

## Revenue Forecasting

There are infinite ways of modeling revenue forecasts ranging from highly mathematical models to subjective estimation known as the gut. In varying scenarios any of these can be more successful than the other, however most forecasting approaches include a bit of both. One must remember that complexity is no guarantee for accuracy. Many a times simple approaches backed by intrinsic understanding of the business and the industry prevail over any other approach.

Amongst many approaches, there are two popular approaches in financial analysis that are commonly used. The bottom up versus the top down approach.

### Bottom up approach

This approach is used when the revenue growth is constrained by internal constraints related to sales or production. In such cases, a business may grow its sales by producing or selling more assuming that the market share and industry size are not a constraint.

In this approach the key drivers of sales are identified at the level of an individual organization and forecasts regarding these variables are made to reflect business strategy in the future. For example, for a retail company the important drivers are generally the number of stores, square foot per store and sales per square foot. These variables truly reflect the key drivers of revenue in the retail industry such as Walmart and Carrefour.

In a more comprehensive example, one may break down the sales of a cinema hall in various slices such as *the number of screens X number of seats per screen X Average shows per day X occupancy Rates X average Ticket Prices*. One must note that the general pattern is always Quantity (Q) X price (P).

Similarly, for a telecom company such variables could be the Average revenue per user and number of total users. For a hotel company, it could be the number of rooms, average room rate and occupancy rate during a period of time.

Challenges may arise when there are macroeconomic or industry level constraints that may limit revenue expansion. In such cases, the later approach may be used to complement/supplement the analysis.

### Top down approach

This approach starts with a view on the economy and the industry growth followed by an assumption about changes in the market share of a particular product or company as a whole. It would be sensible to breakdown process for each major product category based on the type of customer or region or the product itself. Such breakdown enables deeper analysis of the drivers affecting each category.

For example, Amazon may forecast it's sales in US based on the anticipated growth in total retail spending of all consumers, changes in share of e-retail out of total retail spend which is growing rapidly

and share of amazon in total e-retail spend for which Amazon has to compete with other players like Ebay, Target online , Walmart online, Best Buy etc.

### Which is a better approach?

These approaches don't compete but complement each other. In theory, both the approaches may yield similar results if inputs are impeccable, which may not happen in reality. Hence it's hygienic to create a hybrid equation or use both approaches at the same time to compare the sanity of estimates.

For example, the revenue for metals companies may be forecasted using a both kind of models.

**Bottom up:** Installed capacity X Capacity utilization X Average output price

OR

**Top Down:** Per capital consumption of the commodity X Population X Market Share X Average Sales Price

### More examples of generally used equations in revenue forecasting

1. Airlines industry: Number of seats X Average airfare X Occupancy
2. Mining and Exploration (such as Oil and Gas): Reserves X Annual production profile X Average price ex-mine
3. Media industry: (Total airtime – program time) X Average Ad Rate
4. Advisory services (M&A, investment banking): Transaction Size X Probability of success X % Fee
5. Manpower based services: No of employees X Average bill rate X Utilization X Max working hours per employee
6. Power generation: Installed capacity X Plant load factor X Average sales price per unit of power
7. Networking sites (Facebook/Linkedin): Subscription fee per customer X No of customers (if) + Advertisement area X time per ad. X ad. Rate per unit per unit of time

### Challenge requirement:

1. Choose one of the fortune 500 companies and forecast the sales for next financial year. Compliment your analysis by forecasting the sales growth rate in near future and the factors that may affect the growth. Include in your analysis the key drivers of growth and revenue alongside the risk factors.
2. Each team gets 10 minutes to present the case and 5 minutes to answer presentation based questions