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REVERSE LOGISTICS
It isn't simply a reverse gear

DEMAND PLANNING
Realising its full potential

COVER STORY

Celebrating 50 years in Australia

And Toyota is poised for even more exciting times to come

IN FOCUS:
MATERIALS HANDLING AND MANAGEMENT

TOYOTA
MATERIAL HANDLING
Australia's number one forklift company*
*AITA Statistics Ytd December 2017.

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ROD HOZACK

In this series, we explore how the longer-term demand plan should play a more prominent role in businesses. The first two parts will deal with the key elements in setting up the demand planning and forecasting process, and later, we will explore what are the key behavioural elements, i.e. what do we do with the process and the outcomes when we get them. Demand planning and forecasting is a critically important 'front end' of not only supply chain planning processes but business planning processes. Often, however, the whole organisation misses the opportunity to use the demand plan – both in the short term and the longer term – to guide the rest of the business. The longer-term part of the forecast (or more appropriately, the demand plan) is often ignored by the sales team and there is often very little marketing overlay and input into setting direction for the longer term.

Improving forecast accuracy is proven to have numerous significant business benefits, and best-practice companies are typically 'all over' accuracy, especially in the near term.

Why is it, though, that the integrity of the longer-term demand plan does not always have the same focus? As one senior executive was overheard saying recently, "If you get the month right, then the longer term will take care of itself".

Unfortunately, there is a chicken and egg aspect to this statement as we'll see later in this paper. The real reason probably lies in the inability, or unwillingness, to communicate bad news early. It is too common for the sentiment about the emergence of a gap to strategy later in the year, that is 'we'll deal with that when we get there'.

ANCHORING

A fundamental psychological element is to have a mechanism to gain an objective view of the future. It is called 'anchoring' and is about making sure there are boundaries to the demand projections. The primary way to do this is to use statistical forecasting techniques and predictive analytics to ensure the sales projections are as objective as possible. Research has demonstrated that in many environments, statistical algorithms are better at predicting the future, at least in the short term, than human beings.

Hence, statistical forecasting techniques can serve as a powerful anchoring effect, so any large deviations to projections that Marketing or Sales may suggest, can be anchored back to something more objective. This tends to take the emotion out of the numbers and starts a dialogue on the differences in thinking and perspective instead.

So that's the good news. However, using only history to predict the future is fraught with danger. The two main issues are:

1/ Statistical algorithms rely on historic sales and the assumption is that the trend, or curve of 'best fit' from this past data, will continue – in other words, statistical forecasting won't be able to predict what is going to be different about the future.

2/ This is linked to the first issue in that trend analysis and using algorithms is the easy bit, but what is critical about longer-term projections is predicting change. So what we really need to know is:
   a. When is the trend going to change?
   b. By how much is it going to change?
   c. How long will the change last?

The problem we're trying to solve then becomes: how can we use history, and our knowledge of the future, to create a robust longer-term demand planning environment, one that aligns with strategy and that everyone understands and trusts? What I mean by 'understand' is that while there is an acceptance that predictions are never going to be perfectly right, agreement

needs to be gained on the bandwidth of variability and inherent uncertainties in trying to predict future outcomes. This needs to be built into the planning process.

5 KEYS OF DEMAND PLANNING

It is important to keep in mind the working assumption that the demand plan is the plan that underpins all other plans in a business, e.g. supply, inventory, financial, strategic, people, and infrastructure. Without this in place, plans are just unaligned guesses, and highly likely to be different from one department or function to the next.

So, back to our topic of 'Realising the Full Potential of Demand Planning': there are 10 keys to making sure we have congruence between our demand plans and strategy – we will cover five in the first two articles and the remaining five in following ones.

1/ Make sure the monthly management process horizon is at least a rolling 24 months

"We used to take three months to do the 'latest estimate', and then another three months to do the budget ... this left only six months of the year to be actually doing anything valuable. Now budget is a significant non-event." — A CFO's delight

When it comes to demand planning, many companies focus their time on the next month; maybe the next quarter. Thereafter the budget (and sometimes an un-reviewed statistical forecast) is inserted to flesh out the rest of the financial year, but this encourages 'hockey stick forecasting' (see Figure 1.), which is particularly commonplace when sales are consistently tracking behind budget. In this situation most organisations will still be forecasting throughout the year that they will achieve budget, so there is a resultant cumulative error, commonly known as bias.

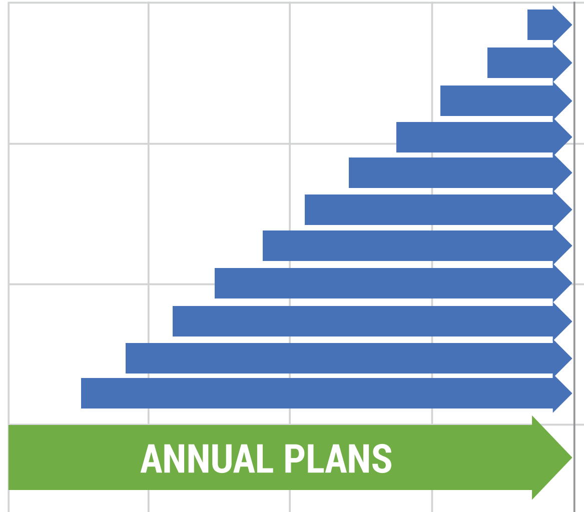
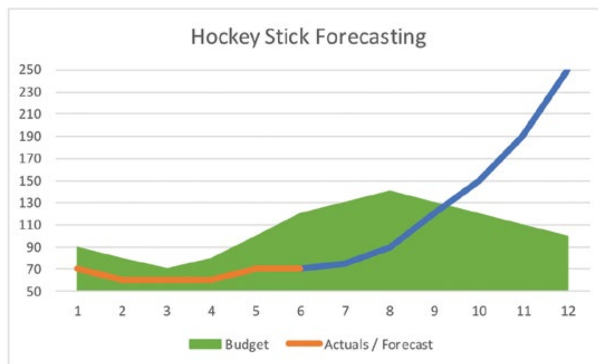


Figure 1. below.
Figure 2. above.

> Improving forecast accuracy is proven to have numerous significant business benefits, and best-practice companies are typically 'all over' accuracy.

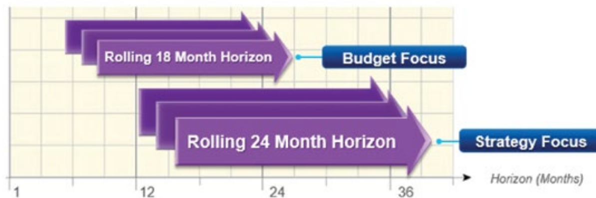


Typically, the gap between forecast and reality only becomes visible through a quarterly or half-year 'latest-estimate' process and then the solution is to just say something like, 'with all the new initiatives we've put into plan, or that we can bring forward from next year, we're still going to hit budget'. When the impact of these 'recovery plans' are time-phased into monthly buckets, the resultant graph looks Figure 1... 'mission impossible'.

The reverse situation is also true. If companies are tracking ahead of budget, there is a tendency not to show the full potential of the plan, and worse still, as they get towards the end of the year, push sales into the following 12 months.

Imagine the chaos this causes if all other plans in the business are linked to those projections. Of course in such circumstances, people try to be clever and don't link their plans directly to the demand plan, using their discretion to hedge against this 'game playing'. Unfortunately, this results in multiple numbers; the value of integration is lost.

So, what's the solution? Some organisations resolve this by looking out to the end of the current financial year, and while this keeps some focus beyond the current quarter, it very quickly becomes compressed into conversations about 'how are we going to end the year?' This is also known as a 'compressing horizon' or the 'accordian horizon' (see Figure 2.).



More sophisticated organisations take the next step and insist on a monthly process that assesses an 18-month horizon and this at least gives visibility of next financial year, six months in advance. However, in reality, it's barely enough, since many companies start their budgeting process around six months out, so the first cut of the budget, is only at that 18-month horizon.

Anyone who has been in business for a little while knows that the first draft, or 'roughly-right' budget plans, become the anchor to which all subsequent deviations must be explained.

So a better approach is to make sure the monthly review cycle has at least a rolling 24-month horizon (see Figure 3.). This means there are six months to get the first draft of the budget as good as it can be, but avoids a 12-month budgeting process.

In this way, the senior leadership team gets a view of the next year's plan in full, right at the time the financial year is starting. As the team learns more about the integrity of the underlying assumptions through the execution of 'this year's plans', the underlying assumptions about next year can be iteratively refined and applied in readiness well before the point of commitment.

The result is that senior managers are so confident of 'delivering this year', they are freed up to focus on strategy. It may take two or three iterations before their confidence reaches the appropriate level, but the important thing is to make a start.

It also makes the whole budgeting process a significant non-event – 'significant' in that it is vital to have a budget, but a 'non-event', because the budget comes automatically from the rolling monthly projections.

These days, many companies are even projecting out to a 36-month horizon because they know how important it is to spend time anticipating future issues and opportunities, before they become today's problems. If you think this is just hypothetical, when I left industry in 1996, our IBP process was routinely looking out 36 months, with technology that was way less sophisticated compared to what is available today.

With the tools that are available today, there really is no excuse.

A simple test of having a valid budget is that when the senior team looks at the opportunities and risks to achieving the plan, they are evenly balanced either side of the most likely outcome (see Figure 4.). Most companies, however, tend to 'bank' all their opportunities in their annual budgets, and then spend the rest of the year dealing with risks of not delivering the plan, which is not a very uplifting environment to be in.

Figure 3. above.
Figure 4. below.

This article will continue in the September-October issue of MHD Supply Chain Solutions magazine. Rod Hozack is a partner at Oliver Wight. For more information email information@oliverwight.com or visit www.oliverwight.com. ■