

ANKLESARIA GROUP

Strategic Cost Management

Improving Supply Chain Competitiveness and Profitability

STRATEGIC COST MANAGEMENT

Improving Supply Chain Competitiveness & Profitability

Presented by

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Version 0218

Part of this program is based on the book
Zero Base Pricing™: Achieving World Class Competitiveness
Through Reduced All-in-Cost

by
David N. Burt, Warren Norquist and Jimmy Anklesaria
Byline Publishing

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STRATEGIC COST MANAGEMENT

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Strategic Cost Management:
Seminar Agenda and Objectives

Total Cost Solutions 3.0



Anklesaria Group, Inc.
Del Mar, CA

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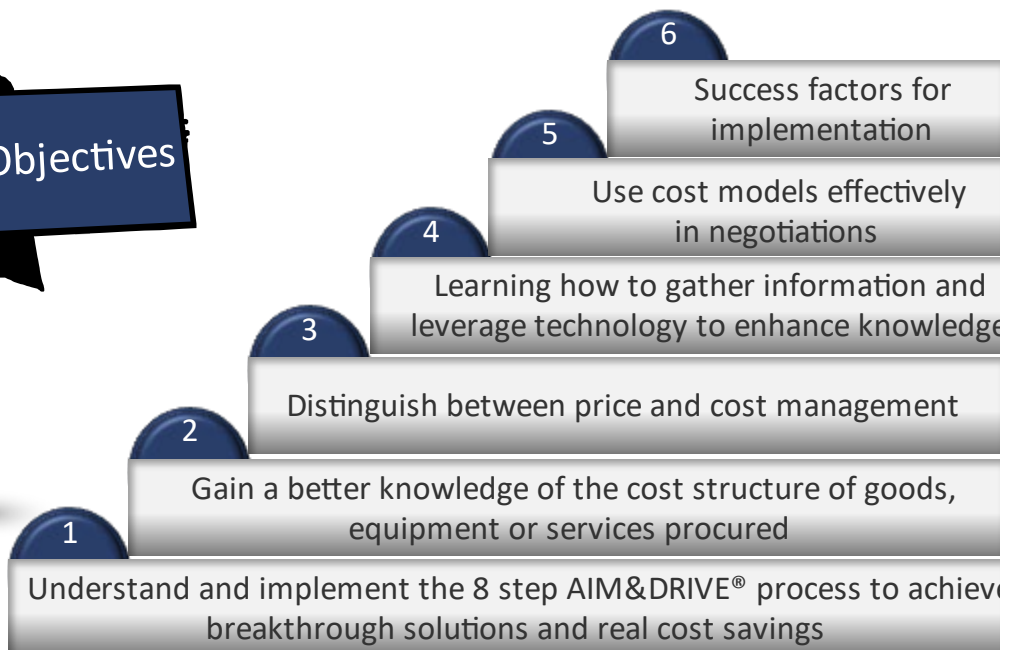
AGENDA

1	Introduction
2	The Anklesaria Cost Management Toolkit Case: Analyzing Cost Breakdowns
3	AIM&DRIVE®- Collaborative Cost Management
4	Price Analysis
5	Basic Cost Models & Industry Cost Profiles Case: Basic Should Cost Model
6	Process-based Should Cost Models Case: Process-based Should Cost Model

AGENDA

7	Price Discipline™ Models Case: Price Discipline™ Model
8	Total Cost of Ownership (TCO) Models Case: TCO Model
9	Leveraging Technology and Online Data Resources
10	Implementing Strategic Cost Management
11	Next Steps

SEMINAR INTRODUCTION & OVERVIEW

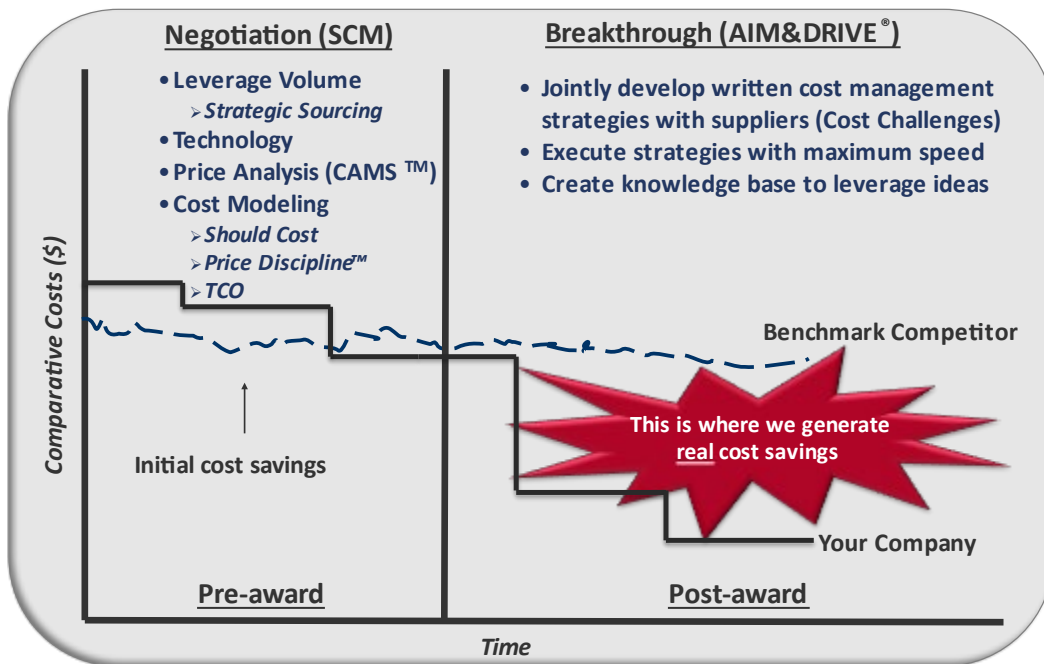


Strategic Cost Management:

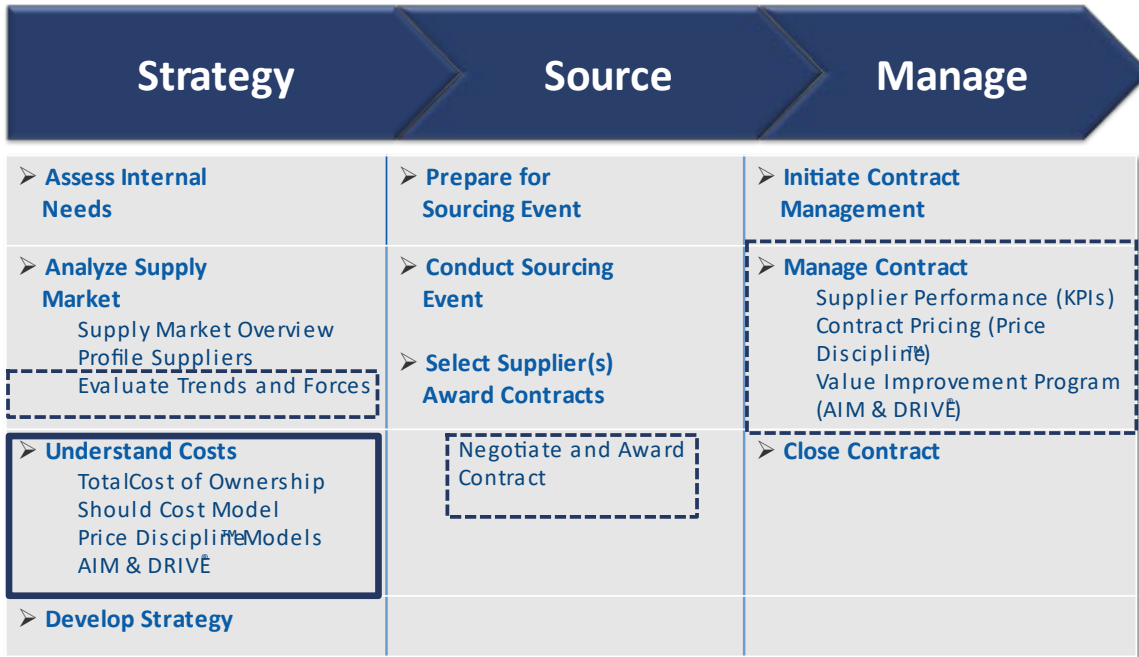
The Concept

The Anklesaria Cost Management Toolkit

Selecting your strategy



Where does cost management fit in the strategic sourcing process?

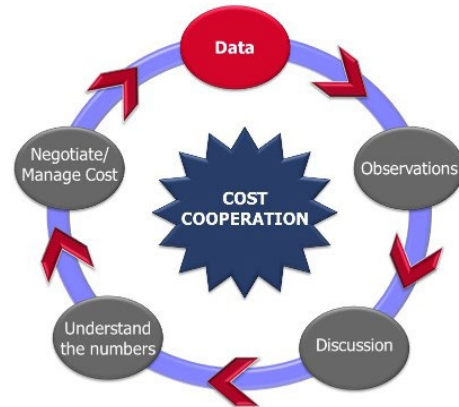


Case Study

Analyzing Cost Breakdowns

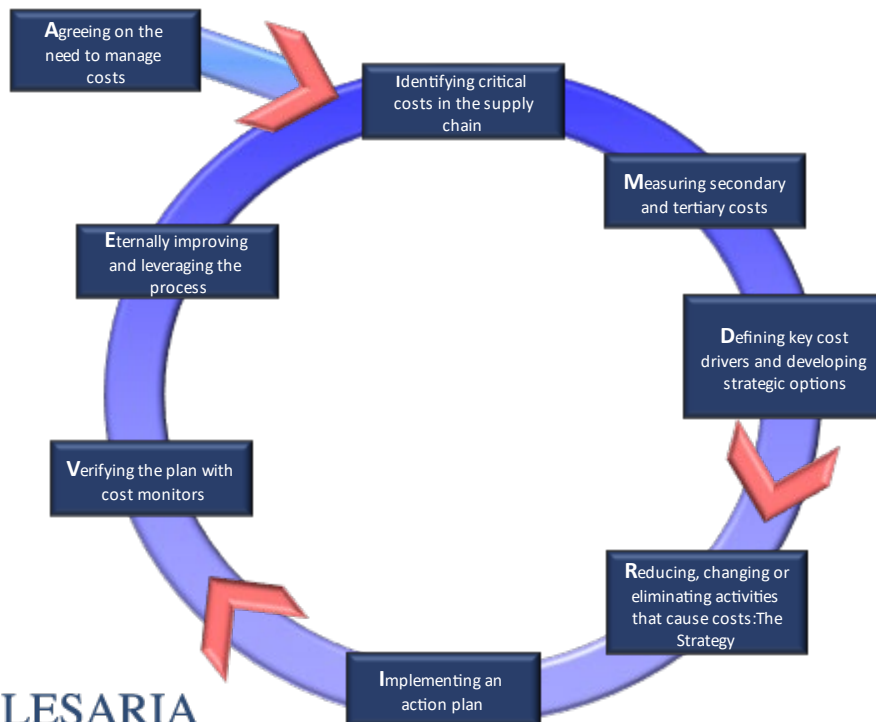
Case Study – Key Takeaways

- Prepare the Supplier– Be an Educator and not an Auditor
- Only request relevant data and provide constructive feedback
- Sign a non-disclosure agreement if necessary
- Communicate that cost knowledge is the foundation for building a cost management strategy
- Knowledge is Power
 - **Price analysis** to determine market trends for the critical costs
 - **Cost analysis** to validate the absolute value of a supplier's proposal
 - **AIM&DRIVE**® process to drive breakthrough solutions and generate savings/value beyond negotiations



AIM&DRIVE®- Collaborative Cost Management

Anklesaria's AIM & DRIVE® Process



STRATEGY DEFINED

The River (Sun Tzu)

- ◆ Clear Goal
- ◆ One Direction
- ◆ Converge with Business Strategy
- ◆ Removing and overcoming obstacles (long-term vs. short-term)
- ◆ Harnessing the inherent power



AGREEING TO MANAGE COSTS

Select a Primary Cost (The Topic)

- ◆ Pareto Analysis
- ◆ Significant competitive gap
- ◆ Variation from established standard that causes profitability to be jeopardized
- ◆ Spend exceeds a "hurdle" amount
- ◆ Topic can be leveraged



AGREEING TO MANAGE COSTS

Understand and respect different perspectives

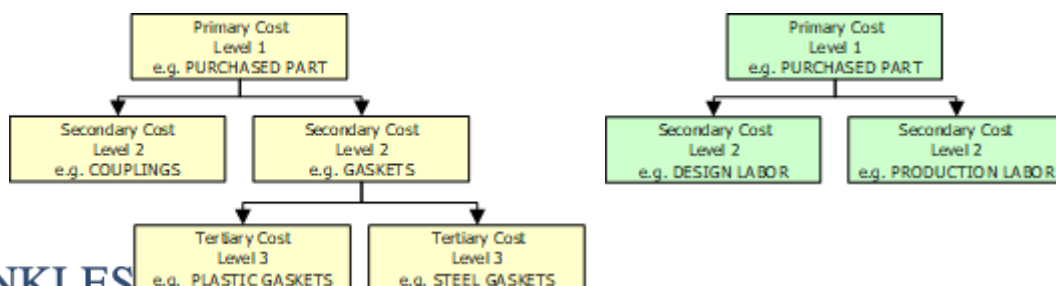
- ◆ Marketing - Time to market
- ◆ Manufacturing - Throughput
- ◆ R & D - Design cycle time
- ◆ Finance - Payment terms
- ◆ Logistics - Speed
- ◆ Procurement - Purchase price



*“The blind men and the elephant”
Every one is partly right and yet all
are wrong*

IDENTIFYING CRITICAL COSTS

- ✓ Map the process to understand activities
- ✓ Break down the Primary Cost (Level 1) into lower level (secondary and tertiary) costs
- ✓ Assign values if possible
- ✓ Focus on future cash flows (recurring or non-recurring)
- ✓ Determine if impactable or non-impactable
- ✓ Select critical costs



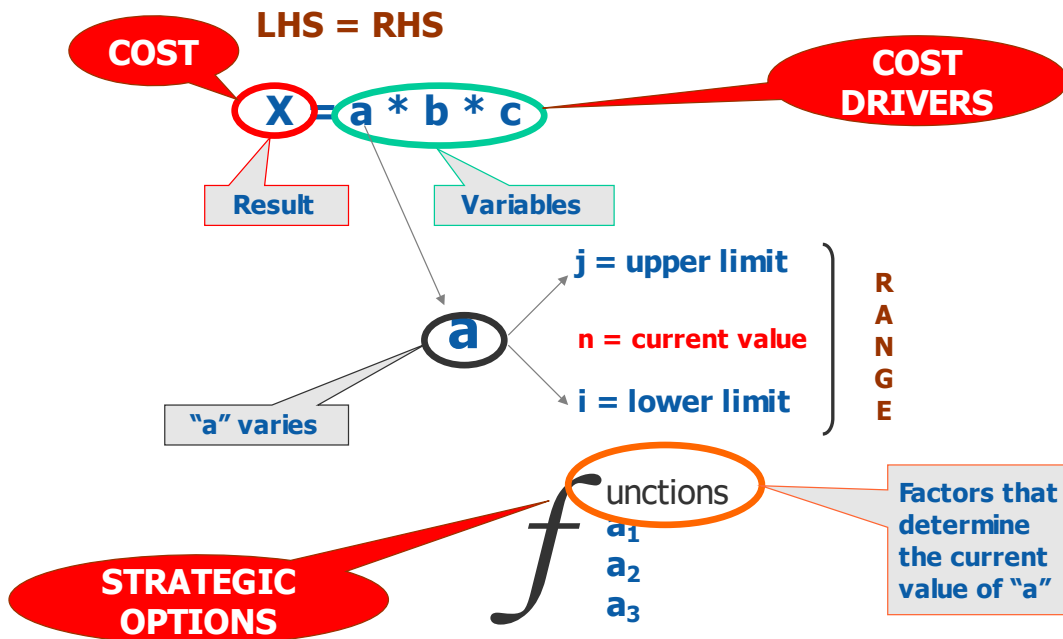
FORMULA BASED COSTING™

- Premise: A mathematical equation, LHS = RHS
- The LHS (result) is the cost element
- The RHS (variables) are the cost drivers
- Cost Drivers vary within a range (min/max)
- Strategic Options are functions that determine the current value of a driver within the range

FORMULA BASED COSTING™: POINTS TO REMEMBER

- ◆ The logical end of a formula is the Revenue Driver
- ◆ There is only ONE Revenue Driver in a supply chain
- ◆ A plus sign in a formula indicates Cost Elements NOT Cost Drivers
- ◆ A Cost Element is a physical expense that can be expressed as "\$ per year"
- ◆ A Cost Driver must be a numerically expressible variable
- ◆ A "qualitative" factor will always be a "function/strategic option"

FORMULA BASED COSTING™: THE LOGIC



DEFINING KEY COST DRIVERS

- Select by discussion
- Use a decision matrix
 - Assign weights (relative percentages) to cost elements
 - Evaluate the impact of each cost driver on the cost elements
 - Calculate weighted impact score
 - Determine current level of the driver and the amount of improvement possible
 - Evaluate the teams ability to impact drivers



DEVELOPING STRATEGIC OPTIONS (FUNCTIONS)

"Functions" are factors that determine the current value of cost drivers

- Brainstorm among team members
- Solicit "Ten Meter Manager" input
- Consider different perspectives



REDUCING, CHANGING OR ELIMINATING ACTIVITIES

- ✓ Identify constraints, if any
- ✓ Select options (functions) that can be impacted
- ✓ Create a strategy statement for each selected function
- ✓ Evaluate risks/benefits from different perspectives
- ✓ Quantify potential savings on current Primary Cost
- ✓ Quantify savings from leveraging ideas
- ✓ Prioritize strategies for implementation– *make sure some are implementable in the short term*

IMPLEMENTING AN ACTION PLAN

- Select chosen strategies
- What, who and when?
- Minimize or eliminate risks
- Develop contingency plans
- Obtain management buy-in
- Establish dates and participants for verification



CONTINGENCY PLANS

- Focus on “why” (desired goal)
- Suggested contingencies
 - Another strategic option (function) for the same cost driver
 - Use the same strategy but implemented differently

VERIFYING THE ACTION PLAN

Monitoring Performance

- ◆ Appoint project coordinator/s
- ◆ Hold periodic reviews (initially, weekly/biweekly teleconferences)
- ◆ Modify action plans and expand on strategies
- ◆ Document meeting notes
- ◆ Develop new process maps
- ◆ Present status reports to management every 3-6 months



ETERNAL IMPROVEMENT

The journey never ends.....

- Expand on current project
 - Other strategic options
 - Other cost drivers
 - Another cost element
- Educate other teams in the supply chain
- Kick off the next project within 6-9 months
 - Another supplier/customer
 - Another product/commodity/service (Primary Cost)

AIM&DRIVE® Total Cost Solution 3.0 Managed Services Platform



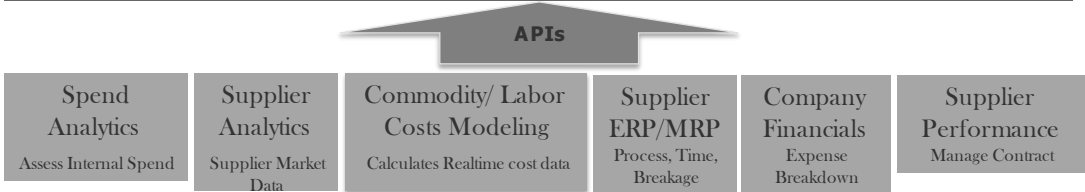
AIM&DRIVE® PORTAL ONLINE LEARNING ACADEMY

AIM&DRIVE® IDEA-BANK
(AI-Based Industry-Knowledge-Base, Supplier Cost Opportunities, Customer Re-pricing Opportunities)

Agree Areas of improvement team goals & rational	Identify Critical Cost Elements, Impactable Costs & Future CF	Measure Secondary & Tertiary Costs and identify Cost Drivers	Define Key cost drivers and identify strategic options	Reduce Change/Eliminate Activities, Risk-Benefit analysis, Prioritize Strategies	Implement Action Plan, Assign Ownership, Target Dates	Verify Progress, Report Value, Realtime Monitoring	Eternal Continuous Improvement, Deferred Item Repository
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AIM&DRIVE® BASE
(User Admin & Security, RealTime Monitoring, Individual & Project Reporting)

AWS GLOBAL SECURE CLOUD



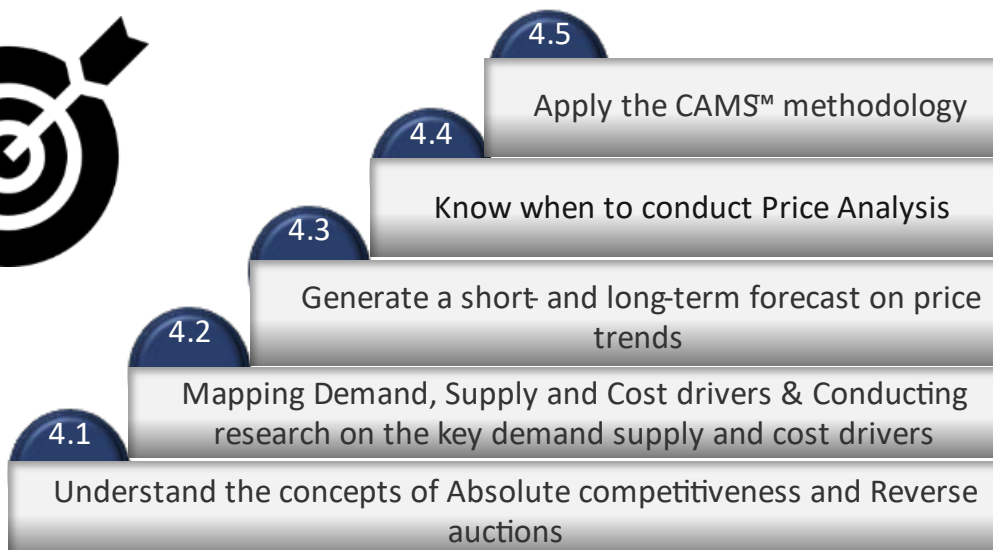
ANKLESARIA EXPERTISE

Price Analysis

4. Price Analysis

Section Objectives

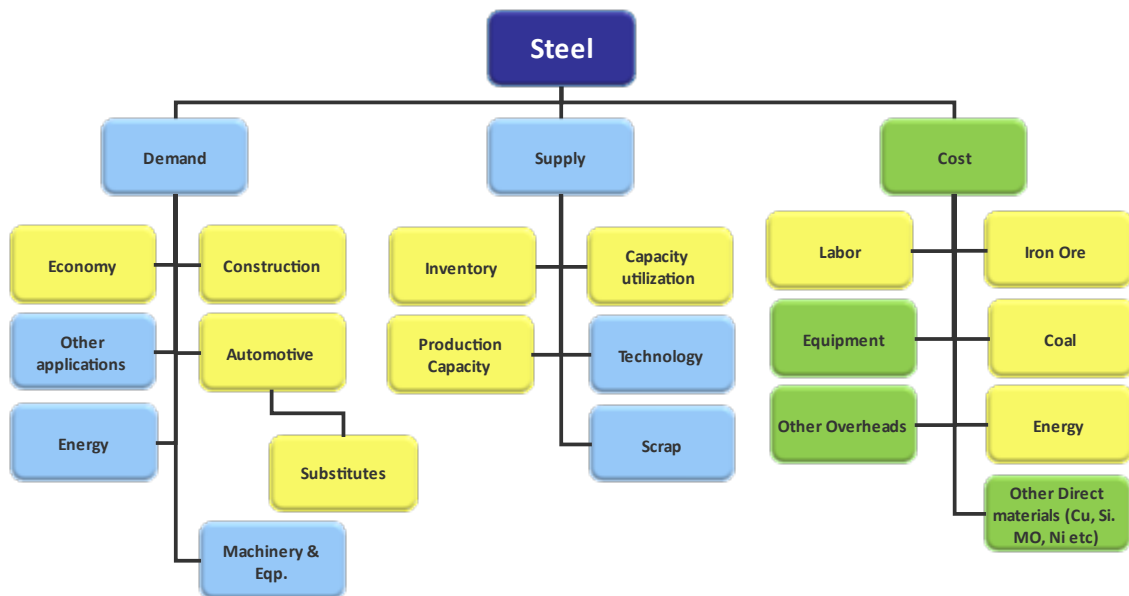
At the end of this section, you should be able to:



Price analysis is most useful when price is the only differentiating variable

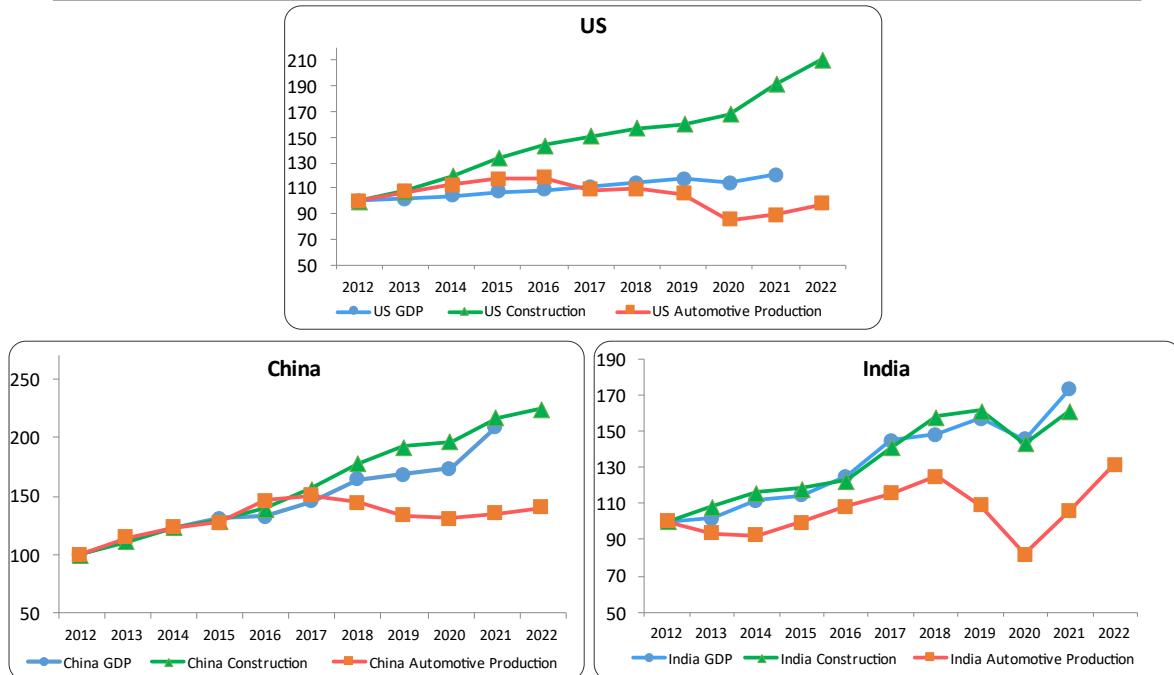
- Useful when the price of the product or service is market driven or standardized
- Should be used on critical contracts, even if cost models have been developed
- Forms of price analysis:
 - **Trend Analysis**
 - Mapping Demand, Supply and Cost Drivers
 - Tracking key price drivers and making observations
 - Generate forecast and buying strategy
 - Competitive Advantage Measurement System (CAMST™)
 - **Absolute Comparisons**
 - Absolute Competitiveness (Benchmarking studies)
 - Reverse auctions

Mapping demand, supply and cost drivers



Key Price Drivers

Analyze Demand Driver Trends



Sources: US Census, China Statistical Yearbook, India MOSPI, OICA.net, World Bank, BEA.gov

Analyze Trends to identify Impact on Prices

KEY DEMAND DRIVERS	TREND (Up, Down, Flat)	RATE (S, M, F)	IMPLICATION	PRICE IMPACT
Economic growth	Up	S	Economies of US and India have experienced a downturn in the early half of 2020 owing to the Covid-19 pandemic while the Chinese economy witnessed a reduced growth rate. These economies have witnessed swift recoveries in the second half of 2020 and 2021 leading to an increased demand for steel.	↑
Construction	Up	F	US has announced a spend of \$1.2 Trillion under the infrastructure Investment and Jobs Act 2022. Construction spend in China and India has gradually increased post the Covid-19 pandemic.	↑
Auto Manufacturing	Up	M	Automotive sector in the US, India and China has witnessed a recovery in 2021 and 2022 post a production slump in 2020 due to the Covid-19	↑
Substitute availability	Up	S	Increasing economic viability of substitutes like aluminum puts downward pressure on prices.	↓
KEY SUPPLY DRIVERS	TREND (Up, Down, Flat)	RATE (S, M, F)	IMPLICATION	PRICE IMPACT
Capacity utilization	Down	S	Capacity Utilization had witnessed a significant drop due to Covid-19 reaching a low point of 49% in May 2020 but has since recovered to Pre-Covid levels of ~88% as of September 2021. The capacity utilization has fallen down to levels of ~70% as of March 2023	↓
Inventory	Up	S	Slowly increasing inventory levels (since July 2020) put some downward pressure on prices.	↓
Production capacity	Down	S	Industrial Production has witnessed a recovery since May 2020, reaching pre-covid levels of as of September 2021. Industrial Production has been reducing in 2023 reaching levels of 86% as of Jan 2023	↑

Cost Driver Trends determine Impact on Production Cost

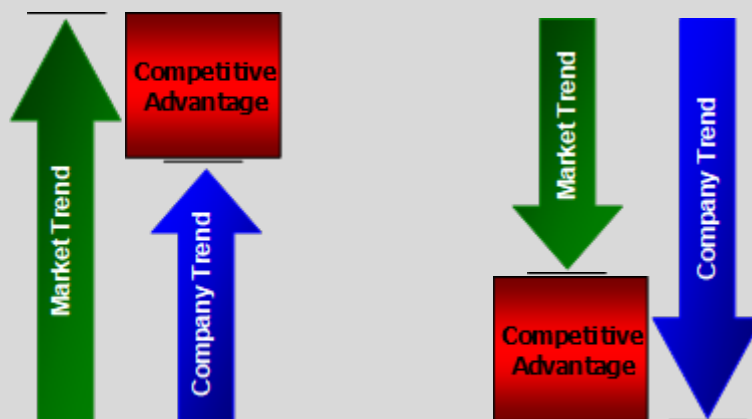
KEY COST DRIVERS	TREND (Up, Down, Flat)	RATE (S, M, F)	IMPLICATION	PRICE IMPACT
Labor	Up	S	Increasing labor costs will put a slight upward pressure on prices.	↑
Iron Ore	Down	S	Decreasing iron ore prices will put downward pressure on steel prices.	↓
Coal	Up	F	Since January 2022, Coal prices have increased ~37.3% leading to higher energy costs	↑
Energy	Down	S	Natural Gas prices have decreased by 44.6% since Jan 2022	↑

Summary

Short Term	Long Term
<ul style="list-style-type: none"> As countries recover from the Covid -19 pandemic, continued economic growth will offset spare capacity. Increasing spend on construction within these 3 economies will increase demand for steel. Also increase in labor prices will put upward price pressures for steel. We expect prices to increase slightly in the short term (0 -3 months) 	<ul style="list-style-type: none"> Economic growth in the US and developing nations will drive demand. Capacity utilization is expected to stabilize as total capacity is reduced. Energy costs are expected to remain flat or increase slightly as upgrades are done to infrastructure. We expect prices to stabilize in the long term.

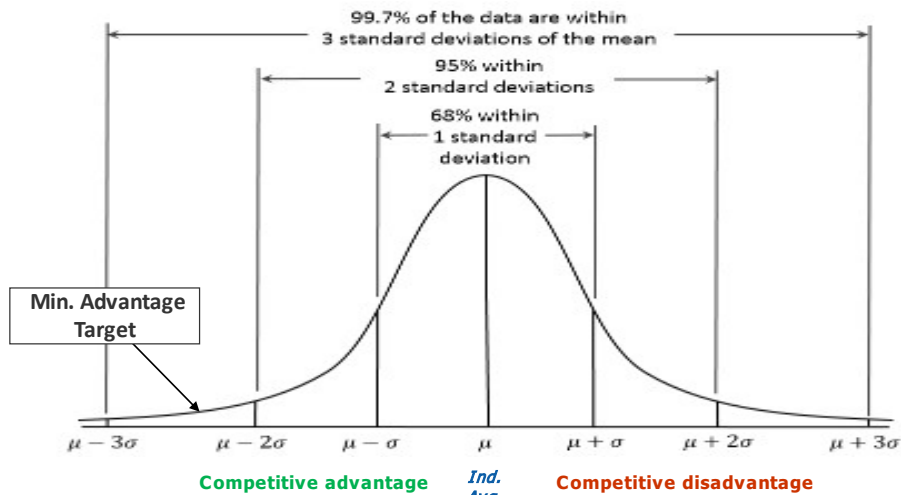
Competitive Advantage Measurement System (CAMS™)

- 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 2.5%1.6% of an industry group (~1 to 2 standard deviations from the mean)



Competitive Advantage Measurement System (CAMS™)

- Pick a base period – e.g. January
- Select an index or proxy index (public or private)– e.g. Bureau of Labor Statistics Thermoplastic resins and plastics materials

Series Id: PCU3252113252114
 Series Title: PPI industry data for Plastics material and resins mfg-Thermosetting resins and plastics materials, not seasonally adjusted
 Industry: Plastics material and resins mfg
 Product: Thermosetting resins and plastics materials
 Base Date: 190012
 Year: 2022

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Index Value	327.0	326.8	332.3	335.0	348.9	354.9	361.0	360.0	363.1	361.0	366.6	366.627
% change from Jan		-0.1%	1.6%	2.4%	6.7%	8.5%	10.4%	10.1%	11.0%	10.4%	12.1%	12.1%

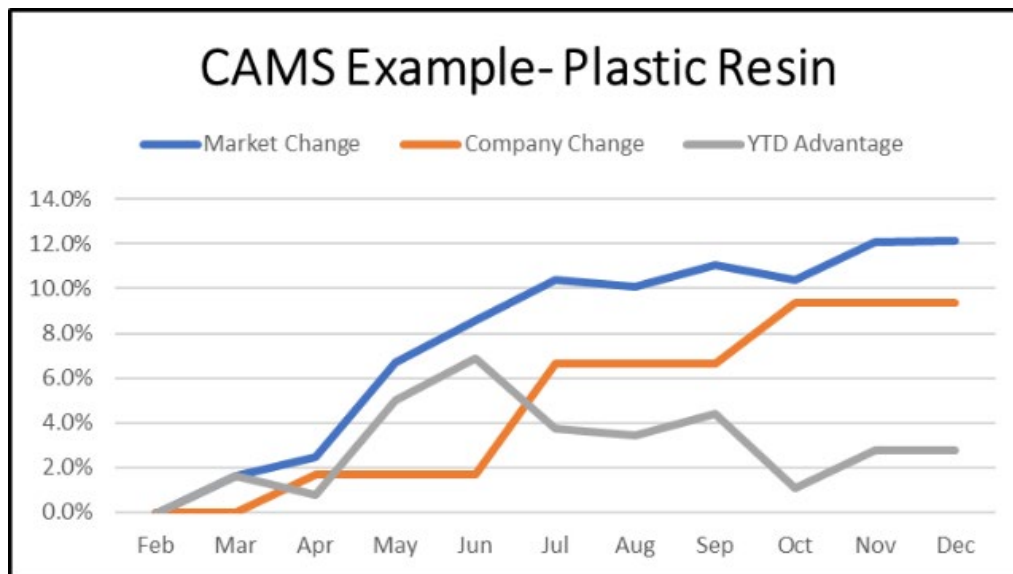
- Track changes in the index and company’s prices (using January as the base)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Company Prices	\$3.00	\$3.00	\$3.00	\$3.05	\$3.05	\$3.05	\$3.20	\$3.20	\$3.20	\$3.28	\$3.28	\$3.28
% change from Jan		0.0%	0.0%	1.7%	1.7%	1.7%	6.7%	6.7%	6.7%	9.3%	9.3%	9.3%

- Calculate Year To Date (YTD) Competitive Advantage from base date

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
YTD Advantage		-0.1%	1.6%	0.8%	5.0%	6.9%	3.7%	3.4%	4.4%	1.1%	2.8%	2.8%

Competitive Advantage Measurement System (CAMS™)



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 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 on price, terms, requirements, personnel, etc.

Reverse Auctions (e -Auctions)

- In reverse auctions, buyers invite suppliers to bid for their business with the objective of pushing prices down
- Typically, the bidding happens realtime online and therefore they are also known as e-Auctions or Electronic Auctions.

Critical Success Factors:

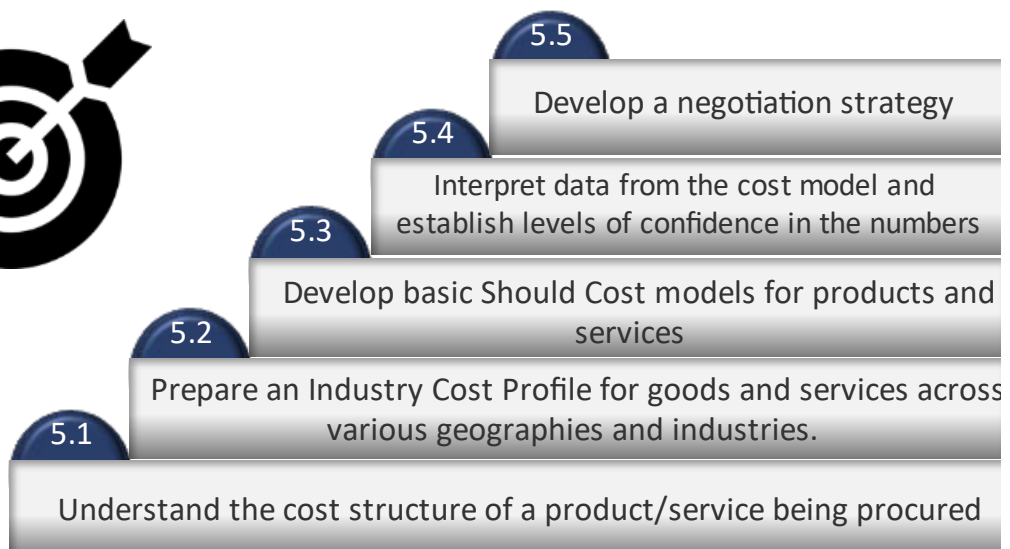
- **Target Price** – The buyer should have a target price (based on knowledge of market prices, supplier costs and key cost drivers) that they would like to achieve through the reverse auction
- **Category Selection** - Reverse auctions should only be conducted on Transactional/Routine Categories and **NEVER** on Strategic and Bottleneck Categories
- **Prequalification of Suppliers** – Price should be the only differentiating factor amongst the suppliers invited to participate in the reverse auction
- **Fixed Specs / SOW** – Reverse auctions should only be conducted when the Specs (for products) and SOW (for services) are clearly defined and not subject to change

Should Cost Models

5. Basic Should Cost Models & Industry Cost Profiles

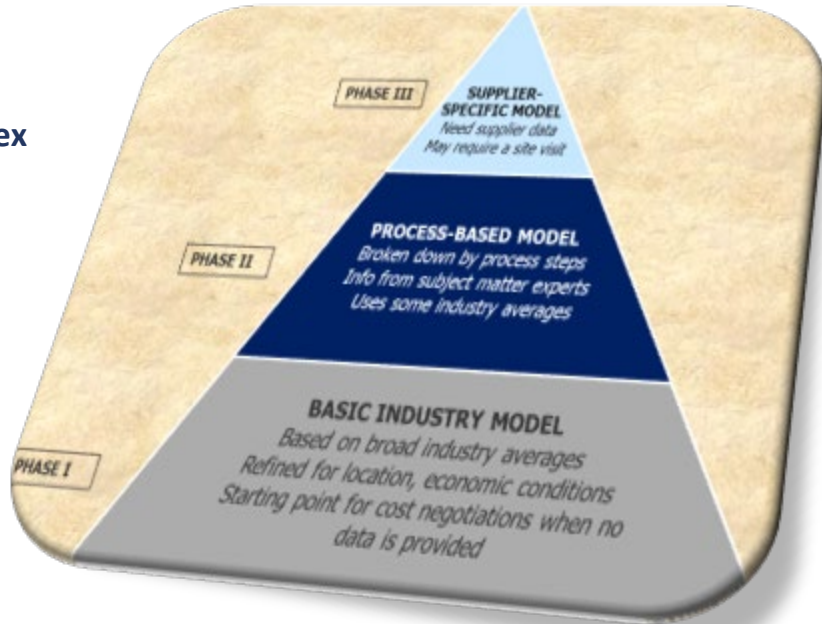
Section Objectives

At the end of this section, you should be able to:



Each situation requires a unique cost model

A simple model that helps you make an informed decision is better than a complex model that creates uncertainty



Cost Definitions

Element	Definition
Direct Material	Bill of Materials (BOM)
+ Direct Labor	Product: Labor required to convert direct material into a finished product (production worker wages) Service: Labor required to execute activities in the Statement of Work (SOW)
+ Manufacturing Overhead or Service Overhead	Indirect costs associated with the conversion process (Depreciation, energy and other plant operating costs, supervision, ...)
= Cost of Goods Sold (COGS) or Cost of Sales (COS)	SUB-TOTAL
+ GSA (General, Selling, Administration) and Other Expenses	Costs incurred to keep the organization in operation (R&D, finance, procurement, marketing, ...)
+ Profit Before Tax	Profit before deduction of government taxes
= PRICE	Total of all cost elements

An Income Statement Approach

Financial statements

Consolidated income statement

for the year ended 31 December 2020

Element	2020			
	Note	Pre-exceptional items \$m	Exceptional items \$m	Total \$m
NET SALES (PRICE)				
- COST OF GOODS SOLD or COST OF SALES				
= GROSS PROFIT				
- GSA & OTHER EXPENSES				
= PROFIT BEFORE TAX				
- TAXES (a percentage of Profit Before Tax)				
= NET PROFIT AFTER TAX				

	Note	Pre-exceptional items \$m	Exceptional items \$m	Total \$m
Revenue from continuing operations	1,2	7,564.3	-	7,564.3
Cost of sales		(6,836.6)	-	(6,836.6)
Gross profit		727.7	-	727.7
Administrative expenses	5	(554.9)	(239.3)	(794.2)
Share of post-tax profit/(loss) from joint ventures	5,12	41.6	(8.0)	33.6
Operating profit/(loss)	1	214.4	(247.3)	(32.9)
Finance income	3	13.4	-	13.4
Finance expense	3,5	(121.1)	(8.0)	(129.1)
Profit/(loss) before taxation from continuing operations	4,5	106.7	(255.3)	(148.6)
Taxation	5,6	(51.5)	(28.0)	(79.5)
Profit/(loss) for the year from continuing operations		55.2	(283.3)	(228.1)
Profit/(loss) attributable to				
Owners of the parent		53.8	(283.3)	(229.5)
Non-controlling interests	28	1.4	-	1.4
		55.2	(283.3)	(228.1)

Building a basic industry should cost model

Step 1. Build an Industry Cost Profile

Step 2. Monetize one cost element (e.g. Direct Material = \$1.00)

Step 3. Estimate should cost (divide this cost element \$ by its %)

Step 4. Use Industry Cost Profile to estimate the other cost elements

Element	%	\$	Calculation
Direct Material	50%	\$1.00	= \$0.500/kg * 2kgs/part
Direct Labor	10%	\$0.20	= \$2.00 * 0.10
Manufacturing Overhead	20%	\$0.40	= \$2.00 * 0.20
<i>Cost of Goods Sold</i>	<i>80%</i>	<i>\$1.60</i>	<i>= \$2.00 * 0.80</i>
GSA & Other Expenses	10%	\$0.20	= \$2.00 * 0.10
Profit Before Taxes	10%	\$0.20	= \$2.00 * 0.10
PRICE (Should Cost)	100%	\$2.00	= \$1.00 / 0.50

Step 1

Example

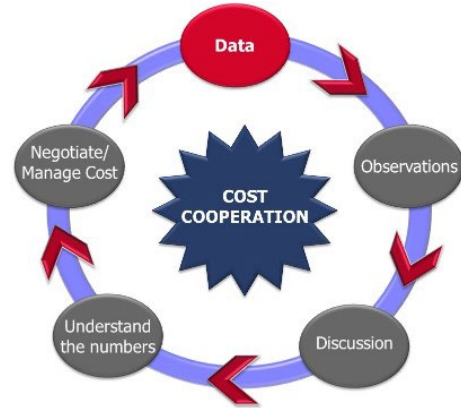
Product Should Cost Model

Case Study

Product Should Cost Model

Case Study – Key Takeaways

- Prepare the Supplier– Be an *Educator* and not an Auditor
- The objective of “understanding” the costs of the contract must be clearly communicated.
- Share screenshots of data sources used and validate any numbers that may be assumed in the model
- Walk the supplier through the logic for material cost and other assumptions
- Attempt to understand the difference between what the supplier quoted and what the model is showing
- Build a business case from the supplier’s perspective, showing why they would want to enter this contract at your calculated price

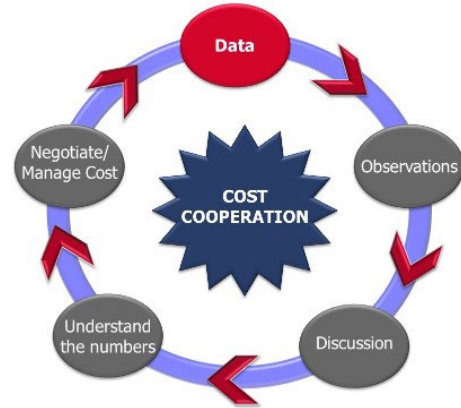


Case Study

Service Should Cost Model

Case Study – Key Takeaways

- Prepare the Supplier– Be an *Educator* and not an Auditor
- The objective of “understanding” the costs of the contract must be clearly communicated.
- Share screenshots of data sources used and validate any numbers that may be assumed in the model
- Walk the supplier through the logic for direct labour and other assumptions
- Attempt to understand the difference between what the supplier quoted and what the model is showing
- Build a business case from the supplier’s perspective, showing why they would want to enter this contract at your calculated price

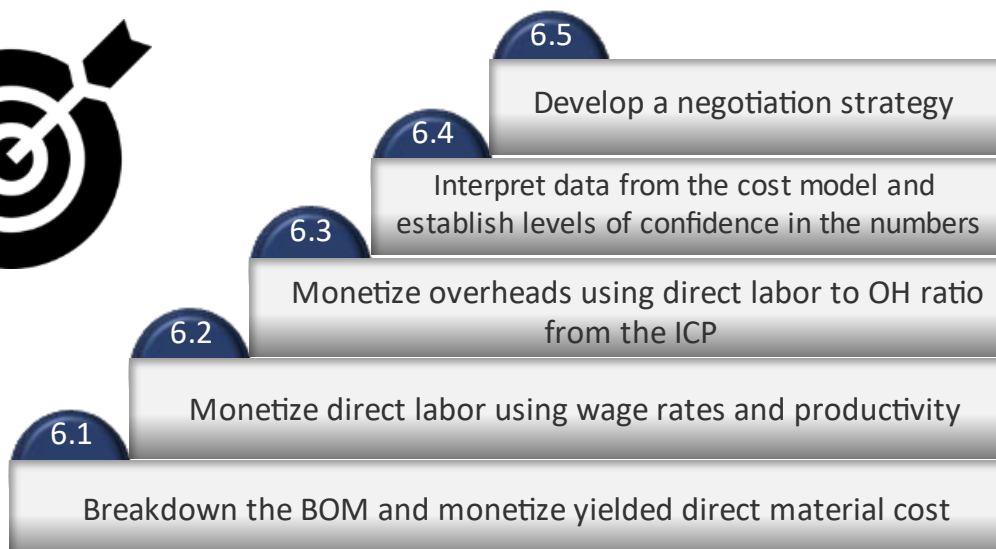


Process Based Cost Models

6. Process-based Should Cost Models

Section Objectives

At the end of this section, you should be able to:



Steps for building a process-based cost model

- 1 Build a Basic Should Model
- 2 Understand the process being followed
- 3 Monetize the other elements of Cost of Goods Sold
- 4 Use cost profile to complete cost elements that are missing
- 5 Validate model with market/supplier information

Build Model Incrementally

Building a process-based cost model

Element	Calculation
Direct Material	Calculate \$
Direct Labor	Calculate \$
Manufacturing Overhead	Calculate \$
<i>Cost of Goods Sold</i>	<i>DM \$ + DL \$ + MOH \$</i>
GSA & Other Expenses	% GSA * Should Cost
Profit Before Taxes	% PBT * Should Cost
SHOULD COST	COGS \$ / COGS %

Building a process based should cost model

Step 1. Build an Industry Cost Profile

Step 2. Monetize DM, DL and MOH to calculate COGS (e.g. COGS = \$1.68)

Step 3. Estimate should cost (divide this COGS \$ by its %)

Step 4. Use Industry Cost Profile to estimate GSA and Profit

Element	%	\$	Calculation
Direct Material	50%	\$1.05	$=(\$0.500/\text{kg} * 2 \text{ kgs/part})/0.95$
Direct Labor	10%	\$0.21	$= (\$20/\text{hr} / 100 \text{ parts}) / 0.95$
Manufacturing Overhead	20%	\$0.42	$= 0.21 * (\text{MOH}/\text{DL})$
<i>Cost of Goods Sold</i>	<i>80%</i>	<i>\$1.68</i>	<i>= \$DM + \$DL + \$MOH</i>
GSA & Other Expenses	10%	\$0.21	$= \$2.10 * 0.10$
Profit Before Taxes	10%	\$0.21	$= \$2.10 * 0.10$
PRICE (Should Cost)	100%	\$2.10	= \$1.68 / 0.80

Step 1

Example

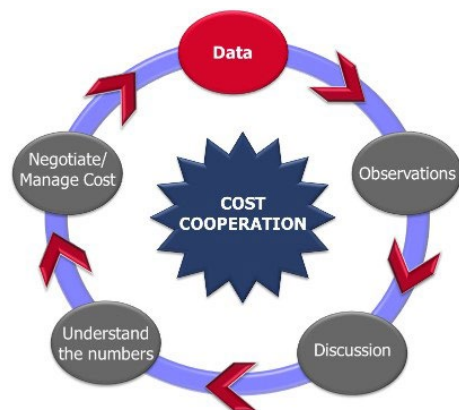
Process Based Cost Model

Case Study

Process Based Cost Model

Case Study – Key Takeaways

- Prepare your process-based cost model ready with screenshots and URLs of data sources used and document all assumptions made
- Thoroughly understand the numbers of the cost model and use them to evaluate the different supplier quotes received at a more granular level
- Understand the concept of material markup and the lack of correlation between the material cost and the material markup charged
- Understand the additional costs that constitute the Total Cost of Ownership for the product being analysed
- Build a business case from the supplier’s perspective, showing why they would want to enter this contract at your calculated price

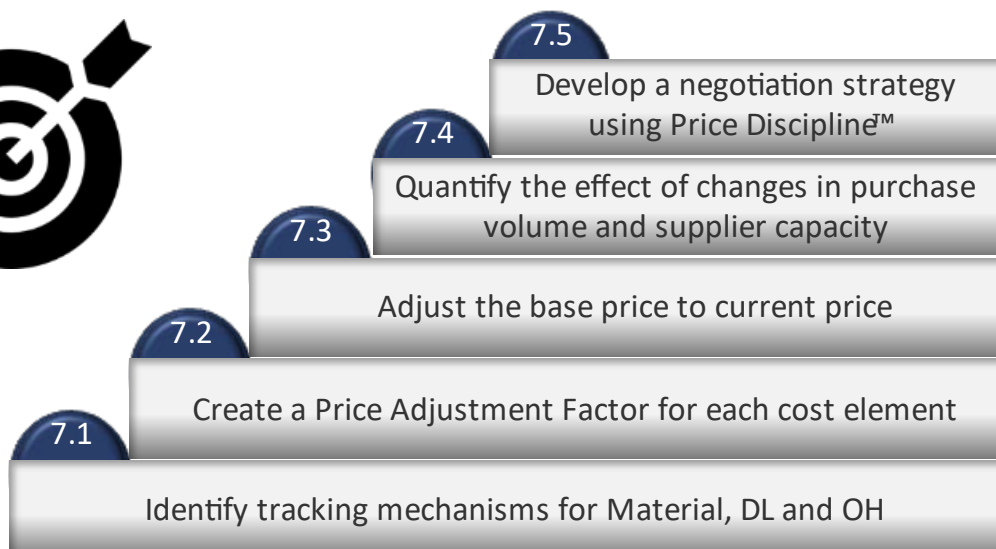


Price DisciplineTM Models

7. Price Discipline™ Models

Section Objectives

At the end of this section, you should be able to:

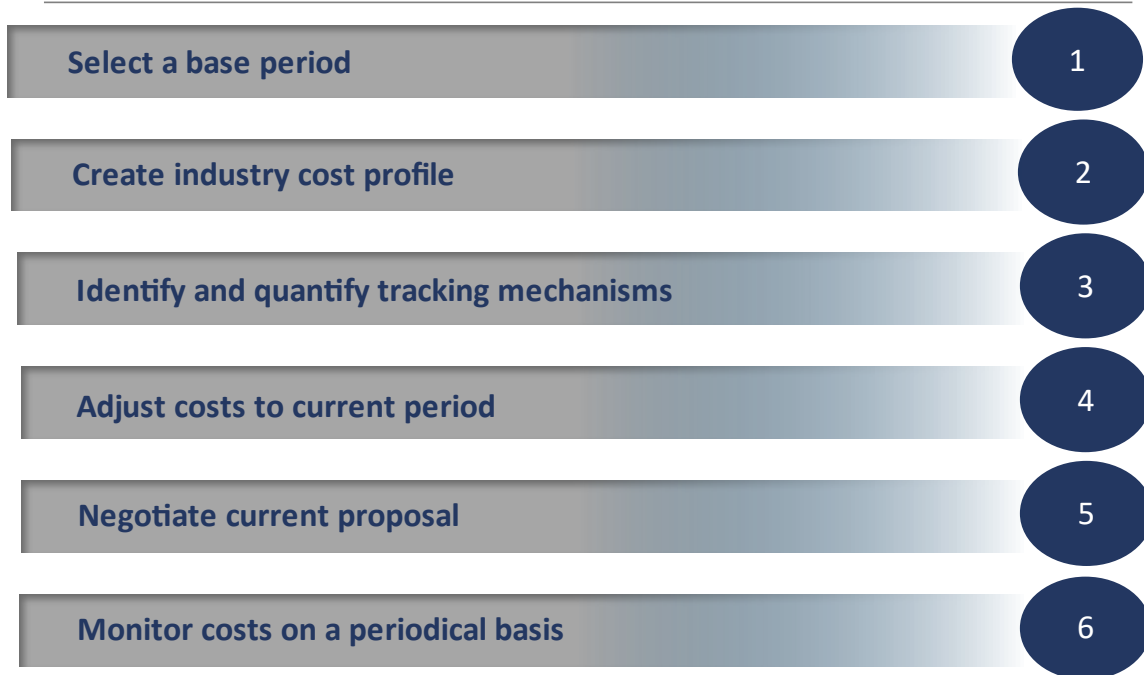


Definition and benefits of using Price Discipline™

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

- 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)

Steps in building a Price Discipline™ Model



Factors to consider when selecting tracking mechanisms

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

Building a Price Discipline™ model

Step 1. Build an Industry Cost Profile

Step 2. Monetize ICP by breaking down base price into major cost elements

Step 3. Identify tracking mechanisms and prepare Price Adjustment Factors (PAF)

Step 4. Multiply base cost elements by PAF

Step 3

Element	%	\$	\$	Calculation
Direct Material	50%	\$1.05	\$1.10	$= \$1.05 * (1 + 0.10 - 0.03) * (1 - 0.02)$
Direct Labor	10%	\$0.21	\$0.22	$= \$0.21 * (1 + 0.07) * (1 - 0.02)$
Manufacturing Overhead	20%	\$0.42	\$0.39	$= (0.42 * 0.8 * 1.06 * (100/120)) + (0.42 * 0.2 * 1.06)$
<i>Cost of Goods Sold</i>	<i>80%</i>	<i>\$1.68</i>	<i>\$1.71</i>	$= \$DM + \$DL + \$MOH$
GSA & Other Expenses	10%	\$0.21	\$0.19	$= (0.21 * 0.9 * 1.06 * (100/120)) + (0.21 * 0.1 * 1.06)$
Profit Before Taxes	10%	\$0.21	\$0.21	$= (\$1.71 + \$0.19) / (1.10)$
PRICE (Should Cost)	100%	\$2.10	\$2.11	= COGS + GSA + Profit

Step 1 Step 2 Step 4

Adjustment of MOH and GS&A Expenses

Example: Fixed and Variable costs for a Smart Watch



Typically
80% fixed
20% variable

Typically
90% fixed
10% variable

	Fixed	Variable
Direct Material		<ul style="list-style-type: none"> LCD panel Wristband Processor Sim card
Direct Labor		<ul style="list-style-type: none"> CNC operator Assembly Testing
MOH	<ul style="list-style-type: none"> Facilitiesrent Depreciation Security Cafeteria GM QC Engineers Plant engineers Maintenance Electricity 	<ul style="list-style-type: none"> Electricity Use-based maintenance Logistics
GSA	<ul style="list-style-type: none"> Executives Marketing Corporate IT Procurement Sales salary Office leases 	<ul style="list-style-type: none"> Sales commissions Customer support

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Profitability is the key to competitiveness

- Acknowledge the need for suppliers to make a reasonable profit early in the process
- Profit should be discussed when it becomes a “critical” cost
- Profit should be based on risk and/or value added
- Select appropriate profit option:
 - Current supplier profit margin
 - Industry margin
 - Industry margin plus premium
 - Current absolute per unit dollars
 - Current total dollars (ROI/KPI)

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Example

Price Discipline™ Model

Case Study

Price Discipline™ Model

Case Study – Key Takeaways

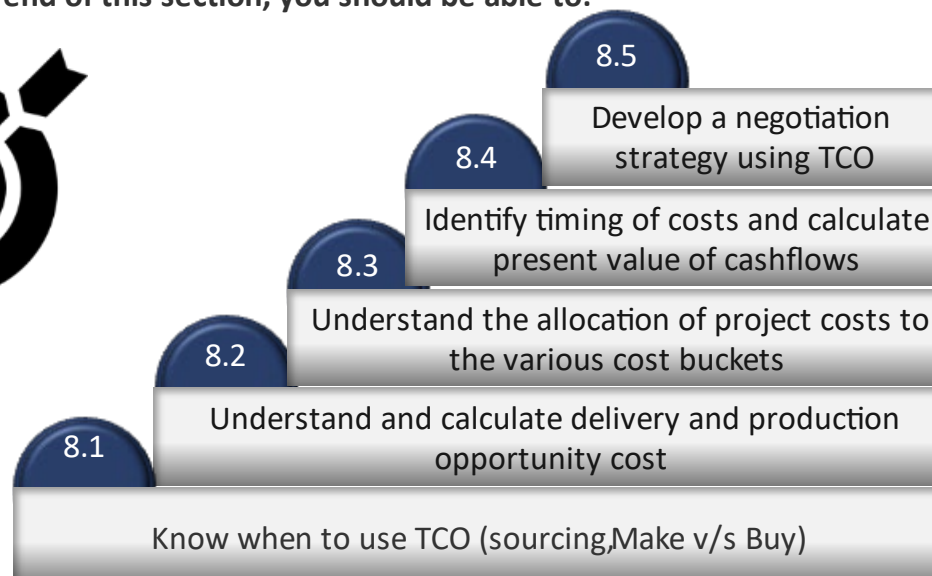
- Understand your bargaining power and what opportunity you represent for the supplier
- Present your methodology and show all assumptions and data sources used in your model to your management and the supplier
- Walk through your model step-by-step (do not show your final number)
- Try to encourage the supplier to reconcile differences and clarify where "you went wrong"
- Assure the supplier that you are not after their profits. You may consider using a 3-year industry moving average plus a reasonable premium for future profits.
- Look at opportunities to collaboratively reduce costs of each element
- Establish a "stake in the ground" which is the new price and the right mix of cost elements. Incorporate methodology and data sources into future contracts.

Total Cost of Ownership Models

8. Total Cost of Ownership (TCO) Models

Section Objectives

At the end of this section, you should be able to:



Total Cost of Ownership and Opportunity Cost

TCO: The Present value of all costs associated with a product/service, incurred over its expected life

- TCO Captures both cash costs and opportunity costs
 - A Cash Cost is a physical outflow of money over a project’s life
 - An Opportunity Cost is the value of a lost benefit resulting from a certain action/decision

SOURCING

- Examines the overall financial impact of sourcing options including Make v/s Buy
- Analysis helps user make the “right” sourcing decision

COST MANAGEMENT

- Identifies critical areas to focus on
- Takes negotiation beyond purchase price
- Useful in establishing the value of incentives and liquidated damages in contracts

Total cost of ownership goes beyond the purchase price

- Understand cost elements that make up the purchase price, including profit
- Later, extends to other cost components included in the “Total Cost of Ownership”

Direct Material
+ Direct Labor
+ Manufacturing Overhead
= **Cost of Goods Sold**
+ GSA & Other
+ Profit Before Taxes

= **PURCHASE PRICE**

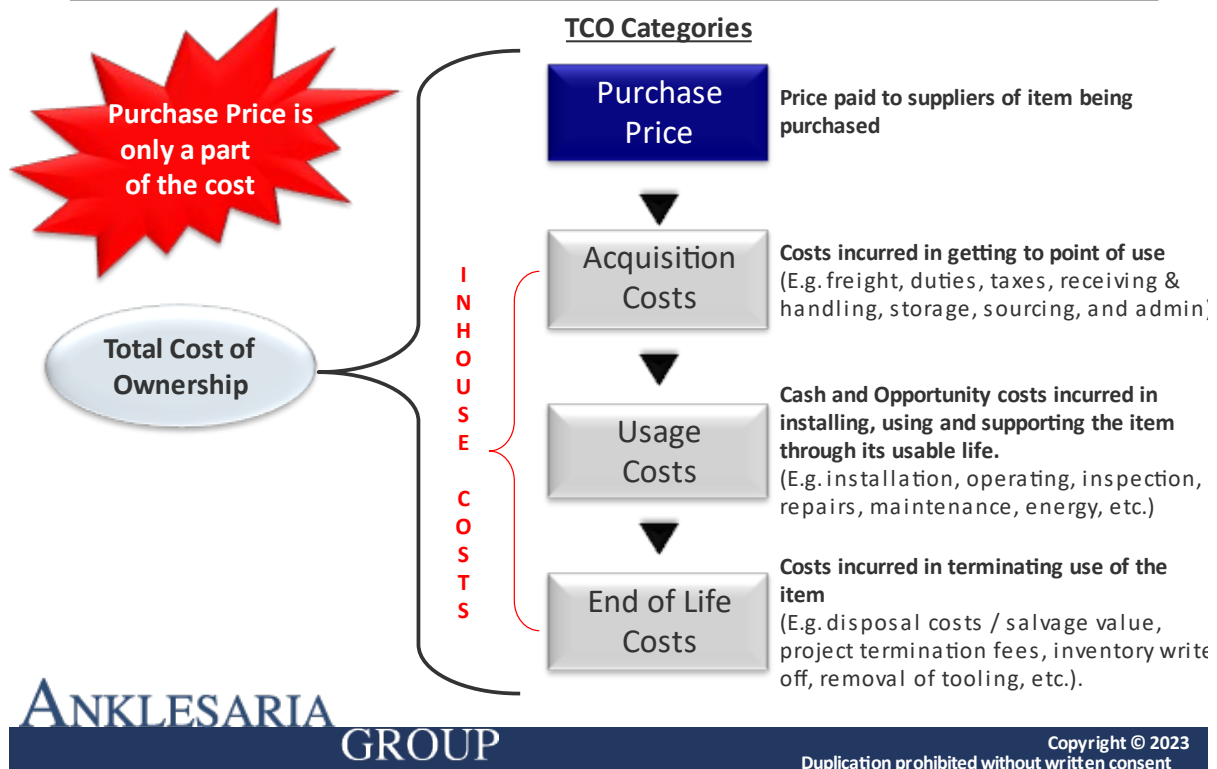
Purchase Price
+ Acquisition Cost

= **LANDED COST**

+ Usage Cost
+ End of Life Cost

= **TOTAL COST OF OWNERSHIP**

Total Cost of Ownership structure



Opportunity cost defined

- An OPPORTUNITY COST is the value of a lost benefit resulting from a certain action/decision
- Calculation of an Opportunity Costs the lost **contribution** from one unit of sales/production multiplied by the number of units lost due to a missed or lost opportunity (e.g. delivery, throughput, efficiency, etc.)
 - **Opportunity Cost = Contribution * number of units lost**
- **CONTRIBUTION = Sales price – variable costs**
 - **Example:**
 - Product sold: widgets
 - Sales Price = \$100.00 per unit
 - Variable Costs = \$70.00 per unit (Anklesaria assumption)
 - Contribution = \$100.00– \$70.00 = \$30.00 per unit

Opportunity Cost Example: Delivery

Sales Price = \$100.00 per unit
 Variable Costs = \$70.00 per unit
Contribution = \$30.00 per unit

Problem: 2 suppliers, A & B are bidding on a contract to supply a certain piece of equipment. Supplier A’s machine has a throughput of 700 widgets per day and can be delivered in 130 days. Supplier B’s machine has a throughput of 650 widgets per day with delivery in 100 days. Assuming that this machine is the bottleneck and that the entire output can be sold, what is the delivery opportunity cost for each supplier?

Solution:

Delivery Opportunity cost for B = \$ 0 (Best in-class delivery time)

Delivery Opportunity cost for A = (Delivery time for A – Delivery time for B) * B’s Output per day * Unit Contribution

= (130- 100) * 650 * \$ 30 = **\$ 585,000**

In calculating TCO, a one-time Delivery Opportunity cost of \$ 585,000 will need to be added to the Total Cost for Supplier A

Opportunity Cost Example: Delivery

SUPPLIER A						
	Present	Year 1	Year 2	Year 3	Year 4	Year 5
<i>PURCHASE PRICE:</i>	...	...	...	...	...	...
<i>ACQUISITION COST:</i>	...	...	...	...	...	...
<i>USAGE COSTS:</i>						
<i>Opportunity Cost Delivery</i>	\$585,000					
<i>END OF LIFE COSTS:</i>	...	...	...	...	...	...

SUPPLIER B						
	Present	Year 1	Year 2	Year 3	Year 4	Year 5
<i>PURCHASE PRICE:</i>
<i>ACQUISITION COST:</i>
<i>USAGE COSTS:</i>						
<i>Opportunity Cost Delivery</i>						
<i>END OF LIFE COSTS:</i>

Opportunity Cost Example: Production Speed

Sales Price = \$100.00 per unit
 Variable Costs = \$70.00 per unit
Contribution = \$30.00 per unit

Problem: 2 suppliers, A & B are bidding on a contract to supply a certain piece of equipment. Supplier A’s machine has a throughput of 700 widgets per day while Supplier B’s machine has a throughput of 650 widgets per day. Both machines have an expected Up - time of 240 days per year. Assuming that the entire output can be sold, what is the production opportunity cost for each supplier?

Solution:

Production Opportunity cost for A = \$ 0 (Best -in-class throughput)

Production Opportunity cost for B = (Throughput of A – Throughput of B) * Machine Up - time per year * Unit Contribution

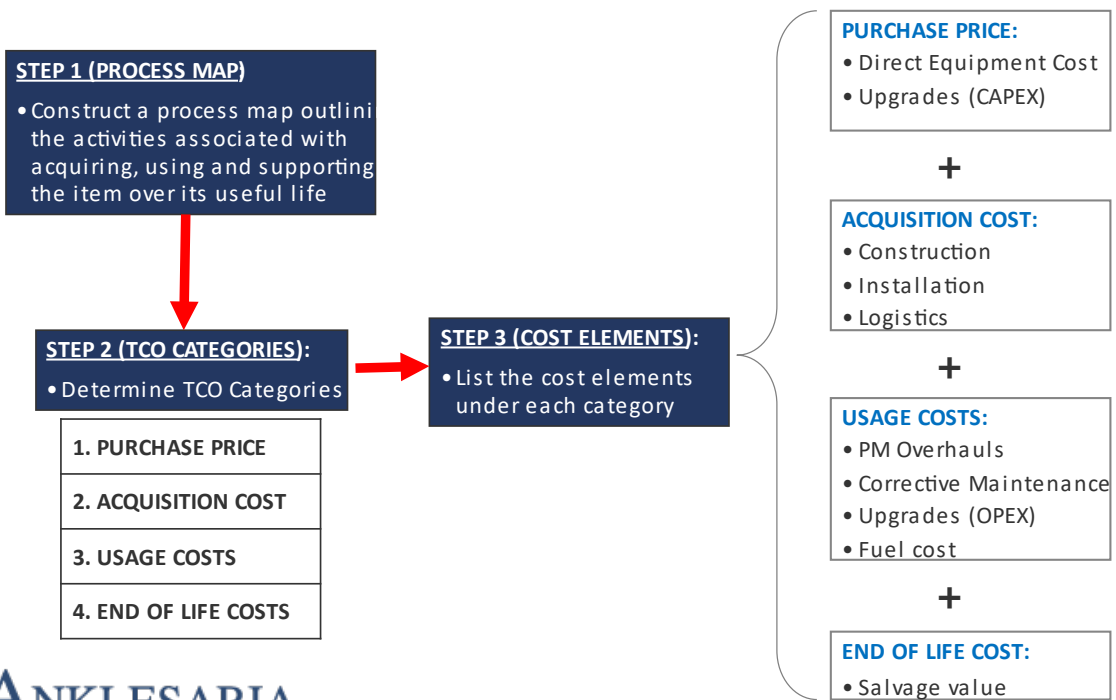
$$= (700- 650) * 240 * \$ 30 = \mathbf{\$ 360,000}$$

In calculating TCO, a recurring Production Opportunity cost of \$ 360,000 will need to be added to the Total Cost for Supplier B for the duration of the project.

Opportunity Cost Example: Production Speed

SUPPLIER A						
	Present	Year 1	Year 2	Year 3	Year 4	Year 5
<i>PURCHASE PRICE:</i>	...	...	...	...	...	...
<i>ACQUISITION COST:</i>	...	...	...	...	...	...
<i>USAGE COSTS:</i>						
<i>Opportunity Cost Delivery</i>	\$585,000					
<i>Opportunity Cost Production</i>						
<i>END OF LIFE COSTS:</i>	...	...	...	...	...	...
SUPPLIER B						
	Present	Year 1	Year 2	Year 3	Year 4	Year 5
<i>PURCHASE PRICE:</i>	...	...	...	...	...	...
<i>ACQUISITION COST:</i>	...	...	...	...	...	...
<i>USAGE COSTS:</i>						
<i>Opportunity Cost Delivery</i>						
<i>Opportunity Cost Production</i>		\$360,000	\$360,000	\$360,000	\$360,000	\$360,000
<i>END OF LIFE COSTS:</i>	...	...	...	...	...	...

Building a Total Cost of Ownership Model



Building a Total Cost of Ownership Model

STEP 4 (MEASUREMENT):

- Determine if each cost element is recurring (R) or one-time (O)
- Identify how each element is to be measured

ELEMENT	R/O	MEASURE
PURCHASE PRICE:		
> Direct Equipment Cost	O	Supplier quote (\$2,575,000 per Turbine)
> Upgrades (CAPEX)	O	Supplier quote (\$320,000 per Turbine)
ACQUISITION COST:		
> Construction	O	Supplier quote (\$500,000 per Turbine)
> Installation	O	Supplier quote (\$240,000 per Turbine)
> Logistics	O	Supplier quote (\$110,000 per Turbine)
USAGE COSTS:		
> Delivery Opportunity Cost	O	\$10,500,000
> Preventive Maintenance	R	\$106,667/Turbine per year
> Corrective Maintenance	R	\$646,000/Turbine per year
> Fuel cost	R	\$3,000,000/Turbine per year
END OF LIFE COSTS:		
> Salvage value	O	\$600,000/Turbine

Analyzing TCO:

Use cost modeling skills beyond purchase price

- 1 Identify the main cost categories within TCC(e.g. Usage costs)
- 2 Identify main cost element(s) within chosen category (e.g. Corrective Maintenance)
- 3 Build cost model(s) for chosen element(s)
- 4 Test for reasonableness
- 5 Use in negotiations as necessary

Example

Total Cost of Ownership Model

Case Study

Total Cost of Ownership Model

Case Study – Key Takeaways

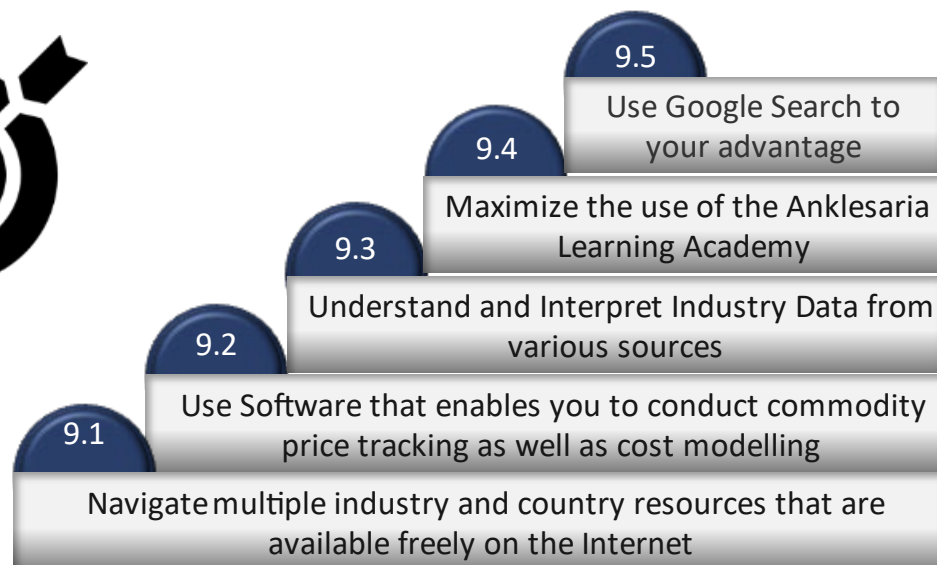
- Communicate that the decision is going to be based on a long-term evaluation and obtain the willingness from the supplier to work on developing and executing cost management strategies on all the critical future cash flows.
- Obtain a cost breakdown for the machine and evaluate the reasonableness of the numbers. Markups should be evaluated and discussed. Remember the intent is to “understand” the numbers first and then ensure that they are fair and reasonable. This should be communicated to the supplier.
- Identify strategies to reduce the delivery leadtime. Premiums for earlier delivery should be discussed.
- Terms and conditions such as payment terms, liability during shipment should be carefully looked at.
- Unplanned maintenance (Mean Time Between Failure) turnaround time should be added to the analysis and evaluated.
- The transition process should be laid out in detail with contingency plans in place in case things go wrong.

Implementing Strategic Cost Management

Leveraging Technology and Online Data Resources

Section Objectives

At the end of this section, you should be able to:



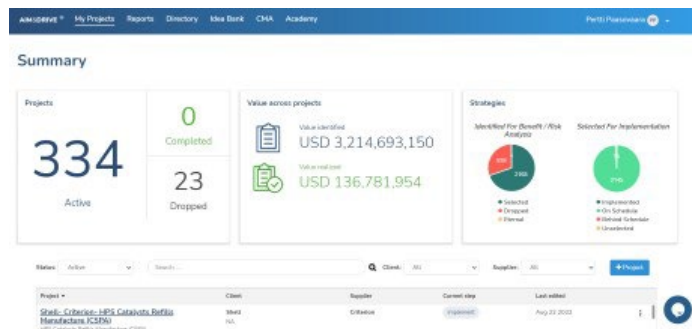
Gathering information for Cost & Price analysis

- Obtaining data from suppliers through RFI/RFQ/RFP
 - Be consistent and persistent
- Government statistics
- Trade associations
- Subject matter experts
- On-line databases
- Google Search- Keywords
- Company financial reports



AIM&DRIVE® Total Cost Solution 3.0 Managed Services Platform

- The AIM&DRIVE® managed services platform is designed to take an organization through the entire journey of cost management.
- Assess the level of cost management knowledge and processes within your organization and identify areas of improvement using the CMA tool.
- Fill knowledge gaps by using the Learning Academy that houses the AIM&DRIVE® training suite
- Develop product, service and process cost models and Price Discipline models using the custom templates and data modules within the platform.
- Develop category strategies, category cost strategies as well as cost optimization and management strategies using the 8-step AIM&DRIVE® process coded into the platform
- Leverage ideas developed with a single supplier across the enterprise and identify opportunities for continuous improvement using the AIM&DRIVE® Ideabank



Anklesaria's Learning Academy

- Complements the content being covered during the live sessions
- Pool of Online resources spanning multiple industries and multiple geographies
- 12-month access post completion of live sessions
- URL: <https://anklesaria.talentlms.com/index>



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Using the Anklesaria Online Learning Academy

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Implementing Total Cost Solutions 3.0: Moving from Knowing to Doing

Implementation Checklist: Moving from Knowing to Doing

- Set up meeting with Anklesaria Coach
 - Identify suitable project to use the Anklesaria Toolkit
 - Select participants (Managers, Analysts, stakeholders, ...) and develop scope of work
 - Conduct weekly or bi-weekly calls to monitor progress, share learnings and develop negotiation strategy
 - Make presentation to leadership and stakeholders for critique and buy-in
 - Present model/s to supplier and negotiate accordingly
 - Create a library to store templates, data sources etc
 - Update the library from time to time

Value of Strategic Cost Management

To Customers:

- Develop a sustained competitive advantage
- Understand cost structures better
- Continuously improve
- Break down customer-supplier barriers
- Set the stage for a “real” alliance
- Leverage supplier’s knowledge to reduce costs

To Suppliers:

- Improve cost competitiveness
- Increase market share
- A different insight into costs
- Reduce business risk through stability
- A methodology for cost management
- Leverage customer’s resources to reduce costs

And Finally...

**Every morning in Africa, a gazelle wakes up.
 It knows it must run faster than the fastest lion,
 or it will be killed.**

**Every morning a lion wakes up.
 It knows it must outrun the slowest gazelle,
 or it will starve to death.**

It doesn't matter whether you are a lion or gazelle:

Source: Roger Bannister





***WHEN THE SUN COMES UP
YOU HAD BETTER BE RUNNING***

Strategic Cost Management:

Course Evaluation

STRATEGIC COST MANAGEMENT SEMINAR EVALUATION

Date(s) of seminar: _____ Instructor Name: _____

Participants Name (Optional): _____

Where do you work? Company: _____

Division / Department: _____

Current job position / title: _____

How long have you worked in this industry?

- Never 1 year or less 2-5 years 5-10 years 10 or more

For the questions below, please circle your choice using the following key:

- ① = Unacceptable ② = Poor ③ = Average ④ = Good ⑤ = Excellent

Value of seminar workbook & templates 1 2 3 4 5
Comments:

Value of case studies / team project 1 2 3 4 5
Comments:

Effectiveness of audio / visuals 1 2 3 4 5
Comments:

Quality of instruction 1 2 3 4 5
Comments:

Overall quality of the seminar 1 2 3 4 5
Comments:

What was the value of the seminar to your time? (Please check box)

Value exceeded time Value equaled time Value less than time

Would you be interested in a seminar about:

Collaborative Strategies to Manage the Cost of the Supply Chain? Yes No

Analyzing Supply Markets? Yes No

Developing a Effective Strategic Sourcing Process ? Yes No

Seminar strengths: what was most valuable to you?

Seminar weakness: what would you recommend you improve?

Other comments

We value your comments. If you did not submit this evaluation to the instructor at the end of the seminar, fax it to (858) 755-2139 or mail it to:

Anklesaria Group, Inc.
1172 Cuchara Drive
Del Mar, CA 92014

APPENDIX A:
List of Data Sources

Appendix A: List of Data Sources

DATA SOURCE / HYPERLINK NAME	URL
AGI Data Sources	www.anklesaria.talentlms.com (Username/Password: one used for pre-work)
USA Trade Online	http://www.usatradeonline.gov/
Securities Exchange Commission (SEC)	http://www.sec.gov
Foreign Labor Statistics	http://www.bls.gov/fls/home.htm
International Statistical Agencies	http://www.bls.gov/bls/other.htm
International Labor Organization	http://laborsta.ilo.org
Foreign Government Data Sources	http://www.lib.umich.edu/govdocs/stforeig.html
Standard & Poor's Industry Surveys*	http://www2.standardandpoors.com
IDC*	http://www.idc.com
Gartner*	http://www.gartner.com
Career Journal*	http://www.careerjournal.com
Salary.com*	http://www.salary.com
Hoovers*	http://www.hoovers.com
SIC Code Search	http://www.osha.gov/oshstats/sicser.html
NAICS Code Search	https://www.census.gov/econ/isp/
Eurostat	http://epp.eurostat.ec.europa.eu
European NACE Codes	http://ec.europa.eu/eurostat/ramon/index.cfm?TargetUrl=DSP_PUB_WELC
UK SIC Codes	https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007
Singapore SSIC Codes	http://www.singstat.gov.sg/methodologies-standards/statistical-standards-and-classifications/SSIC
Australia SIC Codes	http://www.abs.gov.au/ausstats/abs@.nsf/0/7cd8aebba7225c4eca25697e0018faf3?opendocument
India Ministry of Statistics and Programme Implementation	http://mospi.nic.in/
US Economic	https://www.census.gov/econ/isp/

Census	
National Bureau of Statistics of China	http://www.stats.gov.cn/
RMA*	http://www.rmau.org
Bizminer Financial ratios*	http://www.bizminer.com/products/analysis/industry/financial-ratios-profiles.php?aid=78
Bureau of Labor Statistics	http://www.bls.gov
Occupational Employment Statistics	http://www.bls.gov/oes/home.htm
Dun & Bradstreet*	http://www.dnb.com
Producer Price Index	http://www.bls.gov/ppi/home.htm
Employment Cost Index	http://www.bls.gov/ncs/ect/home.htm
Labor Productivity	http://www.bls.gov/lpc/home.htm
Multifactor Productivity	http://www.bls.gov/mfp/home.htm
Mergent Online*	http://www.mergentonline.com/login.php
IBIS world*	http://www.ibisworld.com/
Business Week	www.businessweek.com
Capital IQ*	www.capitaliq.com
China Briefing	www.china-briefing.com
Google Finance	http://www.google.com/finance
Reuters*	www.reuters.com
Platts*	www.platts.com
Salary Expert	www.salaryexpert.com
Factiva*	www.factiva.com
Yahoo Finance	http://biz.yahoo.com/ic/
Lexis Nexis*	http://www.lexisnexis.com/
EMIS*	https://www.emis.com/
Economic Intelligence unit*	http://www.eiu.com/public/
Frost and Sullivan*	www.frost.com
Forrester Research*	www.forrester.com
Worldwide statistical resources	http://stats.oecd.org/source/list.asp
Mintel*	www.mintel.com
Bizstats	http://www.bizstats.com/

ONDD (Belgium Export Credit Agency)	https://www.credendo.com/
Organisation Internationale des Constructeurs d'Automobiles	http://www.oica.net/
Propurchaser*	http://www.propurchaser.com/
Economagic	http://www.economagic.com

**require subscriptions*

Other Anklesaria Courses Offered:

- Strategic Sourcing: Creating a Winning Supply Base
- Supply Market Analysis: Creating Competitive Advantage through the Power of Knowledge
- Financial Analysis for Effective Supply Chain Management
- AIM & DRIVE: Eight Steps to Managing Costs through the Supply Chain

"We have now fully deployed AIM & DRIVE at Nokia for all component solutions. AIM & DRIVE is also playing a major role in our overall cooperation and collaboration with our suppliers' network in a very positive partnership spirit which is the foundation of our strategy."

-Jean-Francois Baril
Senior VP Sourcing and Procurement:
Nokia

"I have used the Anklesaria Cost Roadmap repeatedly over the last ten years with three organizations, to great effect each time. We have been able to take millions of dollars out of supply chain costs through knowing just how much there is that can be avoided, either by identifying and jointly removing those costs that are not valid for us, or through helping suppliers take down their own cost base. The AIM&DRIVE® process is a great way to get a structured start, running the process in parallel with multiple suppliers."

-Neil A. Deverill
Former VP Procurement:
Anglo American Corporation
Philips
Electrolux

"I truly believe that this process (AIM & DRIVE®) has probably been the single biggest catalyst for change in this organization over this past year."

-Robert Croatt
President:
Goebel Fixture Company

"I have been personally involved with Anklesaria's AIM&DRIVE® process over the past several years with two large employers. The process really works..! I have yet to find any other methodology that provides a comparable return-on-investment. Jimmy and his team are true professionals, and they deliver incredible results each and every time."

-Steve Kesinger
Vice President, Procurement
Nordstrom