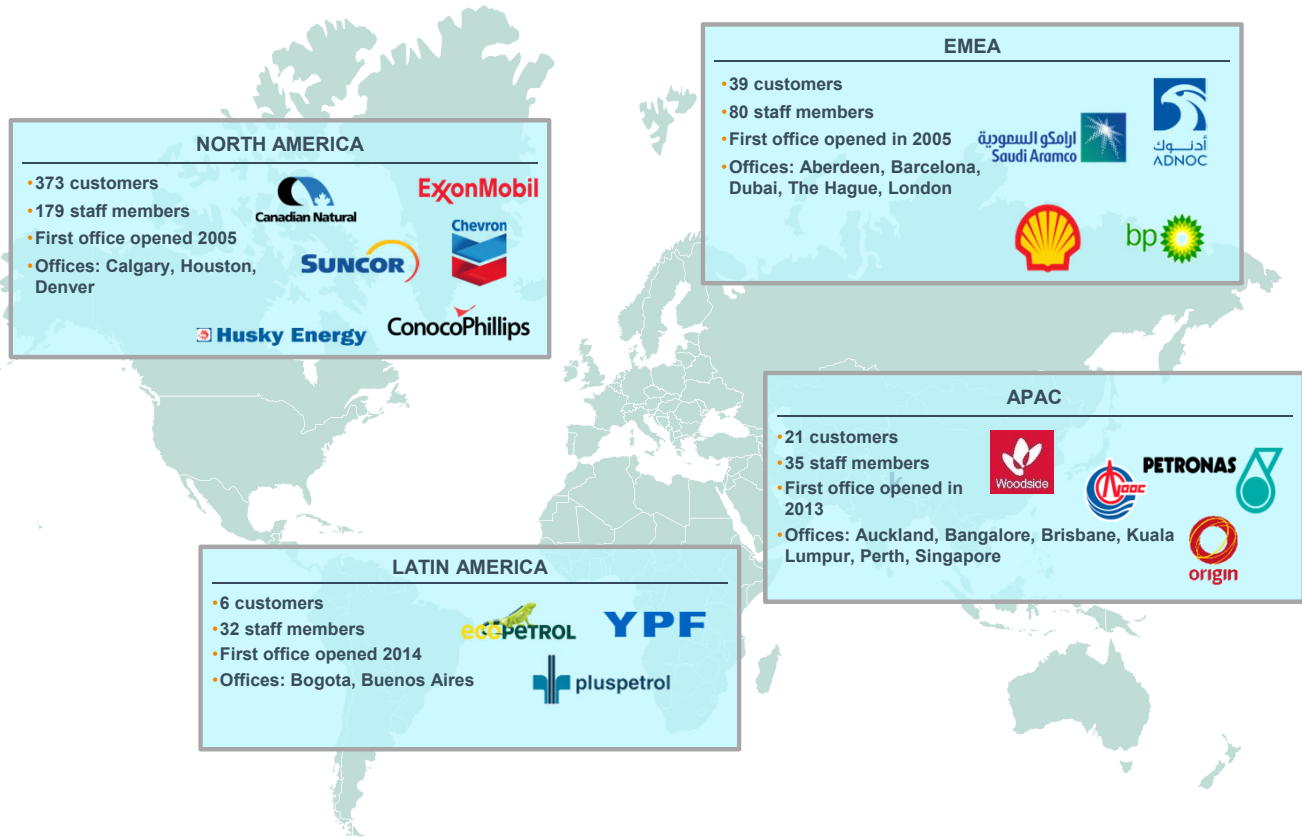
**GLOBAL PARTNER**  
to address a  
**GLOBAL INDUSTRY**

Global footprint with software used in over 35 oil & gas producing countries

Solutions used in 9 of the 10 largest IOCs and 16 of the 25 largest O&G organizations globally

IOCs, NOCs, and Independents / Majors represent 88% of ACV (170 logos)

50% of GTM staff<sup>1</sup> and 45% of total staff located outside of North America



Note: ACV and customer counts figures represent July 2018 LTM. Headcount figures as of Dec-18. <sup>1</sup> Includes Account Managers, Client Care, Global Account Managers, Sales Management, and Technical Consultants.

# Aucerna's unique positioning

	Legacy		New Entrants	
	Industry Incumbents	Independent O&G Point Solutions		Horizontal Planning
Vendors	  	 	 	  
Current State of Play	<ul style="list-style-type: none"> <li>Maintenance model with limited to no product investment in years</li> <li>Legacy market share position (particularly in U.S. market) intact but continuing to decline</li> <li>Incumbents have sought to partner with Aucerna over the past 12 months due to insufficiency of internal solutions</li> <li>Excel historically was the “tool of last resort” but is no longer able to keep up with today’s planning needs</li> </ul>	<ul style="list-style-type: none"> <li>Inability to scale or have strategic impact relegates group to tier 4-5 or small deployments</li> <li>Heavy reliance on custom / third-party integrations for broader reach</li> <li>Aucerna frequently displacing point solutions (industry broadly moving towards single-source integrated solutions)</li> </ul>	<ul style="list-style-type: none"> <li>Intrigued by upstream oil &amp; gas markets but with limited-to-no traction</li> <li>Lacking in domain knowledge (e.g., limited technical knowledgebase, models, and purpose-built O&amp;G-specific workflows) and deep executive-level relationships (particularly at tier 1-3), which are all critical drivers of success in O&amp;G industry</li> <li>Poor track record with early adopters who have not seen promised benefits materialize</li> </ul>	



# Aucerna & today's E&P challenges

## Key Front Office Challenges



### Data Integrity:

Strategy, planning, and execution teams operating in siloes off of **disparate and inconsistent data sources**



Provides the bridge for operational activity, strategy, and financial outcomes – Aucerna **ties strategy to resources, actions, and business realities** that creates transparency and accountability



### Data Connectivity:

**Disconnected data systems** makes dynamic planning and execution extremely challenging



Eliminates manual and duplicative efforts to **streamline and vastly increase productivity by leveraging a single source of data and integrated workflows** throughout the organization



### Business Insights:

Making decisions without complete information and **relying on instinct rather than analyses**



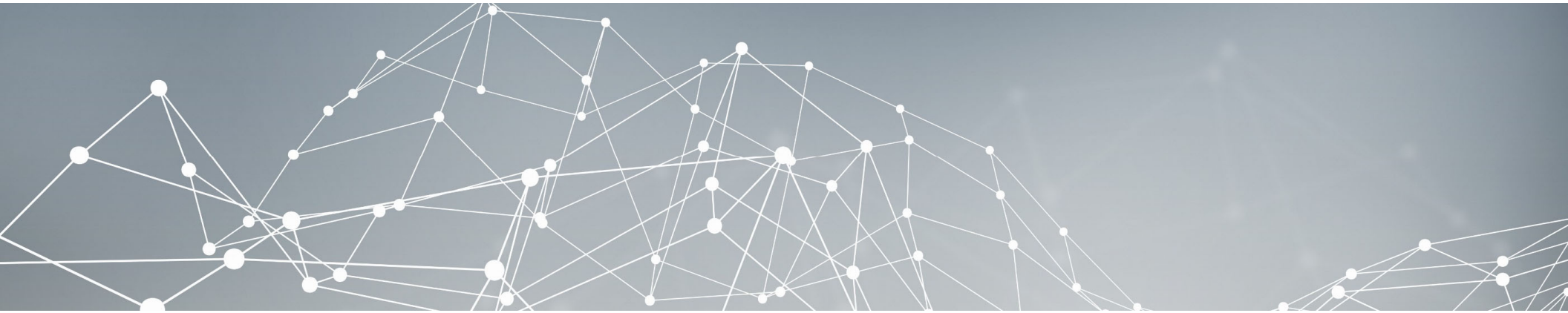
Integration of planning and reserves provides a uniform view of a company's assets resulting in **increased efficiency and more informed decisions**

## Why this Matters

- Industry has shifted to **focus on maximizing profitability** versus maximizing production – the right decisions to **optimize operational efficiency** is more critical and under more scrutiny than ever
- Volatile oil price has increased awareness and importance of **longer-term planning and data-driven decision making** framework
- E&P organizations are highly complex with exposure to volatility – lack of **data consistency** between the front office, business units, and asset teams exacerbate this industry dynamic
- E&P capital planning process is **time consuming, duplicative, and labor intensive**, which has become more apparent as planning is now an **evergreen process** and no longer just a nice-to-have annual exercise
- Normalized mid-range oil prices puts **incremental stress on global capex decisions** and resource planning



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# Portfolio Optimization and Uncertainty Analysis



# Advanced portfolio optimization & uncertainty analysis



## Optimize complex portfolios

Leverage the power of advanced optimization to quickly evaluate the optimal mix of dissimilar and high-risk assets.

## Rapidly evaluate strategic alternatives

Understand operational and financial tradeoffs through scenarios that honor company goals & constraints.

## Analysis of Risk and Uncertainty

Incorporate predictive analytics to help understand downside exposure and to quantify the probability of meeting short-term and long-term goals.



**Unlock the performance potential of your upstream portfolio**