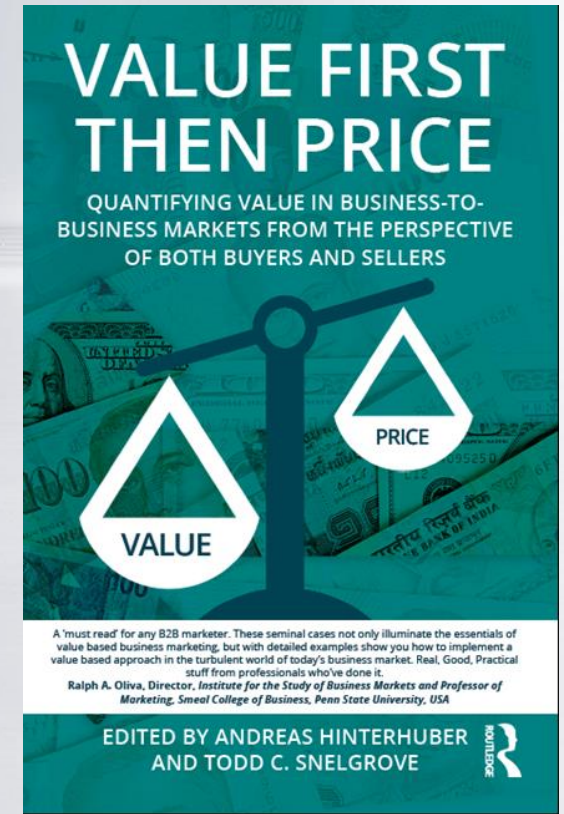




BEARING AND RELIABILITY CONFERENCE AND EXHIBITION 2017

Maintenance, Reliability, Operations, Production, and working together to create the greatest **Total Profit Added™**

Todd Snelgrove, Vice President, Marketing, Collaborative Operations, ABB, [todd.c.snelgrove@us.abb.com](mailto:todd.c.snelgrove@us.abb.com),  
Former Global Vice President Value

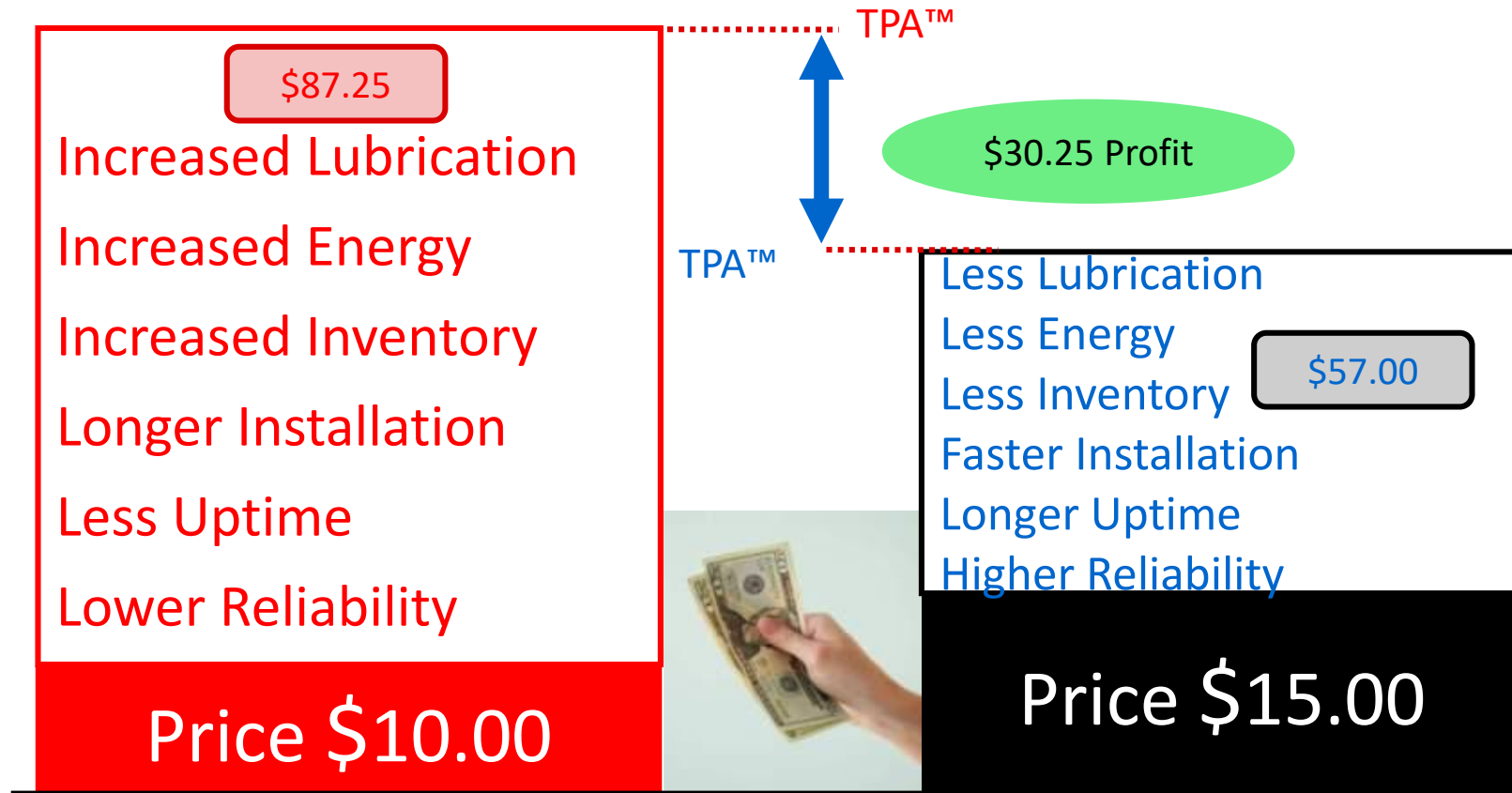


# Price $\neq$ Costs $\neq$ Value

“Ceteris Paribus”



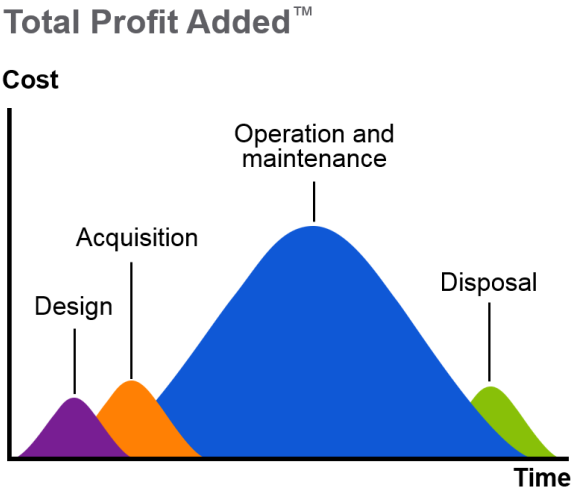
## Price vs. Total Cost – It's about measuring all the factors...



\$5.00 Investment Creates \$30.25 in Increased Customer Value

# Total Profit Added™

Design	Acquisition	Operation	Disposal
Robustness Ease of manufacture Tolerances Design costs <u>Margin</u> <u>Sales</u> Customer TPA™	Inventory amounts Payment terms Contract management Supplier consolidation Finance charges Obsolescence Receiving Unit Price	Energy & lubrication Product life Auxiliary repair costs <u>Production amounts</u> <u>Production quality</u> Machine reliability Cost to install Taxation Warranty costs	Dismantle Shipping Disposal costs Recycling costs Treatment costs Government fees Sustainability



# The Priceberg

Total  
Profit  
Added™



# Accenture's Asset Lifecycle Total Cost of Ownership

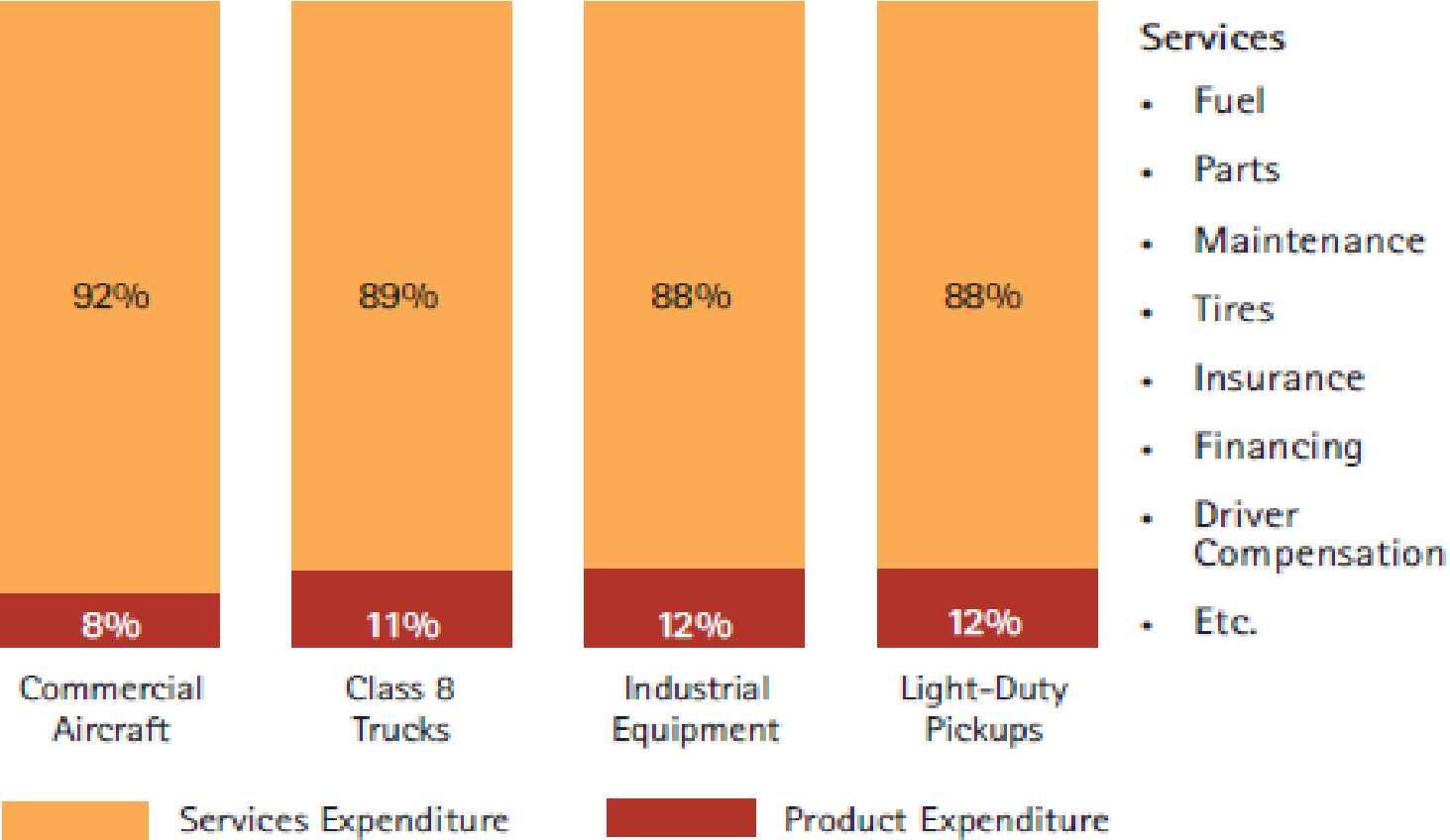
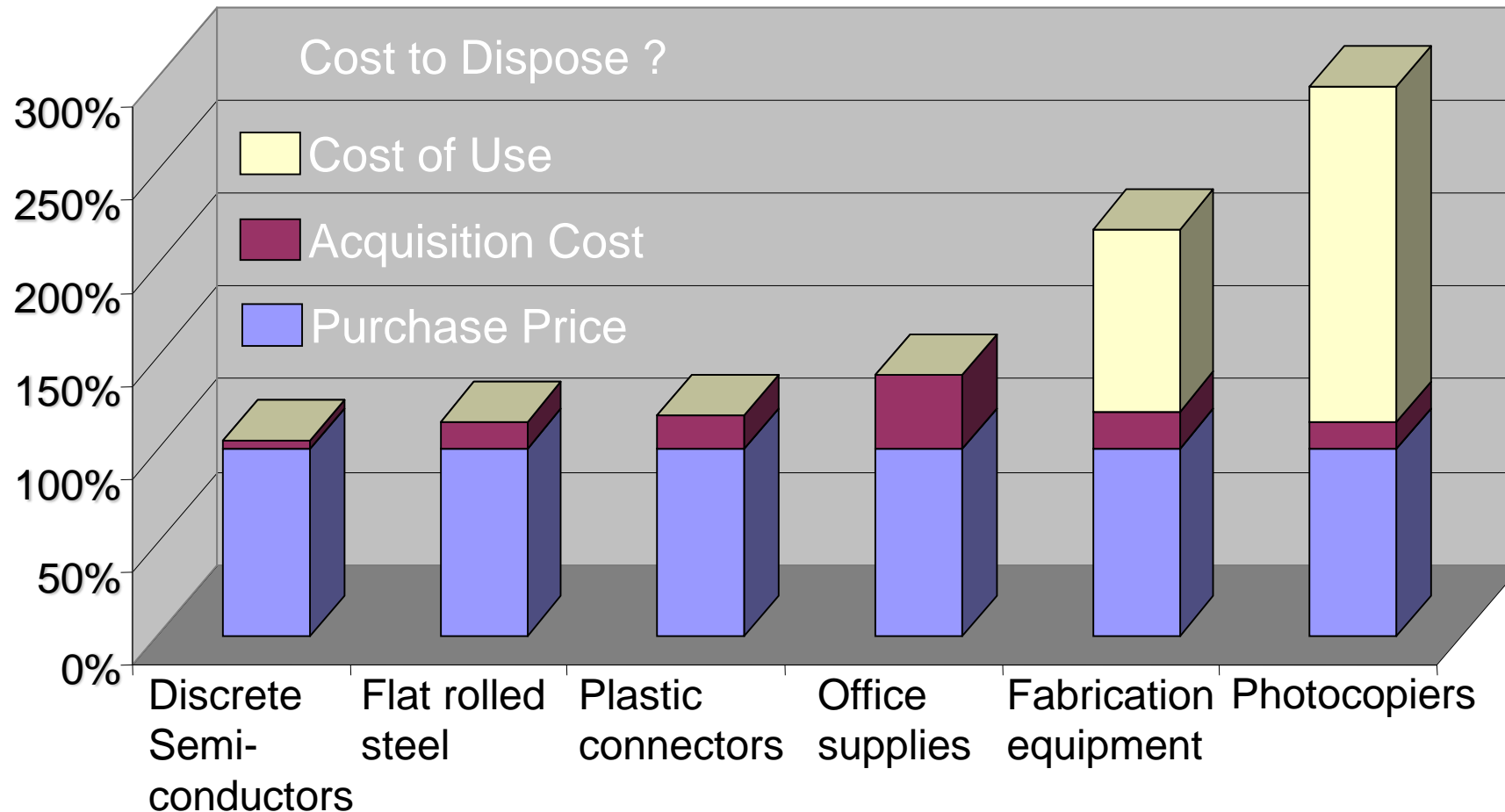


Figure 1. Initial product purchase relative to total product lifecycle costs.

# Understanding Total Cost Of Ownership



*Acquisition and life cycle costs will vary by item*

# Peter Kraljic

<b>Risk/ Business Contribution</b>	<b>Security</b> Reduce risk Continuity Conformance	<b>Strategic</b> Partnership Value engineer Negotiate
	<b>Nuisance</b> Ignore Automate Bundle	<b>Leverage</b> Leverage Exploit Switch
<b>Spend</b>		

Harvard Business Review 1983 –  
Purchasing must become supply chain management

MISTAKE.....

Focusing  
on  
activities  
vs.  
results.



**Minimum Guarantees for Performance  
don't work... Performance Reward Contracts Do...**

Ceiling



Floor



# What procurement wants

**Paula Gildert, Head of R&D Procurement, AstraZeneca**

---

Suppliers often don't come to us with a business case.

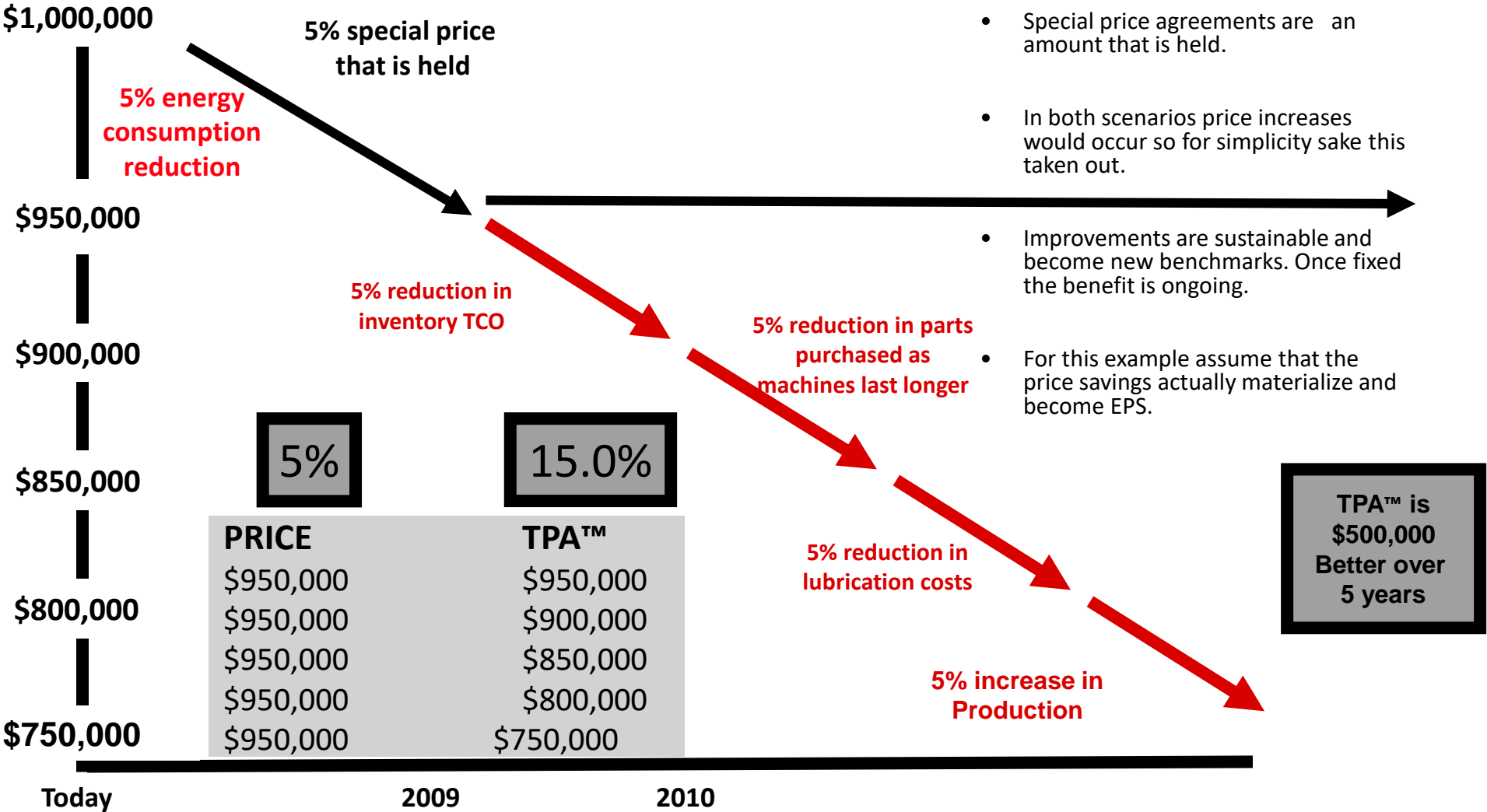
But it's what we want.

Sell your value in our numbers to get our attention.

But if you can't quantify your value – don't be surprised at the failure of procurement to do so.



# 5% Price versus 5% Annual TPA™ Improvements?



- Special price agreements are an amount that is held.
- In both scenarios price increases would occur so for simplicity sake this taken out.
- Improvements are sustainable and become new benchmarks. Once fixed the benefit is ongoing.
- For this example assume that the price savings actually materialize and become EPS.



# Total Cost of Ownership

## Responses Segmented by TCO Methodology

The table on the right shows responses to key questions based on whether or not the respondent has a methodology to define TCO when buying equipment, supplies, or repair parts.

Companies with a TCO methodology are twice as likely to enter into pay-for-performance agreements with suppliers, nearly twice as likely to realize 90% or more of savings promised by a supplier, and more than seven times as likely to receive supplier offers with a TCO component.

**They also have 35% higher average net operating margin (11.92% vs. 8.82%)**

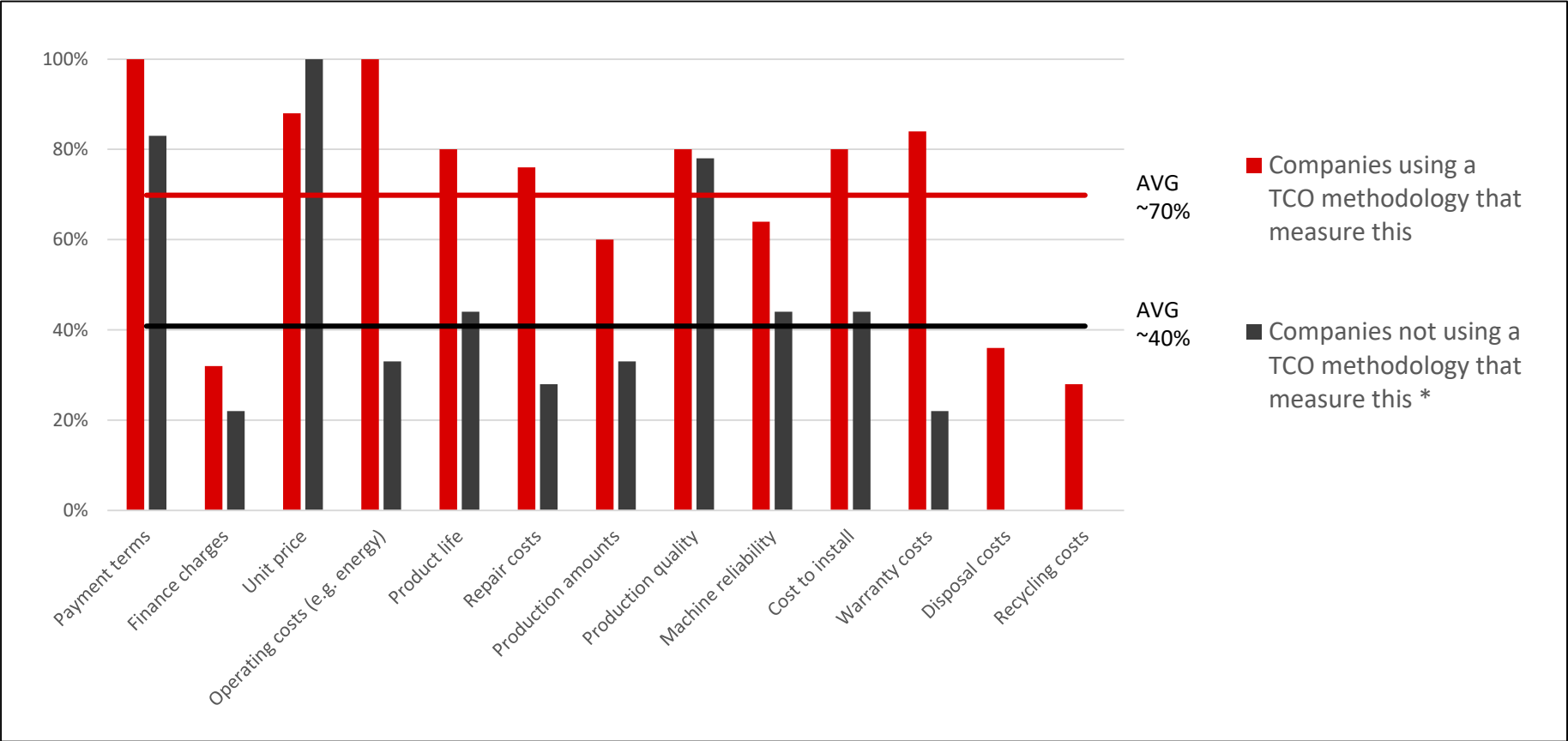
	Companies <u>using</u> a TCO methodology	Companies <u>not using</u> a TCO methodology
Usually or sometimes enter into pay-for-performance agreements with suppliers	52%	26%
Have never had a supplier offer a TCO arrangement before	13%	40%
50% or more of supplier offers include a TCO component	22%	3%
Usually or always ask in RFP for an analysis to show how a supplier will reduce TCO	35%	8%
Realize 90-100% of savings promised by supplier	59%	33%
Operating margin (calculated for public companies only)	11.92%	8.82%





# Companies using Total Cost of Ownership know more

## Product Lifecycle Metrics - Responses Segmented by TCO Methodology



**Companies with a TCO methodology were more likely to gather data on almost every single metric we asked about.**

**Some of the differences were dramatic: this group is *four times as likely to collect data on warranty costs, and three times as likely to collect data on operating costs.***

# Companies that buy and sell on best value are more profitable

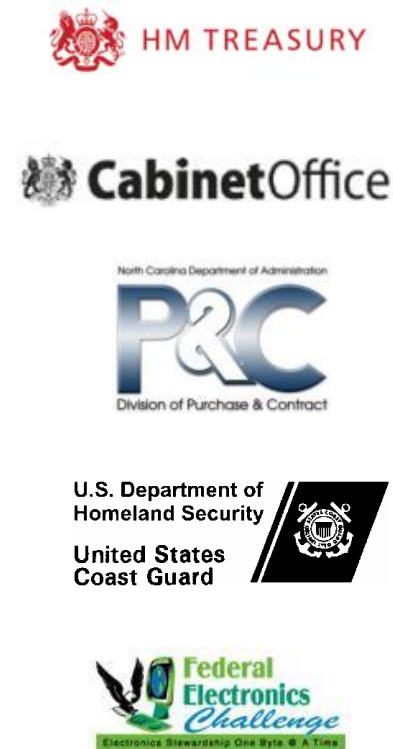
## Academia



## Procurement



## Government



## Consultants



## The Customer NEEDS it....

Easier to do-nothing than change

It's **easier** for B2B  
buyers to “do-nothing”  
than change

**Frugalnomics**  
is in Full Effect



**90%**

of buyers require a  
business case for  
new projects



**81%**

expect vendors to  
provide economic  
justification

# Evidence of Value

Creating Outcome Based Value Agreements... How we get there

iPad 11:50 AM

ABB

Potential improvement range

Loop monitoring and performance  
\$2.53m - \$3.2m

Loop variability reduction  
\$2.53m - \$3.2m

Total Value Delivered  
\$12.53m - \$13.2m

1. Customer Profile 2. Configurator Questions 3. Summary

1. System

How many control loops do you have in your plant? ?

During normal operation, how many loops are typically running in manual mode? ?

2. Quality

In your best judgement, what is the total percentage (%) cost of quality related issues (lost/purged as well as rework to recycle)

3. Personal Efficiency

In your best judgement, what % of your maintenance do you spend on troubleshooting instrumentation as well as planned and unplanned maintenance? ?

Previous Next

iPad 11:50 AM

ABB

Potential improvement range

Loop monitoring and performance  
\$2.53m - \$3.2m

Loop variability reduction  
\$2.53m - \$3.2m

Total Value Delivered  
\$12.53m - \$13.2m

Subtitle summary: \$200k-\$210k  
Subtitle summary: \$150k-\$175k  
Subtitle summary: \$50k-80k

Loop monitoring and performance  
\$2.53m - \$3.2m

Loop variability reduction  
\$2.53m - \$3.2m

1. Customer Profile 2. Information Gathering Questions 3. Summary & Export

Tell us about your/their situation (current Loop investment details):

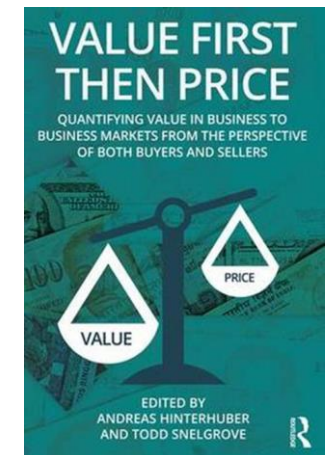
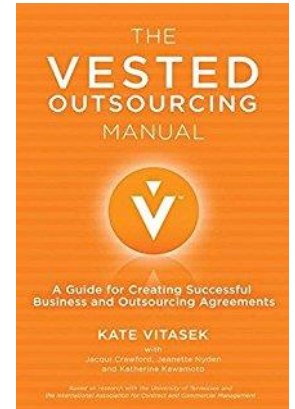
"I have  control loops in my plant with  % of our loops in manual mode during normal operation."

CONTINUE >

# Partnering with Suppliers Based on best Total Profit Added™

The best way to become sustainably more profitable

- Manufacturers Alliance for Productivity and Innovation 2013 Chief Procurement Officer Survey  
Bought and rewarded suppliers on TPA™ were 35% more profitable than Industrial Companies that did not
- The Vested Outsourcing Manual  
Based on 2009 Nobel Economics Prize Winner Prof Oliver Williamson – WIIFWE
- State of Flux 2016 Supply Relationship Management Report  
Obtained 4-6% Over and Above Contracted Agreement by using SRM



This book challenges many of the assumptions that exist in inter organizational relationships. It truly is possible to achieve win-win outcomes that drive mutual value and shared risks and rewards, Snelgrove explores this proposition in detail, providing a great read for practitioners.

**Robert Handfield Bank of America Distinguished Professor of Supply Chain Management  
Director, Supply Chain Resource Cooperative North Carolina State University**

Todd Snelgroves measurement of a new view on Total Cost of Ownership (TCO), a more holistic measurement focused around Cost, Benefit, and Value called Total Profit Added™ (TPA) is a great step in the evolution of enabling both buyers and sellers to make the right decisions based on best value not lowest price."

**Prof Thomas Choi Center for Advanced Procurement Studies  
Professor Arizona State University**

# Top 10 starting drivers of good TCO procurement / reliability ...

## Do

Align company culture – management and cross functional.

Understand your TCO drivers.

Define corporate TCO benchmark numbers.

Communicate these drivers and values to suppliers.

Reward / Penalize suppliers on Cost reductions.

Reward “all” company on Cost Reductions / Profit (EVA).

Review and communicate in pipeline projects, and results.

## Do Not

Take cash out of departmental budgets.

Accept “similar product” / lower price substitutions.

Accept non quantified “obvious” or “trust us” results.

## I now see Both Sides Now

“Pay half the  
**price** at twice the  
**cost**”

Rock Legend Sammy Hager



“At half the **price**  
its really twice the  
**cost**”

Value Merchant  
Todd Snelgrove

**Price  $\neq$  Costs  $\neq$  Value**

[todd.c.snelgrove@us.abb.com](mailto:todd.c.snelgrove@us.abb.com)

Helping companies create, calculate, communicate, and realize value.

