Responsible accounting

By

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Responsible accounting is the ability to conduct business in a way that is not harmful and which positively benefits as many people as possible and themselves. Although this sounds simple, it is easier said than done! As there will always be a conflict of interest between various groups of people. Any decisions made by businesses need to be made with an informed awareness of the specific situation and then act according to some sort of accounting standard. If you adhere to those standards you will become an responsible account, but doing the right thing is not as straightforward as explained in many accounting books. Most accounting dilemmas in the workplace are not simply a matter of Should she steal from him? or Should he lie to his boss? Businesses cannot function without accounts being responsible. GAAP dictates a set of rules and conformities to allow all businesses strive after common goals it means that these goals can only be achieved on the basis of standards. Businesses in general are working on the basis of an ethics that settles

different interests. The standards within companies can be characterized as mutual respect. In this respect it is in everyone's interest, and is considering people as an end in themselves, not as a means. This responsibility is passed down and filtered to a group of accounts who maintain the companies finances. Many people say there's always a right thing to do based on responsibly accounting, and others believe the right thing to do depends on the situation, ultimately it's up to the individual on what they do and on what they believe to be the

right thing is. Accounts say that new ethical beliefs are state of the art legal matters, and that what becomes an ethical issue of today is then later made into a law. Values that say how we should behave are said to be moral values, values such as respect, honesty, fairness, responsibility. The concept of responsible accounting has been seen to mean various things to different people, but usually it's knowing what is right or wrong in the workplace and doing what's right in regard to products, services and the company's bottom line. A focal point on responsible accounting in the workplace shows and alerts leaders and staff on how they should act. An attention to these practices in the workplaces helps ensure that when leaders and managers are struggling in times of crises and confusion, they retain a strong moral focus. However, attention to accounting ethics provides numerous other benefits, as well. For many people, believe these principles can go right out the door during

times of stress. Business ethics can be a strong preventative medicine during those times. Ethics codes are often drawn up in response to scandals and to protect the name of the company, and then this only state its legal responsibilities and the conduct it expects from its employees, rather than listing any ethical principals and aspirations that it holds. The emphasis has often been on the company setting standards for the employees to meet, so it will not be caught breaking the law, rather than realizing that the company itself needs to be guided in its business conduct. In closing there are accounting standards on how to administer a companies accounting record, there are company polices on how the records need to be kept, but in the end responsible accounting is up to the individual and their own moral standards.

Cost allocation ism located and used in the cost accounting system. Cost allocation is the core of the cost accounting system. The main definition of cost allocation is the tracing and reassigning costs to one or more cost objectives, such as activities, process, departments, customers, or products (1). There are several

different terms for cost allocation such as absorb, apply, allocate, attribute, etc. (1).

When you allocate cost you will use cost drivers and a cost pool. It is also based on

cost behavior (2).

There are three types of allocation processes; allocation type one is to allocate

to organizational units which direct costs are physically traced back to the unit, the

costs of resources are jointly used by more than one unit then are allocated based on

the cost driver activity units. Examples of this are rent on departments based on

floor space occupied. So what it is saying that if your company rents out a

warehouse and does not need to use all the warehouse then the part of the unit being

used will be allocated. Allocation type two is to allocate costs form one

organizational unit to another unit when one unit provides products or services to

the other unit, which then the costs are transferred along with the product and

services. Some examples of this are the personal department and laundry

department in the hospital.

So if the hospital uses the personal department to service the laundry department

those cost that occur will then be allocated between the both departments.

Allocation type three is which costs allocated to activities, products, services or

customers, which is also costs allocated to each organizational unit in type one and

type two. The example for this type is that a CPA firm tax department allocates its

costs to the clients. So, if you get your taxes done by a CPA firm then the amount

that you are charged will have some of the allocated costs added into it (1).

There are two most popular methods for allocating departments cost which

are: direct method and the step-down method. The direct method is when the cost

allocation ignores all the other service departments costs to the revenue-production

or operating departments. The other method that is used is the step-down method,

this method recognizes that some departments support other departments activities.

Cost allocation has been carried further to the final cost objects. There are

two major final cost objectives that are used; they are the traditional approach and

the activity-based-costing approach or the ABC. The traditional approach uses

three steps in allocating costs; to allocate production costs, select one or more cost

drivers, and finally allocate or apply the total cost accumulated to the products or

services. The activity-based-costing approach or ABC is to focus the accumulating

costs into activities.

Between these two objectives the accuracy of ABC systems is greater then the

traditional costing system since choosing cost drivers have the cause and effect

relationship.

With cost allocation and reporting, there are two ways to report the

information that you have acquired. The first is internal reporting this way allows

the companys' staff and board of directors, stockholders, accountants, etc., to see

how the company is producing its' product or service. This way allows the

managers to make the decisions on how to keep the company in business. Internal

reporting also shows services to aid resources and energies to (3). The second way

is to report external. This way goes to the federal government and IRS and the

state. When externally reporting, you will have to go by the GAAP requirements for

the allocation. You need to have the information right when these papers go to

either make the company or brake the company with taxes. Both of these way are

very important, and they are both needed for the corporation, no matter if the

company is a nonprofit or for profit corporation. The company will report the cost

allocation on the annual financial statements.

Most people will wonder why I pick this topic for my term paper. Well I

would like to get into the cost accounting aspects of a corporation and knowing and

understanding the cost allocation is the main focus of the job description. I did not

know to much about the topic before I started this paper, now I kind of understand

a little better and not so much in the dark about it.

Process Costing

Managerial accounting provides managers with the information necessary to facilitate their decision-making, to motivate their actions and behavior in desirable direction, and to promote the efficiency of the organization. It assists managers in carrying out their planning, controlling, and decision-making responsibilities by showing them what kind of information is needed, where this information can be obtained, and how this information can be used. By using management accounting techniques, such as, process costing and cost allocation, managers must consider ways in which accounting information may be accumulated, analyzed and presented in relation to specific problems, decisions and day-to-day tasks of business management (Slagmulder, 1999).

Process costing is a method of cost accounting applied to production carried out by a series of chemical or operational stages or processes. Its characteristics are that costs are accumulated for the whole production process and that average unit costs of production are computed at each stage. Special rules are applied in process costing to the valuation of work in progress, normal losses, and abnormal losses. In process costing it is usual to distinguish between the main product of the process, by-products,

and joint products (Oxford dictionary, 1999). Process costing is used when identical goods or services are mass- produced or produced in a continuous flow. For example, the television sets that Sony sells to K-Mart are the same as the television sets sold to Wal-Mart or Target. Similarly, the gallon of gas that BP sells to one person is the same as the gallon that BP sells to another person. These are typically assembly-line operations. Because the products are all the same, then the costs for every product is the same. If the cost of each product is the same, then there is no reason to incur the expense and paper work necessary to keep track of how much each order costs to produce. Under process costing, instead of keeping track of the cost of each order separately, one calculates the average cost of all the items that were produced during the period in question. For example, if Sony makes 300,000 television sets at a cost of $6,000,000, then each television costs $20. An added complication to process costing is the different manner in which costs can be added during the production process. This complication comes into play when there are partially completed goods (Constas,2002).

The primary objectives are to calculate the product unit cost for goods completed during the period and those remaining in

inventories at the end of the period and to promote efficient use of resources. When calculated averages, you have to convert partially completed units into completed units with the equivalent amount of work. This is called calculating "Equivalent Units". For example, six half completed units are the equivalent of three full units. A process cost system typically has these characteristics: *1.) Costs are accumulated according to cost center, usually a department or work area.*

2.) Costs are accumulated for a time period rather than for completed jobs.

3.) Several work-in-process accounts are used.

4.) Completed costs from each cost center or department become the raw material cost for the subsequent department. The concept of equivalent production units is for the assignment of costs to goods that are only partially completed at the end of the period.

The three elements of cost (materials, labor, and factory overhead) apply to process cost, as well as job order costing. However, increased levels of automation in mass production blur the distinction between labor and indirect labor, an overhead item. Since overhead and labor frequently occur at about the same time and usually in some consistent proportion, many manufacturers combine the two into

"conversion costs", the cost of converting direct materials into the finished product (Bicheno & Elliot, 1997).)

In the simplest scenario, there is one cost center with no beginning inventory. If all goods started during the period are finished, computing the cost per unit is easily done (Winicur, 1993). We simple add the materials cost and the conversion cost and divide by the number of units produced. If there are several departments, the cost of the completed products moves along with the units themselves, becoming the "materials" cost for the second department.

The situation becomes more complex when we have units that are unfinished at the end of the period. How are costs assigned to units that are only partially complete? The answer lies in the concept of equivalent production. All partially finished units are restated in terms of the equivalent number of complete units (Stuart & McCutcheon).

A typical production pattern adds all materials at the beginning of the production process and adds conversion costs uniformly throughout the process until the goods are complete. If there are 500 units half-finished at the end of the period they are

complete with respect to materials. One hundred percent of the materials has been added, and it will take no more materials to finish the goods. The conversion costs necessary to convert the 500 units half done is the same as those needed to process 250 finished units. Thus the equivalent production for the period is 500 units for materials, 250 for conversion costs. The second issue that must be decided is how to treat beginning inventory. Partially complete units at the beginning of a period have costs attached to them from the previous period. Two methods of accounting for these costs are available: average costing and FIFO costing. With average costing, beginning inventory costs are added to the costs of the new period, creating a unit cost that is an average of the two periods. Under FIFO costing, beginning inventory costs are kept separate from costs incurred in the new period and maintain their identity until they leave the cost center. The average cost method has an advantage over the FIFO method in that all units completed during the period are assigned the same cost. While it is somewhat less accurate than the FIFO method (it doesn't provide as much feedback about cost behavior), it is often adopted because it is easier to understand and use.

By knowing the number of units in process at the beginning and end of the period, the number of units completed and transferred out and the costs associated with each group, the accountant can provide the information required for inventory valuation and for careful monitoring of the company's production activity.

The first step in process costing is to "Summarize the Flow of Physical Units." In order to do this, total production must be divided into three groups of units:

(a) *Beginning Inventory*: These are the units that were left over from last month. The first thing that was done did this month was finishing them off.

(b) *Started and Completed*: These are the units that were started this month and finished this month.

(c) *Ending Inventory*: These are the units that were started this month, but did not finish.

So these units have the following characteristics:

	STARTED THIS MONTH	FINISHED THIS MONTH
BEGINNING INVENTORY	**NO**	**YES**
STARTED AND COMPLETED	**YES**	**YES**
ENDING INVENTORY	**YES**	**NO**

The units that are finished this month are the "Beginning Inventory" and the "Started and Completed" units. The units that are started this month are the "Started and Completed" units and the "Ending Inventory". In other words:

Units Started = Started and Completed + Ending Inventory

Units Finished = Beginning Inventory + Started and Completed

Knowing this relationship allows you to figure out how many units go into each of the three categories of units. For example, assuming that 10,000 units were started and 6,000 units were completed, if 2,000 units were in Beginning Inventory, then the following can be computed:

ACCOUNT	AMOUNT	COMPUTATION
Beginning Inventory	**2,000**	**Given**
Started and Completed	**4,000**	**6,000 - 2,000 = 4,000**
Ending Inventory	**6,000**	**10,000 - 4,000 = 6,000**

Often, in the process costing area, labor costs and factory overhead costs are combined in the calculation. This combined cost is referred to as "conversion costs." The thought here is that utilizing raw materials, spending money on labor, and overhead, the raw materials are converted into finished goods.

Illustration: Assume that “A” company uses process costing. The following cost data is given:

Beginning Work In Process Inventory $ 42,360
Operating costs for May:

Direct Material	**360,000**
Direct Labor	**211,200**
Factory Overhead	**316,800**

Total Costs	**$930,360**

Beginning work in process consisted of 20,000 gallons (100% complete for materials & 30% complete for conversion). During May, 180,000 gallons were started. Ending work in process consisted of 30,000 gallons (100% complete for materials & 40% complete for conversion).

A.) First consider the number of units in each of the three groups described above (Summarize the Flow of Physical Units -- Step 1). (This is the blue area of the chart below.) Given is beginning inventory of 20,000 gallons. Also given is ending inventory of 30,000 gallons. Work was started on 180,000 gallons; also a given. The units started consist of ending inventory as well as started and completed units because of their characteristics. Thus, the total of ending inventory and started and completed units is 180,000.

ending inventory + started and completed units = 180,000
30,000 + started and completed units = 180,000
started and completed units = 180,000 - 30,000 = 150,000

B.) Next, Compute the Equivalent Units Produced (Step 2), by considering the percentage of work done this month. (This is the

green area of the chart below). At the beginning of the month, the beginning inventory was 100% complete for materials and 30% complete for conversion. Therefore, no materials were added to the beginning inventory in order to complete the beginning inventory. 70% of their conversion work must be completed this month in order to finish them. At the end of the month, the ending inventory was 100% complete as to materials and 40% complete. Thus, you have to complete those portions of the ending inventory units this month. The started and completed units were started this month and finished this month. So, 100% of them were completed his month in order to finish them.

C.) Next, consider the equivalent units for the average material cost calculation. At the moment, we are only interested in this month's material costs. Because (i) the beginning inventory are 100% complete, we did not add any additional materials to our beginning inventory this month as we finished off the beginning inventory. Thus, beginning inventory has no share of the materials cost for this month ($360,000).

The ending inventory is 100% complete as to materials this month. Therefore, each unit of ending inventory has the same material cost

as a unit that was completely manufactured this month. So, in the denominator of the average cost calculation we regard incomplete units the same as complete units. In our calculation, we will include 30,000 units in the denominator for the ending inventory.

D.) Next, consider the equivalent units for conversion. We are told that the beginning inventory was 30% complete as to conversion costs at the beginning of the month. Therefore, 70% of the conversion work in. Beginning inventory was added this month. That means that each of the beginning inventory units has 70% of this month's conversion costs that are contained in each of the Started and Completed units. So convert 20,000 (7/10 beginning inventory) partial units into 14,000 completed units (equivalent units). Similarly, you convert the 30,000 (4/10 ending inventory) partial units into 12,000 completed units (equivalent units).

E.) Next, summarize the costs to be allocated (Complete The Cost Summary Rows) (Step 3). (This is the yellow area in the chart below.)

F.) Next, Compute Cost per Equivalent Unit (Step 4), by dividing the costs to be allocated (Step 3) by the equivalent units for that cost (Step 2). (This is the red area of the chart below.)

	In this Column, You compute the Units (Step1)	%	Dir. Mat. $360,000	Conversion Cost. $211,200 + 316,800 = $528,000	In this row, you put the dollar cost incurred this month. It is the numerator of the average cost. (Step 3)
Beg. Inv.	20,000	0%-70%	0	14,000	In this row, you put the equivalent units for each cost This is the denominator of the average cost calculation. (Step 2)
S & Comp.	150,000	100%	150,000	150,000	
End. Inv.	30,000	100%-40%	30,000	12,000	
			180,000	176,000	
			360,000 / 180,000	528,000 / 176,000	In this row you divide the dollar cost by the equivalent units for each cost in order to get the average cost per equivalent unit. (Step 4)
			$ 2.00	$ 3.00	This is the average cost per equivalent unit. (Step 4)

G.) Now we Assign Costs to Outputs (Transferred Out and Ending WIP Inventory) (Step 5):

Beginning Inventory	**$42,360 + 14,000(3)**	**$ 84,360**
Started and Completed	**150,000 (2 + 3)**	**$ 750,000**
Transferred Out		**$ 834,360**
Ending Inventory	**30,000 (2) + 12000 (3)**	**$ 96,000**

You can see how these calculations are used in our accounting process by considering the Work in Process Inventory t-account.

WORK IN PROCESS INVENTORY	
42,360 (BEGINNING BALANCE)	84,360 (BEGINNING INVENTORY)
211,200 (DIRECT LABOR)	750,000 (STARTED & COMPLETED)
316,800 (FACTORY OVERHEAD)	
360,000 (DIRECT MATERIALS)	
96,000 (ENDING BALANCE)	

With the weighted average method of process costing, the cost to make the beginning inventory from the prior month is added to the manufacturing costs for the current month. These costs are then allocated to the three groups of units treating any work done last month the same as any work down this month. In other words, you average the costs from last month and this month together for all the units (Constas, 2002).

You can accomplish this by making the following changes to the FIFO rules learned above.

a. The percentage of work done on the beginning inventory is always 100%.

b. Add the costs of the beginning inventory to the direct materials, conversion costs & transferred in for the current month.

c. Do not add the beginning inventory cost for last month back to the cost of the beginning inventory. It is already reflected in the average cost per equivalent unit.

d. Do the rest of the calculations in the same way (Constas, 2002).

It had been thought that job costing was used to cost out current inventory to fill in the balance sheet and for the income statement, costing calculated the cost of goods sold. Today, especially in manufacturing companies, job costing has become a very important part of the manager's decision making process. This paper will show how managers in a manufacturing company get the job done with the use of job costing.

In a manufacturing company, the job costing responsibilities are a part of the cost department under the direct supervision of the controller. Job costing is a process that distributes the individual costs of everything it took to make that final product. The costs included in the manufacturing of a product are labor, materials (inventory), and manufacturing overhead. All of this information is used by managers to make decisions on how to improve the product's quality and to improve the efficiency of how the product is being manufactured.

The main role of job cost accounting is to interpret all the data retrieved from manufacturing and give it to management. This in turn helps the managers perform several jobs. First, with the information received, managers must figure out a way to manufacture within their means but also

to stay competitive. The managers do their best to motivate the employees to work so they stay within their goal.

Another job a manager must perform with the job cost information is to develop costing methods that give them control over lowering cost and improving quality. Some ways in which a manager can do this is by shopping around for material. Getting a better price or buying in bigger quantity can help lower costs. Managers can also send their employees to classes on how to do their job a new way or even better. To go make sure the employees apply what they learned at class, managers can give their employees incentives for the best work and least amount of mistakes.

Managers also want to be able to control their inventory so they know what is used and how it will apply to the cost of the product. In essence, the managers want to make sure the employees are using what supplies they say they are using to manufacturer the product. If an employee uses the wrong material or supply, it could through the whole cost of making that product off.

From the information received, another task the manager must do is figure out how much the manufactured product cost the company to make and if it that product is making the company money. Usually, this is reported within one month's time, which is an accounting cycle or even a shorter span of time. Also, inventory totals have to be determined along with the profit or

loss so the managers know how to handle the manufacturing process for the next month. This is very important to companies so they can decide if it is profitable to keep manufacturing that product or take it off the market.

As you can see, the decisions managers have to make are anywhere from easy to the most complex of all. One choice could determine the profit or loss of a company and the life of a product being sold or being discontinued. One factor in job costing that remains constant is inventory. This is the most critical part of analyzing a product. If the inventory is off or the employees are not using it correctly, it could through off the whole final analysis of the costing reports.

To go along with all the above information, there are several different reports that can be used by a company. Two of the main reports that job costs fall onto is the Balance Sheet and the Income Statement. Below is an example of an estimate versus actual cost report. This shows a printing company making an advertising flyer for a local newspaper. It compares by department what the estimated hours and cost was to the actual hours and cost to make that flyer.

Estimated vs. Actual Cost

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Job 101 Advertising Flyer Due: 02/12/02 Completed: 02/12/02

Dept	Est.Hrs	Act.Hrs	Est.Cost	Act.Cost	Mat.Cost	Ttl.Cst
300	1:40	2:10	100.00	91.14	3.90	95.04
Sub Total	1:40	2:10	100.00	91.14	3.90	95.04
400	1:15	1:35	54.00	71.10	1.10	72.20
Sub Total	1:15	1:35	54.00	71.10	1.10	72.20
500	3:30	3:35	235.00	196.90	71.00	267.90
Sub Total	3:30	3:35	235.00	196.90	71.00	267.90
800	0:10	:10	5.00	8.08		8.08
Sub Total	0:10	:10	5.00	8.08		8.08
Total	6:35	7:30	394.00	367.22	76.00	443.22

In certain types of manufacturing, this form will be used, especially when the company is continuously making the same type of product.

When it comes the balance sheet, the job costing portion on that report is dealing with the value of the inventory and on the income statement job cost is dealing with the cost of goods sold.

In my own life, I was a job cost analyst for a steel roll manufacturer. This job consisted of analyzing all the jobs to make sure they were profitable. I would break down all of the costs from the labor, the steel used, any other supplies and the factory overhead. On some jobs, the steel rolls would come back in to be reworked and it was my job to quote how much to charge the customer when the roll was redone. I had to look at the labor and factory

overhead for this part of the job. Rarely did the shop use any other materials when the roll was just being reworked.

That position also required of me to keep tracking of some of the overhead costs such as shipping. It was my job to meet with transportation companies on a regular basis and get the best possible rates to ship our orders to customers. I was also involved with keeping track of the timecards for the machinists. I would compare their timecard to their job sheets to make sure all the time for each job equal to the total hours on their timecard.

I was also in charge of entering the accounts payable into the system. This is how I would keep track on how much our supplies cost us. I was able to keep close tabs on any price changes on a daily basis.

Everyday I pulled the job folders of the jobs that were ready to ship. So on a daily basis, I knew how much we sold. I would then pass the job folders on to the accounts receivable department in order for the customers to be billed.

All in all, I feel that job costing is a very important part of any manufacturing company. This process will keep the company up to date on how much the product is making as a profit or a loss.

Annual reports have different meaning to each individual, therefore how you read an annual report depends upon your purpose. For example a person who invest will probably be interested in the

profitability, survivability, growth, stability, dividends (if any), learn of problems, risks and other factors which may affect your investment in that company. The Annual Report should have all this information listed. If you have bought shares of a company, you should be receiving their Annual Report.

Annual Reports are created with no kind of mission in mind but to inform readers of the company's financial activity. They are a reference for all activities of the past year, which included the company's strengths .

There are nine major sections in most Annual Reports. Not all reports will have all the sections or the same type and degree of information. The sections include:

- Letter from the Chairman
- Financial Charts
- Financial Review
- Consolidated Financial Statements
- Notes to Consolidated Financial Statements
- Report of Independent Accountants
- Quarterly Results
- Directors & Officers
- Organization

Below is a review of each section and what information is given.

Letter from the Chairman

The Letter from the Chairman is a message to the stockholders that gives them an overview of the past years financial activity. The Chairman also shares his insight on economic and political trends and comments on future expectations based on current trends.

Financial Charts

Financial chart cover specific information regarding Revenue, Income, Earnings per Share, Fixed Assets, etc., over the last five years. This allows readers to see the trend of growth with comparison to the previous year.

Financial Review

Financial Review contains analysis from operation results from management. It give summary

and results for two years. The key reasons responsible for the results are explained in brief detail so that stockholders can determine what's driving them.

Financial Statements

Financial Statement section has the most information and is the most important section. These statements provide key information about the performance and financial health of the company.

The following are the different financial statements that are disclosed in a companies annual report:

- Consolidated Statement of Income
- Consolidated Balance Sheet
- Consolidated Statement of Cash Flows
- Consolidated Statement of Stockholders' Equity

These financial statements are all prefaced with the word "Consolidated" to indicate that the results of all the operations have been combined for the purpose of the Annual Report. Below is a brief explanation of the terms in the financial statement.

Consolidated Statement of Income

The Statement of Income has information about the activity of a company during the year and can be used as trend to future activities. The two main components of an income statement are Revenue and Expenses.

Revenue consists of *Operating revenue* and *Interest & other income*. *Expenses* are the cost which are incurred for the operating of the company within that year. They are listed on the Statement of Income in major categories:

> *Cost of goods sold and services* includes the cost of raw materials, supplies, and wages and salaries to produce and deliver products and services.
>
> *Research & engineering, Marketing* and *General expenses* comprise a category generally known as administrative expenses, but they are listed as separate items to more accurately identify costs that are not directly related to production of goods and services. A key factor of the past and future success of a company is the amount of money spent on *Research & engineering* as this gives an idea of how much we are committed to the development of new technology.
>
> *Interest* is the annual interest expense related to the short-term and long-term debt

borrowings by the Company.

Unusual items comprise the financial impact of events or transactions that are not part of normal operations. They are required to be listed as a separate line on the Income Statement. An unusual item may be a substantial gain or loss on the sale of a business, or the recovery of property or money through a court settlement. A more detailed explanation of these items can be found in the *Notes to Consolidated Financial Statements* section.

Taxes on income represents the estimated taxes to be paid on income for the year, not the amount actually paid during the year.

Consolidated Balance Sheet

The Balance Sheet contains financial information of the company at the time the Balance Sheet is prepared. It uses information from the previous year for comparison.

The Balance Sheet is divided into two parts: *Assets* and *Liabilities and Stockholders' Equity*. Both sides are always in balance. Assets are everything the company owns plus any amounts owed to a company by others. Liabilities are everything the company owes to others. The difference between assets and liabilities is called stockholders' equity, the company's "net worth" or "book value."

Assets are divided into two major categories:

Current Assets usually include all Cash and assets that will eventually become cash, with a year's time, after the balance sheet.

Short-term investments represent the investment of cash, primarily in bank certificates of deposit and time deposits. Because these funds may be needed on short notice, the investments are selected carefully to ensure that they are readily marketable and relatively stable in market value.

Receivables represent the amount of money not yet collected from customers for whom services were provided or to whom products were shipped prior to payment, which is customary practice. An allowance for doubtful accounts is included to take into account the fact that some customers will not pay their bills due to unforeseen difficulties.

Inventories include the cost of raw materials to be used in manufacturing products, partially finished goods in process of manufacture and finished goods ready for shipment or to be used in providing services to a customer.

Deferred taxes on income represents the net tax benefit on items which have been expensed in the Statement of Income but do not yet qualify as a deduction on a tax return. They will be deductible in the future.

Other Current Assets represents current assets that do not fit within the above major categories.

The second category generally includes assets that are not considered available for conversion to cash in the short term:

Long-Term Investments, held to maturity are generally deposits or similar type interest-bearing investments which mature after 12 months from the date of the balance sheet.

Fixed Assets are essentially the property, plants and equipment owned by the company, not intended for sale and used over and over in order to produce and deliver products and services. For accounting purposes, Fixed Assets are shown on the Balance Sheet at the original purchase price less accumulated depreciation. Depreciation is the normal wear and tear of the assets held by the company due to their usage. It is an expense which is charged to the Income Statement over the useful life of the asset. Accumulated depreciation reduces the value of an asset on the Balance Sheet. Land is not subject to depreciation, and its listed cost remains the same year to year. The allowance for depreciation on the Balance Sheet represents the total depreciation taken to date on fixed assets still in service.

Excess of Investment Over Net Assets of Companies Purchased: Sometimes one company will acquire a company at a price that exceeds the fair market value of the net assets of the company being acquired. This excess amount is considered to be an intangible asset, listed on the balance sheet as the *Excess of Investment Over Net Assets of Companies Purchased*, otherwise known in financial circles as "goodwill." This goodwill is expensed, or amortized, evenly over periods ranging up to 40 years depending on management's long-term view of the business acquired.

All headings under assets are listed on the as Total Assets on the Balance Sheet. As is the case with Assets, Liabilities are also classified as *Current Liabilities and Long-term Liabilities.*

Current Liabilities include all debts and obligations that will be repaid within 12 months of the date of the balance sheet:

Accounts Payable represents the amount owed to our regular business creditors for supplies and services received in the normal course of business.

Accrued Liabilities are obligations that the company has toward salaries, wages, employee benefits, etc., as well as other identified liabilities.

Bank loans, Dividend payable (to stockholders), *Estimated liability for taxes on income*, and the portion of *Long-term debt due within one year* are also classified as current

liabilities.

Long-Term Debt represents debts that are due for repayment after one year from the date of the Balance Sheet.

Postretirement Benefits represent the actuarial valuation of future medical benefits which will be paid to employees covered under the US medical plan during their retirement years.

Other Liabilities includes debts that do not fit under the current or long-term obligations.

The sum of all debts owed by the company – current, long-term and other – is called Total Liabilities.

The following is a sample financial statement from :

Income Statement			
$ (Millions)	1998	1999	2000
Revenue	18,441.0		
Cost of Goods Sold	13,887.0		
SG&A Expense	2,473.0		
Earnings	1,304.0		

Balance Sheet			
$ (Millions)	1998	1999	2000
Acc Receivable	4,537.0		
Fixed Assets			
Current Assets	8,040.0		
Current Liabilities			
Long Term Debt	4,051.0		
Equity	7,429.0		

Notes to Consolidated Financial Statements

This section provides explanations and backup for some of the numbers listed in the Consolidated Financial Statements. All significant items are explained in greater detail in this section. It includes the accounting methods used for the computation of different items such as Revenue recognition, Inventories, Fixed assets and depreciation, Investments, and Research & engineering expenses. Various businesses acquired during the year are listed along with other pertinent information such as a breakdown of Fixed Assets, Long-Term Debt, details about Stock Compensation Plans, Income Tax Expense, Contingencies, Employee Benefit Plans, etc. Reconciliations of key financial numbers by our main business segments and also by geographic area are provided as well. This is the section that the analysts concentrate on to get a better understanding of the numbers provided in the Consolidated Financial Statements section.

Report of Independent Accountants

This report is provided by the company'sauditors. Their opinion states whether or not the company's financial statements fairly represent the corporate financial position, results of operations and cash flows in conformity with generally accepted accounting principles. Accounting practice requires everyday decisions based on guidelines by the FASB. If guidelines are not clear or there are none available, accountants must rely on their own knowledge. There guidelines are termed Generally Accepted Accounting Principles, or GAAP.

This supplementary data provides the stockholder with quarterly revenue, gross profit, net income, basic earnings per share, and diluted earnings per share for the last two years. You will see that the Quarterly Results are followed by the term "(unaudited)"; this is because the Report of Independent Accountants covers the full year only. In addition to the quarterly results, also provided is a Five-year Summary of operations and some key financial data for that period. This provides the reader with an instant trend for the last five years, an excellent indicator of how well a company has been performing. Important information provided includes Net income, Fixed asset additions, Return on average stockholders' equity, Liquidity, Long-term debt, Number of employees, etc.

Directors & Officers

These are listings of both the Directors and Officers of the company as of December 31. The Board of Directors is responsible for overseeing the activities of the management and or Officers of the company. The Board of Directors meets on a quarterly basis to review and discuss the company's results and strategies

REAL-LIFE EXAMPLES

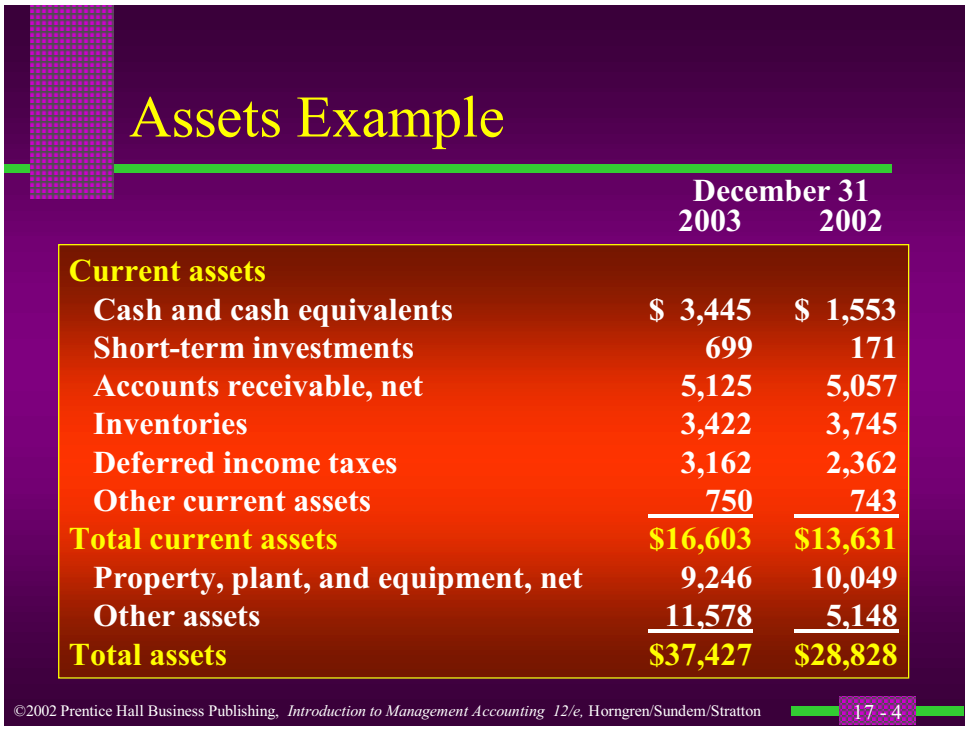
At KeyBank we always believe that showing the annual report is important. We have a lot of executives candidates for hire, who ask for a copy of our annual report. This allows the candidate to review the company's financial status and is usually a factor on if they would like to work at Key.

Our Annual Report is listed on our website and we as recruiter use this as a selling point for conversation, especially during a phone interview. We give the our website and after they review the information, they are generally excited about coming to key.

Key uses the annual report for candidates and also new hires. We use a powerpoint presentation

for out orientation which include financial information from our annual report.

Below is an example of accounting statements and reporting:

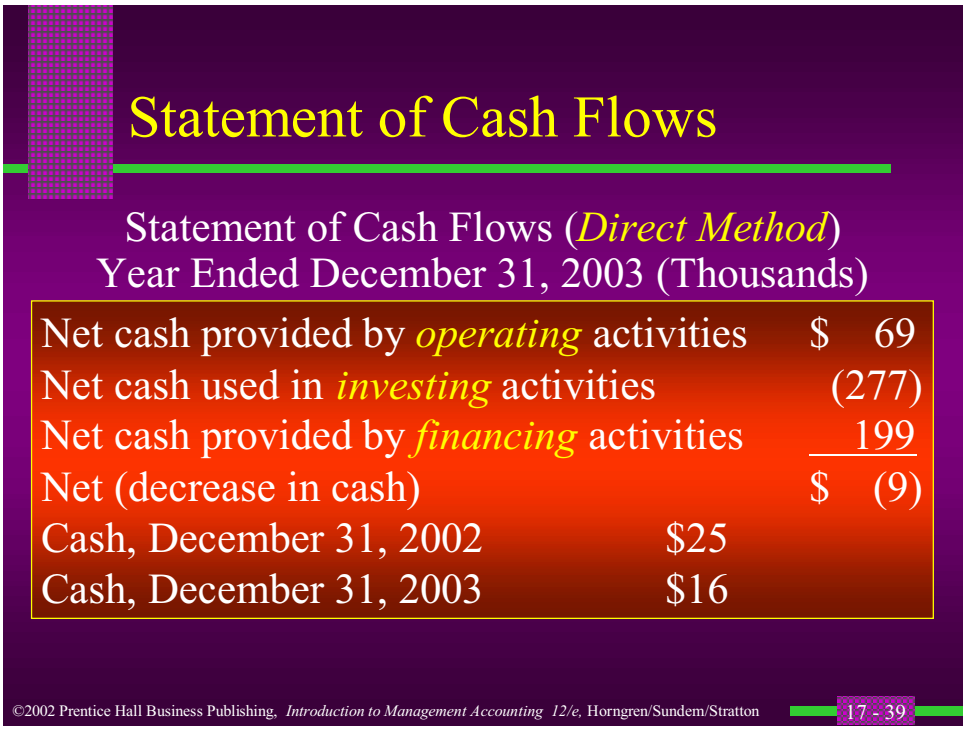


Liabilities Example

	December 31 2003	December 31 2002
Current liabilities		
Notes payable and current portion of long-term debt	$ 2,604	$ 2,909
Accounts payable	3,015	2,405
Accrued liabilities	6,897	6,226
Total current liabilities	12,516	11,540
Long-term debt	3,089	2,633
Deferred income taxes	3,481	1,188
Other liabilities	1,513	1,245
Total liabilities	$20,599	$16,606

Stockholders' Equity Example

	December 31 2003	2002
Preferred stock, $100 par value issuable in series, Authorized shares: 0.5 (none issued)	–	–
Common stock, $3 par value Authorized shares: 1,400 Issued and outstanding: 2003, 612.8; 2002, 601.1	1,838	1,804
Additional paid-in capital	2,772	1,894
Retained earnings	9,064	8,254
Non-owner changes to equity	3,154	270
Total stockholders' equity	16,828	12,222
Total liabilities and stockholders' equity	$37,427	$28,828



MANAGEMNT CONTROL SYSTEMS

by

William Noll

A paper submitted in partial fulfillment of the
requirements for

Management Accounting AC273

Myers University

Date: November 30, 2002

Myers University

Abstract

MANAGEMNT CONTROL SYSTEMS

by William Noll

Instructor: Janet Tarase

A management control system when properly designed and implemented is a vital tool that can be used by company management to guide and direct managers and workers behavior to fulfill the goals of the company. The intent of a management control system should be to allow managers and workers to become a part of the organizational growth. Setting goals and motivating employees in a positive way is essential for the success of organization over a long period.

These paper outlines some of the important features needed in a control system. While it doesn't cover in detail all aspects it does touch on the important areas and the types of reporting and performance measures used.

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GLOSSARY

Responsibility Centers: A set of activities and resources that are assigned to a manager, a group of managers, or other employees.

Cost Centers: A responsibility center in which a manager is responsible for cost only. Its financial responsibilities are to control and report cost
Profit centers. A responsibility center for controlling revenues as well as costs.
Investment centers: A responsibility center whose success is measured not only by its income but also by relating that income to its invested capital, as in the ratio of the income to the value of capital employed
Goal congruence: A condition where employees, working in their own personal interest, make decisions that help meet the overall goals of the organization.
Balanced Scorecard: A performance measurement and reporting system that strikes a balance between financial and operating measures, links performance to rewards, and gives explicate recognition t the diversity of organizational goals.
Key performance indicators:
Responsibility accounting: Identifying what parts of the organization have primary responsibility for each action, developing measures and targets to achieve, and creating reports of these measures by organization subunit or responsibility center.
Controllable costs: Any cost that is influenced by a manager's decision.
Uncontrollable costs: Any cost that cannot be affected by the management of a responsibility center within a given time span.
Segments: Responsibility centers for which a separate measurement of revenues and costs is obtained.
Quality Control: The effort to ensure that products and services perform to customer requirements.
Total quality management (TQM): The application of quality principles to all of the organization's endeavors to satisfy customers.
Cycle Time: The time taken to complete a product or service, or any of the components o a product or service.
Productivity: A measure of outputs divided by inputs.

Cost allocation ism located and used in the cost accounting system. Cost

allocation is the core of the cost accounting system. The main definition of cost

allocation is the tracing and reassigning costs to one or more cost objectives, such as

activities, process, departments, customers, or products (1). There are several different terms for cost allocation such as absorb, apply, allocate, attribute, etc. (1). When you allocate cost you will use cost drivers and a cost pool. It is also based on cost behavior (2).

There are three types of allocation processes; allocation type one is to allocate to organizational units which direct costs are physically traced back to the unit, the costs of resources are jointly used by more than one unit then are allocated based on the cost driver activity units. Examples of this are rent on departments based on floor space occupied. So what it is saying that if your company rents out a warehouse and does not need to use all the warehouse then the part of the unit being used will be allocated. Allocation type two is to allocate costs form one organizational unit to another unit when one unit provides products or services to the other unit, which then the costs are transferred along with the product and services. Some examples of this are the personal department and laundry department in the hospital.

So if the hospital uses the personal department to service the laundry department those cost that occur will then be allocated between the both departments. Allocation type three is which costs allocated to activities, products, services or customers, which is also costs allocated to each organizational unit in type one and type two. The example for this type is that a CPA firm tax department allocates its costs to the clients. So, if you get your taxes done by a CPA firm then the amount that you are charged will have some of the allocated costs added into it (1).

There are two most popular methods for allocating departments cost which are: direct method and the step-down method. The direct method is when the cost allocation ignores all the other service departments costs to the revenue-production or operating departments. The other method that is used is the step-down method, this method recognizes that some departments support other departments activities.

Cost allocation has been carried further to the final cost objects. There are two major final cost objectives that are used; they are the traditional approach and the activity-based-costing approach or the ABC. The traditional approach uses three steps in allocating costs; to allocate production costs, select one or more cost drivers, and finally allocate or apply the total cost accumulated to the products or services. The activity-based-costing approach or ABC is to focus the accumulating costs into activities.

Between these two objectives the accuracy of ABC systems is greater then the traditional costing system since choosing cost drivers have the cause and effect relationship.

With cost allocation and reporting, there are two ways to report the information that you have acquired. The first is internal reporting this way allows the companys' staff and board of directors, stockholders, accountants, etc., to see how the company is producing its' product or service. This way allows the managers to make the decisions on how to keep the company in business. Internal reporting also shows services to aid resources and energies to (3). The second way is to report external. This way goes to the federal government and IRS and the state. When externally reporting, you will have to go by the GAAP requirements for the allocation. You need to have the information right when these papers go to either make the company or brake the company with taxes. Both of these way are very important, and they are both needed for the corporation, no matter if the company is a nonprofit or for profit corporation. The company will report the cost allocation on the annual financial statements.

Most people will wonder why I pick this topic for my term paper. Well I

would like to get into the cost accounting aspects of a corporation and knowing and understanding the cost allocation is the main focus of the job description. I did not know to much about the topic before I started this paper, now I kind of understand a little better and not so much in the dark about it.

PURPOSE AND FUNCTION

Upper management set company wide goals, performance requirements, and targets. These goals are the framework that managers to set individual goals for their areas of responsibility. In order to meet these goals a properly designed management control system needs to be in place. According to Harvard Professor Robert G. Eccles, says, "Control is about creating conditions which will improve the probability that desirable outcomes (of the processes and systems) will be achieved." He adds: "A control system is comprised of (1) a set of measures for (2) defined entities, (3) criteria for evaluating these measures, and processes for (4) obtaining these measures and (5) the criteria for evaluating them."[1] It is the responsibility of all managers to design and implement the system that will fulfill these requirements.

It is important that the goals set down by the management are clear and the responsibility centers are well defined. If the managers are not clear on the goals set down then they can not affectively accomplish them. Soichiro Honda, founder of the Honda Motor Company, described "The Sacred Obligations of Senior Leadership" this way:

> "Vision: What will be?
> Goals: What four or five key things must we do to get there?
> Alignment: Translates the work of each person into an alignment with the goals." [2]

The alignment function, his third point, may well be the most important. Alignment is a necessary condition for organizational effectiveness. "Alignment is the achievement of goal congruency where all parts and functions of an organization's value chain work toward the same purpose. In its ideal form, all members of the organization can align their personal values and

objectives with those of the firm." With proper alignment employees feel a clear sense of purpose. They feel a part in the effort of meeting the organizational goals. With out it people end up working ineffectively. Individual objectives take president over those of the organization or the customer. Morale and productivity diminish over time, and the organization becomes more vulnerable to competitors and market forces.

SYSTEM DESIGN

The definition of a management control system is "a logical integration of techniques to gather and use information to make planning and control decisions, to motivate employees behavior, and to evaluate performance." A well-designed system motivates individuals throughout the organization to act in concert and aids and coordinates the process of making decisions. Employee understanding of: and loyalty to the control system is important to its success. Control systems fail if managers and employees are not clear on what the goals are or do not have any input in to how they should be achieved. It is important that communication exist between all levels of management and employees.

The motivation of employees and the evaluation of performance are two critical functions of any management control system. Managers and employees can be motivated to perform in a positive manner by assigning each a **responsibility center**. Responsibility centers are activities and resources that are defined by the management system and assigned to manager, a group of managers, or employees. It is important that these be clearly defined. Gray or cloudy areas of responsibility can lead to confusion and low trust in the system.

Responsibility centers normally have multiple goals and actions that the management control system monitors. These centers are classified by there financial responsibility as **cost centers**, **profit centers**, or **investment centers**.

MOTIVATING EMPLOYEES

As stated at the beginning of this paper; "Alignment is the achievement of **goal congruence** where all parts and functions of an organization's value chain work toward the same purpose. In its ideal form, all members of the organization can align their personal values and objectives with those of the firm." To accomplish the organizations common goals, management control systems must recognize the effects performance evaluations, both financial and non-financial, have on the employees. Evaluations often produce strong reactions from employees. Theses reactions can have either a positive or negative impact on the accomplishment of the organizational goals. To often employees see budgets and action plans as a means of squeezing more work from them in a shorter period of time. The reaction to a system seen as restricting behavior will often only result in negative performance. It is important that a control system is used as a positive motivator, promoting productive behavior without being threatening to an employee's security and self-esteem.

It is important for the designers of a control system to take into consideration what will motivate the employees. This is difficult because what motivates employee's is differs from employee to employee. The system must align employee's self-interest with the goals of the organization. One way to accomplish this is to per mote employ participation in setting and measuring performance goals is a way to motivate. If employees have a vested interest in the goal then they

are more likely to work towards meting the goal. They will also feel that the goal is a fair standard for evaluating their performance.

Operating budgets, when properly used, can be an effective mechanism to motivate employees to higher levels of performance and productivity. Improperly developed and administrated, it can cause animosity towards both management and the budget.

It is also important that management recognize budgets are not perfect. Improper predictions and unforeseen circumstances often occur. These will require changes to be made in the budget. If top management does not recognize the need for changes due to circumstances, support for the budget at lower levels will erode. It is important for both upper and lower management to maintain support the budget in order receive maximum benefits of the budget.

MEASURING PERFORMANCE

Measuring the performance of workers and systems put in place to meet objectives are important in an effective management control system. A typical attitude of managers is "You simply can't manage anything that you can't measure". Another old axiom is "You get what you measure." Thus, an effective performance management system must have as its foundation a strong performance measurement system. [2]

Since responsibility centers have multiple goals and actions, it is difficult to express them all in financial terms such as operating budgets, profit targets, or required return on investments. Some achievements that occur concurrently with financial accomplishment are non-financial. It

is important that both financial and non-financial performance measures are used when evaluating performance. Managers are better to use non-financial measures to motivate employee. They are easier to understand, are timelier, and relate more to the employee performance. Examples of non-financial information include: sales volume in units, production output in units, labor or machine hours, and quantity measures of material used.

Good performance measures will:[4]

1. Relate the goals of the company
2. Balance long-term and short term concerns
3. Reflect the managements of key actions and activities
4. Be affected by actions of managers and employees
5. Be readily understood by employees
6. Be used in evaluating and rewarding managers and employees
7. Be reasonably objective and easily measured
8. Be used consistently and regularly

One device used by corporations to measure and report performance is the **balanced scorecard**. This tool is used to link organizational strategy to the actions of managers and employees. The following example show how a balanced scorecard can help meet the needs of an organization, motivate and to build confidence in employees.

Colina Insurance (a diversified German insurance company and part of the AXA group) had to conquer misalignment when it created a Customer Care Center (CCC) to provide better customer service and to stem increasing customer defections. The concept was that

the CCC would provide customers with a single telephone number to handle questions and problems for all its insurance products. Conceived as a 24/7 operation, the system had as its goal to handle 90% of all customer problems on the first call.

The directors of the various insurance groups (health, auto, life, property, and casualty) were called on to fund this new central service department, but they did not uniformly agree with the concept of the operation. Concerns were raised about costs, productivity issues, the CCC staff's capabilities, the existing information technology, and the systems potential to resolve customers' problems. The CCC manager knew that his department by itself was not the solution to stemming customer defections, and he was concerned that this would be the measure used to judge his performance.

A balanced scorecard was developed to resolve the CCC manager's measurement concerns and to assure the directors on an ongoing basis that the CCC was operating effectively and efficiently. The measures chosen reflected the strategic intent of the CCC and incorporated the various concerns of the directors. The CCC manager was comfortable with the new measures and was able to use the scorecard to manage and motivate his department. The funding group managers were comfortable, as the set of agreed-upon measures gave them the confidence that the CCC would perform as designed.[2]

A balanced scorecard also allows managers to see the relationship between non-financial measures and financial measures. The Non-financial measures relate more directly to actions of

the manager. A balanced scorecard reports the performance of other areas in obtaining the goals of the organization. In this way a manager can relate how their actions contribute to these goals. Each responsibility center will have its own scorecard. Scorecards for the organization will list all of the goals of the organization. Lower level department scorecards will only list those components that are within their responsibility centers. Not all performance measures are listed on the scorecards. Managers of responsibility centers only list measures that are **key performance indicators**. These indicators are measures that drive the organization to achieve its goals. They are linked to other measures that together are used to achieve this goal. An example of a balanced score card is given in Figure 1.

Figure 1: Balanced Scorecard For A1 Productions

Production Department

	Target	Actual
Volume	10,000	11,000
Manufacturing Cost:		
Direct Material	$ 100,000	$ 108,000
Direct Labor	60,000	70,000
Variable Overhead:		
Group A	$ 14,400	
Group B	60,000	
Total	74,400	82,000
Fixed Overhead	52,000	53,000
Totals	$ 286,400	$ 313,000

The information gathered is used to create performance reports. These reports compare the actual performance of an activity to the budgeted performance. This information is evaluated by lower managers, commented on and passed up the line to the next level. This process continues, with each level adding information from all the areas of responsibility under their control.

The performance monitoring and reporting structure are important elements in a control system. It is important that structure is developed that will per mote communication between all levels of management and employees. It is also important that the monitoring of the activities be objective. The person doing the monitoring must have the trust of the employees and allow the employees to have some input.

The reporting structure should be clear as to who should receive the information and how often. The manager responsible for the activity should receive the information first. The manager is then responsible to evaluate the information and pass it on up the chain of command. It is important that the manager does not look to obtain the information from other sources than the person delegated the responsibility to do the monitoring.

REPORTING PERFORMANCE

Performance reports should address the individual responsibility centers. This concept is referred to as responsibility accounting. Financial reports should only show revenues and expenses controllable by the responsibility center manager.

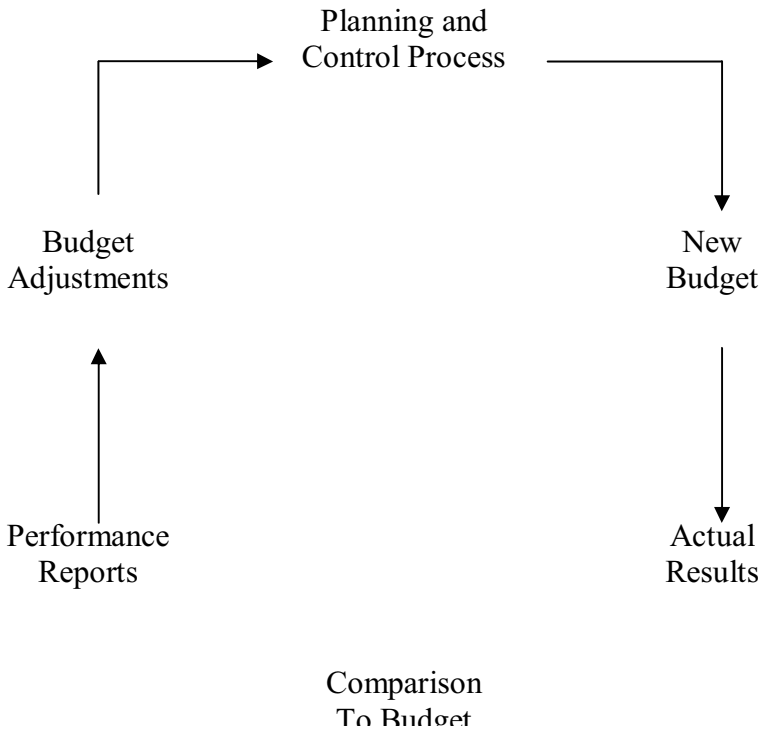
In **responsibility accounting** the focus is on the specific units within the organization that are responsible for specific activities. The reports concentrate on theses activities. An example is a financial performance report addressed to the head of a production department. It contains manufacturing cost controllable by the department head: it does not contain cost, such as advertisings or sales commissions, which the head of the production department does not control. Including such cost would not be beneficial to the department head in controlling the cost he is responsible for.

The performance report is used to provide feedback to managers. Budgeting and performance evaluation is a continuous cycle as shown in Figure 2. During the accounting period actual operating data is collected and compared to the current budget in the form of performance reports. The appropriate managers receive these reports and then obtain additional information to explain any significant deviations from the budget. Based on this information, management attempts to improve

As stated earlier, performance reports can be either financial or non-financial in nature. The financial performance reports provide feedback to managers on performance as it relates to the organizations operating budget. Non-financial performance reports provide information dealing with production output rather than costs.

It is essential that the management control system distinguish between **controllable costs** and **uncontrollable costs**. Controllable costs provide evidence about the manager's performance. It is unfair to include in performance evaluations an activity or cost that a manager has no control over.

Figure 2: Performance Evaluation Cycle



current operations and plans for the future. This is summarized in the new budget. This new budget now becomes the current budget, and the cycle continues.

Financial Reports

All product and service activities within an organization result in a financial measure. The common forms of financial measures are income statements, variance reports of actual to budget, variance reports of actual to standard, and return on investment. Variance reports are normally available at all levels of management. They are used by managers to check if all department costs are within an acceptable range. A dollar value is applied to activities on a performance report. Once determined, the dollar amounts can be summarized and reported up to the next level of management. The immediate supervisor of the activity, as well as managers far removed from the activity can understand this information.

A limited amount of non-financial information is included on financial reports. This includes sales volume in units, production output in units, labor and machine hours and material quantities. This information is helpful in explaining the success or failure of an organizations activity.

One method to report financial performance is by using the contribution approach to measure income with responsibility accounting. This type of report provides cost by behavior as well as by degrees of responsibility. These reports can be structures to show the total organizations performance or broken into individual responsibility centers or **segments**. This allows the managers to evaluate each segments performance individually. Segment reporting is common in organizations where there are distinct divisions of product lines, geographic territories, or organizational units. The segments for which reports are prepared depend on the information needs of the management. Types of segmented reports are:

1. Income statements for each retail store, district or division.
2. Income statements for each product line or service.
3. Income statements for each sales territory or customer category

These three functions are basic to the preparation of every report:

1. Identification of the reporting objective segment.
2. Assignment of direct costs to the reporting objective segment.
3. Allocation of indirect costs to the reporting objective segment.

Figure 3 is an example of a segment report using the contribution approach. This type of report stresses cost behavior, controllability, manager's performance, and responsibility.

Figure 3: Segmented Report By Division

Segmented margins by division of Offshore Refining Company

Production Department	Segments		Company
	Division A	**Division B**	**Totals**
Sales	$ 100,000	$ 200,000	$ 300,000

Less:			
Variable manufacturing expenses	20,000	50,000	70,000
Manufacturing margin	$ 80,000	$ 150,000	$ 230,000
Less:			
Variable selling expenses	$ 10,000	$ 15,000	$ 25,000
Variable administrative expenses	25,000	30,000	55,000
Total	35,000	45,000	80,000
Contribution margin	$ 45,000	$ 105,000	$ 150,000
Less direct fixed expenses:			
Manufacturing	$ 15,000	$ 50,000	$ 65,000
Selling	5,000	17,000	22,000
Administrative	10,000	18,000	28,000
Total	30,000	85,000	115,000
Division margin	$ 15,000	$ 20,000	$ 35,000
Less common expenses:			
Manufacturing			$ 6,000
Selling			2,000
Administrative			4,000
Total			12,000
Net Income			$ 23,000

By including the contribution margin for each segment managers can predict what impact a short run change in activity volume will have on income. They can quickly calculate the contribution margin ratio, contribution margin divided by sales, and multiply this by increase or decrease in dollar sales.

The contribution margin is a fair performance indicator that can be used to evaluate a segment manager. It does not contain fixed expenses that the manager can not control such as equipment depreciation or building rent. The division margin is the financial performance of the segment. This is distinguished from the financial performance of the manager given in the contribution margin. Unallocated expenses are taken from the company totals only.

The segment report emphasizes a segment's contribution to the corporate profit. Management can use this information in their evaluation of the segment manager's performance and to make decisions on the profitability of the product being made or service provided.

Non-Financial Reports

As stated earlier, non-financial performance reports provide information dealing with production output rather than costs. This includes areas such as quality, cycle time, and productivity. This information is useful to lower level managers. It relates closer to the activities that the employees within their responsibility area are performing and can control. Non-financial reports do not include dollar performance measures. They report the information is units or hours.

Quality control has become an impotent part of most organizations. The cost of poorly produced products, the lose of customers, and rework time can have a substantial impact on a companies operating revenue.

Identifying what quality requirement the customer is demanding and then reaching and maintaining that level of quality is a major undertaking. Companies undertake various programs to meet the requirements. The old method relied on inspection of products. Because of the expence to inspect all products being produced, sample test were conducted. As a result, defective products were still being shipped to customers. The added expense to either repair defective parts or scrap them also was becoming unacceptable. These programs themselves become costly to an organization. The cost of these programs can be tracked through a cost of quality report.

Recently companies have developed **total quality management (TQM)** programs. Japanese companies developed this type of quality management decades ago. The TQM approach is based on the assumption that the cost of quality is minimized when a firm achieves high quality levels. These control programs include all aspects of an organization with a goal to eliminate the problem before it occurs. In order for a TQM program to work, employees must be trained in the process and use the quality control information.

Cycle time is an important factor in improving the quality of a product. By reducing the time a product or service is process the lower the cost are that are associated to it are. Lowering cycle time means reducing quality issues. It creates increased flexibility to react to customers needs.

Figure 4: Cycle Time Report

Cycle Time Report

Process Stage	Actual Cycle Time	Budgeted Cycle Time	Variance		Explanation
Chaises assembly	1.5	2	0.5	U	Rework of tapped holes in frame
Motors wired	1	3	2	U	Additional wire harness required
Assembly painted	0.5	0.5		F	
Unit assembled into fixture	3	4	1	U	Rework of frame, holes out of specification.
Testing	5	8	3	U	

F = Favorable U = Unfavorable

Cycle time is measured for the important stages of a process and for the process as a whole. Cycle time is measurement from the end of one stage to the end of the next stage. Bar code readers are used as common way to electronically gather this information. Figure 4 shows an example of a cycle-time report.

Productivity measurement is used as a means to improve a company's competitiveness. It is a measure of output divided by inputs. By reducing the number of inputs required by a produce a company can become more **productive**. How a company measures inputs and output depends on the type of company. In all cases it is the ratio of some measure of the objective of using the resource divided by a measure of the resource that management wishes to control.

The choice of what productivity measure to use depends on the behavior desired by the management. The challenge is to choose a measure that while improving one area it does not become harmful to another area. This can happen if a manager can improve the number of unit being produced, but sales does not keep up with the increase and additional finished goods inventory increases.

The use of a single measure of productivity generally does not result in overall improvements. Management controls that focus on fundamental activities, such as quality control and service, can use productivity measures to monitor the actual benefits of the improvements in the activity. Manager must be cautious in comparing productivity measures over time. Changes in processing rates and inflation can provide misleading information. When compiling reports comparing past performance to future or present performance, adjustments must be made to be sure that the comparisons are equal.

EVALUATING PERFORMANCE

Managers can use performance data as a steering control. The data can be used an early warning that specific actions may be required. For example, high morale is a popular goal but one that is

difficult to measure. Forecasters such as number of accidents, absenteeism, and employee turnover may be evaluated together and serve as a surrogate measure for increasing or declining morale.

However, careful evaluation must be used. If the accident rate increases rapidly in the production area, it would suggest declining morale when a significant increase is caused by employee carelessness. However, if the cause is related to equipment that suddenly wears out, then there probably is not a relationship between accident rate and low morale.

It is important that managers review all deviations before evaluating performance. Conditions outside of the normal operating range may have caused unexpected results. These need to be identified and included in the performance reports. Deviations can be positive as well as negative. Managers must remember to reward employees for positive deviations. To often only negative performance receives attention. This can lead to poor moral and performance.[2]

Managers need to be coaches. They need to provide feedback to their employees. The feedback needs to be reliable, relevantly frequent and prompt. The reliability of the information will affect how employees change the behavior or to plan in order to get on course. Frequency of information has to do with the interval for which data are received. If, for instance, costs would not normally get out of control in a snort period, then monthly reports might be adequate. On the other hand, a delay of six months might allow the situation to get so far out of control that it would be too late to take corrective action

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PREPARED BY

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According to the text, service organizations are all organizations that do not make or sell tangible goods. Public accounting firms, law firms, management consultants, real estate firms, transportation companies banks insurance companies and hotels ate profit-seeking organizations. Almost all non-profit organization, such as hospitals, schools, libraries museums and government agencies are also service organizations.

Managers and accountants in non-profit organizations have much in common with their counterparts in profit seeking organizations. There is money to be raised and spent. There are budgets to be prepared and controls systems to be designed and implemented. Managers have an obligation to use their resources wisely.

If resources are used intelligently accounting contribute to efficient operations and helps non-profits organizations achieve their goals. The main characteristics include:

1. Labor-the highest proportion of expenses are allocated to labor

2. Output- output is usually difficult to define

3. Major inputs and outputs cannot be stored-example an empty airline seat can not be stored for a later flight and hotel available labor force and rooms are either used or unused as each day occur.

Technological changes over the past decade have had the most dominant influences on management accounting. With the increase use of computers accountants can gather, store and manipulate and report data.

Budgets and performance reports are essential tools for planning and controls. Budgets results from the planning process and are means of translating the organizations goal into action. A performance report compares actual results to the budget. Simplicity is the watchword for installation of systems. Complexity tends to generate costs for the gathering and interpreting of data that often exceeds prospective benefits.

Service organizations as well as manufacturing companies must determine the cost drivers and the most effective use of resources. A cost driver is any output measure that causes the use of costly resources. Example of how cost can affect a non-profit organization. A treatment center has$100,000 budget for 50 to 150 clients. The variable cost per client $400.00 per year, the fixed cost are $60,000.00.

Revenue-variable expenses- fixed expenses=0 if budget is completely spent

$100,000lump sum-$400n-$60,000=0

400n=$100,000-60,000

N=$40,000/$400

N=100 clients

Managers must use activity analysis (which is the process of identifying appropriate cost driver and their effects on the cost of making a product or providing a service.) This is very useful for managers for measuring and predicting cost for which cost drivers are not obvious. An example of this is a facilities maintenance department budget:

1. Plan cost In January the facilities expected to service 4,000 clients a day. January's predicted cost $10,000 fix plus the variable cost of $20,000(4,000 clients times $5 per clients – day) for a total of $30,000.
2. Provide feedback to managers- In January the actual facilities cost were $34,000 in month when the $4,000 client-day was served as planned. The administrators want to know they overspent by $4,000. ($34,000 less the $30,000) this I needed to make adjustment

The manager must not take the information and try to determine where the over run cost came from and how to eliminate them in the future to make the most efficient use of the limited resources available to the service organization.

Armed with the decision to make the most efficient use of the resources managers have to make many decisions. Many may include the need to determine if purchasing new equipment might offset the labor hours currently being used.

Managers of service organizations must identify when it is more cost effective to

replace equipment than to continue to use it. An example of this is shown:

	Keep	Replace	Difference
Cash operating costs	$20,000	$12,000	$8,000
Old equipment (book Value) periodic write-off	4,000	----------	---------
As depreciation Or lump sump	----------	4,000	----------
Write off Disposal value	----------	-2,500	2,500

New machine		
Acquisition cost	----------	8,000
-8,000		
Total cost	_____	_____
_____		
	$24,000	$21,500
$2,500		
	======	======
=====		

Most managers in the past used traditional costing systems (one that does not accumulate or report cost of activities or processes). There has been a change in focus in operations and accounting. The increased attention to the cost of the activities to research, design produce, sell and deliver a company's product or service. Many companies have begun directly measuring the cost of these activities. The companies have turned to Activity –based costing (ABC) systems accumulate indirect cost for each of the activities of the area being costed. The most important differences between traditional and activity based costing systems is the extent of allocation.

Traditional systems generally allocate only production cost to the products. Activity-based costing systems often expand allocation of cost beyond production to process such as order processing, design marketing and customer service. The ABC systems are more complex but promise more accurate costs to aid decision makers.

Many managers use the ABC system, this new cost accounting system provides a

more accurate and timely measurement of

1. customer and product profitability- a strategic purpose.

2. activities that provided the most value to managers and customers- an operationan as control purpose- and

3. costs of nonvalue- added activities –an operational control purpose.

Service and non-profit organizations must provided financial statements to that adhere to generally accepted accounting principles.

An example of that can be seen on the consolidated statement of cash flow for the American Red Cross Year ended June 30,2000

	2000	1999
Cash flows from operating activities	$59,052	$192,127
Adjustment to reconcile change in newt asset to net		

Cash provided by operating activates

Depreciation and amortization 82,926

73,006

Provision for doubtful acct receivable 16,547

15,006

Provision for obsolete inventory 9,453

11,800

Net gain on sales of property (1,413 (6,581)

Net investment gains (21,731)

(77,249)

Permantely restricted contribution income

Change in operating assets and liabilities

Increases in receivables

(64,234) (8,624)

Increases in inventories

(26,606) (38,534)

Decreases in other assets

4,529 4,514

Decreases in prepaid pension costs 5,722

13,697

Increases in accounts payable and accrued exp 13,924

21,571 increases (decreases) in other liabilities (4,058)

13,193

Increases in postretirement benefits 7,567

6,201

==========net cash provided by operating activates 64,015 207,936

==========cash flows from investing activities

purchase of property (127,682) (110,992)

proceeds from sales of property 4,278 10,484

purchases if investments (294,209) (238,003)

proceeds from sales of investments 145,584 134,051

==========

Net cash used in investing activities (272,029) (204,460)

Cash flows from financing activities:

Permanently restricted contributions and income 17,663 12,193

proceeds from borrowing 203.528 35,233

repayment of debt (10,538) (59,931)

==========

net cash provided by (used in) financing activities 210,653

(12,505)

net increased (decrease) in cash and cash equivalents 2,639

(9,029)

cash and cash equivalent, beginning of year 142,659

151,688

cash and cash equilivant, end of year $145,298

$142,659

Supplemental disclosures of cash flow information:

Cash paid during the year for interest $

27,637 $ 21,819

Non cash investing and financing transaction:

Acquistion of equipment and under capital lease agreements

11,189 ---

In conclusion, accounting for a service organization is much like the accounting and for a manufacturing organization. Service organizations, especially non-profit organizations must make efficient use of their limited resources especially during these thought times. Using activity based costing and activity analysis a manager can determine where the resources are being used and if they are being used in the most efficient

manner. I choose this topic as I am interested in the accounting aspect of the non-profit organization that I am working with and would like to help them better use the limited resources available to them using the generally accepted accounting principles.