

# The Slimstock guide to demand planning

Ask anyone involved in **demand planning**, **demand forecasting** or **demand management**, and they will tell you the same thing: this critical part of the planning process can reveal some shocking revelations about the state of your business.

In fact, there are some products where the rise and fall of their demand are so significant it hints at the status of the wider global economy.

And so, setting your watch by these products can often be a good idea. And people do. Smart people, like economists.

As an example, have you ever heard of the lipstick index?

It's a term coined by Leonard Lauder, chairman of the board of Estee Lauder, the cosmetics company. The index describes the increase in sales of smaller, lower-priced items during times of economic recession.

In a nutshell, the reason for products like this flying off the shelves can sometimes be attributed to their use case and price point. Lipstick, for example, offers a cheap moment of cheer. And so, people who use lipstick often buy more of it when there's less money to go around.

It's a similar story for sales of men's underwear. But rather than increases in sales forecasting worrying time: ahead, it's the opposite.

Demand for men's underwear is so consistent that economists can use even a slight dip in demand to predict a national recession.



# However, there are problems with both of these ideas

Recent studies have shown major global events can diminish their relevance. The recent pandemic is a good example of this.

In fact, some theorists have trouble hanging their hats on both the lipstick and underwear indexes. Because despite their initial robustness in predicting market shifts, huge events often derail the likelihood of them being true gauges.

After all, if you're not leaving the house, why buy lipstick?

## **What does this have to do with your demand planning process?**

Sure, these indexes were fairly good barometers of oncoming trouble up until the pandemic struck. However, things change!

And the same applies to anticipating demand for the products within your assortment.

So how do you know if your forecasts are up to scratch?

Where demand fluctuates dramatically, is there any way at all of anchoring current sales to future forecasts? Or are you forever doomed to sticking a soggy finger in the air as you look into the oncoming hurricane?

# Why is demand planning in supply chain management imperative?

Before we get on to the positives of **demand planning**, it's worth thinking about the negatives of not doing so, or getting it wrong.

You could face running out of stock, excess stock, increased (and totally avoidable) costs, waste, dissatisfied customers, brand and PR woes, plunging shares, dissatisfied stakeholders, and the list goes on and on.

And let's say you're just a small company with very few product lines on offer. You might be tempted to make best guesses or scrimp on the process. Given the potential pitfalls, it's not a great idea.

Great forecasting will help you to align demand with supply.

It'll help you make strategic decisions, which prove to be successful.

It'll provide the entire business with visibility and clarity. Every person, in every department.

Frankly, the positive knock-on effects are too plentiful to name.



# But what does a good demand forecast look like?

Effective **demand planning** is all about managing the unexpected. Imagine the following scenario:

“**The weather forecast looks good today**” you muse, leaving the house without a jacket.

Only to scream “**Where’s this rain come from?!**” just half an hour later, soaked beyond all recognition, fists directed at the heavens.

The funny thing about forecasts is, that they’re always wrong, by definition.

Your demand plans are no different.

## **Take a weather forecast**

Does a 30% chance of rain mean there’s a 30% likelihood of rain in the area pictured? Or 30% of the forecasted area will definitely see rain.

**Answer:** it depends.

In fact, even Meteorologists aren’t in agreement on how to measure the probability of precipitation. It often depends on which forecast you’re looking at. But if they don’t tell you how they work it out, how will you know?

## And by this reckoning, how useful is the weather forecast to you?

To answer this, it's important to think about the margin of error and not the overall forecast. For example, if there's a 0.1% chance of precipitation, it doesn't matter how they work it out. Leave that jacket on the rack.

If there's a 50% chance, however, it does matter.

The reality for most businesses is that they need fast & reliable insights now. Not weeks of forecasts or the construction of an arc for inclement weather, which never arrives.

### A checklist for robust demand planning

Here's a helpful checklist to analyse your own business' forecasts.

1. Is your forecast a solid reflection of reality?
2. Can your demand plans be explained & easily understood?
3. Does the business, including all members of all teams, have faith in the forecast?
4. Can you use the forecast to plan future orders, replenishment & allocation processes, with confidence?
5. Can the process for building the demand plans be replicated?

If you answer yes to all of the above, there's every chance your forecasting is on the right lines.

But answer no to any one of those and it could indicate a much bigger problem.



# Which factors impact the quality of your demand plans?

Chances are you are depending on your demand management process to make some pretty important decisions.

This means you need to be confident that the quality of your demand plans is up to scratch.

Below we'll break down the different factors that might affect the quality of both your demand management forecasts and the subsequent strategy of your organisation.

## 1. The quality of your data

Ever been asked by someone whether they need a coat?

Despite the fact they know you've not left the house yet today, haven't looked at a forecast and have exactly the same information they do.

Much in the same way you're not a qualified meteorologist and yet you're asked your opinion on the weather, you need the right data to build a solid forecast.

Put poor data into your forecast and you'll get poor data out of it. You should prioritise high-quality data at every opportunity.

This means gaps in your demand history due to past stock-outs are accounted for. It means one-off events like promotions are 'cleaned' up. It means exterior market forces are analysed and the impact understood.

The more detailed and critical you are with data, the more detailed and useful the forecast will prove to be, come judgment day.

## 2. The amount of history you have to base your forecast on

*“It doesn’t look like rain, but we do live in Manchester.”*

It sounds obvious, but the less data you have, the less reliable your forecast. You’ve got little chance of predicting the future if you know nothing of the past.

For a product that you have been selling for years, you will have a much better idea of what’s to come than a new product that has only just been launched.

With more history on which to build a demand plan, you can see emerging trends and the impact of seasonality.

And with the longevity, you can smooth out blips, like unexpected demand or dips.

However, we need to be careful. A lot can change in the space of a few years. Is the big order you received 4 years ago still relevant? Is another global pandemic likely to erupt, or can you rest on your laurels for the time being?

And this brings us nicely to point 3...



### 3. The horizon you're trying to forecast

The longer the range of your forecast, the less confident you should be.

Because when it boils down to it, no one can accurately predict the future.

Yes, it's possible to make educated guesses based on historical data for the short-term horizon. But foreseeing what the world will look like in 3 years is challenging to say the least.

Let alone create a robust forecast you can set your watch by.

### 4. The level of volatility in the market

There will always be some things in life that are out of our control. Perhaps less important to state that now than it would've been 2 years ago.

But assessing the predicted level of volatility is quite tough. Not many people would've anticipated the COVID-19 pandemic to roll on quite as long as it has.

Equally, does it mean the market will be less volatile for the next 2 years in comparison?

In comparison, sure. But less volatile doesn't mean stable.

Generally speaking, if the market's volatile, your forecast will naturally be less reliable.

## 5. The level and quality of market intelligence

Statistical forecasts are a great start.

But many businesses struggle to capture and incorporate market intelligence along the way. And this is vital information which can shape or mould your picture of future demand.

However, remembering to analyse your source should be high on the agenda. Both the best and worst part of market intelligence is that it can come from many different sources.

It could be the insight of the sales team who speak with the customer every day. But Ginny might have different insights than Dave due to their different market locations.

It could be your customer's purchase forecast. But one large customer might have a more robust forecast than several smaller customers.

Or it comes from 'big data' sources. The accumulation of trillions of different data sets. But one Data Scientist might tell you one story, and another might tell you a different one.

So, who do you trust? That's up to you to work out.

But the right market intelligence can unlock powerful insights into the shape of future demand that statistics alone just can't match.

# How do I identify forecast errors?

For some products, we need more reliable forecasts than we do for others.

Take short shelf-life food items for example. You'd need far more accurate forecasts, per 'Stock Keeping Unit', per store, on a day-to-day basis, than you might for something like nuts 'n' bolts.

Ultimately, we need a forecasting process that spits out trustworthy results and also alerts us when things don't look right.

## **What kind of demand planning exceptions do we need to watch out for?**

*"Looking like a warm day out there, unless the wind changes direction."*

### **Incidental demand management exceptions:**

Incidental exceptions are those which typically concern a single month that deviates from the forecast.

It may be that the deviation is significant and alters the wider forecast. Unless of course, you can account for it.

Otherwise, the deviation may wrongly impact your forecast for the coming months.

**Structural demand management exceptions:**

If your actual demand is structurally fluctuating, and not in line with the forecast, you can define this analysis as emerging trends.

But your demand pattern can only be considered a trend when the demand increases (or decreases) around a given threshold. Typically, this may be a variation of around 8% month on month. Without this degree of movement, it's likely the fluctuation could be anomalous.

And once you know whether it's a trend or an outlier, you need to align your forecasting approach appropriately.

# How do I align my demand planning approach to actual demand? Some final thoughts...

We have talked about what counts as a 'good' demand forecast, what data you need & what exceptions you need to watch out for. But now what?

Here are some final thoughts to help you establish better **demand planning** and **demand management** tactics.

## 1) Let historic demand guide you, but focus on what's most relevant

Sure, we like lots of demand history. But as we have seen, the world may have changed. Perhaps you have recently attained a new customer or maybe the demand spike the sales team still talk about is now a distant memory for everyone else. Either way, you may want to worry about the more recent demand patterns.

To do this, weigh your forecast more heavily towards the more recent months, as these are likely to be more reflective of immediate future demand than legacy data (e.g. 3 years ago) which might have lost relevance.

Equally, what if the recent demand is less relevant? Imagine that you suffered a series of crippling stockouts over the last few months due to all of the supply chain disruption. The drop in demand you see in the data probably is not a true reflection of actual demand.

In this case, you may need to exclude certain periods from your **demand planning** process.

## 2) Ignore demand classes at your peril

You probably need a forecast for pretty much every item in your assortment. And to ensure the **demand planning** process is as efficient as possible, many businesses use demand classes to quickly and easily apply the right demand management approach.

Demand classes take into account the given demand behaviour to group items that share demand characteristics and build a forecast accordingly. Broadly speaking, we can use the following demand classes:

### Frequent, Normal & Runners

- These are items where the demand is consistent & occurs every month
- As the level of volatility is relatively low, we can anticipate demand with a good level of confidence

### Lumpy, Irregular & repeaters

- For these items, we see fairly regular demand most months
- As the degree of volatility is a little higher, there is likely to be a higher degree of uncertainty

## Slow, Sporadic & Strangers

- Demand for these items is typically, very infrequent
- Consequently, these are the hardest items to plan for

Demand classes are a useful tool when it comes to **demand planning** for large assortments.

However, to ensure the best possible forecast, we need to ensure the forecast model in play is still relevant. Therefore, if demand for a regular item suddenly becomes jumpy, we should adapt the forecast model to reflect this.

### 3) When it comes to demand management, expect the unexpected

We have talked about different types of demand classes. But what about items with demand profiles that exist outside of these parameters?

We can define this class as 'other'.

And there are many examples.

Maybe the demand for a product this month is already much higher than expected for the month (and we still have a couple of weeks to cover).

Or maybe the product is new so we don't have a demand history? If you've just introduced a product to the market, can you trust one week's sales data?

Or maybe the product is obsolete and all that demand history is now completely irrelevant. Or worse, one of the components in its manufacture is obsolete, despite demand still being at steady levels.

This might feel like a lot of information to consider when looking at your **demand planning & management** capabilities as a business.

But with the importance of effective **demand planning** being so high, every point is worth considering.

If you'd like more information or assistance on any of the details discussed on this page, [click here](#) to arrange a call with Slimstock, and you'll nail your forecasting and business strategy for years to come!