



The Importance of Sales Forecasting

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This paper aims to inform you on why sales forecasting is important, different techniques of forecasting, measuring their accuracies, and improving forecasts through predictive analytics.

An accurate sales forecast is an important tool for companies to have. It helps CEOs gauge the demand for their products. It helps companies better manage inventory. It allows CFOs to financially plan for the company's growth. For public companies, forecasting impacts stock prices and market expectations. It allows marketing teams to see if a future dip in sales could benefit from promotional offers. Sales forecasting allows companies to see into the future and strategically plan their moves to increase growth.

Yet, a majority of companies get sales forecasting wrong. A [recent study](#) shows that **79% of sales organizations miss their quarterly sales forecast by more than 10%**. Why do organizations get such an important tool wrong and how is it impacting them?

Why is Sales Forecasting Important?

Companies use sales forecasting to predict business performance in the coming quarters. It is a helpful tool for budgeting and setting expectations for the C-Suite.

An accurate sales forecast allows a company to gauge the interest in their products. Increased sales mean a higher demand for their products. It helps companies plan their supply to meet the increased demand.

It helps CFOs to plan the financial growth of the company. With a real sales forecast, it allows them to accurately budget the coming months and year.

Forecasting helps public companies when setting projections for the next quarter. Meeting the predefined goal from the start of the quarter can have a positive impact on stock prices and investor perceptions. Inversely, failing to meet the forecasted goal can significantly hurt stock prices.

Sales forecasting helps marketers, too. If the forecast shows a coming dip in sales, marketers can adapt by creating promotions that drive more business.

With buyers exerting more control over the sales process, sales leaders are having more trouble with forecasting and pipeline management. Across the United States, sales leaders have identified sales forecasting as one of their [most vexing challenges](#).

Techniques of Forecasting

It is important for businesses to create an accurate sales forecast each quarter. There are many different ways to create a quarterly forecast. We focus on accurate sales forecasting here at ORM Technologies. Below are some of the forecasting methods we have seen companies use. Some are easy to generate, while others require more work from the sales team. All of these methods are used to predict deals that already exist at the start of the quarter.

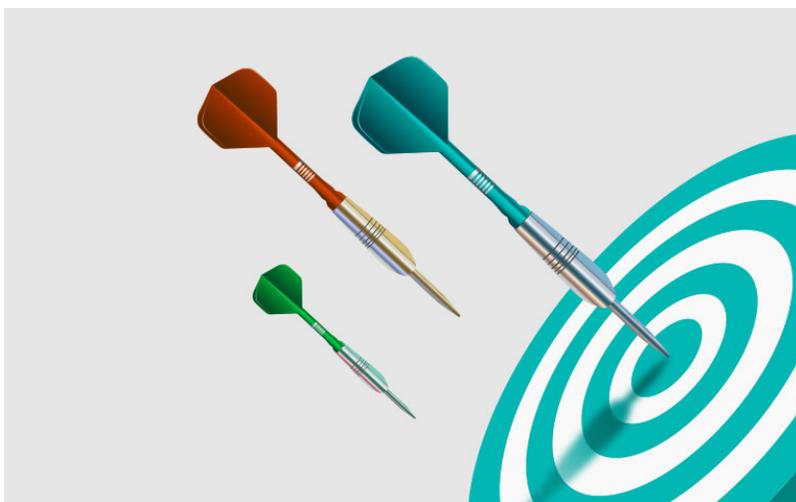


Figure 1: Some forecasting methods hit and some methods miss big.

Resource Forecast

Resource forecasting is based on the number of sales reps you have, their assigned quota, tenure, and seasonality in your business. You calculate this forecast based on how much quota you've assigned and how much of you expect to be attained this quarter. This is based primarily on the experience of your team and your [expected sales ramp rates](#).

Roll-Up Forecast

This forecasting method is based on the commitment you get from each of your sales reps. Each sales manager rolls up these commitments and passes them up to be combined into an overall forecast. This is a common approach for many sales organizations.

Pipeline Forecast

A pipeline forecast is not based on the number of opportunities in your funnel and their perceived value. This is not based on your sales reps' committed opportunities. This approach might involve calculations leveraging average deal size, expected win rate, average days to close, etc. or it might just be a simple multiple, such as a 3x goal.

Time-Series Forecast

This forecast is only based on data that you are able to observe through time. It considers business trends, cyclical business changes, seasonality, and random noise. This type of forecasting does not observe the open opportunities in your sale pipeline, but can still be a very good estimate of sales. This is especially true if your business does not rely on only one or two deals each quarter.

Opportunity Scoring Forecast

An opportunity scoring forecast is similar to roll-up forecasting, but instead of asking your sales team to make the commitments, you use an algorithm to determine which opportunities will win and which will lose. The appeal to this type of forecasting is its ability to remove human bias. You no longer have to worry about sandbagging or over commitments.

Ensemble Forecast

An ensemble forecast combines other forecasting methods to get a more accurate prediction for the quarter. It is like diversifying your stock portfolio to minimize risk. You can combine multiple forecasts by simply averaging them. However, this may not be the most accurate way to blend the forecasts as it gives each one the same weight. To get a more accurate forecast, you would need to tune the weights of each method by comparing its prediction to the actual quarter outcome. The appropriate weights can be determined using a simple regression or machine-learning model.

Measuring Forecast Accuracy

Most businesses create forecasts each quarter. Very few create *accurate* forecasts. The first step to improving your forecasting method is to start measuring its accuracy. According to [SiriusDecisions](#), a good forecast is within 10% of the actual outcome of a quarter. An excellent forecast is within 5%.



Figure 2: Don't settle for "Good".

A forecast's accuracy is defined as the difference between the Day 1 Forecast and Actual Sales for the quarter (or any reporting period) as a percentage of Actual Sales.

$$\text{Sales Forecast Accuracy} = \frac{\text{Day 1 Forecast} - \text{Actual Sales}}{\text{Actual Sales}} \times 100\%$$

Day 1 Forecast – The first forecast made for the quarter (or any reporting period).

Your first forecast for the quarter is the most important forecast to measure because it sets the expectation for the quarter. As more information becomes available while the quarter progresses, you should revise your forecast as necessary to run your business

Actual Sales – The cumulative sales closed in the quarter (or any reporting period).

Comparing the total cumulative sales closed to overall forecast is straight forward, but it requires some attention if you break your forecast down into components (i.e. business unit). It is important to compare the forecast to the actual sales it was trying to predict. Most sales forecasts are under 90% accurate because the sales team's predictions are usually wrong. Sales forecasts are often fraught with bias and rely too heavily on sales managers' interpretations of the pipeline deals.

This is why **79% of sales organizations miss their forecast by more than 10%**.

Every quarter, sales leaders make new forecasts that rely on the same old tricks. When the quarter ends, we should not be surprised when our forecast misses again. To improve your forecast, it is important to first reflect on how and why you missed.

A good way to measure the accuracy of your forecast is to look at two important metrics: **price variance and volume variance**. These two stats can tell exactly *why* you missed your quarter.

Price Variance

The price variance tells you if you missed your quarter because *you closed smaller deals*. It is defined as the difference in forecasted sales and actual sales due to changes in the average price of your deals.

$$\text{Price Variance} = (\text{Actual Average Sale Price} - \text{Forecast Average Sale Price}) \times \text{Actual Wins}$$

Volume Variance

The volume variance shows if you missed your quarter because *you didn't close as many deals as you were expecting*. It is defined as the difference in forecasted sales and actual sales due to having more or less won deals (wins) than expected.

$$\text{Volume Variance} = (\text{Actual Wins} - \text{Forecast Wins}) \times \text{Forecast Average Sale Price}$$

Example of Calculating Price and Volume Variance

Below is an example of how to calculate the price and volume metrics.

FY2017 Q3	Deals	Wins	Win Rate	Average Price	Total Value
Forecast	100	60	60%	\$10,000	\$600,000
Actual	110	55	50%	\$9,000	\$495,000

Given the outcome of this example quarter, we can calculate if they missed their forecast because they closed fewer deals or deals worth less.

	Calculation	Result	% of Forecast
Price Variance	(\$9,000 - \$10,000) x 55 Wins	-\$55,000	-9.2%
Volume Variance	(55 Wins - 60 Wins) x \$10,000	-\$50,000	-8.3%
Total Variance	\$495,000 - \$600,000	-\$110,000	-17.5%

So, what is this telling us? 9.2% of our sales forecast missed because of a lower than expected Average Sale Price. Another 8.3% of our sales forecast missed due to not winning enough deals. Specifically, we had more deals decided in the pipeline which should have produced a positive variance. However, the benefit of more deals in the pipeline was offset by a lower win rate.

When we miss our forecast due to price variance, it is usually because our sales reps are discounting deals at the end of the quarter to get buyers to close. This is typical behavior from many sales teams and can be avoided by proactively considering the price. Price variance is also a result of our sales and marketing teams qualifying smaller deals. This can also be avoided by specifying the types of deals to qualify.

When we miss due to volume it is either because our team did not qualify enough deals, or we just didn't win them. If it is because we didn't qualify enough deals, we can solve it by increasing our marketing activity or outbound prospecting. If it is a win rate issue, it might be due to the quality of the qualified deals, sales turnover, or a market shift.

Price and Volume Variance analysis is a great methodology to evaluate your forecasts. Now that you have a grasp on how you can use it, you are well on your way to improving your forecasting process.

Leveraging Predictive Analytics

On the first day of a quarter, you make a sales forecast based on what you currently have in your pipeline. This is called the Inter-Quarter Forecast. It represents only a portion of your total forecast. The rest of your forecast is comprised of deals that are not in the pipeline on Day 1 but will arrive and win during the quarter. This is called the Intra-Quarter Forecast. The proportion of Inter-Quarter to Intra-Quarter depends on your sales cycle. If you have a 45-day sales cycle, for example, 50% of your forecast might be Intra-Quarter. Your Total Forecast of how you will end the quarter at any point in time is the Inter-Quarter forecast plus Intra-Quarter forecast plus actual sales so far.

Inter-Quarter Forecast - a forecast based on the *deals present in your pipeline at the beginning of the quarter*.

Intra-Quarter Forecast - a forecast based on the expectation of deals that will *arrive and close during the quarter*.

Total Forecast - Inter-Quarter + Intra-Quarter + Actual Sales so far this quarter.

While the previously mentioned methods are good ways of creating an *Inter-Quarter* forecast, they do not value the deals you have yet to see. This is where predictive analytics becomes useful.

Predictive analytics can help you create an accurate (*Intra-Quarter*) forecast at the beginning of the quarter for deals you have yet to see. We create accurate *Intra-Quarter* forecasts for our clients using cluster analysis, multi-linear regression, and machine learning algorithms. We base our forecast on a variety of characteristics, including seasonality of the year, previous quarters' sales, and dozens of attributes of past deals. Our average accuracy across our clients for deals that arrive and close in quarter within 5% of the actual outcome.

Our Optimized [Sales](#) and [Marketing](#) system provides accurate sales forecasts each week. We can track and update both your *Inter-Quarter* and *Intra-Quarter* forecasts each week to provide you with a real-time forecast for the remainder of the quarter. We also report on your previous quarters compared to our forecast to ensure you are always getting the most accurate projection.

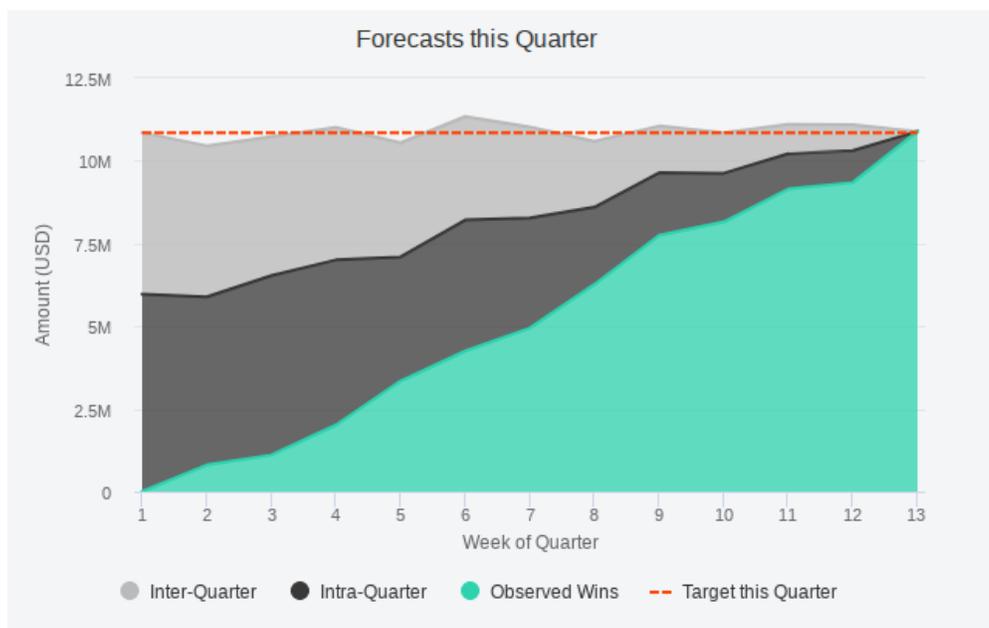


Figure 3: We update our forecasts each week to ensure you always have an accurate projection.

Predictive analytics can be applied to each individual deal. Using a supervised machine learning model, we can predict which deals will win or lose as soon as they are entered into your CRM system. We look at all of the attributes of a deal, including current and previous sales stages, customer type, dollar amount, and time until expected close date. Our model is, on average, 85% accurate at predicting if the deal will win or lose.

Leveraging predictive analytics can help your business create accurate sales forecasts for the quarter as well as for individual deals. With accurate deal projections, you can save your sales team's time by not wasting it on deals that will inevitably lose.

Conclusion

Sales forecasting is an important tool that companies can use to benefit them in multiple areas, such as gauging demand, managing inventory, financial and strategic planning, setting expectations, and creating marketing strategies. It is important to measure your forecasting methodology to ensure you are getting the most accurate prediction possible.

If you need help with your existing sales forecasting method or would like to start leveraging predictive analytics for improved accuracy, contact ORM Technologies at [\(469\) 269-6760](tel:4692696760) or email us at info@orm-tech.com.

