

# STRATEGIC COST ANALYSIS

*Michigan Association of CPAs  
2010 CPE Mega Conference*

*October 28, 2010*

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# STRATEGIC COST ANALYSIS

- Life-Cycle Costing
- Target Costing
- Activity-Based Costing

*These are not competing strategic costing philosophies, they are three of the many elements that comprise strategic costing.*

# STRATEGIC COST ANALYSIS

The managerial use of cost information for the purpose of establishing organizational strategies, controlling the success methods to achieve those strategies, and evaluating the level of success in meeting the proclaimed strategies.

- Establish the strategy
- Control the strategy's implementation
- Measure the strategy's level of success

# STRATEGIC COST ANALYSIS

Strategic cost analysis requires a long-term focus  
(a concept foreign to most US-based companies)

Strategic cost analysis requires accountants to get  
out of the “GAAP Trap” (or the “IFRS Trap”)

# LIFE-CYCLE COSTING

## **Life-Cycle Cost:**

The sum of all recurring and one-time costs over the full life span of a product, service, structure, system, or capital asset. It includes development costs, purchase price, installation or start-up costs, operating costs, maintenance and upgrade costs and residual value at the end of ownership or its useful life.

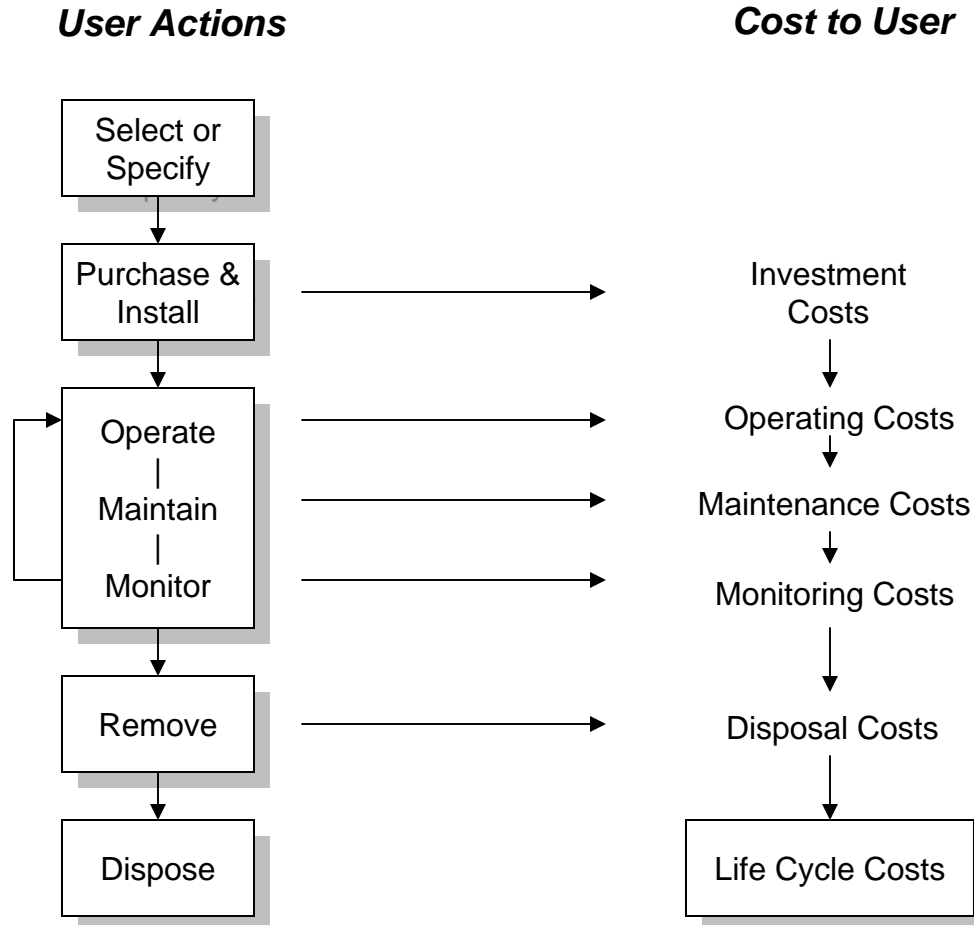
# THE PRODUCT LIFE-CYCLE

- Market Introduction
  - Costs are high
  - Sales volumes low
- Growth
  - Sales volume increases
  - Costs reduced due to economies of scale
- Mature State
  - Sales volume peaks
  - Costs reduced due to value engineering
- Saturation and Decline
  - Volume drops
  - Product retirement costs commence

# PRODUCT LIFE-CYCLE COSTING

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6+	Total
<b>Non-Production Costs</b>								
Launch costs	\$500,000							\$500,000
Special tooling costs	\$300,000							\$300,000
Ongoing engineering		\$100,000	\$100,000	\$100,000	\$75,000	\$25,000		\$400,000
Field support / warranty	\$0	\$15,000	\$45,000	\$60,000	\$85,000	\$100,000	\$95,000	\$400,000
<b>Total Non-Production Costs</b>	<b>\$800,000</b>	<b>\$115,000</b>	<b>\$145,000</b>	<b>\$160,000</b>	<b>\$160,000</b>	<b>\$125,000</b>	<b>\$95,000</b>	<b>\$1,600,000</b>
<b>Production Costs</b>								
Production Volume		100,000	200,000	300,000	250,000	150,000		1,000,000
Material Cost:								
Material cost per unit:								
Base		\$5.00	\$5.00	\$4.55	\$4.50	\$4.74		
Economies of scale		\$0.00	(\$0.50)	(\$0.10)	\$0.20	\$0.20		
Economics 3%		\$0.00	\$0.15	\$0.14	\$0.13	\$0.14		
Value engineering -2%		\$0.00	(\$0.10)	(\$0.09)	(\$0.09)	(\$0.09)		
Material Cost per Unit		<u>\$5.00</u>	<u>\$4.55</u>	<u>\$4.50</u>	<u>\$4.74</u>	<u>\$4.99</u>		
Total Material Cost		\$500,000	\$910,000	\$1,348,650	\$1,185,114	\$748,179		\$4,691,943
Conversion Cost:								
Conversion Cost per unit:		\$6.00	\$6.00	\$5.38	\$5.02	\$5.06		
Economies of scale		\$0.00	(\$0.50)	(\$0.25)	\$0.15	\$0.50		
Economics 3%		\$0.00	\$0.17	\$0.15	\$0.16	\$0.17		
Value engineering -5%		\$0.00	(\$0.28)	(\$0.26)	(\$0.27)	(\$0.29)		
Conversion Cost per Unit		<u>\$6.00</u>	<u>\$5.38</u>	<u>\$5.02</u>	<u>\$5.06</u>	<u>\$5.44</u>		
Total Conversion Cost		\$600,000	\$1,076,350	\$1,506,425	\$1,265,058	\$816,103		\$5,263,936
<b>Total Production Costs</b>	<b>\$0</b>	<b>\$1,100,000</b>	<b>\$1,986,350</b>	<b>\$2,855,075</b>	<b>\$2,450,172</b>	<b>\$1,564,282</b>	<b>\$0</b>	<b>\$9,955,879</b>
<b>Total Life-Cycle Costs</b>	<b>\$800,000</b>	<b>\$1,215,000</b>	<b>\$2,131,350</b>	<b>\$3,015,075</b>	<b>\$2,610,172</b>	<b>\$1,689,282</b>	<b>\$95,000</b>	<b>\$11,555,879</b>
<b>Life-Cycle Cost per Unit</b>	<b>\$11.56</b>							

# ASSET LIFE-CYCLE COSTING



# TARGET COSTING

Target Costing – a method used in the analysis of product design that involves estimating a target cost, via a desired profit and sales price, and then designing the product/service to meet that cost.

It's a cost management tool for reducing the overall cost of a product over its product life cycle.

# TARGET COSTING

Determine the price the market will pay for a product with the proposed product's characteristics

Determine the desired profit on the product

Subtract the desired profit from the product's projected price to arrive at the "target cost"

# TARGET COSTING PRINCIPLES

- 1) Price-led costing: Market prices are used to determine allowable – or target - costs
- 2) Focus on customers – determine the value to the customer of features and functionality
- 3) Focus on design – cost control is emphasized at the product and process design stage

# TARGET COSTING PRINCIPLES

- 4) Cross-functional involvement – teams are responsible for product from cradle to grave
- 5) Value-chain involvement – all members of the value chain are included in the process
- 6) A life-cycle orientation – total life-cycle cost are minimized for both the producer and the customer

# TARGET COSTING

"[...] target costing is not a cost quantification technique, but rather a complete cost reduction program, starting even before the first drawings of the product have been prepared. It is an approach aimed at reducing the cost of new products throughout their lifecycle, while meeting consumer requirements in terms of quality and reliability among others, examining all conceivable ideas relating to cost reduction at the planning, development and prototyping stage. Target costing is not a simple cost reduction technique, but a complete, strategic profit management system" [Kato, 1993].

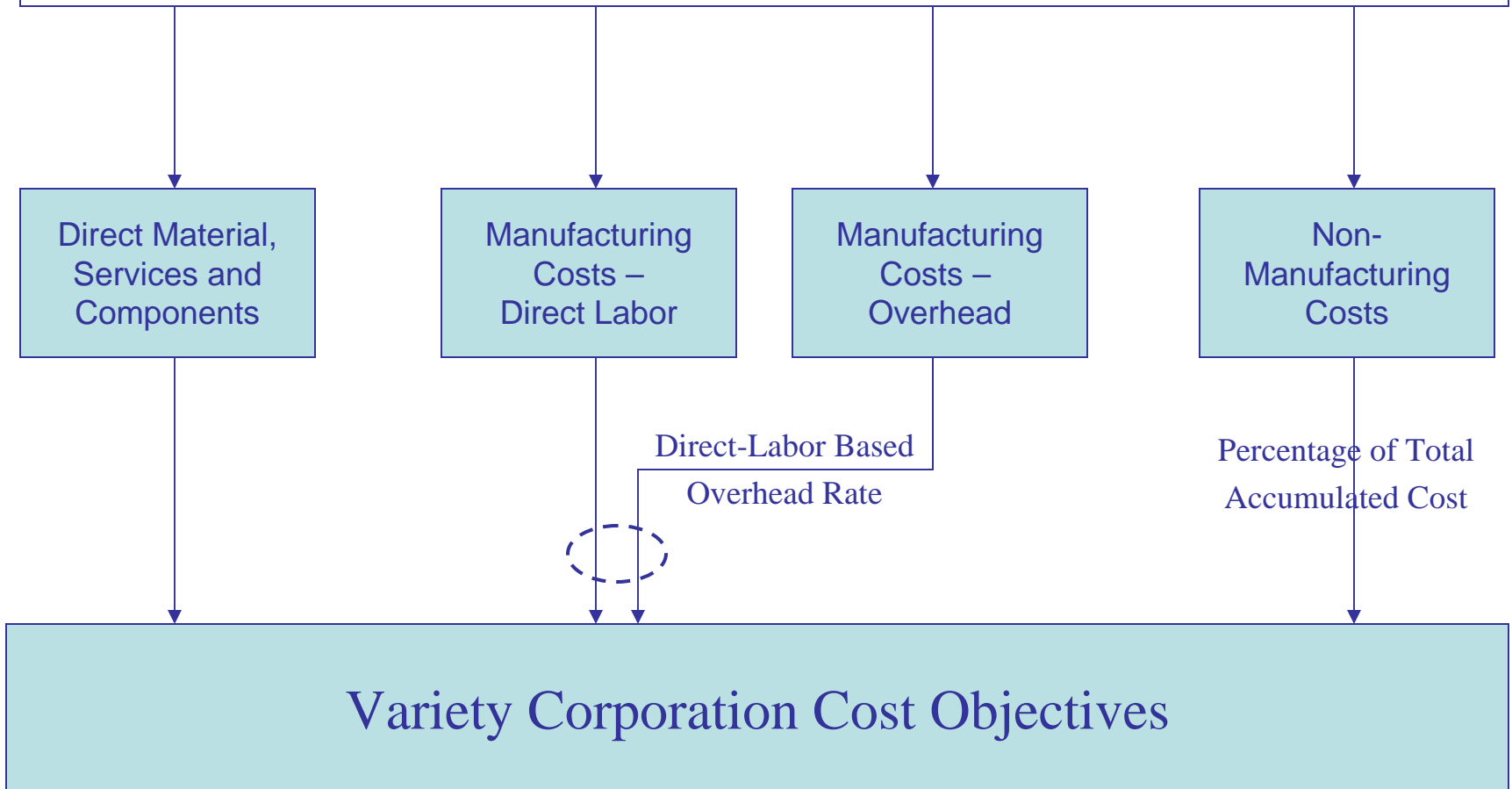
[http://accountingtools.com/Pages\\_Costing/Costing\\_Target.html](http://accountingtools.com/Pages_Costing/Costing_Target.html)

# AN UNDERLYING ASSUMPTION

Both *Life-Cycle Costing* and *Target Costing* assume that the organization can measure its product and process costs accurately

*Unfortunately, this is almost never the case*

# Variety Corporation Costs



# USE THE TRADITIONAL MODEL TO...

- Determine the cost of a purchased component
- Determine the benefit of creating a manufacturing cell to replace three independent operations
- Compare the profitability of two otherwise identical customers with different shipment schedules
- Measure the benefit of reducing a machine's crew size from two operators to one operator

# THE “LENS” OF ABC

# ACTIVITY-BASED COSTING

Activity-Based Costing (ABC) is a “lens” for taking the complex operations of a business enterprise and developing a *cost model* that accurately reflects the *relationships between the company’s costs, activities, and products.*

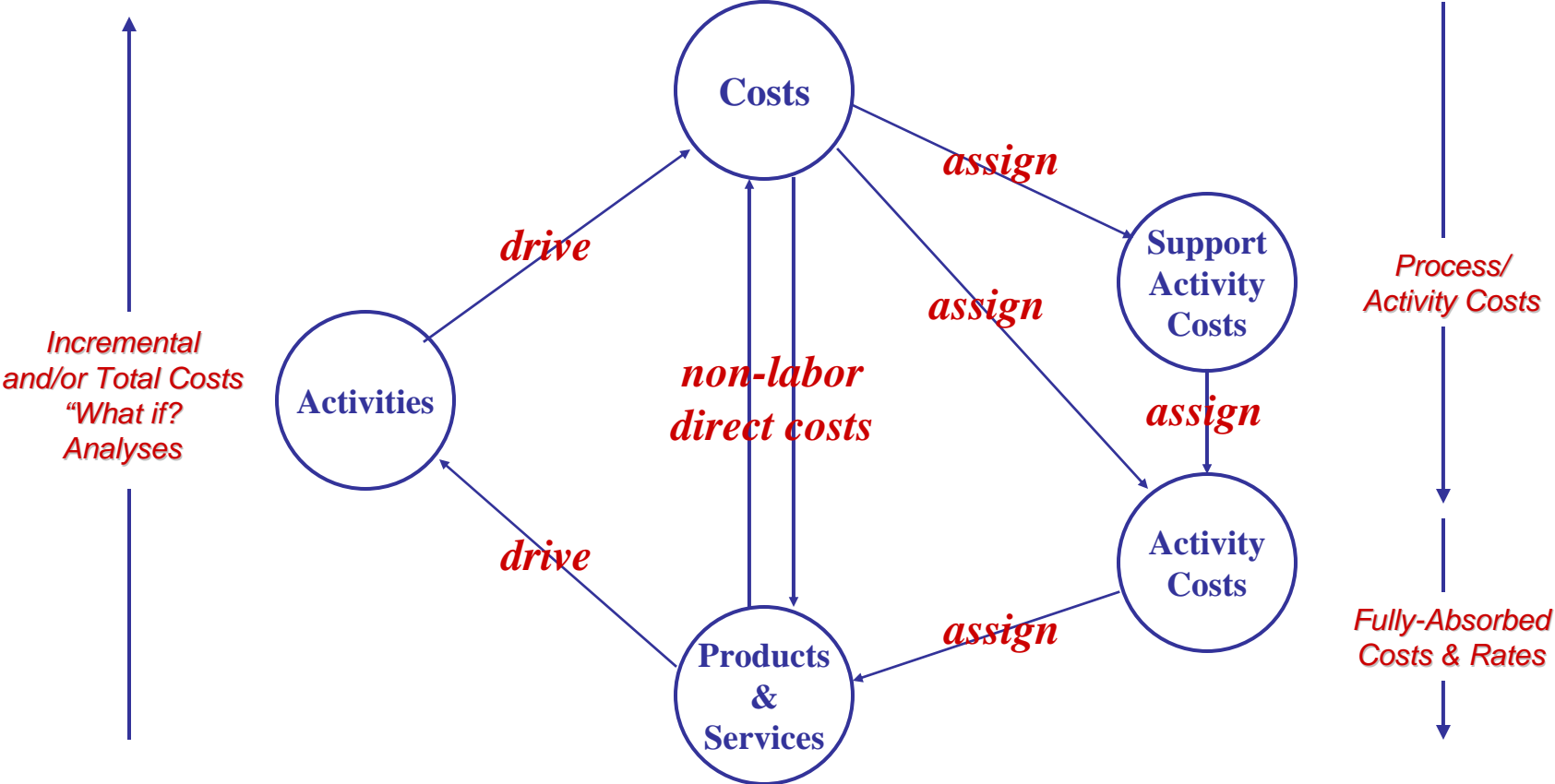
# ACTIVITY-BASED COSTING

The purpose of Activity-Based Costing is  
*insight*, not calculations.

# ACTIVITY-BASED COSTING

- Products and services cause activities and those activities cause costs
- Associate costs with the activities that make them necessary and accumulated activity costs with the products or services that make them necessary

# BASIC “ACTIVITY-BASED” COST MODEL

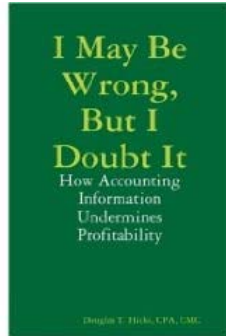


# CATEGORIES OF COSTS/ACTIVITIES

- Throughput or Direct Costs
- Throughput or Direct Cost Support Activities
- Direct or Value-Adding Activities
- Event or Transaction Activities
- Market or Customer Support Activities
- Product or Product Line Support Activities
- General and Administrative Activities

# SUMMARY

- Life-Cycle Costing, Target Costing & Activity-Based Costing are not competing costing philosophies - they are three important components of *Strategic Costing*
- *Life-Cycle Costing* considers costs incurred during an asset's or product's lifetime
- *Target Costing* is a process for minimizing the cost of a product during its entire lifetime
- *Activity-Based Costing* is a “lens” for creating a cost model that will accurately reflect the cost economics of an organization



## I May Be Wrong, But I Doubt It: How Accounting Information Undermines Profitability

By Douglas T. Hicks, CPA, CMC

It may be effective in reporting historical results to outsiders, but relying on the information generated by a GAAP-based accounting system when making management decisions seriously undermines a company's ability to grow into a profitable future. The case is presented in Doug Hicks' new book *I May Be Wrong, But I Doubt It: How Accounting Information Undermines Profitability*

Included in the sixteen essays that comprise this book are arguments describing why:

- Profit as a percentage of sales is an incomplete and misleading measure of product or service profitability
- Depreciation is not only totally irrelevant for decision makers, it can be one of the most damaging concepts in accounting
- Evaluating management performance using financial accounting turns managers into “game players” whose actions are directed at generating the best short-term scores at the expense of long-term success
- Popular solutions to today's cost information problems (ABC/M, Lean Accounting, GPK, Resource-Driven Accounting, etc.) are so narrowly focused as to be irrelevant for a majority of decision makers
- The phrase “Management Accountant” might qualify as an oxymoron and true management accountants may be as rare a Boston Red Sox fan living in New York
- Traditional accounting has trouble distinguishing among a cost, an investment, and a profit
- The discipline of accounting is so focused on arbitrary rules and regulations that accountants may be incapable recognizing economic reality when they see it
- The best solution may be to relieve accountants of their duties as providers of decision support information and assign those duties to individuals whose thought processes have not been tainted with GAAP.

Does your company's accounting information guide or misguide management? Does it promote or undermine your company's profitability? Does it result in management making decisions based on fiction instead of on reality? Find out how your company stacks up by reading *I May Be Wrong, But I Doubt It: How Accounting Information Undermines Profitability*.

You can purchase a copy at [www.lulu.com/content/5145295](http://www.lulu.com/content/5145295) or by visiting [www.amazon.com](http://www.amazon.com).

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## Questions?

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