Profit Planning

Understanding the Best Method of Planning to Maximize Profit

What is profit?

Webster's dictionary defines it as:

PROFIT- NOUN (Profits - plural noun)
a financial gain, especially the difference between the amount earned and the amount spent in buying, operating, or producing something.
See Gross Profit and Net Profit

PROFIT – VERB
obtain a financial advantage or benefit, especially from a project or an investment.
To act of making money·

Regardless of how you define it making profit should be one of the primary goals of every business

What is profit Planning?

Profit planning can be defined as the set of steps and procedures which are enacted by companies to achieve the desired level of profit. Planning for profit is accomplished through the preparation of a number of budgets, and pricing schedules which, when followed , will result in a obtaining a preset level of financial gain.

Some of the critical Items budgets cover are:

Project Cost – This item is broken down as the cost on a project covering Materials, Labor and Overhead.

Overhead is the cost covering the day to day operation of the business. It includes items such as Rent, Utilities, Phones, Advertising, Equipment and Insurance.

Budgets are a way of understanding all costs involved and pricing projects to make a profit.

Advantages of Budgeting:

Among these benefits are the following:

Budgets provide a means of communicating management's plans through the organization.

The **budgeting process** provides a means of allocating resources to those parts of the organization where they can be used most effectively.

Budgets force management and employees to think about job cost. It gives them a hard guideline when dealing with these cost and encourages them to keep in line with the given budget.

Budgeting helps to ensure that everyone in the organization is pulling in the same direction. Budgets provide goals and objectives that can serve as benchmark for evaluating subsequent performance.

Question 1

What is the advantage of using a budget?

A. It gives employees an idea of how the job was bid.

B. It tells you what you can earn on a job.

C. It informs all employees their spending limits on the job.

D. It is a flexible amount that can be changed once the job is started.

Preparing a Budget and Pricing a Job:

Labor costs and Materials costs are completely different entities, with two commonalities. Both types of costs can be deducted, and both are used to make a product or provide a service to customers. Both costs are calculated during the **budgetary process** and are typically considered when determining the amount to charge for the end product. Understanding the difference between labor costs and materials costs is essential to accurate budgeting and making a profit.

Labor Cost: Labor cost should take into consideration the employee cost of all employees involved in the project. Labor cost is not just limited to those working on the job site but must include the salaries of estimators, engineers and others involved in planning the project. Normally the labor cost of office workers such as those answering the phones are cover in the overhead cost.

Preparing a Budget and Pricing a Job:

Employee Cost (Labor)

Many do not know how to calculate employee cost when bidding a job, The cost must cover all employee cost to the employer. If an employer only includes the hourly wage or salary for that employee in the cost of labor then they must include all additional employee cost in an area such as Overhead.

Besides the employees hourly wage or salary employee cost include employer match for Social Security and Medicare (Fica) and fees for state and federal unemployment insurance. Some add these cost into the labor cost of a project and others place the cost in the Overhead budget along with the cost for Worker Comp insurance.

The following two slides show true employee cost.

An employee earned $325.00. The employer withheld $41.00 for Federal taxes, $24.86 for FICA and Medicare and $12.00 for State taxes.

What was the total cost to the employer for this employee?

$41.00 Federal Tax (pd by employee)
$12.00 State Tax "
$24.86 FICA & Medicare (pd by employee)
$24.86 (FICA Match paid by employer)

$325.00
24.86 (FICA Match by employer)
$349.86 Total employee cost to employer

1. An employee earned $500.00. The employer withheld $55.00 for Federal taxes, $31.00 for Social security and $7.25 for Medicare and $14.00 for State taxes. Also consider .8 % for Federal Unemployment, and 2.7% State Unemployment and the employee has earned $3500 this year. What was the total cost to the employer for this employee?

ANS.$555.75 True employee cost.

500.00 Gross earnings	500.00	Employer paid employee
55.00 Federal Taxes		Employee pays all Federal taxes
31.00 Social Security	31.00	Employers matching
7.25 Medicare	7.25	Employers matching
14.00 State tax		Employee pays all State taxes
4.00 FUTA	4.00	Federal Unemployment (employer pays)
13.50 State unemploy.	13.50	State Unemployment (employer pays)
	Cost to Employer = 555.75	

SS = 12.4% 6.2% by employee 6.2 % by employer

Med = 2.9% 1.45 % " 1.45% "

FUTA = .8% All pd by employer (1st $7000 of income)

State Unemploy. = 2.7% All pd by employer (1st $8500 of income)

Pricing a Job:

Materials Cost

Cost of Materials include all products and materials that are needed to complete the project whether it is installing a plumbing system in a 20 story high rise building or replacing a water heater in someone’s home. The type and quantity of materials is determined by a take off and estimating process. This is an extremely important part of the profit planning process because it is a large part of determining the final bid price given to the customer. Failure to correctly determine the type and number of materials needed can end up causing the job to be priced too high and your bid rejected or even worst the bid is too low and the amount does not produce any profit.

Special Equipment. Many estimators include as part of the materials budget any specialty equipment that may be needed to install the materials on the project (jack hammer, lift, or bobcat). Any special equipment that is needed and has to be rented or purchased will add to the job cost and must be added. If these items are not included as part of the material budget then they need to be added to the project budget under some other line item.

Pricing a Job:

Question 1

What is the difference between determining Gross Profit and Net Profit?

a. Gross profit is the job price minus all cost.

b. Gross profit is the job price plus Net profit.

c. Gross profit and Net Profit are the same.

d. Gross profit does not subtract Overhead cost from the job price

Pricing a Job:

Gross Profit vs. Net Profit

When determining the amount of profit produced by a project you will hear the terms Gross Profit and Net Profit.

Gross Profit is calculated by taking the job price and subtracting all costs directly connected to the project. These costs include labor and materials. In some cases there may be commissions or other expenses that are a direct cost to the project and must be included. After subtracting these cost from the total sales price the remaining funds are Gross Profit. Many companies use gross profits to show their total annual revenue. Such as a company has an annual income of 5 million dollars with an annual gross profit of 1.1 million. Many companies express profit as a percentage such as a 15% gross profit. This can be determined by dividing the amount of profit made by the total price of the job. While gross profit does give you a picture of how financially successful the project turned out, it is not an accurate picture of the money that is in the bank.

The following slides show examples of determining Gross profit for a project and determining the profit percentage.

Pricing a Job:

Gross Profit vs. Net Profit

When determining the amount of profit produced by a project you will hear the terms Gross Profit and Net Profit.

Net Profit is calculated by taking the job price and subtracting all costs directly connected to the project. As with Gross Profit you subtract cost for labor and materials plus any other expenses that are a direct cost to the project . When calculating Net Profit you must include the price of operating the company. This is called Overhead. Overhead includes such thing as rent, utilities, office employees, insurance, phones, advertising and other misc expenses. These are the price of doing business. When the cost of overhead is added to material and labor and that total is subtracted it from the total sales price the remaining funds are Net Profit. Net profit are oftn called clear profit because it gives the owners of the company a clear picture of what they have left in the bank that they can spend. The total annual Net Profit a company makes is what they will be taxed on by the federal government.

The following slides show examples of determining Gross profit for a project and determining the profit percentage.

A job contracted in the amount of $46,000.00 was completed by a plumbing contractor.

1. Material cost was $13,000.00
2. Labor cost was $25,000.00
3. Overhead cost was $2,500.00.

Determine the gross profit.

$13,000 Materials cost
<u>$25,000</u> Labor
$38,000

$46,000Total Revenue
<u>- 38 000 Cost</u>
$ 8,000 Gross Profit **Ans $8,000**

A job contracted in the amount of $46,000.00 was completed by a plumbing contractor.

1. Material cost was $13,000.00
2. Labor cost was $25,000.00
3. Overhead cost was $2,500.00.

Determine the Net profit.

$13,000 Materials cost
$25,000 Labor Cost
$ 2,500 Overhead Cost
$40,500

$46,000 Total Revenue
- 40 500 Cost
$ 5,500 Net Profit **Ans. $5,500**

You just completed a job; income was $48,650.00; Material $24,170.00; Labor $14000.00; Overhead $2500.00

Net profit

24170 Material

14000 Labor

2500 Overhead

40670 Total Expenditure

48,650 Income

-40670 Expenses

7,980 Net profit

Net profit 7980 ÷ 48650 = 0.164 = 16%

Gross profit.

24170 Material

14000 Labor

38170 Job cost

48,650 Income

38170 Job cost

$10,480.00 Gross profit

$10,480.00 ÷ 48650 =21.5 %

Bidding a Job to Get a Set Profit Percentage

To find the price needed on a job to produce a certain percentage of profit. Follow the following steps

Find the total job cost by adding the following:

Labor

Material

Overhead.

Determine the percentage of profit you wish to make for example 25%.

You job cost represent 75% of you Total Price

Subtract 75% from 100% = 25%

Divide the total cost by 25%

This number is you Bid Amount

The following slide is an example of this formula

To make a 20% net profit, using the following information, the contract amount would be _____________.

1. Material cost $220.00;
2. Labor for 4 hours at $10.00 per hour;
3. Insurance and taxes are 50% of the cost of labor;
4. Overhead averages $25.00 per hour.

220	Material cost	100%
40	(4 hrs. @$10 per hr.	-20%
20	50% of cost of labor	80%
100	4 hrs. @$25 per hr.	
$380	Total Cost of job	$380 \div 0.8 = 475$

Contract amount = $475.00

Pricing a Job:

Mistakes that Kill Profit

As a rule, **for a business to survive it must be profitable**. Even non-profits and charities must bring in enough money to pay payroll and expenses to keep the doors open. Successful businesses grow and prosper by making a profit on work they perform. Even companies who are trying to do everything correctly to make a healthy profit make mistakes that will hinder or sabotage their efforts.

Over the next few slides we will look at areas where mistakes are made. Listed are the areas we will cover.

Overhead (Cost of running the business)
Estimating, Pricing and Bidding
Job Cost Records and Bookkeeping
Poor Scheduling and Planning
On the job mistakes
Call backs

Pricing a Job:

Mistakes that Kill Profit

Failure to control Overhead

The cost of running a business can spiral out of control easily if not kept in check. As a business grows overhead generally grow as well so it takes a bigger chunk of the profit to feed it. A successful business knows what it cost to run their shop and work to keep overhead cost low. In the beginning of this class we saw the importance of creating a budget. Budgets are a good tool because they make the employees aware of the spending limits for items set by the company. A number of companies failed because they did not keep employee spending or payrolls under control. Waste comes in many forms and it must be kept to a minimum. Some overhead cost may be beyond the owner's control to stay within budget. Insurance cost change often. Office supplies and other items increase in cost. The owner of the company must keep aware of the increases and adjust pricing to keep the companies profit margin healthy. A smart owner is always reviewing overhead cost and making adjustments.

Pricing a Job:

Question

The cost that covers the cost of being in business is called:

A. Labor

B. Overhead

C. Materials

D. Insurance

Mistakes that Kill Profit

Estimating is the #1 Way to Meet Your Project Profit Goals?

Start with a great scope and estimate that includes a plan for possible situations. Estimating is one of the most crucial steps to ensuring a successful project, yet many estimators do not have the tools and skills to develop a scope and estimate of costs that will stand up to all the challenges faced during project execution. From unexpected delays, changes in clients' staff, regulatory issues, unplanned meetings, and unrealized client expectations, your estimate must anticipate and account for anything that could happen. The recession and all the bad habits it created is long gone, yet many estimators still try to cut corners and lower fees believing they must shave fees to get a job. Your greatest negotiating power is before you sign a contract, so taking the time to get it right and planning for all the possibilities is critical to making your full margin on your projects

Mistakes that Kill Profit

Estimating Process

If all your estimators do things their own way then probably only one (or none) is doing it the best way. By developing a streamlined estimating process, you can improve consistency and give your team a better chance of getting the scope and estimate right. The likelihood of the following eight estimating mistakes can be reduced by implementing an effective documented process, including an estimating checklist that ensures that your team is not omitting any significant details that can reduce your profit margin.

Not Comparing Top-Down and Bottom-Up Estimates

A common practice that can cause projects to fail down the road is only creating a top-down budget as a starting point. This often happens because estimators pick a dollar amount that they believe should be the target for the estimate, and build their assumptions to match the target. Very often a bottom-up estimate will show a large discrepancy between the assumed target number and the results of taking the time to develop the details first.

Mistakes that Kill Profit

Using Bad Templates / Spreadsheets

If you do an assessment of the estimating templates and spreadsheets your estimators are using, you may find a lot of problems including miscalculations, omissions, and poor design. Many templates get changed over and over through the years, and with all of the cutting, pasting and re-programming, they are fraught with errors. Templates should be cleaned up and assessed regularly and approved by your accounting department.

Using Incorrect Rates

Another common mistake is using old rates or rate tables that fail to account for increases over time. Building an estimate up from low rates to begin with guarantees that your project will not make the profit margin you desire. For multi-year projects, your contracts should include escalation clauses to account for known increases in overhead, salaries and subcontractors

Pricing a Job:

Mistakes that Kill Profit

Bidding and Estimating

Estimating the cost of a project are one of the most critical part of a successful project. Estimators are the ones who determine the cost of a project and the bid price submitted to the customer for the project. This is an area where mistakes can be costly. A professional estimator uses a number of tools to check and recheck his estimate before he turns them in. Estimates are used to create budgets for various parts of a project. The following cover some of these areas where estimators are used.

Materials - (Take off determine what is needed for the project.)
Labor - (The total man hours necessary to complete the project.)
Overhead – (Office support for the project)
Fees - (Permits, Bonds, Insurance and Legal)

The following slide shows estimating the number of workers needed to complete a job on time

You have estimated it will take 68 man hours to rough-in the DWV piping in a building and find the job schedule allows 3 days for this part of the job.

How many men will be required to complete the rough-in within the scheduled time?

(a) 2 (b) 2.5 (c) 2.8 (d) 3

A man hour is 1 man working 1 hour

1 man working 3 days @ 8 hrs. per day = 24 hrs.

68 total needed ÷ 24 = 2.833 men (Round Up)

Answer: (d) 3 needed

Pricing a Job:

Mistakes that Kill Profit

Job Cost Records and Bookkeeping

Just like and good Estimator, **a good book keeping system is a must.** A good book keeper system keeps the owner aware of how the company stands financially. This system should include job cost records so that the company can determine how much profit was made on a project. They should be the one to keep all department on budget and look for cost saving methods. Companies who do not use a system to keep up with overhead and profit or loss generally do not last very long. Companies which do not keep job cost records are not sure of how much if any profit was made. Larger companies generally have a full time book keeping staff while smaller companies contract with and outside firm to do their accounting. Either way this cost is covered under Overhead.

Bookkeeping Methods used – Cash System and Accrual System
Controls Budgets
Keeps Job Cost Records
Handles all payments for invoices, payroll and all required tax payments

Pricing a Job:

Mistakes that Kill Profit

Scheduling and Planning

Planning is one of the best preparation a company can do. Almost every successful projects start with a good plan. Plans are developed by looking at what must be done a plotting out a strategy to best get the work done. Planning is necessary to have the material and man power needed to complete the project on time and on budget. If you are in total control of a project or job the scheduling should not be as much of an issue. Scheduling becomes a little more complicated when you are a subcontractor on a larger project. The scheduling on this project is often dictated by the general contractor as opposed to the company doing the work. Every large project is started with a proposed schedule which may or may not happen. As well as a person or company plans, their schedule can be disrupted by things like weather, material shortages, labor problems and other unforeseen circumstances. Most General contractors will do everything possible to make up lost time on a project by scheduling subcontractors in at time when the work is not ready and putting multiple contractors on the project at the same time to work around each other. This is where you need to have a plan.

Pricing a Job:

Mistakes that Kill Profit

On the job mistakes

Mistakes have always been a profit killer. A company can lose the profit on a job and more depending on how serious the mistake is. Mistakes can be anywhere in a project starting from the Planning and estimating to while performing the work on site. This is the reason to set up a good system of checks and balances to reduce or eliminate mistakes. If an estimator missing something on the plans and does not include that cost or order the materials that is a costly mistake. If planning does not include enough people to do the work on schedule, that is a costly mistake. If someone does not install the materials or systems correctly then time and money are lost while corrections are made. Successful companies are the ones that can keep mistakes to a minimum. Training of employees is critical to reduce mistakes in the field. Having a system of rechecking material take offs and bids calculations reduces mistakes on the projects.

Pricing a Job:

Mistakes that Kill Profit

Call Backs

Call Backs can be a slow death to a profit margin. After a project is completed you hope that you will not hear from the customer again until there is another project or job to do. Every contractor has call backs and the goal is to keep them to a minimum. They can be caused by a number of things but are more often are caused by bad workmanship. Other reason for call backs are material or equipment failure. When this is the reason you should decide if it is significant enough where the manufacturer or supplier should help cover the cost.

Every time you are working on a call back you are losing double because while you are paying the person to do the callback, they could be working somewhere else making money.

The big key here is profit is critical to a business being successful and continuing to do business.

Complete