Cost Management
101
CM 101 Training Objectives

• Section 1: Cost Management Overview
  – What are costs and why is managing costs important?
  – Army’s overall objectives
  – The process of Cost Management and how it differs from Budget Management

• Section 2: Cost Object Definition
  – Understanding what is an ERP (e.g. GFEBS, GCSS, etc.)
  – How to structure ERPs to build the Cost Model
  – Defining the various cost objects (which replace APCs/JONOs) within a Cost Model, e.g. organizations, products, services, jobs, etc.

• Section 3: Cost Flow Methods
  – How costs are captured and managed, e.g. travel (DTS), payroll (DCPS), Supplies (PRs, FMC), etc.
  – What level to manage costs to (individual org/UIC or higher in the command structure)
  – The difference between cost capturing, allocations, and assignment

• Section 4: Analysis and Reporting
  – Understanding of the results of the Cost Model
  – How to report/analyze Budget Execution data for budget status versus cost management
  – How various types of analysis and decisions are supported
Riddle Me This….?

• Could you tell your customers the full cost of providing them their products or services?
• Could you answer the same question by quarter or for the next quarter?
• Could you tell customers how changes in their behaviors might affect their costs?
• How would you determine the cost to operate your DOL or Course?
  What costs would you include?
  What is your “show me” source?
• Let’s view a real life example of Cost Management in action!
Pa & Ma Kettle Math Video
What is Cost?

.....”a cost is the value of money that has been used up to produce something”*

* en.wikipedia.com 11/26/09
“Cost is a monetary measure of the sacrifice associated with:

- expending resource functionality to achieve a specific objective, or
- utilizing resource output required to achieve a specific objective, or
- the provision of resource functionality or resource output while not using it.

* www.rcainstitute.com - RCA Taxonomy
Objective & Agenda

Section 1: Cost Management Overview

• Understanding of why managing costs are important, Army’s overall objectives, the process of Cost Management, how it differs from Budget, and key cost terms

  – **Lesson 1**: Cost Awareness
  – **Lesson 2**: Cost Culture
  – **Lesson 3**: Cost vs. Budget
  – **Lesson 4**: Cost Management
  – **Lesson 5**: Cost Terms
Lesson 1: Cost Mandates vs Cost Awareness

Objective(s):

• To understand the external and internal factors requiring the Army to instill Cost Management as a fundamental approach for day to day activities
Army Stakeholders

External
- Taxpayers
- Congress
- OSD
- Customers

Internal
- ARMY HQ
- COMMAND HQ
- COMMAND FIELD

Strategic
Management
Operation
There has been a push for the past decade for the ability to explain how well an organization is performing versus what it is performing.

More questions are being asked about - how much does it cost to? How efficient are we at? Versus where did you spend the budget?

Questions on efficiency fall into the domain of management accounting; questions of which funds were expended are the domain of budget accounting.
Cost – Government History

• Actions Requiring Costs & Performance
  – Chief Financial Officers Act (1990)
  – Government Performance Results Act (1993)
  – President’s Management Agenda (2002)
  – OMB Performance Assessment Rating Tool
  – OSD Requires Army Performance Budget

• Public Sector GAAP (SFFAS 4) Full Cost (1995)
  – Army Developed GFEBS Costing Module

• OSD Actions to Increases Cost Management
  – Acquisition Reform (1997)
  – Business Transformation / Lean Six Sigma

Lessons Learned: Cost Measurement Difficult
Cultural Resistance
ASA(FM&C) Operational Priorities

• Provide accurate, reliable, and timely financial information and integrated functional performance data to Army decision makers
• Improve Army accountability and enable full cost management
• Exchange information with customer and stakeholders
• Achieve efficiencies and operate effectively
• Enable the Army to receive and unqualified audit opinion on annual financial statements with respect to Army General Funds
Objective

In order to meet the first 4 operational priorities, the Army needs to establish a cost culture that:

– functions as a key and integral part of the Army’s overall management process
– adds value to the organization by enabling the effective use of resources in dynamic and competitive contexts
– provides continuous feedback on effective use of resources to create value for stakeholders
Vision

By obtaining the objectives, the Army can meet its overall vision of:

• Leaders use cost information for effective decision-making and performance management by:
  – understanding both the near- and long-term cost implications of their decisions;
  – making effective trade-off decisions to achieve the best possible use of limited resources; and
  – holding subordinates accountable for improving the efficiency and effectiveness of their operations.

• Army soldiers/civilians along the value chain understand how their efforts contribute to the Army mission and impact Army resources
Need to Understand What the Resources Buy – The Army Product

Ensure Strategic Objectives are Effectively Resourced

Effectively & Efficiently Produce Outputs

- Products/Services
- Organizations (Cost Centers)
- Resources (Labor, Equipment, Assets)
ARFORGEN Process
Optimization Impacts Multiple Programs

- Reset/Train
- Ready
- Available

- Man
- Equip
- Train
- Sustain
- Operate

- HQDA
  - IMCOM / REGION
  - GARRISON
    - Population Shifts (Deployments, Training, Etc.)
    - Family Programs
    - Facilities Utilization
    - Maintenance & Repair
    - Etc. ..

- TRADOC
  - Infantry School
    - Course ABC
    - Course XYZ
  - National Training Center
    - Event 123
    - Event 456
    - Etc...
Army Cost Management Framework

**Available / Deploy**

**Train / Ready**

**Reset**

- Train Units
- Operations & Activities

- Research
- Procure
- Sustain
- Distribute
- Dispose

- Acquire & Train
- Manage (Pay) & Distribute
- Develop & Educate
- Force Development

- Facility
- Installation
- Command Programs
- Centrally Managed Programs

- Command & Intelligence
- Operating Forces

- Depot Maint / Repair of Mil Eqt
- Ordnance
- S&T & R&D
- Systems Acquisition, T&E, Engineering, & Contracting

- Civ Education / Training
- Civ Personnel Svcs
- Mil Education / Training
- Mil Personnel Svcs
- Prof. Development Educ.

- Community & Family Svcs
- Environmental Security & National Resource Svcs
- Health Svcs
- Installation / Facility Mgt

**Program / Budget Construct**

**Communications, Computing, & Info Systems**

**Financial Management / Budget**

**Operation Planning & Control**

**Note:** Program / Budget and Cost Management constructs shown represent subset of overall framework
Lesson 1: Wrap-Up

- **Cost** is the monetary sacrifice for a resource
- External Pressures provide an emotional trigger
- Each level of stakeholders have different objectives & vision which should align and support total objectives & visions
- Cost awareness and management as an approach will be used to shift the focus of budget only, e.g. what was spent, to performance, e.g. what did we do/get?
- The Army’s product is the Brigade, the Brigade’s lifecycle is the ARFORGEN process, and the Core Enterprises support the generation of the Army product
Question #1: Based on the HQDA Strategy of BCT being the Army Primary Product, How can Your Command Impact that Strategy through Cost Management?

ANSWER:

Ensure Strategic Objectives are Effectively Resourced

Effectively & Efficiently Produce Outputs

Light

Heavy

Stryker

ARFORGEN

Human Capital

Materiel

Readiness

Services & Infrastructure

• Products/Services

• Organizations (Cost Centers)

• Resources (Labor, Equipment, Assets)
Question #2: What are some examples of how Your Command is impacted by the Army’s optimization strategies, i.e. ARFORGEN Process?

Answer:

- **Man**
- **Euip**
- **Train**
- **Sustain**
- **Operate**

**Reset/Train**
- HQDA
- IMCOM / REGION
  - GARRISON
    - Population Shifts (Deployments, Training, Etc.)
    - Family Programs
    - Facilities Utilization
    - Maintenance & Repair
    - Etc...
- TRADOC
  - Infantry School
    - Course ABC
    - Course XYZ
  - National Training Center
    - Event 123
    - Event 456
    - Etc...

**Ready**

**Available**
Lesson 2: Cost Culture

Objective(s):

• Understand the level of effort for deploying cost awareness throughout the Army, i.e. generating a Cost Culture
What is a Cost Culture?

Organizational Culture:

- Comprises the Attitudes, Experiences, Beliefs & Values of an Organization
- A Shared Behavior by People & Groups in an Organization
- Most Experts Agree that it is the Shared “Taken-For-Granted” Assumptions, Beliefs, Values, Expectations & Rules that Members of a Work Unit Team or a Corporate Organization Hold

A Cost Culture is the Cultural Shift from “Accomplish the Mission at Any Cost” to “Accomplish the Mission Considering Cost”
Why Focus on Cost Culture?

Deploying Systems, Improving Cost Models, Issuing Policies, Training Staff, Recruiting Experts will not Enhance the Army’s ability to manage costs unless Army Soldiers / Civilians Understand & Value the Need to Manage Costs

- Knowing Our Costs & Managing Them To Increase Our Mission Capability Must Become Ingrained in Our Culture
- Leaders Must Demand Cost Information & Use It In Decision-making — Otherwise It Provides No Utility To The Army
- We Need A Lifestyle Change, Not A Diet!
Leadership Statements on a Cost Culture

From Chief of Staff, Army:
• Most Army processes lack a cross-functional focus and cost-benefit analysis which leads to grossly inefficient application of resources.

• Large budgets in the past few years have produced a consumption-based culture that focuses on accomplishing missions without concern for more efficient delivery of capabilities.

From 2008 Army Posture Statement:
• Integral to achieving our goals is the development of an Army-wide cost-management culture in which leaders better understand the full cost of the capabilities they use and provide and incorporate cost considerations into their planning and decision-making. This approach will enable us to achieve readiness and performance objectives more efficiently.

From HONORABLE Nelson Ford, ASA (FM&C):
• The cultural change that is essential to Army financial management, and without which all the other improvements will leave us short of achieving our goals, is the adoption and integration of cost management into the Army culture.
Creating A Cost Culture

**Cost Culture Vision:**
Leaders Use Cost Information for Effective Decision-Making & Performance Management by ... 

- Understanding Both Near & Long-Term Cost Implications of Their Decisions
- Making Effective Trade-Off Decisions to Achieve Best Use of Limited Resources
- Holding Subordinates Accountable for Improving the Efficiency & Effectiveness of operations

**Cost Culture Take - Aways:**

- Know the True Cost of What You Do - Not Knowing Cost Makes Everything Appear Free -- “Free Goods Have Infinite Demand”
- Cost Management is Not Easy -- You Have to Know What Drives Costs & Take Action to Control Costs
- Cost Management Goes Beyond “Do More With Less” - It Is Optimizing Resources to Efficiently and Effectively Meet Mission -- “Focused on Continuous Improvement”
Business Culture Change Process
“Making a Square a Circle”

- The Culture Is Defined By What, Who, Why, And How Business Is Conducted
- The Culture Is Imbedded in People, Processes and Technologies
- “We’ve Always Done It This Way”

- Influencing A Culture Requires Changes To The Components Of A Culture
- Visualize and Define What You Want To Be
- “We’re going to be…”

Enablers of Change
Army Cost Culture Change
“Making a Square a Circle”

“A Culture of Entitlement”

- Budget-focused
- Spend rate driven – inputs
- Performance objective - 99.9% obligated
- Free goods has infinite demands

“A Culture of Influence”

- Cost and performance focused
- Results driven - output & outcome
- Performance objective – resource consumption optimization (efficiency & effectiveness)
- Use what is necessary to obtain the objective

How To’s

- Develop/Recruit Analysts
- Enhance Training
- Performance Focus

Policy

- Process Improvement (Lean 6-Sigma)
- Integrated Business Design

How To’s

- ERP Applications e.g. (GFEBS, LMP, GCSS)
- Business Warehouses
- Executive Scorecards

Enablers of Change
Cultural Change Video
Lesson 2: Wrap-Up

• Culture is the Shared “Taken-For-Granted” Assumptions, Beliefs, Values, Expectations & Rules that Members of a Work Unit Team or a Corporate Organization Hold

• Change management is required to move towards a Cost Culture

• Change management impacts the areas of People & Other Resources, Processes, Policies & Procedures, and Technology

• Cultural shift to a Cost Culture is a maturation process moving from “What We Spent”, to “What It Actually Costs”, to “What It Should Costs”
Question #1: What are the Enablers of Business Culture Change
Answer #1: What are the Enablers of Business Culture Change

- People/Other Resources
- Processes, Policies & Procedures
- Tools & Technologies
Question #2: What is the biggest obstacle to establishing a cost culture in the Army for you?
Answer #2: What is the biggest obstacle to establishing a cost culture in the Army for you?

Answer: Discussion
Lesson 3: Cost vs Budget

Objective(s):
• Understand how Costs differ from Budget
TINA, put together a document showing how our budget aligns with our priorities.

Write it so it seems like it does.

Isn't that lying?

I call it leadership by words.
Where We Are Currently

• Focused on the “Budget” domain
• The “Budget” domain consists of creation of the Budget requests/submissions, determination of the year of execution Budget (e.g. availability control and informal Budgets), actual execution, and reporting of the status of execution against the Budget (i.e the PPB&E process)
• Primary focus of budget execution is the Obligation (consumption of the Budget)
• Budget Accounting focuses on 4 series accounts – status of Budget and consumption
• Budget Management focuses on the status of available funds, which includes both current and prior years funds
Budget Terms

- **Budget** = What Can Be Spent
- **Obligation** = a promise to procure a product/service (e.g. to spend)
- **Budget ≠ Obligations**
- **Budget – Obligations = Availability** (e.g. what is left to spend)
- **Expenditure** is the receipt of the product/service which was obligated (e.g. what was spent)
- **Expenditures** or collection of expenses/expenditures determines Costs
Cost versus Budget

Knowing your Obligations is **not** the same as knowing your Costs!

**Obligations**

A legally binding commitment by the federal government that will result in outlays, immediately or in the future. Budgetary resources must be available before obligations can be incurred legally.

**Costs**

The price or cash value of resources used (expenditures) to produce a program, project or activity. All relevant costs may not appear in the organization’s budget.

Cost will contain expenses from different years, source of funds, organizations, etc.
Budget ≠ Obligations ≠ Cost…

• Cost Accounting / Management is New to Most of Army as a formalized process
• Provides Financial and Managerial Information
• Cuts Across financial and operational organizations
• Is Driven by Information Needs of the Operational Army not solely the Financial Community
Cost Management Focus

COST MANAGEMENT FOCUS

Inputs

Conversion “Work”

Outputs

Resources:
Labor
Material
Equipment
Supplies
Contracts
Assets

Work Performed by Organizations (Cost Centers) to Produce Products and Services for Customers

Products Services:
Courses
Services Support Programs
Tests
Research Projects
Training Events
Budget vs Cost Domains

**Budget Formulation**
- **Budget**
  - President’s financial plan and the priorities for the Federal Government
- **Focus**
  - requirements
- **Key Data Elements**
  - appropriation, FTE
- **Questions**
  - What do I need?
  - What will I ask for?

**Budget Execution**
- **Budget Authority**
  - Authority to incur obligations
- **Focus**
  - availability, obligations
- **Key Data Elements**
  - appropriations, EOR’s, PE, MDEP, projects, BLIN, etc.
- **Questions**
  - What funding did I get?
  - What obligations were executed?

**Cost Management**
- **Cost**
  - Valuation of resources used to produce outputs, basis for decision making
- **Focus**
  - full costs, Plan vs Actual
- **Key Data Elements**
  - operational entity (e.g. cost centers), services, rates, products, projects, etc.
- **Questions**
  - What was expensed?
  - What did I get for it?
  - How well was it used?
Budget - Color of Money

Appropriations
- OMA
- AFH
- RDT&E

Program Elements
- $BOS
- $SRM
- $GFEBS

Fund Centers
- IMCOM
  - Jackson
  - Benning
  - Knox

Elements Of Resources
- Supplies
- Training
- Travel
- Equipment
- Labor
- Etc.
Cost-Conversion of Work

Cost Center
Organization - Labor, Materials, Supplies

Asset / Equipment
Plant, Property & Equipment

Project / Program
Building Project, Weapon System

Internal Order
Services, Events (SSP, Course)

WBS / Work Order
Job (Set of Tasks) – Maint & Repair
Transforming The Army

Enhance Budgeting with a Cost Culture

**Budget Culture**

- ASA(FM&C)
  - PEGs
  - II PEG
  - MACOMs
  - IMCOM
  - MSC
  - Regions
  - Installations
  - Other Directorates
    - Dir of Logistics
      - Transportation
      - CIF
      - Food Services

**Budget Process**

- Stop

**Other Directorates**

- 25A – Manage CIF
- 25B – Issue OCIE
- 25C – Provide Clothing
- 25D – Accept OCIE
- 25E – Receive Shipments
- 25F – Manage Chemical
Lesson 3: Wrap-Up

- Budget ≠ Obligations ≠ Costs
- Budget Management is primarily “input” focused (color of money) where Cost Management is primarily “output” focused (products/services)
- The Budget and Cost domains have different purposes, focuses, questions, optimization goals, while sharing the “expenditure” data stream
- Budget – Type or “Color” of Money
- Cost – Conversion of resources to outputs
Quiz

Question #1: Cost = Budget
  0 True
  0 False

Question #2: Cost = Obligation
  0 True
  0 False
Quiz Answers

Question #1: Cost = Budget

☐ True
☑ False

Question #2: Cost = Obligation

☐ True
☑ False
Question #3: ________________ provides ‘authority’ and control of the conversion activity in order to provide the agreed upon outputs of the agency (primarily input focused)

Question #4: ________________ provides ‘efficiency and effectiveness’ and control of the conversion activity in order to provide the agreed upon outputs of the agency (primarily output focused)
Question #3: **Budget** provides ‘authority’ and control of the conversion activity in order to provide the agreed upon outputs of the agency (primarily input focused)

Question #4: **Cost Management** provides ‘efficiency and effectiveness’ and control of the conversion activity in order to provide the agreed upon outputs of the agency (primarily output focused)
Exercise #1

1. Define Area (Organizations)

2. Identify Resources Used

3. Activities/Tasks Performed

4. Products/Services Produced
Lesson 4: Cost Management

Objective(s):

• Understand the definition of Cost Management
• Understand the key components of the Cost Management Process
• Identify who is involved in performing Cost Management
I NEED A COST ESTIMATE ON YOUR PROJECT.

I HAVE NO IDEA. I HAVEN'T EVEN GATHERED THE USER REQUIREMENTS.

DON'T WORRY. I WON'T HOLD YOU TO THE ESTIMATE.

YES YOU WILL. YOU WILL PUT IT IN THE PLAN. FORGET WE HAD THIS CONVERSATION. AND FIRE ME WHEN I GO OVER BUDGET.

GIVE ME A NUMBER OR I'LL FIRE YOU RIGHT NOW.

OKAY, IT WILL COST TEN MILLION DOLLARS.

THAT'S TOO HIGH.

IF YOU ALREADY KNOW THE COST, WHY ARE YOU ASKING ME?

SO YOU'LL FEEL LIKE YOU HAD INPUT.

IS INPUT SUPPOSED TO FEEL THIS BAD?
Cost Management

Managing Business Operations *Efficiently & Effectively* Through the Accurate Measurement & Thorough *Understanding of the "Full Cost"* of an Organization's Business Processes, Products & Services in Order to Provide the *Best Value to Customers*.

- **Efficiently** is to doing things "right“, e.g. in the best and most economical way, wasting no resources

- **Effectively** is to do the "right" things, e.g. setting targets to achieve an overall goal (the *effect*) and attaining the goal

- **Full Costs** is the inclusion of all and only those costs related to generating the output

- **Best Value** is a qualitative measurement to be taken into consideration
Managing Business Operations *Efficiently & Effectively* Through the Accurate Measurement & Thorough *Understanding of the "Full Cost"* of an Organization's Business Processes, Products & Services in Order to Provide the *Best Value* to *Customers.*
Cost Planning is the use of a Cost Model for “should-cost” forecasting to make informed decisions.

Often Performed for:
- Budget Requirements Requests
- Costs Estimations
- Output Quantities
- Capacity Management
- Risk Analysis
- Various Time Frames: Out year / Current year, Quarterly, Monthly
- Standard Rates
- Defining Targets to Measure Efficiency and Effectiveness
Cost Accounting translates the operational value chain into financial values

- Cost Accounting is the dollar valuation of the cost measurements resulting from business operations
- Cost Measurement has meaning only when considering its purpose
- Defining Cost Measurement should be carefully considered and evaluated
- Alternative cost methods should be evaluated under operating environment

Purpose Is the key to Understanding the Army ERP Cost Design (GFEBS): To Provide Operational Managers With Relevant “True” Cost Information to Make Sound Economic Decisions*

* Source: The Federal Accounting Standards Advisory Board (FASAB) No. 4. Managerial Cost Accounting Standards
Cost Analysis is the integration of functional outcome data with cost data to produce valid and verifiable information to conduct various forms of analysis.

Sample types of analysis include:
- Organizational performance
- Analysis of alternatives
- Variance analysis
- Economic analysis
- Cost / Risk assessments
- Trending
**Cost Controlling** is to take “Best Value” and/or “Best Practice” actions to realign the organization to achieve the defined objectives

- Actions taken based on information provided from Cost Analysis results
- Redeployment of resources between outputs
- Change outputs (e.g. do more or less)
- Update/revision of plan information, e.g. updated Std. Rate
- Execution of trade-off decisions, e.g. OT versus external support
Cost Management Involves

- **Capture and Valuate Data**
  - Accurate, timely and relevant data
  - Connecting operational output/performance data to financial data
  - Allocate Overhead

- **Cost Planning**
  - Set Cost Targets and Efficiency Goals
  - Compute Standard Rates

- **Cost Controlling**
  - Move to action based on analysis
  - Change targets
  - Change resources
  - Change quality

- **Cost Analysis**
  - Variances
  - Depreciation
  - Trends and forecasting
  - Product, service or activity cost by element (labor, contract etc)
  - Understanding full costs of organizations, operations, products and services
Cost Management Process
(Who Is Involved?)

- Resource Managers (RM)
- Operational Managers (OM)
Lesson 4: Wrap-Up

• Cost Management = Managing Business Operations Efficiently & Effectively Through the Accurate Measurement & Thorough Understanding of the "Full Cost" of an Organization's Business Processes, Products & Services in Order to Provide the Best Value to Customers.

• Cost Management Process consists of Cost Planning, Cost Accounting, Cost Analysis, and Cost Controlling

• Cost Management involves Operational Managers and Resource Managers
Question #1: What are the 3 Key Components of the Cost Management Definition?
Answer #1: What are the 3 Key Components of the Cost Management Definition?

**ANSWER:**
- efficiently and effectively
- "full cost"
- best value to customers.

**Cost Management:** Managing business operations *efficiently and effectively* through the accurate measurement and thorough *understanding of the "full cost"* of an organization's business processes, products and services in order to provide the *best value* to *customers.*
Question #2: Which Sections of the Cost Management Process Primarily Involve:
- Resource Managers (RM)?
- Operational Managers (OM)?
Question #3: Which Sections of the Cost Management Process Primarily Involve:
- HQDA/COMMAND HQ?
- FIELD LEVEL - Garrisons, Schools, MSEs ... & Below?
Answer #3: Which Sections of the Cost Management Process Primarily Involve:
- HQDA/COMMAND HQ?
- FIELD LEVEL - Garrisons, Schools, MSEs ... & Below?

Answer:

Which Sections of the Cost Management Process Primarily Involve:
- HQDA/COMMAND HQ?
- FIELD LEVEL - Garrisons, Schools, MSEs ... & Below?
Lesson 5: Cost Terms

Objective(s):

• Understand the key terms involved with Cost Management
Cost Terms

- There is a language to Cost Management, however there are many dialects!
- There is an inconsistency of cost terms in the market driven by outgrowth from manufacturing to the introduction of service costing
- Cost terms additionally differ based on costing philosophy (e.g. standard costing, activity-based costing, theory of constraints, etc.)
- Army has determined the Cost Terms to be propagated to provide a level set language for understanding Cost information
Many Types Costs

- **Direct costs**—A cost such as labor, materials/supplies that can be directly traced to producing a specific output of an organization, product/service.

- **Indirect costs**—A cost that cannot be directly traced to a specific organization, product/service output.

- **Funded Costs**—The value of goods or services received because of an obligation of funds (obligation authority), by the organization performing the work.

- **Unfunded costs**—A cost that are financed by another organization's or activity's appropriations.

- **Variable Costs**—A cost that changes with change in output.

- **Fixed Cost**—A cost that remains the same regardless of the change in output.

- **Recurring Cost**—A cost that is incur repeatedly for each organization and/or product/service produced.

- **Non-Recurring Cost**—A cost that is unusual and unlikely to occur again.

- **Avoidable Costs**—A cost incurred on an object that will no longer be incurred due to a decision to change the output.

- **Unavoidable Cost**—A cost incurred on an object that will be incurred regardless of the decision to change.

• Common Understanding of Types of Cost is Necessary for Informed Decision Making

• Each Decision Should be Focused on Only Relevant Cost that Impact the Decision
## Type of Cost Functions

<table>
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<th>Type Cost is a Function of ...</th>
<th>Direct or Indirect</th>
<th>Recurring or Non-Recurring</th>
<th>Fixed or Variable</th>
<th>Funded or Unfunded</th>
<th>Avoidable or Unavoidable</th>
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Funded vs Unfunded

• The terms Funded and Unfunded define the relationship of the appropriation dollars consumed to the organization utilizing those funds.

• Classification of the dollars input (utilized) in relationship to the organization responsible for the output
Funded Costs

Funded Costs – The value of goods or services received because of an obligation of funds (obligation authority), by the organization performing the work. (e.g. civilian labor, building and grounds maintenance). These costs are funded in the Annual Operating Budget of the organization.
Unfunded Costs – Costs that are financed by another organization's or activity's appropriations. These costs do not result in any obligation of funds by the organization; examples include depreciation, military labor, and military rations.

Example:

- **Military Labor**
- **Depreciation**
- **Central Issue Facility**
- **Cost Center/Resource Pool**
Direct vs. Indirect Costs

• Direct and Indirect define the relationship of the cost incurred to the output provided
• Direct and Indirect are often contentious terms since they imply responsibility for control (view changes depending on where you sit in the organization)
Direct Costs – A cost such as labor, materials/supplies that can be directly traced to producing a specific output of an organization, product/service.
Indirect Costs – Costs that cannot be directly traced to a specific output. They are often allocated on some predetermined basis and are generally synonymous with overhead, such as general and administrative expenses.
Recurring vs Non Recurring

- The terms Recurring and Non-Recurring define regularity of the occurrence of the expense

- **Recurring Costs** are those that incur repeatedly for each organization and/or product/service produced (e.g. payroll, materials)

- **Non-Recurring Costs** are those that are unusual and unlikely to occur again (e.g. Hurricane, GFEBS deployment)
Fixed vs Variable

- Fixed and Variable define the influence on the dollar relationship of the cost incurred to the output provided.
- Are defined within a relevant time, such as the plan cycle (i.e. 1 year.)
**Fixed and Variable Costs**

**Fixed Cost** - A cost that remains the same regardless of the change in output, within a relevant range (e.g., rent, supervisor).

**Variable Costs** - A cost that changes with change in output (e.g., cost of material, labor, utilities).

**Cost Center: CIF**

<table>
<thead>
<tr>
<th></th>
<th>Fix</th>
<th>Var</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOL Support</td>
<td>$$$</td>
<td></td>
</tr>
<tr>
<td>Labor</td>
<td>$$$</td>
<td>$$$</td>
</tr>
<tr>
<td>Material</td>
<td>$$$</td>
<td></td>
</tr>
<tr>
<td>Contracts</td>
<td>$$$</td>
<td>$$$</td>
</tr>
<tr>
<td>Travel</td>
<td>$$$</td>
<td></td>
</tr>
<tr>
<td>Military Labor</td>
<td></td>
<td>$$$</td>
</tr>
<tr>
<td>Facilities</td>
<td>$$$</td>
<td></td>
</tr>
</tbody>
</table>
Fixed and Variable Cost & Quantities

Inputs are considered **Fixed** if they do not change as a result of differences in output measures.

Inputs are considered **Variable** if they increase or decrease as a result of changes in output.

<table>
<thead>
<tr>
<th></th>
<th>Help Desk</th>
<th>Mgr. Alice Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output: Help Desk Hours</td>
<td>3,000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Fixed</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Salaries</td>
<td>$0</td>
<td>$15,000</td>
</tr>
<tr>
<td>Mgr. Salaries</td>
<td>$10,000</td>
<td>$0</td>
</tr>
<tr>
<td>Licenses</td>
<td>$30</td>
<td>$0</td>
</tr>
<tr>
<td>Supplies</td>
<td>$0</td>
<td>$598</td>
</tr>
<tr>
<td>Disk Space (MB)</td>
<td></td>
<td>46,000</td>
</tr>
<tr>
<td>CPU Time (Mins)</td>
<td></td>
<td>4,000</td>
</tr>
<tr>
<td>Facilities (Sqft)</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

S1L5_p14
Decision Specific Cost Concepts

**Avoidable Costs** - A cost incurred on an object that will no longer be incurred due to a decision to change the output, such as contract labor to operate the test range.

**Unavoidable Cost** - A cost incurred on an object that will be incurred regardless of the decision to change output, such as depreciation on equipment.
Lesson 5: Wrap-Up

- Cost Management = Managing Business Operations **Efficiently & Effectively** Through the Accurate Measurement & Thorough **Understanding of the "Full Cost"** of an Organization's Business Processes, Products & Services in Order to Provide the **Best Value to Customers**.

- Cost Management Process consists of Cost Planning, Cost Accounting, Cost Analysis, and Cost Controlling

- Cost Management involves Operational Managers and Resource Managers

- A common understanding of the types of costs in order to make informed decisions
Exercise # 2: List Cost Differences

<table>
<thead>
<tr>
<th>Funded vs. Unfunded</th>
<th>Recurring vs. Non-recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fixed vs. Variable</th>
<th>Available vs. Unavailable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Answers to 1 through 4

- **Direct costs** - directly traced to producing a specific output
- **Indirect costs** - cannot be directly traced to a specific output
- **Recurring Costs** – those costs that occur year over year
- **Non-Recurring Costs** – one time within the year of execution and not planned to happen again
- **Variable Costs** - changes with change in output
- **Fixed Cost** - remains the same regardless of the change in output (within a relevant range)
- **Avoidable Costs** - will no longer be incurred due to a decision to change the output
- **Unavoidable Cost** - will be incurred regardless of the decision to change output
Question #5: Provide Examples of When Labor is?

- Direct
- Indirect
- Funded
- Unfunded
- Recurring
- Non-Recurring
- Variable
- Fixed
- Avoidable
- Unavoidable

Answer: Discussion