



# FORECASTING – BY THE NUMBERS

A DEFINITIVE GUIDE TO HELPING YOUR  
CLIENTS PLAN FOR THE FUTURE

BY MIKE MILAN



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# Introduction

*“If you want to know what the future holds, you have to bring it into the present.”*

*– David H. Sandler*

The quote is powerful on many levels. While Sandler was referring to understanding the buying process of a customer during a sale, I find this quote is relevant to almost anything I’m uncertain of. The future of your client’s business is always an unknown, and they look to you to guide them through.

This guide helps clear the fog of uncertainty away from your client’s minds when they are thinking about the future. It is a step-by-step approach to looking at a business through the eyes of the financials and bringing the future into the present on paper. This guide will go well beyond just forecasting the income statement: It includes techniques to forecast the balance sheet and determine a safe growth rate for your client’s business. Lastly, each section has a \*Pro Tip\* to further assist you.

Here’s what you can expect.

## The 5 Steps of Forecasting

- 1 Start with the end in mind – Build transferrable value
- 2 Watch the business in action – Create a monthly income statement forecast
  - Sprinkle in a dose of reality – Adjust for seasonality
- 3 You can’t spend profit – Forecast your cash
- 4 It takes money to grow – Forecast the balance sheet
- 5 Growth is a planned event – Calculate sustainable growth rates





## STEP 1 - START WITH THE END IN MIND (Build Transferrable Value)

As your client's trusted advisor, one of the most important questions you should ask is, "Where are we going?" Think about it. There is realistic potential for you and your client to build a long-term relationship spanning decades. Therefore, it's critical for you to understand what their goal is to help them create a path to achieve it. Simply put: Successful business owners endeavor to build transferrable value. It is the role of the advisor to guide them in that process.

Transferrable value isn't something that accountants and their clients regularly talk about. In fact, many may never discuss it. But it is the destination on your business ownership journey. Transferrable value is simply the amount of money the business owner wants to have on hand whenever they decide to do something different. If you are going to help your clients achieve their goal, start here, with the end in mind.

Here's an example: Your client is a couple around 40 years old. They have plans to retire to a lake house in 20 years. They currently have about \$200,000 in cash and investments and estimate that they will need about \$100,000 per year to live the lifestyle they desire. The average retirement lasts 25 years, so they will need about



\$2.5 million dollars. Their investment risk tolerance should yield them 5 percent per year.

Believe it or not, this is real life and all business decisions should start here. Now, I know what you're thinking: "I thought this was a guide about how to forecast." It is, but you can't forecast blind. You must build toward a goal. Results in business do not just occur. They are almost always planned events.

**After learning the circumstances about your client, you are ready to start the mathematical forecasting process. Use the facts you learned to calculate an annual cash requirement to fund their transferrable value number.**

Let's stick with the previous example. Here's what we know:

The Transferable Value you are trying to build is.	<b>\$ 2,500,000.00</b>
You will need to set aside this much per year to live the dream you described in question 1.	<b>(\$91,654.99)</b>

Make sure you have at least this amount in your annual income forecast + money to re-invest in the business. I recommend adding at least 10% or more to this amount depending on growth.

ANSWER THESE QUESTIONS

- What do you dream of doing in the future? (retire, travel, buy another company.....?)  
**Retire to a lake house**
- How much do you think you will need to live lifestyle you described above? Answer in terms of annual compensation.  
**\$ 100,000.00**
- How many years do you have until you want to exit this company?  
**20**
- How much have you currently put away to support this dream?  
**\$ 200,000.00**
- Since we are talking about the future, what is a safe interest rate you hope to get on your saved/invested money?  
**5%**

This information becomes the basis for all your future conversations with your client. Now, let's put our first reality check on our client's information to get a sense of how likely it is the aforementioned couple can achieve their goal.

Using the PMT function in Excel, we learn that this client couple will need to contribute \$91,654.99 per year to reach their goal.

Annual Interest Rate Earned	Term in Years	Present Value	Future Value	Payment to Transferrable Value	Formula
5%	20	\$ 200,000	\$ 2,500,000	(\$91,654.99)	"=PMT(A4,B4,C4,D4)"



## PRO TIP

The first question we should ask is if this number is doable. This may be the first time that your client has seen the amount they should be contributing. Based on the size of the business, this number might be easy or impossible to achieve. In either case, we now have a number to build our forecast against.

You may also notice that I did not include the value of the business in this calculation. That is because we assume that the couple will continue to own and operate the company until they decide to make a change. We don't want to rely on a sale of the business to finance our transferrable value because we can't calculate its worth in 20 years. Also, we can anticipate that the sale of the business might be used to cover a shortfall in our planning or choose to view the sale as "icing on the cake."

Bottom line: Do not rely on the value of your company to finance your future unless you have to.



## STEP 2 – WATCH THE BUSINESS IN ACTION (Create a Monthly Forecast)

Once the groundwork has been laid for the long-term relationship, it is possible to focus more specifically on the one-year financial plan. The first step in this process is forecasting the income statement.

Conventional forecasting methods normally start with looking at last year's sales performance and creating a new forecast with anticipated growth or changes in expenses. They ignore the transferrable value contribution we calculated above. This is one of the ways you can be different as an advisor. Don't leave your client's dream to chance. Create a high-level monthly income statement see if it can be done.

Using the company financial statements provided at the end of this guide, here is an annual forecast for our sample company. A business is a programmable machine with predictable functions that we can use to forecast.

The steps to create a forecast like this are:

- 1 Record the actual numbers from the previous year's performance.
- 2 Calculate a % of sales amount for the Cost of Goods Sold (COGS), gross profit, operating expenses and net profit before taxes.
  - These numbers will be used to “common size” the projected year's forecast. *Common sizing is a technique that maintains the relationship of financial statement accounts proportional to the sales volume.*

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### PRO TIP

START WITH A NET PROFIT AFTER TAX AMOUNT THAT INCLUDES THE TRANSFERRABLE VALUE CONTRIBUTION FROM ABOVE (\$91,654.99) & MONEY TO LEAVE IN THE BUSINESS. I chose (\$132,000).

4

Last year, we had a poor performance, and I raised our net profit expectation from 0.15% to 2.4%.

- a. These numbers will be used to “common size” the projected year’s forecast. *Common sizing is a technique that maintains the relationship of financial statement accounts proportional to the sales volume.*
- b. Interest will be down to \$120,000 from \$129,000, according to our loan amortization table.
- c. Add interest to net profit before tax to calculate the operating profit amount.
- d. In order to increase our net profit expectation in Step (a) above, I slowed our operating expense increase.
- e. Record any depreciation from the schedule used for your tax returns.
  - *You need to separate your operating expenses and depreciation to build a cash budget in the next part of the annual forecast.*
- f. The gross profit is calculated by adding operating profit to operating expenses.



- g. COGS should be consistent with the previous year's actual percentage of sales, unless you anticipate a price adjustment in direct costs.
- h. The result is how much you must sell in order to meet your net profit expectation, which includes your transferrable value contribution. In this case, our sample company will have to sell \$8,003,000 in the projected year.

	Actual Year 5 (000's)	%	Projected Year 6 (000's)	%
Sales	\$7,100	100.0	\$8003	100.0
Cost of Goods Sold	4,920	69.3	\$5546	
Gross Profit	\$2,180	30.7	\$2,457	
Operating Expense	1,857		1,956	
Depreciation	183		192	
Total Operating Expenses	\$2,040	28.7	\$2,148	27.5
Operating Profit	140		309	4.0
Interest	129		120	
Profit Before Tax	11	0.15	189	2.4
Income Tax	2		57	
Net Profit After Tax	\$ 9		\$ 132	

**\*Start with Net Profit after Tax = \$132,000**

**Transferrable value contribution = \$92,000**

**Profit left in company = \$40,000**

**Then, work backwards up the Projected Income Statement.**

## PRO TIP



This should be the moment of truth. Especially if the growth amount seems unattainable, or you have never earned the level of profit needed to meet your transferrable value goal. When this happens, you have a couple of options.

1. Have a frank discussion about your client's future goals and see if it should be adjusted downward. It's going to be a tough discussion, but goals are only successful if they are realistic. Start with a lower transferable value amount. You can always adjust upwards if the situation allows.
2. Put together a plan to reach your profit goals. You have four financial levers to work with as the business owner. The plan should include any combination of these four.
  - a. **Increase sales** – probably the hardest but overall will have a huge impact on profit.
  - b. **Increase price** – this takes some skill and understanding that the goal is more profit. You can make more money and not increase sales by increasing price.
  - c. **Buy your goods better** – finding ways to reduce your COGS is key to increasing gross profit. You can negotiate with vendors or take advantage of discounts if possible.
  - d. **Cut operating expense** – probably the easiest of the four ways but be careful not to cut expenses that drive your revenue – like advertising costs if they bring in traffic and sales.





## STEP 2a – SPRINKLE IN A DOSE OF REALITY (Adjusting for Seasonality)

Although a company's operating expenses are mostly flat during the year, sales rarely are. It is important to understand the sales cycles a business experiences. A good way to visualize this is to create a Monthly Projected Income Statement from the Annual Projected Statement we built in Step 2.

Start by analyzing the historical sales pattern from the last three to five years, if it's available. Break down the sales into a monthly view for each year you have. You should notice that the amounts vary month over month but may fall into a pattern for the same month year over year. For instance, January of Year 1, Year 2 and Year 3 might be similar in their proportional to the annual sales volume. Average the percentage of sales for each month, and use this number to create your monthly sales forecast, as shown on the next page.

## PRO TIP



For start-up operations with no history, you will have to make some educated assumptions about the sales cycle for the industry. You might want to try to spread your annual sales revenue evenly throughout the year, but it is more likely that a new company will show a ramped sales volume rather than a flat one.

Successful business owners will steer their companies to a constant gross profit percentage. This means that they have a good pricing strategy for their products and services. Gross profit is the only place a business can get cash to spend or keep as profit, so it is vital to build and execute your forecast by this number. Here is an example of a monthly projected revenue table based on a company's historical performance. The gross profit was stable, at 76% of sales, and COGS was calculated at 24% of sales.

	<u>% of Sales</u>	<u>Sales</u>	<u>COGS</u>	<u>Gross Profit</u>
January	3%	94	23	71
February	3%	94	23	71
March	4%	126	30	96
April	5%	158	38	120
May	8%	252	60	192
June	17%	536	129	407
July	25%	788	189	599
August	15%	473	113	360
September	7%	221	53	168
October	5%	158	38	120
November	4%	125	30	95
December	4%	125	30	95
	100%	\$3,150	\$756	\$2,394



## PRO TIP



As you can see, this sample company experiences seasonality in their business where most of their sales are earned in the summer. Knowing this a business owner can avoid any cash flow surprises and plan to stock up on inventory or labor ahead of the seasonal increase and make downward adjustments in the slower months.

Let's assume your client likes what they see and thinks the forecast is achievable. The next step is to build a cash forecast to make sure your client can support this type of growth with the funds generated from their business.

## STEP 3 – YOU CAN'T SPEND PROFIT (Forecast Your Cash)

Most of us have created a budget for our business to see what the future might look like. Some of us even create several scenarios based on best-case and worst-case revenue projections. This is an exercise that plays itself out in businesses every month, as small business owners strive to get a better understanding of their company.

**This practice is a critical planning step to running a successful business. The problem is that most of us only do half of the process.**

We skip the most critical step: Tying our spreadsheet assumptions to the reality of our day-to-day business. Therefore, many companies look great on a spreadsheet but fail as soon as the cash starts to move.

This is the classic problem of watching paper profit and ignoring how cash moves through a business. Small business owners can create pro-forma income statements and see that a certain revenue amount, with a specified amount of spending, will result in a net profit amount. This is basic math based on the best information you have about your sales environment. The purpose is to see if the business is viable and attainable. It's a great first step, but it falls short of giving the business owner the critical information they need to make wise decisions.

Here are the two steps. The first one, as outlined above, most of us do. The second one, the most critical step, is often missed.

- 1 Create a monthly income statement forecast.
  - a. Create an annual view to see totals for individual line items.
  - b. Break down annual view into a monthly view to see seasonality.
    - **SUPER CRITICAL** – Rarely is a business the same every month.
- 2 Create a cash forecast based on your forecasted monthly income statements.
  - a. Use your real numbers for accounts receivable and accounts payable.
  - b. Include your one-time purchases that don't always make it into the pro-forma.
    - This includes new equipment, loan repayments, inventory increases etc.

The cash budget is where the rubber meets the road in business planning. It connects the revenue and expense assumptions a business owner made about the year to the actual way money moves through a company.

It's one thing to say, "I'm going to sell \$40,000 in January and spend \$30,000 on expenses to make \$10,000 in profit." It's quite another to realize that the \$40,000 in sales you made in January won't hit your bank account until March, because your customers typically pay you every 60 days. Additionally, you also have some lag time in how you pay your bills. Even though the expense for an advertising campaign is recorded on your income statement for January, it's possible the invoice for that campaign sat on your desk for 30 days until you made the payment in February.

Here is an example of how you can make assumptions to build a cash budget:

### Cash In:

- 1 Customers typically pay their invoices in 60 days – (AR Days = 60)  
*Our budget will start in January, so we need to account for cash we receive from November and December sales from the previous year. Meaning: November sales are collected in January, December sales are collected in February, and January sales are collected in March.*

### Cash Out:

- 1 You client typically pays their invoices within 30 days – (AP Days = 30)  
*The AP for this example is linked to COGS. We assume that when the client buys inventory, they receive an invoice and pay it within 30 days. The cash-out number will be equal to the COGS number in this cash budget. So, December COGS will be paid in January, January COGS will be paid in February, and February COGS will be paid in March.*
- 2 Operating expenses will be spread evenly throughout the year.

**3** The following cash purchases will be made (this is where you can project one-time purchases your client might make with cash):

- a. \$220k in vehicle replacements starting in August (\$44k per month)
- b. \$240k will be paid in taxes (an estimated payment will be made each quarter)
- c. \$180k for real estate and CAPEX projects will be paid in full by the year's end with a balloon payment due in Q4. The payment is \$5k per month through September and \$45k per month through the end of the year.
- d. \$20k for technology upgrades in January and \$20k in May

Now, let's put the two steps together and see the difference between profit and cash. The Excel templates we used are available in the free File Share Area on the [Elevate Financial Training Website](#). Use this link to enter your email address for free access.

## Monthly Projected Income Statement (using table from above)

INCOME STATEMENT	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1 Net Sales	94	94	126	158	252	536	788	473	221	158	125	125	3150
2 Cost of Goods Sold	23	23	30	38	60	129	189	113	53	38	30	30	756
3 Gross Profit	71	71	96	120	192	407	599	360	168	120	95	95	2394
4 General & Administrative Expense	132	132	132	132	132	132	132	132	132	132	132	132	1584
5 Depreciation / Amortization	15	15	15	15	15	15	15	15	15	15	15	15	180
6 Total Operating Expenses	147	147	147	147	147	147	147	147	147	147	147	147	1764
7 Operating Profit (3 minus 6)	(76)	(76)	(51)	(27)	45	260	452	213	21	(27)	(52)	(52)	630
8 Other Income (Expense) Net	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	-12
9 Net Profit Before Tax (7 + 8)	(77)	(77)	(52)	(28)	44	259	451	212	20	(28)	(53)	(53)	618
10 Less Taxes	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	-240
11 Net Profit After Tax (9 - 10)	(97)	(97)	(72)	(48)	24	239	431	192	0	(48)	(73)	(73)	378

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## PRO TIP



Notice that most of the profit is made during the summer months. Also, this company experiences losses at least 7 months per year. This should be a warning sign to the business owner that they need to stockpile cash to cover fixed expenses during the slow season.

If we stopped at the monthly income statement, we would assume that this company will be fine and end the year with \$378k. However, the cash budget shows a different story. This business doesn't have enough cash to meet their operating needs most of the year. They either need a line of credit or a cash infusion. Otherwise they will encounter debt collectors until August.

CASH BUDGET	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
12 Cash Balance Beginning	12	(6)	2	(129)	(203)	(279)	(385)	(408)	(255)	166	352	301
13 Cash Sales												
14 Accounts Receivable Collection	180	165	94	94	126	158	252	536	788	473	221	158
15 Other Income (Expense) Net	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
16 Total Cash Available	191	158	91	(36)	(78)	(122)	(134)	127	532	638	572	458
17 Cost of Goods Expense (A/P)	40	23	23	30	38	60	129	189	113	53	38	30
18 General Administrative Expense	132	132	132	132	132	132	132	132	132	132	132	132
19 Equipment - Tractors/Trailers								44	44	44	44	44
20 Taxes			60			60			60			60
21 Real Estate / CAPEX	5	5	5	5	5	5	5	5	5	45	45	45
22 Technology Upgrade	20				20							
23 Stock Repurchase Plan					6	6	8	12	12	12	12	12
24 Total Disbursements	197	160	220	167	201	263	274	382	366	286	271	323
25 Cash Surplus (Deficit) (16 minus 24)	(6)	2	(129)	(203)	(279)	(385)	(408)	(255)	166	352	301	135

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## Key Points

- The cash budget is worked from vertically month to month, imitating a real-world situation. All January inflows and outflows are calculated prior to calculating February. The ending balance in January becomes February's beginning balance. See the flow below.
- The cash beginning balance of \$12k comes from the cash amount listed on the balance sheet as of December 31st of the year prior to this budget, which starts in January.

CASH BUDGET		Jan	Feb	Mar
12	Cash Balance Beginning	12	(6)	2
13	Cash Sales			
14	Accounts Receivable Collection	180	165	94
15	Other Income (Expense) Net	(1)	(1)	(1)
16	Total Cash Available	191	158	91
17	Cost of Goods Expense (A/P)	40	23	23
18	General Administrative Expense	132	132	132
19	Equipment - Tractors/Trailers			
20	Taxes			60
21	Real Estate / CAPEX	5	5	5
22	Technology Upgrade	20		
23	Stock Repurchase Plan			
24	Total Disbursements	197	160	220
25	Cash Surplus (Deficit) (16 minus 24)	(6)	2	(129)

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- C. Notice how the AR collection mirrors the sales from the Monthly Projected Income Statement with a 60-day lag. January sales of \$94K are expected to be collected in March.

INCOME STATEMENT	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1 Net Sales	94	94	126	158	252	536	788	473	221	158	125	125	3150
2 Cost of Goods Sold	23	23	30	38	60	129	189	113	53	38	30	30	756
3 Gross Profit	71	71	96	120	192	407	599	360	168	120	95	95	2394

CASH BUDGET	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
12 Cash Balance Beginning	12	(6)	2	(129)	(203)	(279)	(385)	(408)	(255)	166	352	301
13 Cash Sales												
14 Accounts Receivable Collection	180	165	94	94	126	158	252	536	788	473	221	158
15 Other Income (Expense) Net	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
16 Total Cash Available	191	158	91	(36)	(78)	(122)	(134)	127	532	638	572	458

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- d. To account for this company paying their invoices, you will see that January's COGS of \$23K on the Monthly Income Statement is expected to be paid in February. You can start to see the difference between a profit and a cash plan pretty clearly.

INCOME STATEMENT	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
1 Net Sales	94	94	126	158	252	536	788	473	221	158	125	125	3150
2 Cost of Goods Sold	23	23	30	38	60	129	189	113	53	38	30	30	756
3 Gross Profit	71	71	96	120	192	407	599	360	168	120	95	95	2394

CASH BUDGET	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
12 Cash Balance Beginning	12	(6)	2	(129)	(203)	(279)	(385)	(408)	(255)	166	352	301
13 Cash Sales												
14 Accounts Receivable Collection	180	165	94	94	126	158	252	536	788	473	221	158
15 Other Income (Expense) Net	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
16 Total Cash Available	191	158	91	(36)	(78)	(122)	(134)	127	532	638	572	458

17 Cost of Goods Expense (A/P)	40	23	23	30	38	60	129	189	113	53	38	30
	122	122	122	122	122	122	122	122	122	122	122	122

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- e. The cash purchases are input into the months in which we originally assumed they would occur.

19 Equipment - Tractors/Trailers								44	44	44	44	44
20 Taxes			60			60			60			60
21 Real Estate / CAPEX	5	5	5	5	5	5	5	5	5	45	45	45
22 Technology Upgrade	20				20							
23 Stock Repurchase Plan					6	6	8	12	12	12	12	12

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Accounting for the timing differences of when action items are recorded and when they happen will change the way you operate and put you on a more successful path to getting and keeping cash. You can also see when you have a cash surplus to make those important purchases for your business. It takes the guesswork out of how much money you have at any given point in time.

## PRO TIP



Use the Cash Surplus amount (line25) to look for months where cash shortages exist. If you see deficits in your cash budget, this is a perfect time to talk to you client about ways to avoid any cash flow surprises. For instance, you could prepare a line of credit application to cover operational shortfalls. Some clients will forego equipment or inventory purchases to keep more cash in the company. Or, you could decide to stockpile profits in the months ahead of the shortage to make sure you can cover your expenses. The big thing is knowing that the potential for a cash shortage exists and making changes ahead of the event to avoid it.

Adding this second step to your planning phase takes the pain out of accrual accounting and helps you properly time your sales to your cash. After all, cash keeps a company alive, not profit.

For the average advisor, this is where the forecasting stops. However, you can gain a ton of insight by forecasting the Balance Sheet as well.





## STEP 4 – IT TAKES MONEY TO GROW (Forecast the Balance Sheet)

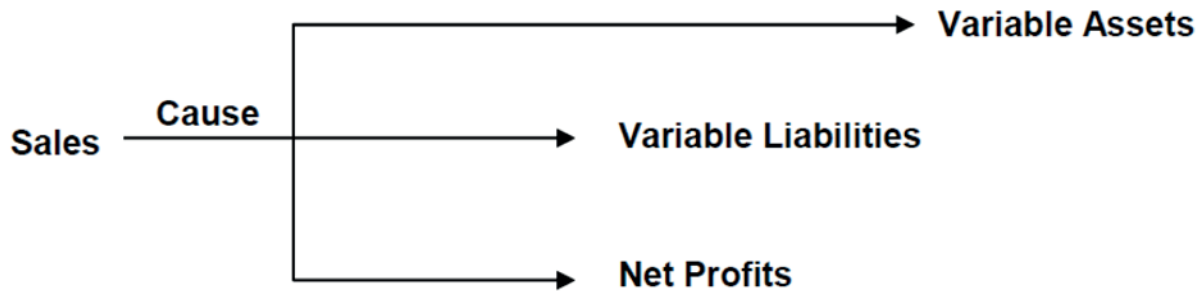
Once the sales forecast has been made, you can also evaluate the items on the balance sheet that have a direct relationship with sales.

Sales cause several things to occur in the business, including increases in AR, cash and inventory. The more sales we have, the more cash there will be. These are called **variable assets** because they go up and down with sales. Assets such as land, building, furniture and fixtures are not directly attached to sales, since they take a management decision to increase or decrease.

Sales also cause us to have liabilities. Accounts payable and accrued expenses go up as sales increase; these are called **variable liabilities**. Notes payable can move with sales, but it is not considered a variable liability. Instead, when we forecast the balance sheet, we use this account to determine any additional funding the company may need to grow and operate.

It is also expected that an increase in sales will have a corresponding increase in **profits**.

We therefore have the following cause-and-effect relationships:



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By common sizing the balance sheet, like we did with the income statement above, we can determine what variable assets and liabilities will be needed to support the forecasted sales volume. This is done by maintaining the relationship between the current sales level and the forecasted one.

This sample company currently has \$800,000 in sales and earns a 5% net profit after tax. The current balance sheet is shown below in the format used to conduct the forecast. The variable assets and liabilities are calculated as percentages of sales to establish a constant in the forecast.

ASSETS			LIABILITIES		
		% of Sales			% of Sales
Cash	\$ 16,000	2.0	Notes Payable	\$ 0	
Accounts Receivable	200,000	25.0	Accounts Payable	136,000	17.0
Inventory	224,000	28.0	Accruals	40,000	5.0
<b>Total Current Assets</b>	<b>\$ 440,000</b>	<b>55.0</b>	<b>Total Current Liabilities</b>	<b>\$ 176,000</b>	
Equipment	256,000		Long Term Debt	234,000	
Leasehold Improvements	220,000		<b>Total Liabilities</b>	<b>\$410,000</b>	
			<b>Equity</b>	<b>\$506,000</b>	
<b>Total Assets</b>	<b>\$ 916,000</b>		<b>Total Liabilities &amp; Equity</b>	<b>\$ 916,000</b>	

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During the forecast, the client believes they can grow their business from its current volume of \$800,000 per year to a projected value of \$1,400,000 per year. quick check of the math reveals a growth rate of a whopping 75%  $((\$1,400,000 - \$800,000) / (800,000))$ .



## PRO TIP

Always check the growth rate % for reasonableness. In smaller high growth rate companies 75% might be reasonable. It's not impossible, but still a huge task. By forecasting the balance sheet with this new sales volume, we can see if they have enough cash to grow or if they will need additional investment from the owner or a loan from a bank.

The current balance sheet has a blue background for comparison.

ASSETS			% of Sales	LIABILITIES			% of Sales
Cash	\$	16,000	2.0	Notes Payable	\$	0	
Accounts Receivable		200,000	25.0	Accounts Payable		136,000	17.0
Inventory		224,000	28.0	Accruals		40,000	5.0
<b>Total Current Assets</b>	<b>\$</b>	<b>440,000</b>	<b>55.0</b>	<b>Total Current Liabilities</b>	<b>\$</b>	<b>176,000</b>	
Equipment		256,000		Long Term Debt		234,000	
Leasehold Improvements		220,000		<b>Total Liabilities</b>		<b>\$410,000</b>	
<b>Total Assets</b>	<b>\$</b>	<b>916,000</b>		<b>Equity</b>		<b>\$506,000</b>	
				<b>Total Liabilities &amp; Equity</b>		<b>\$ 916,000</b>	

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Currently, our client doesn't have any short-term bank debt; they do have an equity balance of \$506,000. Using this forecasting technique, these two items are necessary.

Also, here are the variable assets and liabilities we will focus on for our forecast.

ASSETS			LIABILITIES		
		% of Sales			% of Sales
Cash	\$ 16,000	2.0	Notes Payable	\$ 0	
Accounts Receivable	200,000	25.0	Accounts Payable	136,000	17.0
Inventory	224,000	28.0	Accruals	40,000	5.0
<b>Total Current Assets</b>	<b>\$ 440,000</b>	<b>55.0</b>	<b>Total Current Liabilities</b>	<b>\$ 176,000</b>	

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### Variable Assets

### Variable Liabilities

If our sample clients achieve their growth goal, we can expect their balance sheet to look like the figure below. In common sizing, we calculate the variable assets and liabilities to maintain the same proportions to the sales volume of the current balance sheet.

#### PRO TIP



Make sure you keep the variable asset and liability % consistent. Match the actual % to the forecasted % of revenue. In this case we had 2% of \$800,000 in cash, so we can assume we will have 2% of \$1,400,000 in cash when we forecast.



## Forecasted Growth to \$1,400,000 – Net Profit of 5%

ASSETS			% of Sales	LIABILITIES			% of Sales
Cash	\$ 28,000	2.0		Notes Payable	\$ _____		
Accounts Receivable	350,000	25.0		Accounts Payable	238,000	17.0	
Inventory	392,000	28.0		Accruals	70,000	5.0	
<b>Total Current Assets</b>	<b>\$ 770,000</b>	<b>55.0</b>		<b>Total Current Liabilities</b>	<b>\$ 436,000</b>		
Equipment	256,000			Term Debt	234,000		
Leasehold Improvements	220,000			<b>Total Liabilities</b>	<b>\$ 670,000</b>		
				<b>Equity</b>	<b>\$ 576,000</b>		
<b>Total Assets</b>	<b>\$1,246,000</b>			<b>Total Liabilities &amp; Equity</b>	<b>\$1,246,000</b>		

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Fill in the balance sheet in a U-shaped pattern, starting with the Cash Account on the Assets side and ending with Notes Payable on the Liabilities side.

Here are some notable highlights from our calculations:

- 1 Variable assets and liabilities maintained their relationship to sales.
- 2 In order to fill in the balance sheet in a U-shaped pattern, you must assume the sheet will balance out. In other words, you must assume total assets will equal total liabilities and equity.
- 3 In order to calculate equity, you must take the equity balance from the current balance sheet and add the expected net profit/retained earnings from the forecasted year. In this case, our client should earn \$70,000 on \$1.4 million in sales if he nets 5% of sales.
- 4 On the liabilities side, you make the calculation by subtracting the account values from the total beneath them. For example, in order to determine total liabilities, you must subtract equity (\$576,000) from total liabilities and equity (\$1,246,000).

- 5 Working the liabilities side backwards leaves Notes Payable as a variable we can use to balance the sheet. In this case, we can see it will not balance with a value of \$0.



### PRO TIP

This technique will help you determine if this company needs additional funding to grow. Your client can either invest more capital, take on partners, or use this amount to apply for a line of credit.

The last part of this forecast is balancing the balance sheet. In order to sell \$1,400,000, this company will require an additional \$128,000 in investments or loans (Notes Payable \$128,000 + Accounts Payable \$238,000 + Accruals \$70,000 = Total Current Liabilities \$436,000). Otherwise, they run the risk of “growing broke,” or not having enough money to maintain your operation while you are expanding your business. That’s right: It is possible to grow too fast.

## STEP 5 – GROWTH IS A PLANNED EVENT (Calculate Sustainable Growth Rates)

Forecasting, especially if you are expecting growth, can be extremely difficult. We already know that an increase in sales usually requires an increase in both current assets, like AR and inventory, as well as fixed assets, like additional equipment. These increases often lead to shortages in operating cash flow during the growth period, and business owners must rely on bank loans to survive.

So, the question remains: **How fast can a company grow without hurting itself or weakening the balance sheet?**

### PRO TIP



The answer lies in determining what the business owner risk tolerance for debt is. Are they ok with new debt and how much?

1. Do they want to maintain their current Debt to Equity (Total Liabilities / Total Equity) ratio?

- *Debt will increase proportional to Equity Growth.*

2. Are they willing to accept more risk in taking on more debt?

- *Set a pre-determined Debt-to-equity ratio. Banks like this number to be 3.0 or less.*

3. Maybe, they don't want to take on any new debt.

- *Debt to Equity will decrease proportional to Equity Growth.*

Once you determine your client's risk tolerance for debt, use the corresponding formula below to calculate the rate of growth they should be trying to achieve.

Here are the variables you will need for each calculation:

Net Profit Margin %  
Debt-to-equity ratio – Current or Maximum Allowed  
Variable Asset %  
Variable Liabilities %  
Current Sales  
Current Equity

The following formulas will calculate the **maximum growth rate** your client can reach. In order to grow further than the results, your client will need to do one or more of these things:

- 1. Invest more capital – add cash to the business.*
- 2. Find a way to reduce the variable asset % on the balance sheet.*
- 3. Increase the net profit % they earn.*
- 4. Increase the debt-to-equity ratio they are willing to accept.*



## PRO TIP



You can narrow your guidance to your clients by asking this question. “Are you willing to take on new debt or not?” If they are, then use a Debt-to-equity ratio of 2.0 in the equation. Banks like to see a D/E ratio of 2.5 or less. Using 2.0 will help you calculate a growth rate that will not completely deteriorate your clients balance sheet. If they do not want any new debt, simply use Equation # 3 below.

### 1 Sustainable Growth Formula for Maintaining the Same Debt-to-Equity Ratio

This company wants to maintain a debt-to-equity ratio of 1.0. The net profit percentage is 1%, and variable assets as a percentage of sales are 34%.

$$\text{Sales Growth \%} = \frac{\left( \text{Net Profit Margin\%} \right) \times \left( 1 + \frac{\text{Debt}}{\text{Equity}} \right)}{\left( \frac{\text{Variable Assets}}{\text{Sales}} \right) - \left[ \left( \text{Net Profit Margin\%} \right) \times \left( 1 + \frac{\text{Debt}}{\text{Equity}} \right) \right]}$$

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$$\begin{aligned} \text{Sales Growth\%} &= \frac{0.01 \times (1 + 1.00)}{0.34 - [0.01 \times (1 + 1.00)]} \\ &= \frac{0.01 \times 2.00}{0.34 - (0.01 \times 2.00)} \\ &= \frac{0.02}{0.34 - 0.02} \\ &= \frac{0.02}{0.32} \\ &= 6.25\% \end{aligned}$$

This company can grow to a maximum of 6.25% and still maintain a debt-to-equity ratio of 1.0.

## 2 Sales Growth Rate for New Debt-to-Equity Target

Let's say the same company decides to increase their tolerance to new debt and raise the debt-to-equity ratio to 1.3 from the current level of 1.0. All other variables are the same as above. The exception is that this formula uses the equity amount on the balance sheet to calculate the new growth rate.

$$\text{Sales Growth \%} = \frac{\left[ \left( \frac{\text{Equity}}{\text{Sales}} \right) \times \left( \frac{\text{New Debt}}{\text{Equity}} - \frac{\text{Old Debt}}{\text{Equity}} \right) \right] + \left[ \left( \frac{\text{Net Profit Margin\%}}{1 + \frac{\text{New Debt}}{\text{Equity}}} \right) \right]}{\left( \frac{\text{Variable Assets}}{\text{Sales}} \right) - \left[ \left( \frac{\text{Net Profit Margin\%}}{1 + \frac{\text{Debt}}{\text{Equity}}} \right) \right]}$$

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$$\begin{aligned} \text{Sales Growth\%} &= \frac{\left[ \left( \frac{\$1,145,000}{\$4,000,000} \right) \times (1.30 - 1.00) \right] + [0.01 \times (1 + 1.30)]}{0.34 - [0.01 \times (1 + 1.30)]} \\ &= \frac{(0.2863 \times 0.3) + (0.01 \times 2.30)}{0.34 - (0.01 \times 2.3)} \\ &= \frac{0.0859 + 0.023}{0.34 - 0.023} \\ &= \frac{0.1089}{0.317} \\ &= 34.35\% \end{aligned}$$

By taking on additional capital in the form of more debt, this company can now grow at a maximum rate of 34.55%. Here is proof positive that growth requires cash.

### 3 Sales Growth Rate with No New Debt

Lastly, here is how much our sample company can grow without adding any additional debt to the balance sheet. All other variables will remain the same.

$$\text{Sales Growth\%} = \frac{\frac{\text{Variable Assets}}{\text{Sales}} - \frac{\text{Variable Liabilities}}{\text{Sales}} - \text{Net Profit Margin\%}}{\text{Net Profit Margin\%}}$$

$$\begin{aligned}\text{Sales Growth\%} &= \frac{0.01}{0.34 - 0.10 - 0.01} \\ &= \frac{0.01}{0.23} \\ &= 4.35\%\end{aligned}$$

Now the company can experience a modest growth rate of 4.35%.

# CONCLUSION

Forecasting shouldn't be left to chance. It's a very important exercise for any business. Sales performance can vary greatly month to month. As growth and changes in the business occur, you can act on your role as advisor by helping your client manage their cash budget and prepare for any anticipated short-term borrowing needs that develop.

## PRO TIP



As a business advisor, you have life experiences and knowledge that can help your clients. Remember they most likely have one or two businesses that they have run, while you have worked with 10's, 100's or more. This step by step guide can help them create a foundation to implement your solutions. When you share your life story and experience you impact lives and help them achieve breakthrough moments.

"Planning is everything, but the plan is nothing." This is a paraphrase of a quote by President Dwight D. Eisenhower that holds very true to the forecasting process.

It is important to measure your forecast against your client's actual results on a monthly basis. When you see the real-world results substantially differ, look at the circumstances surrounding the difference and change the forecast. Active management of your forecast will help your client thrive and grow in a world of uncertainty.

Here are the steps to helping your clients live a better future.



# The 5 Steps of Forecasting

- 1 Start with the end in mind – Build transferrable value
- 2 Watch the business in action – Create a pro-forma income statement
  - Sprinkle in a dose of reality – Adjust for seasonality
- 3 You can't spend profit – Build a cash budget
- 4 It takes money to grow – Forecast the balance sheet
- 5 Growth is a planned event – Calculate sustainable growth rates

Please feel free to use the blank forms provided for your own business. For downloadable spreadsheets, worksheets, and training videos please visit [Elevate Financial Training](#). The website is full of free and paid resources that are guaranteed to change you and your client's conversations

# About The Author

## Mike Milan “Cash Flow Mike”

Mike is one of the highest rated instructors at the nation’s most prestigious banking schools on the topic of financial management for small business owners. He has built or helped build multiple companies from the ground up by transforming ideas into multi-million dollar enterprises. In the last 6 years has trained bankers, accountants, and business owners on the art of managing cashing in a business. This experience has had a positive impact thousands of business owners and their advisers.

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