

# COSTS CATEGORIZATION GUIDE

## **COSTS CATEGORIZATION GUIDE**

Non-profit leaders must understand the different categories of costs for effective organizational decision making, product and/or service pricing, financial planning, and reviewing financial performance. This Cost Categorization Guide provides definitions and examples of the main types of costs involved in organizational financial management.

## **Cost Categories**

There are three main categories for an organization's costs of doing business:

- 1. Fixed vs. Variable
- 2. Direct vs. Indirect
- 3. Relevant vs. Sunk

Every expense item can be categorized across these three dimensions. For example, rent can be classified as a **fixed**, **direct**, and **sunk** cost.

#### **Fixed vs. Variable Costs**

Fixed costs are not affected by the volume of services or goods produced. Examples include:

- Supervisor salaries;
- Additional office space (as opposed to existing office space described below);
- Additional equipment.

Variable costs increase or decrease with changes in volume. Examples include:

- Hourly wages of nurses or case managers;
- Supplies used in performing services;
- Fuel for transportation vans;
- Supplies needed to prepare home-delivered meals.

## **Direct vs. Indirect Costs**

**Direct** costs are easily traced to a specific project or product line.

**Indirect** expenses are typically incurred for multiple projects and cannot be easily attributed to a specific project.

The key difference between direct and indirect costs is the ease of allocation.

- The delineation between **direct** and **indirect** costs also depends on an organization's ability to attribute the cost to specific projects.
- Similar expenses may be categorized differently by various organizations. For example, a rental car company may have sophisticated software that can track its cars. This enables them to **directly** allocate vehicle expenses to each individual branch. On the other hand, a CBO may use a small fleet of cars to deliver meals and provide transportation services. Without a clear tracking system, its vehicle expenses must be **indirectly** allocated to both programs.

#### Relevant vs. Sunk Costs

**Relevant** costs are *future* expenses that will be incurred only if the sales opportunity is pursued or the service line is offered.

- By definition, all variable costs are also relevant costs.
- Relevant costs **SHOULD** be considered in a financial planning or pricing decision.

**Sunk** costs are *existing* expenses that will be incurred regardless of whether or not a sales opportunity is pursued or service line is offered.

- Sunk costs are a subset of fixed costs, and are unaffected by volume.
- Sunk costs **SHOULD NOT** be considered in a financial planning or pricing decision.
- Examples include:
  - CEO Salary;
  - Human Resources;
  - Management training;
  - Accounting;
  - Existing office space;
  - Existing equipment.

## **Cost Category Matrix**

The matrix below shows all the possible classifications for an expense item.

	Direct Indirect		
Fixed	Relevant	Relevant	
	Sunk	Sunk	
Variable	Relevant	Relevant	

## **Additional Notes**

#### **Overhead Costs**

**Overhead** is a term that is commonly used to refer to **fixed** and/or **indirect** costs depending on the context. This creates confusion as **overhead** can actually be **fixed** or **variable**, **relevant** or **sunk**. Be sure to clarify when using this term. In an accounting context, overhead is the same as **indirect** costs. These expenses do not directly contribute to the product or service provided by the organization.

#### The Effect of Timing, Duration, and Scale on Fixed Costs

The timing, duration, and scale of a project can affect the classification of **fixed** vs. **variable** costs. In the long run, many **fixed** costs will become variable as volumes increase beyond the capacity of the **fixed** cost items. This leads to a common fallacy of the "economies of scale" concept that projects increasing volumes to always reduce average costs. This assumes that **fixed** costs are **fixed** irrespective of how high volumes might increase. However, there is a tipping point where **fixed** costs will have to increase to provide additional capacity. These increases will exhibit a "step" function. For example, one supervisor may be able to manage five care coordinators. A sixth care coordinator will require an additional supervisor.

#### The Indirect Cost Rate

A common practice in the non-profit sector is to apply an **indirect cost rate**, usually a percentage, to direct expenses to calculate **indirect** expenses. This shortcut can lead to highly inaccurate estimates as there may be no relationship between **direct** expenses and **indirect** expenses. Actual **indirect** expenses may be significantly higher or lower than this calculation. The SCAN Foundation has developed an **Indirect Cost Worksheet** to help organizations more accurately calculate and allocate their **indirect** costs.

#### The Relationship between Indirect and Fixed/Variable Costs

There is sometimes confusion between **indirect** and **fixed** costs; however, these concepts are not the same. Simply speaking, **indirect** costs are very difficult to track accurately to particular activities. That does not mean that **indirect** costs cannot be **variable**. For instance, electricity use in a manufacturing facility will increase with the extent of production. Thus it is **variable**, however, it is typically placed in the **indirect** cost category because it is difficult to allocate to specific products.

### The Sunk Cost Fallacy

A common error that occurs in financial planning and pricing decisions is the inclusion of **sunk** costs. Allocating **sunk** costs will drive up the total costs, which could result in an apparent loss in net income. In these cases, new service proposals appear to lose money, but in reality they would still add to the bottom line of the organization. As long as the price is higher than the cost per unit, it will provide a financial gain that "contributes" to offsetting the **sunk** cost.

Sunk Cost Example: Below is an illustration of why sunk costs should not be considered.

An organization is considering a New Service with the following financial projections:

	Service A	Service B	New Service	Total
Fee per Unit	\$14.00	\$10.00	\$10.00	
Units	250	250	200	700
TOTAL REVENUES	\$3,500	\$2,500	\$2,000	\$8,000
Variable Cost per Unit	\$9.00	\$6.00	\$6.50	
Total Variable Costs	\$2,250	\$1,500	\$1,300	\$5,050
Fixed Costs of Service	\$300	\$200	\$200	\$700
TOTAL DIRECT COSTS	\$2,550	\$1,700	\$1,500	\$5,750
FINANCIAL CONTRIBUTION	\$950	\$800	\$500	\$2,250
Total Sunk Costs				\$2,000
Indirect allocation	\$714	\$714	\$572	
Total Costs by Service Line	\$3,264	\$2,414	\$2,072	\$7,750
NET INCOME	\$236	\$86	(\$72)	\$250

Notice that the Net Income for the new service shows as negative after the allocation of **sunk** costs, but the Financial Contribution is positive before **sunk** costs (**Indirect** Allocations) were allocated by unit volumes.

If **sunk** costs were included in the decision to offer the New Service, then the organization may reject offering the service due to the projected losses. However, this leaves the following financial projection:

	Service A	Service B	New Service	Total
Fee per Unit	\$14.00	\$10.00	\$0	
Units	250	250	0	500
TOTAL REVENUES	\$3,500	\$2,500	\$0	\$6,000
Variable Cost per Unit	\$9.00	\$6.00	\$0	
Total Variable Costs	\$2,250	\$1,500	\$0	\$3,750
Fixed Costs of Service	\$300	\$200	\$0	\$500
TOTAL DIRECT COSTS	\$2,550	\$1,700	\$0	\$4,250
FINANCIAL CONTRIBUTION	\$950	\$800	\$0	\$1,750
Total Sunk Costs				\$2,000
Indirect allocation	\$1,000	\$1,000	\$0	
Total Costs by Service Line	\$3,550	\$2,700	\$0	\$6,250
NET INCOME	(\$50)	(\$200)	\$0	(\$250)

Without the New Service line, **sunk** costs must be shared by only two service lines. This puts the entire organization in a loss position. The New Service would have provided a Financial Contribution and absorbed some of the **indirect sunk** costs. You must focus on the total impact on the organization and become comfortable with the appearance of losses on single service lines.

Source: Professor Emeritus Victor Tabbush, PhD UCLA Anderson School of Management

#### **Psychology behind the Sunk Cost Fallacy**

For further reading on the **sunk** cost fallacy, see the article linked below:

http://youarenotsosmart.com/2011/03/25/the-sunk-cost-fallacy/

#### **Conclusion**

This Costs Categorization Guide expands upon cost concepts described in The SCAN Foundation's **Budget & Financial Planning Tool** and **Pricing Guide**. See those guides for more numerical guidance and examples on calculating cost. In combination, these tools and guides provide organizational leadership with greater knowledge of how different types of costs can affect financial decisions.

