

Supply Chain Profitability and Cost Management

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Global Supply Chain Excellence Summit

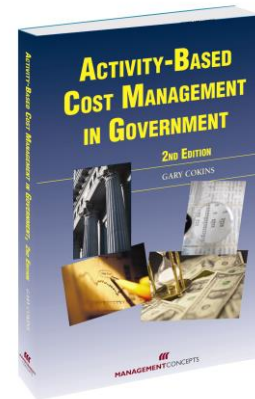
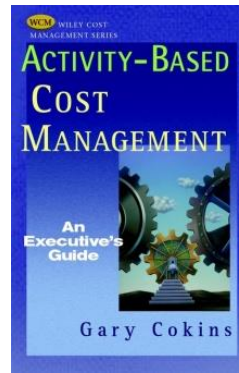
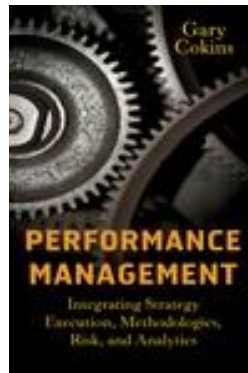
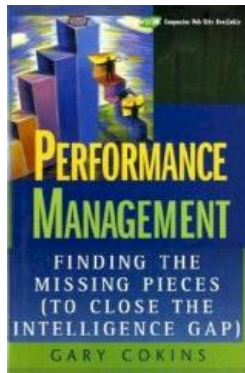
February 3, 2024

About Gary Cokins

Founder, Analytics-Based Performance Management LLC

B.S. Industrial Engineering & Operations Research; Cornell University, 1971

M.B.A. Finance & Accounting; Northwestern University, Kellogg Graduate School of Management, 1974



Previous Associations:

- FMC Corporation
- Consultant with: Deloitte, KPMG Peat Marwick, Electronic Data Systems [EDS, now HP]
- SAS (16 years)

Who will benefit from this presentation?

Managers who have previously struggled at promoting enterprise performance management (EPM), supply chain management (SCM), and integrating business analytics (BA) into their decision support systems.

Managers who intend to “champion” any or all EPM, SCM, and BA improvement techniques and need a compelling call to action.

AGENDA

- **What is Enterprise Performance Management?**
- **Why trading partner collaboration is needed.**
- **Managerial accounting for supply chain management.**
- **Overcoming resistance to change. Getting buy-in.**

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Confusion and Lack of Consensus about EPM

Is it human resources PM?

Is it scorecards, dashboards, KPIs and measures?

Is it alignment, such as strategic or resource allocation?

Is it process, productivity and quality improvement?

Or ... is it all of the above? And even more?

The good news is this

What is Analytics-based Performance Management?

Analytics-based Enterprise Performance Management is the integration of multiple methodologies with each embedded with business analytics, such as segmentation analysis, and especially predictive analytics ... to achieve the strategy and to make better decisions.

What has caused interest in EPM?

- 1 Executives frustrations with strategy failure.**
- 2 Increased accountability.**
- 3 More rapid decision making.**
- 4 Mistrust of the managerial accounting system for transparency.**
- 5 Poor customer value management**
- 6 Contentious budgeting – poor resource capacity planning.**
- 7 Dysfunctional supply chain management.**
- 8 Unfulfilled ROI promises from IT systems – lack of integration.**

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Gary Cokins

Analytics-Based
Performance Management
LLC

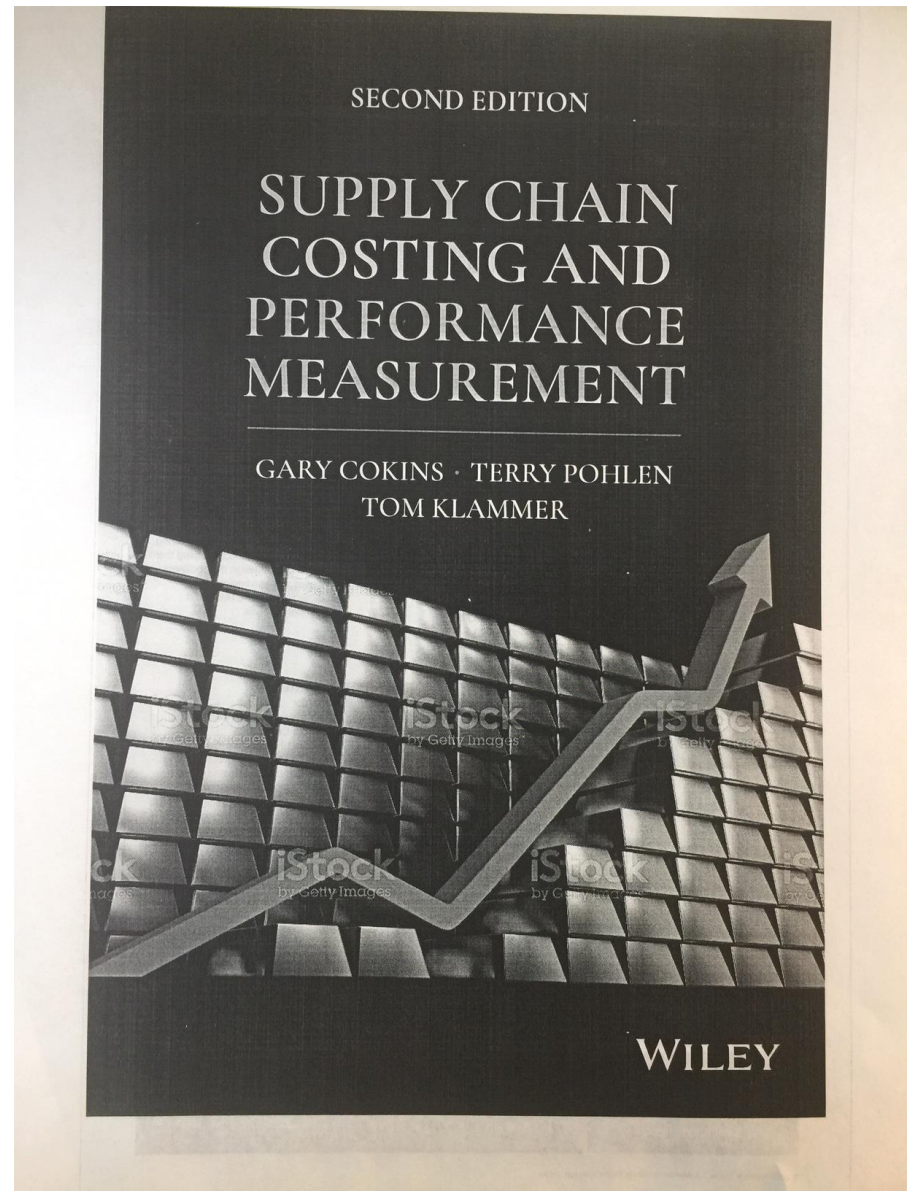
Thomas P. Klammer

Professor of Accounting
(retired)
University of North Texas

Terrance L. Pohlen

Associate Professor of
Logistics
University of North Texas

[Supply Chain Costing and Performance
Management, 2nd Edition | Wiley](#)



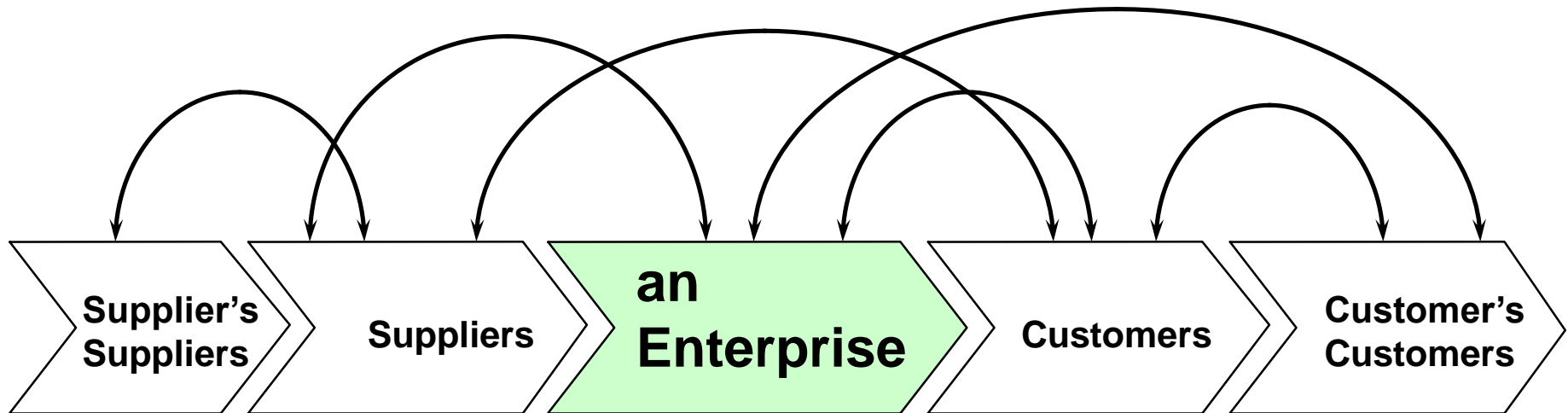
Post ERP and SCM Challenges

In the 1990s and 2000s businesses embraced ERP and supply chain management to automate relationships and increase efficiencies. These either eliminated or shifted costs.

But they didn't address three key challenges.

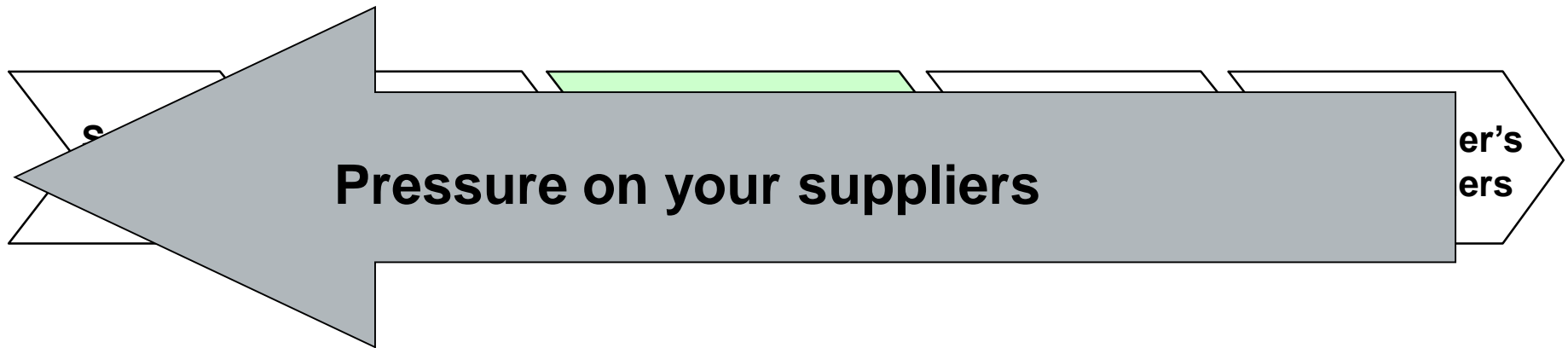
(1) Adversarial Relationships

While each trading partner knows there are mutual profits to be gained, decades of arms-length and adversarial behavior has precluded efficiency gains.



(2) A Procurement Focus

Immense pressure is being placed on suppliers for price reductions or containment without regard to effects on service levels.



(3) A Sub-optimal Internal Focus



It is no longer sufficient to be the most agile, lean, and efficient firm. You are dependent on all of your trading partners – upstream and downstream – to also be agile, lean, and efficient.

This eventually creates a need for *collaboration*

... but first you need the facts to know what your own costs and profit margins are and who or what is causing them.

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A Case for Supply Chain Cost Accounting

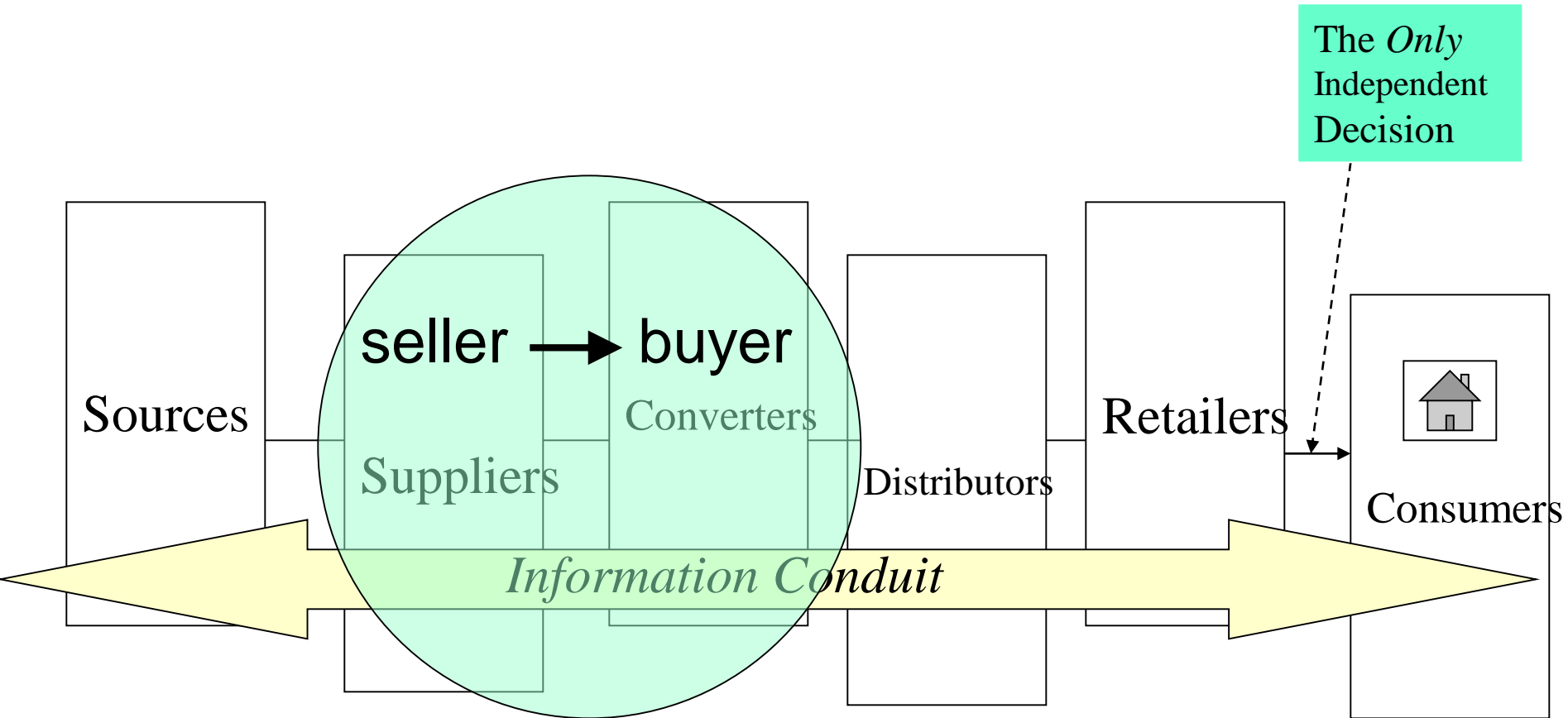
“Many companies may find it near impossible to track supply chain costs, but it is a requirement for properly tracking, reporting, and measuring item performance. And it is a true prerequisite for advanced supply chain and retail optimization.”

Robert Bruce

VCC Associates, Inc.

Wal-Mart (retired), VP Supply Chain Strategies

Profit Opportunities Across the Supply Chain

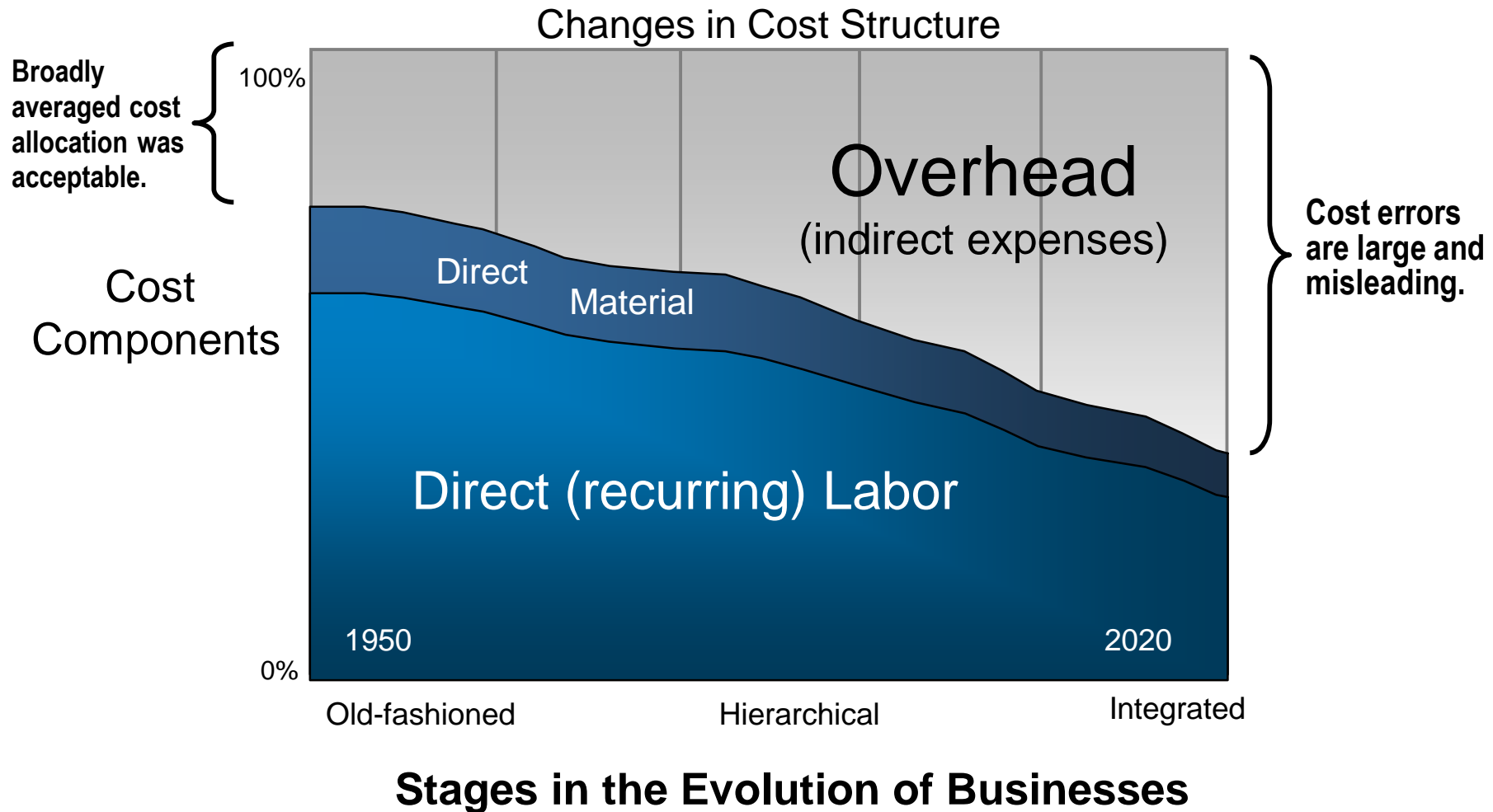


The starting point to measure profits “across” the supply chain, and identify joint mutually beneficial opportunities, begins at any seller/buyer interface along the chain.

**A simple explanation of ABC ...
that you can explain to your
spouse (or boss) tonight.**



The Need for Tracing, not Allocating, Costs



Each Activity Has Its Own Cost Driver

From: General Ledger

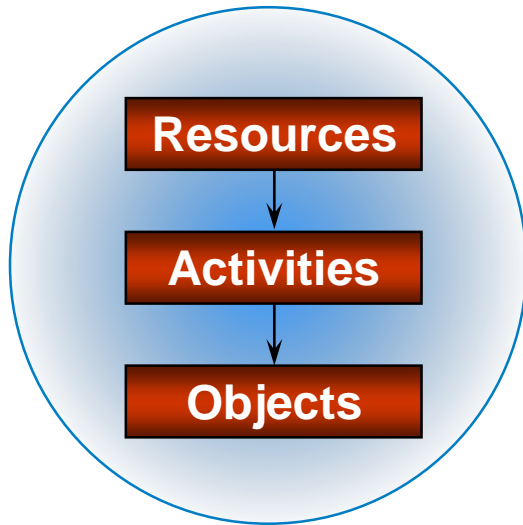
| Chart-of-Accounts View | | | |
|------------------------------|------------------|------------------|-----------------------------|
| Claims Processing Department | | | |
| | Actual | Plan | Favorable/ (unfavorable) |
| Salaries | \$621,400 | \$600,000 | \$(21,400) |
| Equipment | 161,200 | 150,000 | (11,200) |
| Travel expense | 58,000 | 60,000 | 2,000 |
| Supplies | 43,900 | 40,000 | (3,900) |
| Use and occupancy | 30,000 | 30,000 | — |
| Total | \$914,500 | \$880,000 | \$(34,500) |

To: ABC Data Base

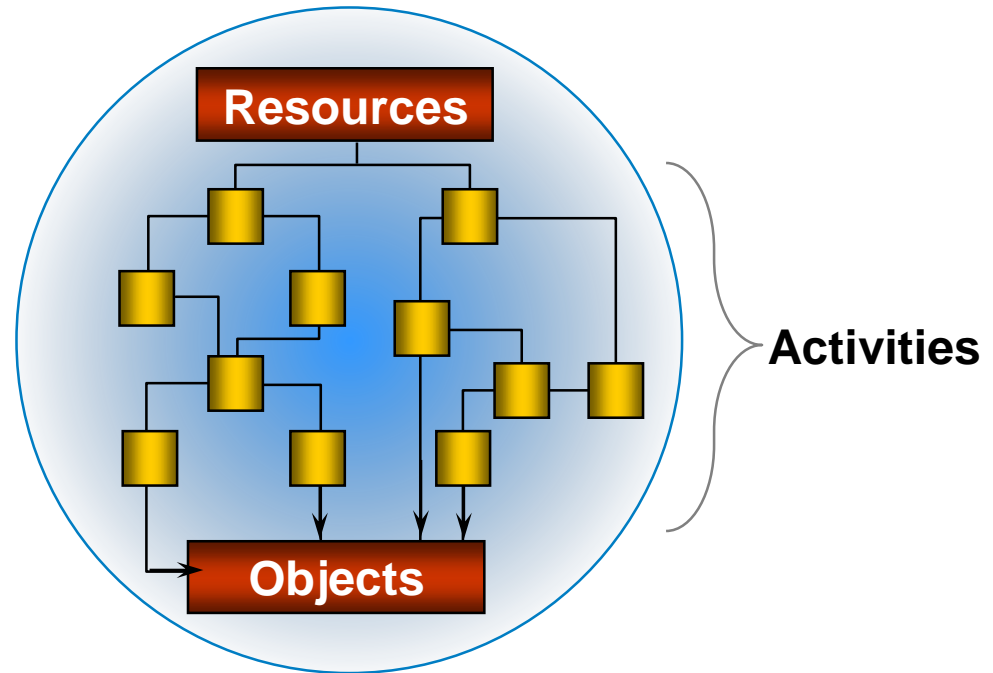
| Activity-Based View | | | Activity cost drivers |
|----------------------------|------------------|---------|-----------------------|
| Claims Processing Dept | | | |
| Key/scan claims | \$ 31,500 | ← #of — | Products / customers |
| Analyze claims | 121,000 | ← #of — | |
| Suspend claims | 32,500 | ← #of — | |
| Receive provider inquiries | 101,500 | ← #of — | |
| Resolve member problems | 83,400 | ← #of — | |
| Process batches | 45,000 | ← #of — | |
| Determine eligibility | 119,000 | ← #of — | |
| Make copies | 145,500 | ← #of — | |
| Write correspondence | 77,100 | ← #of — | |
| Attend training | 158,000 | ← #of — | |
| Total | \$914,500 | | \$914,500 |

When managers get this kind of report, they are either happy or sad, but they are rarely any smarter!

Multiple-Stage Cost Flowing



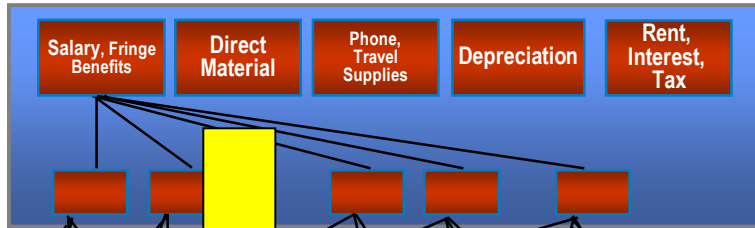
**Simple
ABM**



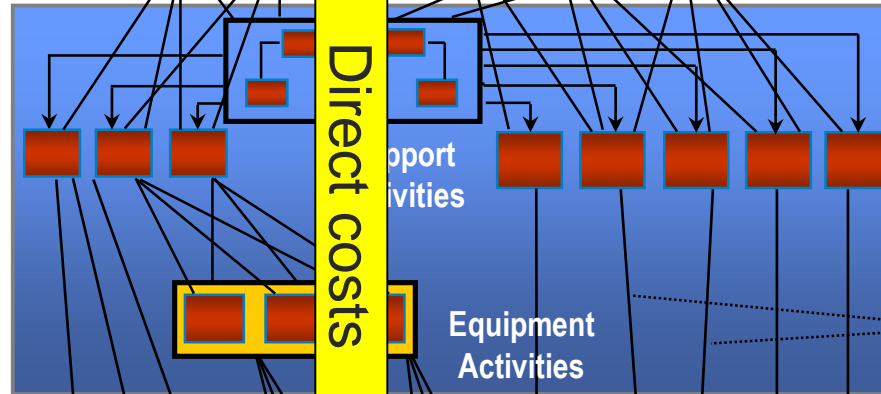
**Expanded
ABM**

ABC/M Cost Assignment Network

Resources
(general ledger view)



Work Activities
(verb-noun)

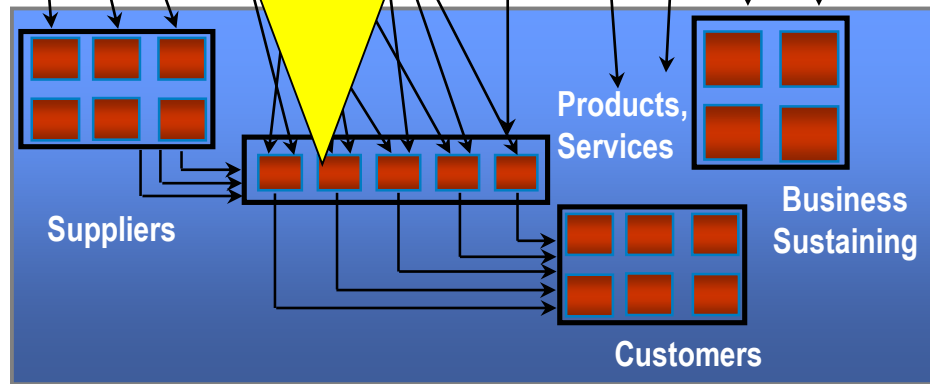


People Activities

"cost-to-serve" paths

Final Cost Objects

"Costs Measure the Effects"
(1) Demands On Work ↑ Costs (2)
↓



Further detail readings

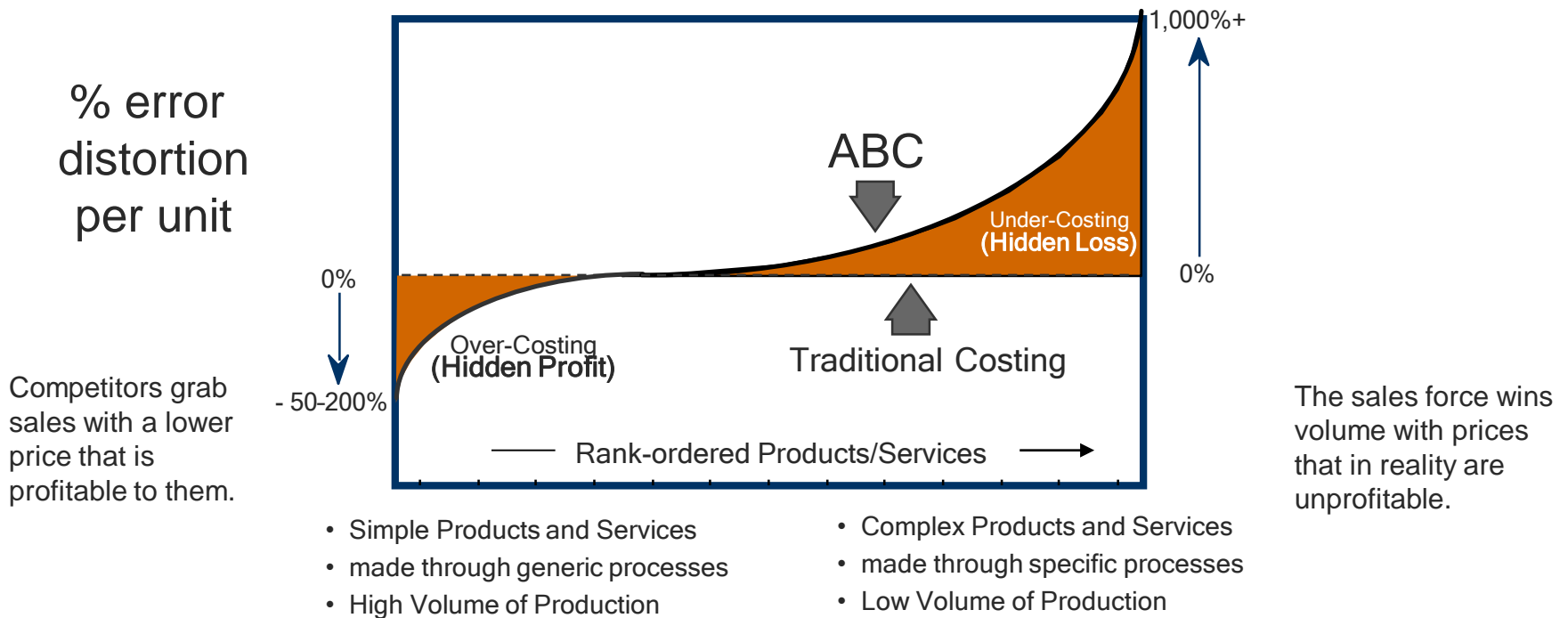
To read in more detail about the multi-stage ABC cost assignment network, below is a link to content that I have authored.

It is titled “A Statement on Management Accounting – Implementing ABC”.

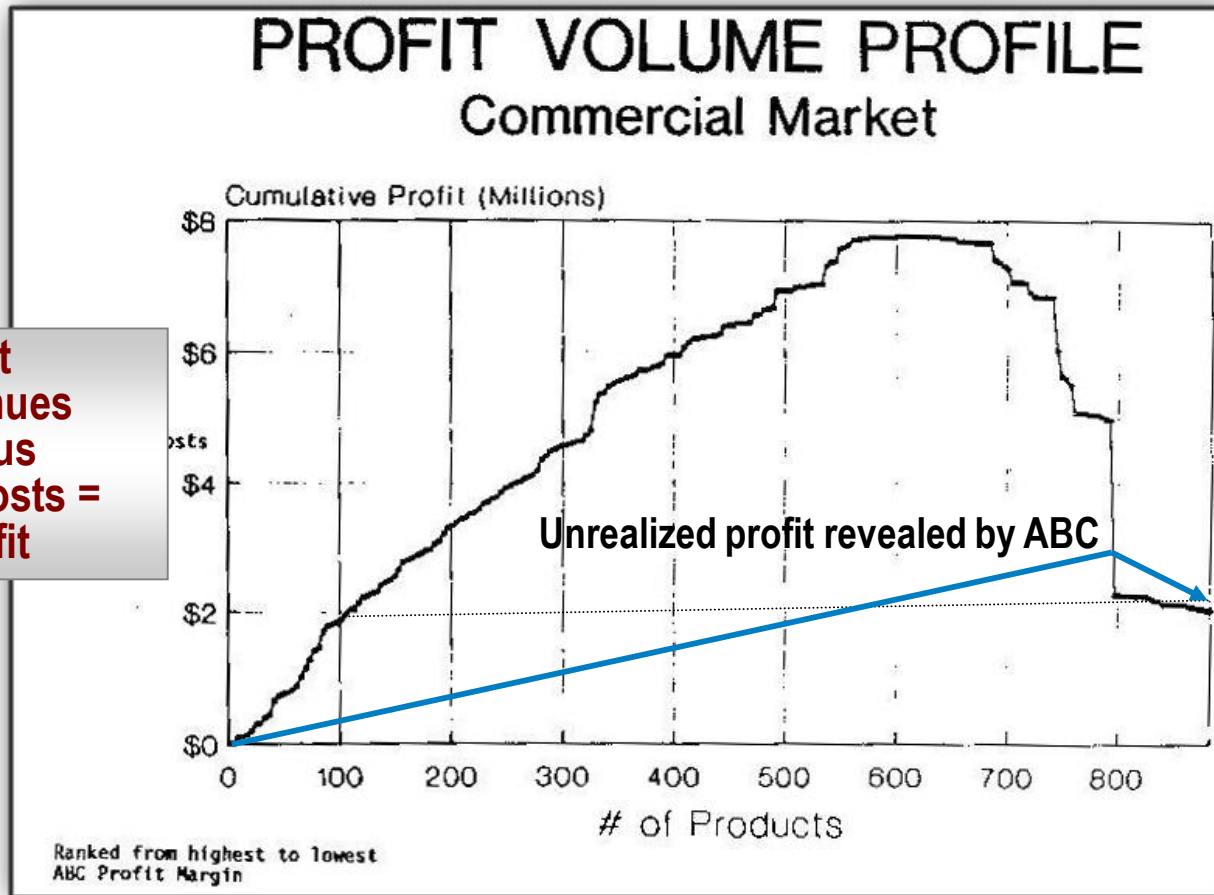
I wrote it for the Institute of Management Accounting (IMA) at www.imanet.org

<https://www.imanet.org//-/media/d5beff30c5864c7383e6ebb61556bab3.ashx?as=1&mh=200&mw=200&hash=E34259B80CE1AC68ED6AB8363D05635AE19BAB91>

Standard Costing Over- and Under-Costs Products



More important than a better costing method are its results.



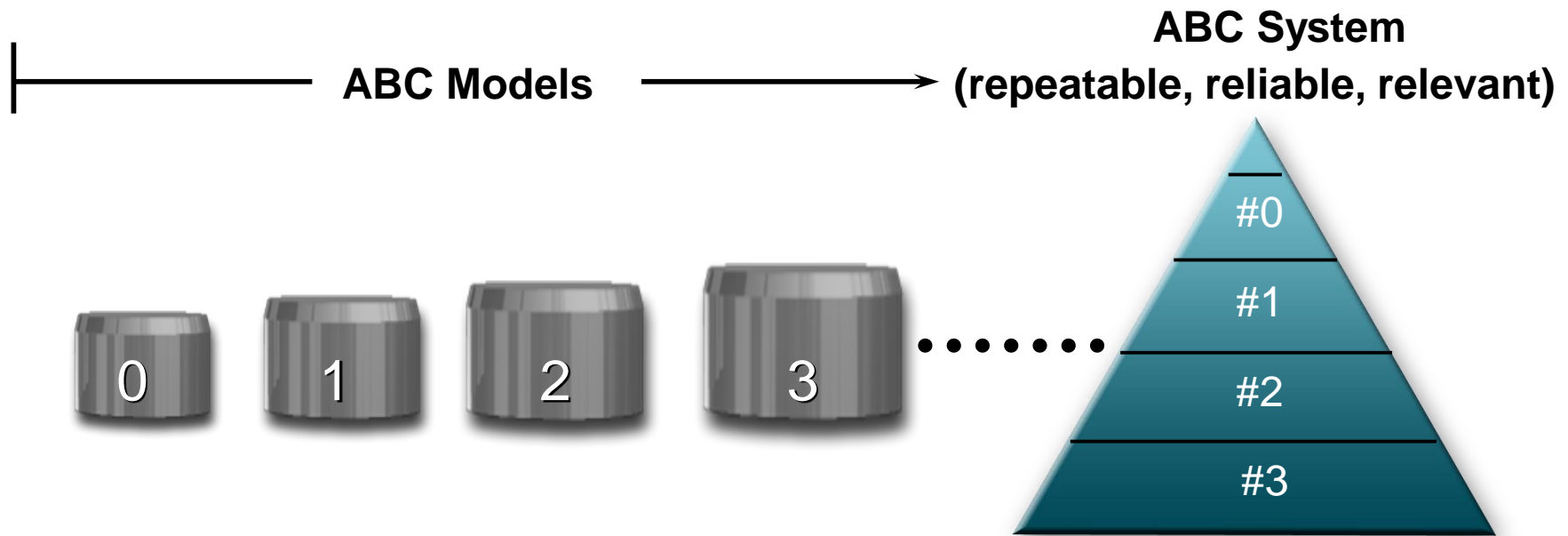
**Net
Revenues
Minus
ABC costs =
profit**

$$\begin{array}{r} \$ 30 \text{ sales} \\ - 28 \text{ expenses} \\ \hline = \$ 2 \text{ profit} \end{array}$$

← \$ 2 profit

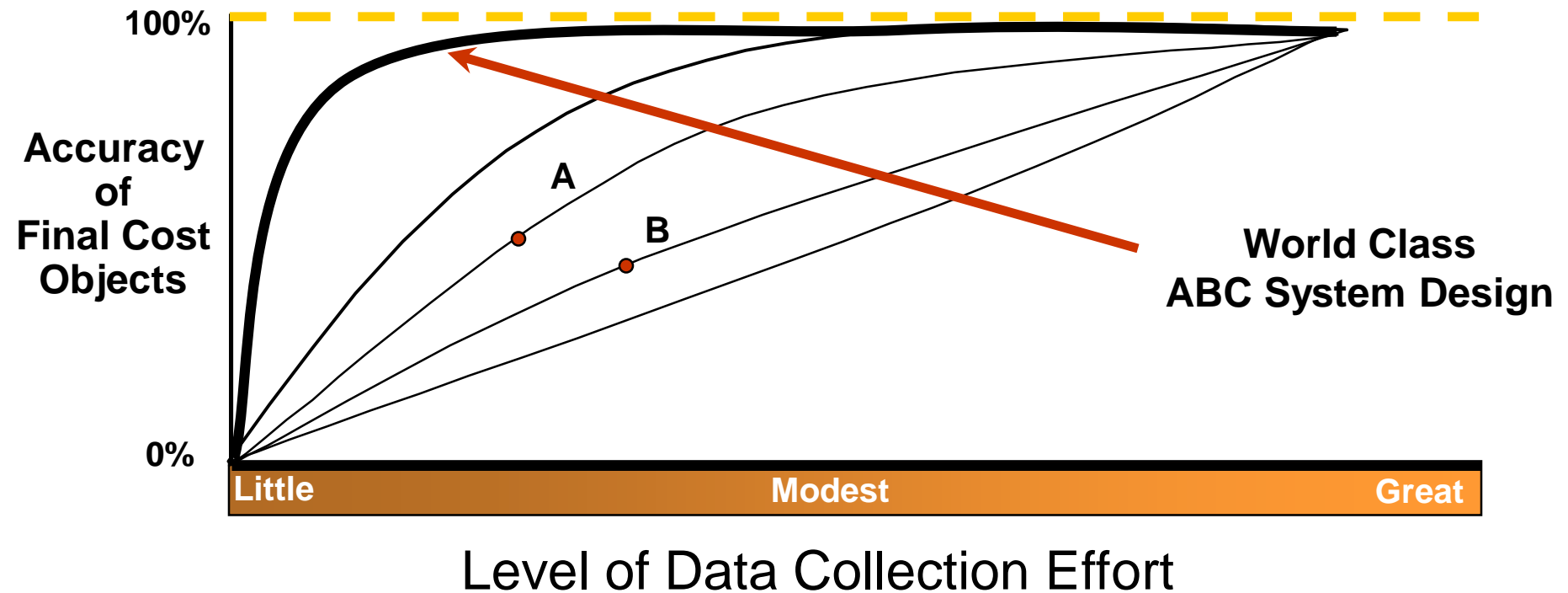
Rapid Prototyping with *Iterative Remodeling (crawl, walk, run, fly)*

Each iteration enhances the use of a ABC system.



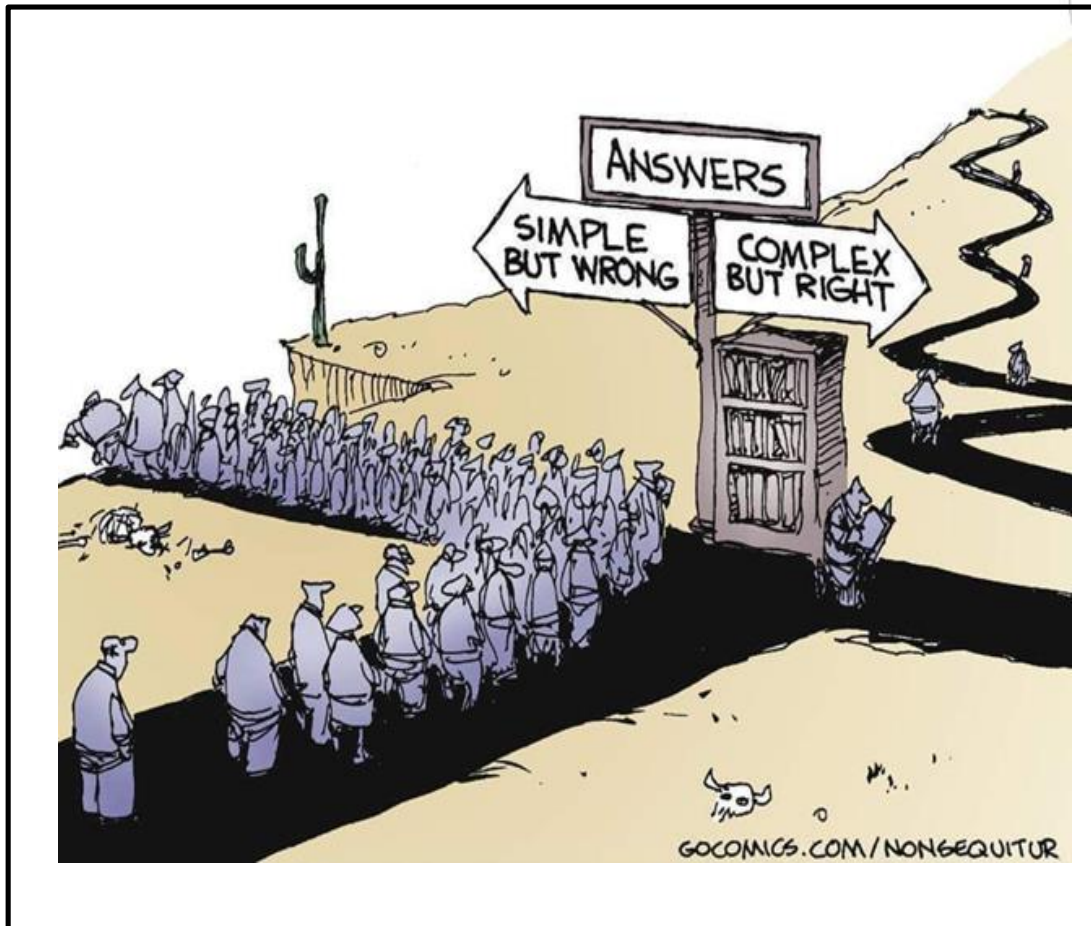
Make your mistakes early and often, not later when the system is too hard to change.

Balancing Levels of Accuracy with Effort



Is the higher climb worth the better view?

Most CFOs take the left-side path!



Value of Company = f(Value from Customers)

The only value a company will ever create is the value that comes from its customers – the current ones and the new ones acquired in the future.

To remain competitive, one must determine how to keep customers longer, grow them into bigger customers, make them more profitable, serve them more efficiently, and acquire relatively more profitable customers.

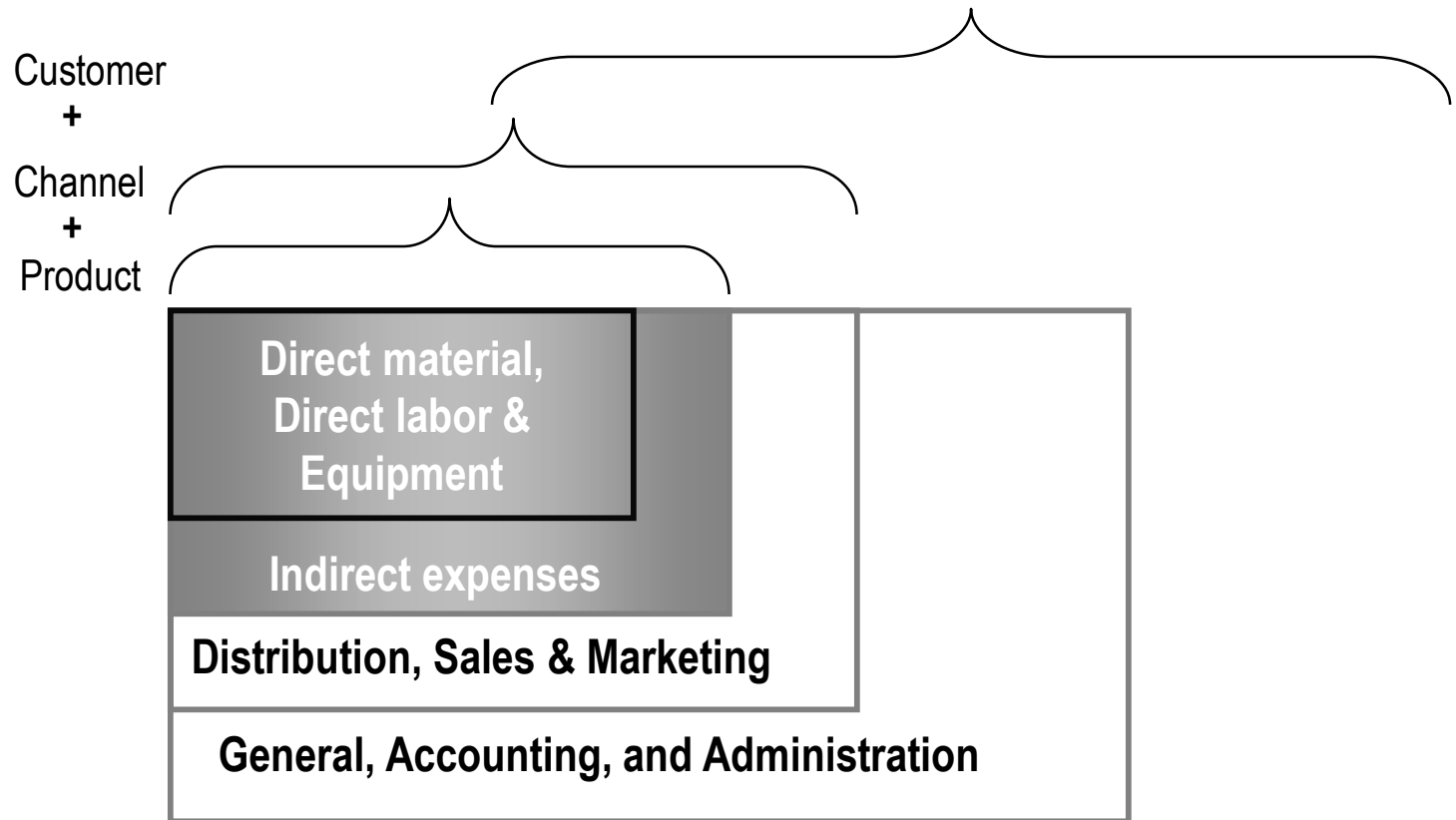
So What about the Other Below-the-line “Calculated” Costs?

Products and standard service-lines are not the only thing for which accountants should compute costs.

What about costs that have nothing to do with making products and delivering standard service-lines?

The problem with traditional accounting’s product gross profit margin reporting is you don’t see the bottom half of the picture.

Costs from Sales & Marketing are not Products



High and Low Maintenance Customers

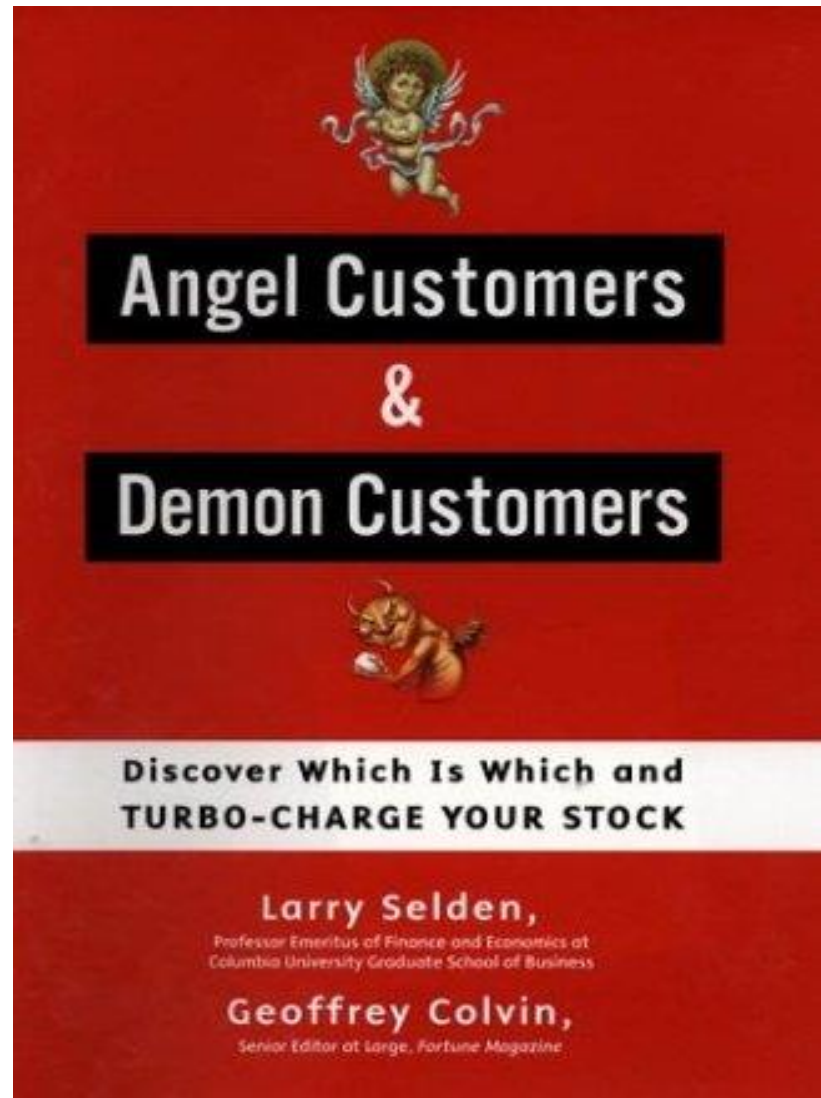
Every company has a high and low maintenance customers.

Examples of high maintenance customers: always changing delivery schedules, demanding special not standard products, returning good, calling help desk.

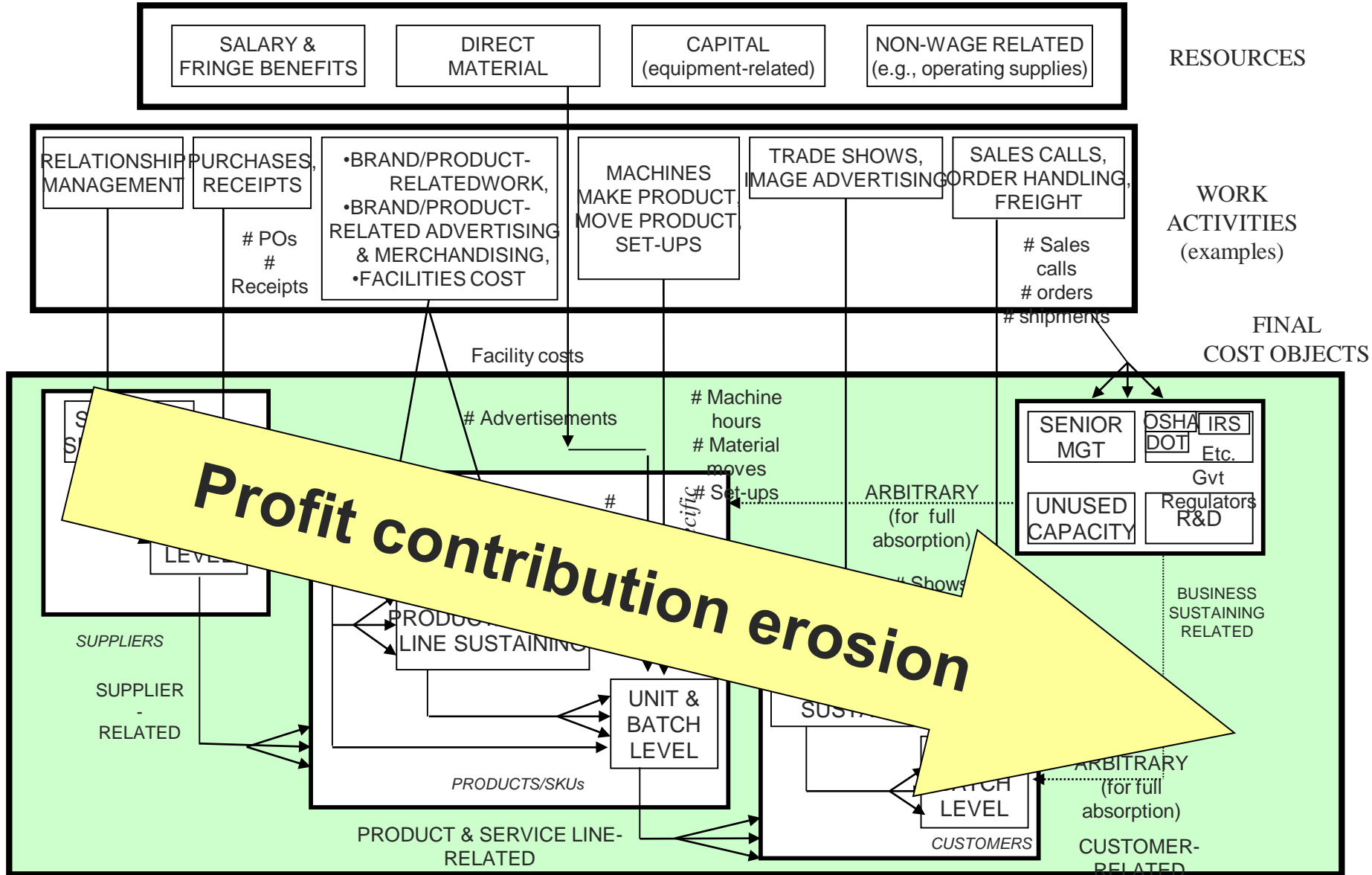
Low maintenance customers do none of these.

The message:

Sales volume is not equivalent to the profit from a customer.



ABC/M Profit Contribution Margin Layering



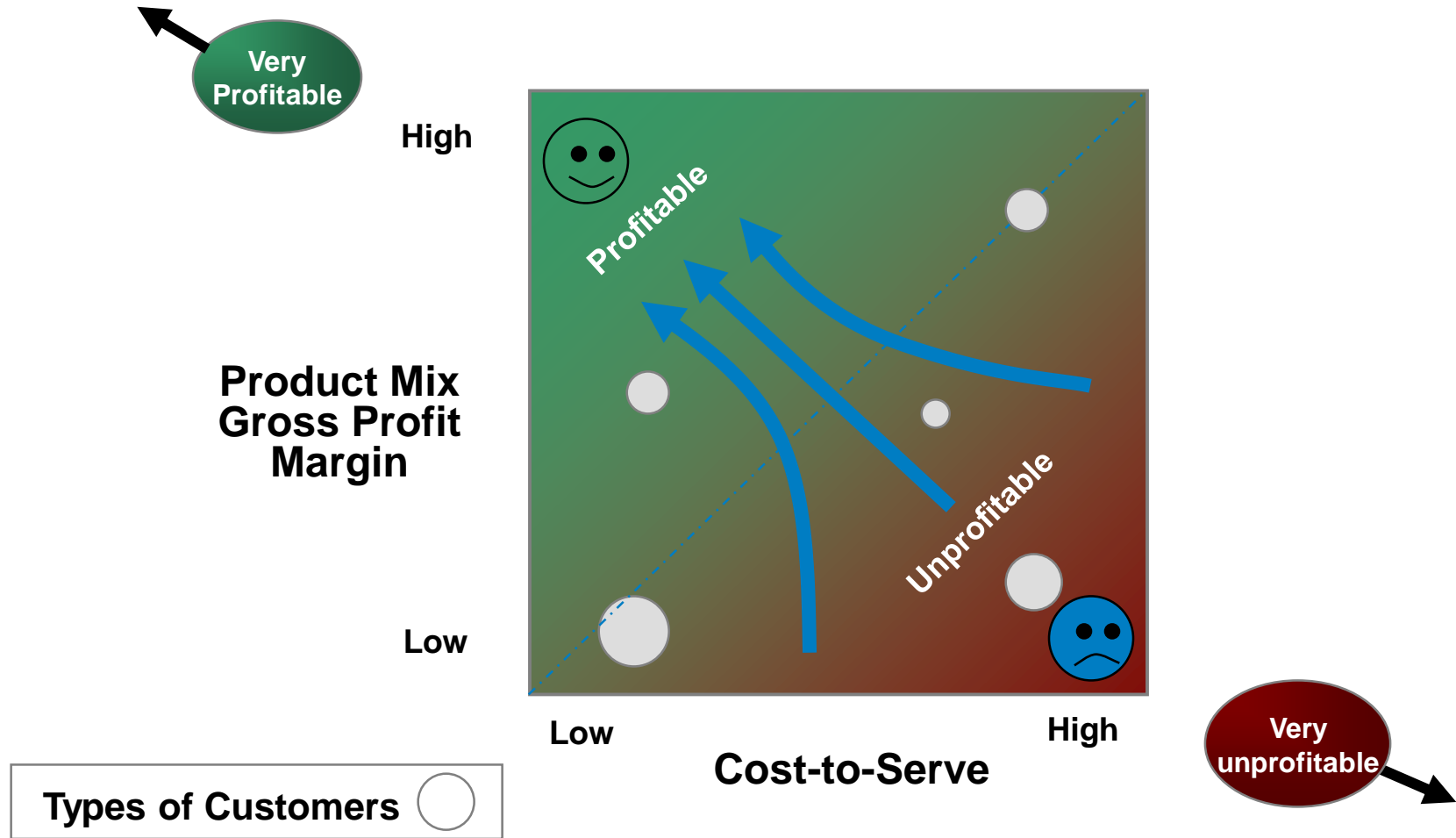
A Customer Profit & Loss Statement

| CUSTOMER: XYZ CORPORATION (CUSTOMER #1270) | | | |
|--|---------------|--|-----------------------------|
| Sales | \$\$\$ | Margin \$ (Sales - Σ Costs) | Margin % of Sales |
| Product-Related | | | |
| Supplier-Related costs (TCO) | \$ xxx | \$ xxx | 98% |
| Direct Material | xxx | xxx | 50% |
| Brand Sustaining | xxx | xxx | 48% |
| Product Sustaining | xxx | xxx | 46% |
| Unit, Batch* | xxx | xxx | 30% |
| Distribution-Related | | | |
| Outbound Freight Type* | xxx | xxx | 28% |
| Order Type* | xxx | xxx | 26% |
| Channel Type* | xxx | xxx | 24% |
| Customer-Related | | | |
| Customer-Sustaining | xxx | xxx | 22% |
| Unit-Batch* | xxx | xxx | 10% |
| Business Sustaining | xxx | xxx | 8% |
| Operating Profit | | xxx | 8% |

} Product-related costs (rows 2-6)
} Channel & Customer-related costs (rows 7-10)

* Activity Cost Driver Assignments use measurable quantity volume of Activity Output
 (Other Activity Assignments traced based on informed (subjective) %s)

Migrating Customers to Higher Profitability



A Shift in the CFO's Emphasis

The CFO must now help Sales and Marketing ... to better target customers.

The spending budget for sales and marketing is critical ... but it should be treated as a preciously scarce resource to be aimed at generating the highest long-term profits.

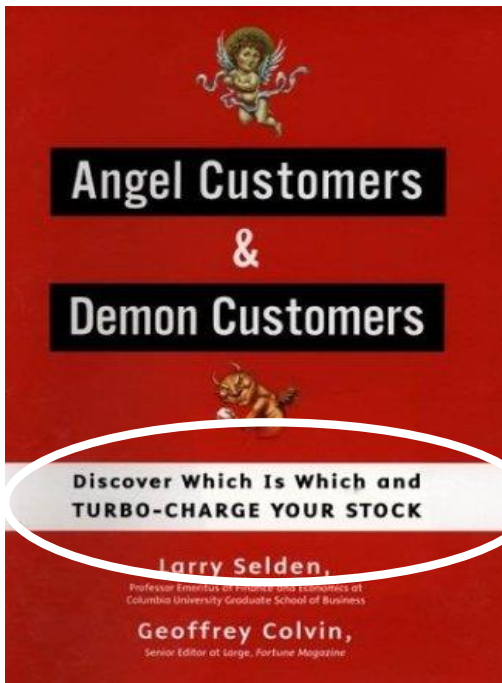
This means answering questions like:

Which type of customer is attractive to newly acquire, retain, grow, or win back? And which types are not?

How much should we *optimally* spend attracting, retaining, growing, or recovering each customer micro-segment?

Optimizing Customer Value ---

“Smart” Sales Growth



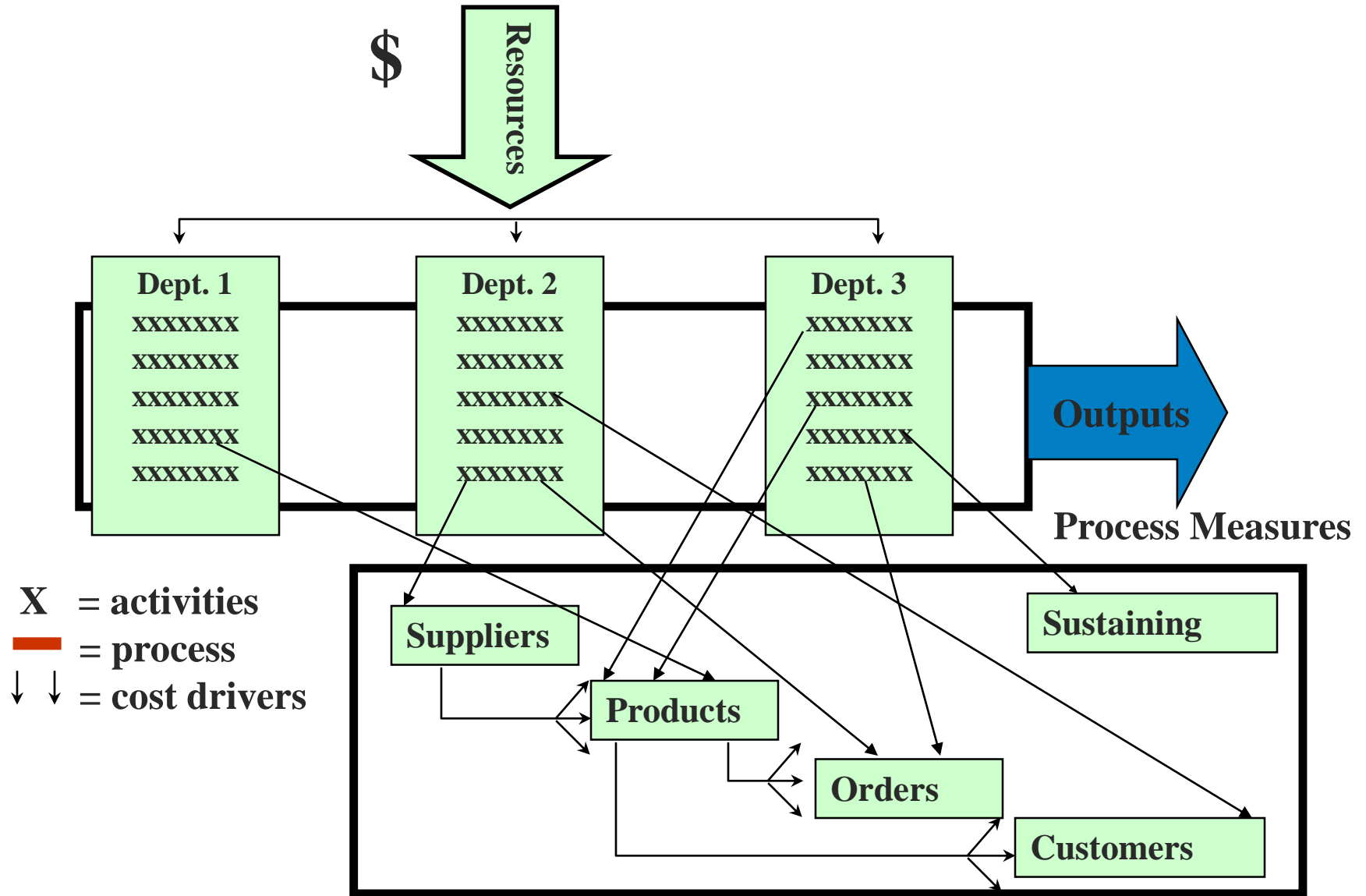
You can destroy shareholder wealth creation by ...

... over-spending unnecessarily on loyal customers for what is needed to retain them.

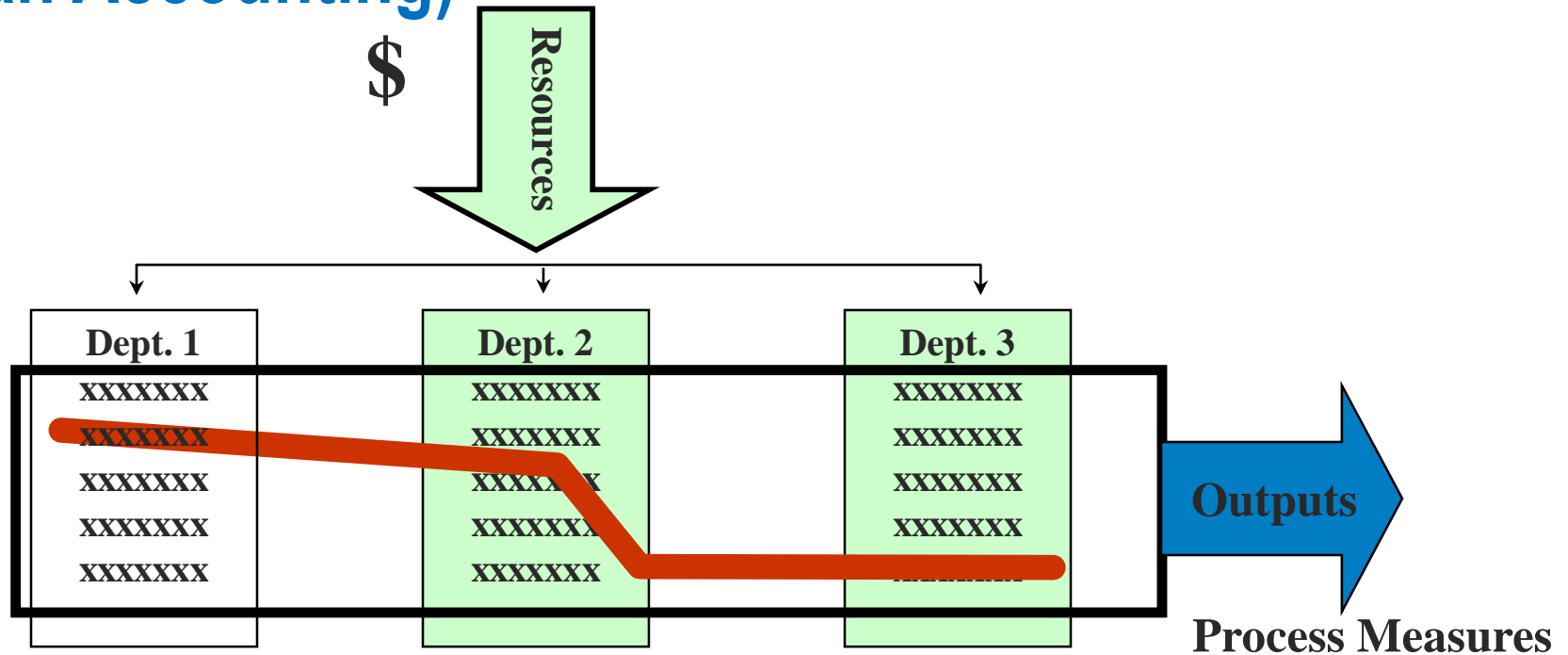
... under-spending on marginally loyal customers and risk their defection to a competitor.

Therefore, what is the optimum spending level for differentiated services to different micro-segments of customers?

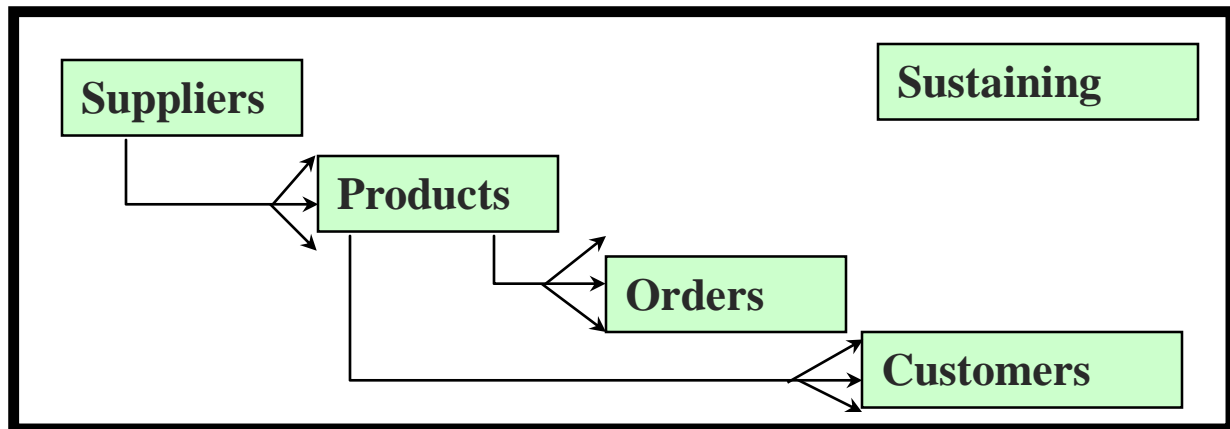
The Vertical view of Assigning Costs



The Horizontal view of Sequencing Costs (Lean Accounting)

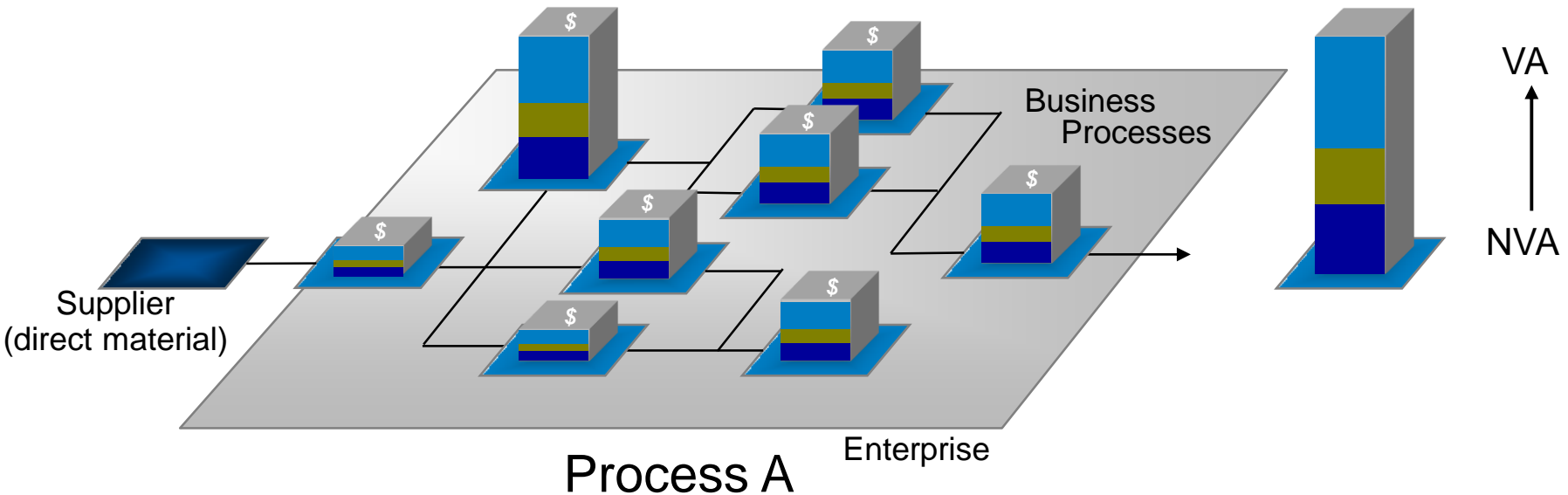


- X** = activities
- = process
- ↓ ↓** = cost drivers

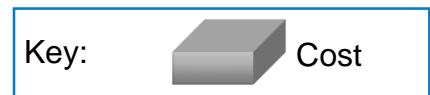


Processes: Six Sigma, Lean Management, and Value Stream Mapping

Processes include activities that have high to low *value-adding* content.



ABC also provides unit costs of outputs for cost visibility and benchmarking.



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The Buy-in to SCM leveraging EPM

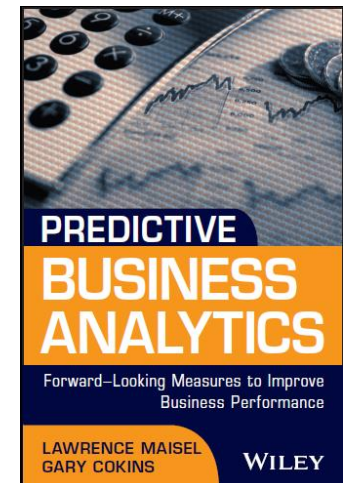
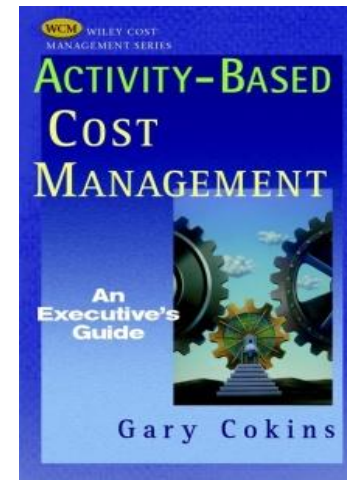
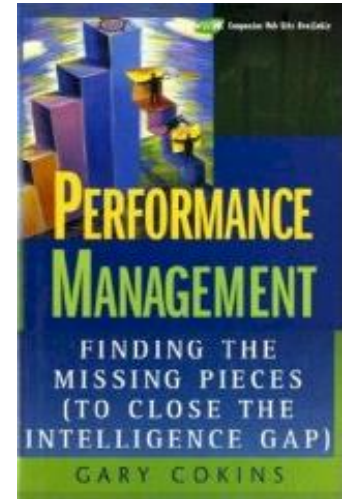
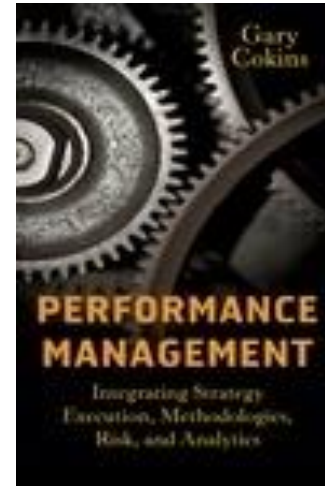
Why has the adoption rate for EPM's methodologies with SCM been so slow?

Why is the adoption rate so slow? What are the barrier categories?

- (1) Technical barriers include IT related issues.**
- (2) Perception barriers are excess complexity and affordability.**
- (3) Organizational behavior barriers involve resistance to change, culture, and leadership.**

From Theory to Practice

Your success depends on how well and how fast the right information and intelligence gets to the right people.



Thank You

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