

SUPPLYING INNOVATION



# Ensuring Your Procurement and Inventory Management Systems are Optimized

August 25, 2011

# Agenda

## **Introduction and Objectives**

**Safety Awareness**

**Strategic Sourcing**

**Purchasing**

**Procurement**

**Total Cost of Ownership**

**Optimizing your Procurement Processes**

**Supplier Relationship Management**

**Optimizing your Procurement Processes**

**Inventory Management**

**ATC's Solutions**



## Introduction and Objectives

### **Safety Awareness**

#### Strategic Sourcing

Purchasing

Procurement

Total Cost of Ownership

#### Optimizing your Procurement Processes

Supplier Relationship Management

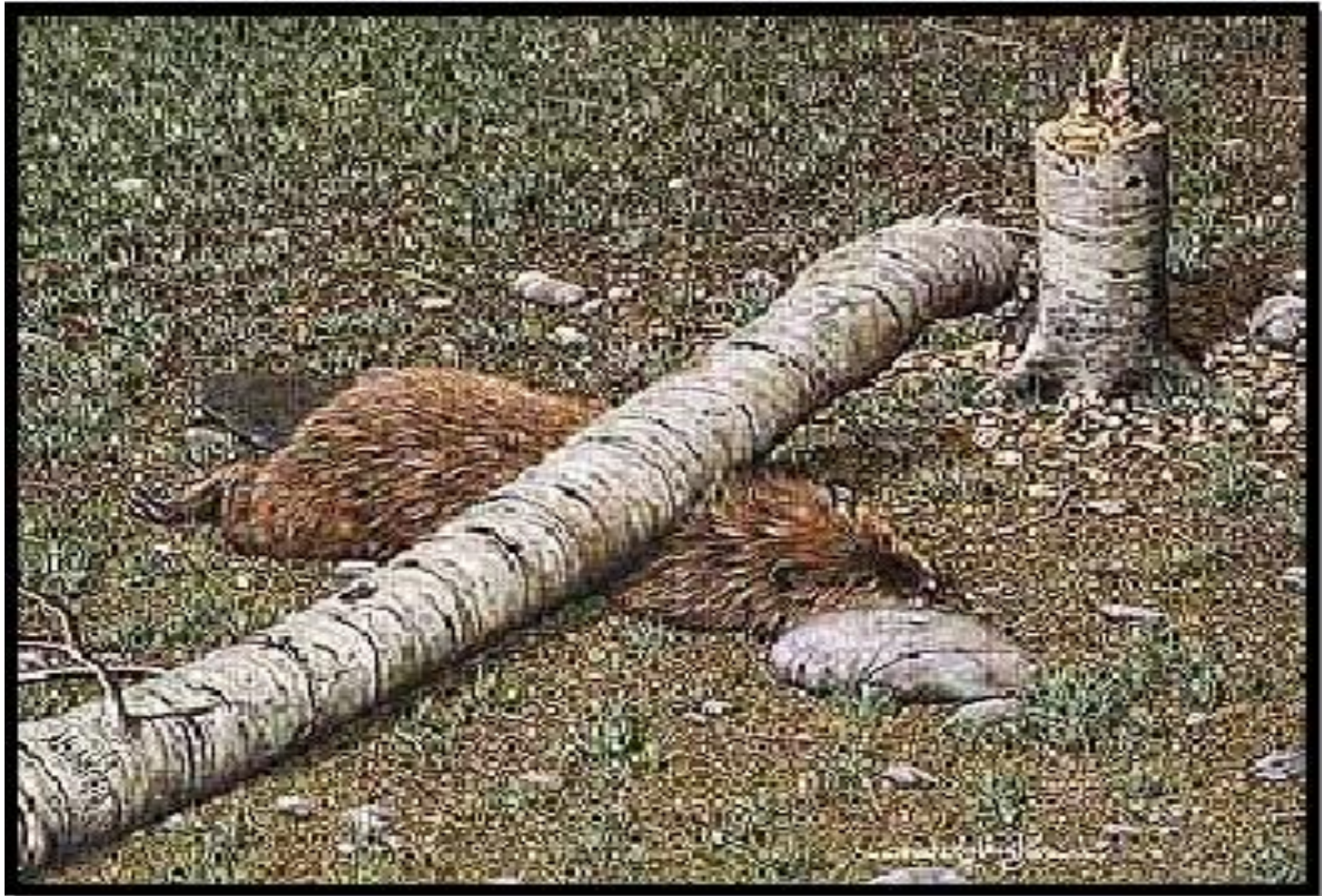
#### Optimizing your Procurement Processes

Inventory Management

#### ATC's Solutions



# Safety Moment and share: Because there Is No Such Thing As Luck!

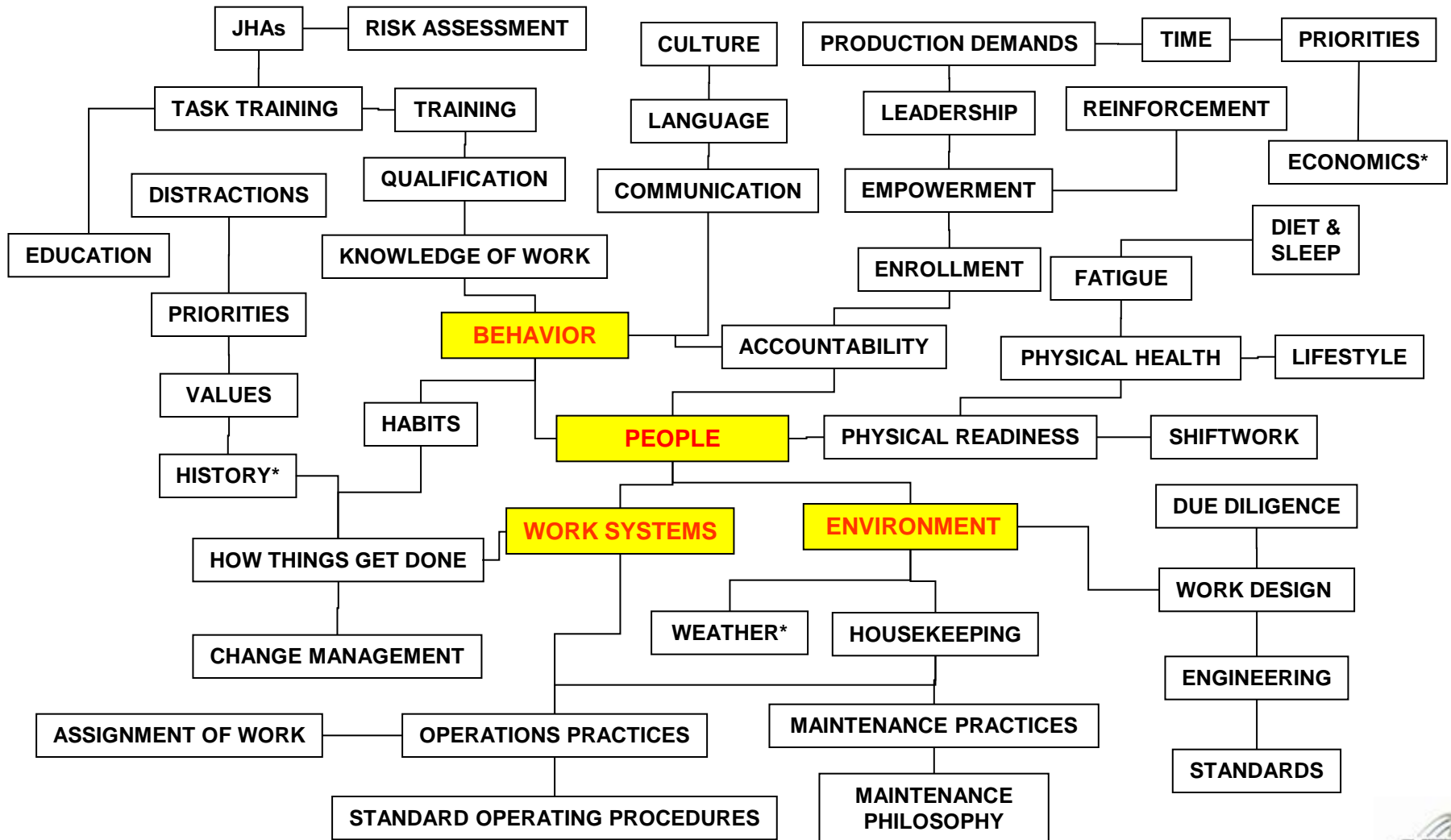


# Why Employees Get Hurt

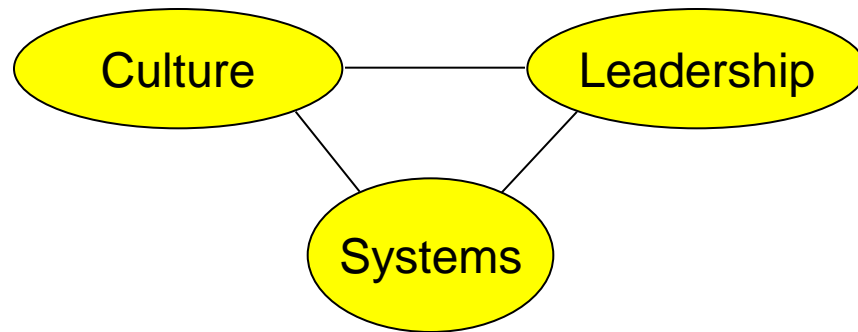
- ❖ Not following procedure
- ❖ Pace of work
- ❖ False sense of security
- ❖ Being in the line of fire
- ❖ Not paying attention
- ❖ Not properly supervised
- ❖ Poor work planning
- ❖ Production pressure
- ❖ Inexperience
- ❖ Long work hours
- ❖ Equipment failure
- ❖ Weather
- ❖ Defective PPE use
- ❖ Unidentified hazards
- ❖ Poor maintenance
- ❖ Inadequate training
- ❖ Poor housekeeping
- ❖ Poor communication
- ❖ Third party behavior
- ❖ Poor personal health



# Factors that Contribute to Injuries



# Safety, Health and Environmental Management System



1. Policy, Procedures & Planning
2. People
3. Hazard Management
4. Environmental Management
5. Measure, Review & Improve

PPE, safety committees, rules, procedures, housekeeping, inspections, warning signs, training, lock-out/tag-out, background checks, safety meetings, preventative maintenance, machine guarding, first aid, etc, etc.

# Making Safety a Personal Value

- ❖ Know how to work safely
- ❖ Accept responsibility for your actions
- ❖ Actively care for others
- ❖ Report *all* injuries and near misses
- ❖ Speak up if you see unsafe behaviors
- ❖ Lead by example. Stop, Think, Act



For Everything You Do:

**Stop! Think! Act!**

**Safely...**



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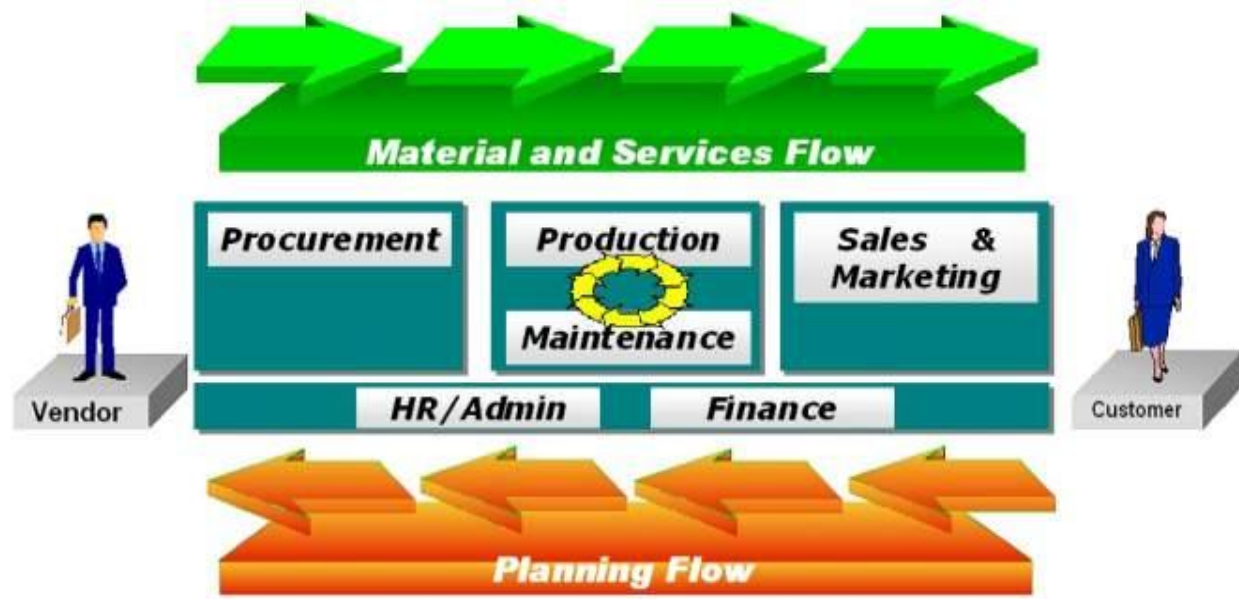
# Introduction – Procurement ... is a part of the supply chain

## Procurement is ...

... all third-party sourcing activities at strategic and operational levels to ensure minimum total cost of ownership.

## Purchasing is ...

... the systematic process of deciding what, when and how much to purchase; the act of purchasing it; and the process of ensuring that what is required is received on time in the quantity and quality specified.



# ...and then there is Strategic Sourcing

## How much do you know already about strategic sourcing?

- ❖ What does strategic sourcing mean to you?
- ❖ What is your level of knowledge of strategic sourcing?
- ❖ What are some of the main challenges/difficulties you have regarding strategic sourcing?



# Strategic Sourcing – What is it?

## ❖ Strategic Sourcing:

- is a sophisticated and **thorough approach** that is used by Procurement professionals to procure goods and services
- is the principal driver for Procurement organizations to form **sustainable relationships** according to commercial, technical, environmental, social, and safety and health criteria
- is methodical and rigorous



# What is the value of a Strategic Sourcing Process (SSP)?

❖ It focuses on:

- **Total cost**, not purchase price
- Consolidation of purchasing power
- Reduction of supplier base and **stronger supplier relationships**
- **Redesign and realignment of business processes** and flows to eliminate redundancies & non-value-add activities
- Improvement in cross-functional teamwork, greater contract compliance and easier change management



# What is the value of a Strategic Sourcing Process (SSP)?

## ❖ Strategic Sourcing:

- minimizes costs and creates savings
- facilitates improved internal and external relationships
- creates sustainable cost reductions
- encourages compliance to contracts



# What is the value of a company's SSP?

- ❖ It provides a structured way to perform strategic sourcing activities
- ❖ It provides a discipline that forces individuals to cover each critical aspect of strategic sourcing
- ❖ It enables companies to standardize activities and outputs associated with strategic sourcing activities
- ❖ It is used by many companies globally
- ❖ It facilitates communication between business units within companies





# Introduction

## Category Assessment Template (“CAT”)

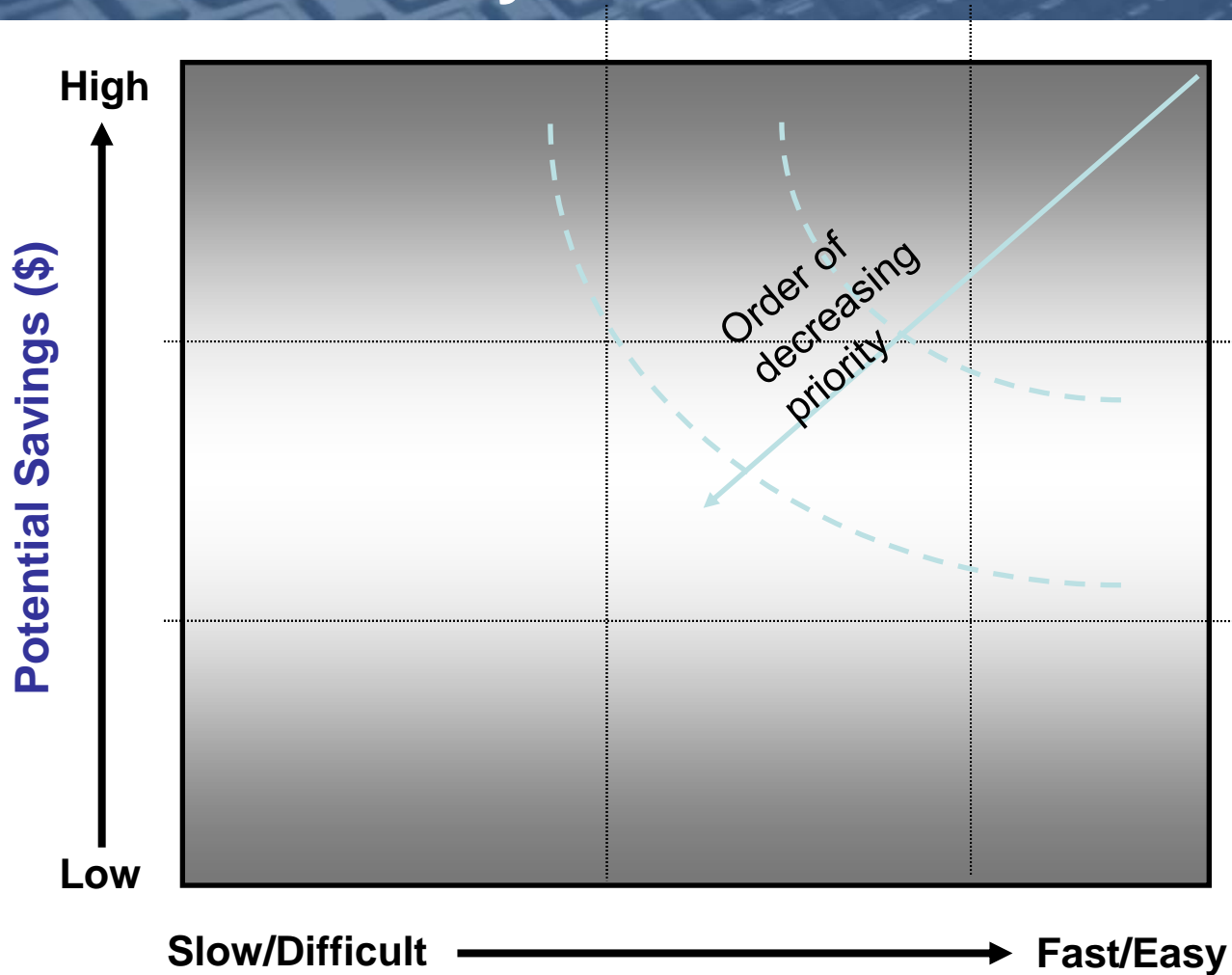
<b>Commodity Name</b>				<b>PCS Code</b>			
<b>Spend Characteristics</b>		<b>Supplier Analysis</b>			<b>Benefit Assessment</b>		
2011 Spend in m€		top 5 suppliers 2011	value in m€	% of Total Spend	opportunity in %		
% of Total Spend					opportunity in €		
# of POs					difficulty (high/medium/low)		
# of invoices					priority (high/medium/low)		
avg € per line item					target in %		
procurement responsibility					target in €		
core model (y/n)							
catalogable (y/n)							
<b>Buyer issues &amp; constraints</b>		<b>Supply Market Analysis</b>			<b>Opportunity areas/strategies/enablers</b>		
<b>Spend comments</b>		<b>Contract assessment</b>			<b>Benefit assessment comments</b>		
		<b>Supplier e-readiness assessment</b>			<b>Sign-off</b>		





# Introduction

## Commodity Prioritization Matrix (CPM)



“Speed to Benefit (Time)” OR “Complexity” (Difficulty)



# Total Cost of Ownership (TCO)

- ❖ We introduce this concept now because it is **key** to strategic sourcing so it is important that we have a common understanding of it



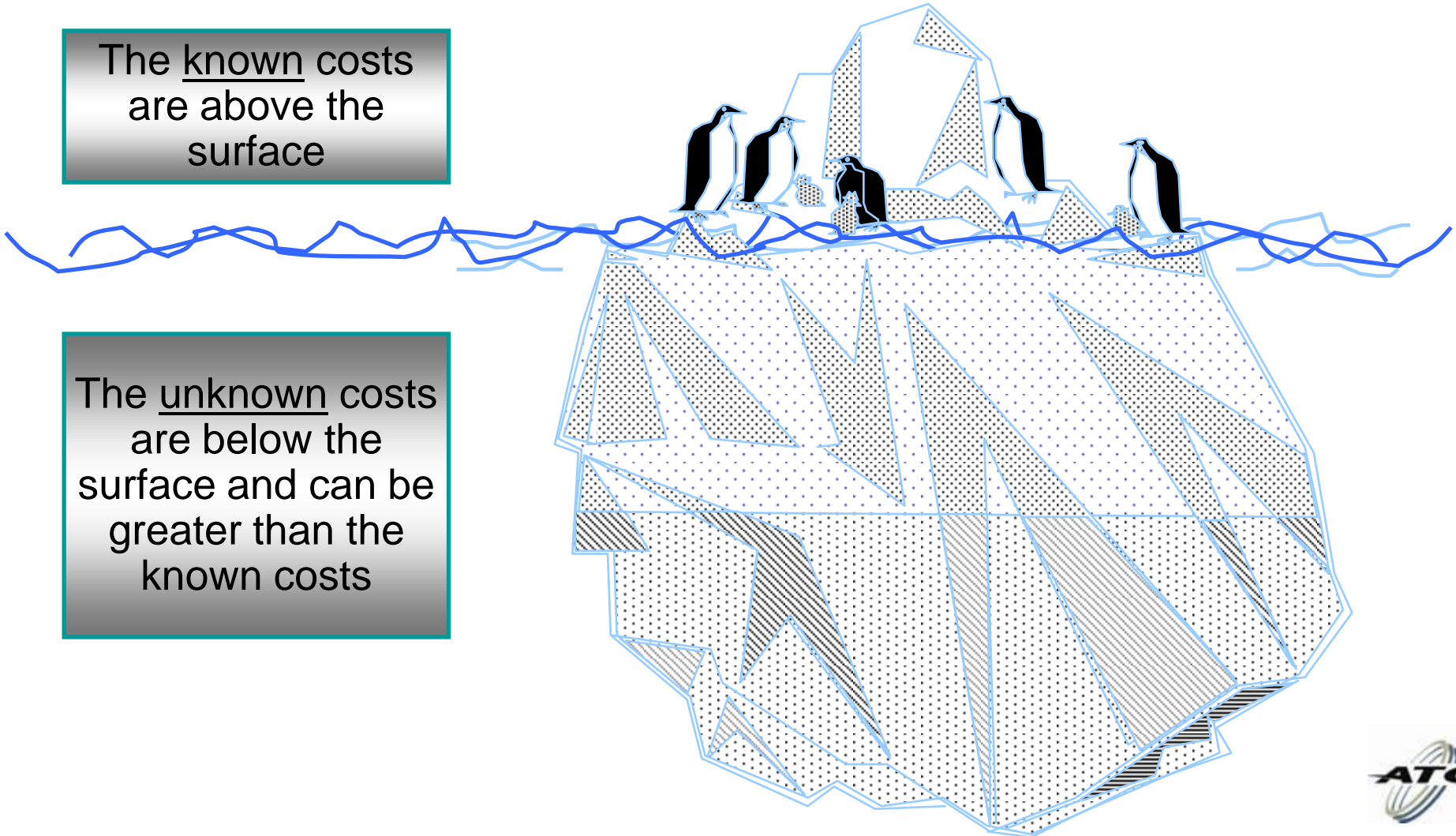
# Introduction

## Total Cost of Ownership (TCO)

The Total Cost of Ownership (TCO) concept can be illustrated by the “iceberg”

The known costs  
are above the  
surface

The unknown costs  
are below the  
surface and can be  
greater than the  
known costs



# Introduction

## TCO – What is it?

- **Intel:**

- “TCO is a calculation of the expense involved in deploying, maintaining and troubleshooting computer resources in the enterprise.”

- **ISM:**

- “The total cost of ownership can be defined as the present value of all costs associated with a product, service, or capital equipment that are incurred over its expected life.”

- **ATC:**

- initial acquisition costs + value of (internal business costs (operation, financing, training, maintenance, administrative, inventory carrying costs) + joint supplier-company-customer life cycle costs (specifications, R&D costs).



# Introduction

## TCO – Why do it?

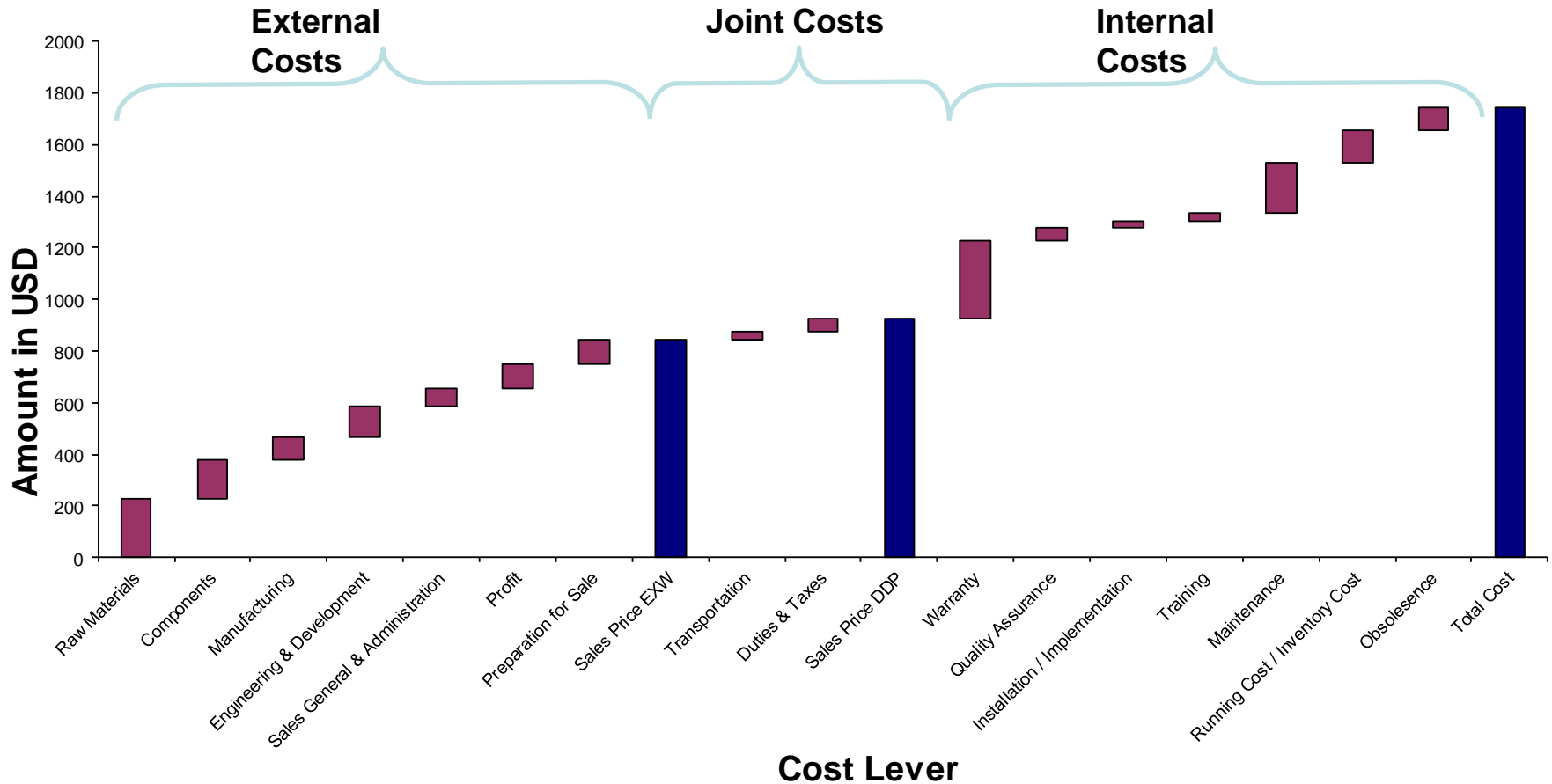
- ❖ To understand the total cost of owning a commodity or a service to:
  - Reduce external costs (**informed negotiations with suppliers**)
  - Reduce internal costs (**improved processes**)
  
- ❖ To contribute to the bottom line
  - ▶ **A \$ saved in procurement** contributes a **much larger fraction to the bottom line** than an extra \$ of sales
  - ▶ For a company with a Total Spend of 1 billion dollars, a **1% reduction** would boost gross margin **by 10 million!**
  - ▶ The nature of most businesses demands an intensive effort to study, understand, and manage TCO of all major commodities



# Introduction

## TCO – What does it look like?

TCO Structure of a product or service



# Introduction

## TCO – How do I build one?

- ❖ **Map the process** and develop TCO categories
- ❖ Determine cost elements for each category
- ❖ Determine how each cost element is to be measured
- ❖ Gather data and quantify costs
- ❖ Develop a cost timeline



# Introduction

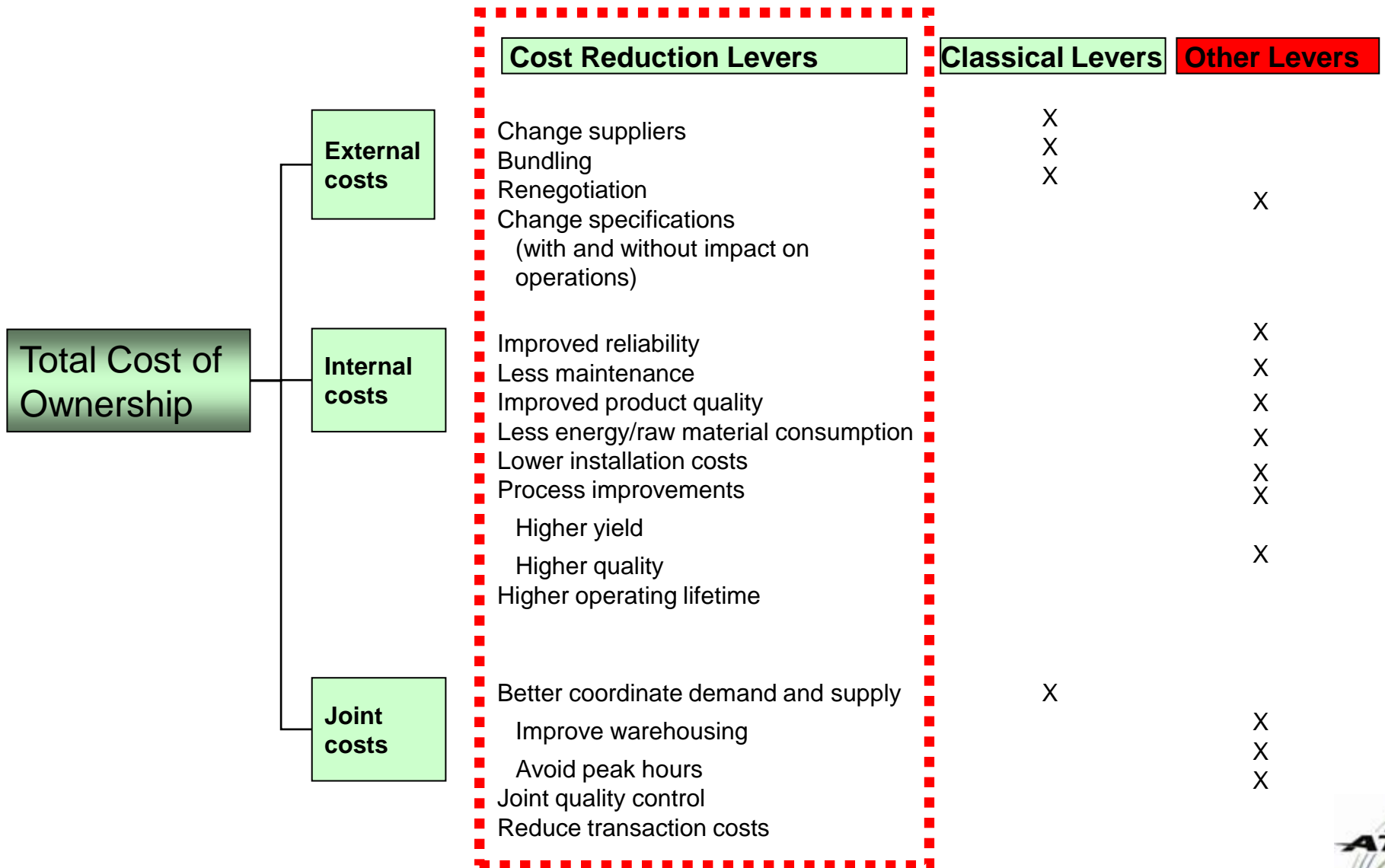
## TCO – What is it made up of?

Element	Examples
<p><b>Purchase price</b> — The amount paid to the supplier for the product, service, or capital equipment</p>	<p>hard cost of product, service</p>
<p><b>Acquisition costs</b> — All costs associated with bringing the product, service, or capital equipment to the customer's location</p>	<p>sourcing, administration, freight, taxes</p>
<p><b>Usage costs</b> — In the case of a product, all costs associated with converting the purchased part/material into finished product and supporting it through its usable life. In the case of a service, all costs associated with the performance of the service that are not included in the purchase price. In the case of capital equipment, all costs associated with operating the equipment through its life</p>	<p>inventory, conversion, scrap, warranty, installation, training, downtime, and opportunity costs</p>
<p><b>End-of-life costs</b> — All costs incurred when a product, service, or capital equipment reaches the end of its usable life, net of amounts received from the sale of remaining product or the equipment (salvage value), as the case may be</p>	<p>obsolescence, disposal, cleanup, and project termination costs</p>

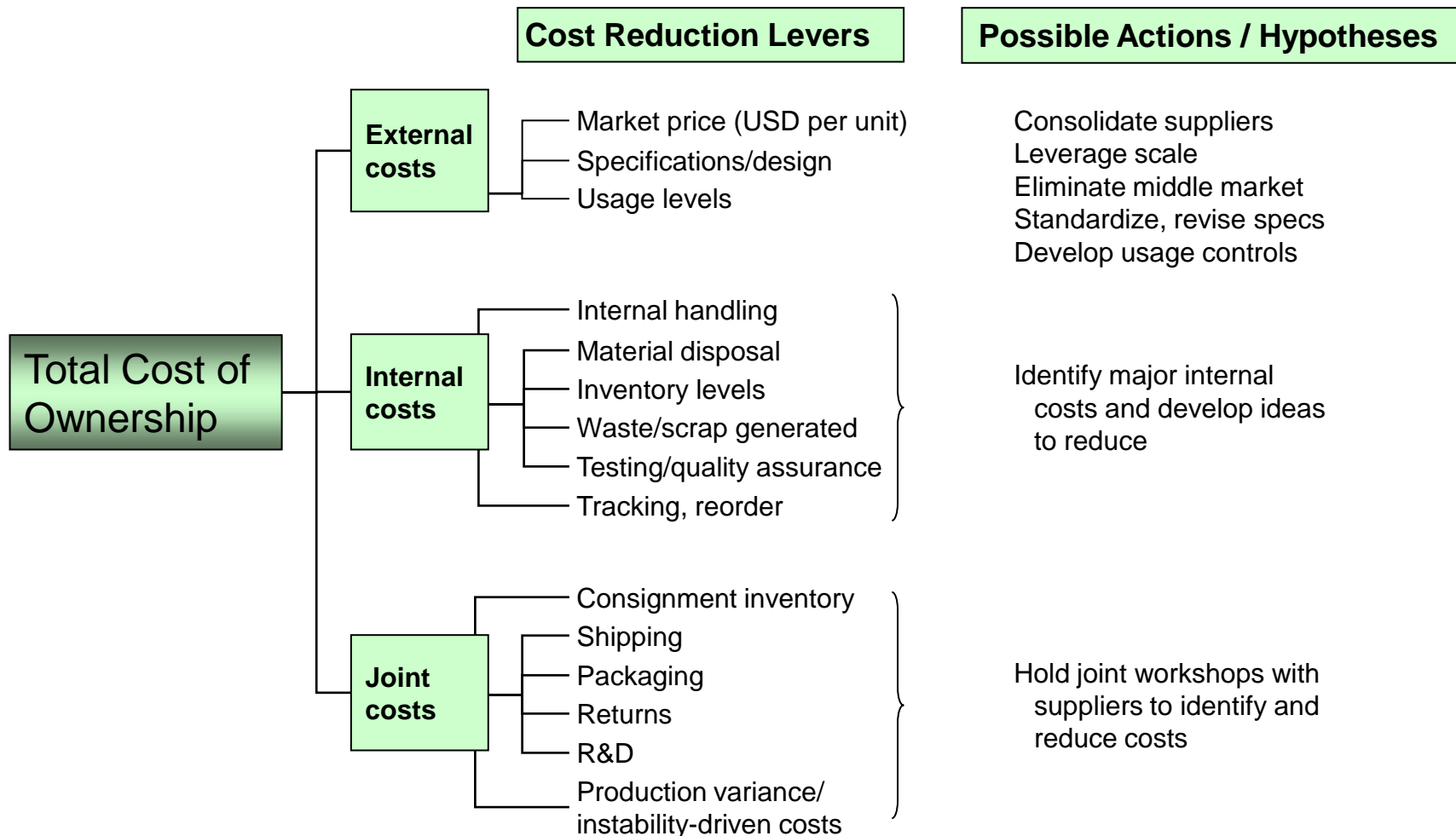


# Introduction

## What are TCO Cost Reduction Levers ?



# What are the Possible Actions / Hypotheses?



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# Optimizing your Procurement Processes



## Supplier Relationship Management

Through a solid  
procurement  
infrastructure...



# Supplier Relationship Management (SRM)

## ***What is SRM?***

- ❖ SRM involves working closely with suppliers to develop the communication and trust required such that both parties can mutually identify the scope for greater efficiencies and actively participate in their implementation
- ❖ It typically results in projects that require time and resource therefore SRM is more likely to be deployed with suppliers where there is a large spend, high risk, or strategic value



# Supplier Relationship Management – Definition

## Supplier Relationship Management should be ...

- ❖ ...a continuous analysis, development and implementation of business relationships with suppliers
- ❖ ...a recurrent process for the segmentation, qualification, selection and development of suppliers
- ❖ ...a cross functional activity throughout an enterprise
- ❖ ...part of the Procurement Policy



# Supplier Relationship Management – Objectives

- ❖ To measure and improve supplier relationships
  - To enhance profit through reduced operational cost of the supply chain whilst maintaining quality
  - To create competitive advantage and drive revenue by jointly bringing new, better and more customer-centric solutions to market faster
  - To increase the quality and efficiency of communication
  - To improve negotiations and decisions due to better information and records
  - To drive down total cost and manage risk
  - To increase efficiency of procurement processes



# Supplier Relationship Management – Impact (Suppliers)

## ❖ Suppliers improve performance and behavior

- Suppliers should view a company as **one** customer rather than a number of single entities
- Suppliers better understand the responsibilities of a company's technical & commercial personnel – improved communication/information flow (e.g. shared spares & equipment)
- Suppliers nominate Key Account Managers dedicated to your company:
  - Escalation and resolution of issues
  - Clarification of lines of communication
- Suppliers are more prepared to alter or improve design for your company



# Supplier Relationship Management Impact (on Your company)

- ❖ Increases visibility of key suppliers to its senior management
- ❖ Improves its negotiation position
- ❖ Focus resources on key suppliers
- ❖ Selection of new suppliers are structured
- ❖ Collaboration brings improved technologies faster to the operation
- ❖ Preferred customer status requires adequate behavior towards supplier



# Supplier Relationship Management (SRM)

**A transformation from  
Vendor transaction  
management to Strategic  
Relationship  
Management**

## SRM Process

- ❖ SRM furthers the Strategic Sourcing Strategy to measure performance and drive continuous improvement through strategic partnerships
- ❖ Performance is measured via KPIs tracked using a weighted average score card methodology such as:

Vendor A	Q1 '08	Q2 '08	Q3 '08	Q4 '08
<b>Price - 25%</b>	<b>22.5</b>	<b>25.00</b>	<b>25.00</b>	<b>25.00</b>
Price Level - 60%	90.00	100.00	100.00	100.00
Price History - 40%	90.00	100.00	100.00	100.00
<b>Delivery - 30%</b>	<b>15.00</b>	<b>14.88</b>	<b>14.93</b>	<b>16.68</b>
On-Time Delivery - 80%	41.67	41.64	42.18	48.89
Shipping Instruction Compliance - 20%	83.33	81.45	80.12	82.52
<b>Quality - 30%</b>	<b>30.00</b>	<b>30.00</b>	<b>30.00</b>	<b>30.00</b>
Compliance to requirements	100.00	100.00	100.00	100.00
<b>Service - 15%</b>	<b>13.00</b>	<b>12.80</b>	<b>13.20</b>	<b>13.50</b>
Service Quality - 34%	85.00	86.00	90.00	90.00
Service Timeliness - 33%	87.50	86.00	88.00	90.00
Technical Support - 33%	87.50	84.00	86.00	90.00
<b>Total - 100%</b>	<b>80.50</b>	<b>82.68</b>	<b>83.13</b>	<b>85.18</b>

### Performance Scale:

- **Excellent: 90% - 100%**
- **Good: 80% - 89%**
- **Fair: 70% - 79%**
- **Poor: <70%**

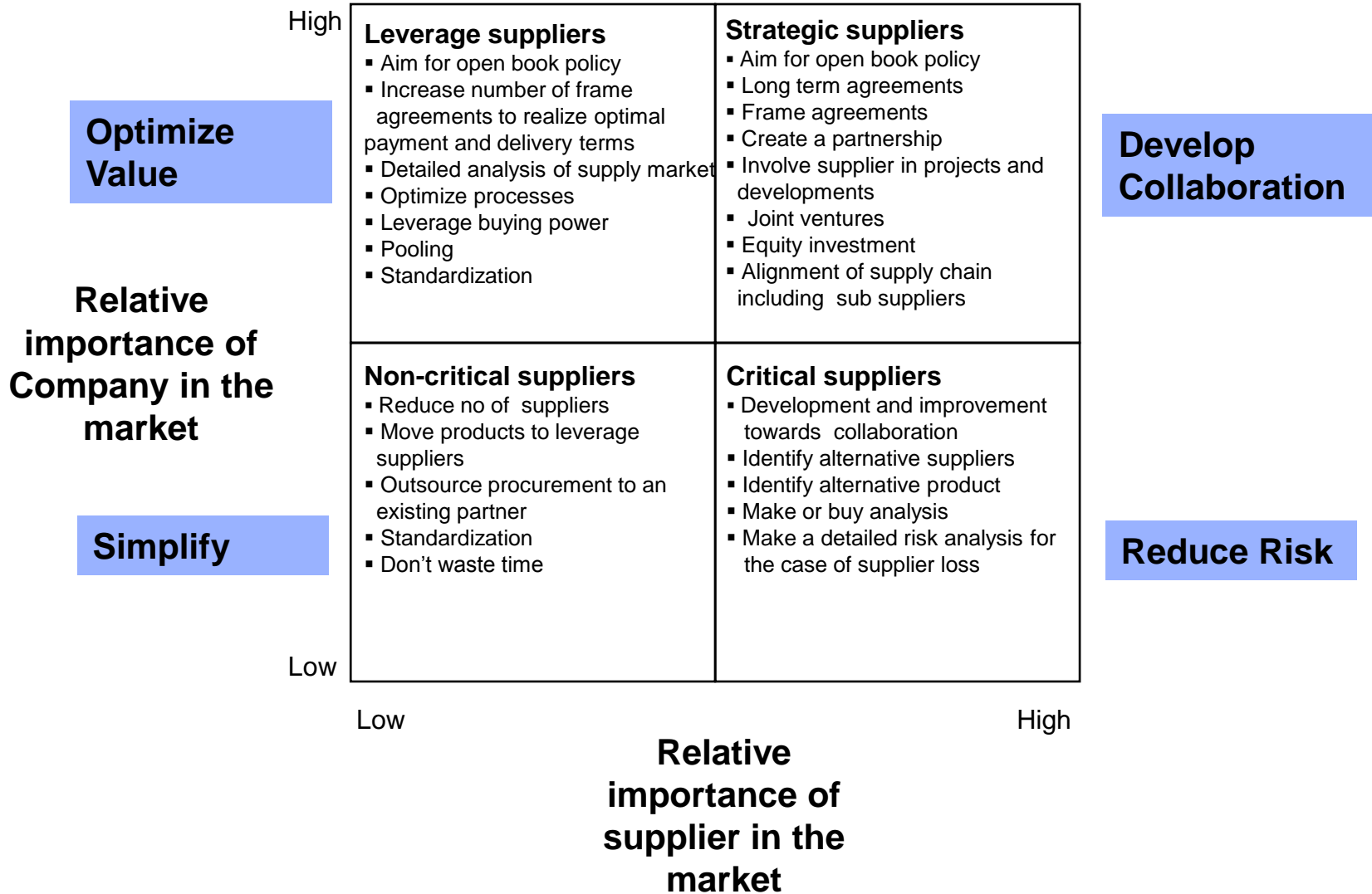
- ❖ Business Reviews with standard agendas will be established with key Supplier leadership to review performance, work through challenges and establish continuous improvement plans

**What gets measured gets done and what gets measured gets improved**



# Supplier Segmentation

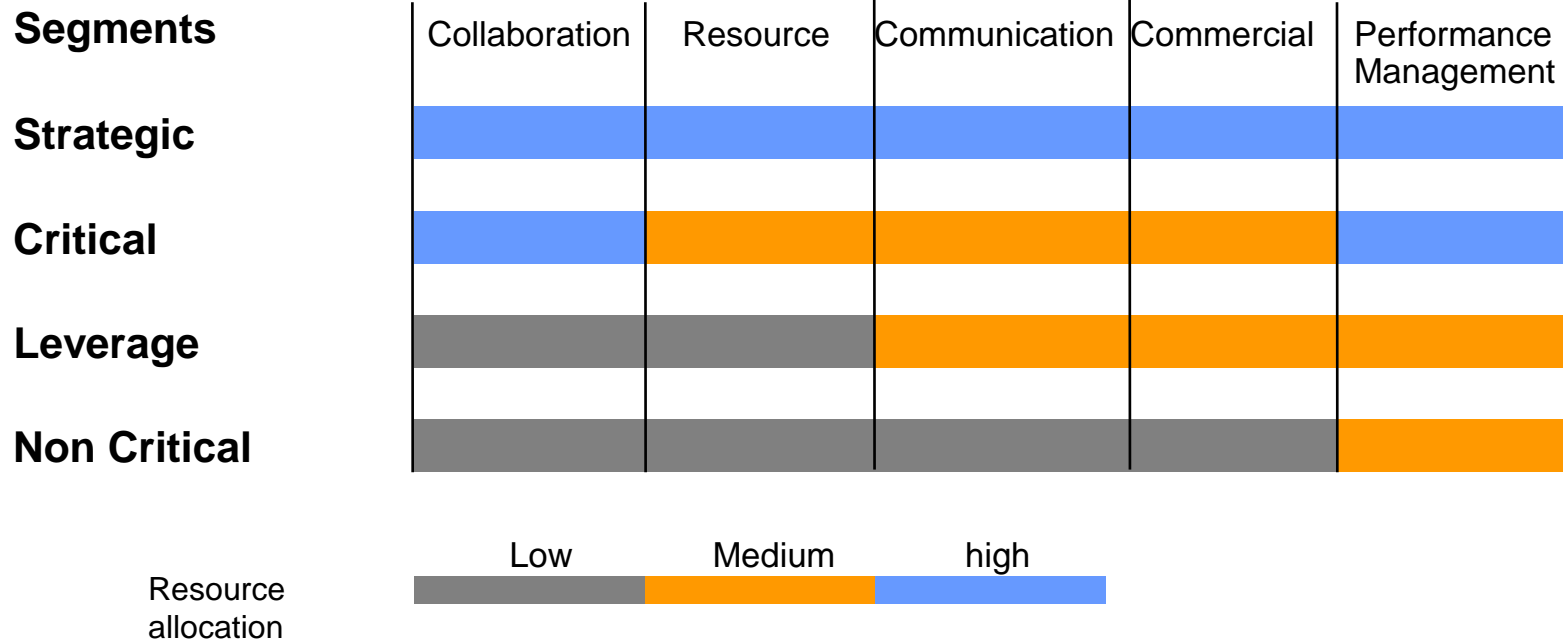
## Supplier Strategy Portfolio Matrix



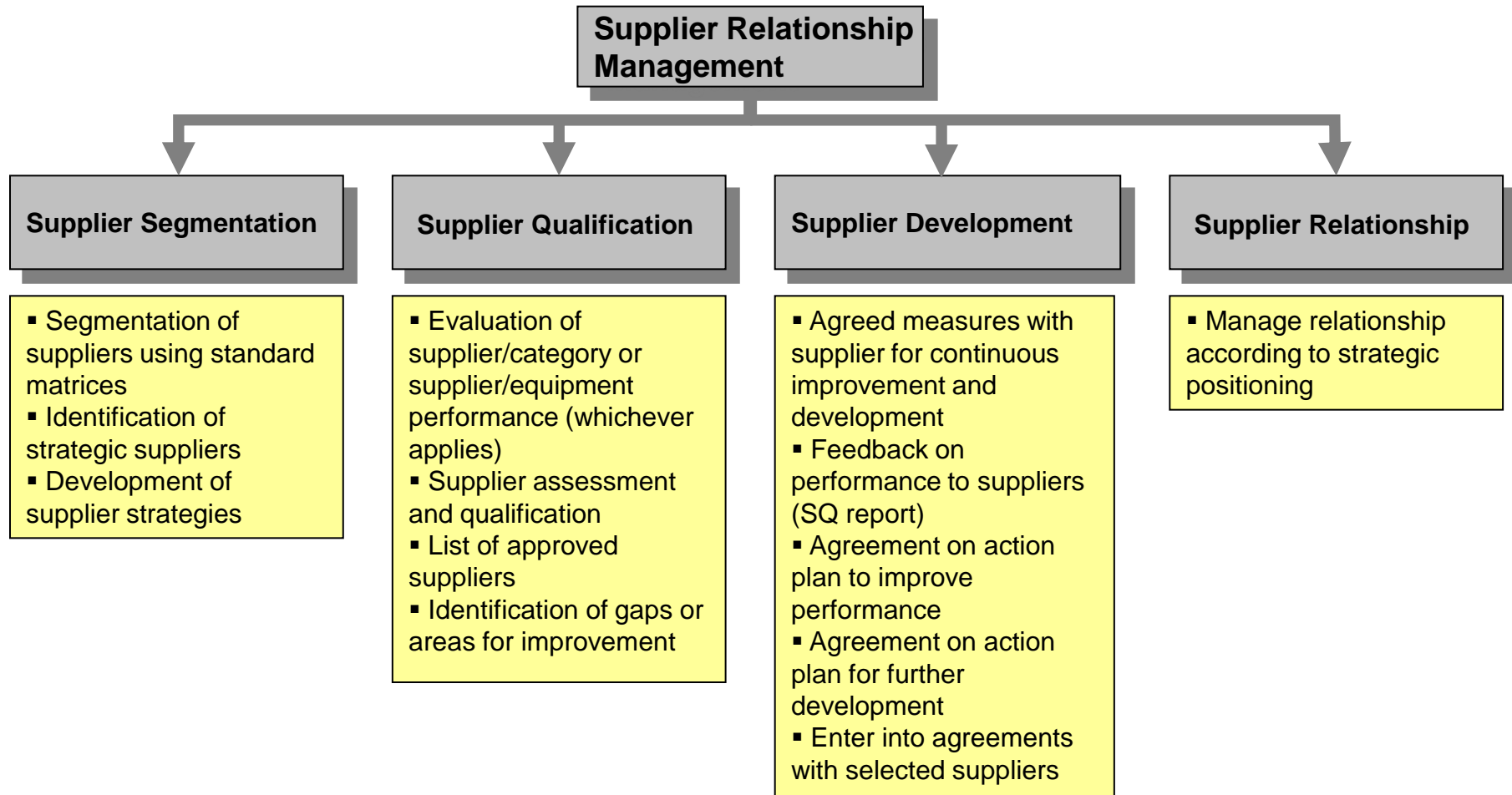
# Supplier Relationship Management – Effort

Collaboration with strategic suppliers may offer significant potential to create benefits, but is in many aspects challenging and time intensive.

## Supplier Management Focus



# Supplier Relationship Management



# Supplier Segmentation

## Supplier Segmentation

- Segmentation of suppliers using standard matrices
- Identification of strategic suppliers
- Development of supplier strategies



# Supplier Qualification

## Supplier Qualification

- Evaluation of supplier/category or supplier/equipment performance (whichever applies)
- Supplier assessment and qualification
- List of approved suppliers
- Identification of gaps or areas for improvement



# Supplier Relationship

## Supplier Relationship

- Manage relationship according to strategic positioning

# What about you...???

- ❖ What are some of the situations you've found yourself in that required strong supplier relationship management or occurred because of a poor supplier relationship?



# Key Messages

- ❖ Use the SRM system and standards and apply them in your operation
- ❖ Work with suppliers who provide products/services at a quality that offers us lowest TCO
- ❖ Use your limited resources for major and critical suppliers (supplier segmentation is key)
- ❖ Understand the strengths and weaknesses of your suppliers (greater transparency for development of suppliers)
- ❖ Communicate our expectations to suppliers and understand your suppliers' competence
- ❖ Maximize the information that results from the SQ process
- ❖ Improve your communication to operations
- ❖ Integrate clauses into contracts to cover weaknesses identified



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# Optimizing your Procurement Processes



## Inventory Management

Through a solid  
procurement  
infrastructure...



# Introduction – What is Inventory

- ❖ A stock or store of physical goods
  - Used to satisfy **customer requirements**
- ❖ A **current asset** on the balance sheet
  - Change in inventory levels impacts return-on-assets ( $ROA = \text{net profit} / \text{total assets}$ )
- ❖ On income stmt., shown as a **cost**
  - Part of cost of goods sold or operating expenses
  - Change in inventory level impacts profit margins

**Bottom line: Valuable resource as well as a source of potentially poor financial performance**



# Introduction

## Two Categories of Inventory

### Dependent demand inventory

- Demand tied directly to production of another item
- Given production schedule, quantity and timing of demand for components are known with high certainty

### Independent demand inventory

- Demand beyond firm's complete control, i.e. subject to external forces, not driven by demand for another item
- Firm may use forecasting models to predict demand
- Typically associated with finished goods in retail and distribution settings
- Also applies to situations where components/materials purchased far in advance of production



# Periodic Review Systems

- ❖ Advantages : Very easy to manage
  - Does not require constant monitoring of inv. levels
  - Two decisions: set the order time intervals and restocking target level
  - Amount of replenishment order (how much?)
  
- ❖ Disadvantages :
  - Tends to be a buildup of safety stock for any given level of customer service (protection against stockouts)
  - Stockouts can occur between time periods when inventory level is checked and replenished
  - Order quantity,  $Q$ , may not be large enough to take advantage of any quantity discounts available



# Continuous Review Systems

- ❖ Appropriate when inventory carrying costs are significant and thus closer monitoring of inventory levels is needed
- ❖ Key features:
  - Re-order quantity is fixed
  - Replenishment orders placed when inventory level reaches a pre-established re-order point target level
    - Fixed amount of inventory on-hand, not fixed point in time
  - Re-order point target based on demand and lead time factors plus amount of safety stock desired if there is uncertainty



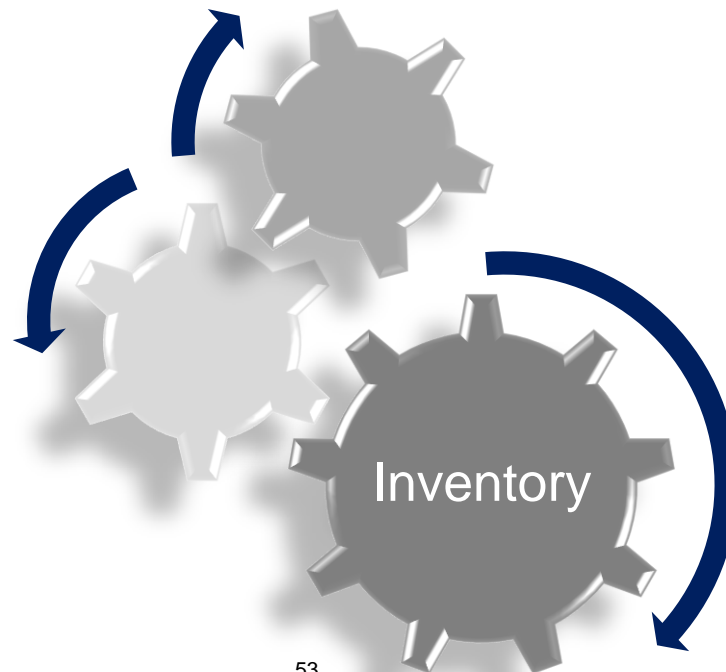
# Inventory Management

## ❖ Definition

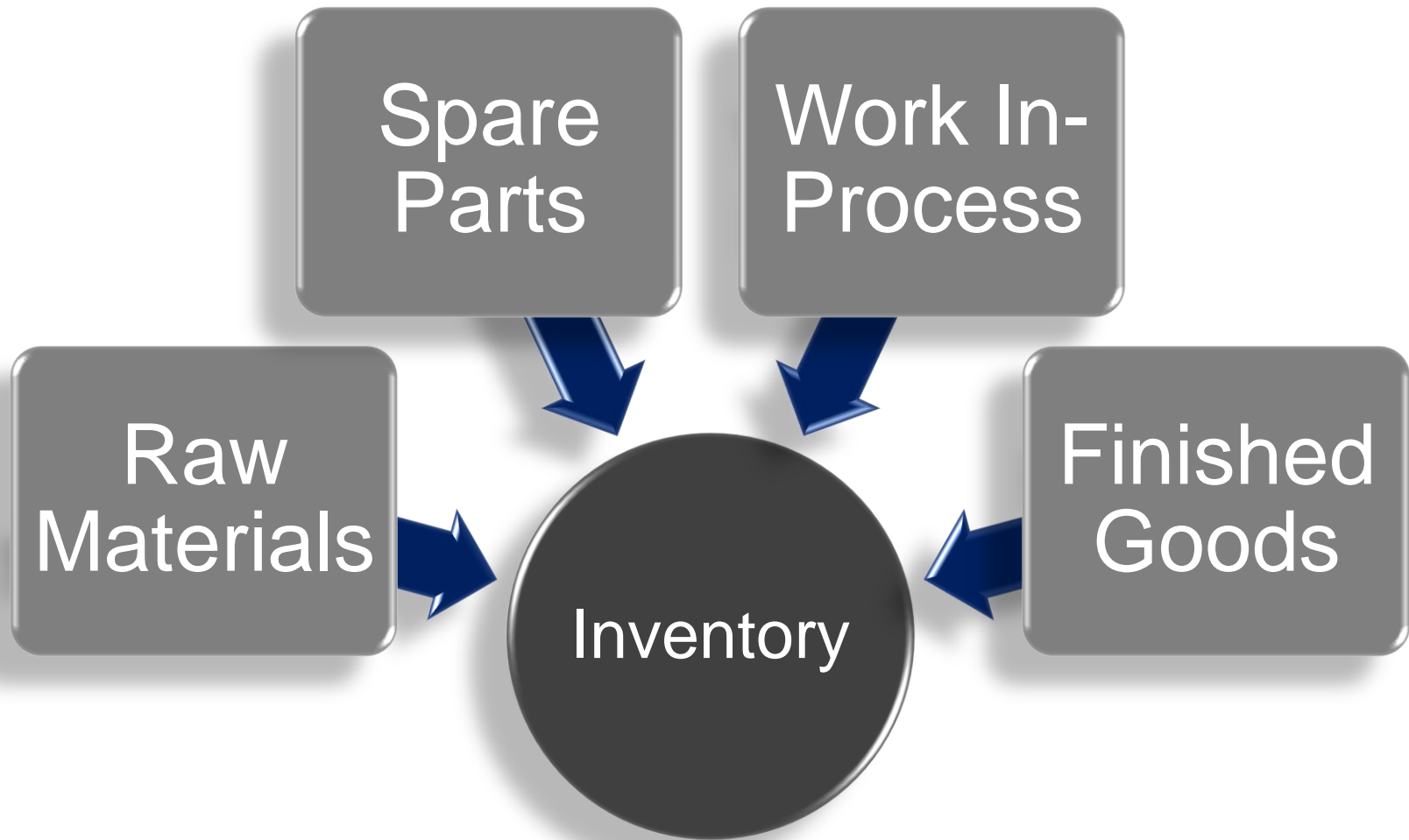
- Activities employed in maintaining the optimum number or amount of each inventory item

## ❖ Objective

- Is to provide uninterrupted production, sales, and/or customer-service levels at the minimum cost



# Types of Inventory



# Elements of Inventory Costs

Item/Product  
Cost

Holding/Carrying  
Costs

Ordering/Set-up  
Costs

Stock-out Costs



# Reasons For Holding Inventory



**Time**

**Uncertainty**

**Economies of Scale**



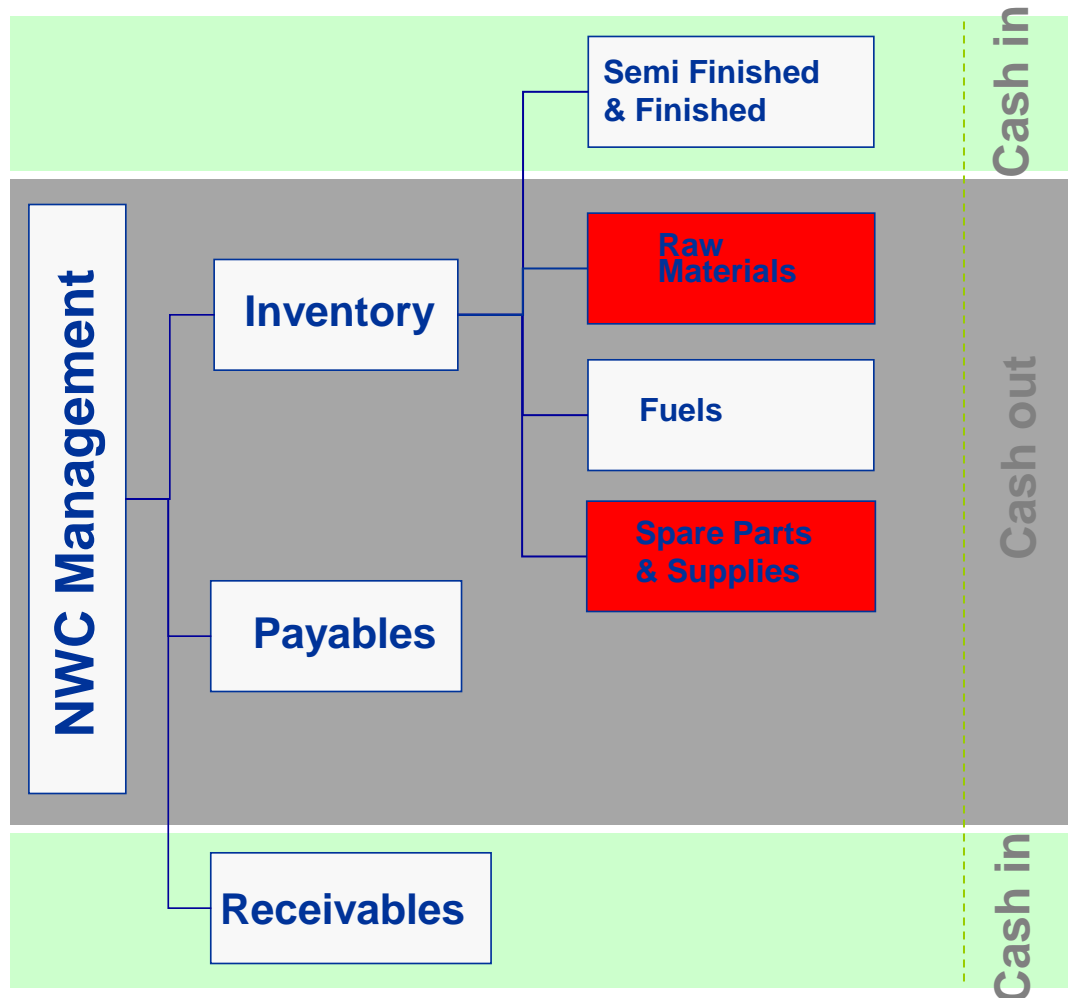
# Inventory Management Systems Purpose

- ❖ Maintaining a balance between too much and too little inventory
- ❖ Tracking inventory as it is transported between locations
- ❖ Receiving items into a warehouse or other location.
- ❖ Picking, packing and shipping items from a warehouse
- ❖ Keeping track of product sales and inventory levels
- ❖ Cutting down on product obsolescence and spoilage

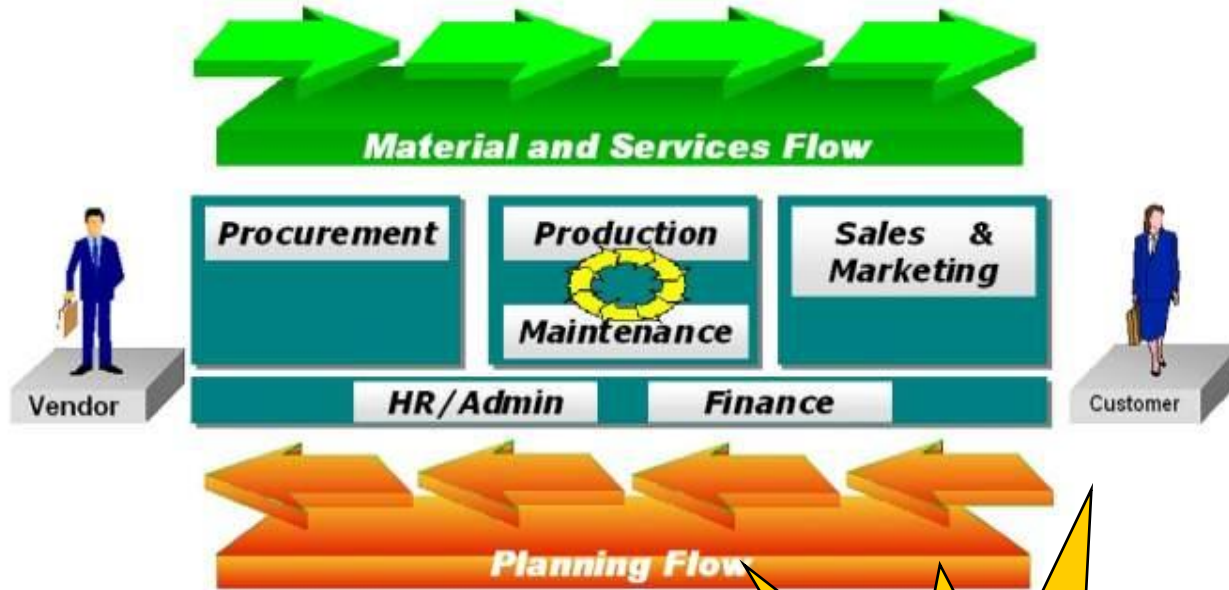


# Net Working Capital (NWC) - money that is not available for growth!

Consequently management of NWC has to be of high priority !



# NWC - The Management of Capital



- Warehouse Materials
- Production Materials
- Process Efficiency
- Plant Reliability
- Payment Terms
- Account Payables
- Optimization

Everything  
can be  
improved  
upon

# NWC - The Effects of Planning

- ❖ When you go to the grocery store to purchase milk, how do you justify how much to buy?
- ❖ When you purchase fuel for your car how much do you purchase and why?
- ❖ When you take cash out of an ATM, how much do you take out?
- ❖ When you purchase clothing, do you purchase goods based on quality or price?
- ❖ When you purchase an automobile what are the core points that help you make the decision on which one to purchase?

***Every moment spent planning saves three or four in execution!***



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# ATC Solutions

ATC is a leading Integrated Supplier in many Industries

We can be utilized for questions to address specific issues with your supply chain

Approach any of the ATC representatives if you want to discuss various tools, systems and concepts to improve your supply chain performance



SUPPLYING INNOVATION



Thank you