

Conceptual Framework for Managerial Costing & Resource Consumption Accounting

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1. Conceptual Framework for Managerial Costing (Institute of Management Accountants Task Force)



The Association for
Accountants and
Financial Professionals
in Business

CMA[®]

*IMA's Certification for
Accountants and
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2. Resource Consumption Accounting as a Costing Approach for Federal Entities

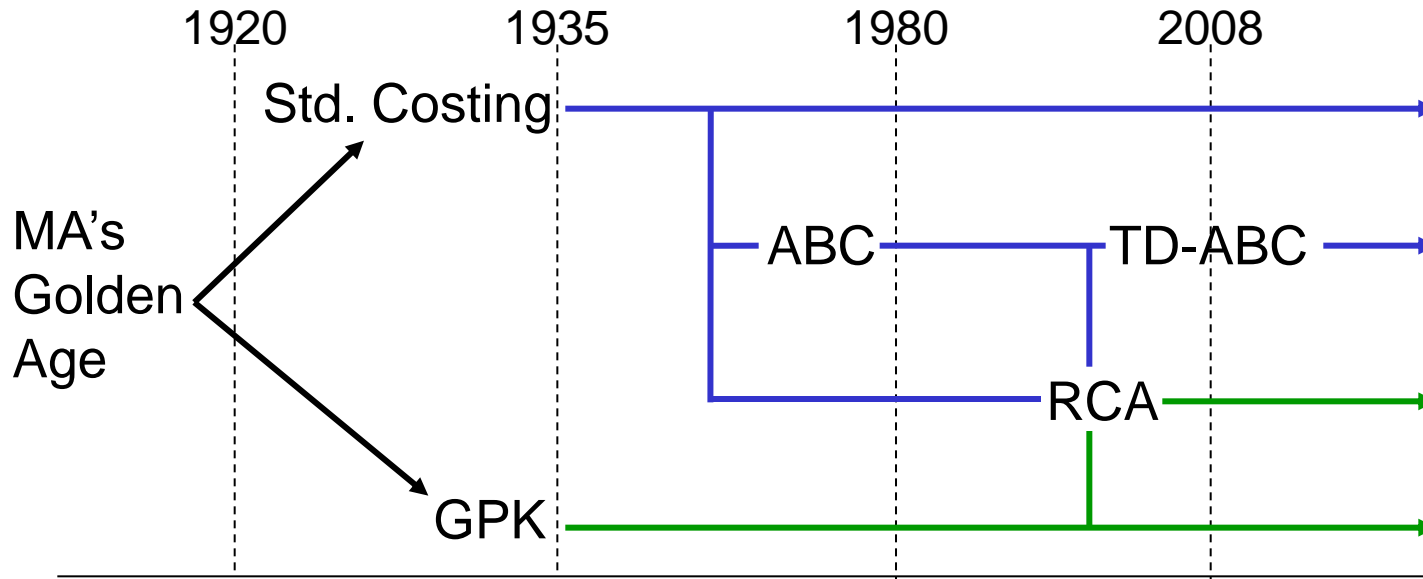
Managerial Costing

- **SFFAS 4** (Para 61,62, 63)
 - Financial Accounting
 - Budgetary Accounting
 - Management Decisions
- **Cost Accounting**
 - Tool for Financial Reporting
- **Management Accounting**
 - Activities of Professional Accountants in Business
- **Managerial Costing**
 - Tool for Managerial Decision Support

- Importance of Conceptual Frameworks
 - Statements of Federal Financial Accounting Concepts (SFFAC's)
 - FASB/IASB
 - IPSASB
- Guidance for Managerial Costing for internal decision support?

Methods

Roots in Accounting Profession



Roots in Other Disciplines



- Production Method Centric
- Accounting Method Centric
- Principle-based

Moving Beyond Methods

- **Objective**
- **Scope**
- **Qualitative Characteristics**
 - **Principles**
 - **Concepts**
 - **Constraints**
- Framework in Operation
- Call to Action
- Appendix: Truth in Managerial Costing

Objective

- The objective of managerial costing is to:
 - Provide a monetary reflection of the utilization of business resources *and*
 - Provide cause and effect insights into past, present, or future enterprise economic activities.
- Managerial costing aids managers:
 - In their analysis and decision making *and*
 - Supports optimizing the achievement of an enterprise's strategic objectives.

Scope

- Provide managers and employees with an accurate, objective cost model of the organization and cost information that reflects the use of the organization's resources.
- Present decision support information in a flexible mold that caters to the timeline and insights needed for internal decision makers.
- Provide decision makers insight into the marginal/incremental aspects of the alternatives they are considering.
- Model quantitative cause and effect linkages between outputs and the inputs required to produce and deliver final outputs.

Scope

- Accurately values all operations (support and production) of an entity (i.e. the supply and consumption of resources) in monetary terms.
- Provides information that aids in immediate and future economic decision making for optimization, growth, and/or attainment of enterprise strategic objectives.
- Provides information to evaluate performance and learn from results.
- Provides the basis and baseline factors for exploratory and predictive managerial activities

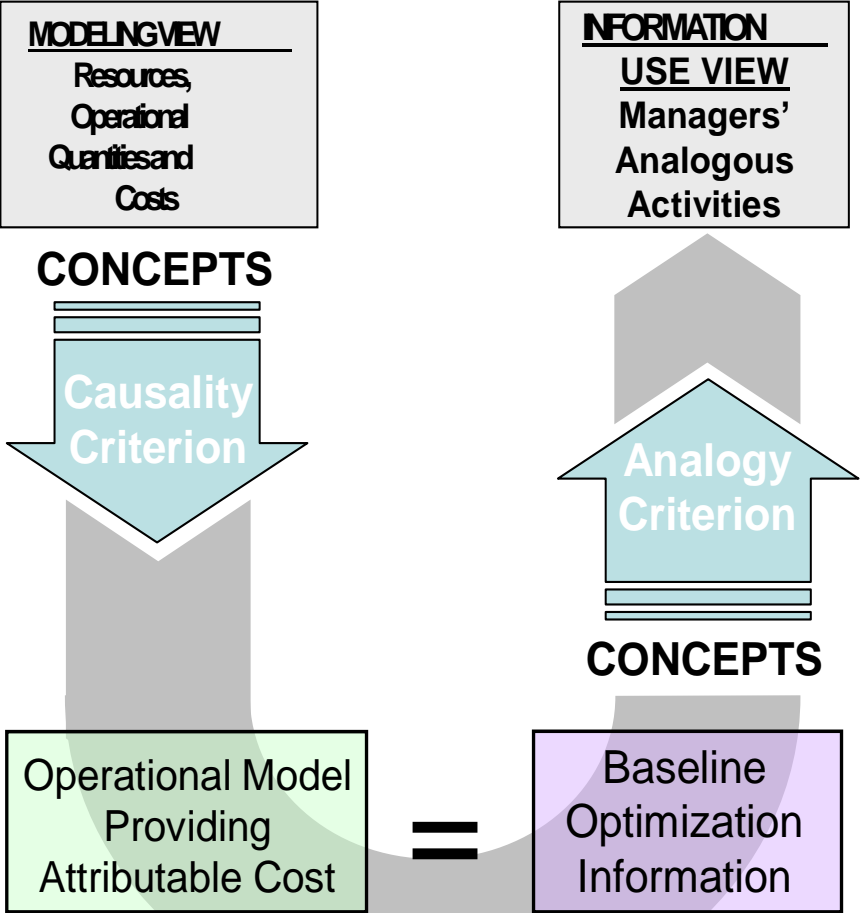
- **Causality**

- *The relation between a managerial objective's quantitative output and the input quantities that must be, or must have been, consumed if the output is to be achieved.*

- **Analogy:**

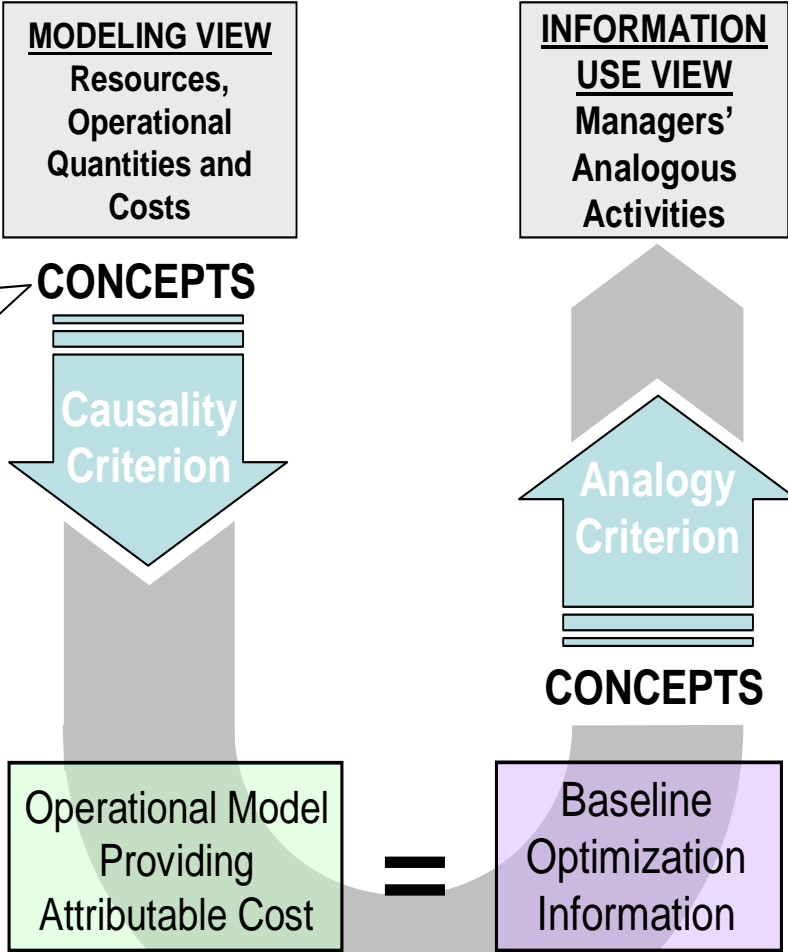
- *The use of causal insights to infer past or future outcomes.*

Principles & Concepts



Modeling Concepts

- Resource
- Cost
- Managerial Objective
- Responsiveness
- Traceability
- Work
- Capacity
- Attributability
- Homogeneity



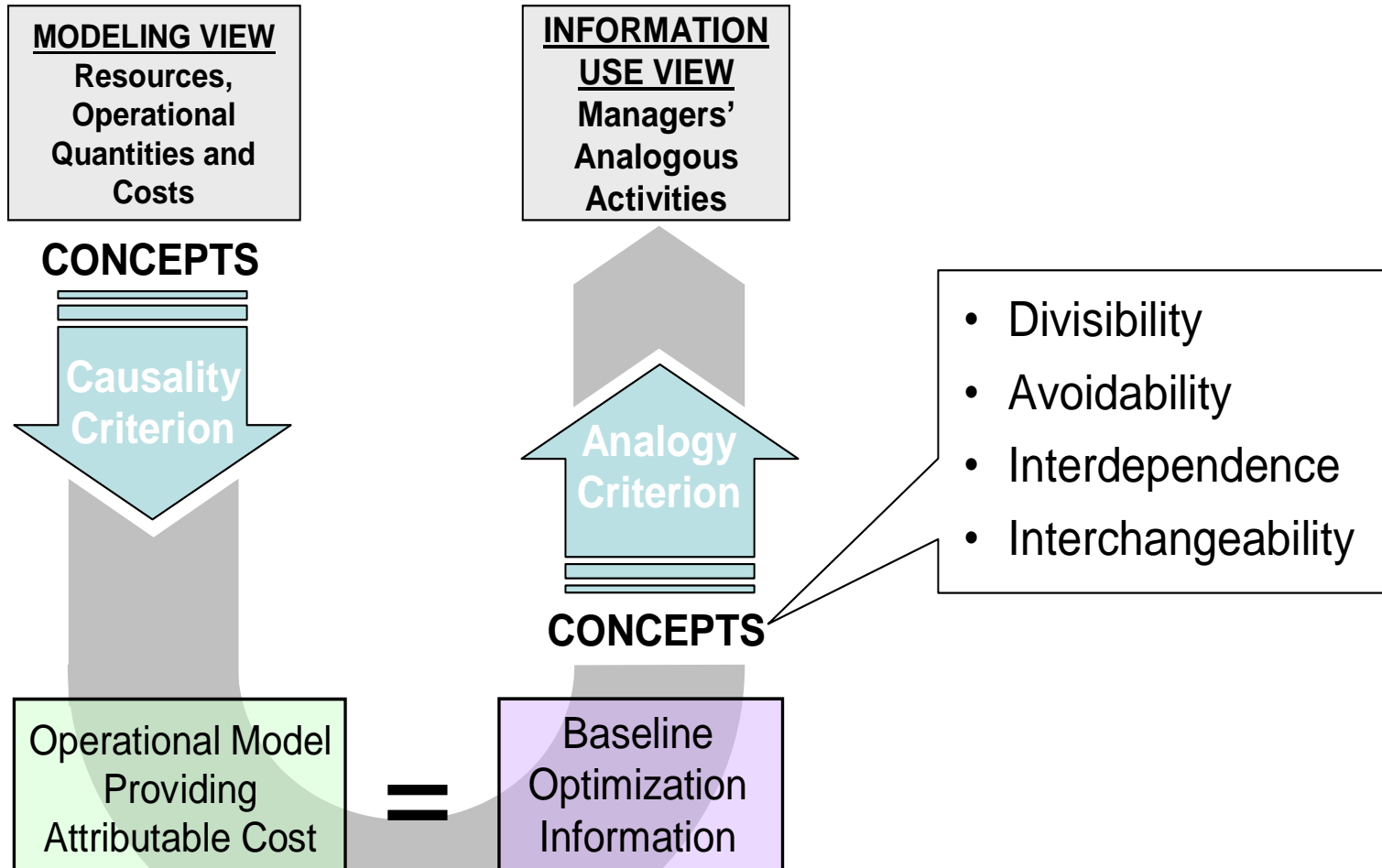
Modeling Concepts

- **Resource:** A definitive component of an enterprise acquired to generate future benefits.
- **Managerial Objective:** *A specific result or outcome of the application or provision of resources, which management chooses to monitor for the purpose of enabling one or more managerial activities.*
- **Cost:** *A monetary measure of (1) consuming a resource or its output to achieve a specific managerial objective, or (2) making a resource or its output available and not using it.*
- **Responsiveness:** *The correlation between a particular managerial objective's output quantity and the input quantities required to produce that output.*
- **Traceability:** *A characteristic of an input unit that permits it to be identified in its entirety with a specific managerial objective on the basis of verifiable transaction records.*

Modeling Concepts

- **Capacity:** *The potential for a resource to do work.*
- **Work:** *A measure of the specific nature of units of resource output.*
- **Attributability:** *The responsiveness of inputs to decisions that change the provision and/or consumption of resources.*
- **Homogeneity:** *A characteristic of one or more resources or inputs of similar technology or skill that allow for their costs to be governed by the same set of determinants and in an identical manner.*
- **Integrated Data Orientation:** *Information about an organization's economic resources, events, and their corresponding monetary values free from traditional accounting artifacts (such as that available in a general ledger), which allows for the aggregation of elementary data elements and their values for any purpose .*

Information Use Concepts



Information Use Concepts

- **Avoidability:** *A characteristic of an input that allows for the input (and hence its costs) to be eliminated as a result of a decision.*
- **Divisibility:** *A characteristic of a resource that allows it to be associated in its entirety with the change in a managerial objective's output resulting from a decision.*
- **Interdependence:** *A relation between managerial objectives which occur because of a decision to use resources to achieve one objective that affects the amount or quality of resources required to achieve other objectives.*
- **Interchangeability:** *An attribute of any two or more resources or resource outputs that can be substituted for each other without affecting the costs of the other resources that are required to carry out the activities to which the interchangeable resources are devoted.*

Cost Modeling Constraints

- **Objectivity:** *A characteristic of a cost model that show it to be free of any biases.*
- **Accuracy:** *The degree to which MA information reflects the intended concepts modeled.*
- **Verifiability:** *A characteristic of modeling information that leads independent reviewers to arrive at similar conclusions.*
- **Measurability:** *A characteristic of a causal relationship enabling it to be quantified with a reasonable amount of effort.*

Cost Modeling Constraints

- **Materiality:** *A characteristic of cost modeling that would allow for simplification without compromising managers' decision making needs.*

Information Use Constraints

- **Impartiality:** *The unbiased consideration of all resource application alternatives.*
- **Congruence:** *The interdependence of individual managerial actions to attempt to achieve both individual and enterprise objectives in an optimal manner.*

- Framework in Operation
 - Evaluating a Company's Operations and Strategy for the Purpose of Modeling
 - Model Design & Construction
 - Implementation Factors
 - Managerial and Operational Factors
- Call to Action
- Appendix: Truth in Managerial Costing
 - Pursuit of Truth vs. Relativism

Resource Consumption Accounting



The Primary Challenge

Desired Performance Outcome

Projected New Output

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New Resources to Achieve a Performance Outcome (Marginal Change)

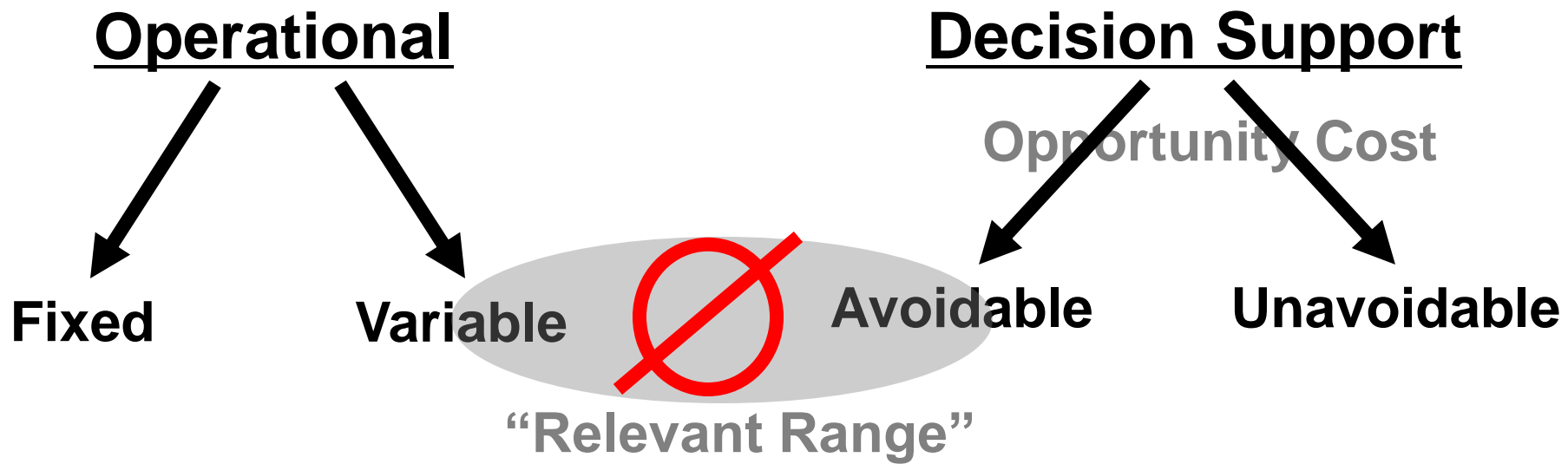
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Existing Resource Base & Current Output

Primary Problems

- Lots of relatively fixed costs
- Unclear cause and effect relationships
- Limited capacity information – productive, unproductive, idle/excess
- Tracing money is easier than tracing resources, but provides limited information.
- Priority – Financial Reporting, Budgetary Reporting, Managerial Reporting

Cost & Consumption Concepts

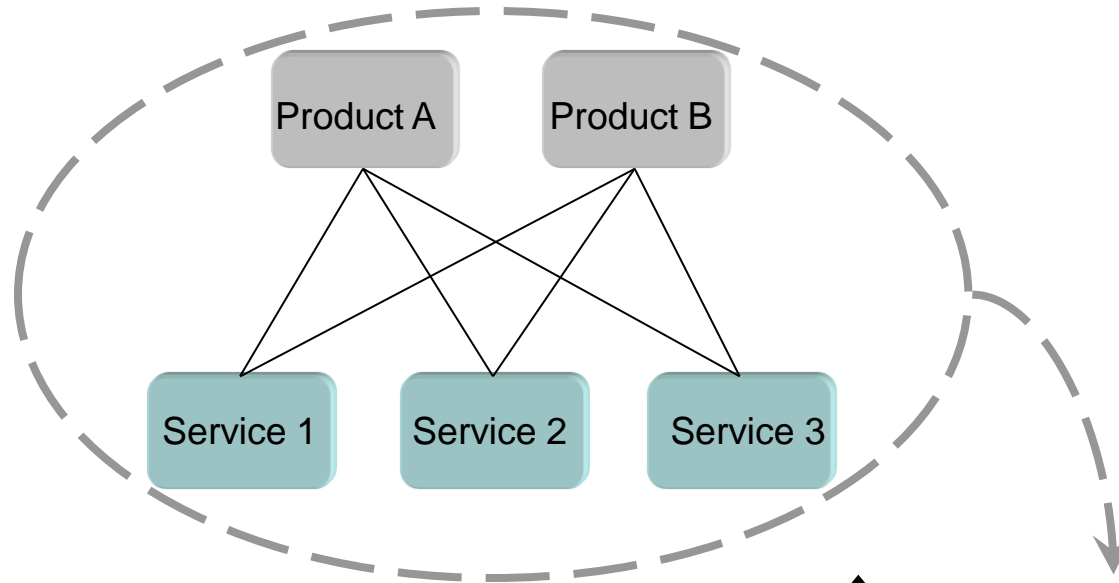


Can be Modeled

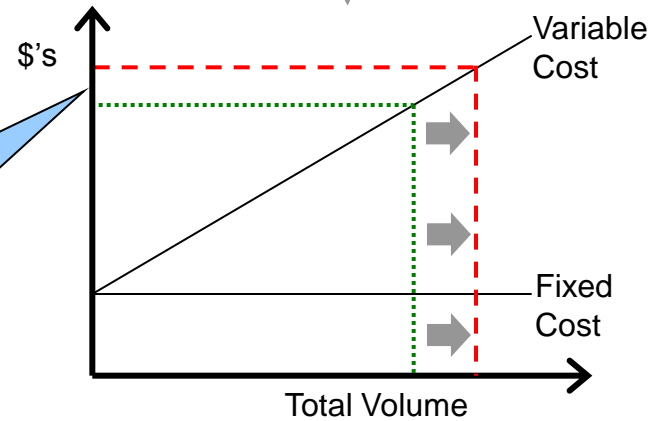
Basis for Action

Divisibility of Resource Information

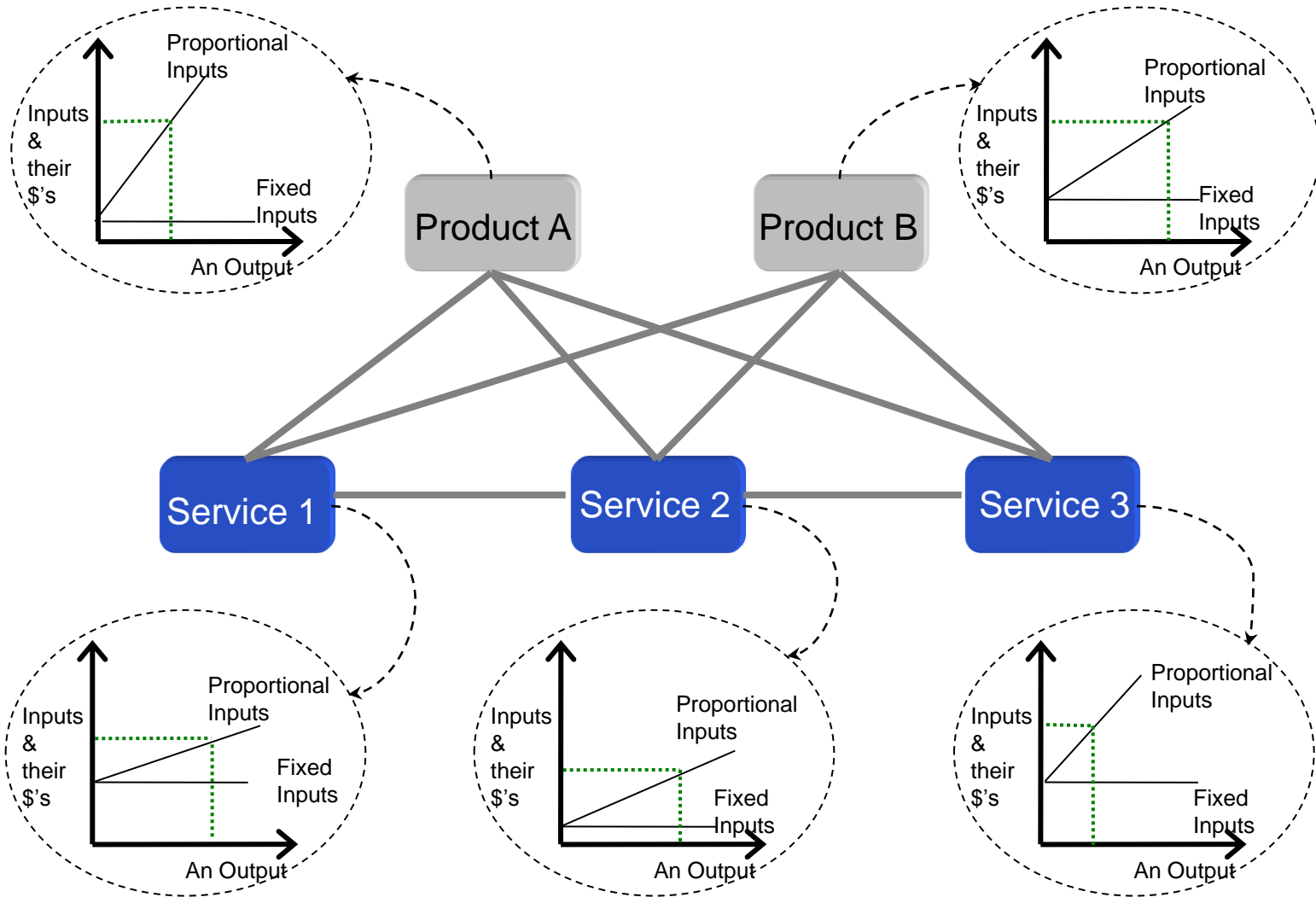
Traditional CVP Analysis



Change in Total \$'s Due to a Change in Total Volume



Resource Responsiveness



Resource Consumption Accounting

- **RCA Inherits Core Principles from German Cost Management (GPK)**

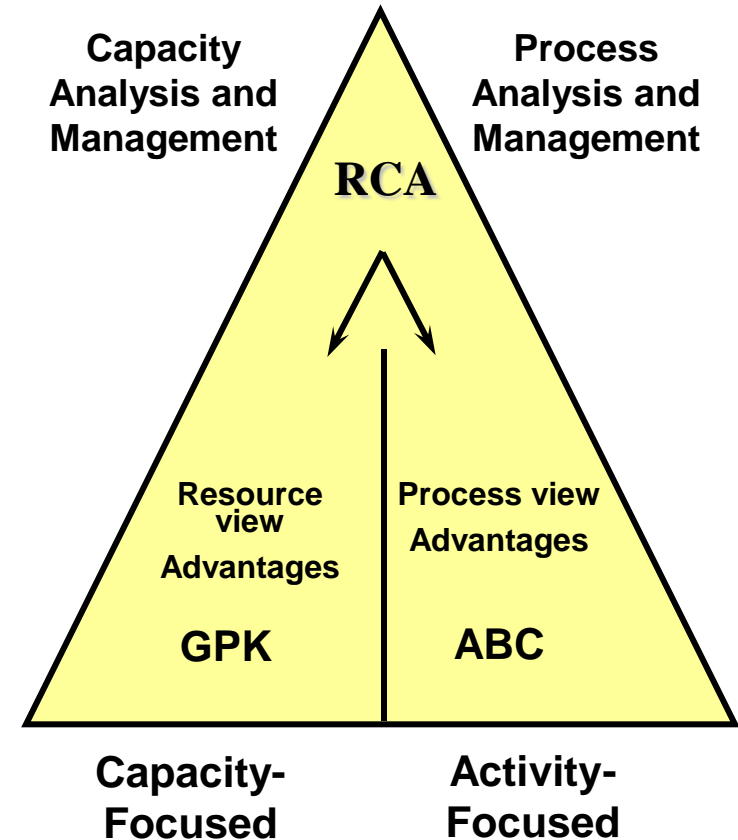
- Grenzplankostenrechnung (GPK) Translated – Flexible Analytic Cost Planning & Accounting
- Principles Applied in Practice since the late 1940's
- Used by 3,000+ Companies

- **German firms currently using GPK**

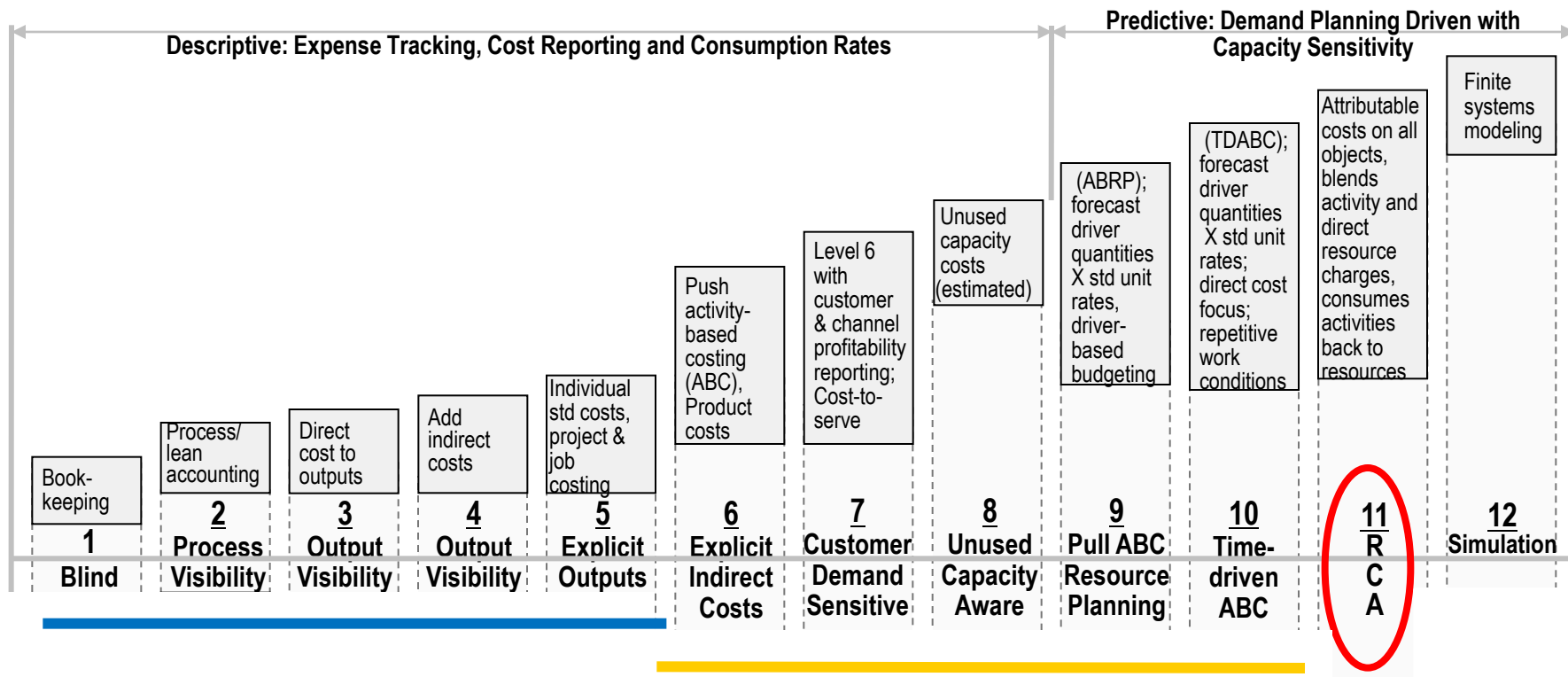
- Deutsche Telekom
- Daimler AG
- Porsche AG
- Deutsche Bank
- Deutsche Post

- **RCA Focuses on Managerial Decision**

- Enterprise Optimization
- Capacity Management
- Superior Marginal/Incremental Analytics



IFAC Costing Continuum/Levels of Maturity



Traditional Standard Costing

Activity Based Costing

RCA Models Your Business

1. Your organization is organized into resource pools
2. Resource from a pool are consumed with a fixed or proportional relationship to their direct output.
3. Resource pool can produce an output (which consumes resources) or be idle.
4. A resource pool's output supports other resource pools or managerial objectives.
5. A resource pool's characteristics transfer to the consuming resource pool.....and may be changed.
6. Dollars can be attached to the flow of resources.

RCA Approach

1. Understand detailed resource pools and their outputs
2. Model the flow of resources (fixed & proportional) through resource pools to managerial objectives.
3. Apply resource quantities without a causal relationship to outputs to the lowest level of organization that can manage (i.e. eliminate) them.
4. Apply dollars to resources and their flow.

Quantification



Accounting Policy Branch Resource Pool

Output Measure: Accounting Policy Labor Hr
Output Quantity: 18,000 Hours

Primary Costs:

- Branch Chief
- Accountants (7 @ \$100K)
- Contractor Hours (4K @\$100)
- Operating Budget (less contractors)
- Equipment Replacement Depreciation

Primary Costs:

Secondary Costs:

- Occupancy & Utilities (2000 SQFT)
- IT & Telecom (12 workspaces, 20 services)
- Personel Services & Payroll (8 employees)
- Procurement (6 Recurring, 10 Large, 30 Small)

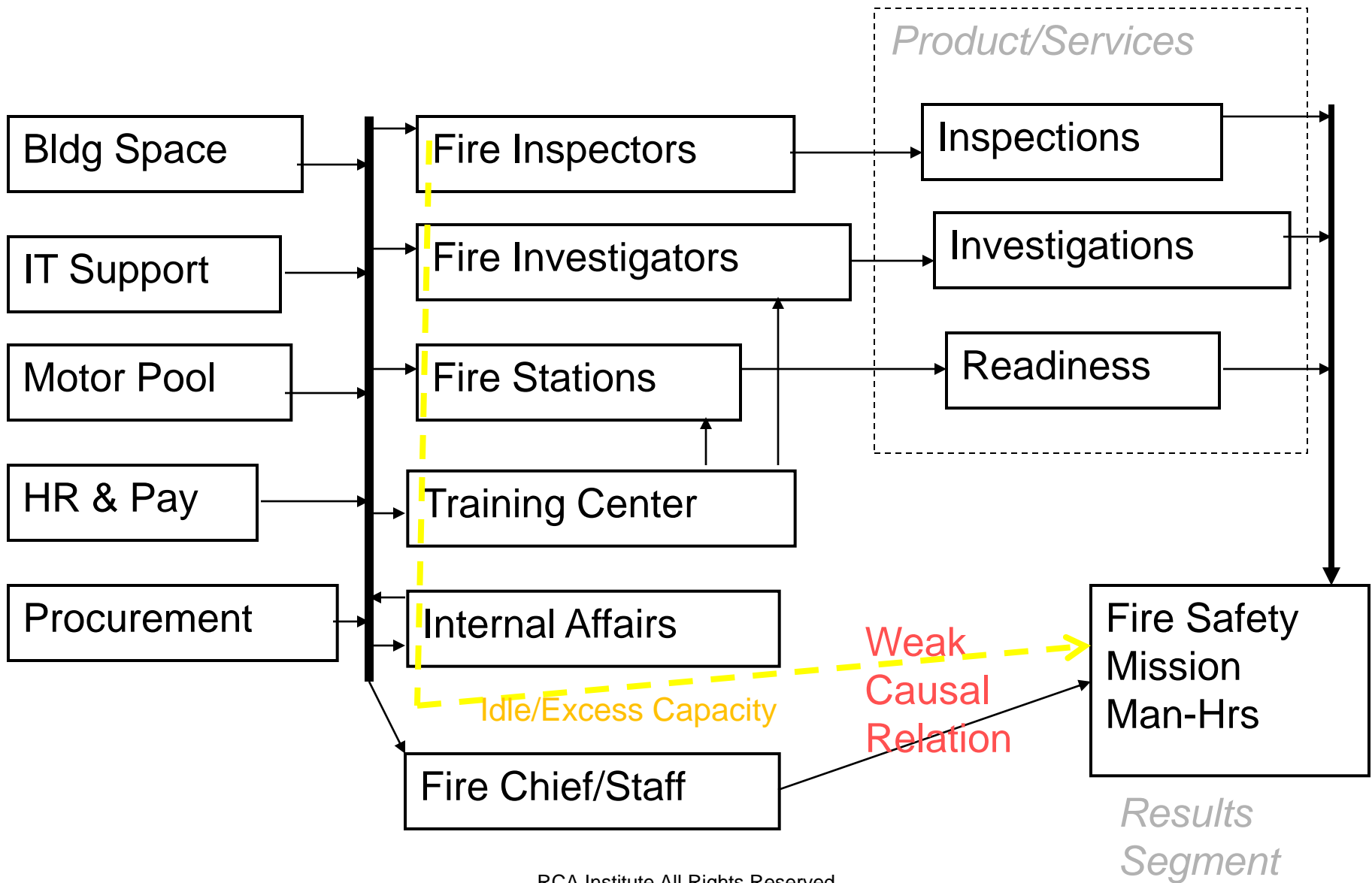
Secondary Costs:

Total Resource Pool Costs:

Unit Cost Rates (/18,000 Hrs):

	Fixed	Proportional
	\$ 120,000	
		\$ 700,000
		\$ 400,000
	\$ 70,000	\$ 30,000
	\$ 10,000	
	\$ 200,000	\$ 1,130,000
	\$ 100,000	\$ 20,000
	\$ 36,000	\$ 20,000
	\$ 8,000	
	\$ 6,000	\$ 5,500
	\$ 150,000	\$ 45,500
	\$ 350,000	\$ 1,175,500
	\$ 19.44	\$ 65.31

Model Example



Results

- Deep understanding of resources and multi-level managerial objectives (outputs)
- Resource Capacity - capacity limits and use/consumption
- Illustrates causal operational relationships
- Attributable Cost - Causal cost relationships or clear responsibility to manage.
- Responsiveness – The key to marginal/incremental cost information

Agenda

➤ Questions?

Thank You

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