NebGuide

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Tracking Profitability for New Businesses Using Revenues and Costs

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Introduction: The Importance of Tracking Profitability

Accurately tracking profitability by calculating revenues and costs is a challenge for many new businesses; however, it is important that businesses prioritize and accurately complete this action. It is a part of normal record-keeping of a business, and is used to calculate things like taxes and income for the business' owner(s). Further, many financing options, including loans, require this information to evaluate such factors as financing suitability, loan size, and repayment risk.

Knowing revenues and costs can help determine the financial sustainability of a business. This action helps a business identify new ways to increase income, for example, either through increasing revenues or lowering costs. And it is one of the most feasible ways to evaluate if a business is moving in a positive or negative direction. Business owners may use other non-quantifiable measures to track their business performances initially. It is essential, however, to start using quantified business metrics like profitability to assess business performances accurately over time.

Profitability Equation

The simple equation below can be used for calculating profitability:

$$P = R - C$$

An explanation of variables within this equation is as follows:

P = Profit: The income of a business. It is the sum of total revenues minus total costs.

R = Revenues: The money going into a business.

C = Costs: All expenses incurred by a business.

Although the equation above is straightforward, the vital part is correctly and completely identifying everything that contributes to the *Revenues* and *Costs* terms. Each of these can have multiple elements that contribute to their overall value. Subsequently, the largest challenge is often not the math itself, but comprehensively determining everything that contributes to the profitability calculation.

Revenues

Revenues is a measure of all money that comes into a business. Simply, it can be calculated as follows:

Revenues = Price of a Good or Service × Number of Sales

Yet, revenues can take many different forms, among them sales of any product or service that a business offers, interest from investing business capital, and money paid for renting out assets like buildings or equipment.

One common mistake that businesses make is confusing revenues and profits. *Revenues* is an overall measure

of money going into a business, and increasing revenues can be a good indicator of growth due to new customers and sales. However, it cannot be used to estimate income of a business, which must instead be done using *Profits*. Be sure to distinguish between these two terms, or you will be over-stating your income by failing to account for *Costs*.

Costs

Costs are all expenses that businesses incur. There are two different categories of costs that a business will encounter.

Variable Costs are those that vary with the amount of product/service that is sold. In other words, variable costs increase proportionally when sales increase and vice versa. Examples of variable costs include raw materials to make a product, packing and shipping costs, as well as hourly labor used to deliver a product or service.

Fixed Costs are those that do not change based on the amount of product/service that is sold. Examples of fixed costs include rent, utilities, regular employee salaries, and fees for website hosting.

It is important to note that certain costs such as labor and marketing can appear either as a fixed cost or variable cost. If marketing expenses are budgeted for advertising regardless of number of sales, for example, they are fixed costs; however, if marketing costs are allocated proportional to sales, they can be calculated as variable costs. The same principal applies to costs associated with labor. How it is classified depends on the nature of the labor for the business. If labor is paid regardless of an increase or decrease in the number of goods or services produced or sold, it should be counted as a fixed cost. If rate for labor can be calculated based on the units of the goods or services produced or sold, it can be counted as a variable cost.

Regardless of what kind of labor costs that a business has, it is crucial that labor is completely and accurately included in the costs for a business, even if this labor comes from the founder/owner. One common mistake new businesses make is excluding this labor in their costs' calculations. If a business grows, a different employee or worker might complete this task in the future. Labor must be accounted for *at all times* so that the business will remain profitable in the event of this occurrence.

Once all fixed and variable costs are identified, the total value of costs is determined with the following equation:

$$\text{Total Costs} = \text{Variable Costs} \times \text{Number of Sales} + \text{Fixed Costs}$$

This equation demonstrates the importance of not only identifying all costs, but also correctly categorizing them as fixed or variable costs. Failure to do so will lead to an incorrect calculation of total costs, and thus profits.

Calculating Overall Profitability

Once *Total Revenues* and *Total Costs* have been calculated, these terms can be plugged into the $P = R–C$ equation above to calculate profitability. If the result is a negative number, it means the business is losing money. While this sometimes occurs for short periods of time and is especially common for new businesses with the initial investment, it is critical to become profitable as quickly as possible either by increasing revenues or lowering costs, or a combination of the two. Otherwise, the business will not be viable, which will ultimately lead to business failure.

Using Excel for Profitability Calculations

Although it is not the only tool available, Microsoft Excel is an excellent software tool for keeping track of profitability calculations. The files this software creates, called spreadsheets, can be customized in countless ways based on the needs of a business. Further, Excel allows users to make small changes of values and functions within a spreadsheet, and will automatically recalculate all values based on these changes. This is very useful for new businesses, which change frequently as they are ramping up business actions, and when doing so, have to update their profitability calculations. Finally, there are many websites online that have free tutorials and examples to help teach how to use this software (see examples listed at the end of this guide).

As a part of this NebGuide, we have created an example spreadsheet that calculates revenues and expenses. This spreadsheet is from a real-world business, and was constructed for a Nebraska entrepreneur who manufactures and sells jewelry. Comments have been added to help explain various parts of the spreadsheet. This document can be found at the following link:

https://unl.box.com/s
/wss1w2sstuodv104xiq7b0i4a5mfthuv

In this spreadsheet, revenues and costs have their own worksheets (individual sheets in the overall spreadsheet file). This allows the business owner to go into detail for each of these categories, while keeping all variables for a single category in a single, easy-to-reference place. The ultimate goal for each of these worksheets is to come up with overall values for revenues or costs.

In addition, there is a third worksheet for calculating profitability based on revenue and cost worksheets. It refer-

ences values calculated in the revenue and cost worksheets, and calculates profitability. This worksheet also calculates some other metrics in addition to profitability. This is done to provide additional indicators about how the business is doing (for example, fixed costs will hopefully decrease as a business grows its number of sales and customers). Although every business has different metrics that indicate success, it can sometimes be beneficial to calculate these metrics alongside profitability on a recurring basis.

It is very difficult for a business to complete all annual calculations at once. Further, businesses, especially new ones can change rapidly over the course of a year, which often leads to changes in the variables used to calculate profitability. As a result, businesses divide their calculations into sections of time called *Accounting Periods*. Most businesses perform monthly calculations (and this is the format used in the example spreadsheet), but this is not the only way to do so (examples of other possible accounting periods include weekly, bi-monthly, and quarterly). Whatever period you select, make sure to use it consistently, to enable accurate comparisons.

Conclusions

It is critical for new businesses to calculate profitability in order to promote financial sustainability and growth. This NebGuide introduces methods to calculate profitability using revenues and costs. It introduces a basic equation for these calculations, and defines all principal terms. In addition, this guide comes with a Microsoft Excel spreadsheet that can serve as an example for calculating profitability over time.

Examples of Online Excel Tutorials

40 tutorials to excel at MS Excel spreadsheets

https://digital.com/blog/excel-tutorials/

Microsoft Excel for Windows training

https://support.office.com/en-ie/article/excel-for-windows-training-9bc05390-e94c-46af-a5b3-d7c22f6990bb

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