

# *Activity Based Management and Costing Program*

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## *Today's Presentation*

- “What is ABM and What Does it Do?”
- “Where Does it Start and Where Does it End?”
- “How Do I Use It and For What?”
- Case Example: Nabisco Foods
- “What are Some of Its Pitfalls?”
- “Lessons to be learned.”

# *Activity Based Management*

## *What is ABM and what does it do . . . .*

- Activity Based Management is the process of measuring and improving business operations and functions within an organization
  - Cost measures
  - Systems and procedures
  - Organization infrastructure
  
- Activity Based Costing is the process of measuring operations costs:
  - Analyzing elemental costs
  - Based on activities performed
  - Measure product and functional costs
  - Determine mix and use of resources

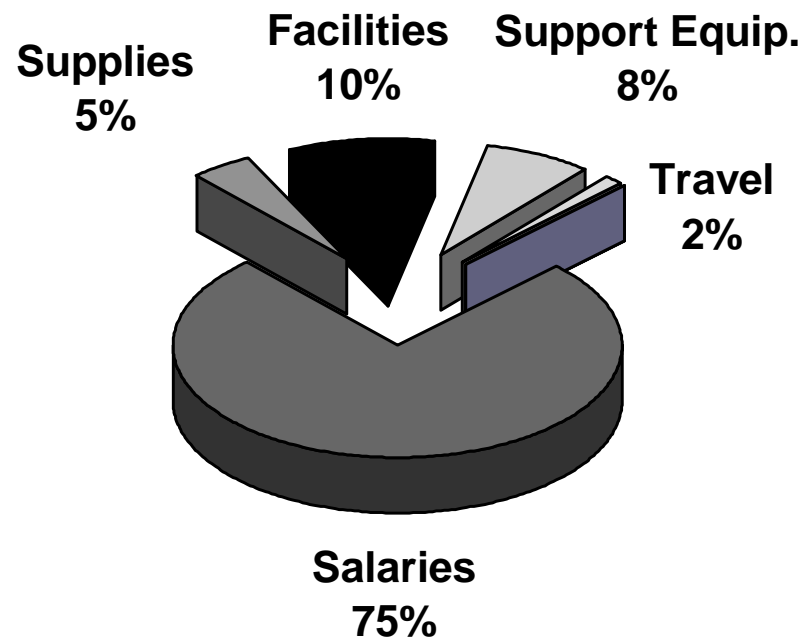
# *Activity Based Management*

## *Evolution of ABM . . . .*

<i><u>Description:</u></i>	<i><u>Benchmark:</u></i>	<i><u>Industry:</u></i>	<i><u>Method:</u></i>
PHASE I	Departmental Budgets	Wholesaling	Limited Cost Measures
PHASE II	Functional Costs	Consumer Products	Developed Measures
PHASE III	Activity Costs	Food & Retailing	ABM

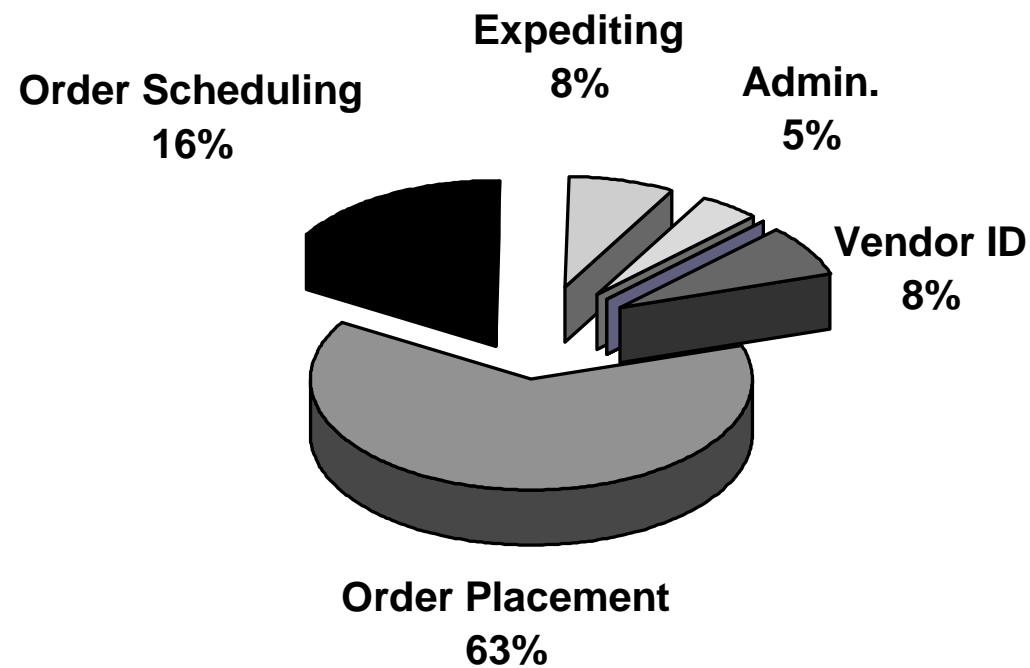
## *Traditional Cost Structure*

*Traditional costs are segmented by standard accounting elements . . . .*



# *Activity Based Cost Structure*

*ABC costs are segmented by activity . . . .*



# *Activity Based Management*

## *Activity Based Management Logic . . . .*

### ■ *ABCost Logic:*

- Products do not generate costs - activities do
- Products are supported by business activities
- Products consume activities - activities consume costs
- Cost categories trace where costs are expended, not where funds are spent

### ■ *ABManagement Logic:*

- Match resources to activities
- Improve product processes
- Reduce process costs

# *Activity Based Management*

*In a broader sense . . . .*

- Activity Based Management is a tool for managing operations and costs by “process” rather than “function”
  - Builds on process of reengineering
  - Produces a complete picture of process costs
  - Identifies non-value activities
  - Highlights high cost activities
  - Provides a tool to manage continuous improvement



## *Scope of Activity Based Management*

*Where does ABM start and where does it end . . . .*

- Product logistics begins with product acquisition and vendors
  - Cost of product purchasing
  - Inbound transportation
  
- Logistics functions continue with:
  - Production planning and scheduling
  - Inventory and warehousing
  - Finished product distribution
  - Outbound transportation
  - Order processing
  
- Customer service completes the product logistics cycle

# *Uses of Activity Based Management*

*How do I use ABM and for what purpose . . . .*

■ **How:**

- Define product flow characteristics of the business
- Identify costs based on activities performed
- Track costs over time periods

■ **Purpose:**

- Benchmarks functions and activities
- Identify high cost activities
- Determine non-value-added elements

## *Case Example*

### *Nabisco Foods Group Profile . . . .*

#### Diverse Product Portfolio

- Approximately \$2.6 bn Annual Sales
- Consumes \$105m Transportation, \$35m Warehouse, and \$20m Admin. Costs.
- Organized in 5 Operating Companies,
- Products include:

*Planters Nuts*

*A-1 Steak Sauce*

*Fleischmann's & Blue Bonnet Margarines*

*Grey Poupon Mustards*

*Cream of Wheat Cereals*

*Royal*

*Milk Bone Dog Biscuits*

## *Case Example*

### *Costs segmented by standard accounting elements . . . .*

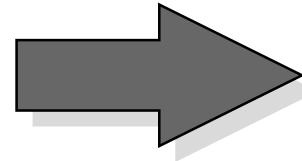
#### Modules of Expenses:

- Transportation: \$53m Customer;  
\$52m Replenishment
- Warehouse: \$26m 12 Dry DC's;  
\$9m 13 Frozen / Refrig. DC's
- Administration: \$20m 1 HQ Office  
1 Field Office

## *Case Example*

*Standard accounting costs were translated into activity costs . . . .*

CHART of ACCOUNTS	
PAYROLL	\$123.
SUPPLIES	\$ 90
TRAVEL	\$ 80
TOTAL COST	\$293.



ACTIVITY COSTS	
ORDER PROC	\$ 75.
CUST SVC.	\$ 115.
ECR ADMIN.	\$ 103.
TOTAL COST	\$293.

## *Case Example*

### *How Nabisco is presently using ABC . . . .*

ABM is used to assign \$155m Logistics costs to a diverse product portfolio among 5 Operating Companies.

Two ABM Systems are in use:

Highly Complex System for Variable Expense

Very Simple System for Administrative Costs.

## *Case Example*

*Nabisco assigns variable costs . . . .*

### Variable Cost System:

Used to assign transportation and warehousing costs to the diverse product portfolio of 5 Operating Companies.

### Characteristics:

Highly detailed transportation rates (lane / product)

Specific product movement history / ability to adjust

Product / Lane variance analysis reporting utilities.

## *Case Example*

### *Nabisco's transportation rates . . . .*

- Rate Calculation Process:

Cass Logistics, Inc. provides freight payment data.

Product / Lane-specific costs calculated on cubic capacity of trailer and converted to cost / cwt.

- Example:

	Freight Cost:	\$500.	Plant A	to DC 1
	<u>Cubic Alloc.</u>		<u>Cwt</u>	<u>\$ / Cwt</u>
SKU A	30%	\$150.	80	\$1.88
SKU B	50%	\$250.	50	\$5.00
SKU C	20%	\$100.	90	\$1.11
TOTAL	100%	\$500.	220	\$2.27

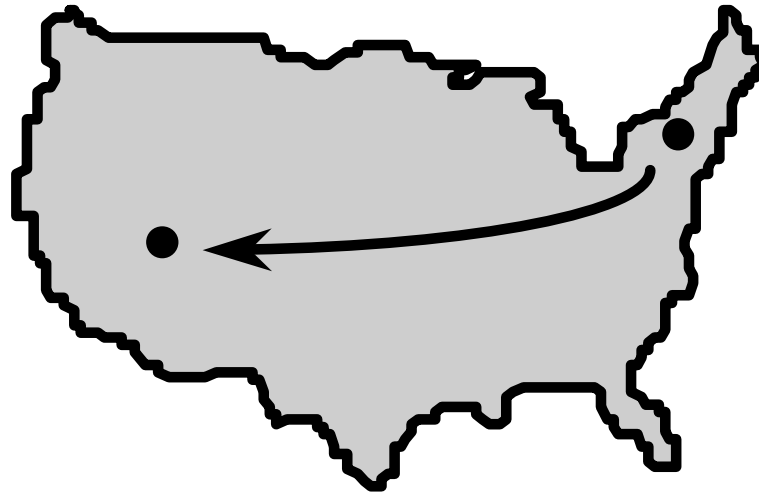


## *Case Example*

*Nabisco's transportation rates . . . .*

### Rate Calculation Process:

**Replenishment  
Rate  
Development**



**Replenishment rates are calculated on a location-to-location basis.**

## *Case Example*

*Nabisco's transportation rates . . . .*

### Rate Calculation Process:

**Customer  
Rate  
Development**



**The average of all customer movement from a shippoint is used**

## Case Example

*Nabisco's product movement . . . .*

### PRODUCT MOVEMENT (Grid)

- Forecasted Deployment Pattern:
- Monthly billing data is summarized and expressed as percentages to produce a forecasted pattern of movement (grid) - by which a sales forecast can be extended.
- Example:

Summarized Billing Data for SKU A ...

<u>Source</u>		<u>Move 1</u>		<u>Move 2</u>
Plant A	100%	→	DC 1 85%	→ Customer 100%
		→	DC 2 15%	→ Customer 100%

## Case Example

### *Nabisco's costing . . . .*

- Costing Process:
  - Rate Table is Extended by Grid:
- The transportation rate table is applied to the forecasted movement (grid) to arrive at total trans. product cost.
  - Example:

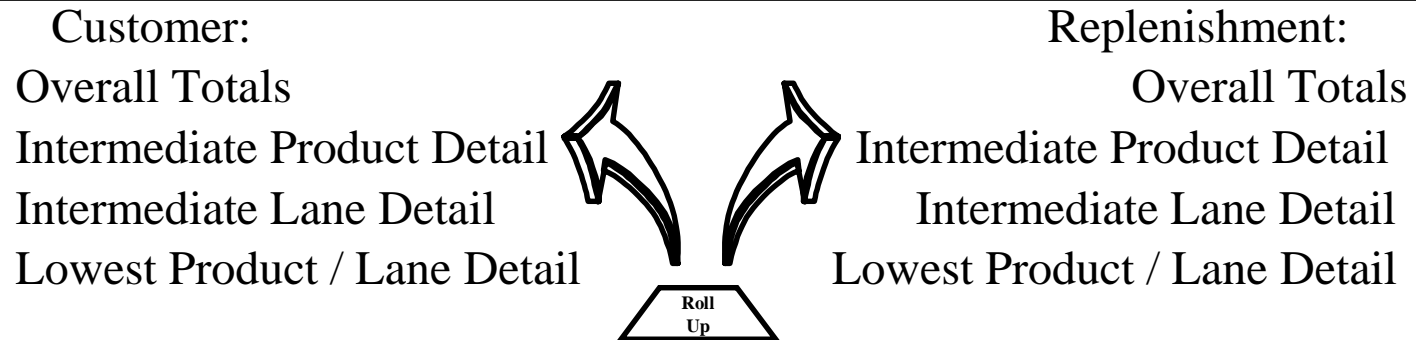
<u>Summarized Billing Data for SKU A ...</u>				<u>100,000 Cwt</u>
Source		Move 1	Move 2	Total Costs
Plant A	100,000	DC 1 85,000	Customer 100%	
		Cost/Cwt: \$1.88	Cost/Cwt: \$2.20	
		\$159,800.	\$187,000.	\$346,800

## Case Example

### *Nabisco reporting . . . .*

- Reporting:
- Volume / Rate Analysis is used for comparison of two time periods.
- Maintain costs at the lowest product & lane levels; enable reporting at various levels:

- Example:



# *Pitfalls of Activity Based Management*

*What are some of the pitfalls of ABM . . . .*

- Accounting versus user based development
- Methods of cost allocation
- Improper identification of basic activities
- Timeliness of data and analysis
- Proper interpretation from bad data
- Decision making based on extrapolation
- Invalid benchmarking from industry data
- Detailed process - hurried

# *Lessons to be Learned*

## *Lessons to be learned about Activity Based Management . . . .*

- Segment issues, functions, and activities
  - Begin with size: Volume, Cost, etc.
  - Segment key functions and activities
  - Identify “Bottlenecks”
  
- Make use of “80-20 rule”
  - Twenty percent of the problem can be eighty percent of the solution
  - Twenty percent effort - eighty percent results
  
- Manage by exception
  - Set parameters and limits
  - Auto-manage routine activities
  - Manage the exceptions

# *Lessons to be Learned*

## *Lessons to be learned about Activity Based Management . . . .*

- Build from a sound base
  - Start with easily identified activities
  - Build on a solid foundation
  - Continue on a steady pace
  - Set realistic goals
  
- Activity Based Management is a process, not a product
  - Employ it as a key tool in operations management
  - Continue to update and improve the process
  - Periodically audit the process and results



# *Successful Activity Based Management*

*Keys to successful Activity Based Management is reporting and control . . . .*

- Identify all relevant activities
- Document resources related to activities
- Identify all activity related costs
- Determine level of detail matched to decision making requirements
- Measure direct versus indirect costs
- Determine value added versus non-value added activities

## *Activity Based Management Summary*

*In summary, ABM drives a fundamental change in business management and resource utilization . . . .*

- Provides construct for benchmarking
- Provides insight on strategic options
  - Understanding key cost drivers
  - targeting cost reduction initiatives
- Serves as the basis for process of enterprise management
- Provides greater assurance of acceptance by top management
- Identifies potential areas of threats by niche competitors and ways to leverage competitive strengths



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