

Excellence in Financial Management

---

# **Discussion Board Articles – Budgeting and Forecasting**

---

Written by: Matt H. Evans, CPA, CMA, CFM

All articles can be viewed on the internet at [www.exinfm.com/board](http://www.exinfm.com/board)

---

---

# **Budgeting & Forecasting**

## **Financial Forecasting Using % of Sales**

Financial forecasting often begins with a forecast of future sales. The Sales Forecast serves as the basis for estimating future expenses, assets, and liabilities. Many of these accounts vary with changes in sales. Therefore, using a percent (%) of sales can be very useful for forecasting a Balance Sheet.

The following steps can be used to prepare a forecasted (pro-forma) Balance Sheet based on the % of Sales Method:

1. Determine which Balance Sheet accounts vary with Sales (such as accounts receivable). Calculate the % of sales for each account that varies with sales.
2. For accounts that do not vary with sales (such as long-term debt and equity), simply list the current balances from the last Balance Sheet.
3. Calculate the future Retained Earnings balance by adding projected net income and subtracting any future dividends from the Beginning Balance for Retained Earnings. Don't forget to calculate a % of sales for Net Income and Dividends.
4. Add up your assets to determine total projected assets. Now add up your liabilities and equity to determine the financing of assets. If total assets are greater than total liabilities and equity, then you will need to raise additional capital.

Please note that the % of Sales Method is based on the assumption that you are operating at full capacity. Also, you will need to prepare a Cash Budget for a more accurate estimate of financing requirements.

## **Improving the Budgeting Process**

One of the most non-value-added activities within financial management is budgeting. Budgets are prepared to allocate and control how resources will be used in the future. Unfortunately, the future is hard to predict and upper-level management doesn't always communicate with people who prepare budgets. Because of poor communication, budgeting becomes an exercise in futility. Some of the main problems associated with budgeting are:

- Poor communication from decision-makers.
- Too many people involved in the process.
- Budgets don't help manage our business.
- Budgets are outdated by external events.
- Budgets are difficult to revise.

Since upper-level management often circumvents the budgeting process, the first thing to do in budgeting is to find out *what does management expect from the budgeting process?* Next, make sure management decision making is linked to the budgets. You can accomplish this by creating budgets within the strategic planning process. Don't forget to include external factors when preparing budgets. Outside events and issues can impact your budget estimates.

Budgets should be easy to revise. When new planning data pops up, your budgeting process should adopt and accept this new data. Hold your cost centers responsible for meeting their budgets. This can force feedback from end-users for improvements in the budgeting process. If you find yourself always revising a budget, consider preparing several budgets or setup a contingency budget if you expect changes. Prepare the basic outline or summary of a budget and get approval before you spend lots of time preparing detail budgets. Or better yet, try to reduce the detail in your budgets to streamline the entire process.

Budgeting should be a dynamic process within strategic planning. The more your budgets can react to change, the closer budgeting will be to a value-added activity. If your budgets don't add value to decision making, then it's time to improve the process.

### **Don't Forget to Use Expected Values in Your Forecasting!**

There are many turns and twists when it comes to forecasting cash flows and other amounts. The last thing you need in your analysis is statistical errors that distort your estimates. The problem is what amount do I use? Do I use the average amount? Do I use the most likely amount? Or do I use the expected value?

In order to come up with a realistic estimate of what amount will occur in the future, you should use expected value. Expected value is not the same as average value or most likely value. Expected value is derived by looking at all possibilities and taking into account the probability of occurrence. Using expected value has statistical merit over other approaches since you are forced to give consideration to all possible outcomes. And the difference you get in estimates can be extremely significant.

Let's say you need to estimate the cash inflows for next month. You have three customers who have outstanding receivable balances. Based on past histories, you can assign probabilities to receiving payment next month.

Customer A owes \$ 10,000, there is a 60% probability of receiving payment next month. Customer B owes \$ 20,000, there is a 30% probability of receiving payment next month.

Customer C owes \$ 30,000, there is a 10% probability of receiving payment next month.

Total Expected Value next month =  $(\$10,000 \times .60) + (\$20,000 \times .30) + (\$30,000 \times .10) = \$ 15,000$ . Total Average Value =  $(\$10,000 + \$20,000 + \$30,000) / 3 = \$ 20,000$ .

Total Most Likely Value =  $\$ 10,000 + \$0 + \$0 = \$10,000$ .

As you can see, it makes a difference in which approach you take in coming up with your estimate. We can use an expected value of \$ 15,000, an average value of \$ 20,000, or a most likely value of \$ 10,000. Therefore, it is very to go through a decision based approach to estimation. You accomplish this by calculating expected values.

## Considerations for Budgeting Software

Budgets are often prepared with the use of spreadsheets. As an organization grows and becomes more complex, the use of spreadsheets must give way to formal budgeting applications. A database of spreadsheets with increased functionality can significantly improve the budgeting process. Here are some features to look for in formal budgeting software:

1. Database Functionality: Each budget dimension (cost center, general ledger account, business segment, etc.) should stand separately so that data can be mapped against each dimension. This allows the user to view budgets by whatever x and y dimension he or she chooses.
2. Bi-Directional Calculations: It should be easy to make random changes to budgets within any level of the organization. Changes should be made from the top and the bottom at the same time. For example, a 5% cut to all departments is made and at the same time, the Marketing Department Budget increases its line item for research.
3. Multi User Sharing: The budget system should not be restricted to any single user. By allowing users to share access to the same database, duplicative procedures are eliminated. Obviously, the budgeting system should include line item security controls for each dimension within the system.
4. Easy to Learn & Use: The budgeting system should be simple and data entry should be self-explanatory. A spreadsheet like feel can help reduce learning time since most professionals are very familiar with spreadsheet programs.
5. Customizable: The actual calculation logic should be subject to modification by the user since one size does not fit all. Users need the ability to customize how budgets are prepared to meet the needs within the organization.
6. Audit Trails: It should be easy to tell who made a revision to the budget. The amount and variance associated with the revision should be easy to identify within the budgeting system.
7. External Importing of Data: The budgeting system should be able to import data from external systems. This can streamline the process and make budgeting more of a value-added activity.

Good budgeting programs should include features like "what if" analysis and customization options at each budget control point. The real power of automating the budgeting process can be found in consolidating large volumes of data and integrating all budget control points into a single, unified budgeting system.

One alternative to budgeting software is the use of Application Service Providers (ASP's) for the overall budgeting process. This so-called e-planning alternative offers some big advantages over formal installation of enterprise software:

- Rapid deployment throughout the entire organization.
- Bypasses the costly life cycle of designing and implementing formal programs.
- Ensures consistent integration throughout the entire organization
- Instantly transforms budgeting into a dynamic, real time process where on-line templates are used to update budget information.

Whichever option you choose, budgeting software or ASP's, you will need to have a process that is flexible and responsive to constant change. The single biggest problem in budgeting often boils down to failure to integrate the process. This should be a key concern in whichever option you choose.