DEMAND PLANNING - 'BIG THREE'

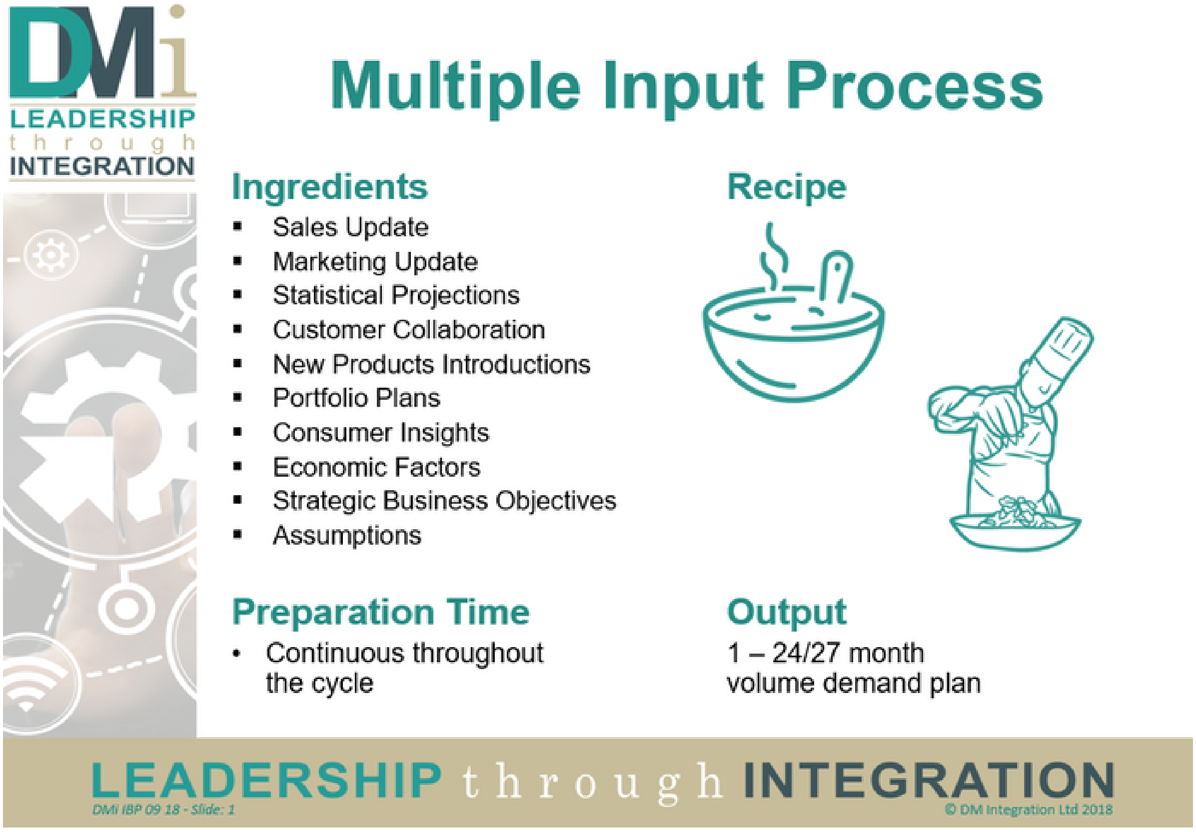
Once you are over the psychological barrier to forecasting that turns 'the art of the impossible into the art of the possible' and you are ready to try harder (see recent post) then we need to turn to how to try harder. This is where what I call the 'big three' comes into play.

<u>**ONE:**</u> Demand Planning is like making 'soup'. The way you make great soup is you take a bunch of **good quality** ingredients, you give them to a **well-trained** chef, who mixes them together using a tool called a stove and a blender and the result is great tasting, nutritious soup, creating a Demand Plan is exactly the same process. You take a set of **good quality** inputs (multiple inputs) and give them to a **well-trained** Demand Manager who combines those inputs on a **tool** called a computer system and the result is a high quality and good for the business Demand Plan. The key here is **multiple input,** no one view will be as good as a multiple view, especially if that view is history. History is an important view which can identify seasonality and trend but if we use history, we 'assume' that the future will be the same as the past. This may not be the best assumption when the pace of change and customer expectation is greater than it has ever been, also we employ a bunch of people in Sales and Marketing to specifically make the future 'better' than the past.

The types of inputs that I'm thinking of includes: -

- **Sales plans**
- **Marketing plans including analysis and trend**
- **Customer forecasts**
- **Financial and Economic factors**
- **Point of sale**
- **Product development**
- **Strategic plans**
- **And yes of course history!**
- **Also assumptions which is the second of the 'big three'**

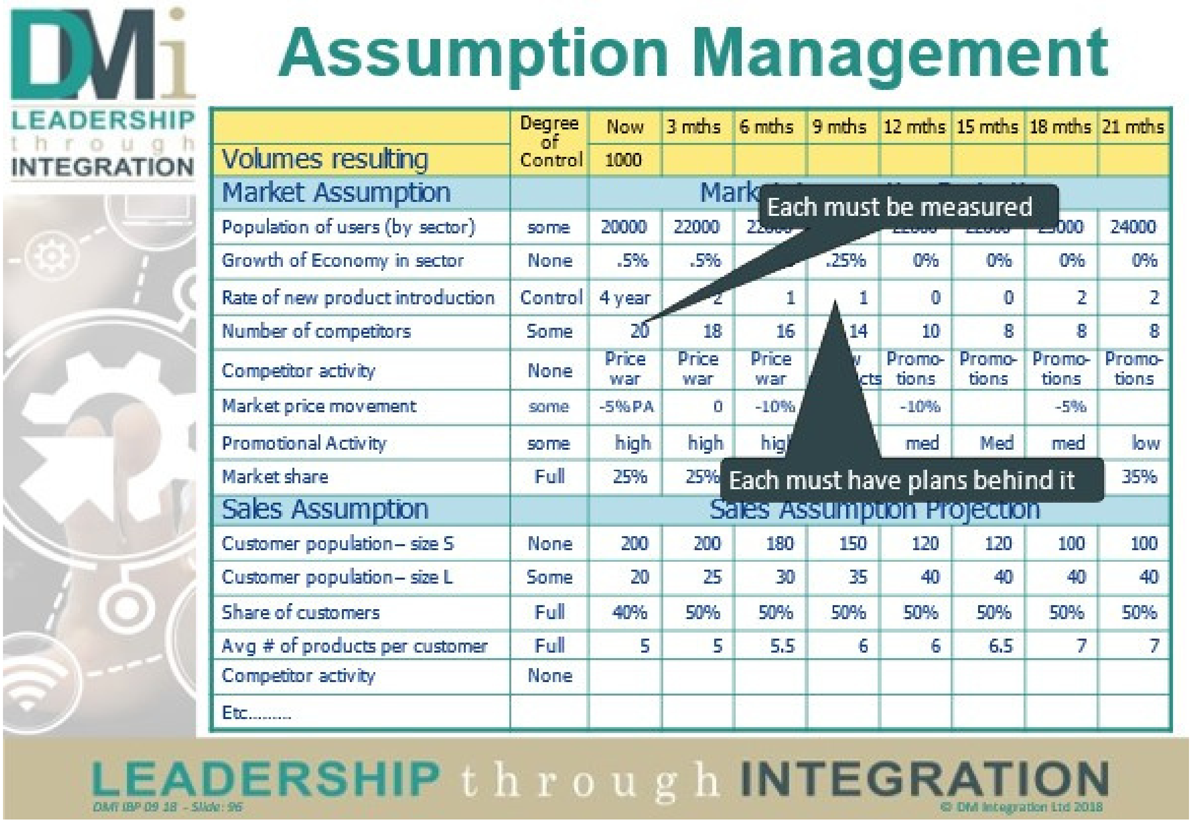
Not all of these inputs are of equal weighting, just like soup making there are some base ingredients. Depending on the type of soup that you are making (Veg, stock etc.) and then there is salt, pepper, spices and herbs but it is often these ingredients that add the richness and quality to the soup. This is the same in Demand Planning.



TWO: Whenever the Demand Plan is wrong – "which is always" it is not the numbers that were wrong, which by definition they were, it is the thinking or **assumptions** behind the numbers that were wrong.

That is why number Two of the 'big three' is Assumption Management. The key to assumption management is that they must be: -

- **Assumptions of significances**
- **Time phased**
- **Quantified or qualified**
- **Level of control identifiable**
- **Have plans behind those controllable assumptions**

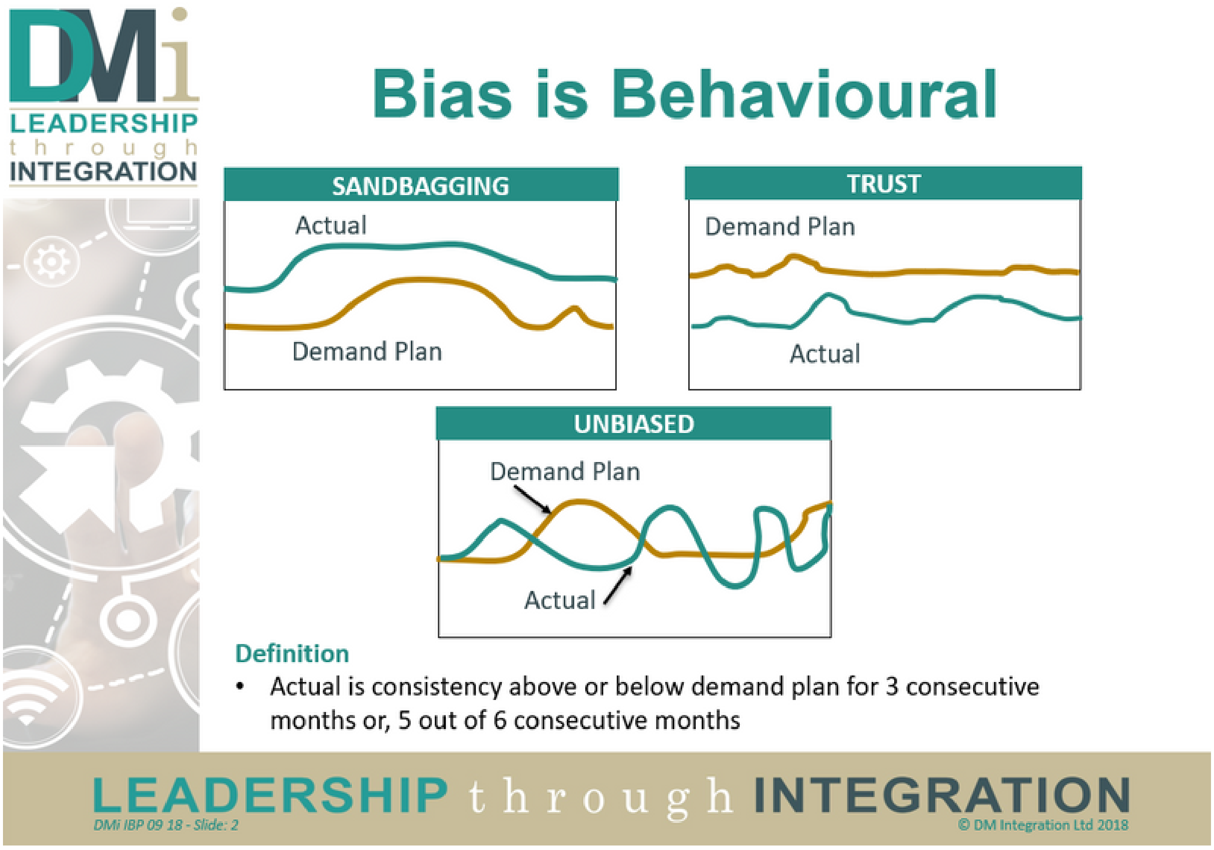


	Degree of Control	Now	3 mths	6 mths	9 mths	12 mths	15 mths	18 mths	21 mths
Volumes resulting		1000							
Market Assumption		Mark[illegible]							
Population of users (by sector)	some	20000	22000	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24000
Growth of Economy in sector	None	.5%	.5%	[illegible]	.25%	0%	0%	0%	0%
Rate of new product introduction	Control	4 year	2	1	1	0	0	2	2
Number of competitors	Some	20	18	16	14	10	8	8	8
Competitor activity	None	Price war	Price war	Price war	[illegible]	Promo-tions	Promo-tions	Promo-tions	Promo-tions
Market price movement	some	-5%PA	0	-10%		-10%		-5%	
Promotional Activity	some	high	high	hig[illegible]		med	Med	med	low
Market share	Full	25%	25%						35%
Sales Assumption		Sales Assumption Projection							
Customer population – size S	None	200	200	180	150	120	120	100	100
Customer population – size L	Some	20	25	30	35	40	40	40	40
Share of customers	Full	40%	50%	50%	50%	50%	50%	50%	50%
Avg # of products per customer	Full	5	5	5.5	6	6	6.5	7	7
Competitor activity	None								
Etc………									

As I see it the majority of the time in Demand Planning should be spent discussing, analysing, reviewing and measuring the assumptions and a fraction of the time arguing about the numbers. A few years ago, one of my clients calculated that 80% of the time was spent on assumption management and the rest developing the Demand Plan numbers. In my experience this is the exact opposite of what most companies do, who spend their time arguing about numbers that are going to turn out to be wrong! Let's stop talking about things that are going to be wrong and spend our time discussing the assumptions behind the numbers and how to use them to make the Demand Plan less wrong.

The real beauty of assumptions is that if we know how to plan less wrong we also know which **levers** (assumptions) to pull to make the Demand Plan bigger, in other words **growth.**

<u>**THREE:**</u> If we look at the chart below then one could argue that all three graphs show a fairly accurate Demand Plan. They all got the trend fairly accurate and the gaps between actual and plan were not too great.



However the two on the left are consistently wrong the same way. In one case the actual is **always** above plan and the other **always** below plan. This is what we call **bias** and is the third of the 'big three'. Bias means it is not natural, in other words 'something' is making it happen, without bias we expect the graph on the right. The key is to identify the root cause of bias and eliminate it and the root cause is always behaviour that walks around on two legs.

- **If Sales & Marketing don't trust that Operations will deliver the plan then they will inflate it to ensure they have enough stock, particularly new products, especially if they don't hold an accountability for stock (inventory levels) or obsolescence. Of course when they do this Operations will second guess them because they do hold accountability for stock (inventory) levels.**

- **If Sales & Marketing are incentivised to beat plan ('smash it') either financially or simply by recognition they will under call the plan (sandbag) for them to be able to smash it! Of course Operations knows that this happens as well and so they will again second guess to ensure that they don't get 'blamed' for poor customer service.**

This often leads to a 'game of poker' between Operations and Sales & Marketing where they try to outwit each other in a sort of internal competition. Wouldn't it be better to try to 'outwit' the external competition?

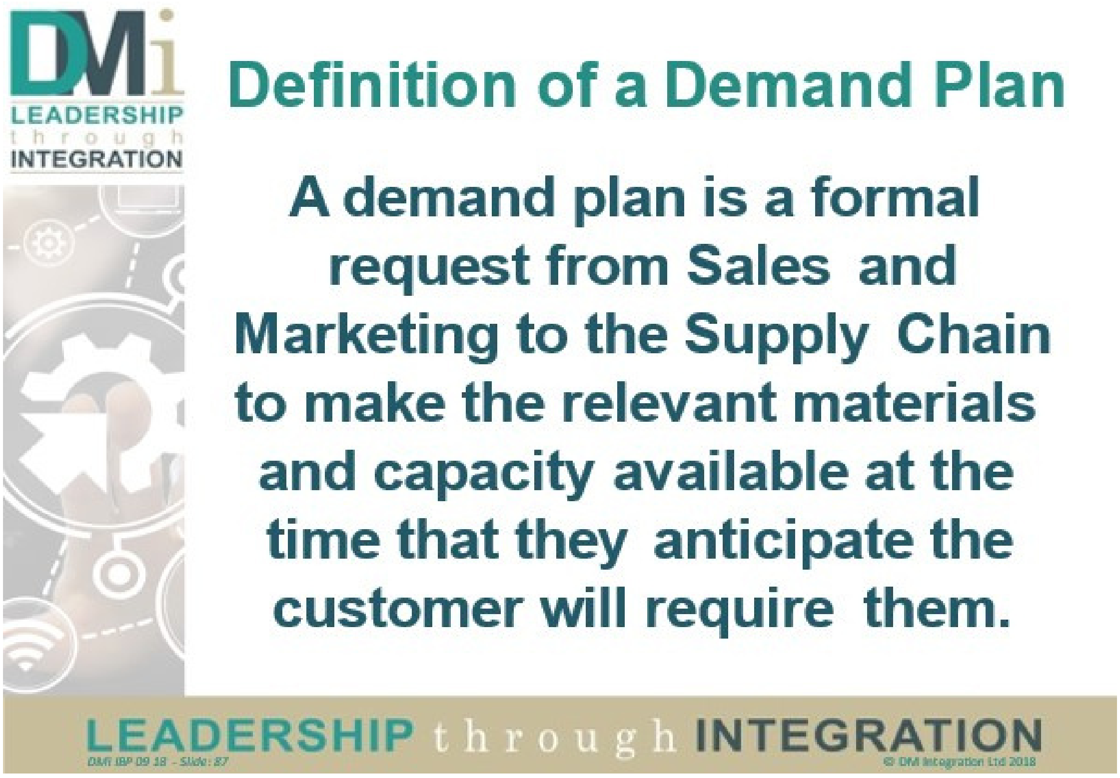
The key to number three is to identify the behaviour that is causing bias which is often (nearly always) measures (KPIs) and accountabilities. The first question that we should ask is ‘what behaviour do we want?’ and then create KPIs and accountabilities that will drive those behaviours. In my opinion the behaviour that is desired is Demand Plan quality **and** growth, therefore let’s create a set of measures that drives both of these behaviours and eliminates bias.

If you seriously address the big three: -

- **Multiple input**
- **Assumption management**
- **Bias**

Then I ‘cast iron’ guarantee that the quality of the Demand Plan will improve which has to be good for the ‘nutrition’ of the business.

There is a fourth factor in the demand planning process that I don’t include in the ‘big three’ but nevertheless I consider a key part of the demand planning process and that is risk and opportunities. Before we talk about Rs & Os we need to understand the demand plan definition below: -



The key here is to recognise that Supply will only plan for what is in the Demand Plan, no more, no less and will not second guess it therefore if Sales & Marketing want Supply to plan for it they must include it in the Demand Plan, if they don’t then they must not include it. This is the ‘contract’ between Supply and Sales & Marketing.

Risks and Opportunities

If we look at the chart below and keep in mind the definition above the base forecast is 200 which Sales & Marketing are contracting with Supply for them to plan to have the material and capacity to have that product available at the time required by the customer. There are also 25 that have been **included** in the Demand Plan but have been identified as at risk. However the contract with Supply is to plan for all 225 while Sales & Marketing will discuss how they could reduce the risk of those 25 not happening. There is also an additional 30 marked as opportunities which at this point **have not** been included in the Demand Plan and therefore Supply have **not** been authorised to plan for that additional 30. They may of course do some scenario planning but they won't plan the material or capacity for those 30. In the meantime Sales & Marketing will discuss whether they wish to pursue that opportunity and if so what would need to be done to have the confidence to include it in the Demand Plan, at which point it is **no longer** an opportunity it is part of the Demand Plan and the contract with Supply is now **255**, of course this additional 30 may still go into the demand plan marked as at risk.

The purpose of this approach which should be part of a formal opportunities management process is to create a safe area where we can have an adult and grown-up conversation about how to manage opportunities. Without this 'safe' area what is likely to happen is that the opportunities will not get discussed outside Sales & Marketing and not included in the Demand Plan because if it was they would be accountable for landing the opportunity. Consequently Supply will not have visibility (other than through the rumour mill) to carry out any sensible scenario planning. Subsequently if the opportunity is lost nothing will be said, after all it wasn't in the plan anyway. If on the other hand the opportunity is landed (often with reduced lead time and reduced margin) then it shows up in Supply as a 'surprise' which results in chaos and firefighting within the supply chain which again erodes margins.

As I said risks and opportunities are not part of my big three but can certainly have a significant impact on the stability and quality of the planning process.
In summary multi-input, assumption management and elimination of bias are the secret to trying harder.

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through
INTEGRATION

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