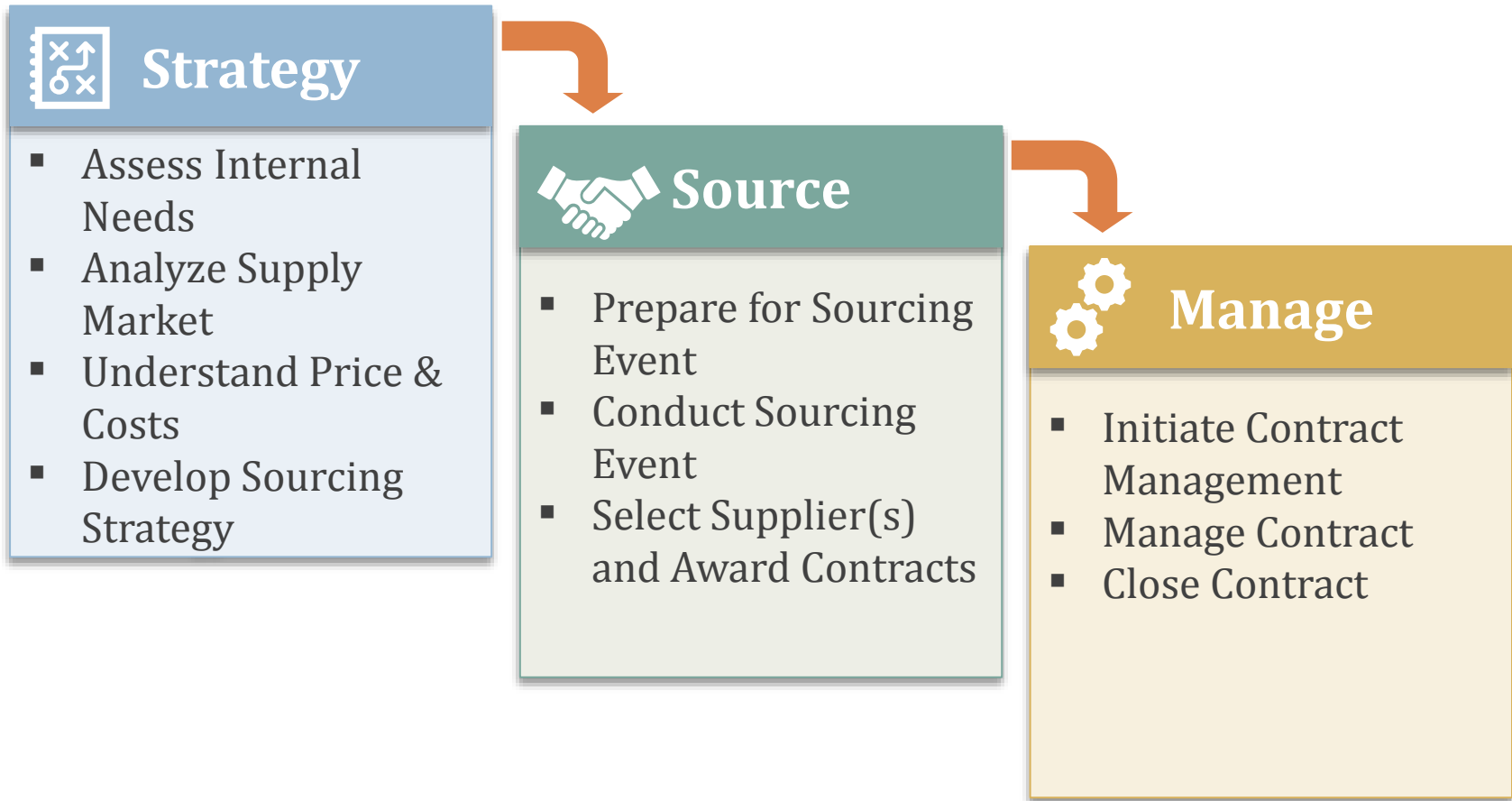


# Strategic Sourcing

*Anklesaria Group, Inc.*  
*Del Mar, CA*

# Strategic sourcing workshop agenda



# Table of Contents



	<b>Introduction</b>
	Strategy
	Source
	Manage
	Way Forward

# Strategic sourcing - objectives

Learn a structured process to strategically source products/ services/capital equipment



Leverage knowledge across regions, categories and over time



Develop fact-based sourcing and negotiation strategies



Establish a repeatable, user-friendly process for sourcing and cost management

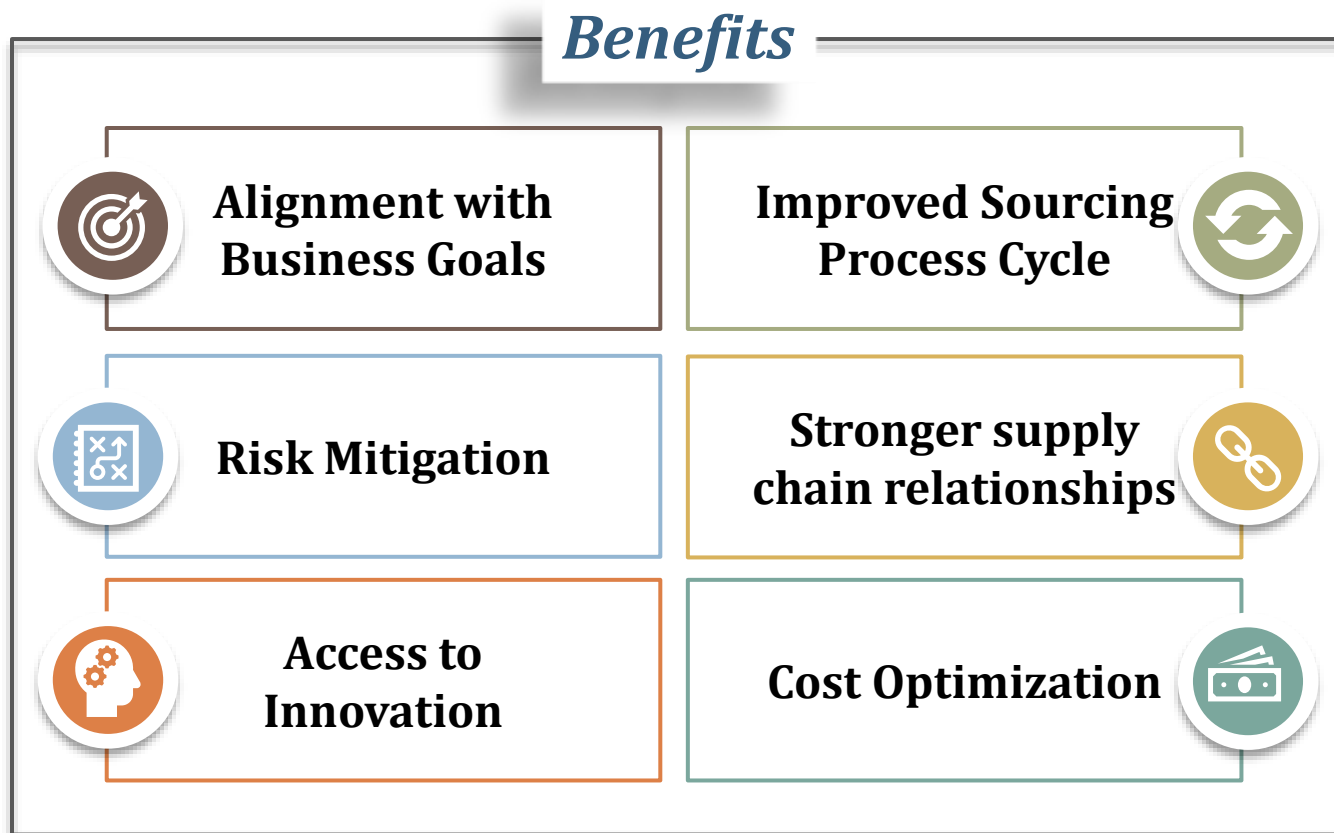


Deliver maximum value to the business at the lowest total cost

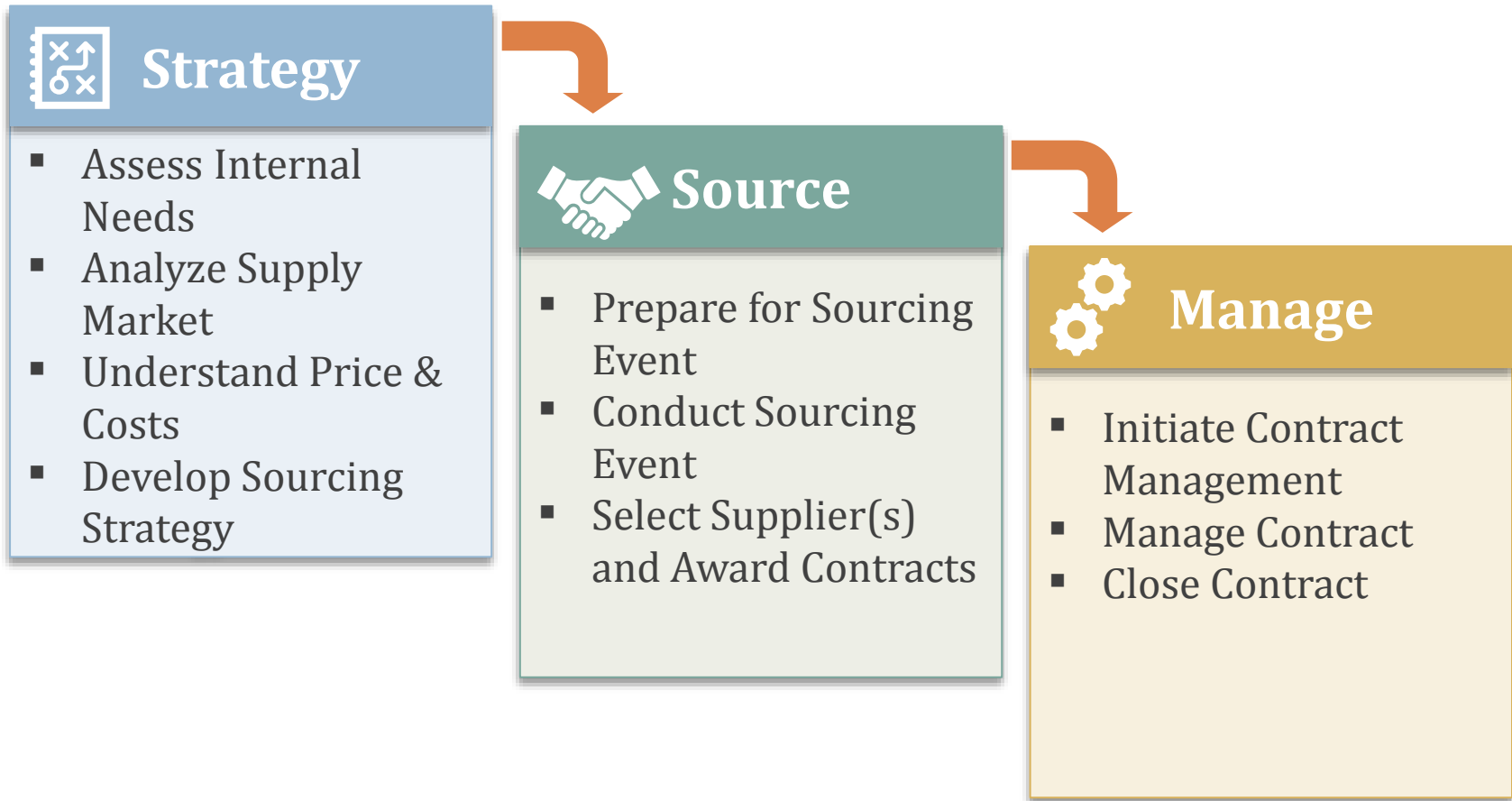


## What is strategic sourcing?

*"Satisfying business needs from market via the proactive and planned analysis of supply markets and the selection of suppliers with the objectives of delivering solutions to meet predetermined and agreed business needs" - CIPS*



# Strategic sourcing process



# Table of Contents



Introduction



Strategy



Assess Internal Needs



Analyze Supply Market



Understand Price & Costs



Develop Sourcing Strategy



Source



Manage



Way Forward

# Assess internal needs – section details

- Team and RASCI
- Stakeholder Mapping
- Goals, Constraints and Risks
- Spend Analysis
- Category Importance
- Category Profile



# Cross-functional team

*Good sourcing strategies require a cross-functional team*

**Commodity/  
Category  
Managers**



**Internal Users**

e.g. engineering, manufacturing, marketing, etc.

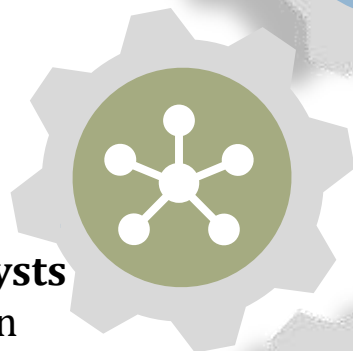


**Senior management**

e.g. leadership team, procurement head, etc.



**Team**



**Sourcing Analysts**

e.g. supply chain analysts, contract engineer, etc



**Internal stakeholders**

e.g. finance, accounts payable, etc.



**External stakeholders**

e.g. consultants, SMEs, government/regulatory bodies etc.

# RASCI matrix

*RASCI Matrix – The RASCI matrix seeks to establish responsibilities for team members*

## Responsible

- The person who conducts the activity
- Responsible for completing the activity

## Accountable

- The person accountable for effectively completing the activity
- Responsible persons are accountable to him

## Support

- The person provides support to the responsible party

## Consult

- The person is not directly involved but consulted during the activity
- Can be subject matter expert

## Inform

- The person needs to be informed about the progress of the activity

# Downhole case background

## Downhole Drilling Example

The Category Manager of Schlumberger based in Houston is reviewing his category and contracts. As part of his Procurement Department's initiative to develop a coherent strategy, he is exploring a structured and logical process to develop his sourcing strategy.

**Category background:** The Downhole Drilling category comprise of the Mud Motor (rentals), Laboratory and Testing, Inspection and Certification services, Treating Iron Services, etc. The tools and services procured through this category are required to drive all drilling activity which ultimately contribute to the overall success and growth of the business. The Oil & Gas Wells in focus are located in

The stakeholders involved include the Department/ Business unit head, department/ business unit manager, sourcing manager, sourcing analyst, logistics department, etc.

Needs to be reviewed

# Team and RASCI

## Downhole Drilling Example

Team Members	Assess Internal Needs					
	Define Team and RASCI Template	Stakeholder Mapping	Define Goals and Objectives	Spend Analysis	Category Importance	Category profile
Business Unit/Department head	Inform	Inform	Inform	Inform	Inform	Inform
Department Manager	Consult	Consult	Consult	Consult	Consult	Consult
Sourcing/Category Manager	Accountable	Accountable	Accountable	Accountable	Accountable	Accountable
Sourcing Analyst	Responsible	Responsible	Responsible	Responsible	Responsible	Responsible
Business users	Consult	Support	Consult	Support	Support	Support
Supporting Business Departments (finance etc.)		Support		Support	Support	Support
External Consultants		Support		Support	Support	Support

# Stakeholder Categories

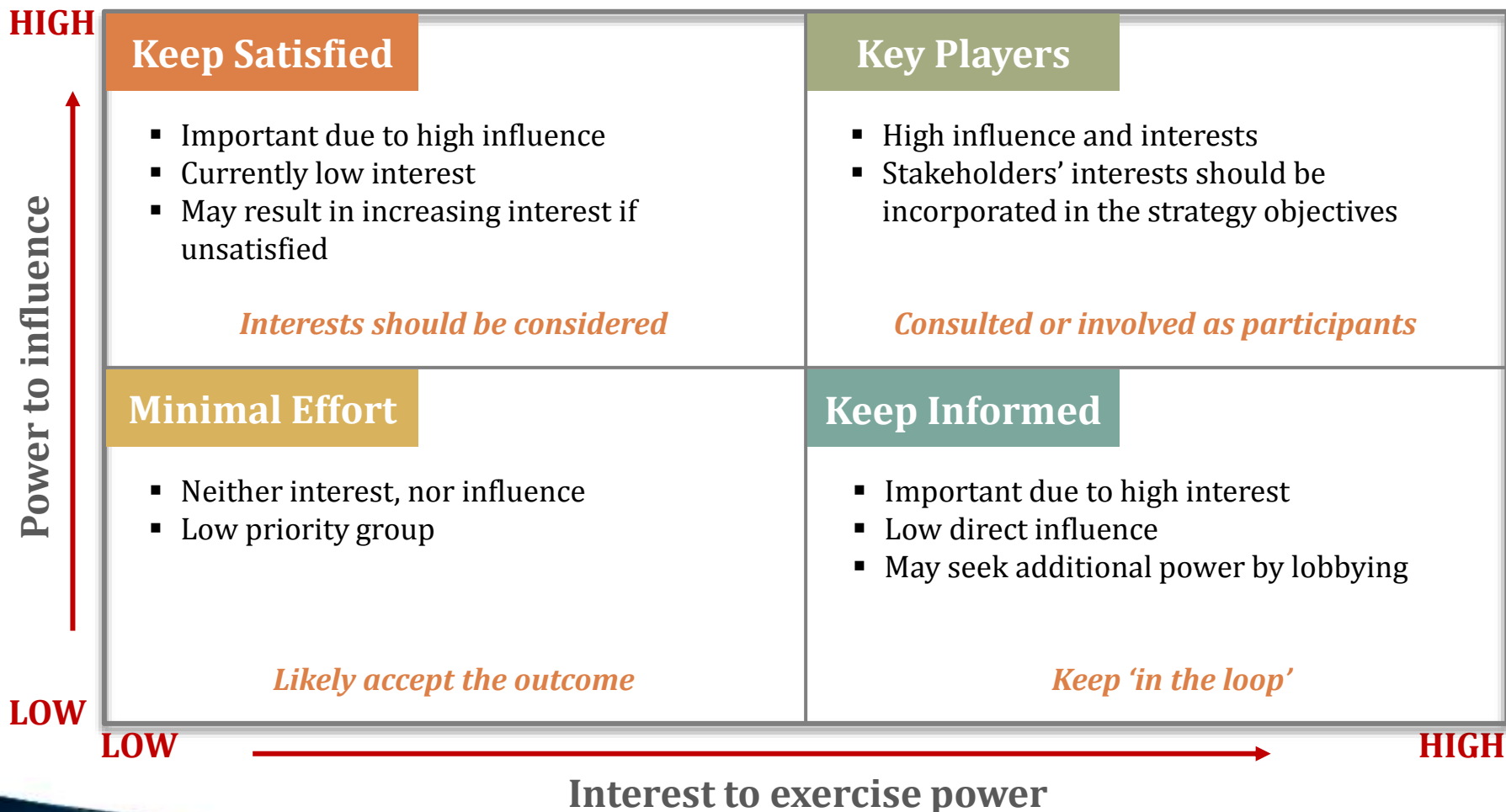
5 main categories of stakeholders:

- Those with **formal power** to take decisions concerning the activities of the team
- Those with the **power to block** the implementation of the results of the team's activities
- Those with the **power to promote** the implementation of the results of the team's activities
- Those **affected** by the activities of the team
- Those with **relevant information** or expertise

Note: These categories are not mutually exclusive

# Stakeholder mapping

**MENDELOW'S MATRIX** – Map stakeholders based on their power to influence -and their interest to exercise the power in the sourcing strategy.

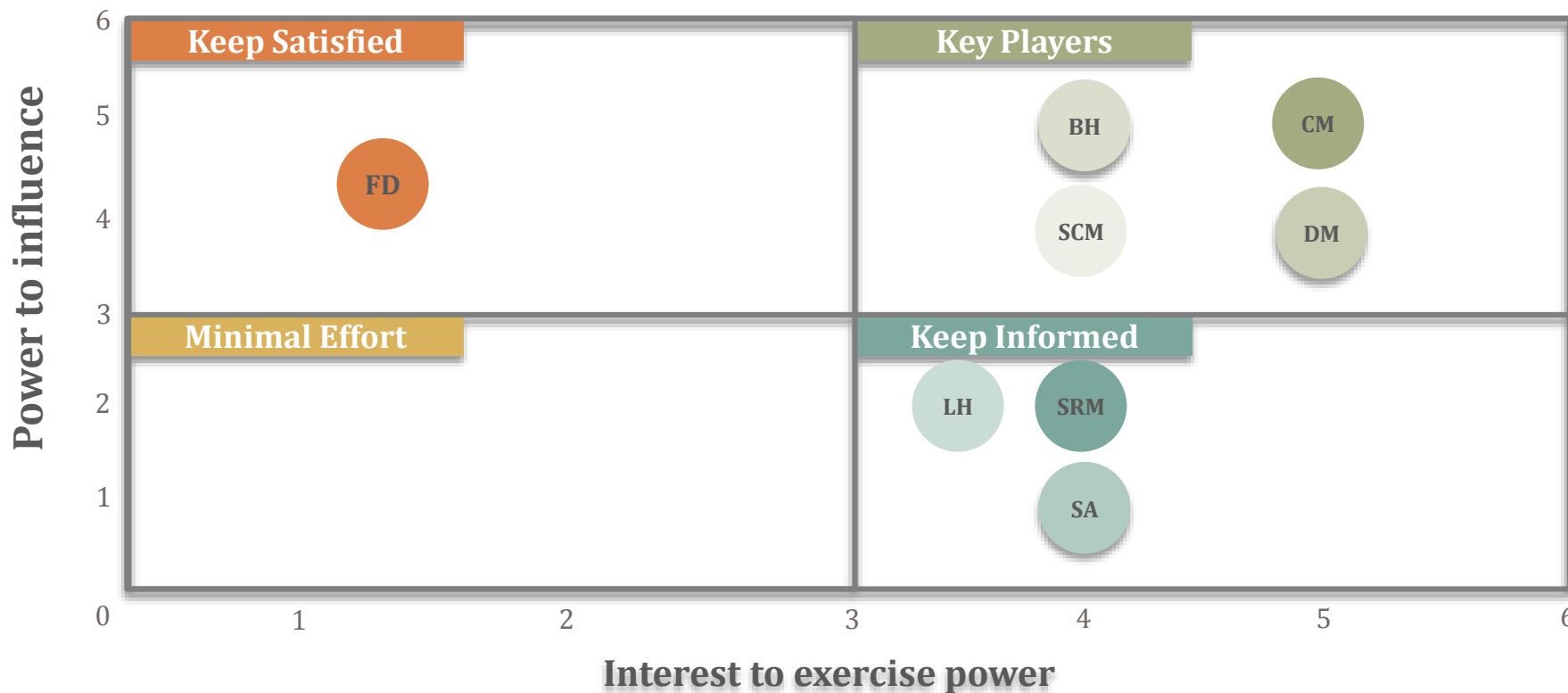


# Stakeholder mapping

## Downhole Drilling Example

- The Key Players are **Supply Chain Manager (SCM)**, **Department Manager (DM)**, **Business Unit Head (BH)**, **Category Manager (CM)**.
- **Finance Director's (FD)** interests should be considered, to keep him satisfied.

Mendelow Matrix



\*Supply Chain Manager (SCM), Department Manager (DM), Sourcing Analyst (SA), Business Unit Head (BH), Logistics Head (LH), Category Manager (CM), Supplier Relationship Manager (SRM), Finance Director (FD)

# How to engage: Do's and Don'ts

- Spend at least as much time actively listening as speaking
- Recognise the importance of stakeholder perceptions and address them
- Build local engagement capacity
- Dialogue directly with stakeholders when possible
- Allow time for social and informal contact
- Recognise and respect stakeholders' time
- Follow up after meetings
- Under commit and over deliver
- Make sure you engage the right people

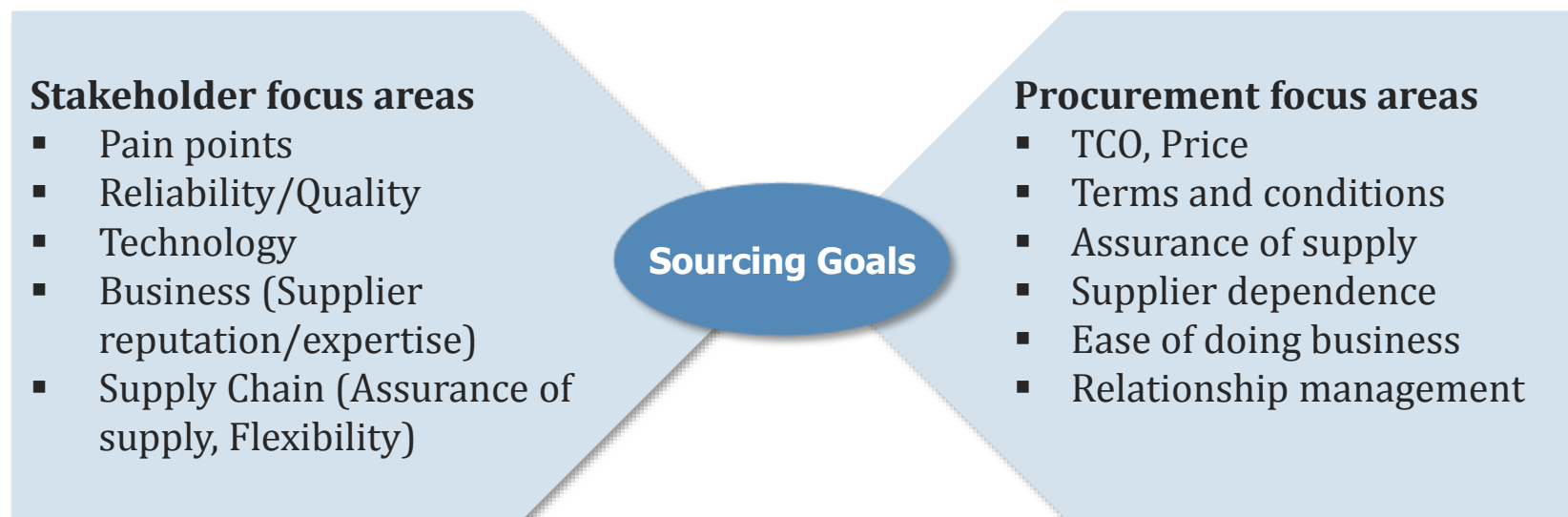
- Don't engage if you are not going to listen
- Don't try and develop all the answers before engaging
- Don't delegate stakeholder engagement
- Don't raise unrealistic expectations
- Don't rely on existing personal contacts
- Don't use consultants to manage the engagement process
- Don't ignore opinions of vulnerable people



# Goals, constraints and risks

## Goals must be established from an overall business perspective

- Identify the value drivers for internal users and customers
- Determine the value drivers for procurement
- Establish and group Sourcing Goals according to “CR-BEST”
- Identify constraints and risks, if any



# Define sourcing goals using CR-BEST

## Cost

- Cost competitiveness
- Cost management process

## Technology

- R&D program and investment
- Patents/intellectual property
- Production technology
- Technology road-mapping

## Reliability/Quality

- TQM program
- Quality performance
- Service levels
- Certifications

## Supply Chain

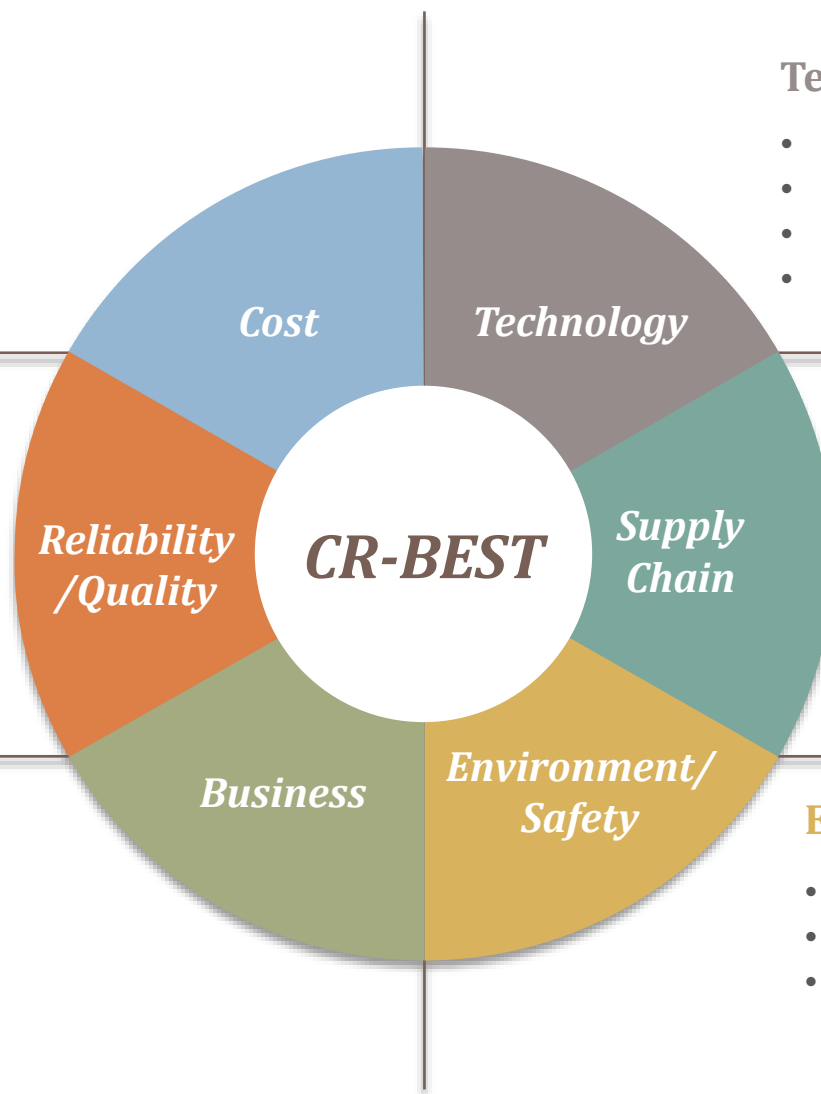
- Supply chain management systems
- Inventory control
- Delivery process and performance
- E-business capability

## Business

- Executive leadership
- Financial health
- Competitive position
- Business strategy

## Environment/Safety

- Environmental program
- Safety program
- Environment/safety record



[return](#)

# Sourcing goals, constraints and risks Downhole Drilling

	Sourcing Goals	Stakeholders								Overall Rank
		SCM	DM	SA	BH	LH	CM	SRM	FD	
<b>C</b>	Price	5	4	5	5	2	5	1	5	5
<b>R</b>	Responsiveness	1	2	1	1	1	1	1	1	1
	Quality of Service	3	1	2	3	4	2	1	2	2
	Continuous improvement	3	1	5	5	5	3	1	4	4
<b>B</b>	Profitability of vendor	4	5	5	5	5	5	3	5	7
<b>E</b>	Safety	2	3	3	2	3	4	2	3	3
<b>S</b>	Availability / Timely Delivery	5	5	5	5	5	5	1	5	6
<b>T</b>	Production Technology	5	5	5	5	5	5	5	5	8

Scoring (1 = Most/Extremely Important, 5 = Least/Not Important)

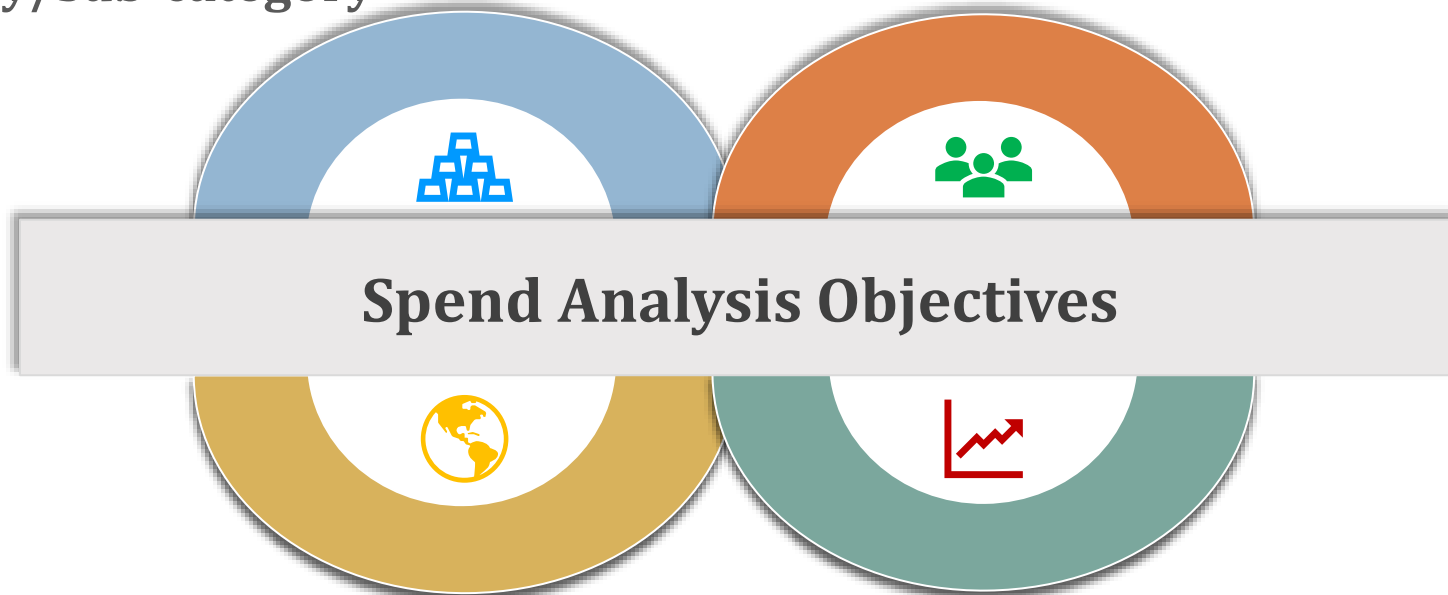
Constraints	Risks
<ul style="list-style-type: none"> <li>▪ Preference for local suppliers due to Local Content requirements</li> <li>▪ High barriers to entry due to high capex requirements within the industry</li> <li>▪ Lack of competitiveness due to dominance of the market by the big suppliers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Quality of Tools and Services supplied</li> <li>▪ Errors during execution</li> <li>▪ Faulty tools that cause disruptions in regular operations</li> </ul>

\*Business Unit Head (BH), Department Manager (DM), Sourcing Analyst (SA), Supply Chain Manager (SCM), Logistics Head (LH), Category Manager (CM), Supplier Relationship Manager (SRM), Finance Director (FD)

# Objectives of spend analysis

Spend by  
category/sub-category

Spend by top suppliers



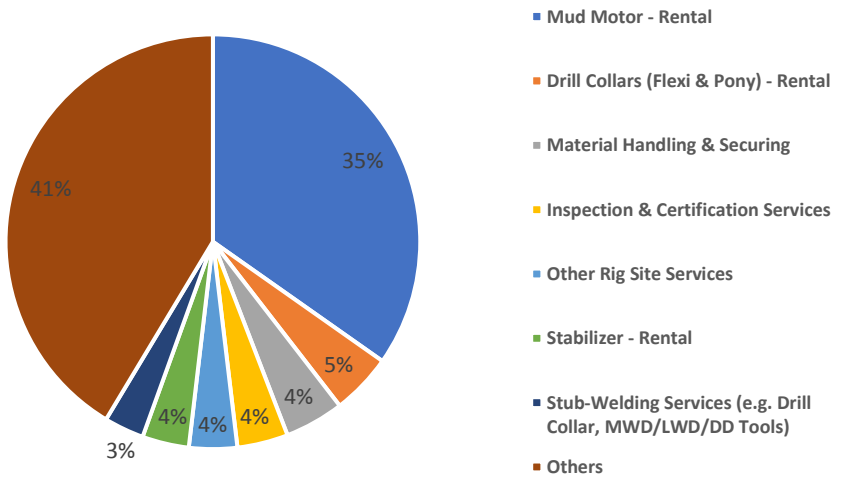
Regional breakdown of  
spend

Forecasted spend

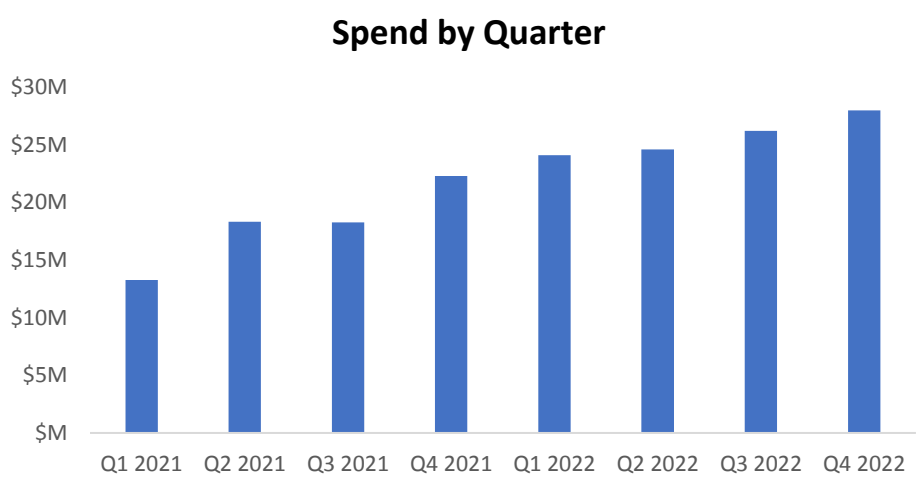
# Spend analysis

## Downhole Drilling Example

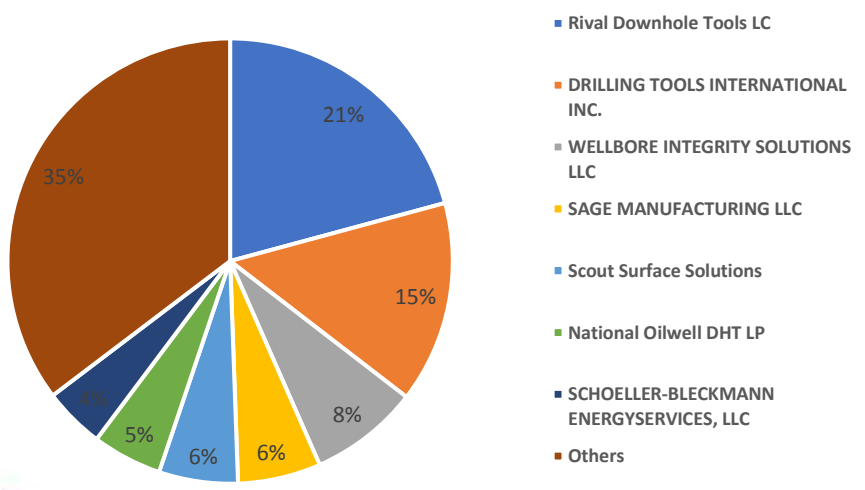
### Downhole Drilling (Spend by commodity), 2021-2022



### Downhole Drilling Spend, 2021-2022



### Cumulative Spend by Supplier, 2021-2022



### Key Takeaways

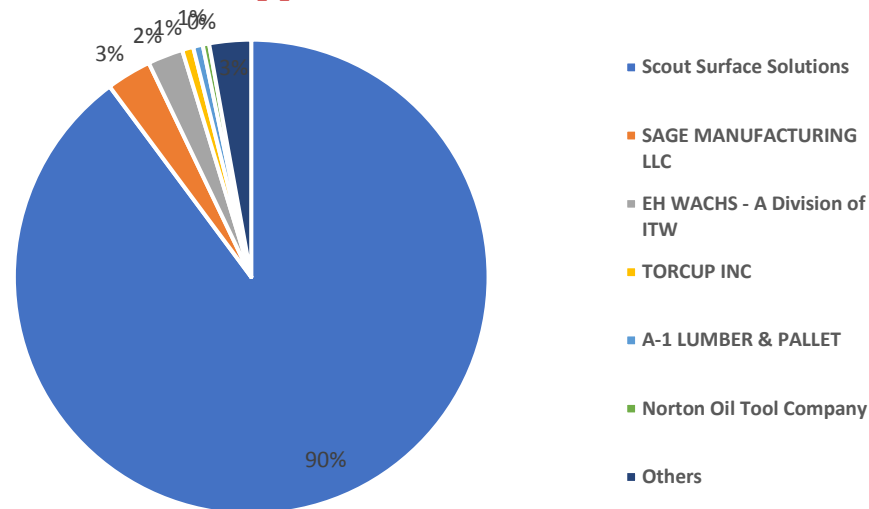
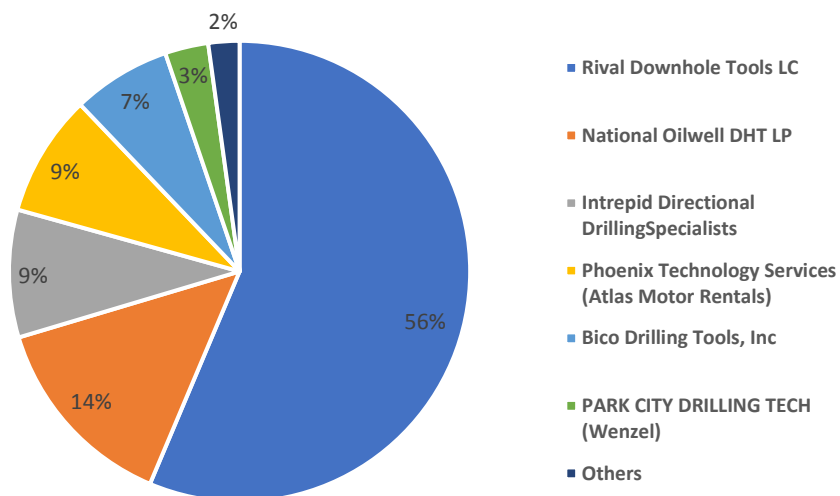
- Within the Downhole Drilling Tools and Services category, there are 238 products
- **Mud Motor rentals** accounts for **35%** of total spend under Downhole Drilling category.
- The quarterly spend was highest in Q4 2022.
- **Rival, DTI & Wellbore** are the key suppliers accounting for **44%** of the cumulative spend.
- **Rival** accounts for **21%** of the total 2021-2022 spend.

# Spend analysis

## Downhole Drilling Example

Cumulative Mud Motor (Rental) Spend by Supplier, 2021-2022

Cumulative Materials Handling and Securing Spend by Supplier, 2021-2022

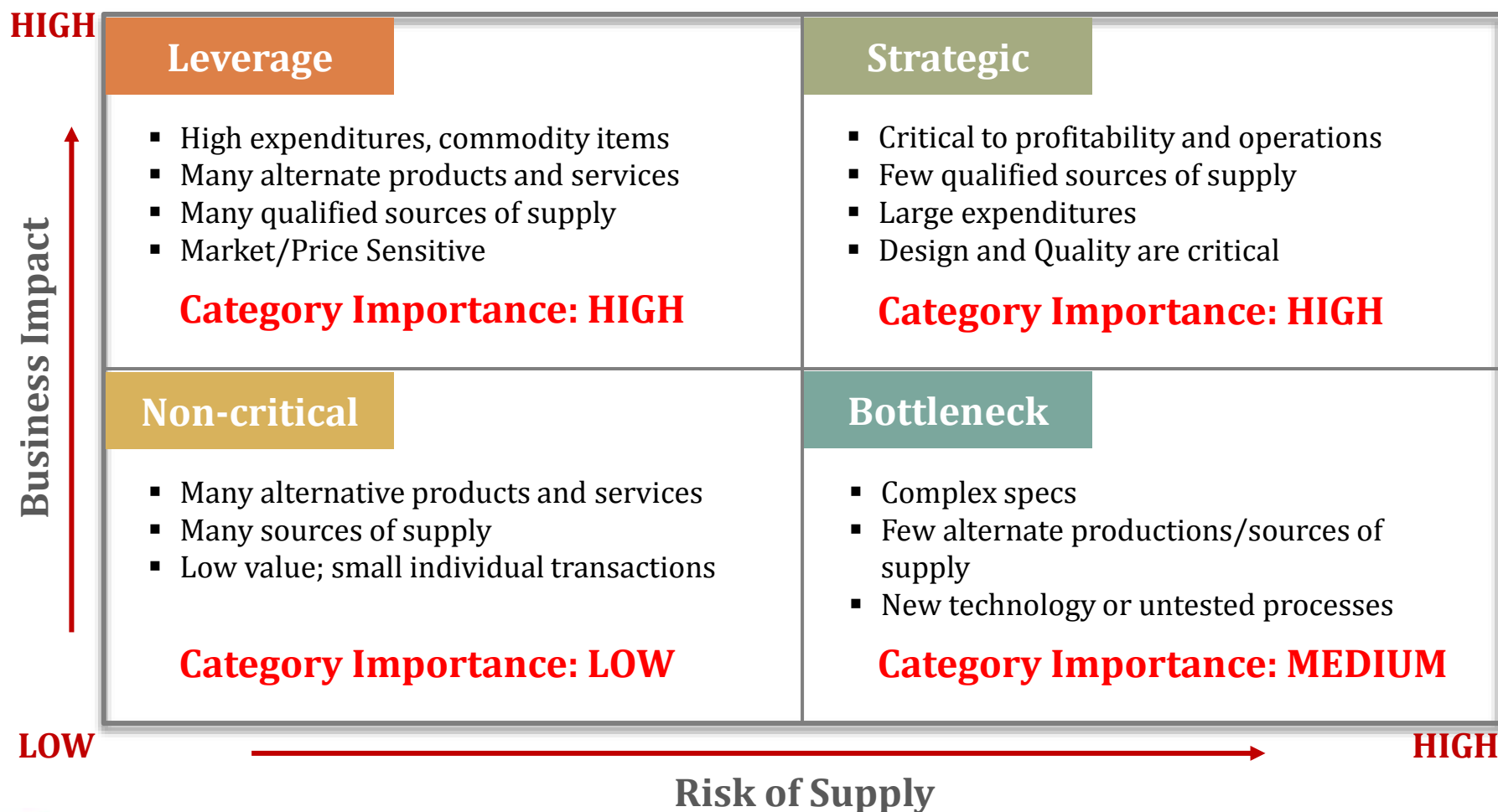


### Key Takeaways

- **Rival Downhole Tools** is the biggest supplier (**56%**) for Mud Motor rentals by spend.
- **Rival and National Oilwell DHT** together account for **70%** for Mud Motor rentals by spend.
- **Scout Surface Solutions** is the biggest supplier (**90%**) for Materials Handling and Securing (Downhole Drilling) by spend.


# Defining category importance

*KRALJIC MODEL - Position category based on the attributes "Business Impact" and "Risk of Supply"*



# Category importance

## Downhole Drilling Example

<b>Kraljic Model</b>  <b>Strategic</b>	<b>Business Impact</b>	<b>High</b>	<ul style="list-style-type: none"> <li>▪ The business impact is very high as non-availability of Downhole Drilling Tools and Services hampers Schlumberger’s exploration activities</li> <li>▪ The successful discovery of new oilwells is dependent on this category.</li> <li>▪ Downhole Drilling is a high-risk activity</li> </ul>
	<b>Risk of Supply</b>	<b>Medium</b>	<ul style="list-style-type: none"> <li>▪ Risk of Supply is Medium due to specifications from customers, Govt. regulations, political conditions</li> </ul>
<b>Category Importance</b>		<b>High</b> 	



# Strategy plan guide

	High <b>H</b>	Medium <b>M</b>	Low <b>L</b>
<b>Subject Matter Expert (SME) involvement</b>	Extensive	Some	Minimal
<b>Stakeholder involvement</b>	Extensive	Some	Minimal
<b>Supplier data requirement</b>	Extensive	Some	Minimal
<b>Analysis</b>	Detailed	Moderate	Minimum
<b>Sourcing activities effort</b>	High	Medium	Low
<b>Strategy review frequency</b>	1-2 years	3-4 years	5+ years

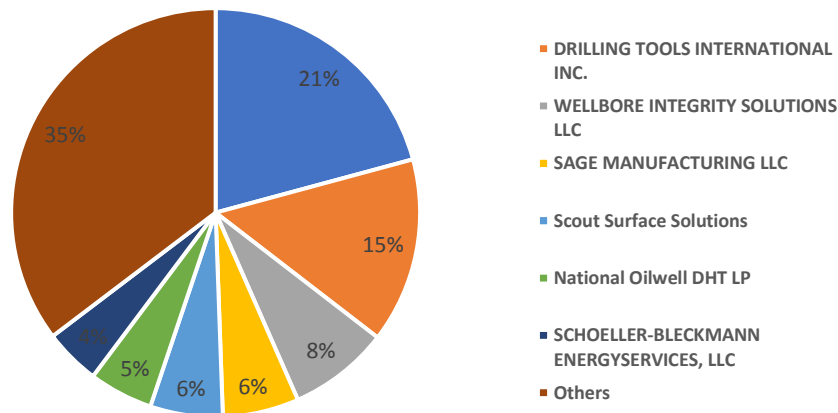
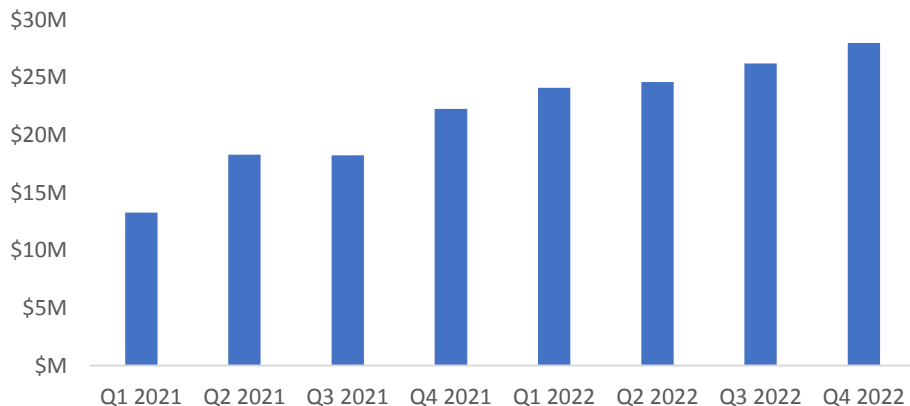
# Category profile

## Downhole Drilling Example

Downhole Drilling Spend by Quarter, 2021-2022

Cumulative Spend by Supplier, 2021-2022

Spend by Quarter



<b>Kraljic Model</b>	<b>Strategic</b>
<b>Category Importance</b>	<b>High</b>

### Downhole Drilling:

The Downhole Drilling category consists of 238 commodities

Mud motor (Rentals) accounts for **35% of total spend** under Downhole Drilling category

Key Stakeholders : **SCM, DM, BH, CM**

Key suppliers : **Rival, DTI and Wellbore - 44% of the cumulative spend**

Biggest supplier for Mud motor (Rental) – **Rival Downhole tools (56%)**

Biggest supplier for Materials Handling and Securing (Downhole Drilling) - **Scout SS (90%)**

Sourcing goals : **availability, quality of tools and services**

Constraints : **local content requirements, dominance by the big suppliers**

Risks : **quality of trained professionals and tools used**

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	<b>Strategy</b>
	Assess Internal Needs
	<b>Analyze Supply Market</b>
	Understand Price & Costs
	Develop Sourcing Strategy
	Source
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# Analyse supply market – section details

● Understand the market

---

● Profile and evaluate suppliers

---

● Evaluate market trends

---

● Analyse market forces

---

# Understand the market



Understand the **scope** of the analysis.

- Extent
- Criticality



What is the **size** (\$) of the market?



What is the **structure** of the market?

- Size (\$/ volume) by region/geography
- Key industry sectors served
- Recent trends/developments



Who are the major **suppliers** in the market?

# Gather industry information

## Supply

- **Market size & growth** – Volume & value(\$) (global/regional/local)
- **Geographical supplier distribution** & future growth
- **Market share** distribution in volume & value, major player identification



## Demand

- **Sectoral demand** distribution
- Sectoral demand **growth**
- **Geographical demand** distribution
- **Demand forecasts** region wise

## Key relevant information

- Price trends, forecast and price drivers
- Government regulations & policies
- Key developments (Technology, IP, mergers & acquisitions)

# Information sources to create market profile

## Government Publications

[Overview of Petrol and Diesel Market in South Africa](#)



## Market reports/articles

[SAPIA Annual report 2018](#)



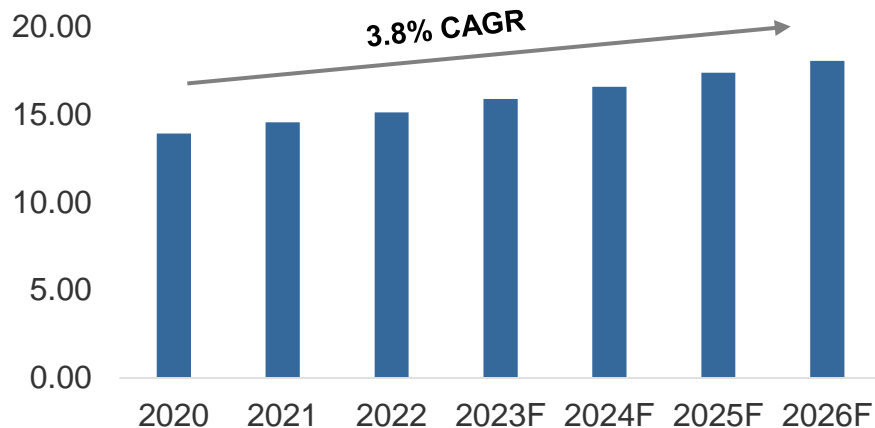
## Industry Report/Statistics

[BP Statistical Review 2018](#)

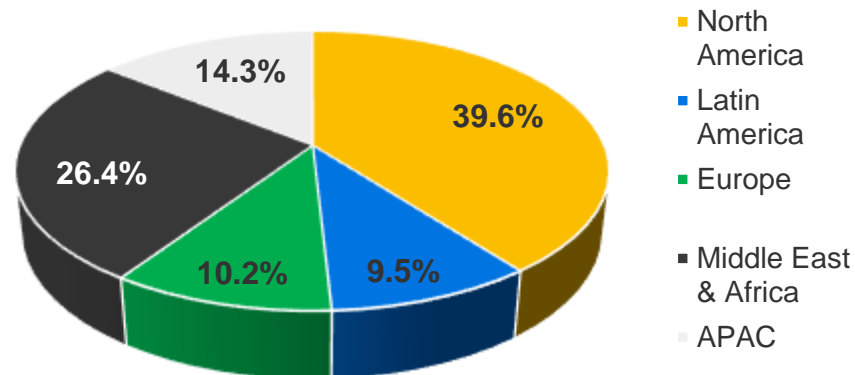


# Industry market profile example: Downhole Drilling

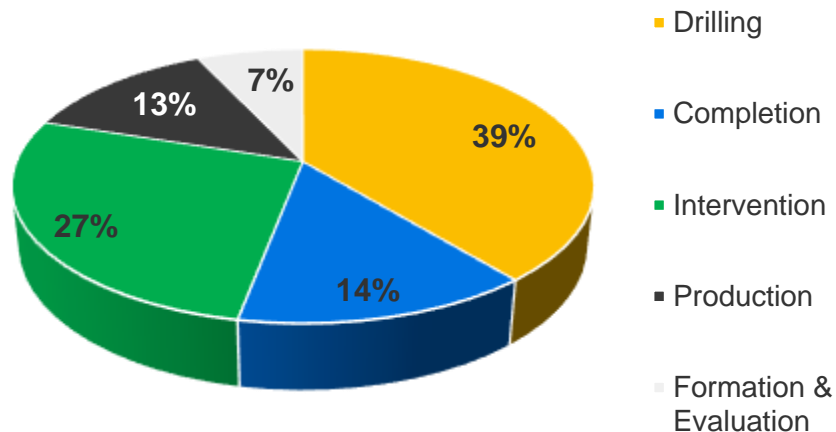
Global Market Size & Forecast (\$ B)



Market Share by Geography



Market Share by Product Type



Source: Beroe



# Analyzing country risk

*A country risk evaluation is conducted for those countries where major players are located.*

## Objectives



Determine viability of investments in international suppliers/markets by examining

- Political stability of source country
- Economic health of source country
- Financial maturity and robustness of source country



Use findings from country risk analysis in supplier SWOT analysis



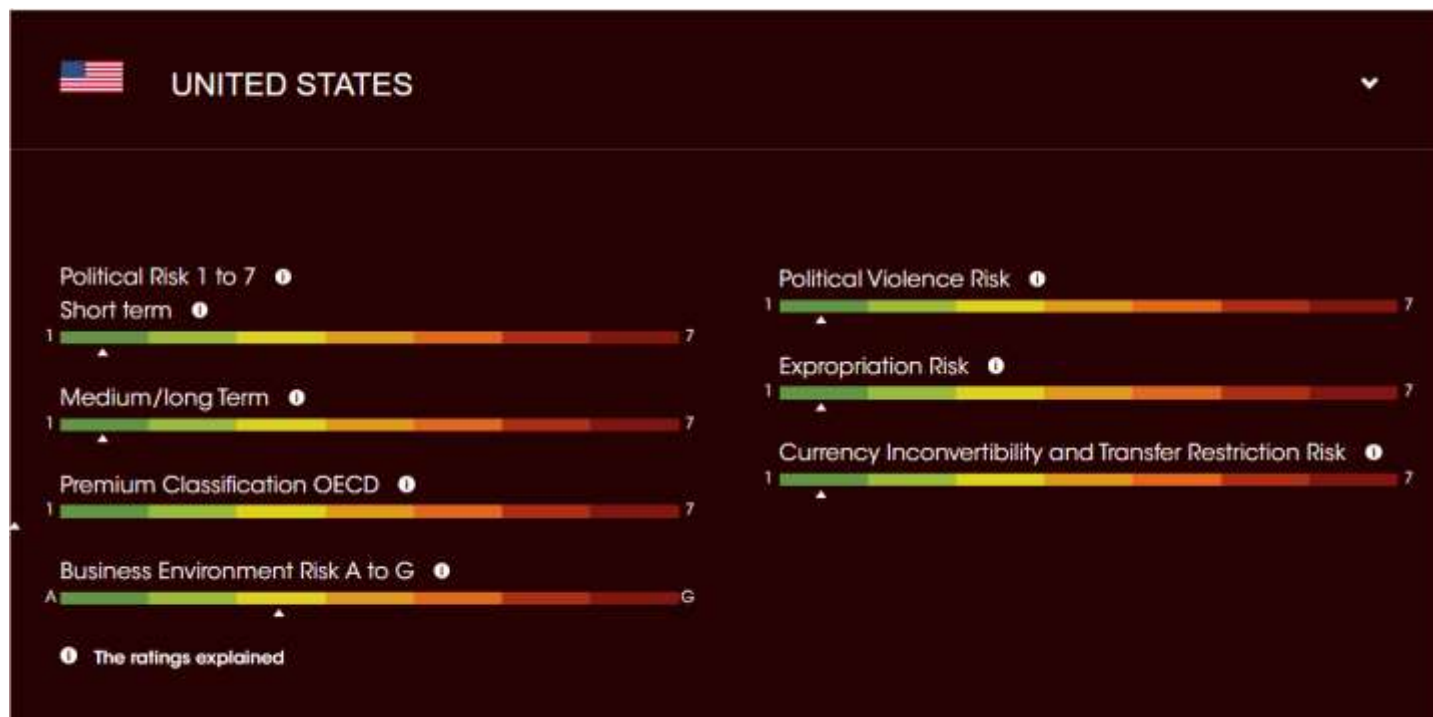
### Sources

[Credit Insurance Firms](#)

[Maplecroft](#)

# Country risk analysis

## Downhole Drilling Example



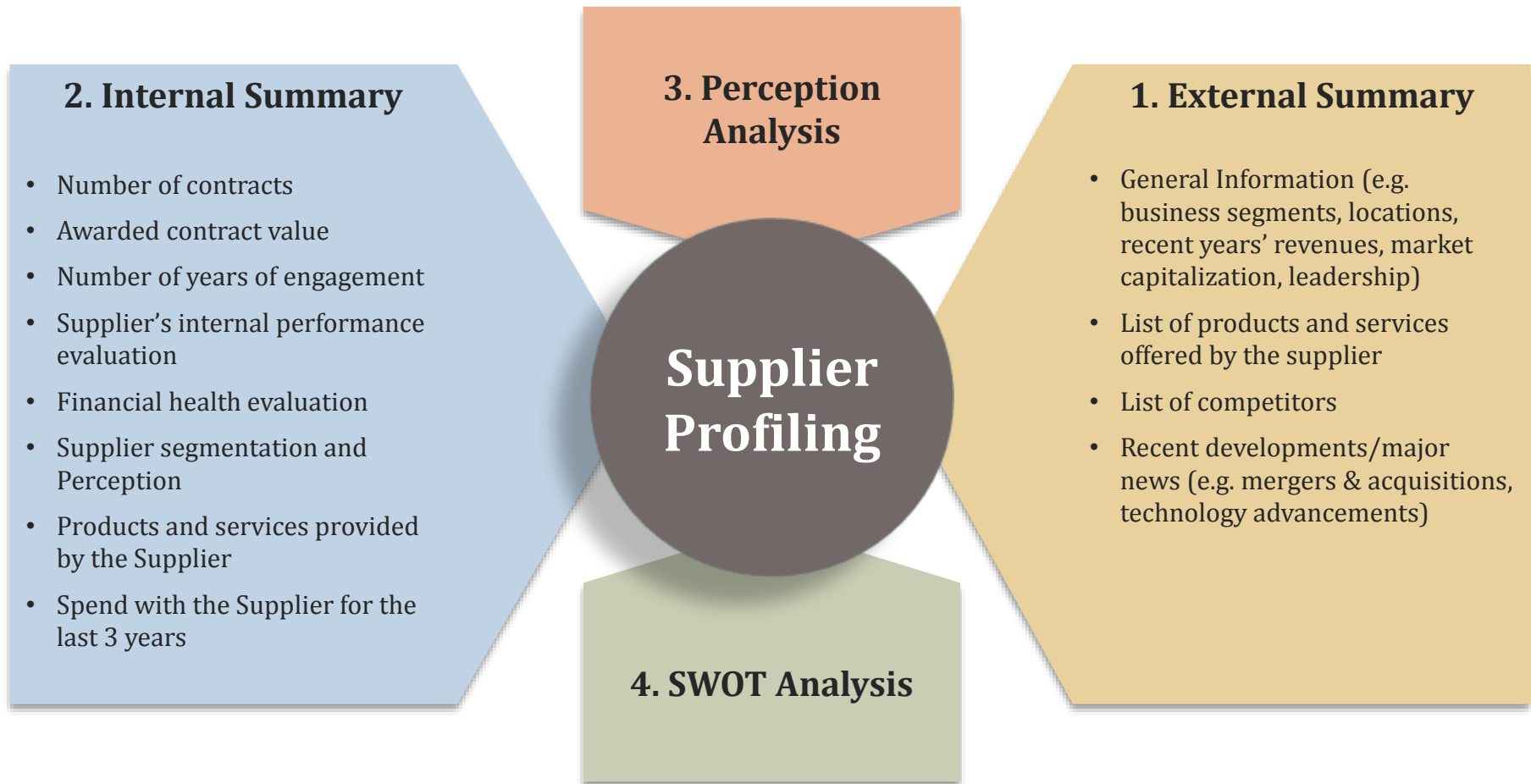
[Source: Credendo](#)

### Key Takeaways - Understand the Market

- Oil and Gas industry is the biggest consumers
- Market is dominated by a few big players
- Demand has increased over the last 2 years with increased Crude Oil production and Russia-Ukraine war

# Profile suppliers

*Supplier profiling helps understand the fundamentals and details of a supplier. This in turn helps companies position their interactions and engagements with the suppliers.*



Fuels: [Supplier Profile](#)

# Information sources for profiling suppliers

Supplier Profiling

Company Website

Investor Presentations

Performance Evaluation



Financial Health Analysis

Annual Reports

Request for Information



SWOT Analysis

Market Reports

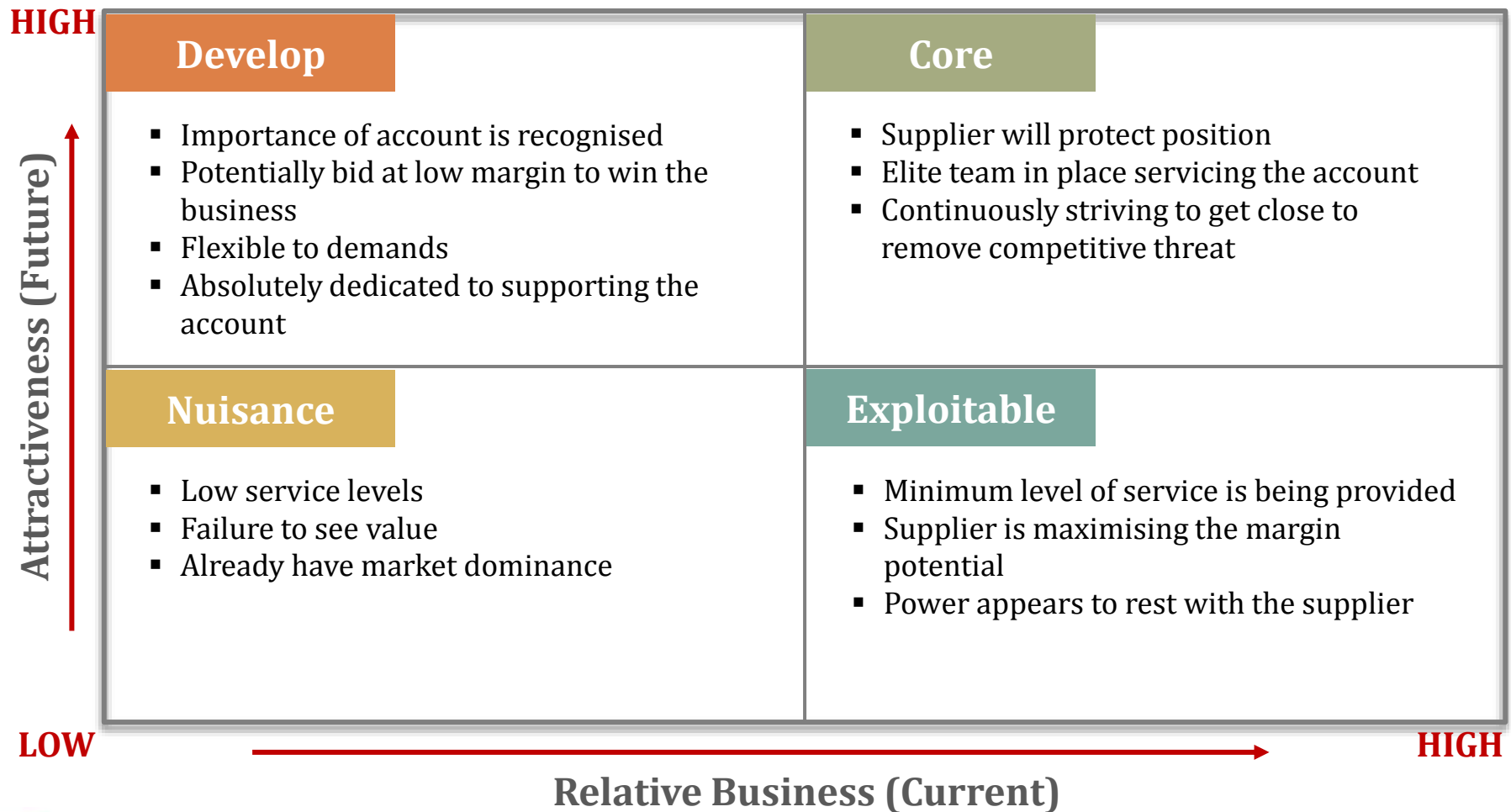
Analyst Reports

Industry News



# Understand Supplier Perception

**SUPPLIER PERCEPTION MODEL** - Position category based on the attributes "Attractiveness" and "Relative Business"



# Evaluate financial health of major players

- *Peer comparison: evaluate performance of major players against each other*
- *Industry comparison: evaluate performance of major players against industry averages*

## Financial Health Analysis

### Cross-Sectional Ratio Analysis

Computes key ratios for a company and compares them to the ratios of peers and the industry. Four key areas of financial health are:

- **Liquidity:** measures a company's ability to satisfy its short-term obligations as they come due.
- **Activity:** measures the speed with which various accounts are converted into sales or cash (a.k.a. turnover ratios).
- **Profitability:** measures the returns a company makes on items such as sales, assets, and shareholder equity.
- **Debt:** measures a company's financial leverage, i.e. the amount of debt a company uses to generate profits.

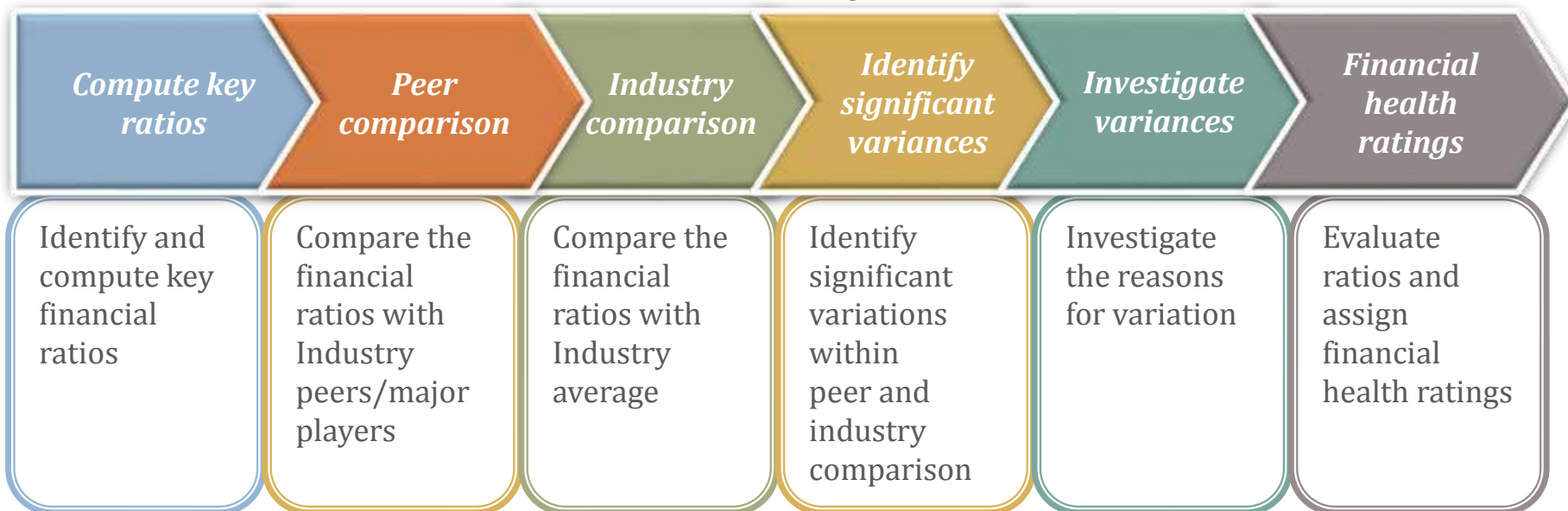
### Trend Analysis

Evaluates a company's growth rates in key areas and compares those rates to peers and the industry. The following trends are typically analyzed:

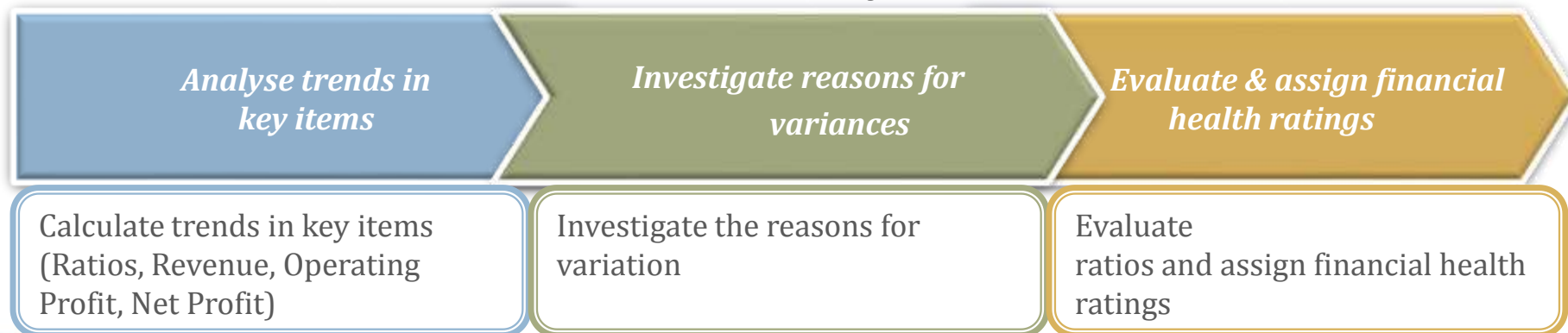
- **Revenue**
- **Profitability:** Operating profit & Net profit
- **Cash:** Net operating cash

# Ratio & Trend analysis

## Ratio Analysis



## Trend Analysis



# Ratio analysis

## Downhole Drilling Example

	3-yr Avg.				Industry Average
	<u>National Oilwell Varco</u>	<u>Schoeller-Bleckmann Oilfield Equipment</u>	<u>Phoenix Energy Services</u>	Peer Group Average	
<u>Liquidity Ratios</u>					
Current Ratio	2.69	2.14	1.98	<b>2.27</b>	<b>1.50</b>
Quick Ratio	1.88	1.62	1.48	<b>1.66</b>	<b>1.01</b>
<u>Activity Ratios</u>					
Inventory Turnover Ratio	3.68	1.99	8.32	<b>4.66</b>	<b>4.41</b>
Inventory Turnover (Days)	99.55	184.81	44.37	<b>109.58</b>	<b>82.77</b>
Receivables Turnover Ratio	3.24	4.08	4.59	<b>3.97</b>	<b>6.64</b>
Receivables Turnover (Days)	112.85	92.54	81.46	<b>95.62</b>	<b>54.97</b>
<u>Profitability Ratios</u>					
Operating Profit Margin (%)	-5.50%	5%	2.77%	<b>0.81%</b>	<b>6.07%</b>
Net Profit Margin (%)	-39.36%	2%	1.20%	<b>-11.95%</b>	<b>2.68%</b>
Return on Assets (%)	-24.26%	1%	1.79%	<b>-7.10%</b>	<b>2.31%</b>
Net Operating Cash Margin (%)	9.65%	21%	18.30%	<b>16.23%</b>	
<u>Debt Ratios</u>					
Debt to Equity	0.98	1.49	0.82	<b>1.10</b>	<b>5.82</b>
Times Interest Earned (TIE)	-38.00	1.41	3.41	<b>-11.06</b>	<b>7.28</b>



# Cross sectional analysis - NOV **Downhole Drilling Example**

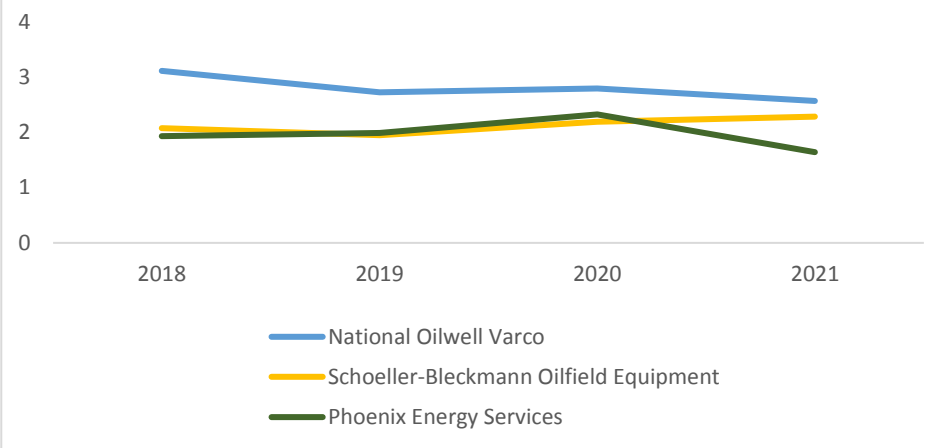
Ratio Category	Rating	Weights	Scores	Weighted Score	Rationale
Liquidity	Above Average	10%	7	0.7	Both Current and Quick ratio are above peer group average
Activity	Below Average	25%	4	1	Inventory turnover is less than peer group avg while receivable turnover is slower than peer group average
Profitability	Poor	40%	3	1.2	NOV has made losses over the last few years while the other peers in the industry made profits
Debt	Below Average	25%	4	1	Debt to equity ratio is lower than peer group while the times interest earned is negative due to the losses
Overall	Below Average			3.9	Overall company rating is "Below Average" based on the Cross-sectional Ratio Analysis

Scoring Guide	
1 - 2	Weak
3 - 4	Below Average
5	Average
6 - 7	Above Average
8 - 9	Strong

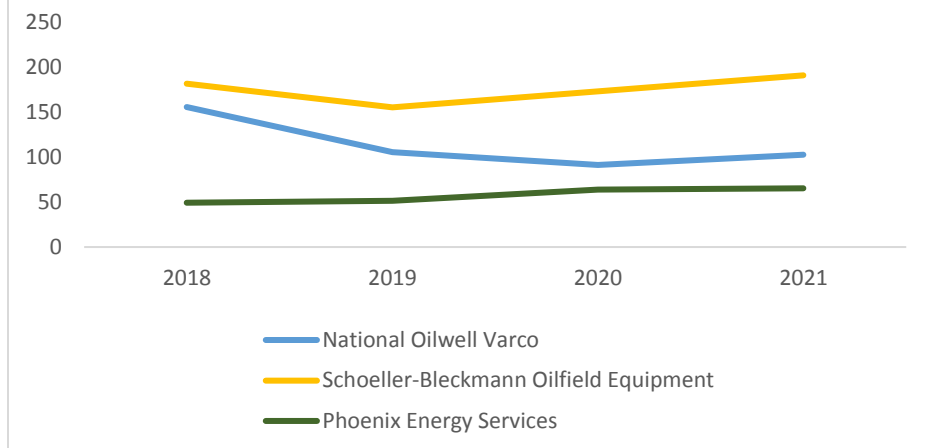
# Trend analysis

## Downhole Drilling Example

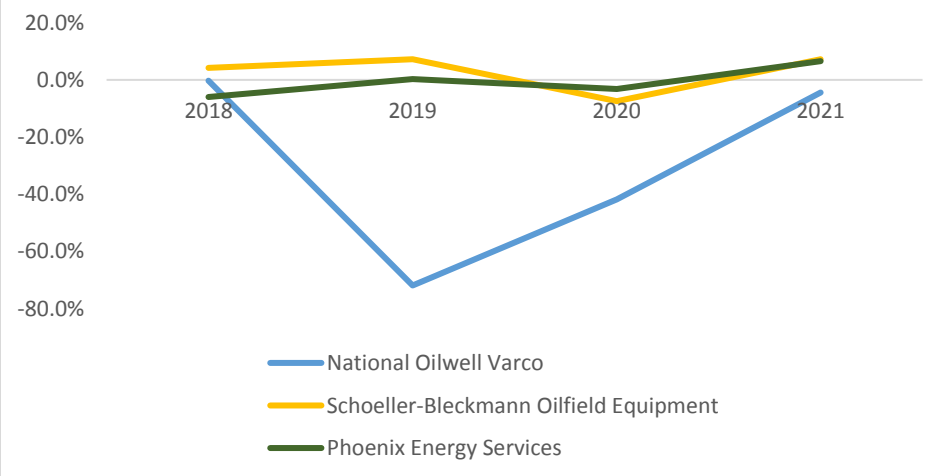
### Current Ratio



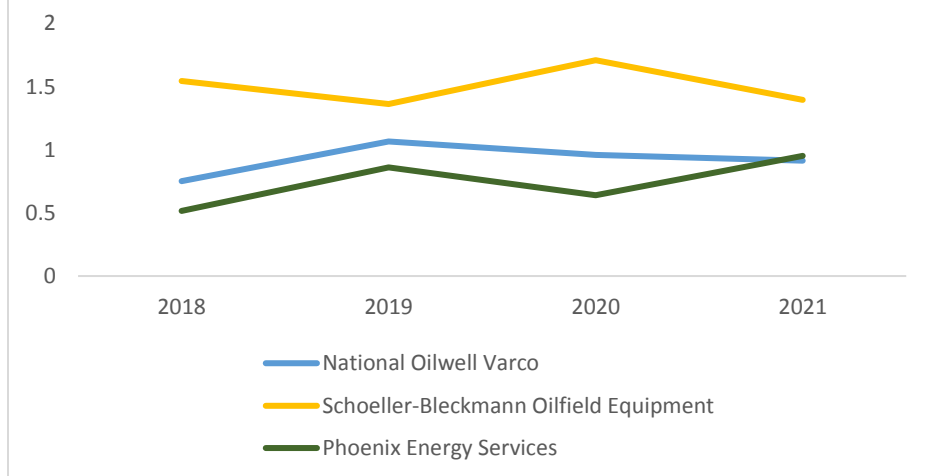
### Inventory Turnover (Days)



### Net Profit Margin (%)



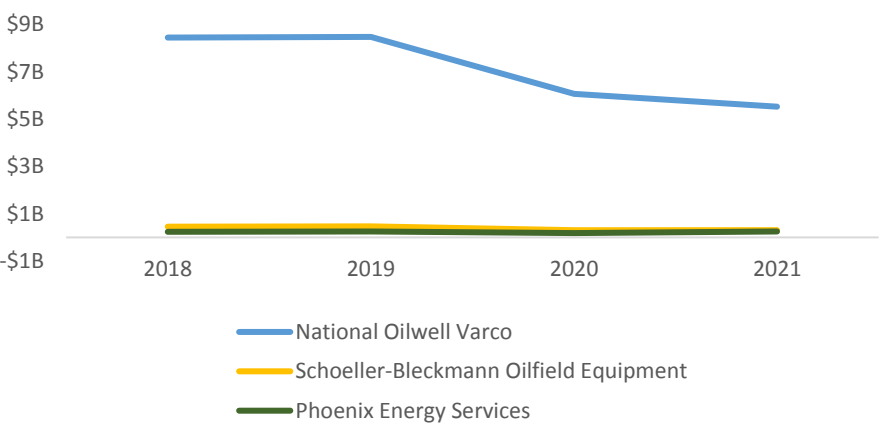
### Debt to Equity



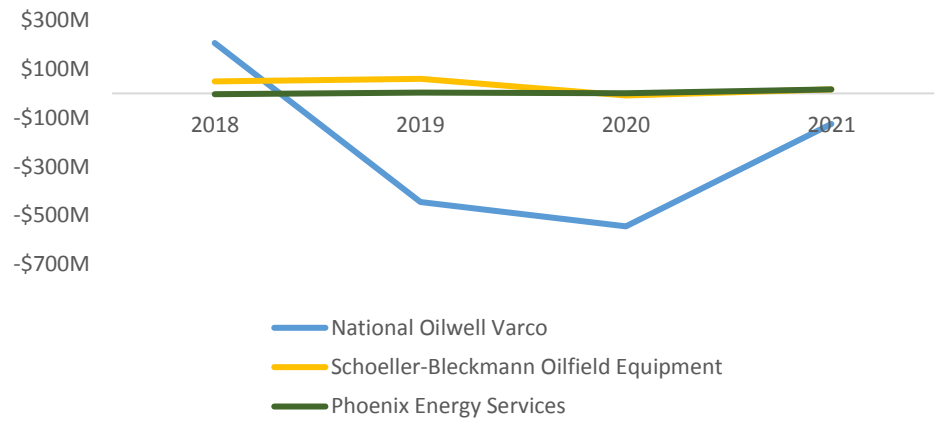
# Trend analysis

## Downhole Drilling Example

Revenue (USD)



Operating Profit (USD)



Net Profit after Taxes (USD)



<b>Rating - NOV</b>	<b>Above Average</b>
<ul style="list-style-type: none"> <li>NOV revenues are much higher than the peer group chosen</li> <li>After a poor 2019, NOV Net losses and operating profits have reduced.</li> </ul>	

# Trend analysis rating - NOV

## Downhole Drilling Example

Ratio Category	Rating	Weights	Scores	Weighted Score	Rationale
Liquidity Trends	Above Average	10%	8	0.8	Both Current and Quick ratio are above peer group average over the last 4 years but are trending downwards
Activity Trends	Average	25%	5	1.25	Activity ratios are close to the average of the peer group and have been trending upwards over the last year
Profitability Trends	Poor	40%	3	1.2	NOV has made losses over the last 4 years with 2019 and 2020 being big loss-making years.
Debt Trends	Below Average	25%	4	1	Debt to equity ratio is below peer group average and has stabilised over the last two years
Overall	Below Average			4.25	Overall company rating is "Below Average" based on the Trend Ratio Analysis

Scoring Guide	
1 – 2	Weak
3 – 4	Below Average
5	Average
6 – 7	Above Average
8 – 9	Strong

Rating	Below Average
<ul style="list-style-type: none"> <li>NOV made massive losses in 2019 and 2020 but they have witnessed a slight recovery in 2021</li> <li>Debt to equity has been stabilizing while their ability to cover their interest expense has been far below industry average.</li> </ul>	

# Evaluating overall financial health

## Downhole Drilling Example

*Using the information from ratio and trend analyses, determine the overall financial health ratings*

### Example of Overall Rating

Financial Analysis	NOV
Cross Sectional Ratio Analysis	Below Average
Ratio Trend Analysis	Below Average
Revenue, Profits Trend Analysis	Above Average
<b>Overall Financial Health Rating</b>	<b>Average</b>

# SWOT analysis

Strengths Weaknesses Opportunities Threats

## SWOT Analysis

- It is a basic, analytical technique that assesses what an organization is capable of doing and what it isn't, taking into account its potential opportunities and threats.
- **Strengths and weaknesses** are internal factors which can be changed over time with distinct focussed efforts. **Opportunities and threats** are external factors which are mostly beyond an organization's control
- It can be conducted for several different objectives such as evaluating a supplier's financial health, introducing a new product, or creating a sourcing strategy.

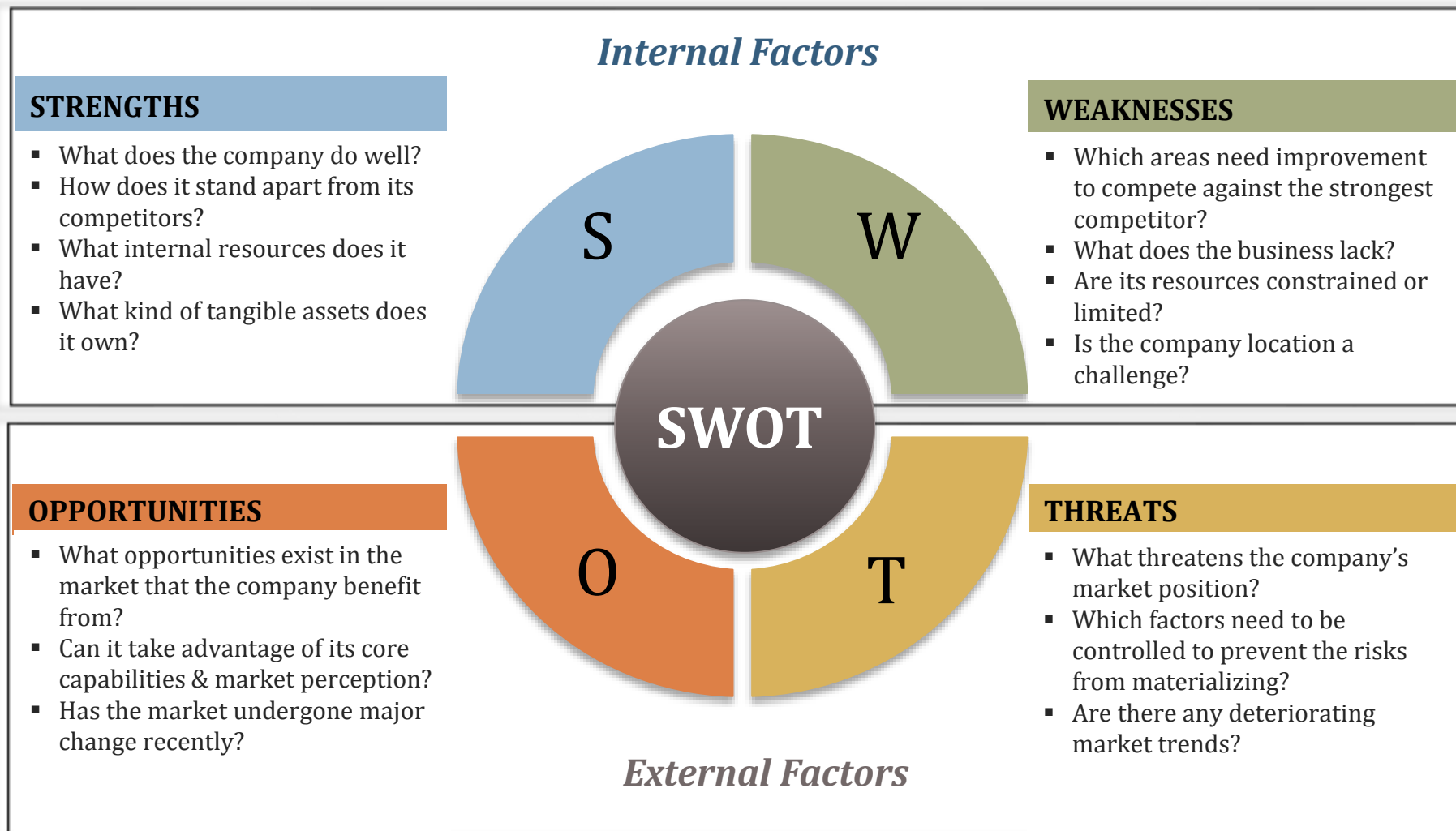
**Strength** – supplier's resources and capabilities that can give it an advantage over competition

**Weakness**- characteristics that place a supplier at a disadvantage compared to its competition

**Opportunity** - elements in the external environment that the supplier can exploit for profit and growth

**Threat** - elements in the external environment that could present threats to a firm's operations/existence

# Key questions to do SWOT analysis



# Rating guide for SWOT analysis

Rating	Rationale
<p style="text-align: center;"><b>STRONG</b></p>	<ul style="list-style-type: none"> <li>▪ Significant Strengths</li> <li>▪ Relatively easy to exploit Opportunities</li> <li>▪ Weaknesses and Threats easily overcome</li> </ul>
<p style="text-align: center;"><b>AVERAGE</b></p>	<ul style="list-style-type: none"> <li>▪ Average Strengths</li> <li>▪ Exploiting Opportunities requires fairly significant effort / resources</li> <li>▪ Overcoming Weaknesses and Threats requires significant effort / resources</li> </ul>
<p style="text-align: center;"><b>WEAK</b></p>	<ul style="list-style-type: none"> <li>▪ Few or no Strengths</li> <li>▪ Exploiting Opportunities requires extraordinary effort / resources</li> <li>▪ Overcoming Weaknesses and Threats requires extraordinary effort / resources</li> </ul>



# External summary - NOV

## Downhole Drilling Example

### Overview

- Business Segments: Wellbore Technologies, Completion and Production Solutions and Rig Technologies
- Locations: USA & Global
- CEO: Clay C Williams

### Products & Services

- Wellbore Technologies – provides the critical technologies, equipment, and services required to maximize customer oil and gas drilling efficiencies and economics.
- Completion & Production Solutions - provides critical technologies to optimize the well completion process and production phase of a well's lifecycle.
- Rig Technologies - is the global leader in the engineering, manufacturing, and support of advanced drilling equipment packages and related capital equipment for oil and gas wells

### Key Competitors

- Rival Downhole Tools
- Wellbore Integrity Solutions
- DTI

### Recent Developments (M&A, Technology, etc.)

- In 2019, NOV acquired a minority interest in Keystone Tower Systems (“KTS”), which has developed a patented tapered spiral-welding process that enables automated wind tower section production

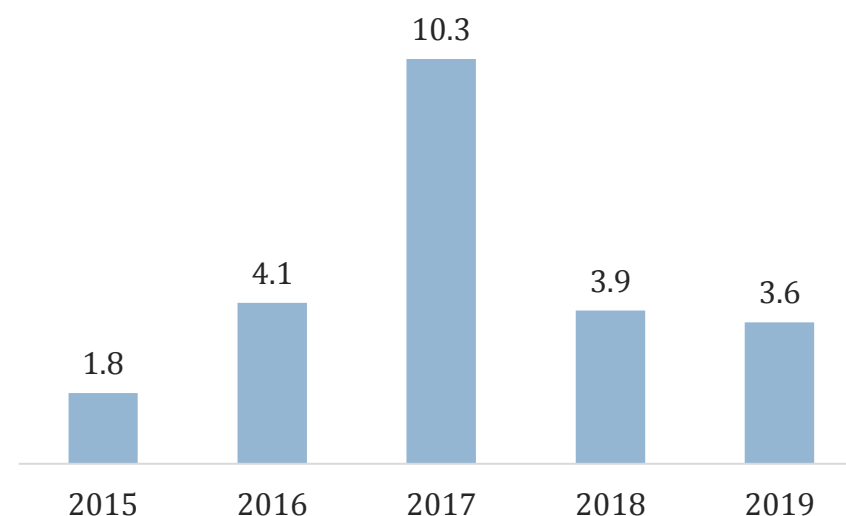
# Internal summary - NOV

## Downhole Drilling Example

Supplier	NOV
No of Contracts	1
Total ACV(across all contracts)	25 Million \$
Years of engagement	8
Supplier's Performance Score (Internal Evaluation)	7.3
Financial Health Evaluation	Above Average
Buyer's perception	Strategic
Supplier's perception	Develop

Contract	Product/Services
D/QDW/SERV- Inspection and Repair services	Inspection and Repair services

### NOV annual spend, \$Mn

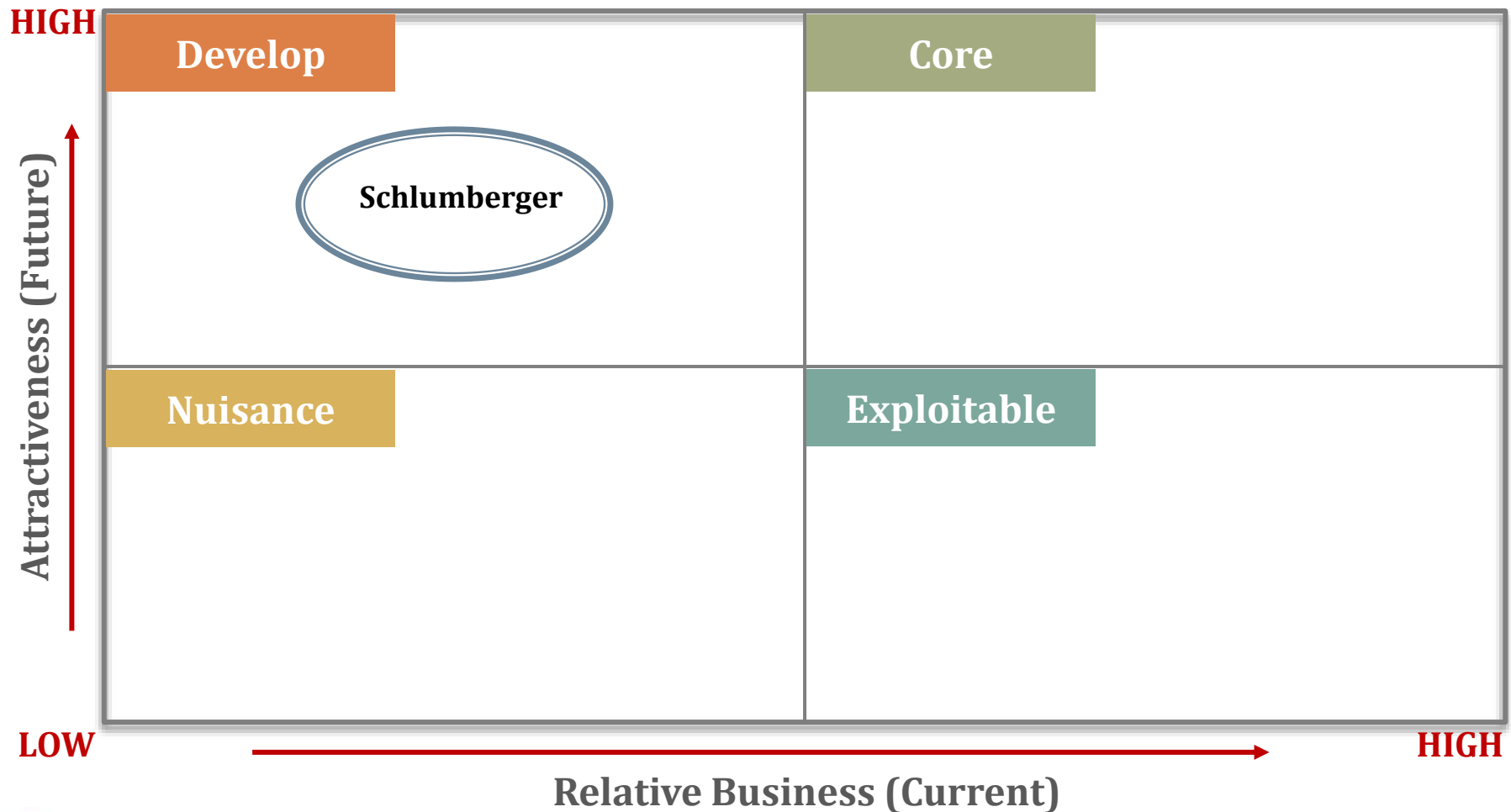


### Internal Performance Evaluation

All Contracts	Criteria Weight (%)									
	15%	15%	15%	15%	10%	8%	8%	7%	7%	100%
KPIs	Environment & Safety	Cost	Schedule / Delivery	Quality	Financial score	Unit cost savings	Responsive ness	Continuous Improvement	Automated quality checks	Weighted Average Score
	6	8	7	7	8	8	8	8	7	7.3

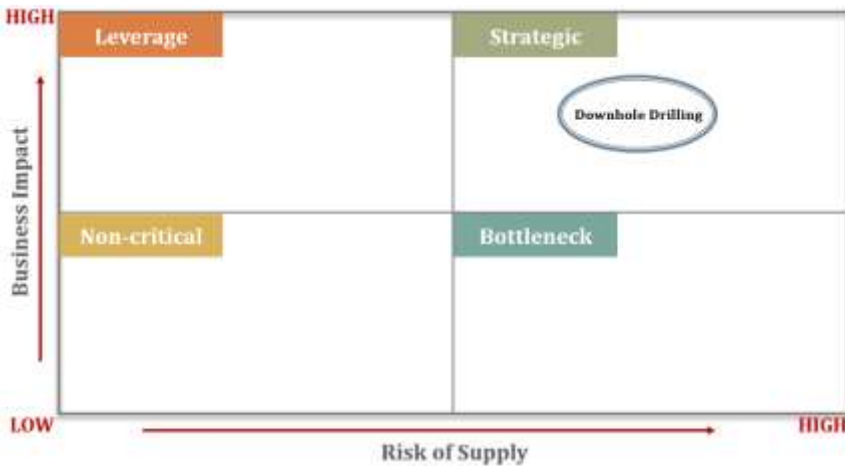
# Understand Supplier Perception

**SUPPLIER PERCEPTION MODEL** - Position category based on the attributes "Attractiveness" and "Relative Business"



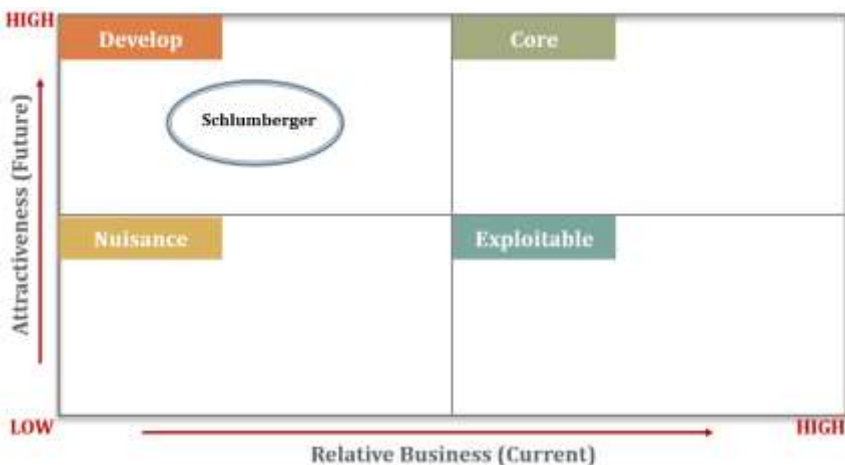
# Perception analysis

## Downhole Drilling Example



### Kraljic Model (The Buyer's Perspective)

- NOV is one of the biggest supplier of Downhole Drilling tools and services for Schlumberger.
- Downhole Drilling is one of the critical categories to keep all operations going on.
- Unavailability can lead to unexpected production shut downs & impact outward shipping of products.



### Supplier's View (The Seller's Perspective)

- There are limited number of big suppliers.
- Schlumberger represents only a small section of current NOV's revenue.

# SWOT analysis – NOV

## Downhole Drilling Example

### Strengths

- Established in 1862, NOV is a leading independent equipment and technology provider to the global energy industry
- Diverse product portfolio that meets a wide range of customer needs across all energy producing industries.
- Operations in 61 countries under three segments: Wellbore Technologies, Completion & Production Solutions, and Rig Technologies
- Strong Liquidity ratios as compared to the peer group

### Weaknesses

- NOV has made losses over the last 4 years with big losses in 2019 and 2020
- Negative Times Interest earned which shows an inability to service debts
- Over-dependance on O&G sector
- High attrition rate in work force resulting in more expenditure on training and development of its employees.

### Opportunities

- Increasing global energy demand due to increasing population
- Increasing mandates for Renewable Energy provides NOV with the opportunity to innovate and diversify their offerings across wind, solar etc.
- Acquisitions and joint ventures in developing countries

### Threats

- Dependent upon the level of activity in the oil and gas industry, which is volatile and may cause fluctuations in operating results.
- Competition from local and regional service providers
- Political Disruptions – Current political instability, war risk and commercial risk
- Rising raw material, environment & labor costs.
- Increasing trade restrictions being imposed by some countries to protect domestic industries

SWOT Rating

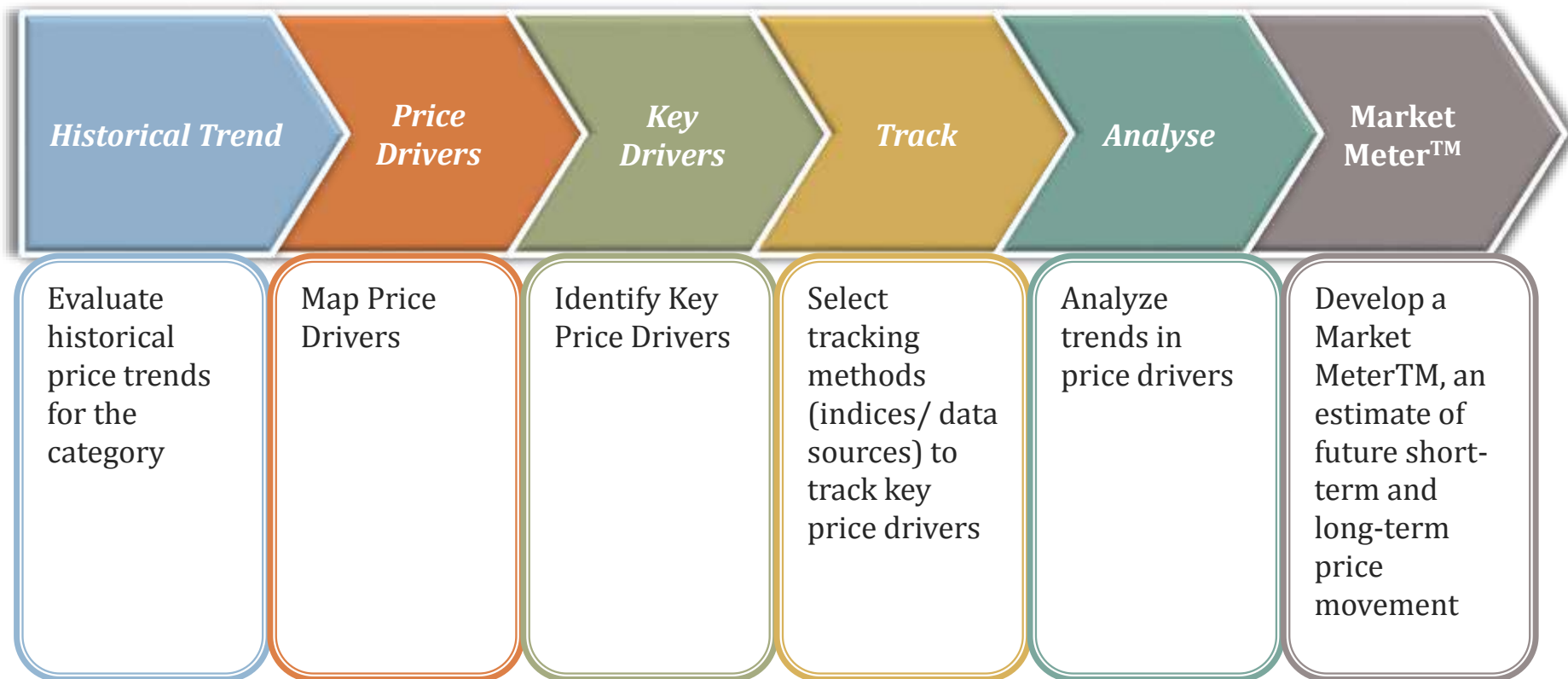
**Above Average**

# Evaluate suppliers

## Downhole Drilling Example

Parameters	NOV	Schoeller-Bleckmann	Phoenix Energy Services
<b>General evaluation parameters</b>			
Financial health	Average	Above Average	Above Average
Buyer's perception	Strategic	Strategic	Strategic
Supplier's perception	Develop	Develop	Develop
SWOT analysis	Average	Below Average	Below Average
Business expansion	Expanding in MENA region	Expansion plans outside USA	Expansion plans outside USA
<b>Category specific parameters</b>			
Safety performance	6	7	5
Quality management	7	5	8
On-time delivery	7	5	6

# Evaluate market trends



# Information sources

**Analyzing Historical Trend**

Commodity Exchanges



**Identifying Price Drivers**

Government Agencies

Trade Associations

Market Reports



**Shortlisting Key Price Drivers**

Market Reports

Analyst Reports



**Tracking Key Price Drivers**

Market Reports

Analyst Reports

Industry News





# Historical price trends for O&G Services

## Downhole Drilling Example

Historical Trend

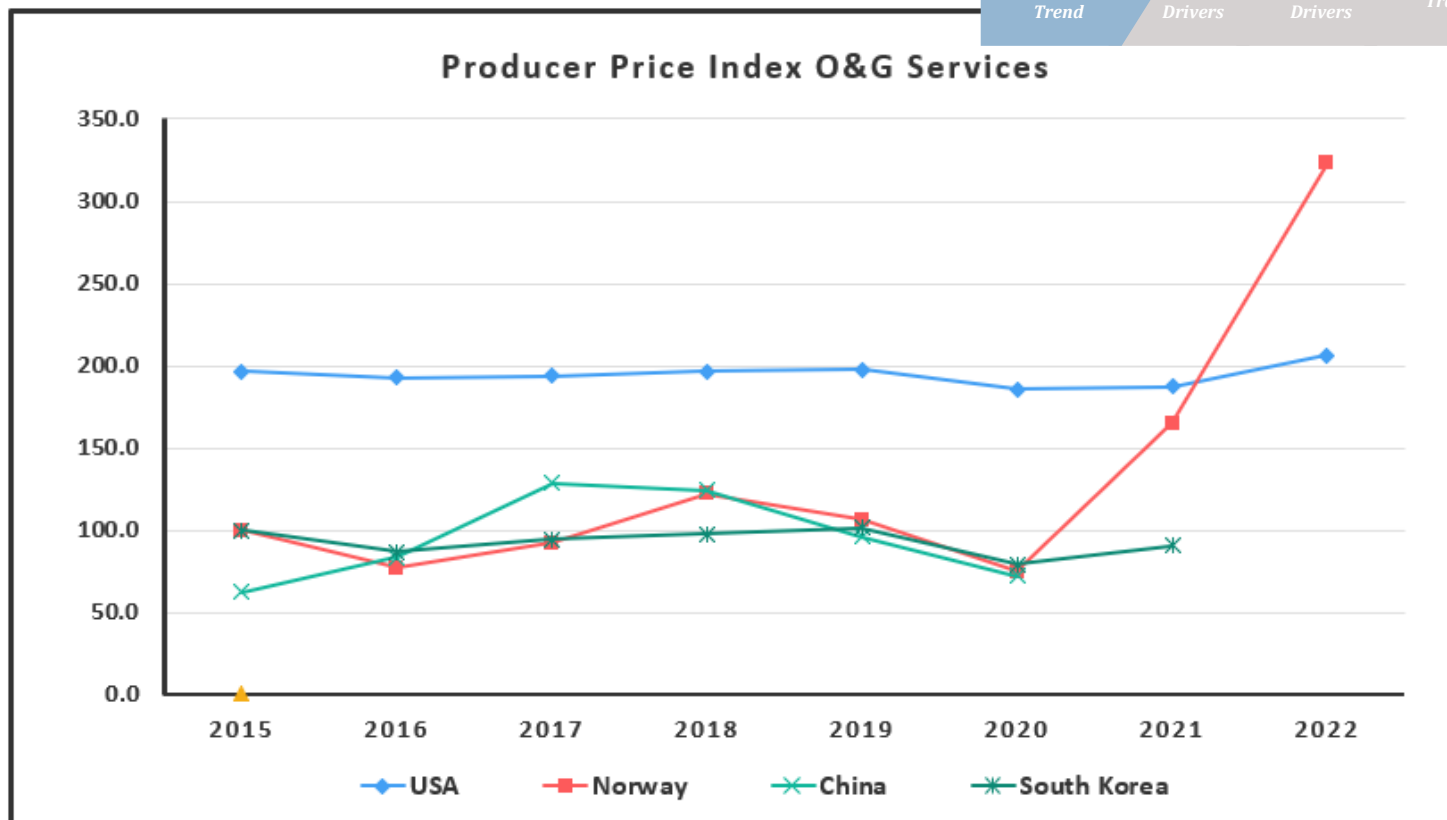
Price Drivers

Key Drivers

Track

Analyse

Market Meter™



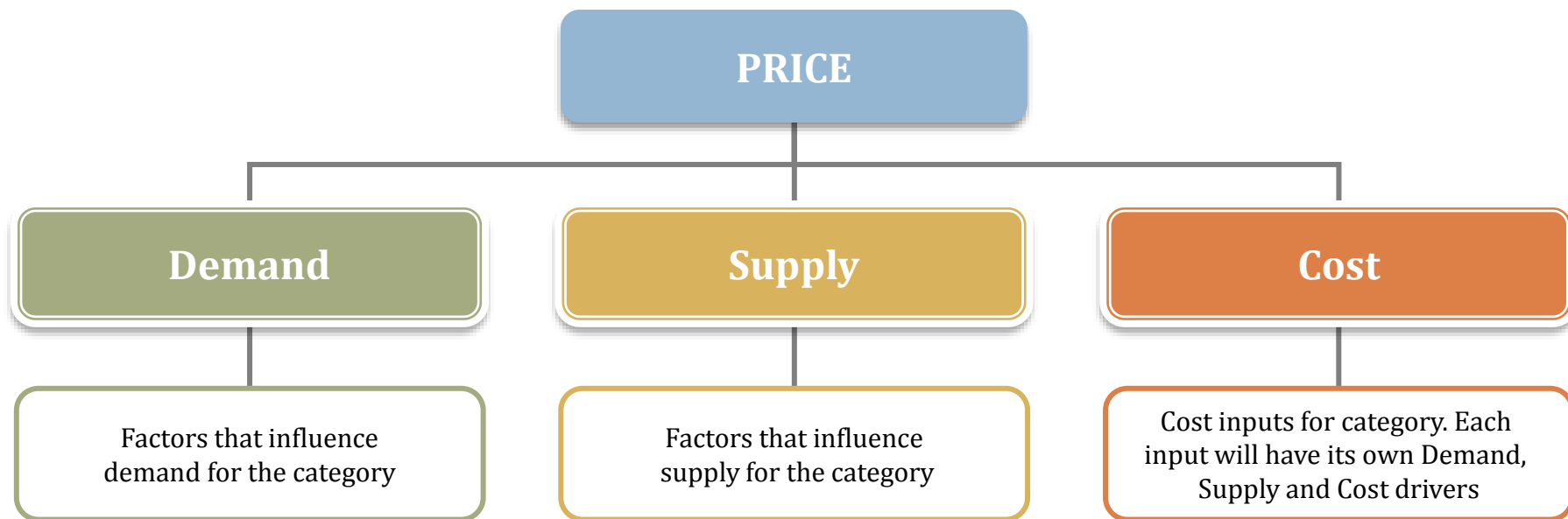
### Key Takeaways - Market Prices

After the Covid-19 pandemic in 2020, there is a trend of increasing in prices in 2021 and 2022

# Mapping price drivers



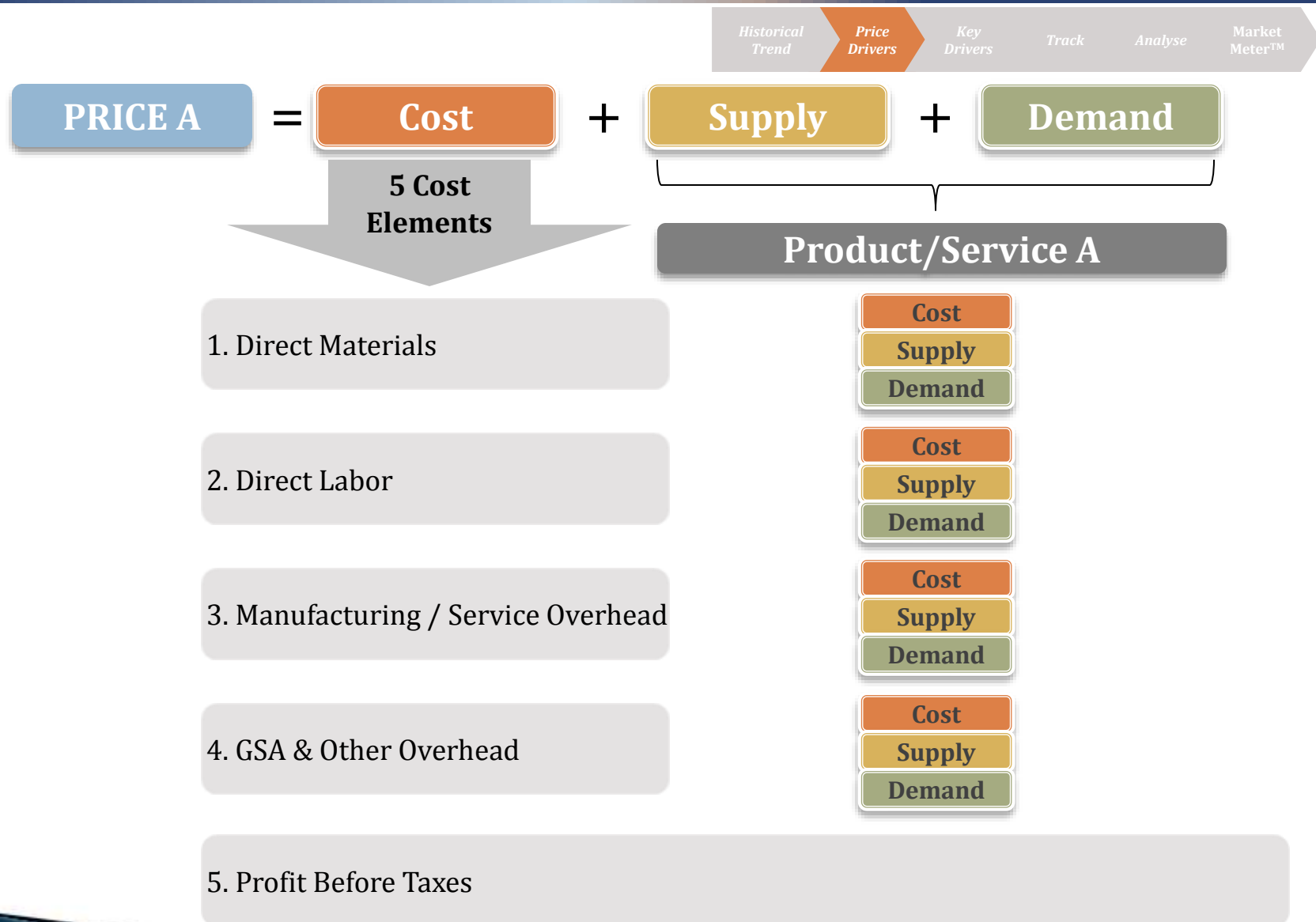
*Price Drivers* are factors/metrics that are leading indicators of trends in market prices



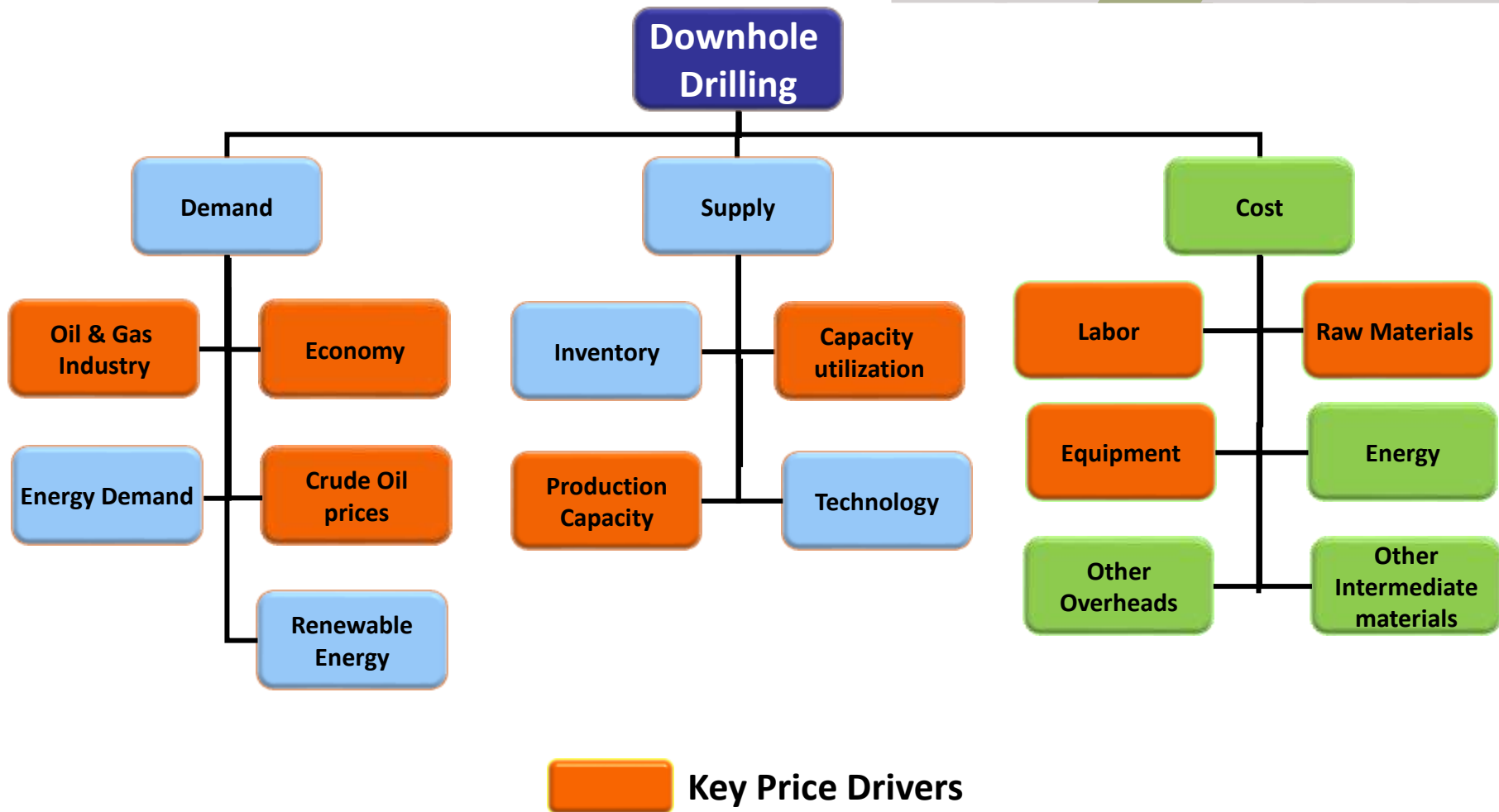
## Why mapping price drivers is important:

- To predict price trends
- To identify potential constraint points
- To develop effective sourcing and cost management strategies

# Mapping price drivers



# Mapping Price Drivers - Downhole Drilling



# Select tracking mechanisms

Historical  
Trend

Price  
Drivers

Key  
Drivers

Track

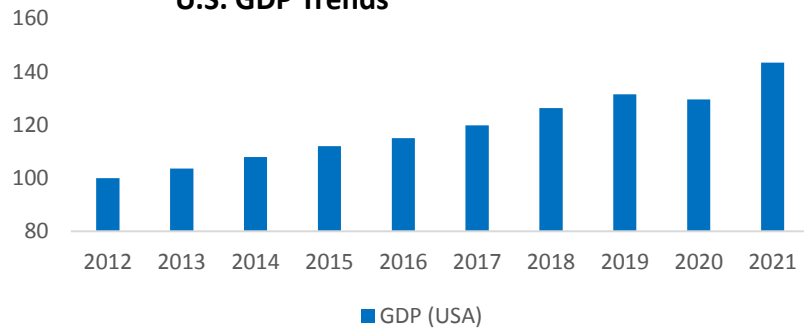
Analyse

Market  
Meter™

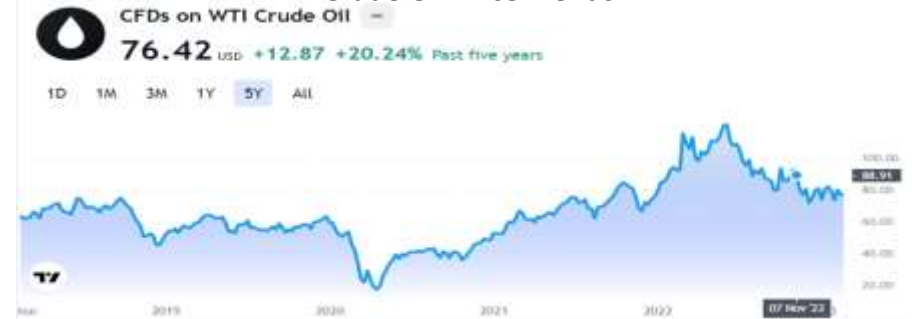
- Identify indices and sources (reports, articles etc.) for trend data
- Be consistent with selection of data sources
- Use proxy indices in absence of a perfect match with a specific index
- Look at trends in conjunction with one another
- Analyze reasons for sudden spikes, if any
- Identify forecast sources for expected future trends
- Validate forecasts with actuals

# Analyze Demand Driver Trends

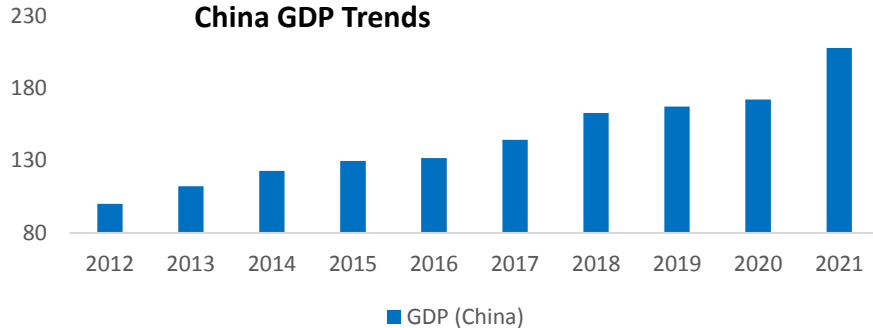
U.S. GDP Trends



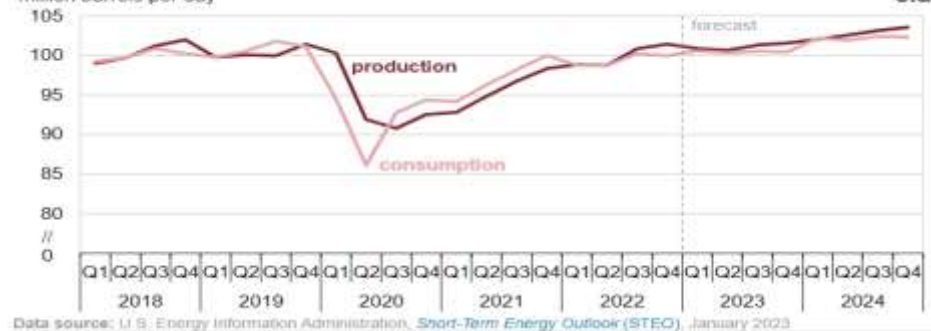
WTI Crude Oil Price Trends



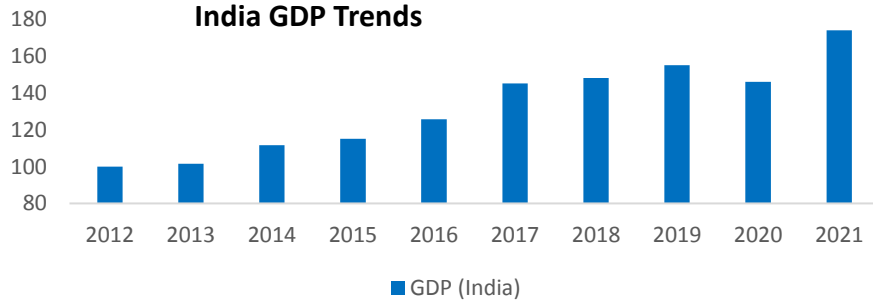
China GDP Trends



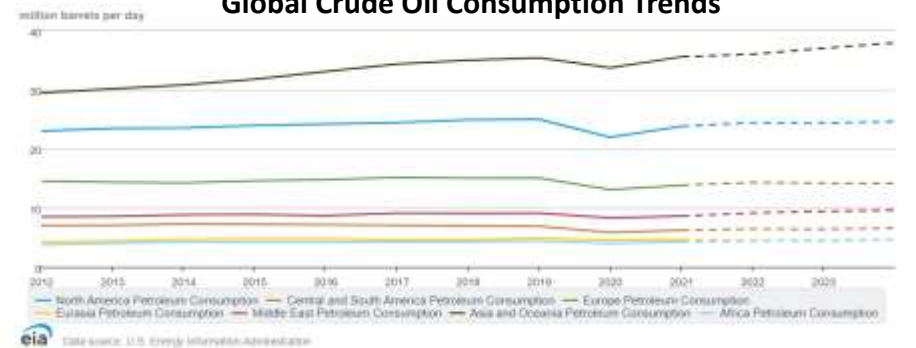
Quarterly world liquid fuels production and consumption (2018–2024)



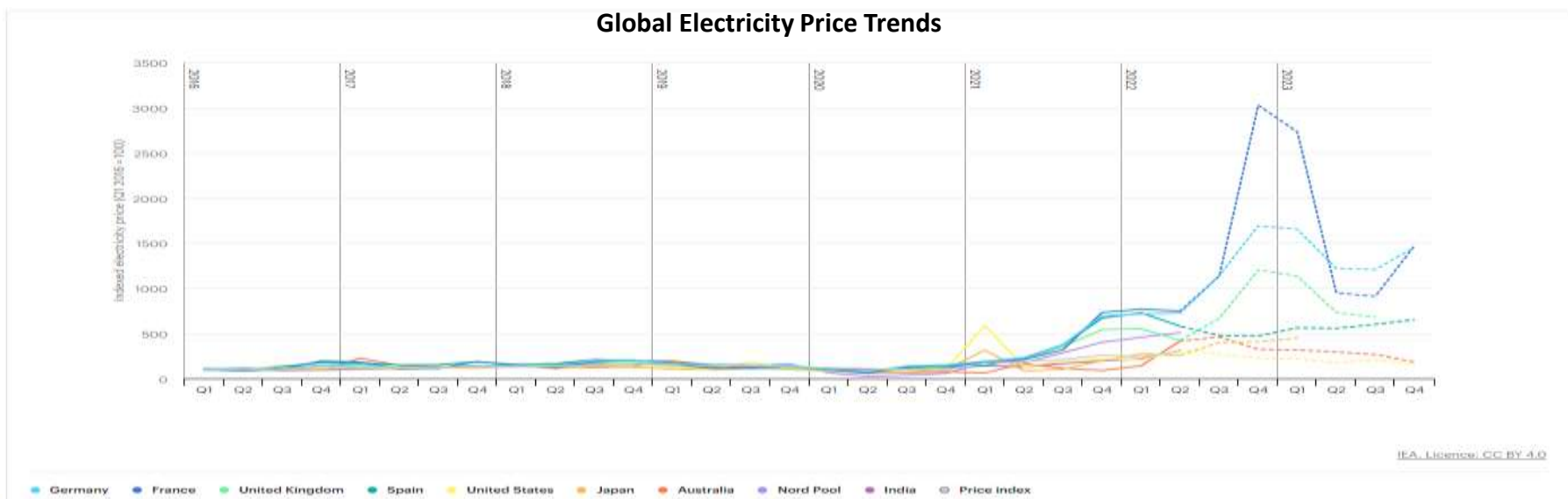
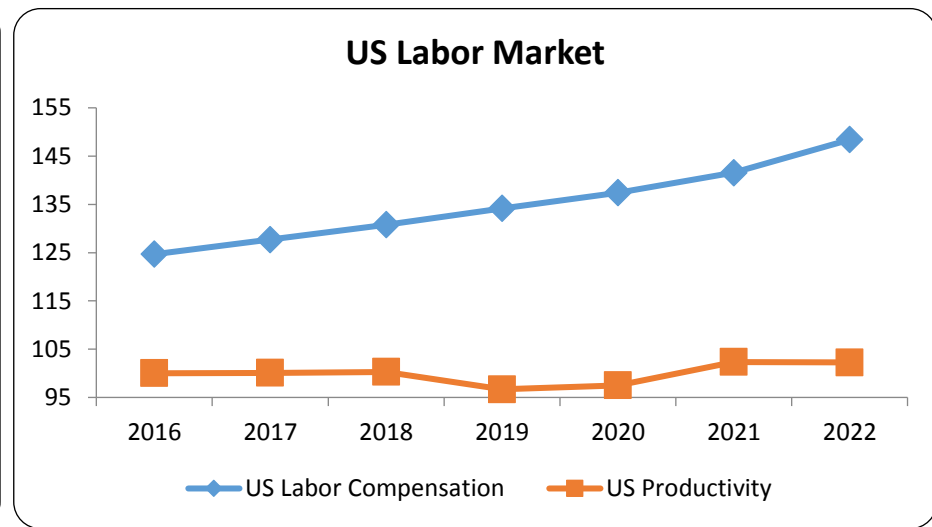
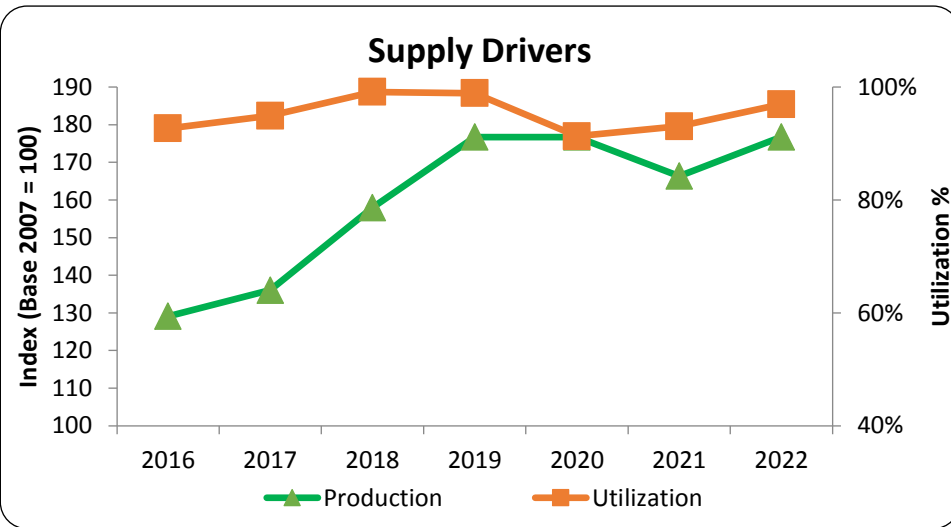
India GDP Trends



Global Crude Oil Consumption Trends






# Analyze Supply and Cost Driver Trends









Sources: US Bureau of Labor Statistics, Federalreserve.gov, EIA

# Analyze Trends to identify Impact on Prices

Key Demand Drivers	Trend (Up, Down, Flat)	Rate (S, M, F)	Comments	Price Impact
<b>Economic Growth</b>	Up	M	<ul style="list-style-type: none"> <li>Global GDP witnessed a drop in 2020 owing to the Covid-19 pandemic with an immediate recovery in 2021 and 2022. The upward trend of Global GDP translated to a higher demand for Oil &amp; Gas and thus a higher demand for Downhole Drilling.</li> </ul>	
<b>Oil &amp; Gas Industry</b>	Up	M	<ul style="list-style-type: none"> <li>Global liquids fuel consumption in the forecast increases from an average of 99.4 million barrels per day (b/d) in 2022 to 102.3 million b/d in 2024, driven primarily by growth in China and other non-OECD countries.</li> </ul>	
<b>Crude Oil Prices</b>	Down	S	<ul style="list-style-type: none"> <li>EIA forecasts the Brent price will stay relatively flat through 2Q23, averaging \$85/b, and then decline through the end of 2024. EIA expects the Brent price will average \$83/b in 2023 and \$78/b in 2024, down from \$101/b in 2022.</li> <li>Implied builds in global petroleum inventories (when there is more petroleum production than consumption) are driving these declines in crude oil prices.</li> </ul>	



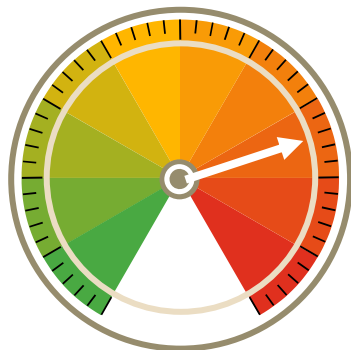
# Analyze Trends to identify Impact on Prices

Key Supply Drivers	Trend (Up, Down, Flat)	Rate (S, M, F)	Implication	Price Impact
<b>Capacity Utilization</b>	Up	M	<ul style="list-style-type: none"> <li>Capacity Utilization has witnessed an upward trend in OPEC and Non-OPEC countries owing to the opportunity created by the Russia-Ukraine war.</li> </ul>	
<b>Inventory</b>	Up	S	<ul style="list-style-type: none"> <li>Implied builds in global petroleum inventories (when there is more petroleum production than consumption) are driving these declines in crude oil prices. EIA forecasts global petroleum inventory builds will average more than 0.6 million b/d in 2023–24.</li> </ul>	
<b>Production Capacity</b>	Up	S	<ul style="list-style-type: none"> <li>We forecast that global petroleum production will increase by 1% (1.1 million b/d) from 2022 to 2023. The United States and OPEC account for most of the increase in global production, offsetting production declines in Russia.</li> </ul>	
Key Cost Drivers	Trend (Up, Down, Flat)	Rate (S, M, F)	Comments	Price Impact
<b>Raw Material</b>	Up	M	<ul style="list-style-type: none"> <li>The raw materials cost is a major influencing factor in the overall milk production costs, accounting for around 43 percent of the cost share. Raw material costs are dependent on global steel product prices, which tend to be highly volatile, especially since the start of Russia–Ukraine war</li> </ul>	
<b>Labour</b>	Up	S	<ul style="list-style-type: none"> <li>Increasing labor costs will put upward pressure on prices.</li> </ul>	
<b>Energy</b>	Up	S	<ul style="list-style-type: none"> <li>Global electricity prices has followed an upward trend thereby putting upward pressure on prices</li> </ul>	

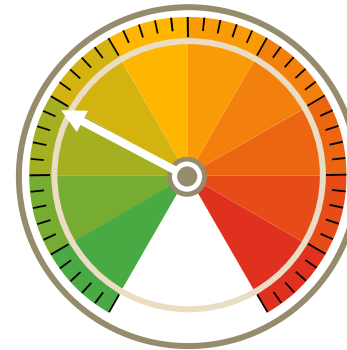
# Market Meter™ - Price Outlook for Downhole Drilling

**Market Meter™:** An overall outlook on short-term and medium-term price movement

Price Trends (0-12 Months)



Price Trends (>12 Months)



## Driver Trends

**Demand** – Uptick in global GDP and overall demand for Oil & Gas will put an upward pressure on prices  
**Supply** – Increase in Production capacity and capacity utilization will have an upward pressure on prices  
**Cost** – Increasing Raw material and Labor prices will put an upward pressure on price

**Demand** – Oil and Gas production will out perform demand in 2024. This will reduce O&G prices thereby putting a downward pressure on price  
**Supply** – As inventory levels in the industry increase, this will put a downward pressure on price  
**Cost** – Energy and raw material costs will stabilize in the long-term thereby putting downward pressure on price

### Short-Term

- Downhole Drilling tools and services prices will increase in the short-term

### Medium-Term

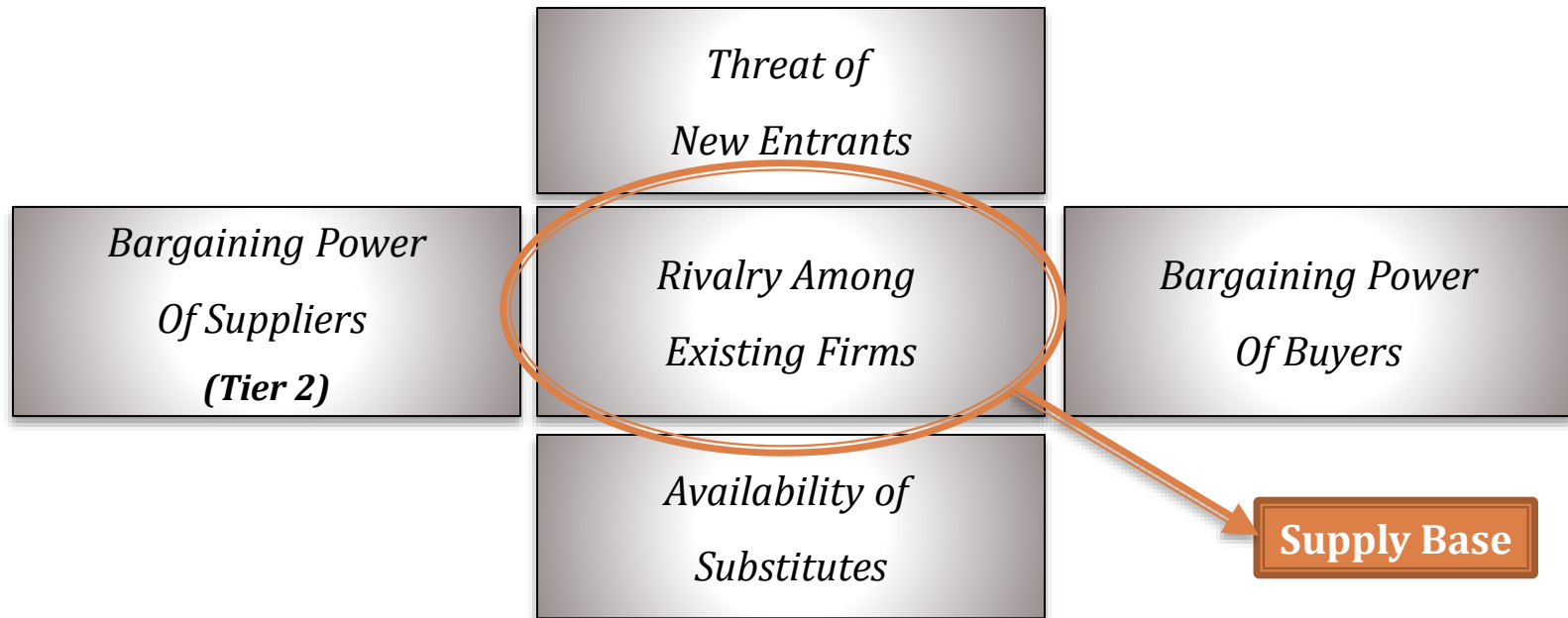
- Beyond 12 months, Downhole Drilling prices should decrease slightly

# Analyzing market forces – Porter's 5 forces

## Objective:

- Evaluate the competitive forces in the market to:
  - determine the nature of competition, and
  - assess competitive position

Porter's Five Forces model identifies the following 5 forces:



\* 5-Forces Analysis adapted from Competitive Strategy, Michael E. Porter. Highly recommended

# Rivalry among existing firms

**Existing Firms**



## Determinants of Rivalry:

- Number of equally balanced competitors
- Industry growth rate
- High fixed costs
- Level of standardization
- Buyers switching costs
- Brand loyalty
- Diversity of rivals
- High strategic stakes
- Exit barriers

By creating / increasing rivalry a buyer can exert downward pressure on the price.

# Rivalry among existing firms Downhole Drilling Example

*Strong competition among existing fuel marketing companies moderates their strength in the market.*

LOW HIGH

Parameters	1	2	3	4	5	6	7	8	9	Score
<b>Number of equally balanced competitors</b>	Small number of equally balanced competitors exist			Mixture of equally balanced competitors			Large number of equally balanced competitors exist			6
<b>Industry growth rate</b>	High growth rate (an abundance of demand)			Medium growth rate			Low growth rate			6
<b>Fixed costs</b>	Low fixed cost allocation per value added			Medium fixed cost allocation per value added			High fixed cost allocation per value added			9
<b>Level of standardization</b>	Mostly customized products and services			Even blend of standard and customized			Highly standardized products and services			5
<b>Buyer's switching costs</b>	High transition costs due to capex, contractual obligations, relationship			Medium transition costs			Low transition costs and easy to switch			6
<b>Diversity of competitors and of competitors' products and services</b>	High diversity; few products and services compete directly			Medium diversity; some products and services compete directly			Low diversity; most products and services compete directly			8
<b>Strategic stakes</b>	Potential for significant rewards is low – strategic stakes are low			Potential for significant rewards is well balanced			High potential for significant rewards – the strategic stakes are high			8
	<b>Overall Score</b>							<b>7.0</b>		

# Threat of new entrants

**New Entrants**



## Sources of Barriers to Entry:

- Capital requirements
- Barriers to exit
- Switching costs
- Access to distribution channels
- Advantages independent of scale:
  - Proprietary IP / Patents
  - Brand identity/loyalty
  - Preferential access to raw materials
  - Government subsidies
  - Learning curve
- Government policy

Low barriers to entry provide opportunities to create new suppliers in the supply market industry

# Threat of new entrants

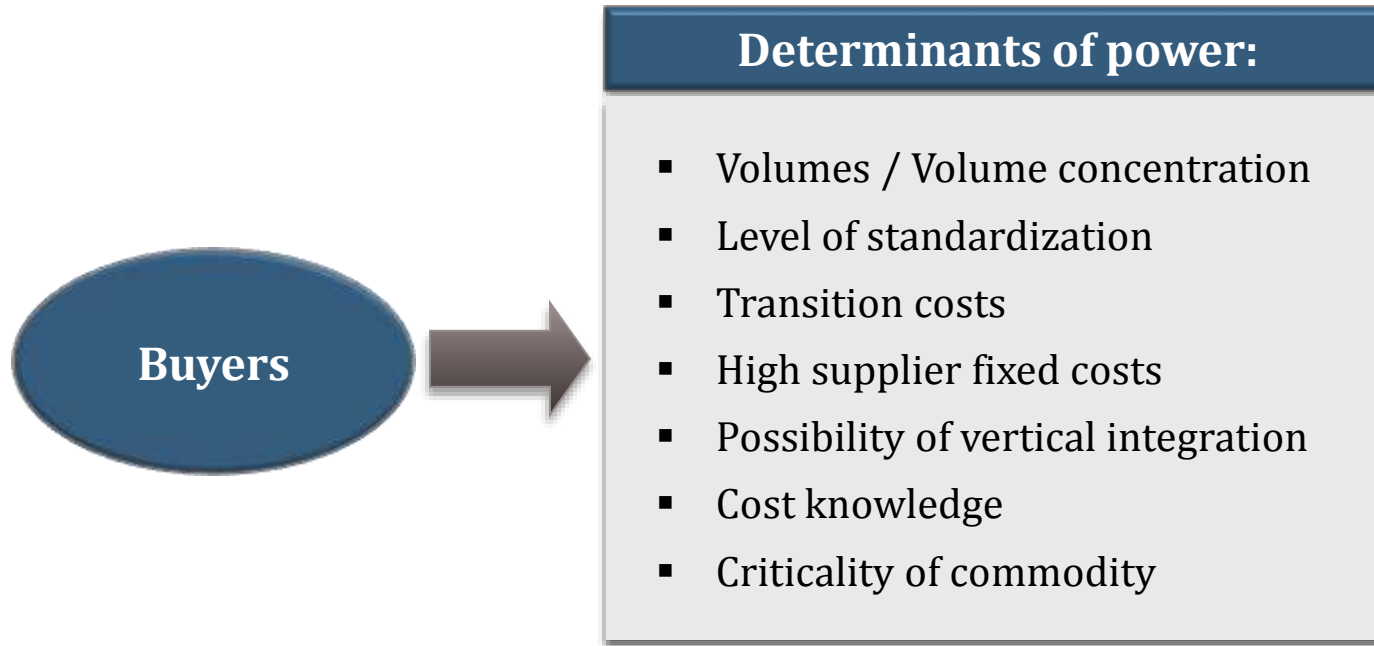
## Downhole Drilling Example

*New entrants access to distribution channels is **Low** because of **high cost of technology and government regulations.***

LOW  HIGH

Parameters	1	2	3	4	5	6	7	8	9	Score
<b>Capital requirements</b>	High capital requirements to enter the market			Moderate capital requirements to enter the market			Low capital requirements to enter the market			<b>1</b>
<b>Barriers to exit</b>	High barriers (cost, regulations, etc.) to exit the market			Moderate barriers (cost, regulations, etc.) to exit the market			Low barriers (cost, regulations, etc.) to exit the market			<b>1</b>
<b>Access to distribution channels</b>	Access to distribution channels is very difficult			Access to distribution channels is difficult, but not impossible			Access to distribution channels is fairly easy (i.e. internet)			<b>4</b>
<b>Advantages needed independent of scale in the industry</b>	Patents, IP, Brand loyalty, special access to raw materials etc. are essential in this industry			Patents, IP, Brand loyalty, special access to raw materials, etc. are important, but not essential			Patents, IP, Brand loyalty, special access to raw materials, etc. are not needed			<b>3</b>
<b>Switching costs in supply base industry</b>	Level of switching costs in this industry is high			Level of switching costs in this industry is medium			Level of switching costs in this industry is low			<b>5</b>
<b>Government policy</b>	Government policy is tightly regulated and present			Government policy affects the industry and may be an important factor at times			Government policy rarely, if ever, affects this industry			<b>2</b>
							<b>Overall Score</b>			<b>3</b>

# Bargaining power of buyers



The amount of leverage that a buyer has is directly correlated to the amount of power



# Bargaining power of buyers

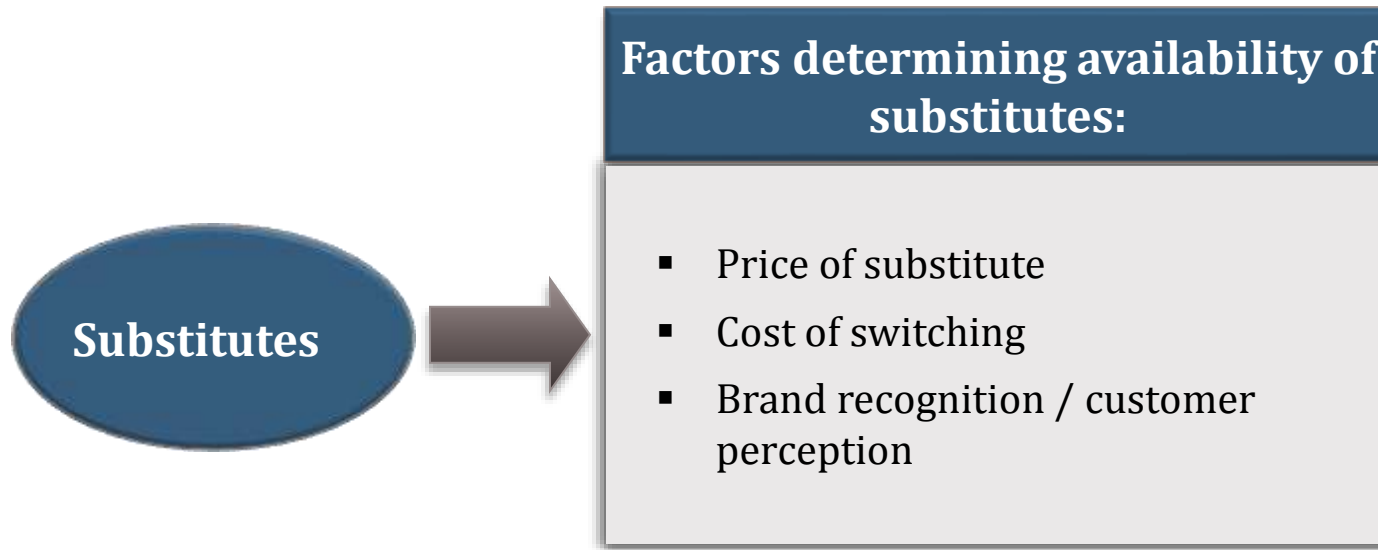
## Downhole Drilling Example

*Schlumberger's bargaining power is medium due to unattractive volumes but may increase if the supply chain is outsourced.*

LOW  HIGH

Parameters	1	2	3	4	5	6	7	8	9	Score
<b>Volume</b>	Lower quartile buyer in supply market			Median buyer in supply market			Upper quartile buyer in supply market			<b>8</b>
<b>Spend is a significant part of the buyer's cost structure</b>	Spend accounts for less than 5% of buyer's cost structure			Spend accounts for less than 5-25% of buyer's cost structure			Spend accounts for >25% of buyer's cost structure			<b>3</b>
<b>Possibility of vertical integration</b>	Currently, no vertical integration exists and very unlikely in the future			Some buyers perform activities in-house and possibility of future vertical integration			Majority of the buyers are vertically integrated			<b>8</b>
<b>Cost knowledge</b>	Buyer cost knowledge is non-existing to very little			Buyer cost knowledge is limited, but adequate for a firm discussion			Buyer cost knowledge is at a subject matter expert level			<b>5</b>
<b>Transition / switching costs</b>	High transition costs due to capex, contractual obligations, relationship, etc.			Medium transition costs			Low transition costs and easy to switch			<b>3</b>
<b>Criticality of commodity</b>	Commodity very critical to buyer's end product			Commodity somewhat critical to buyer's end product			Commodity of minor importance to buyer's end product			<b>1</b>
							<b>Overall Score</b>			<b>5</b>

# Availability of substitutes



The availability of substitutes gives the buyer greater power to switch suppliers

# Availability of substitutes

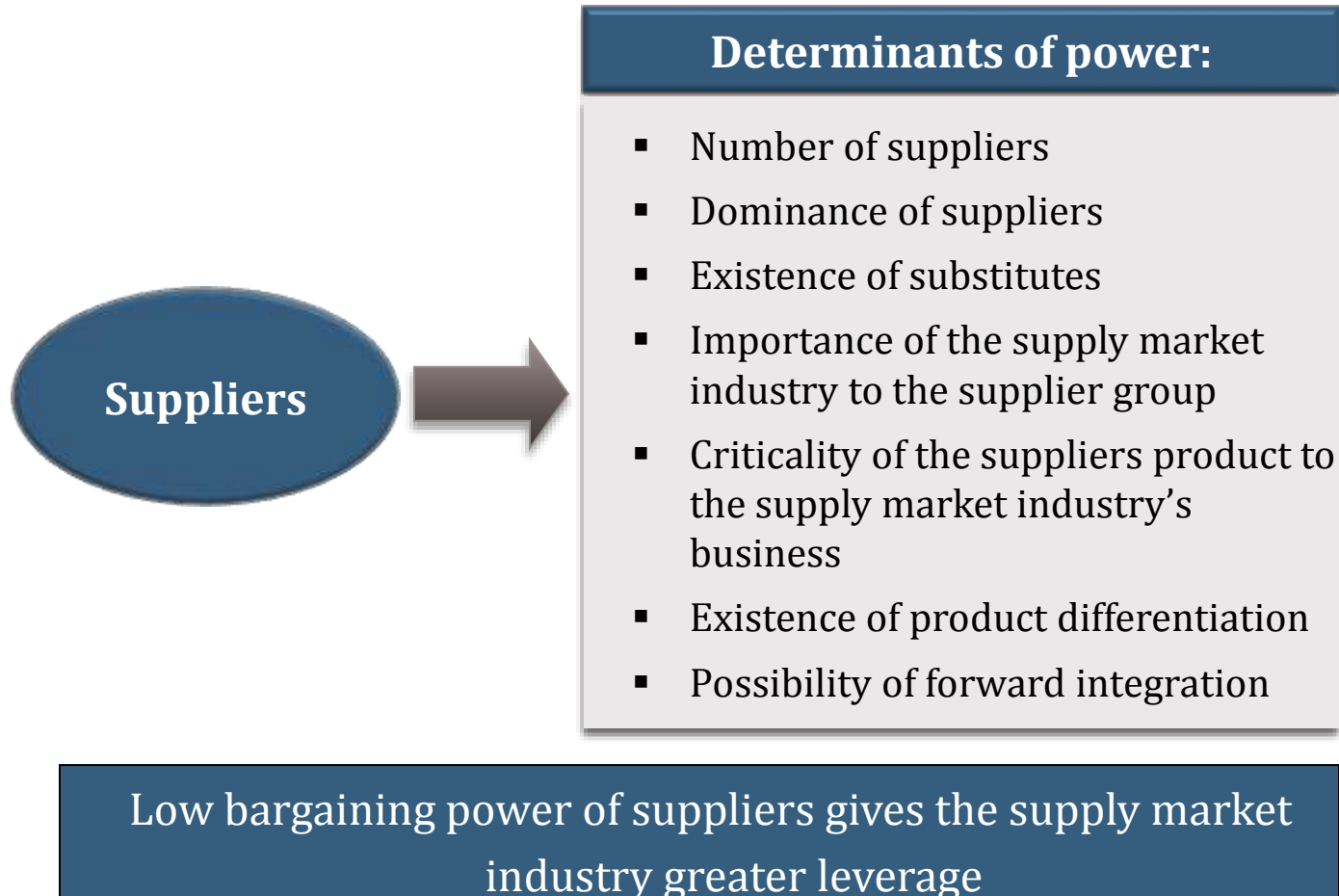
## Downhole Drilling Example

There are few *substitutes* thereby *limiting options* in the market to switch product.

LOW  HIGH

<u>Parameters</u>	1	2	3	4	5	6	7	8	9	<u>Score</u>
<b>Price of substitute</b>	Substitutes prices are high relative to current product or service			Substitutes prices are medium relative to current product or service			Substitutes prices are low relative to current product or service			<b>3</b>
<b>Cost of switching (buyer)</b>	High transition costs due to capex, contractual obligations, relationship, etc.			Medium transition costs			Low transition costs and easy to switch			<b>2</b>
<b>Current brand recognition / customer perception</b>	Current brand recognition is high – customer perceives the current brand as irreplaceable			Current brand recognition is medium – customer perceives the current brand as precious, but not irreplaceable			Current brand recognition is low – customer perceives the current brand as easily replaceable			<b>6</b>
<b>Production Capacity of substitute</b>	Production capacity is very low, significant investment required			Production capacity is sufficient enough to support some transition but not all, investment required for full transition			Sufficient production capacity exists, not much investment required to meet the demand			<b>2</b>
							<b>Overall Score</b>			<b>3</b>

# Bargaining power of suppliers (Tier II)



# Bargaining power of suppliers **Downhole Drilling Example**

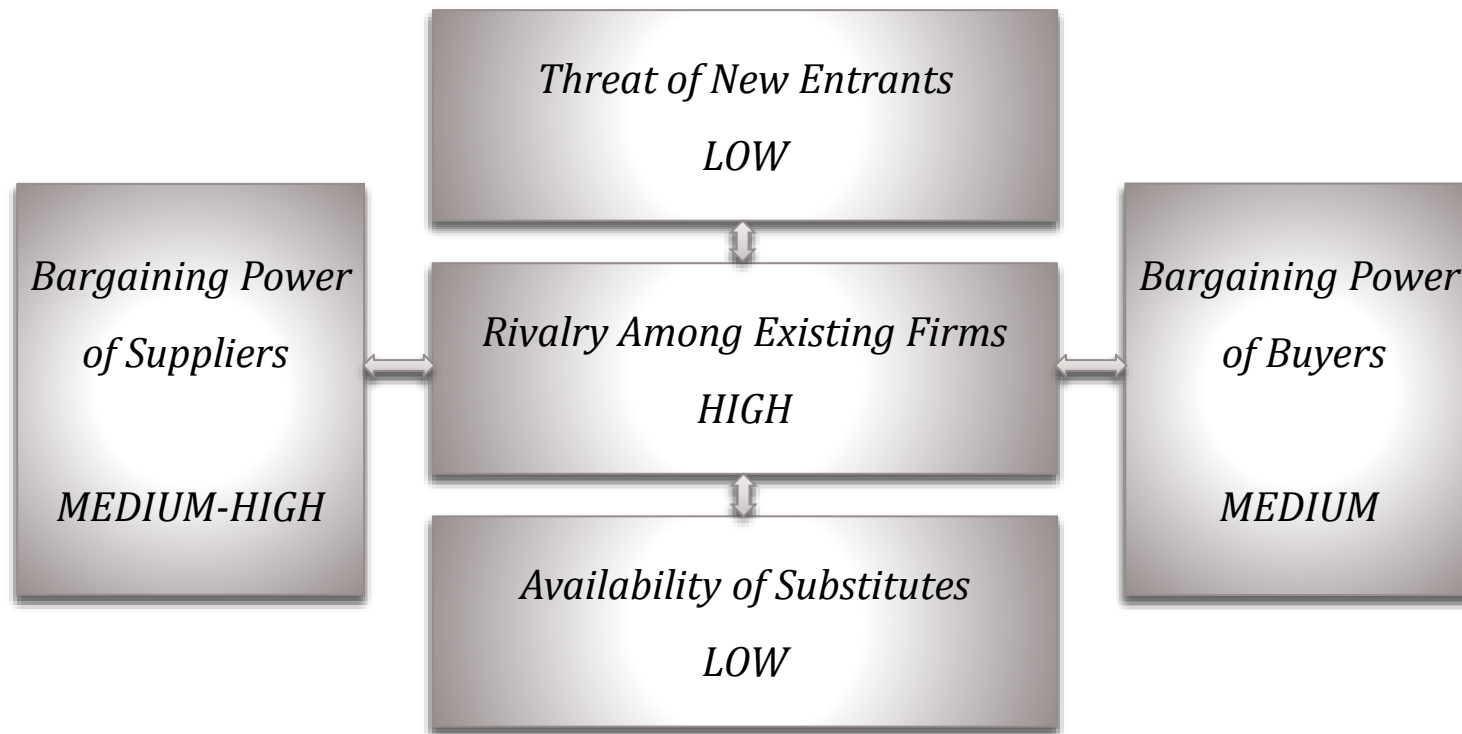
*Suppliers bargaining power is medium to high due to competition from similar sized suppliers*

LOW  HIGH

<u>Parameters</u>	1	2	3	4	5	6	7	8	9	<u>Score</u>
<b>Number of Suppliers</b>	High number of suppliers			Moderate number of suppliers			Low number of suppliers			<b>5</b>
<b>Criticality of the supplier's product to the supply market industry's business</b>	Supplier's product or service is not critical to the supply market business			Supplier's product or service is fairly critical to the supply market business			Supplier's product or service is very critical to the supply market business			<b>7</b>
<b>Importance of the supply market industry to the supplier group</b>	Supply market industry is very important to the supplier group			Supply market industry is somewhat important to the supplier group			Supply market industry is not important to the supplier group			<b>3</b>
<b>Existence of product differentiation</b>	Products and services are standard and not substantially differentiated			Products and services are fairly standard and not substantially differentiated			Products and services are highly customized and very differentiated			<b>9</b>
<b>Possibility of forward integration</b>	Forward integration for supplier would be costly and difficult			Possibility of forward integration is somewhat feasible			Forward integration is very easy and inexpensive			<b>6</b>
<b>Existence of substitutes</b>	High existence of substitutes of supplier's products and services			Moderate existence of substitutes of supplier's products and services			Low existence of substitutes of supplier's products and services			<b>9</b>
							<b>Overall Score</b>			<b>7</b>

# Porter's five forces

## Downhole Drilling Example



### Key Takeaways - Market Forces

Highly competitive industry with reduced potential for increasing profitability

# Key takeaways for SMA

## Supply Market Analysis

Market analysis



Suppliers' evaluation



Market trends



Market forces



## Key Takeaways

Understand market positioning

Understand price trends

List of preferred suppliers

Supplier relationship needs

Market risks to be monitored

Understand possible tenure of the contract

Understand bargaining power

List of substitute suppliers/products

# Key takeaways for SMA

## Downhole Drilling Example

### Supply Market Analysis

### Key Takeaways

Market analysis

- Oil and Gas industry is the biggest consumers
- Market is dominated by a few big players
- Demand has increase in 2021 & 2022

Suppliers' evaluation

- NOV is the strongest company followed by Schoeller-Bleckmann

Market trends

- Market prices are expected to increase in the short-term but will decrease in the long-term

Market forces

- Highly competitive industry with reduced potential for increasing profitability



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Introduction



Strategy



Assess Internal Needs



Analyze Supply Market



Understand Price & Costs



Develop Sourcing Strategy



Source



Manage

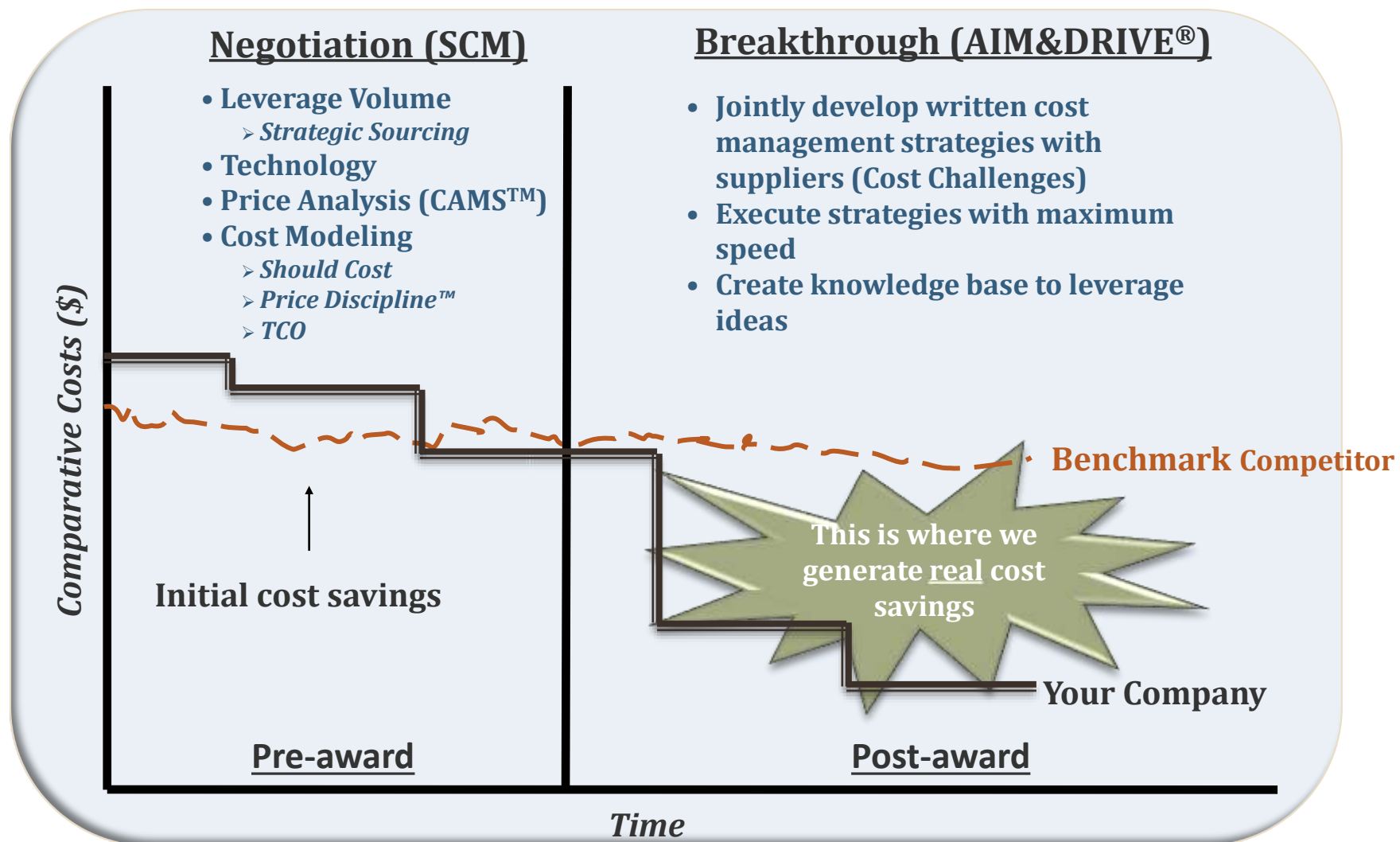


Way Forward

# Understand price and costs– section details

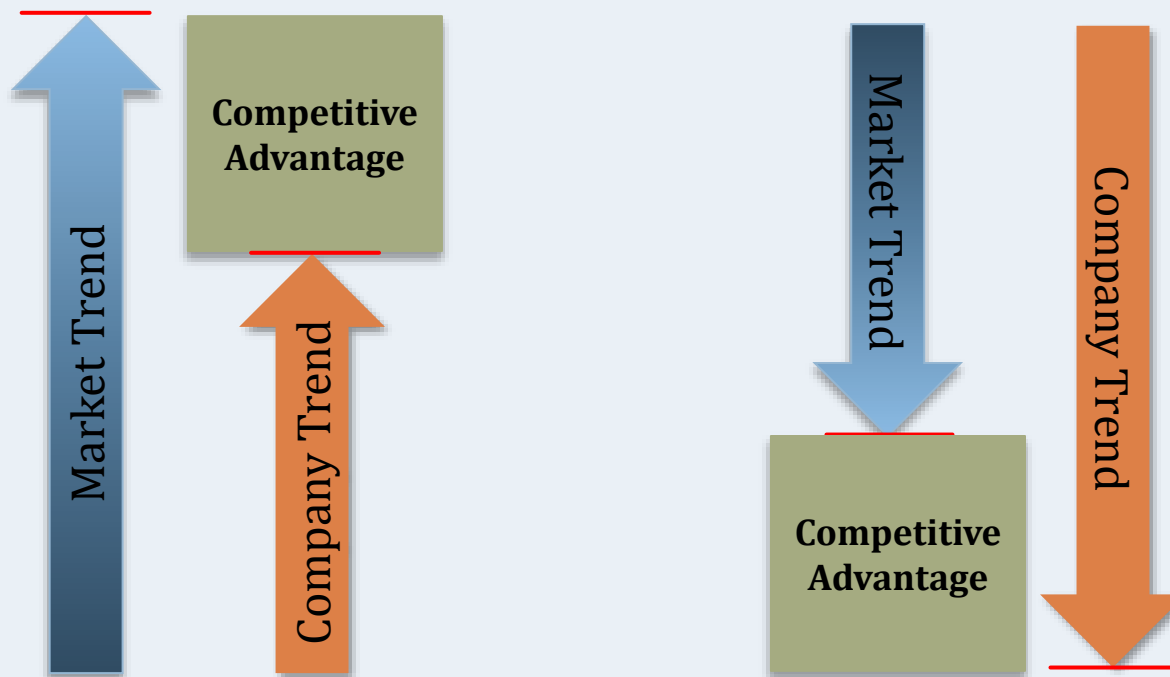
- Assess Price Competitiveness
- Understand Cost Modelling Process
- Develop Should Cost models
- Understand Price-Discipline and TCO concepts

# From Leveraging volume to leveraging ideas



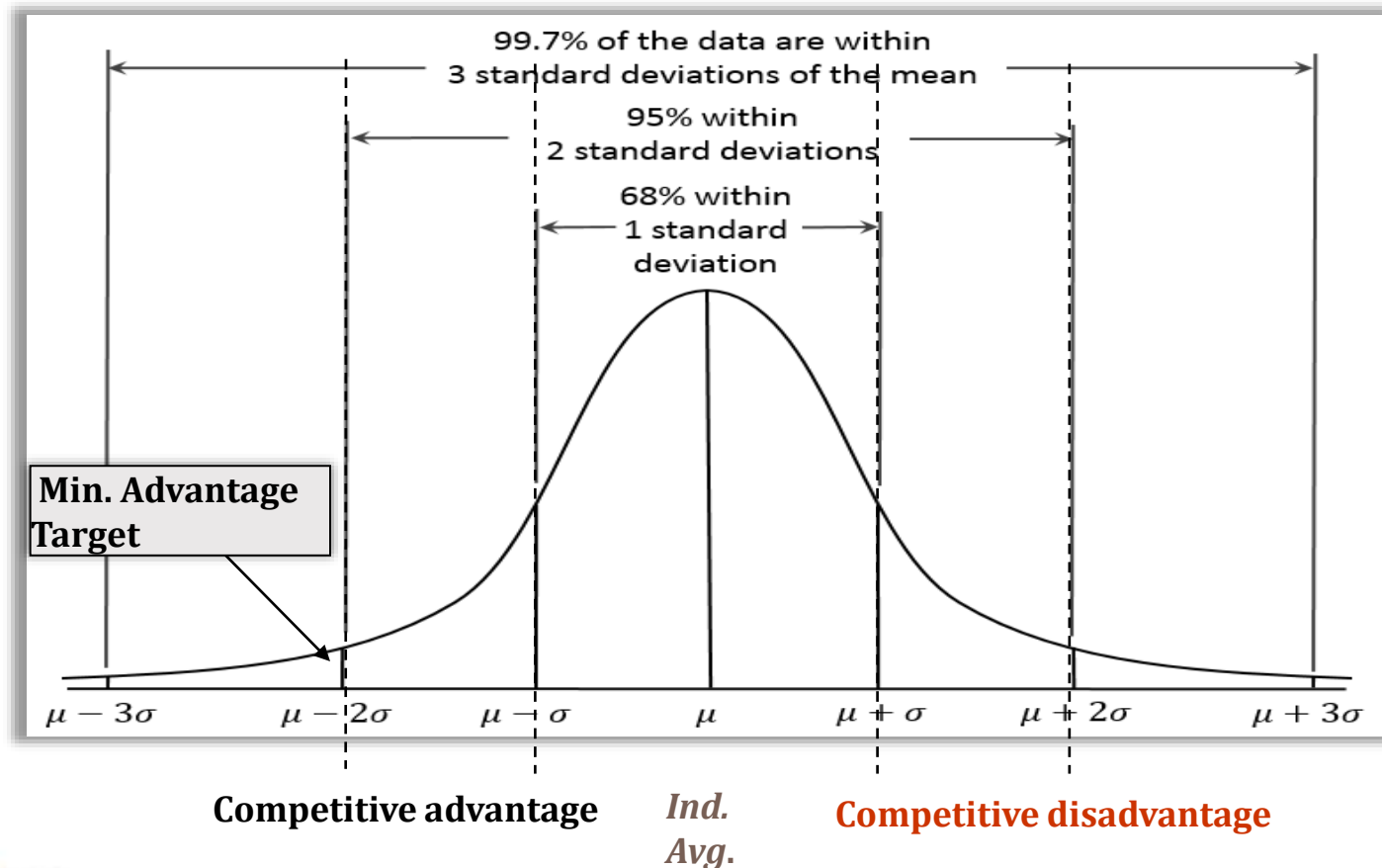
# Competitive Advantage Measurement System

- ❑ A competitive advantage exists when:
  - ❑ The company's costs rise slower than the market; OR
  - ❑ The company's costs fall faster than the market



# Minimum Advantage Target (MAT)

- Industry averages are just that – averages!
- World-class companies should strive to be in the top 5% of an industry group (2 standard deviations from the mean)



# Absolute competitiveness measurement

## Compares prices paid against one or more of the following:

- Overall industry average price
- Prices paid by companies with similar buying power
- Prices paid by competitors
- Prices paid by best-in-class companies

## Objectives of an absolute competitiveness study:

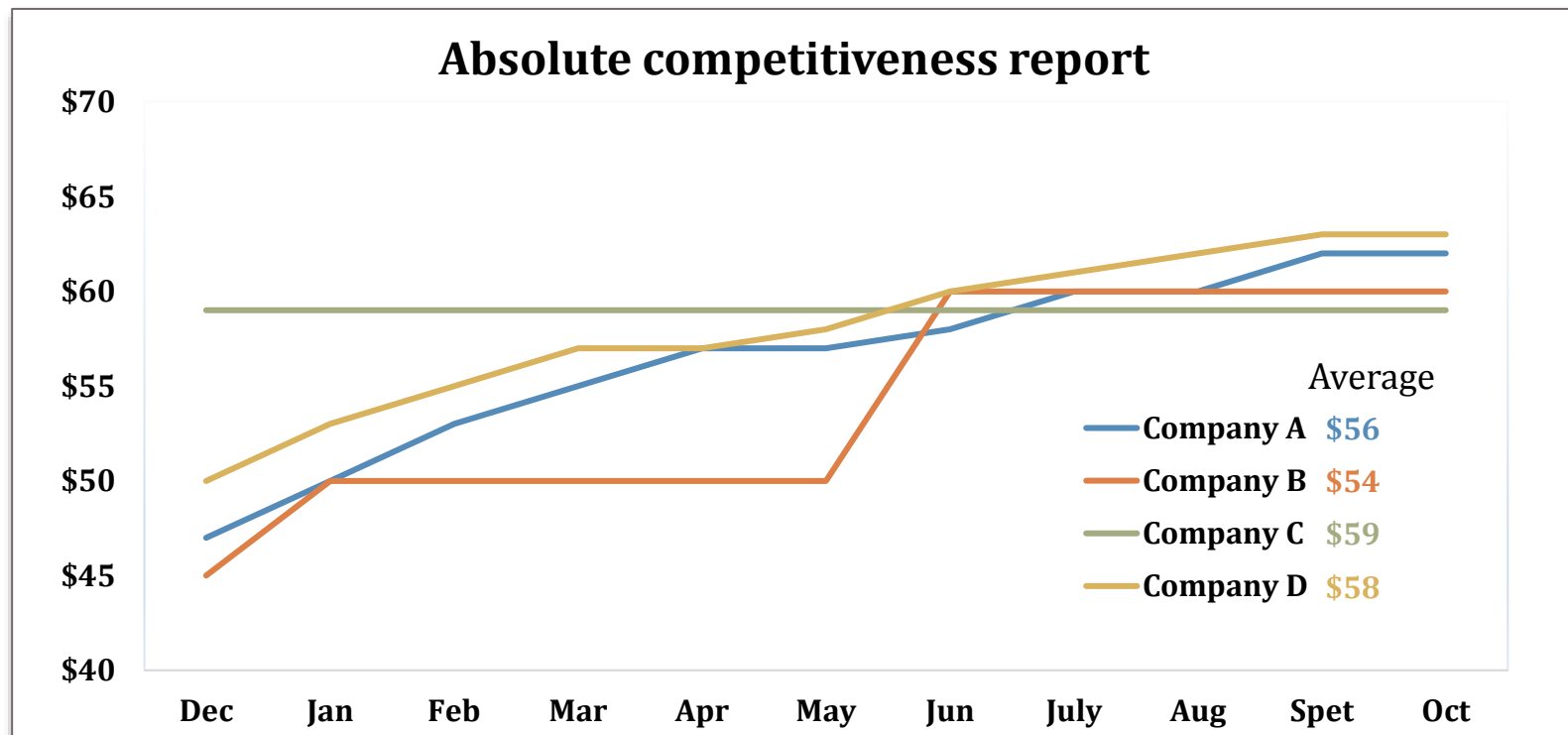
- Determine where your prices stand among others
- Understand how others are buying (i.e. pricing structure, terms, etc.)

## Critical Success Factors

- Perform on strategic categories every 3 years
- Identify target companies for comparison within and outside your industry
- Select a reputed third-party with a good network to conduct the study
- Make observations on price, terms, requirements, personnel, etc.

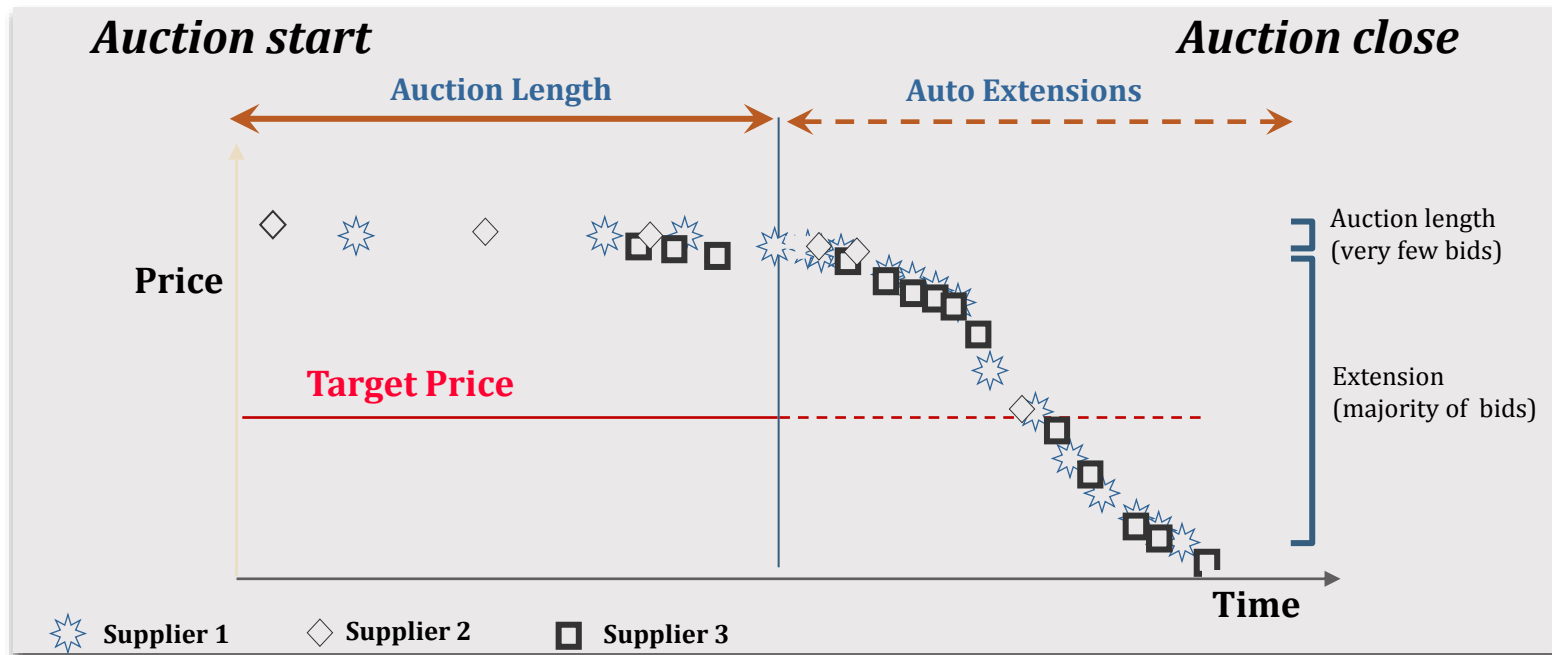
# Critical factors for absolute competitiveness

- Perform on strategic categories once every 3 years.
- Identify target companies for comparison within and outside your industry.
- Select a reputed third-party with a good network to conduct the study.
- Make observations such as price variations, terms, update on requirements, and personnel.



# Reverse auctions

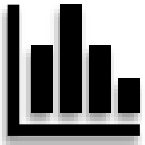
Prospective suppliers submit bids online on item/s put up for purchase



- ❑ Typically the automatic extension time is when bidding escalates
- ❑ Knowledge of market prices, supplier costs and key cost drivers are essential in order to establish the target price

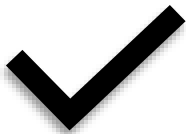


# The power of cost models



Understand the cost structure of a product/service being procured

Engage a supplier that has not provided any cost information



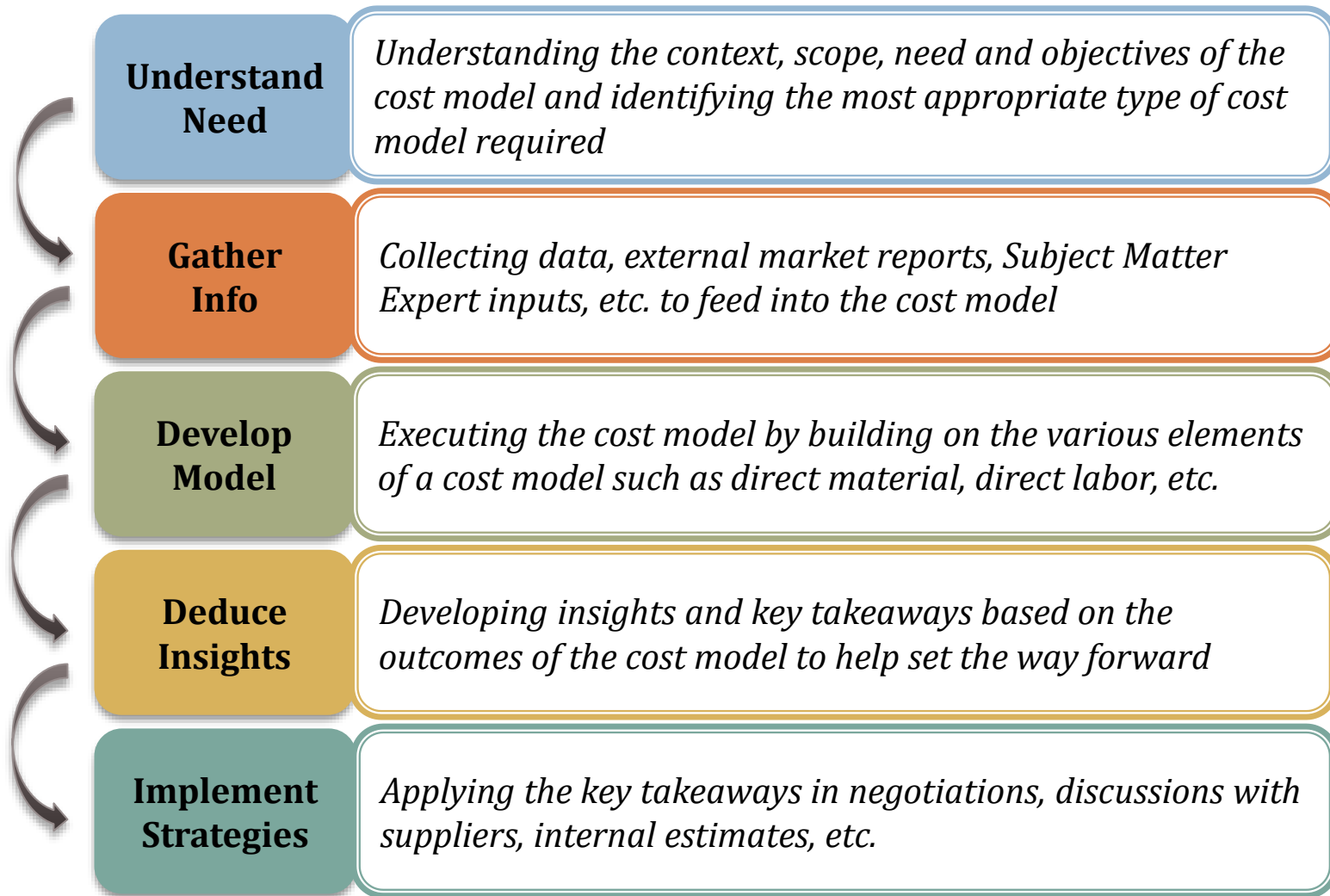
Validate cost information provided by suppliers

Increase transparency to ensure that pricing decisions are based on facts and logic



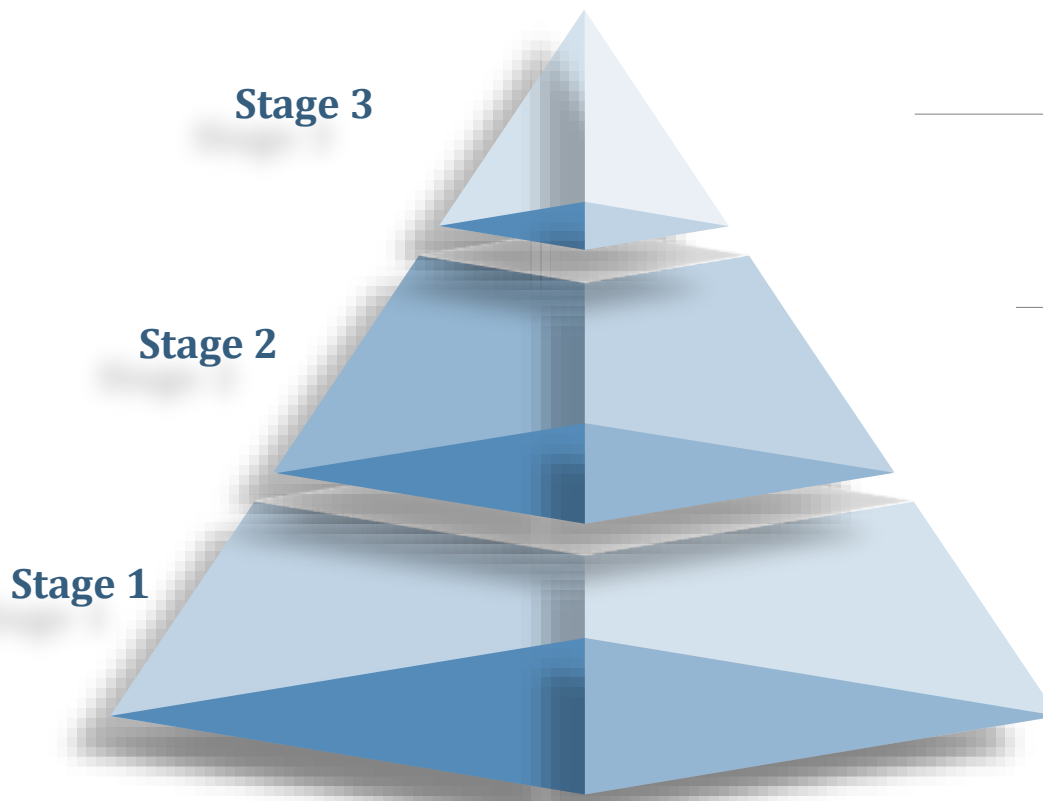
Build credibility and respect for well informed buyers

# Cost model process



# Levels of complexity of cost models

*Based on the quality of inputs, a cost model can evolve from a basic industry based to a collaborative, supplier specific model.  
Each situation requires a unique cost model*



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## Supplier Specific Model

*Need supplier data  
May require a site visit*

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## Process-Based Model

*Broken down by process steps  
Info from subject matter experts  
Uses some industry averages*

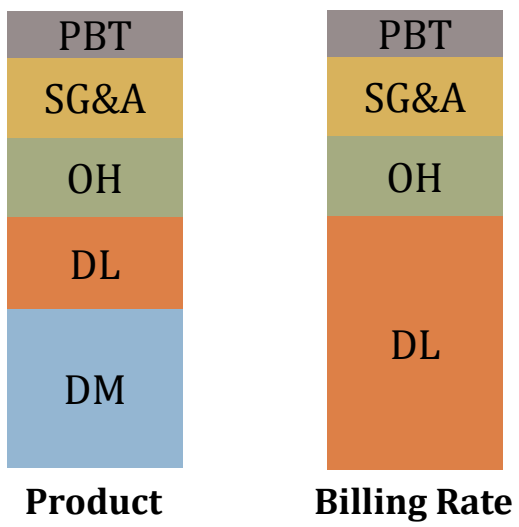
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## Basic Industry Model

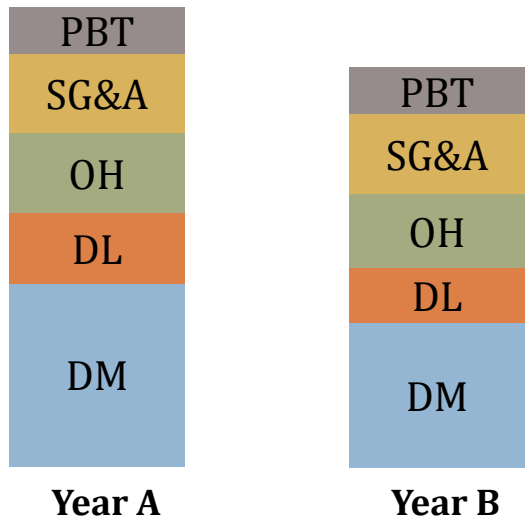
*Based on broad industry averages  
Refined for location, economic conditions  
Starting point for cost discussions when no data is provided*

# Types of cost models

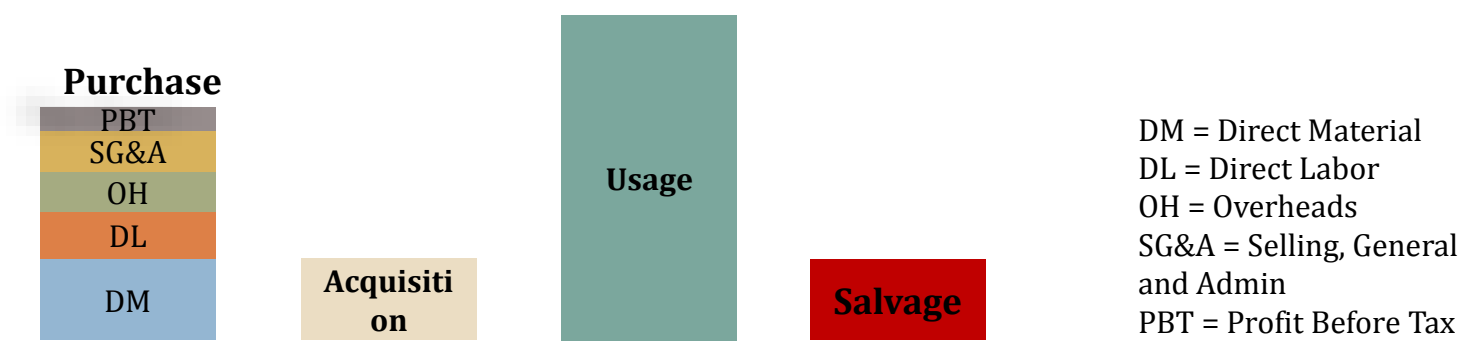
## Should Cost Models



## Price Discipline Model



## Total Cost of Ownership (TCO)

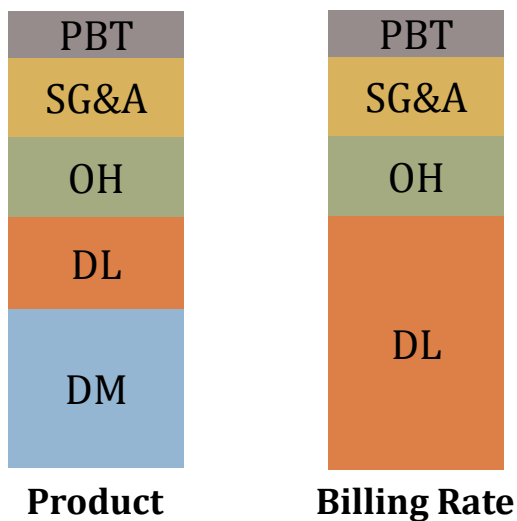


# Should cost models

*Should Cost Models: These type of cost models utilize a ground-up approach to estimate the “should-cost” of a product or service*



## Should Cost Models



- Determine the “should-cost” estimate for a product or service
- Useful in discussions and negotiations on rates

# Should cost model

## Subsea Wellhead Example

Element	% of Total Cost	Should Cost (\$)		Calculations
<b>Direct Material</b>	<b>20%</b>	<b>\$ 24,000</b>		<b>Calculated Direct Materials</b>
Carbon Steel	5%		\$ 6,000	
Stainless Steel 316 ss	5%		\$ 6,000	
Inconel 625	5%		\$ 6,000	
Epoxy	5%		\$ 6,000	
<b>Forging conversion costs</b>	<b>10%</b>	<b>\$ 12,000</b>		<b>Forging cost model</b>
<b>Direct Labor</b>	<b>20%</b>	<b>\$ 24,000</b>		<b>Calculated labor requirements</b>
CNC Vertical Turret Lathe operator	4%		\$ 4,800	
CNC Horizontal bore operator	4%		\$ 4,800	
Assembler/general operator	4%		\$ 4,800	
Inspection/testing technician	4%		\$ 4,800	
Epoxy coating technician	4%		\$ 4,800	
<b>Overheads</b>	<b>20%</b>	<b>\$ 24,000</b>		<b>Calculated overheads</b>
<b>Equipment</b>	<b>13.33%</b>		\$16,000	
Maintenance	3%		\$ 4,000	
Insurance	3%		\$ 4,000	
Support Operations	3%		\$ 4,000	
Miscellaneous supplies	3%		\$ 4,000	
Utilities	3%		\$ 4,000	
Other Manufacturing Overheads	3%		\$ 4,000	
Cost of Goods Sold (CGS)	70%	\$ 84,000		<b>DM+DL+OH</b>
GSA & Other Expenses	15%	\$ 18,000		Company Financials
Profit Before Tax	15%	\$ 18,000		Company Financials
Expected Price for 36" Subsea Wellhead	100%	\$ 120,000		<b>COGS\$/ COGS%</b>

**Supplier's Quote: \$200,000**

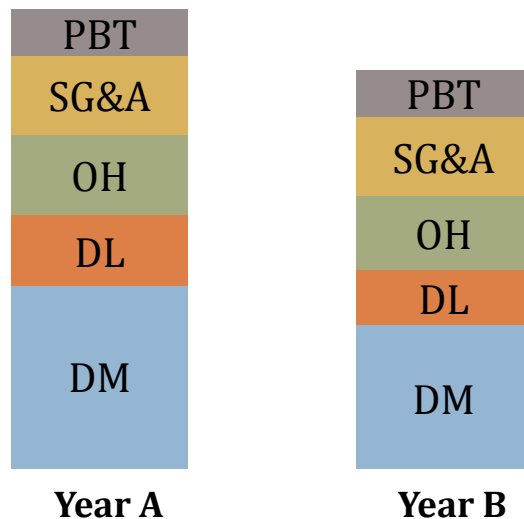
**Cost Model: \$120,000**

**Potential savings 40%**

# Price Discipline™

*Price Discipline™: A structured methodology to evaluate changes in price based on the understanding that various cost elements are NOT directly correlated*

## Price Discipline Model



- Determines the reasonableness of a supplier's request for a change in price
- Sets the framework for all future discussions on price
- Useful in setting up Long Term Agreements (LTAs)

# Factors for determining tracking mechanisms

*For Adjusting costs, make a list of the factors that impact each cost element, quantify the impact of each factor and adjust respective cost elements.*

COST	SAMPLE FACTORS	
Material	<ul style="list-style-type: none"> <li>▪ Market price</li> <li>▪ Minimum Advantage Target (MAT)</li> <li>▪ Volume/stability</li> </ul>	<ul style="list-style-type: none"> <li>▪ Technology changes</li> <li>▪ Material yields</li> <li>▪ Exchange rates</li> </ul>
Labor	<ul style="list-style-type: none"> <li>▪ Wage rates</li> <li>▪ Productivity</li> </ul>	<ul style="list-style-type: none"> <li>▪ Skill mix</li> <li>▪ Govt. regulations</li> </ul>
Overhead	<ul style="list-style-type: none"> <li>▪ Fixed OH – Volume, inflation</li> <li>▪ Variable OH – Inflation</li> </ul>	
Profit	<ul style="list-style-type: none"> <li>▪ Risk</li> <li>▪ Value added</li> </ul>	



# Price Discipline Model

## Pumps Example

Element	2018 (AUD)	2019 (AUD)	Adjustments made
Direct Material	26,000	25,789	Adjusted for price, productivity changes, and MAT
Steel	22,350	22,171	
Metal Fasteners	1,450	1,394	
Aluminum castings	2,200	2,224	
Direct Labor	4,000	3,991	Adjusted for changes in wage rates and productivity
Manufacturing Overhead	10,000	8,526	Adjusted for inflation, Fixed OH for volume
Cost of Goods Sold	40,000	38,306	
GSA & Other Expenses	5,500	4,578	Adjusted for inflation, Fixed OH for volume
Profit Before Taxes	4,500	4,241	Profit % kept constant at 9%
<b>SHOULD COST</b>	<b>50,000</b>	<b>47,125</b>	$(\text{COGS} + \text{SGA}) / (1 - 0.09)$

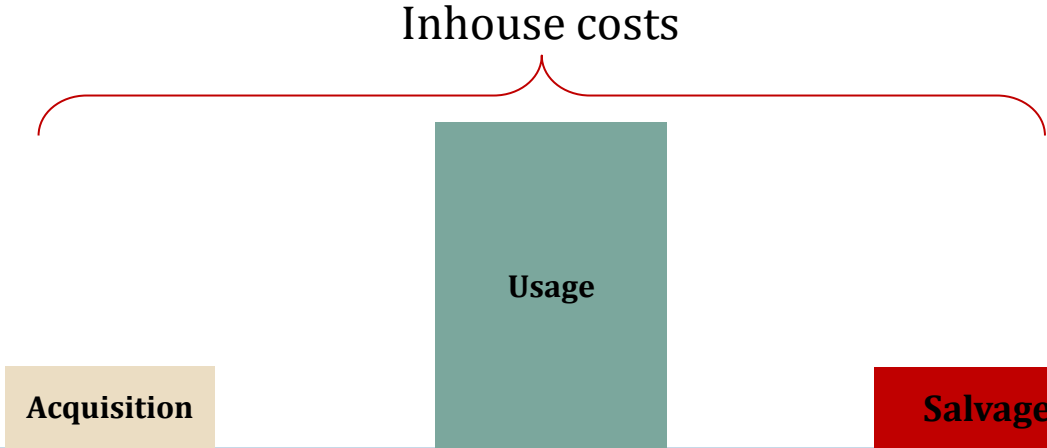
# Total Cost of Ownership (TCO) structure

*The TCO is made up of purchase, acquisition, usage and salvage costs*

**Price is only part of the cost!**



**Price paid to suppliers of item being purchased**



**Costs incurred in getting to point of use.**  
(E.g. freight, duties, taxes, receiving & handling, storage, sourcing, and admin)

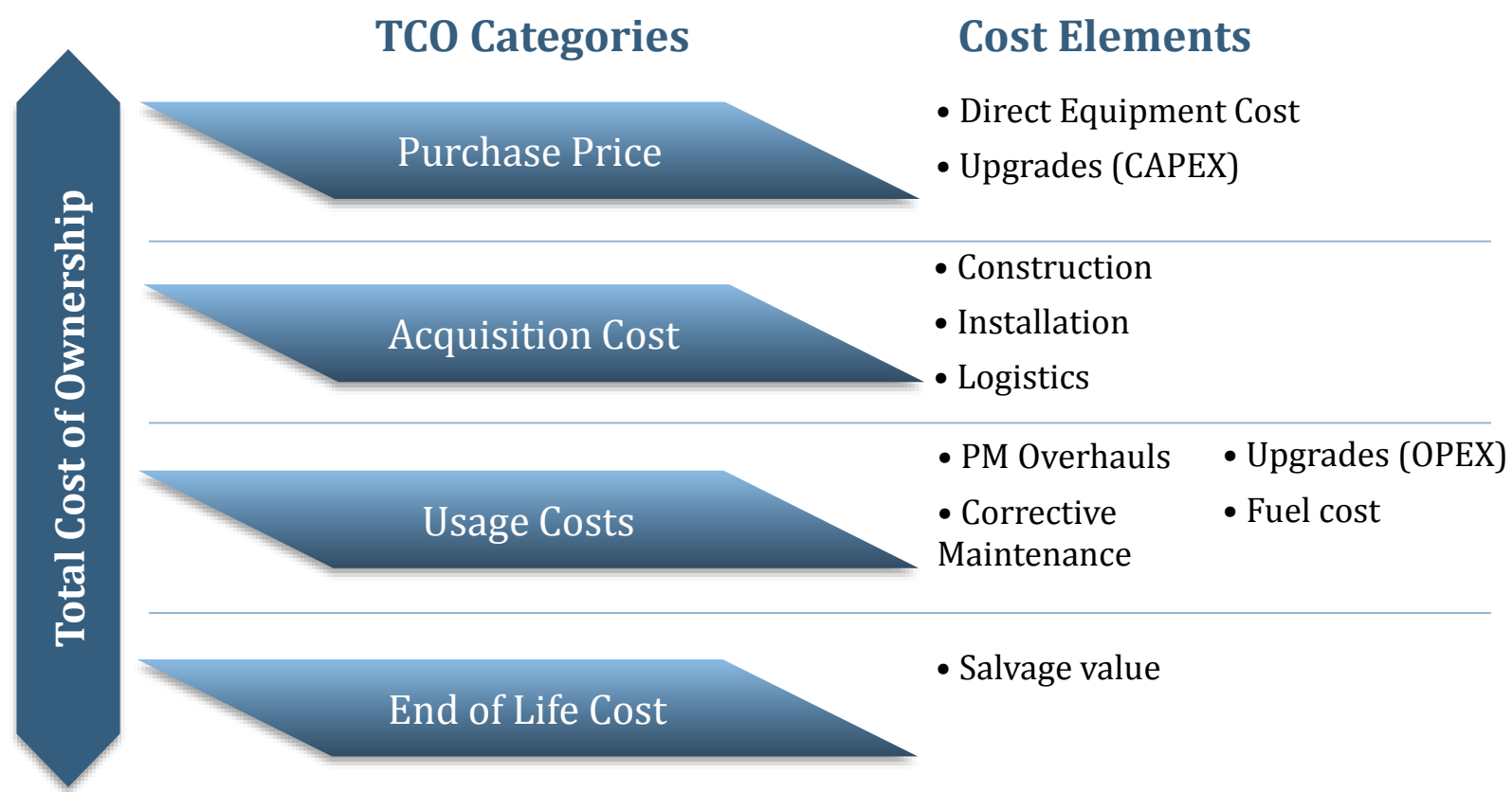
**Cash and Opportunity costs incurred in installing, using and supporting the item through its usable life.**  
(E.g. installation, operating, inspection, rework, repairs, maintenance, energy, litigation etc.)

**Costs incurred in the terminating use of the item**  
(E.g. disposal costs / salvage value, project termination fees, inventory write off, removal of tooling, etc.).

# Building a TCO model

## PowerGen Equipment Example

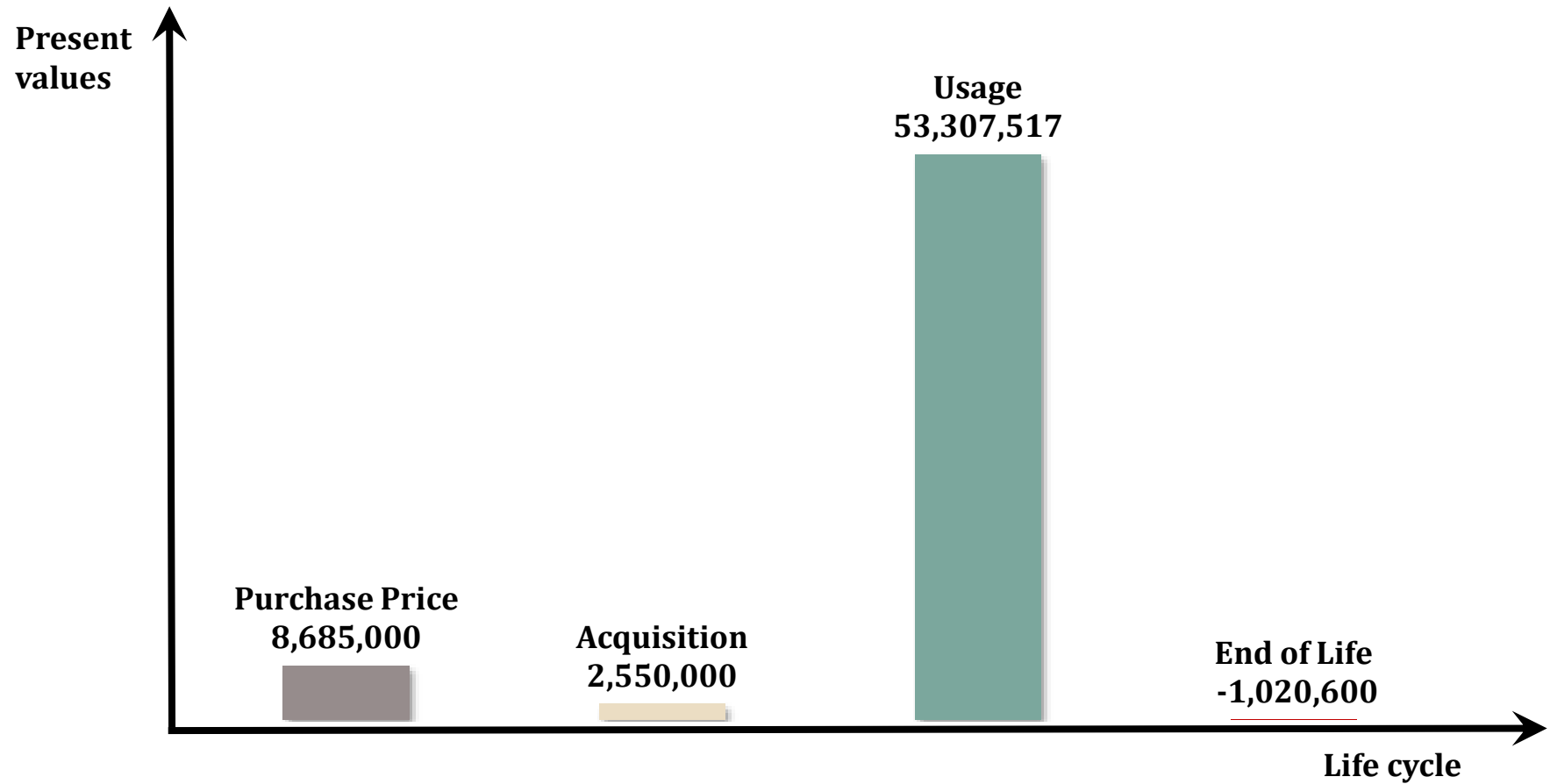
List cost elements in TCO categories and then determine timeline, totals and PV values for each time period



# TCO model outcome

## PowerGen Equipment Example

*TCO for PowerGen Equipment*



# Landed cost model

## PowerGen Equipment Example

ELEMENT	R/O	MEASURE
<b>PURCHASE PRICE:</b>		
➤ Direct Equipment Cost	O	Supplier quote (\$7,685,000 per Turbine)
➤ Upgrades (CAPEX)	O	Supplier quote (\$1,000,000 per Turbine)
<b>ACQUISITION COST:</b>		
➤ Construction	O	Supplier quote (\$1,250,000 per Turbine)
➤ Installation	O	Supplier quote (\$750,000 per Turbine)
➤ Logistics	O	Supplier quote (\$550,000 per Turbine)
<b>USAGE COSTS:</b>		
➤ Delivery Opportunity Cost	O	\$14,500,000
➤ Preventive Maintenance	R	\$121,753/Turbine per year
➤ Corrective Maintenance	R	\$759,000/Turbine per year
➤ Fuel cost	R	\$3,000,000/Turbine per year
<b>END OF LIFE COSTS:</b>		
➤ Salvage value	O	\$1,020,600/Turbine

- Identify cost elements where costs can be better managed
- Engage in discussions with supply chain partners

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Introduction



**Strategy**



Assess Internal Needs



Analyze Supply Market



Understand Price & Costs



**Develop Sourcing Strategy**



Source



Manage



Way Forward

# Develop sourcing strategy – section details

● Analyse Outputs from Previous Steps

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● List Potential Strategies

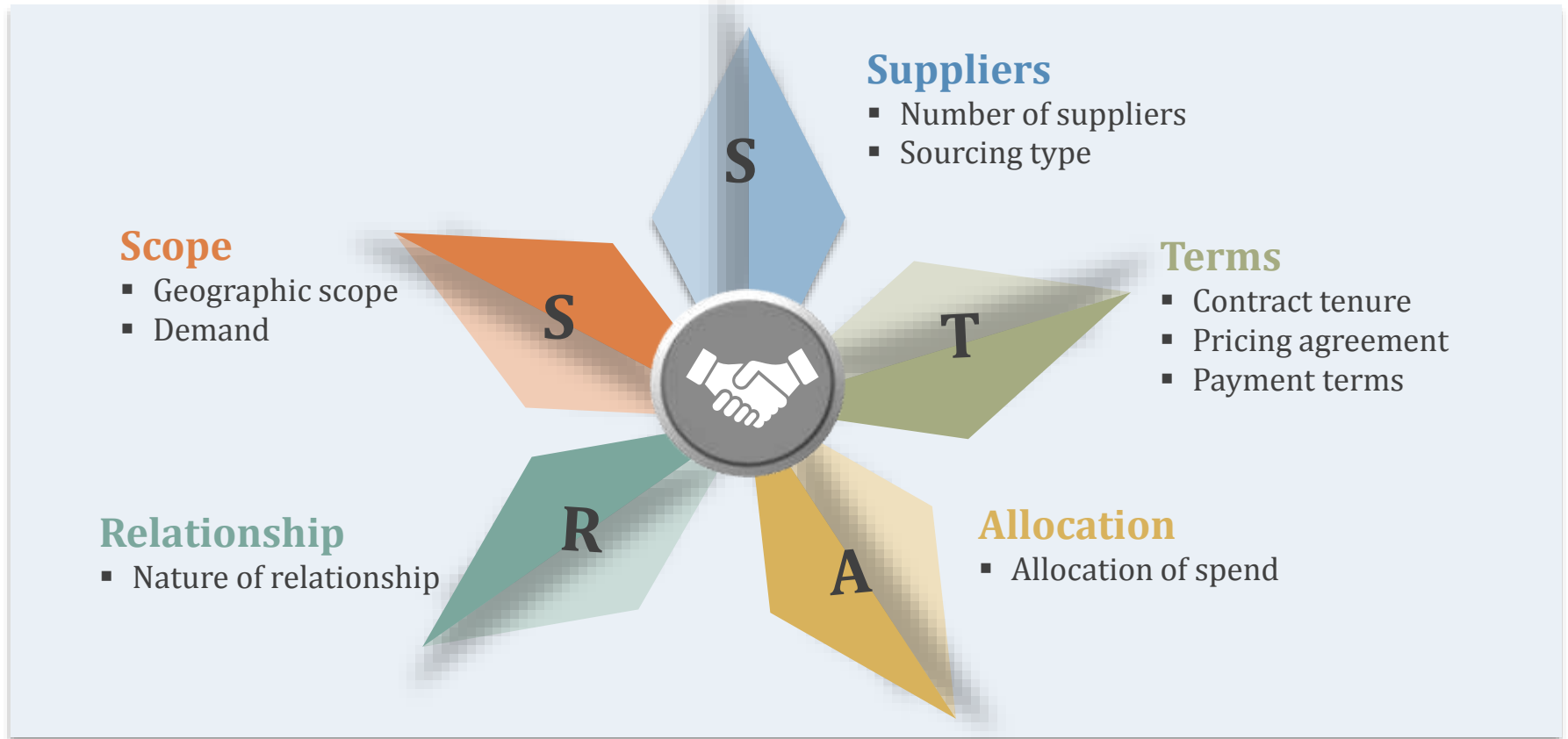
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● Evaluate Potential Strategies

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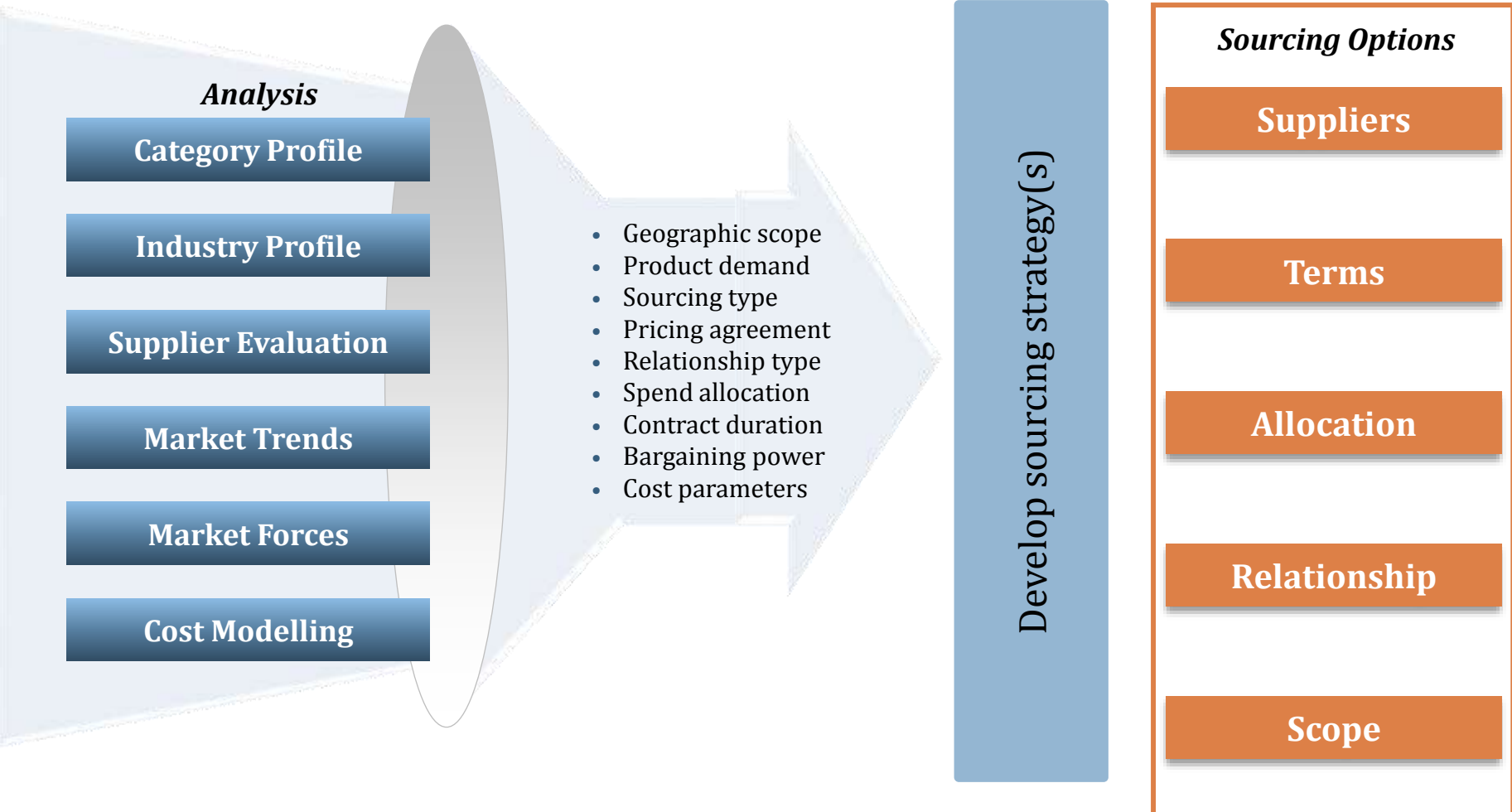
# Stars for developing sourcing options

*STARS* represents critical factors to be considered for developing sourcing options.



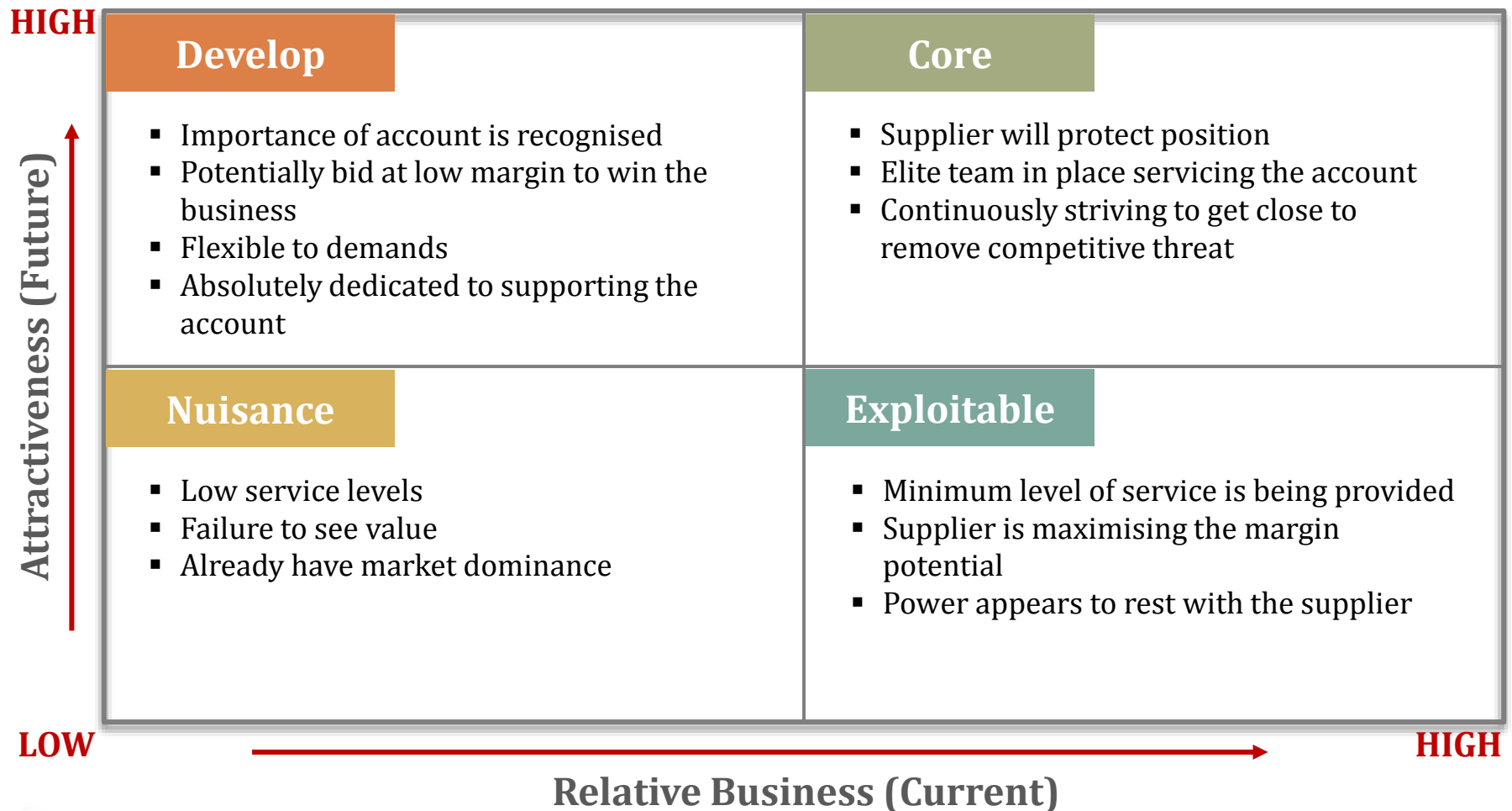


# Analyse outputs from previous steps














# Understand Supplier Perception

**SUPPLIER PERCEPTION MODEL** - Position category based on the attributes "Attractiveness" and "Relative Business"



# Decide on supplier engagement

*Depending on the perceptions of buyers and suppliers, the engagement strategy is decided*

Supplier Perception/ Buyer Perception	Core	Develop	Exploitable	Nuisance
<b>Strategic</b>	Constant improvement in business performance by working collaboratively 	<b>Business relationship for long-term engagements</b> 	No discussion regarding future engagement opportunities 	Both might be looking for another potential business partner 
<b>Leverage</b>	Future potential engagements with value improvement 	To maintain relationship, supplier expects future business opportunities	Supplier may focus to extract maximum value from the ongoing contracts of high spend 	The buyer might not get continuous value improvements in the engagement 
<b>Bottleneck</b>	Crucial for buyer's operations and seller's business 	Buyer may look to provide business opportunities to the supplier	Engagement goals may be misaligned 	The buyer may look for alternative suppliers 
<b>Routine</b>	Buyer seeks to leverage position to get maximum value of the engagement 	Supplier may provide value improvements in present contracts to get more business in the future	Both are not keen for future engagements	Change suppliers frequently or go for spot purchases

# Understand strategies based on importance

<i>Parameters</i>	Strategic	Leverage	Bottleneck	Non-Critical
<i>Strategy</i>	Form partnerships with suppliers	Maximize commercial advantage	Ensure supply continuity	Simplify acquisition process
<i>Tactics</i>	Increase role of selected suppliers	<ul style="list-style-type: none"> <li>▪ Concentrate business</li> <li>▪ Maintain competition</li> </ul>	<ul style="list-style-type: none"> <li>▪ Decrease uniqueness of suppliers</li> <li>▪ Manage supply</li> </ul>	<ul style="list-style-type: none"> <li>▪ Increase role of systems (e-auctions)</li> <li>▪ Reduce buying effort</li> </ul>
<i>Actions</i>	<ul style="list-style-type: none"> <li>▪ Intense negotiation</li> <li>▪ Supplier process management</li> <li>▪ Prepare contingency plans</li> <li>▪ Analyse market / competition</li> <li>▪ Use functional specifications</li> </ul>	<ul style="list-style-type: none"> <li>▪ Promote competitive bidding</li> <li>▪ Exploit market cycles / trends</li> <li>▪ Procurement coordination</li> <li>▪ Use industry standards</li> <li>▪ Active sourcing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Widen specification</li> <li>▪ Increase competition</li> <li>▪ Develop new suppliers</li> <li>▪ Medium-term contracts</li> <li>▪ Attempt competitive bidding</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rationalize supply base</li> <li>▪ Automate requisitioning e.g. EDI, credit cards</li> <li>▪ Stockless procurement</li> <li>▪ Minimize administration costs</li> <li>▪ Minimal negotiating</li> </ul>

In Downhole Drilling example, the category was 'Strategic'.

# Potential strategies

**Fuels Example**

Fuels Category Positioning (Buyer's/ Supplier's perspective): **Leverage/ Develop**

Critical Factors	Option 1: Reverse auctions	Option 2: PPA with major marketers	Option 3: Commercial arrangement at retail outlets	Option 4: Outsource the supply chain to 1 major marketer
<b>Suppliers</b>	15-20 prequalified suppliers	Many suppliers	Multiple suppliers	One supplier
<b>Terms</b>	Short-term (Every 3-6 weeks)	1-year contract	2-year contract with options to renew (1+1)	3-year contract with options to renew by another 2 years (1+1)
<b>Allocation</b>	100% awarded to the most competitive supplier	Distributed between multiple suppliers	Distributed between multiple suppliers	100%
<b>Relationship</b>	Tactical and Competitive	Tactical and Competitive	Competitive at the sourcing stage and then Collaborate to reduce costs and improve processes	Collaborative to reduce costs and improve processes
<b>Scope</b>	Supplier will be in charge of only the delivery of fuels at the point of use	Supplier will be in charge of only the delivery of fuels at the point of use	Supply of fuels to the fleet of vehicles	Supplier will be in charge of the entire supply chain for the supply of fuels
<b>Future Category Positioning</b>	Leverage/ Exploitable	Leverage/ Exploitable	Leverage/ Develop	Strategic/ Core

# Selecting contract types

Contract Types	Form of Remuneration	Scope definition
Lump Sum	Fixed price for defined work scope	Fully defined entire scope
Bill of Quantities	Fixed price for defined work scope	Fully defined for each unit
Schedule of Norms	Fixed prices for unit of activity	Uncertain number of defined activities
Unit Rates	Fixed prices for measured output	Uncertain number of defined activities
Reimbursable Cost (with incentives)	Actual costs plus an incentive if defined objectives have been met	Uncertain scope, buyer's market
Cost Plus (earned fee)	Actual costs plus an earned fee	Uncertain scope, seller's market
Time & Materials	Fixed rate per unit of materials; All-inclusive materials covers labor	Skills and equipment defined, effort / usage uncertain
Day Rate (time contracts)	Fixed rates for effort	Skills and equipment defined, effort / usage uncertain

**Scope**

Increased effort on scope

**Risks**

Reduced financial risk

Reduced effort on scope

Increased financial risk

# Advantages and disadvantages

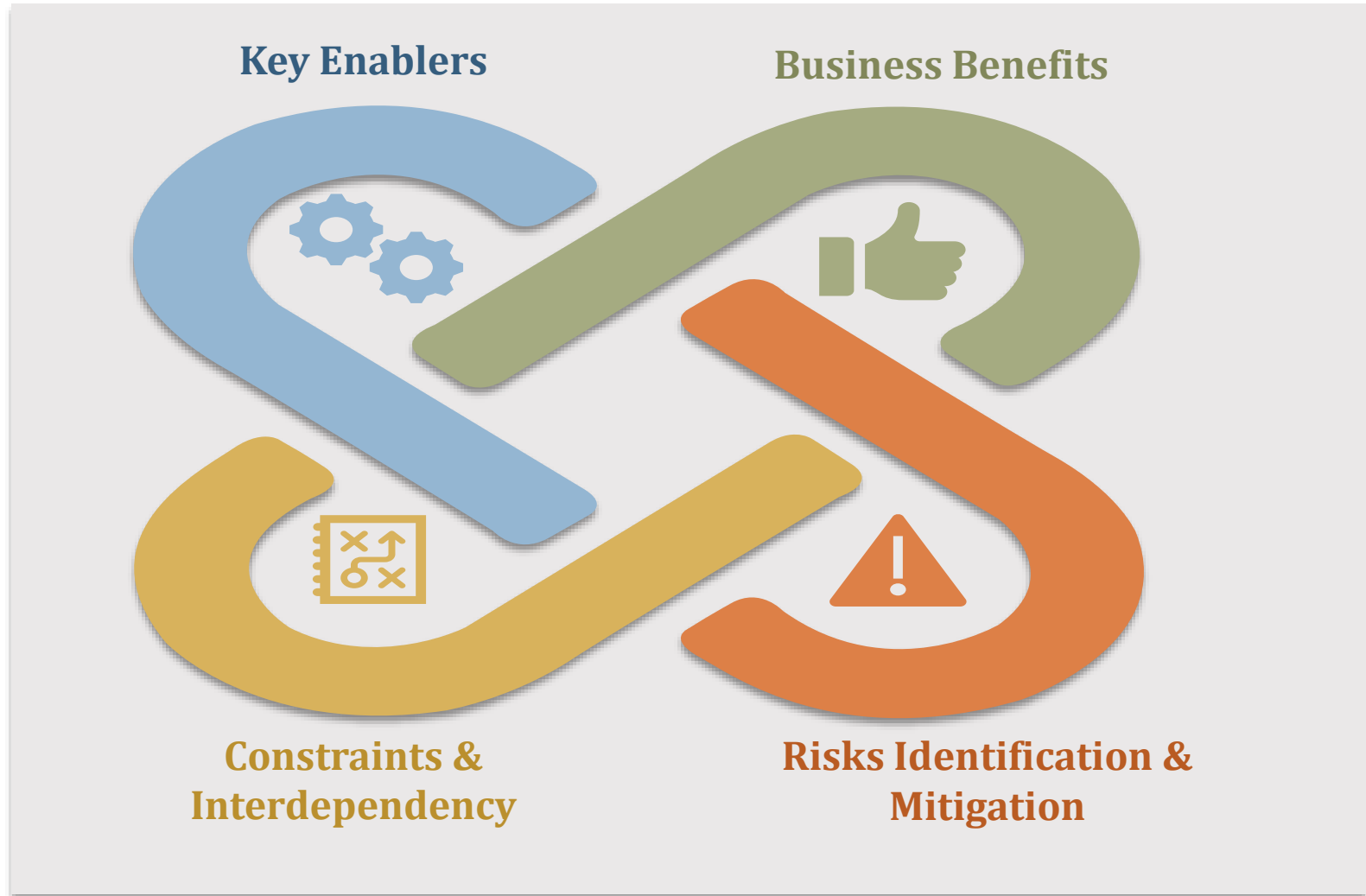
Contract Types	Advantages	Disadvantages
<b>Lump Sum</b>	<ul style="list-style-type: none"> <li>▪ Cost should only change as a result of agreed variations or claims.</li> <li>▪ Costs are known upfront of the project and risk to Company is easier to control.</li> <li>▪ Straight forward contract management and strong incentive for contractor to perform.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There can be a long lead time before construction commences.</li> <li>▪ Potential for claims that could cause delays or disruptions if variations are not handled promptly.</li> <li>▪ Scope of Work must be very specific to avoid tendency of contractor price increases.</li> </ul>
<b>Bill of Quantities</b>	<ul style="list-style-type: none"> <li>▪ Straight forward execution.</li> <li>▪ Cost of variations easily derived.</li> <li>▪ Lower possibility of contractor claims.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Detailed Scope of Work requires considerable upfront effort.</li> <li>▪ Measurement of work requires engineering and administrative effort.</li> </ul>
<b>Schedule of Norms</b>	<ul style="list-style-type: none"> <li>▪ Once a norm (standard) is set for a specific activity, it becomes a benchmark for future productivity improvement.</li> <li>▪ Composite rates can be tendered or negotiated to readily determine “known” price for standard activities.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Determining the norm (standards) requires a considerable effort to fully understand the set of activities involved.</li> <li>▪ Norms must be actively monitored over time to reset them as process improvements occur.</li> </ul>
<b>Unit Rates</b>	<ul style="list-style-type: none"> <li>▪ Degree of control over final cost without the need to define a precise definition of Scope of Work.</li> <li>▪ Project execution can commence prior to completion of detailed design.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cost control requires effort to ensure completed work is measured.</li> <li>▪ Variations can occur if contractor performs work outside of that covered by unit of measurement.</li> </ul>

# Advantages and disadvantages

Contract Types	Advantages	Disadvantages
<b>Reimbursable Cost (with incentives)</b>	<ul style="list-style-type: none"> <li>▪ Appropriate for Front-end design services and other open-type service contracts.</li> <li>▪ Appropriate for major time-driven EPC contracts with experienced contractors.</li> <li>▪ Appropriate if proper milestones for payment, incentives can be established, financial targets set and a buyer's market operates.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Onerous financial administration can be required to determine contractor's true costs.</li> <li>▪ Clear objectives must be set and measurable criteria established for assessing achievements of incentives.</li> <li>▪ Close monitoring by the Company with detailed administrative procedures.</li> </ul>
<b>Cost Plus (earned fee)</b>	<ul style="list-style-type: none"> <li>▪ Effort to develop Scope of Work is minimal for the Company.</li> <li>▪ Contractor can be mobilized quickly for urgent needs.</li> <li>▪ May be useful in a strong buyer's market with experienced contractors.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Requires close monitoring and detailed administrative procedures to reduce financial risk to the Company.</li> <li>▪ Lack of incentives can lead to poor productivity by contractor.</li> </ul>
<b>Time &amp; Materials</b>	<ul style="list-style-type: none"> <li>▪ Contractor should be provided an incentive to work efficiently and meet quality specifications.</li> <li>▪ Minimal supervision is required by the Company.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Can be difficult to control the quality of work performed without proper incentives.</li> <li>▪ Company carries the risk of poor contractor performance.</li> </ul>
<b>Day Rate (time contracts)</b>	<ul style="list-style-type: none"> <li>▪ Appropriate if Scope of Work cannot be sufficiently defined to allow for Lump Sum remuneration.</li> <li>▪ Should include performance incentives whenever possible with criteria for converting to an incentive scheme.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Difficulty in controlling the total cost of work.</li> <li>▪ Company carries the entire risk of poor contractor performance.</li> <li>▪ Significant Company supervision required in the execution of work.</li> </ul>

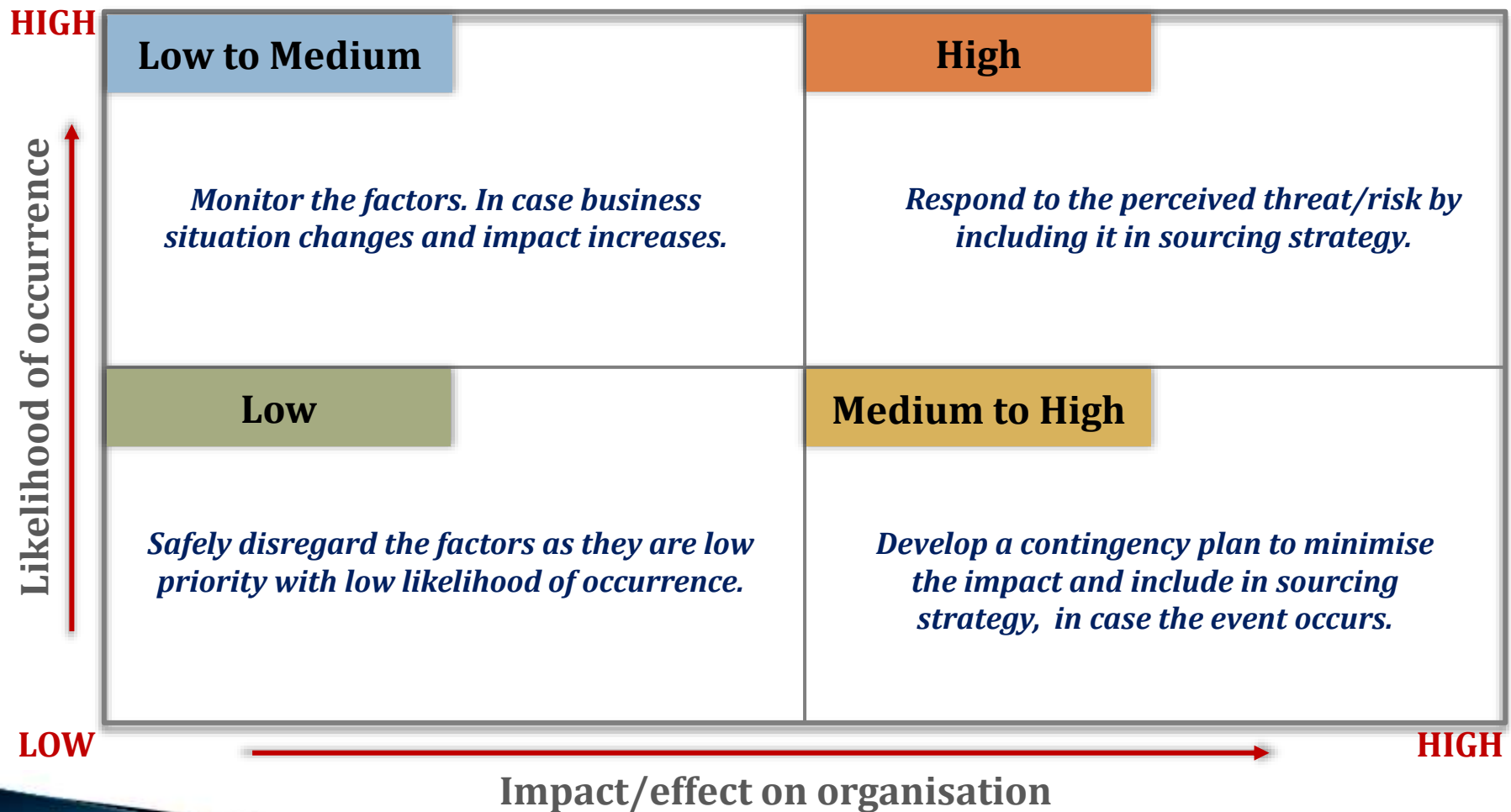


# Evaluate potential strategies



# Risk identification matrix

*Risk identification matrix focuses on categorising supply risks to determine importance of risks to be considered while planning.*



# Risk-Benefit analysis

## Fuels Example

*Strategy Evaluated: Option 4: Outsource the supply chain to 1 major marketer*

Benefits	<ul style="list-style-type: none"> <li>Enable customer to <b>focus on its core activities</b></li> <li><b>Reduce HSSE risk</b> exposure</li> <li>Customer will <b>not have to invest in additional storage capacity</b></li> </ul>	<p><b>Goals addressed:</b></p> <ul style="list-style-type: none"> <li>Quality of Fuel</li> <li>HSSE</li> <li>Integrity of Barges</li> <li>Integrity of Vendor</li> <li>Relationship with Supplier</li> </ul>
Risks	<ul style="list-style-type: none"> <li>Customer is completely dependent on 1 supplier which increases the <b>risk of delivery failures</b></li> <li>Risk of single source <b>supplier going bankrupt</b></li> <li>Risk of <b>shortage of supply</b> due to <b>bad demand Management</b></li> </ul>	<p><b>Risk mitigation strategies:</b></p> <ul style="list-style-type: none"> <li><b>Delivery failures:</b> Ensure that the Supplier maintains the optimum stock levels.</li> <li><b>Risk of bankruptcy:</b> Periodically evaluate the financial health of the supplier.</li> <li><b>Shortage of supply:</b> Provide clear visibility on consumption which must be measured.</li> </ul>
Key Constraints	<p>Current petrol storage capacity in the plant area is 165,000 litres. This is insufficient reserve as the estimated monthly consumption is 200,000 litres.</p>	
Key Enablers	<ul style="list-style-type: none"> <li>Increase the storage capacity of petrol to 330K litres. This additional stock will allow for a reaction time of about 2 months.</li> <li>Fuelling of the security patrol boats in head office to reduce demand on storage.</li> </ul>	

# Strategy checklist & typical timeframe



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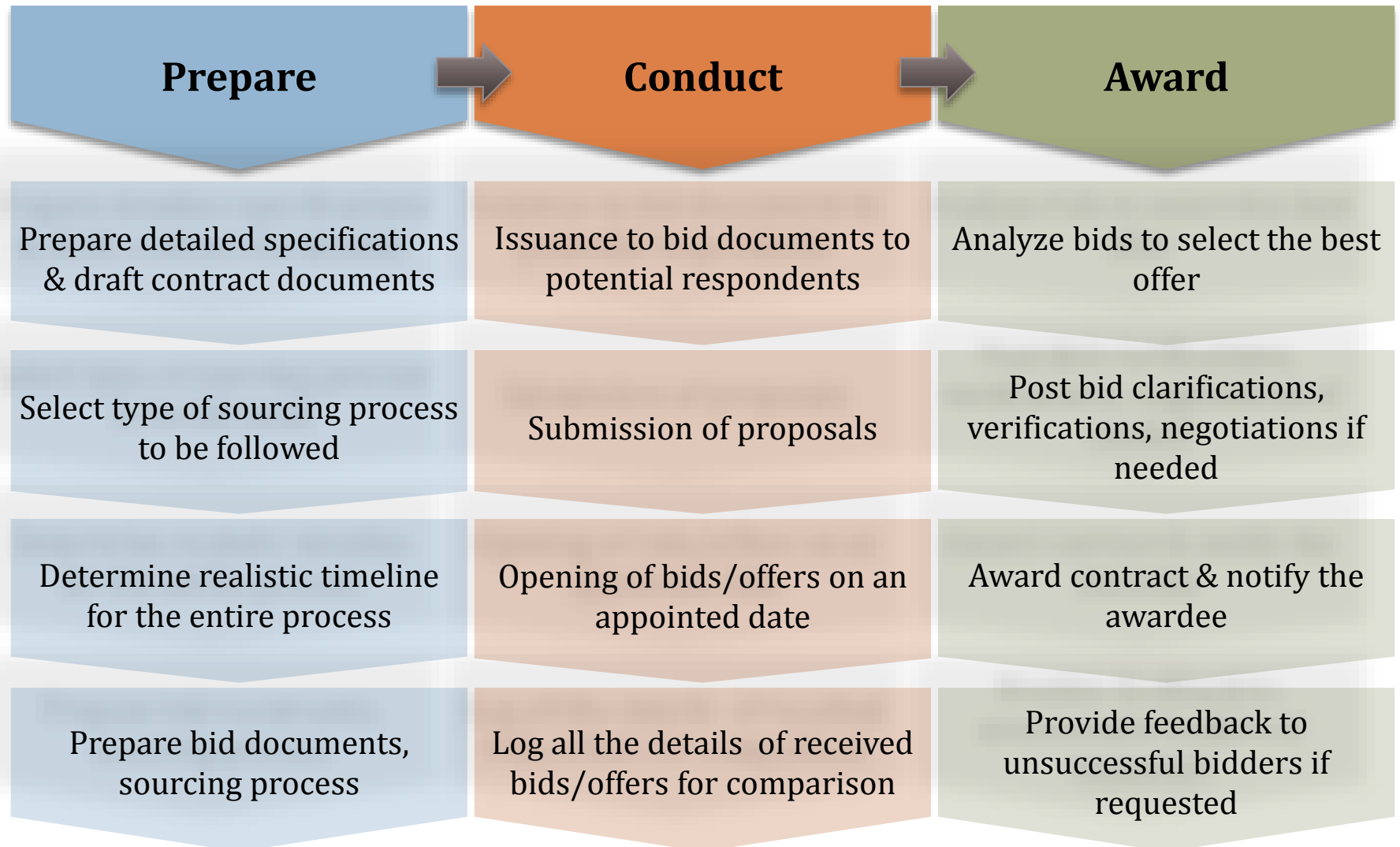


-  Introduction
-  Strategy
-  **Source**
-  **Prepare for Sourcing Event**
-  Conduct Sourcing Event
-  Award Contract/s
-  Manage
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# Prepare for sourcing event - Section details

- The sourcing process
- Develop selection criteria
- Develop RFI & RFQ questionnaires
- Select type of sourcing process

# The sourcing process



# Develop selection criteria

*Performance, Processes and Capabilities of suppliers should be carefully evaluated in accordance with the sourcing goals groupings (CRBEST):*

## Steps to Develop Selection Criteria

- Determine selection criteria using sourcing goals based on [CR-BEST](#)
- Develop a list of “must have” and “nice to have” capabilities to rate suppliers on each criterion (may vary by category)
- Develop detailed selection questionnaire

## Additional analysis to Develop Selection Criteria

- Analyze the [Financial health of Suppliers](#)
- Supplier [SWOT analysis](#)



# Develop criteria and capabilities list

**Example**

*Developing **must-haves** and **nice-to-haves** criteria capabilities to rate suppliers on each criterion. An example is shown below:*

COST		
Sub-criteria	Must-haves	Nice-to-haves
<b>Cost Competitiveness</b>	<ul style="list-style-type: none"> <li>• Provide a cost breakdown based on template in the RFQ</li> <li>• Competitive price</li> <li>• Competitive and sustainable cost structure</li> </ul>	<ul style="list-style-type: none"> <li>• Provides “quick pay” discounts</li> <li>• Lowest price</li> </ul>
<b>Cost Management Process</b>	<ul style="list-style-type: none"> <li>• A formalized cost management program</li> <li>• A structured cost management process that includes key stakeholders</li> <li>• Permits periodic cost management audits</li> <li>• Willing to engage collaboratively on process improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Utilizes same/similar process as us</li> </ul>
RELIABILITY / QUALITY		
Sub-criteria	Must-haves	Nice-to-haves
<b>TQM program</b>	<ul style="list-style-type: none"> <li>• A formalized quality program/team</li> <li>• Adequate failure analysis processes</li> <li>• Effective supplier qualification program</li> <li>• Permits quality audits</li> </ul>	<ul style="list-style-type: none"> <li>• Utilizes same/similar process as us</li> </ul>
<b>Quality performance</b>	<ul style="list-style-type: none"> <li>• Maintains process yields at an acceptable level</li> <li>• Maintains final yields at an acceptable level</li> <li>• Product returns are at an acceptable level</li> </ul>	<ul style="list-style-type: none"> <li>• Zero defects</li> </ul>
<b>Certifications</b>	<ul style="list-style-type: none"> <li>• ISO 9000:2000; 9001:2000 and 9004:2000</li> </ul>	<ul style="list-style-type: none"> <li>• ISO 14000</li> </ul>

# Develop RFI & RFQ questionnaires

## **Objective:**

**RFI:** To obtain business information on potential suppliers and create a short list of candidates for the RFQ process.

**RFQ:** To obtain DETAILED information on prospective suppliers that forms the basis of contract awards

*Note: If the list of potential suppliers is limited and/or the category is standard then the RFI process may be skipped.*

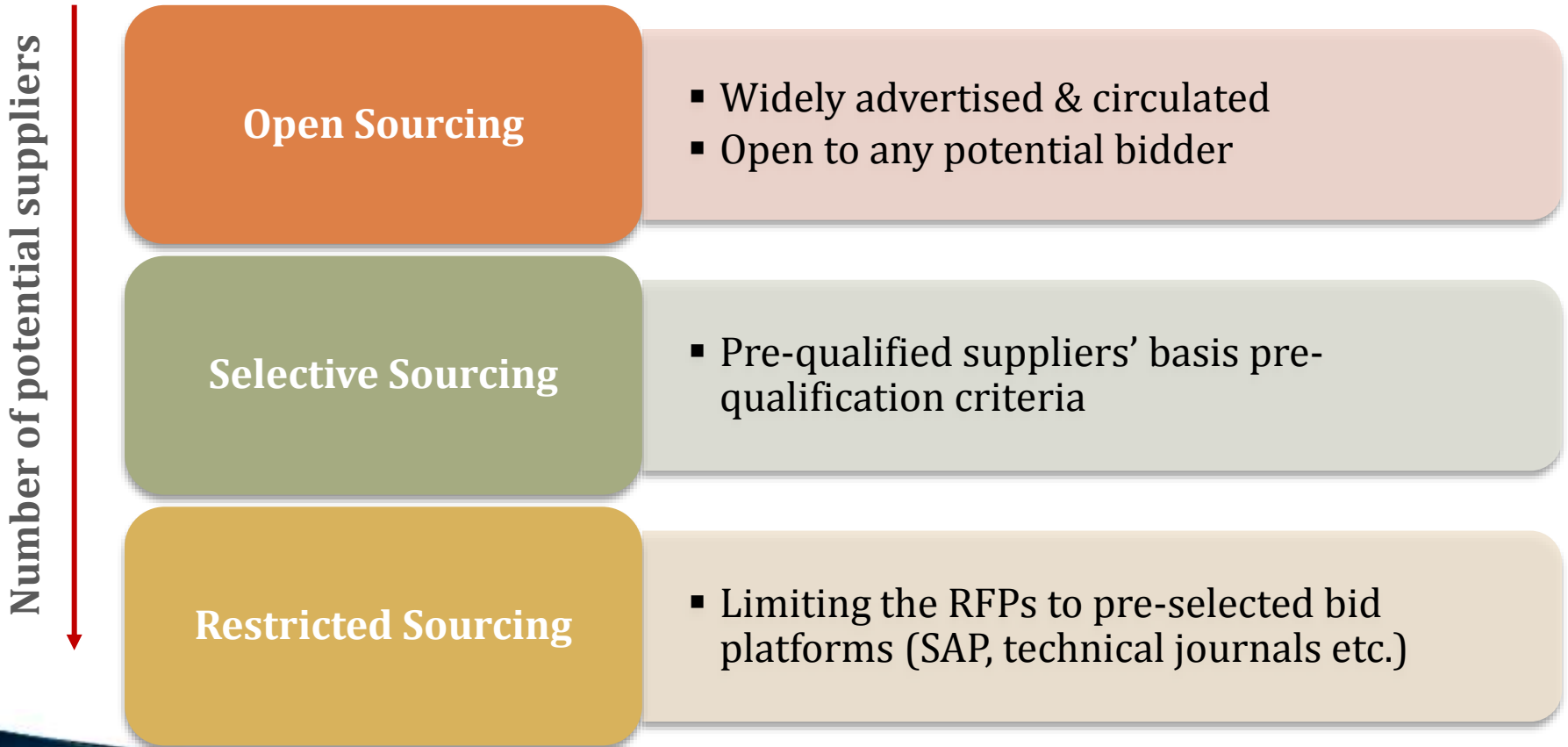
## **Typical contents of an RFX package**

1. Letter of invitation communicating intent
2. Non-Disclosure Agreement
3. General company information
4. Details on category/commodity (Specification/SOW)
5. Questionnaire (to be filled by potential suppliers) requesting information on sourcing criteria

# Select type of sourcing process

*“A purchasing procedure whereby potential suppliers are invited to make a firm and unequivocal offer of price and terms on which they will supply specified goods or services which, on acceptance, shall be basis of the subsequent contract” – CIPS*

## Types of Sourcing Processes



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# Important points to remember

## Do's

- Establish and maintain a record for all correspondence with suppliers
- All clarifications should be answered in a Q&A style without revealing the identity of the original requestor and be issued to all suppliers and recorded
- Any post issuance information, if needed to be incorporated in a supplier's response, should be communicated to all suppliers via an Addendum
- RFX questionnaire package should have only important pertinent questions.
- RFX event should be timebound with important milestones and deadlines communicated to all participating suppliers. Any changes should be promptly communicated to all parties
- RFX pricing sheet should include all the relevant details needed by the suppliers to quote accurately such as unit of measure, manufacturer number, etc.
- Proposals should be reviewed by pre-identified stakeholders only

## Don'ts

- Suppliers and internal stakeholders should not be kept guessing about the next steps in the process. Maintain proactive communication
- Avoid excessive bidding rounds in an RFX process, this can cause supplier fatigue with marginal improvement to the proposal
- Do not hide information necessary for the proposal from the suppliers (excluding confidential information). Incomplete information sharing can lead to the proposals that do not meet the needs.
- Proposals received after deadline should not be opened & returned back

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**Award Contract/s**



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# Award Contract/s

---

- Analyze supplier proposals
- Negotiations and contract award

# Analyse supplier proposals

## Steps for Assessing Proposals

- 1 Establish cross-functional team for assessment with defined responsibilities
- 2 Establish contract award criteria as developed in the “Prepare for Sourcing” activity
- 3 Define a standard template to log information, assessment results of each proposal
- 4 Verify the accuracy of information provided in the proposals
- 5 Compare the proposals against the award criteria
- 6 Assess the Suppliers for Financial health, SWOT Analysis
- 7 Summarize the assessment for each proposal to be submitted to procurement manager



# Analyse supplier proposals

**Example**

*Weighted-factor rating can be used to facilitate objective decision making. Key factors are identified and weights assigned to them based on the fact that some factors may be more important than other. Refer to [CR-BEST](#) while determining the rating.*

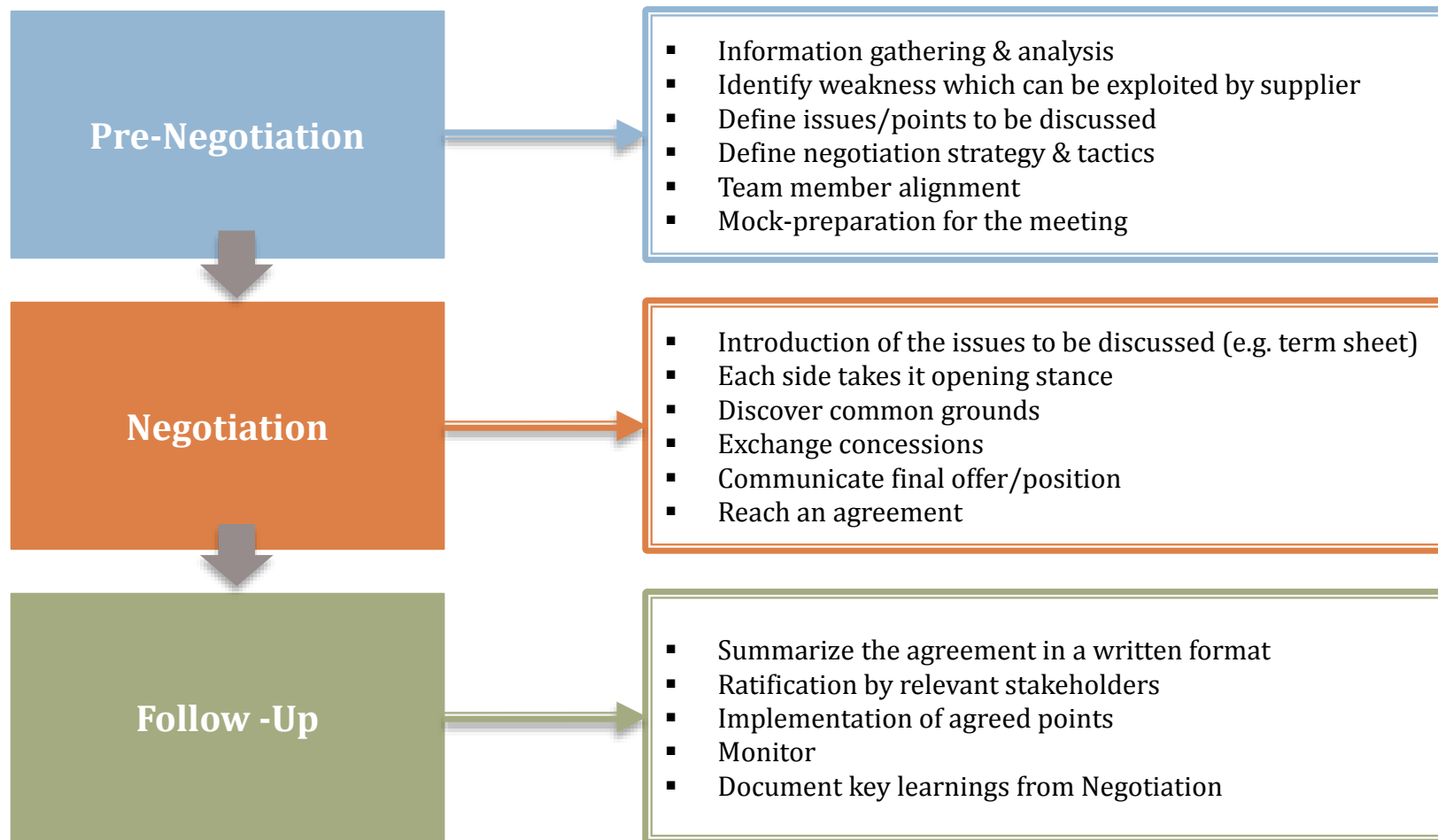
## Sample Weighted-Factor Rating Assessment

Factors	Weights	Supplier 1	Supplier 2	Supplier 3
Price	20	16	18	14
On-Time delivery	15	11	12	12
Financial health	20	16	14	12
Quality management Process	15	13	13	13
Technical understanding	10	9	7	8
Production facilities	20	18	14	16
Overall rating	<b>100</b>	<b>83</b>	<b>78</b>	<b>75</b>

# Negotiations & contract award

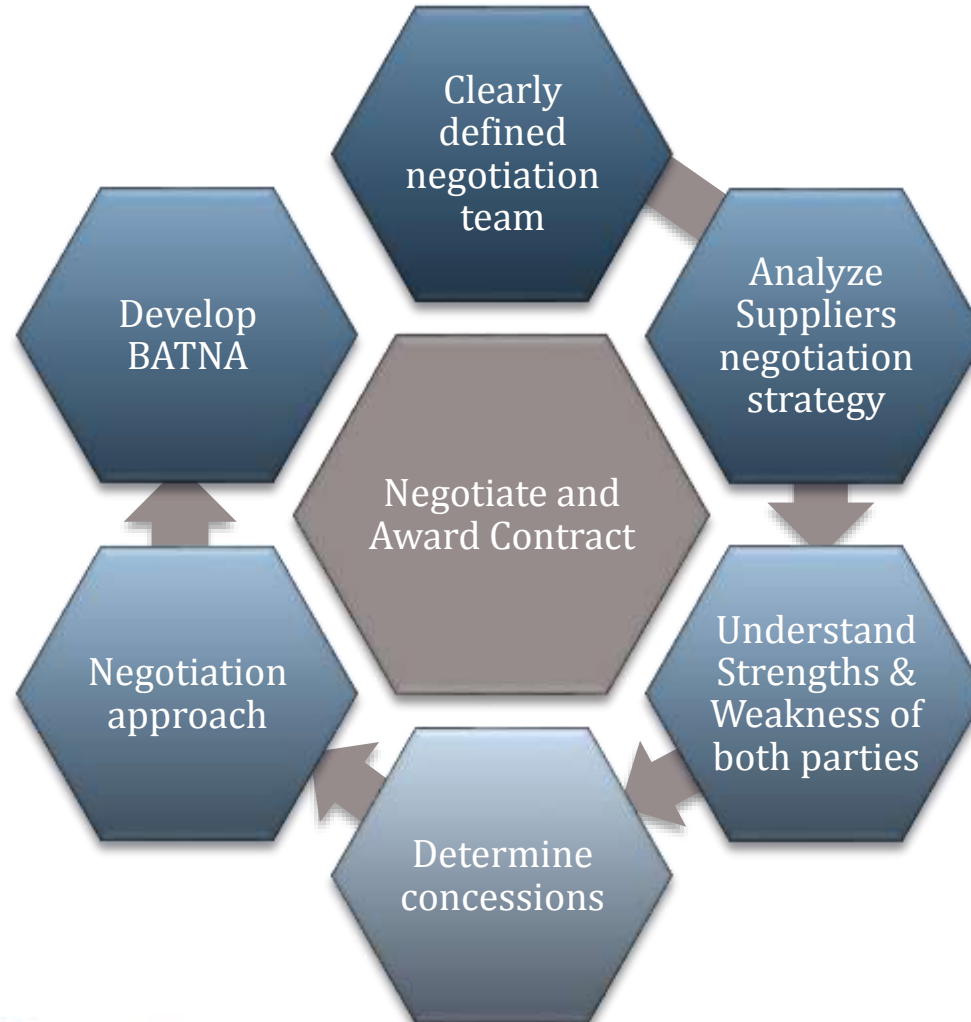
Some of the activities of Pre-negotiation phase has already been completed in 'Strategy' section

## Negotiation Phases

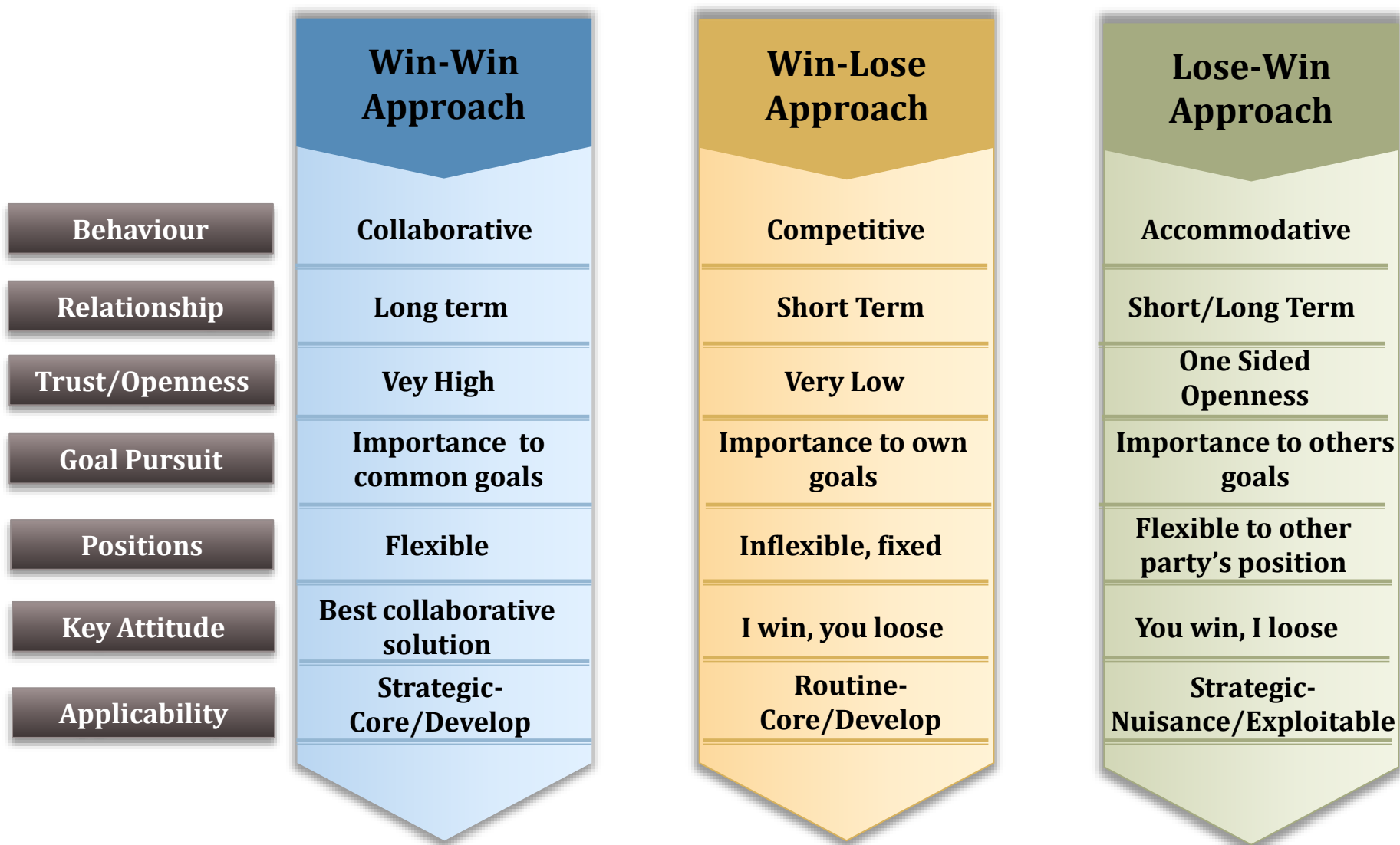


# Negotiations & contract award

*Key points to consider for Negotiation & Award of contract*



# Negotiation approaches





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Manage Contract



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Way Forward

# COMPANIES LOSE FROM POOR CONTRACT MANAGEMENT



# Initiate contract mgmt. – Section details

- Contract Governance
- Develop Performance Measurement System
- Assess and Manage Contract Risks
- Develop Relationship Management Roadmap



# Contract governance

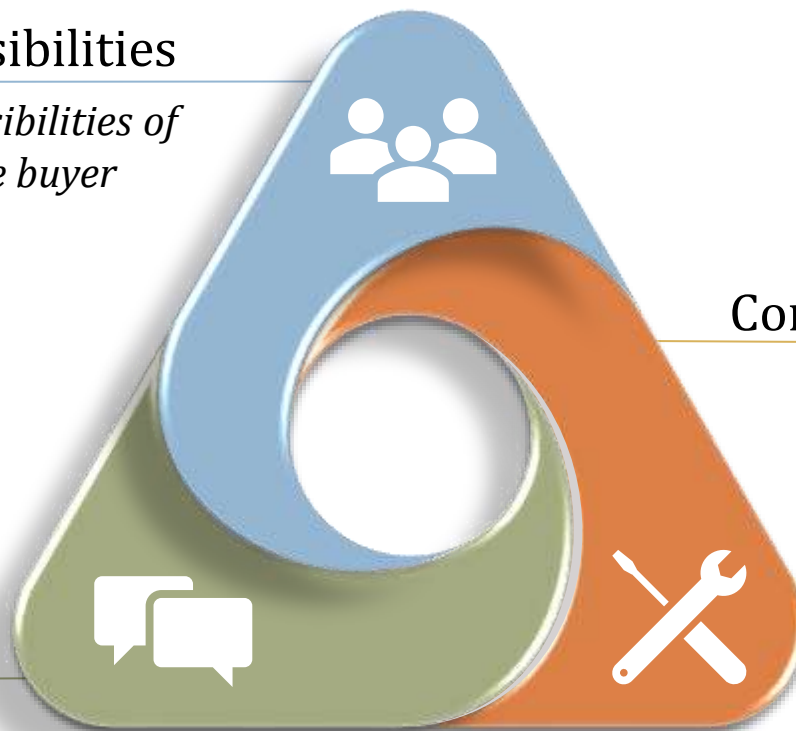
*Contract governance sets the foundation for engagement between buyer and supplier*

## ● Roles and Responsibilities

*Define roles and responsibilities of stakeholders both on the buyer and supplier side*

## ● Communications

*Establish protocols and systems for formal, informal, and outside communications required for contract delivery*



## ● Contract Management

### Plan (CMP)

*Develop a plan to guide decision-making for the contract, engage with stakeholders and provide a path to achieve contract objectives*

## Top quartile contract management means...

The contract is understood and available at all times

Company & contractor's objectives are aligned & KPI's are in place

The CMP addresses key risks and performance monitoring

Specifications are continually reviewed for appropriateness

Demand is forecasted & managed by the company

Cost improvements are delivered and result in budget adjustments

Maintain relationship to avoid breakdowns in goals

Learning from others' experiences (audits, reviews, feedback)

Escalate issues to ensure management focus & resolution

## Identify stakeholders & agree on responsibilities



### Points to consider

- Roles and responsibilities of team members may vary depending on the value and risk of the contract:
  - *Low risk/value contract:* One person may assume multiple roles
  - *High risk/value contract:* Additional roles and responsibilities may be assigned to stakeholders such as department managers, business unit heads etc.

### Internal Stakeholders

- Executive Sponsor (Strategic)
- Business unit head (BH)
- Department Manager (DM)
- Sourcing
- Business Managers/ Site Representative (CSR) – where applicable
- HSSE Representative
- Finance Manager /Representative
- Supplier's Management Team



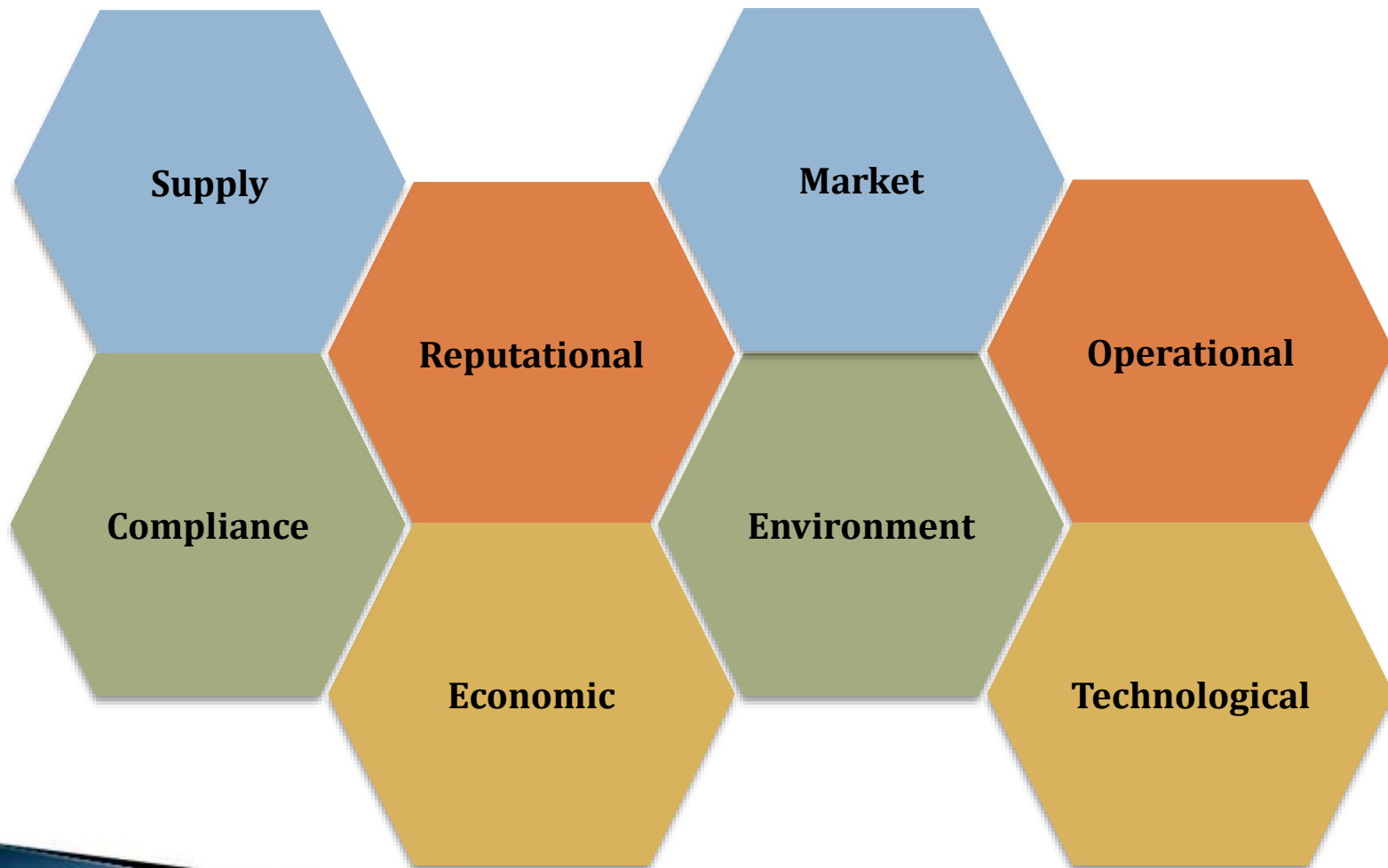
# Roles and responsibilities

	<b><u>Business Unit Head</u></b> <b><u>(BH)</u></b>	<b><u>Department Manager</u></b> <b><u>(DM)</u></b>	<b><u>Sourcing Manager</u></b>
<b>Planning</b>	<ul style="list-style-type: none"> <li>Assign contract to DM</li> <li>Inform internal stakeholders &amp; contractor about appointment</li> </ul>	<ul style="list-style-type: none"> <li>Review contract risk</li> <li>Oversee pre-mobilization and mobilization activities related to the contract</li> </ul>	<ul style="list-style-type: none"> <li>Provide coaching to DM on contract management standards and requirements</li> </ul>
<b>Managing Contracts</b>	<ul style="list-style-type: none"> <li>Manage portfolio of contracts</li> <li>Review and control contract execution</li> <li>Approve delivery of contract requirements</li> </ul>	<ul style="list-style-type: none"> <li>Implement and monitor contract management plans</li> <li>Review and control contract execution</li> <li>Make contract interface arrangements</li> </ul>	<ul style="list-style-type: none"> <li>First line support for BH/DM from commercial perspective</li> <li>Manage CMP</li> <li>Facilitate kick-off meetings</li> <li>Support business performance reviews</li> <li>Make variations/amendments to contract and support with contract close out</li> </ul>
<b>Analyze Improve</b>	<ul style="list-style-type: none"> <li>Monitor improvement plans with DM</li> <li>Endorse contract Key Performance Indicators (KPIs)</li> <li>Participate in assurance visits and audits (optional)</li> </ul>	<ul style="list-style-type: none"> <li>Set contract KPIs</li> <li>Record and analyze contract performance</li> <li>Conduct value improvement plans</li> <li>Participate in assurance visits and audits</li> </ul>	<ul style="list-style-type: none"> <li>Endorse contract KPIs and monitor improvement plans</li> <li>Review contract risk</li> <li>Oversee contract pre-mobilization and mobilization activities</li> </ul>



# Areas of contract risks

- *Consider different areas of contract risks to ensure preparedness.*
- *Periodically, monitor and update risk identification matrix*





# Risk register and management

*A risk register documents details of various risks impacting the contract*

## Risk Register

Description

Probability

Impact

Mitigation

Owner



## Risk Management Strategies

**Tolerate**

Tolerate risks with negligible impact and probability

**Transfer**

Share or transfer risk through insurance, with supply chain partners, etc.

**Terminate**

Terminate or not enter the contract if risk is too great and cannot be reduced

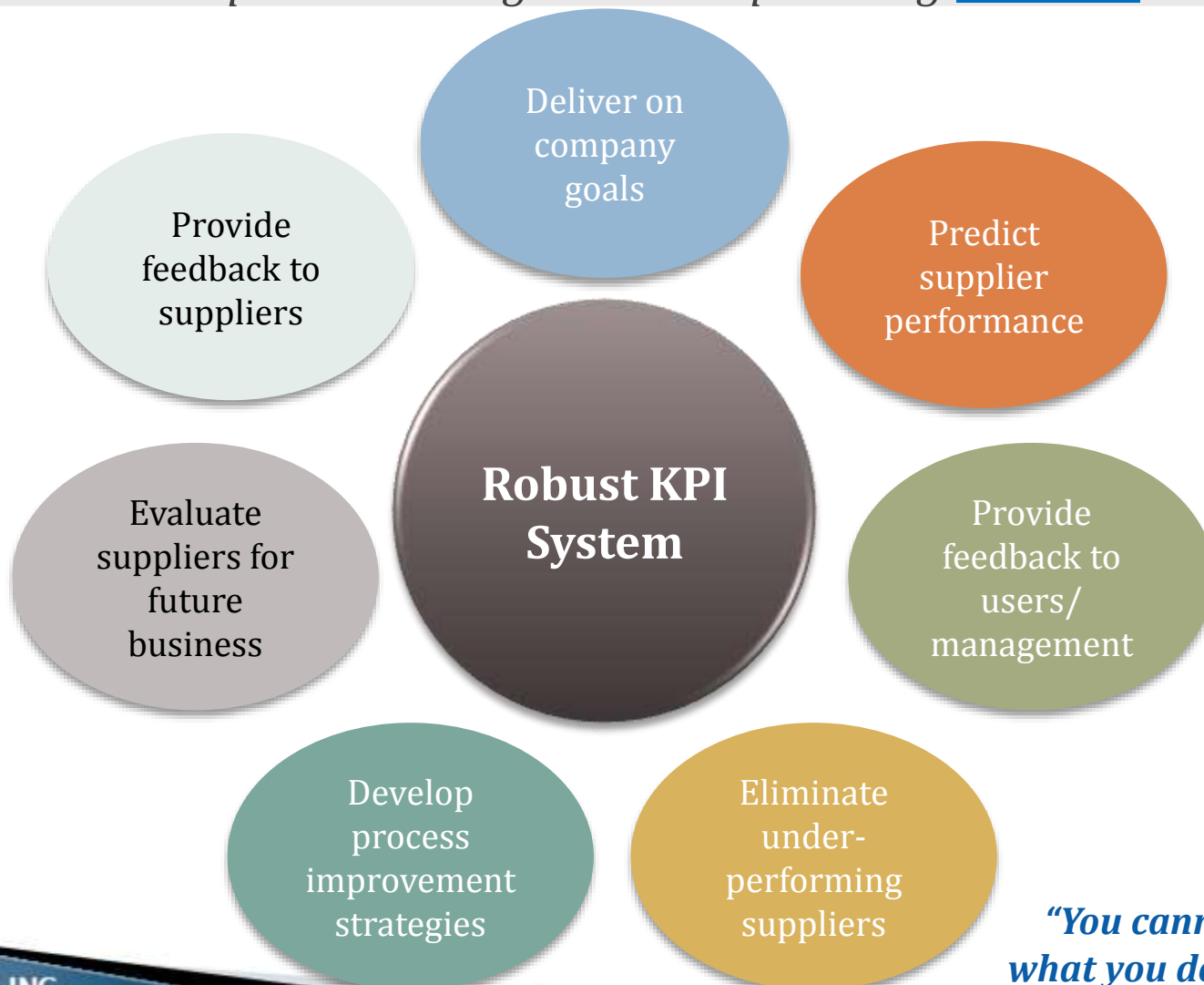
**Treat**

Actively manage and/or reduce through mitigation strategies

# Develop performance management system



*A strong set of KPIs helps both, the buyer and the supplier. KPIs identified should help address the goals developed using [CR-BEST](#)*



***"You cannot improve what you don't measure"***



# Guide to developing KPIs

## INITIATION

- Obtain inputs from supplier and internal stakeholders at engagement initiation
- Develop and agree on measurement metrics upfront with all stakeholders
- Ensure metrics are easy to track

## INCLUSION

- Establish a structured feedback process with a focus on making improvements
- Include KPIs based on the criticality and/or risk of the contract
- Include adequate rewards and penalties

## IMPLEMENTATION

- Implement data gathering system/procedures
- Align stakeholders, suppliers and the contract management team around the objectives and KPIs of the contract
- Develop a review schedule





# Be SMART about KPIs

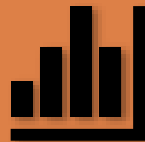
KPIs should be:

**S**pecific



Clear and focused toward performance targets

**M**easurable



Expressed quantitatively

**A**ttainable



Reasonable and achievable

**R**elevant



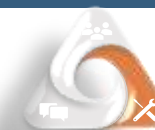
Directly pertinent to the work being done

**T**ime-based



Measured in a given time period

# Developing a Supplier Performance Scorecard



## Example of a supplier performance scorecard:

Attribute (CRBEST)	Weightages	KPIs	Supplier Score	Max Score
Cost	30%	• Cost		150
		• Unit cost savings		150
Reliability/ Quality	30%	• Quality		100
		• Responsiveness		100
		• Automated quality checks		100
Business	10%	• Financial score		100
Environment/ Safety	10%	• Environment & Safety		100
Supply Chain	10%	• Schedule / Delivery		100
Technology	10%	• Operational efficiency (unit cost)		100

## Conduct internal and external kick-off meetings



### **Internal Kick-Off Meeting**

- Objective is to create a shared understanding of the contract scope, processes, rewards, penalties etc.
  - Define success for the contract
- Attendees are sourcing/ category manager, sourcing analyst, stakeholders, finance rep etc.
- Conduct within 3-4 weeks of contract signing

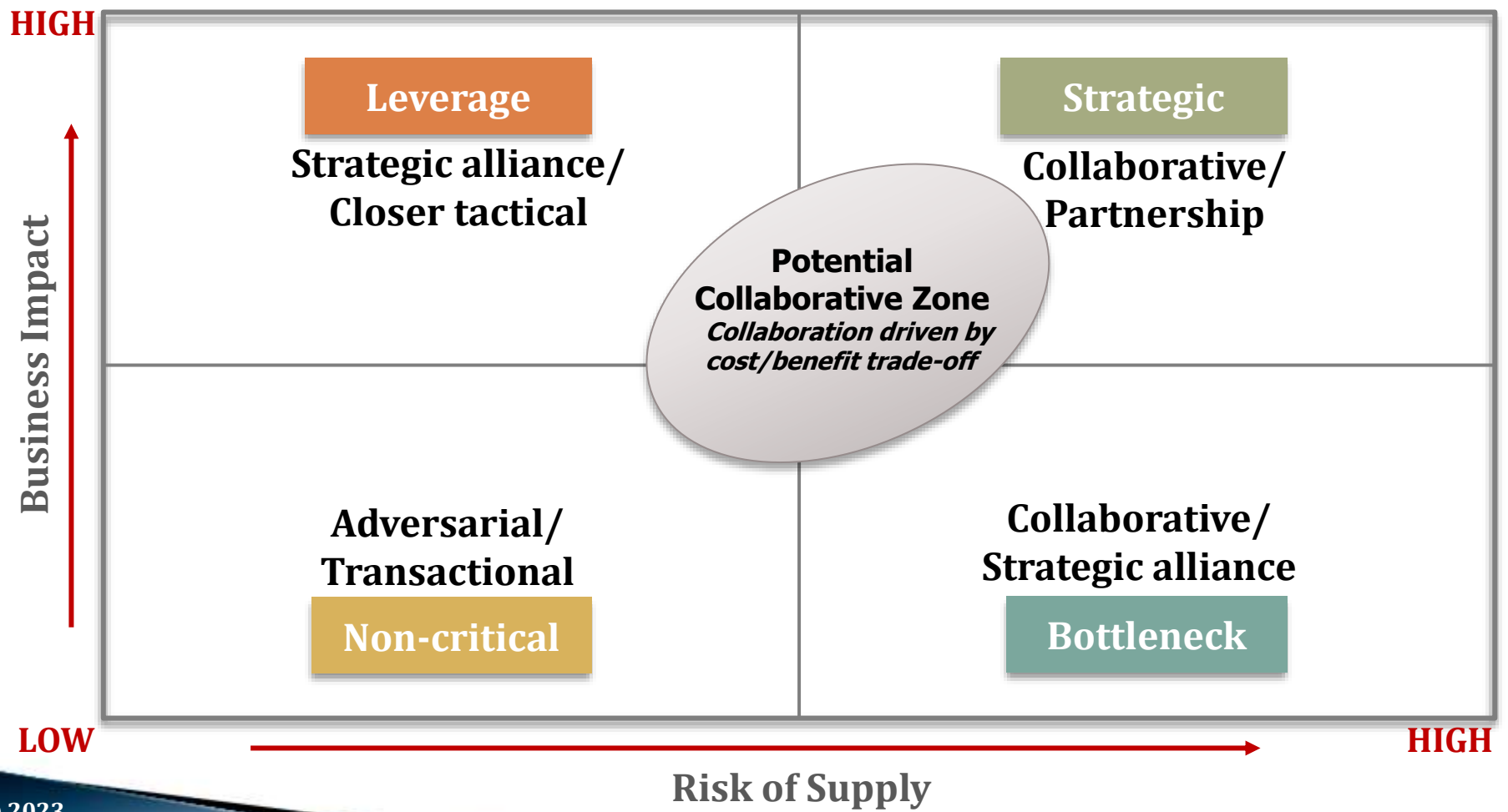
### **External Kick-Off Meeting**

- Objective is to align company's understanding of contract scope, processes, rewards, penalties etc. with the contractor
  - Identify and align contract value drivers and KPIs
  - Identify, prioritize and mitigate threats/ opportunities for value drivers
- Attendees are company and supplier stakeholders
- Contractor briefed on agenda 2-3 weeks prior to the meeting
- Conduct after the internal kick-off meeting

# Develop supplier relationship roadmap



*Evaluate current relationship level and define future path based on your internal needs*





# Determining Relationship Level

	TRANSACTIONAL	PREFERRED	STRATEGIC	PARTNER
Relationship between Executive Leadership	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Some</li> <li>• Occasional top level meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Strong</li> <li>• Regular top level meetings</li> <li>• Top management participation in developing strategies</li> </ul>
Relationship between Operational Personnel	<ul style="list-style-type: none"> <li>• Procurement &amp; Sales</li> </ul>	<ul style="list-style-type: none"> <li>• Proc &amp; sales</li> <li>• Sales &amp; customer internal user OR</li> <li>• Proc. &amp; supplier internal operations</li> </ul>	<ul style="list-style-type: none"> <li>• Cross operational relationships (proc &amp; sales &amp; internal stakeholders on both sides)</li> </ul>	<ul style="list-style-type: none"> <li>• Multi level relationships</li> </ul>
Focus	<ul style="list-style-type: none"> <li>• Price</li> </ul>	<ul style="list-style-type: none"> <li>• Price</li> </ul>	<ul style="list-style-type: none"> <li>• Cost, assurance of supply</li> </ul>	<ul style="list-style-type: none"> <li>• Value, TCO, long-term competitive advantage</li> </ul>
Transparency (information sharing)	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Limited</li> </ul>	<ul style="list-style-type: none"> <li>• Share high level operations, technology and some cost data.</li> <li>• Some collaboration on R&amp;D and cost management</li> <li>• Limited feedback program</li> </ul>	<ul style="list-style-type: none"> <li>• Full Transparency of cost, process and technology data</li> <li>• Robust 360-degree feedback process</li> <li>• Tech. convergence</li> <li>• Collaborative strategies</li> <li>• Joint ventures / investments</li> </ul>
Contract term	<ul style="list-style-type: none"> <li>• Short term</li> </ul>	<ul style="list-style-type: none"> <li>• Short-Medium term</li> </ul>	<ul style="list-style-type: none"> <li>• Medium-Long term</li> </ul>	<ul style="list-style-type: none"> <li>• Long term</li> </ul>



# Establishing Lines of Communication

Buyer	<b>TRANSACTIONAL</b>	Supplier
Executive leadership	None	Executive leadership
Internal stakeholders	None	Internal stakeholders
Procurement	↔	Sales

Buyer	<b>PREFERRED</b>	Supplier
Executive leadership	None	Executive leadership
Internal stakeholders		Internal stakeholders
Procurement		Sales

Buyer	<b>STRATEGIC</b>	Supplier
Executive leadership	↔	Executive leadership
Internal stakeholders		Internal stakeholders
Procurement		Sales

Buyer	<b>PARTNER</b>	Supplier
Executive leadership	↔	Executive leadership
Internal stakeholders		Internal stakeholders
Procurement		Sales



# Building Loyalty



Supplier Loyalty Ladder
Invests in customer
Puts best resources on collaborative NPD
Preferential treatment (allocation/pricing)
Value added services
Preferential pricing
Transactional

\* Adapted from: Building Loyalty in Business Markets, Dr. Das Narayandas, Harvard Business Review, Sept 2005

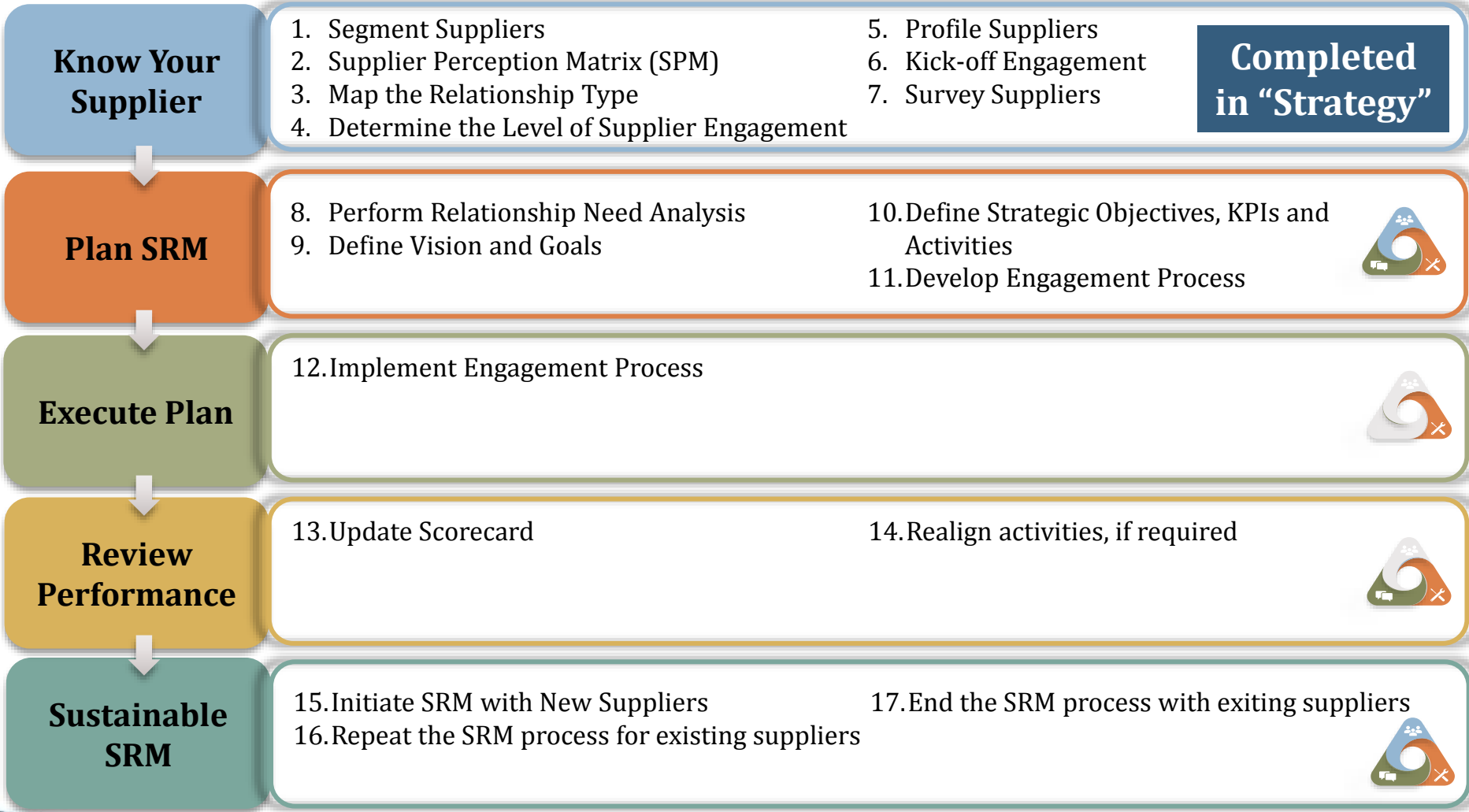
# Critical Success Factors For Relationship Management

- Select the appropriate relationship level
- Top management commitment and consistency of message
- Trust and openness
- Leverage each other's strengths
- Risk/Reward sharing
- Robust problem resolution process (ombudsman)
- Walk the talk



# SRM process framework

*The framework for an SRM Program is defined below:*



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Initiate Contract Mgmt



**Manage Contract**



Close Contract



Way Forward

# Manage contract – section details

● Contract Management Using Analytics

● Value Improvement Programs

● Performance Reviews

● Dispute Resolution

# Contract management using analytics

*Supply Chain Analytics helps in managing contract performance and add strategic value with real-time monitoring and automating processes.*

## Strategic Outcomes

### Predictive Sourcing

- Predict demand
- Manage real-time spend
- Manage contract revisions based on periodic alerts

### Automated Procuring

- Automated alerts based on demand, consumption and stock replenishment
- Process improvement (P2P)
- Timely payments
- Automated secure payments

### Proactive Risk Management

- Real-time risk monitoring
- Risk mitigation through automated reporting
- Assurance of supply with timely alerts

## Supply Chain Analytics

Descriptive Analytics  
Diagnostic Analytics  
Predictive Analytics  
Prescriptive Analytics

## Data Inputs

### Contract Data

Physical documents

### Unstructured Data

Cognitive computing

### Intelligent Tracking

RFID, Barcodes

### External Data

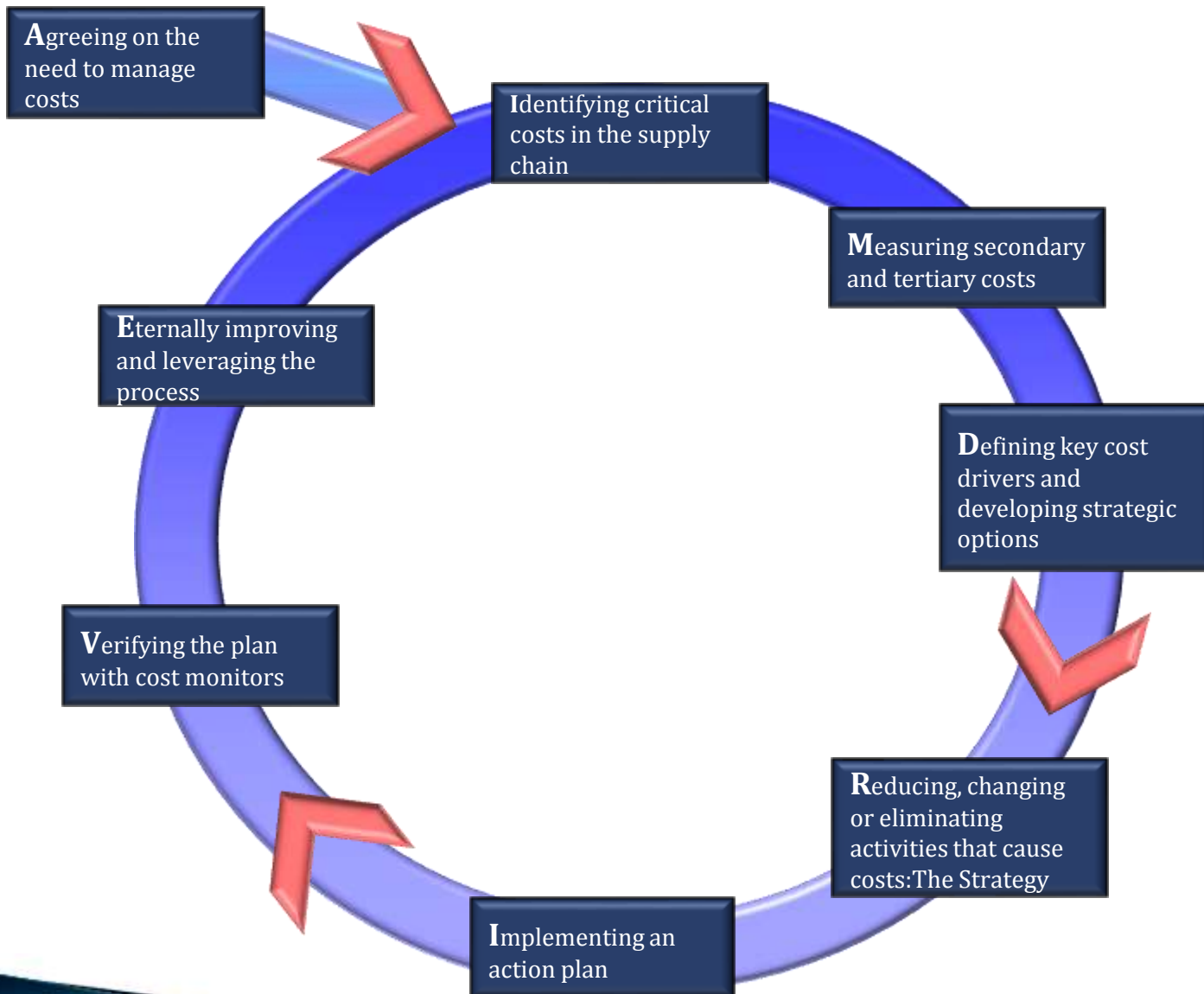
Databases and news

# Value improvement initiatives

*Value improvement initiatives are typically conducted collaboratively with contractors to “increase the pie”*



# Anklesaria's AIM & DRIVE<sup>®</sup> Process



- *AIM&DRIVE can be conducted during pre or post award*
- *A repeat of the AIM&DRIVE exercise is suggested every 1-2 years*

# Performance reviews

*Performance reviews are conducted to align and deliver on business goals.*



## **Performance**

KPIs, performance, safety metrics, etc.



## **People**

Resource planning, requirements, etc.



## **Operational**

Utilization, NPT, planning, etc.



## **Opportunities**

Business, new technology, innovations, etc.



## **Communications**

Focal points, exchange of data and information, etc.



## **Recognition**

Highlights, lowlights, team recognition, awards, etc.

# Dispute resolution

*Disputes typically arise in almost all contracts and need be addressed at the right time and in the right way*

## Negotiation

Process used by the buyer and seller to reach acceptable agreements or constructive compromises between the two parties

## Mediation

If a voluntary settlement is not reached, mediation may be used wherein an independent person makes a formal proposal or recommendation

## Conciliation

In this process, conflicts or grievances are aired in a discussion and facilitated by an impartial conciliator

## Adjudication

Here, an expert third party appointed by the agreement of the buyer and seller hears arguments and makes a decision

## Arbitration

A mutually acceptable independent person in formal, closed proceedings delivers a judgment which is legally binding

## Litigation

This involves legal action that are resolved by courts. It is a method of “last resort”, particularly with important suppliers



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Manage Contract



**Close Contract**



Way Forward

# Close contract – section details

---

- Contract renewal or termination

---

- Lessons learned

---

# Contract renewal or termination

Towards the end of the contract, the contract manager needs to review the success of the contract and the relationship and decide on the way forward:

- ✓ Decide path forward prior to expiration of current contract.
- ✓ Consider cost of change
- ✓ Review Ts & Cs of current contract to fully understand the implications of the contract expiry/termination



Typical requirements of a contract close out process are:

1. complete and verify delivery of goods & services;
2. confirm technical and financial completion;
3. complete and verify handover of work, spare parts or surplus materials;
4. dispose of surplus material;
5. release of warranties;
6. cut-off date for honoring third party invoices;
7. final invoice from supplier;
8. settlement of claims

# Lessons learned

*Capture lessons learned to carry forward to future contracts and contracting processes*

- Typical activities as part of the lessons learned include:
  - Review contract performance
  - Gather feedback from all stakeholders (including supplier)
  - List what went right and what went wrong
  - Identify how things could have been done more effectively or efficiently
  - Capture and transfer knowledge gained throughout the contract duration



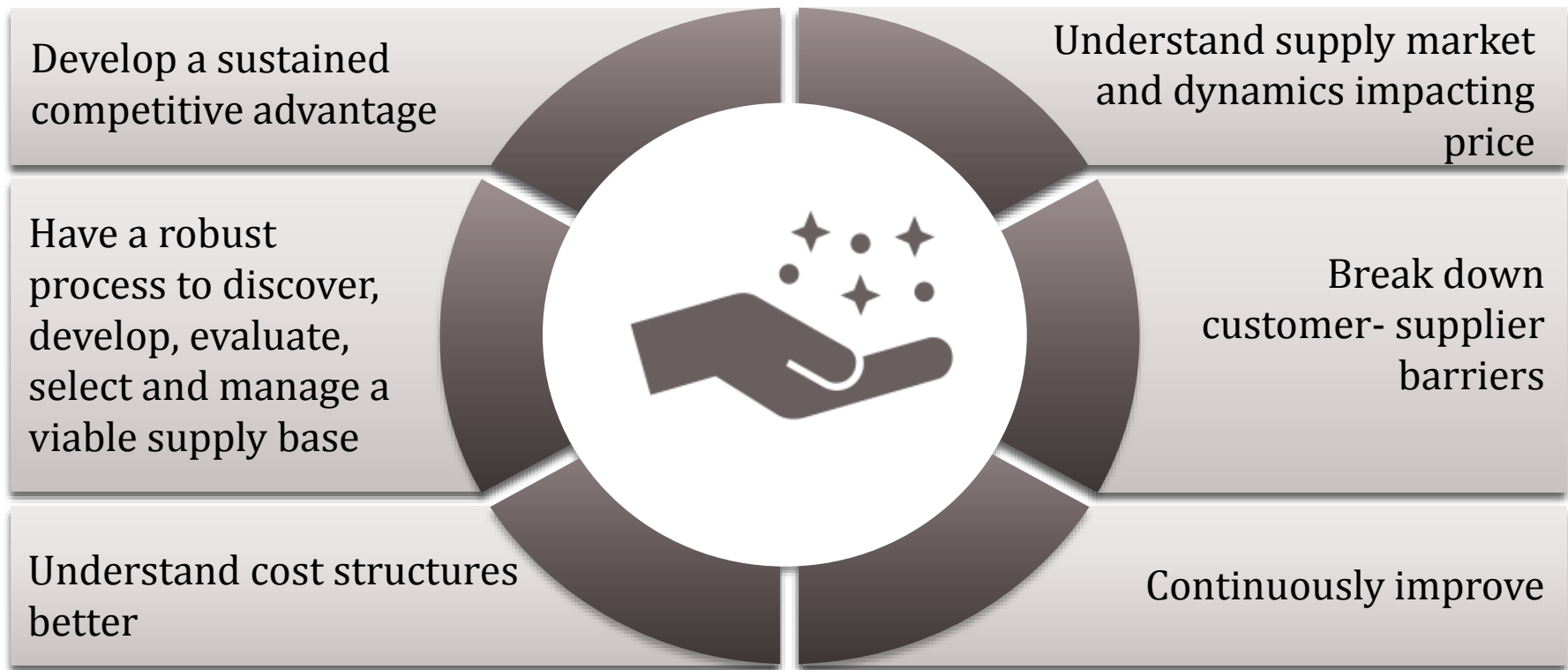


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# Value of strategic sourcing for customers



# Value of strategic sourcing for suppliers





# Way forward



# Thank You

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