

Where did my gross margin go? An analytical framework

At a glance

- Margin analysis is a neglected lever in companies. Valuable insights can be gained by understanding what exactly is driving your margins.
- Margins are driven by impacts due to price, volume, channel mix, product mix and sales region mix. Volume can often mask the impact of other factors. PwC has developed proprietary tools to separate the impact of these drivers.
- PwC can assist multi-channel firms analyze the impact and magnitude of the drivers and develop action plans to maximize profit.
- The tool can be used both as a diagnostic and as a forward looking planning tool.

Overview

Executives try all kinds of things to increase revenue and profits - expanding services, launching complimentary products, driving cost reductions, and shifting channel strategy. Yet for all the work and ingenuity that goes into these plans, many managers can't actually tell you what impact any particular program is having on their gross margins.

Gross margin analysis of revenue driving factors can be very useful because the analysis can pinpoint your key issues. Once the issues driving the poor gross margins are understood, specific programs can be put in place to drive improvements.

The graphs on the following page show a hypothetical company with a decline in margin quality as illustrated by a decreasing margin percentage at the same time that the margin \$ increased by \$11.3M. Disaggregated, it becomes easier to see what's going wrong, and the relative contributions of each factor: the channel mix may be bad, but the product mix is worse and volume is driving the gross margin \$ increase. Here, the increase in margin \$ due to volume may in fact be masking the deterioration in performance of these other two factors. Being able to see these numbers makes it much easier to see what's happening, and push aside opinions for facts. With a complete gross margin analysis, you not only know your house is on fire, you know which floor is burning.



Figure 1: Standard Margin \$ Bridge

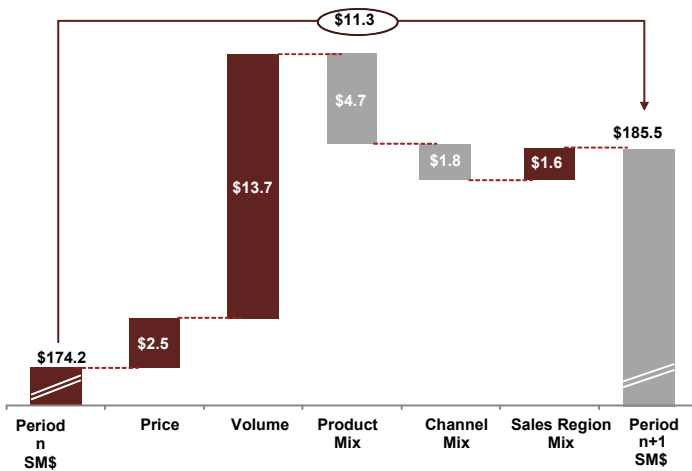
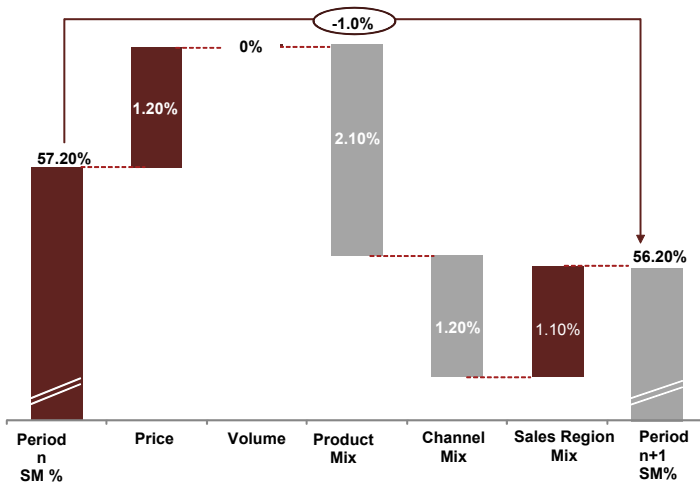


Figure 2: Standard Margin % Bridge



For example to understand the drivers of margin \$ and % of your company, begin looking at how sales region mix, channel, and product mix each impact margin independently. To do this, solve for impact of one variable by holding all else constant - by looking at revenue within a given sales region, channel, and product line, the only impacts to gross margins are price and volume. Each variable can be held constant as you solve out from volume/price to product mix to channel to region mix, and reveal how each is driving gross margin \$ and % changes.

Building winning long term strategies and quick short term course corrections are greatly improved by a clear understanding of the individual impacts of price, volume, product mix, channel mix and geographical mix.

1. Price and Volume: The primary method of improving gross margin dollars is to increase the unit volume of products sold. For companies with a small market share, volume based growth is the obvious way to grow revenue. But a key insight is that when comparing profitability quarter to quarter, volume does not have any impact on gross margin percentage. The impact of volume is purely to increase margin dollars. Separating out volume impact can help companies identify if their efforts to increase market-share have been successful or come at the expense of profitability. In some cases, increasing volumes at the expense of price may still allow companies to improve profitability when Cost of Goods Sold (COGS) can decrease at a faster rate than the discounts.

Price on the other hand is an important contributor to margin %. Improvement in margin contribution from price may be indicative of supplier pricing power or lack of customer bargaining power. A successful improvement in price benefit may also indicate an opportunity area for further price increases and evidence that money was being left on the table. Price improvements may also be occurring due to an increased customer willingness to pay. This knowledge is valuable because it could provide some pointers on price elasticity in a specific market in order to drive future pricing actions. Coupling this information with market competitive intelligence can provide insight on whether the pricing or volume driven growth approach is aligned with your overall market strategy.

2. Product mix. Identifying the margin impacts of product mix changes due to individual product groups can help focus efforts to improve sales on specific higher margin products. Often deteriorating product mix is the trickiest challenge for companies to identify simply because changes in volume may be overshadowing the product mix change. Left unchecked, deteriorating product mix can wipe off margin improvements from cost reductions or channel expansion. A bottoms up understanding of product mix can pinpoint the specific product(s) reducing margins. This, in turn can help you focus on whether the root cause of the change in product mix is market or customer driven or sales incentive driven. Once your company has understood the product drivers you can focus on short term strategies to improve margin

quality like promotions and sales incentives. You could also accelerate the end of sale of lower margin products that have a higher margin replacement. Alternatively, you can implement targeted price increases or hold price steady on products sold to existing customers. This analysis can also help focus R&D efforts to improve margins by refreshing lower margin, high run products with higher margin replacements.

3. **Channel mix.** Shifting channels can lead to meaningful shifts in gross margins. Done right, indirect channels can expand the revenue base by improving sales coverage while reducing marketing expenses, inventory and transportation costs. But if your firm uses both types of channels, a shift in sales from a higher % to lower margin channel revenues will drive down your gross margins. In some cases, targeting specific deals or customers to move towards direct will increase your margin without eroding customer value, service levels, and your channel relationships. Well managed sales force will proactively review direct and indirect account lists to ensure the appropriate levels of customer intimacy, service levels, sales costs, and alignment with the channel strategy.
4. **Sales Region.** Looking at the impact of gross margin changes across geographies makes it possible to see the effectiveness of selling different solution bundles, such as hardware and software, and geographical impacts of discounting behaviours. The mere fact that an increase in sales in a particular region can drive margin percentages lower can be a surprising insight for some companies. Some regions focus on volume at the expense of profitability. In some cases, margin changes within regions of the world are driven by macroeconomic factors. However, discounting authority levels and practices can be controlled. A good approach is to look at the policies and best practices of a higher margin region, contrast it with a lower margin region and share these practices while acknowledging the differences in geographical competitive environments.

It is important to note that margin analysis isn't purely a backward looking exercise. One can apply the same principles identified here to compare plan to actual performance to identify if any of the initiatives you are undertaking are not bearing fruit and to quantify the deviations from planned performance.

A neglected view

Companies are often steered by any number of ratios and numbers. But margin analysis is often neglected in developing a holistic view of performance. The approach presented here is a practical way of shedding light on the components driving margin changes.

But for many, the numbers are not all that easy to generate, especially in a large company. The technical challenges of doing this analysis are two-fold: first, the level of data the financial reporting systems can provide, and second, developing an analytical approach to remove the co-variance between the variables.

In summary, sales matter but profit matters more. In the last two decades, companies have focused a lot of energy on reducing their cost of goods sold, through ERP systems and other extremely useful tools. Now it's about time to turn financial attention again to margin improvement through sales growth – especially in a world that seems now to be filled with vast new markets and opportunities and has finally broken off recessionary trends. Using the gross margin as an analytical lever is a good way to begin to understand the main drivers of performance and better calibrate your strategy to meet the challenges ahead.

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