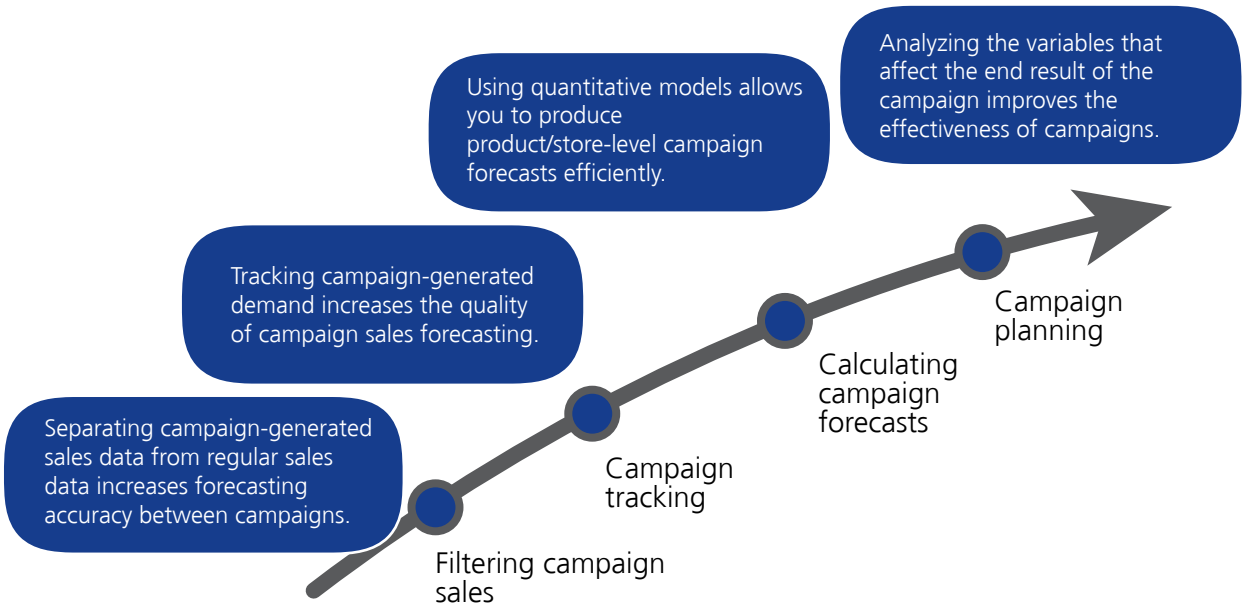
Control your campaigns!

Author: **Johanna Småros**
Director, Scandinavian Operations, D.Sc. (Tech.)
johanna.smaros@relexsolutions.com

Ask managers what causes them the most problems in the consumer product supply chain – choosing from any product, product group or are of operations – and the most common answer you'll get is "campaigns".

Ask them what the most difficult thing about campaigns is and as often as not they'll tell you "everything!" Forecasting, delivering, tracking; they can all bring supply chain managers out in a cold sweat. But don't worry, the situation isn't hopeless. It's a little like the old joke – 'how do you eat an elephant?' – answer; 'one mouthful at a time'. Campaign control is a step by step process and bringing together the right tools and the right approach should put an end to most, if not all, of your worries.



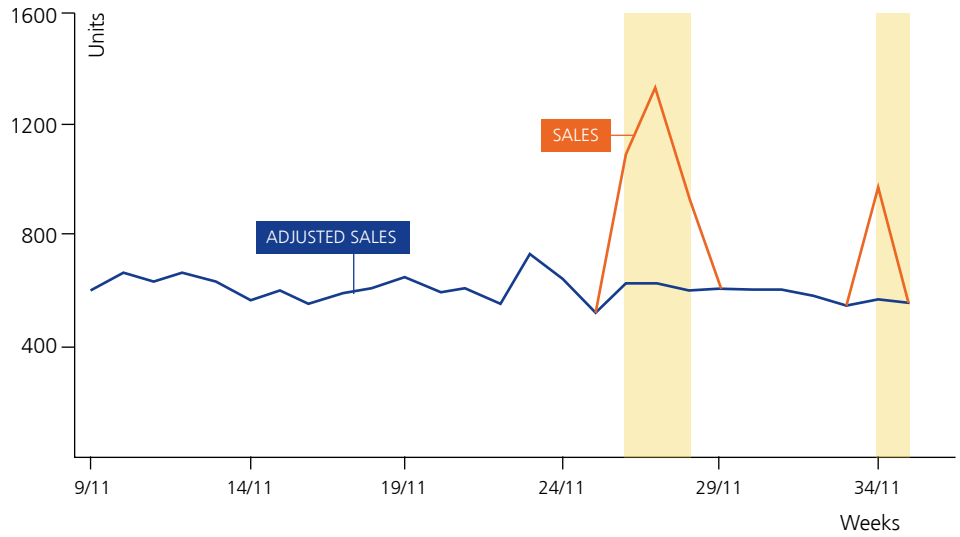
Picture 1. Developing campaign management one step at a time

This whitepaper is about how to plan your campaigns, and how to improve your forecasting and tracking. It also examines the requirements of the different development phases from an output data and operating model perspective. Store replenishment related issues are dealt with in a separate white paper.

1. Separate campaign sales from normal demand

Campaigns still live in an Excel-jungle, even though other key business processes have been moved to ERP systems. The first step towards making your campaign management more efficient is to give campaign sales their own defined category in the ERP system.

Separating campaign sales from normal sales increases forecasting accuracy very significantly! Demand spikes generated by campaigns skew forecasts for standard demand when the campaign has run its course. So configuring your system to separate out campaign data automatically allows you to forecast regular sales using regular sales data and to do it painlessly. It should be obvious, but not every system allows businesses to do this. This simple step can make a big difference.



Picture 2. An example of demand history, in this case campaign caused demand peaks have been adjusted. (Campaign periods have been marked with a yellow background. The actual sales (shown in orange) differ from adjusted sales used for forecasting only for campaign periods.)

In practice this first step only needs you to do two things:

1. Divide sales into two categories: 'normal' and 'abnormal'
2. Generate an adjusted demand history, from which campaign periods have been filtered out, for regular forecasting.

You can often find the information you need to categorize sales in historical data from your old system. If your campaign included price changes, those changes will have created its own data set that can be pulled from the ERP or cash register system. Now you just need to know how to use this information for forecasting.

2. Track the effect of campaigns

When campaign demand is separated from normal demand, campaign tracking becomes much easier.

If normal demand is used to calculate forecasts, campaign-led demand change is easy to identify – just examine the difference between actual demand and the computed base forecast.

Using that differential you can identify campaign-related absolute added sales or the percentage of added sales. Campaign forecast accuracy can also be tracked by comparing forecasts prepared for the campaign with actual demand.

VALUES	Campaign name	Campaign start/launch	Campaign end	Sales	Customizable manual forecast	Forecast	Absolute forecast error
CAMPAIGNS							
Total				663.00	701.30	701.30	38.30
June Campaign	June Campaign	08.06.2011	15.06.2011	498.00	521.30	521.30	23.30
July Campaign	July Campaign	08.07.2011	07.08.2011	66.00	70.00	70.00	4.00
January Campaign	January Campaign	08.01.2012	06.02.2012	165.00	180.00	180.00	15.00
May Campaign	May Campaign	08.05.2012	07.06.2012				

Picture 3. An example of a campaign tracking report

Systematic tracking helps to increase forecasting accuracy. The more information there is available from earlier campaigns, the easier forecasting becomes for future campaigns. Tracking the accuracy of forecasts, accelerates learning – the more feedback there is received from campaign forecasts, the quicker it is to eliminate recurring problems, such as over-optimistic projections.

If the reporting tools you are using support this, you should track the campaign effects on demand for a whole product group, as well as its margins. This helps to identify campaigns that really improve the profitability of the business, and also those that decrease its profitability.

For example: A retail store chain concluded that demand for a certain product group had decreased, because total sales in Euros for those products had decreased significantly. However a more detailed analysis showed that sales volumes had remained at previous levels. Instead active campaign efforts had shifted demand towards campaign products with lower margins. So rather than increase demand the campaign had decreased the overall profit generated by the product group.

3. Utilize quantitative models for campaign forecasting

Creating one campaign forecast manually is fine, but what about when demand forecasts are needed for ten, or even hundreds of stores?

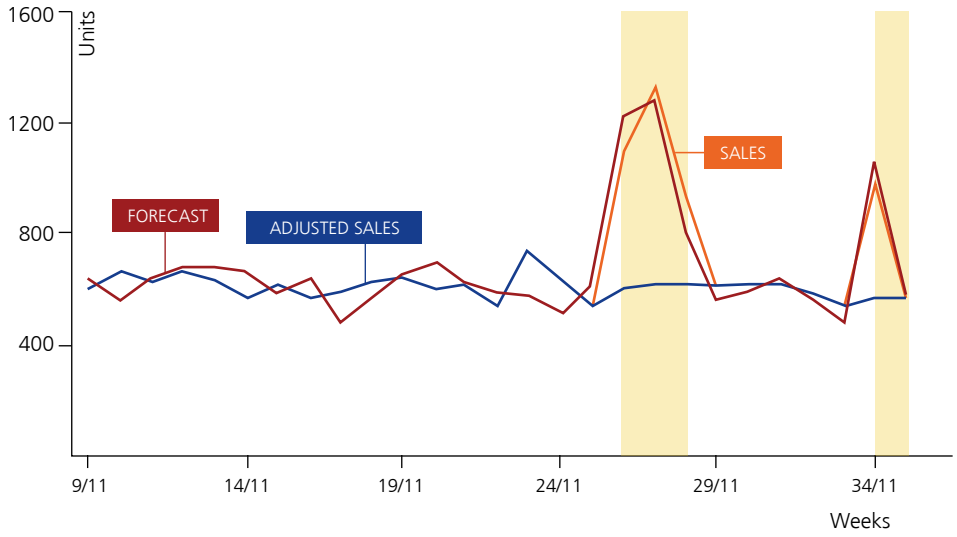
Generating centralized store-specific campaign forecasts manually is labour intensive and impractical. The typical solutions are either: 1) Replenishment for all stores is based on a single centralized campaign forecast, or 2) The problem is passed on to each store, with the demand that they pre-order campaign products. Both 'solutions' clearly produce poor results. A single forecast cannot reflect the individual profile of each store. Demographics, local competition, and a host of other factors mean that a campaign's effect on demand may vary significantly from store to store. Even though the purchasing managers may have information on local conditions, they still lack the skill and time required to create accurate forecasts tailored for each outlet. This leads to orders being placed based on 'gut feeling.' Some stores even forget to order.

By using quantitative forecasting, it's possible to achieve great campaign results. Above all, quantitative forecasting models allow store specific campaign forecasts to be generated efficiently!

In practice, quantitative campaign forecasting requires more than the simple categorization of demand into 'campaign' and 'normal' sales. Better results can be achieved when campaign data is combined with specific campaign profiles. Usually it's enough to use simple categories. For instance television campaigns, magazine advertisements, as well as in-store campaigns all have different effects and can be categorised separately.

It may be tempting to attempt to break down the campaigns in minute detail once you start doing something about it. It is important to bear in mind that category information is only useful if it is kept up-to-date. The easier that information is to produce, the more likely it is that it will be kept up to date in the future. Remember the old saying – 'the best is the enemy of the good' – better to set up a workable system that produces good results than be forced to abandon an unworkable one intended to produce perfect results.

When you begin to collect categorized historical campaign data, store specific campaign forecasts can be calculated based on store specific demand changes for similar historical campaigns. The more historical campaign data that is found for a product, the more accurate the results you achieve will be. On the other hand, when there is no previous experience with a similar campaign, a reasonable base forecast can be computed by checking earlier campaign effects on the same product group's products.



Picture 4. **An example of quantitative campaign forecasts. (Campaign periods are marked with a yellow background, and the quantitative forecast is shown in red. Actual sales are in orange, while the adjusted sales used for basic demand forecasting are shown in blue.)**

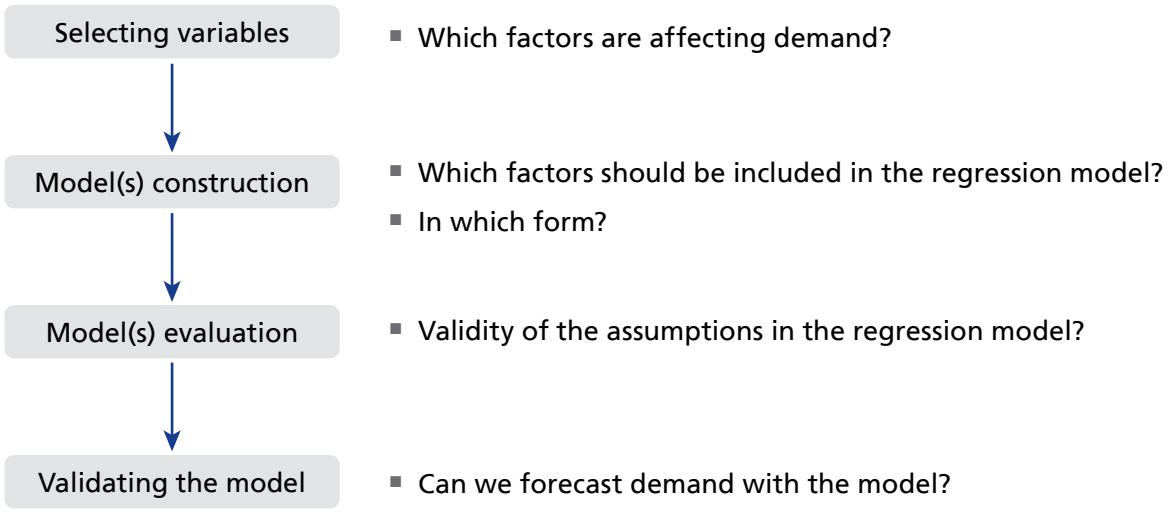
4. Analyze factors bearing on demand and use them for planning campaigns

When the data you need is available, use it for planning campaigns.

Forecasting models can be used for selecting campaign products and campaign types. When we understand how different campaign types work for different products or different product groups, we have a better chance of calculating in advance how best to execute campaigns to achieve the desired end result.

The richer and more diverse the data, the more accurate the analysis we can perform. One key area of interest is the effect of price on demand. The impact of price changes can be created quantitatively within a model, for example, with regression analysis. In practice the available output data imposes certain restrictions. The actual application of regression analysis requires data from several executed price changes. If in addition to price research, we also want to research other contributing factors, such as the effect of presentation of available products, then the number of previous campaigns from which data will need to be drawn increases. The more variables you include, the greater the pool of historic data you need to draw on.

The benefit of analyzing and forecasting retail sales is that the factors affecting demand, such as price, shelf space and store and media advertising, are known in advance. With regression models the effects of different factors on campaign sales can be identified. Regression models should be built carefully. When standardizing the use of, for example, price changes or marketing effects between different products and campaign channels, the models generally use significantly more data elements. This helps create well-functioning models. When computations become more common it is possible to make incorrect choices, which reduce the clarity of the model, and the accuracy of the forecast. This is why you need to put aside sufficient to develop your model and improve forecasting accuracy. Moreover, as the amount of data grows, and the market and competitive situation changes, you should check your existing models.



Picture 5. Constructing the regression model.

Reach full control of your campaigns one step at a time

Campaigns cause headaches for supply chain managers, but in many cases, campaign management can be significantly improved relatively easily. You can get great results simply by separating normal demand from campaign demand!

Table 1. Campaign management development phase requirements and potential benefits.

Phase	Requirements	Benefits
1. Separate campaign sales from normal demand	Define campaign and normal sales as different sales types. Normal demand use in quantitative forecasting.	Improved forecasting accuracy for normal demand
2. Track campaign effects	System support for defining campaign demand effect (campaign demand compared to the quantitative base forecast).	Support for quality forecasting of campaign demand. Campaign profitability and forecasting accuracy development.
3.Utilize quantitative models for forecasting campaigns.	Campaign categorization and category maintenance in system. Historical data from earlier campaigns.	More precise (store specific) campaign forecasts automatically.
4.Analyze affecting factors and utilize them for planning campaigns.	Broad campaign data base. (When the number of variables we want to analyze increases, the data required from different campaign launches also increases.)	A better understanding of the variables affecting campaign results leads to better campaigns.

Developing campaign management requires long-term work. Better accuracy goals mean tougher requirements for collecting campaign data. Since there is not necessarily any data available at the beginning, you have to proceed step by step (just like with that elephant sandwich).

There are several major incentives to improve your campaign management: In phase one forecasting accuracy for normal demand improves as soon as you separate out campaign-led sales. During the second phase increasingly accurate forecasts let you build more precise campaign forecasts and understand better which campaigns work and which don't. By phase three you're able to generate more accurate forecasts on a store-specific level with less work. In the last phase a whole new level of reach can be attained for efficient campaign planning, which results in increased demand and improved margins.

How do we proceed?

We at RELEX have huge experience in campaign management. With our flexible and easy to use solutions, You can improve both normal and campaign demand forecast accuracy track campaigns more efficiently.

To take the first step towards developing your campaign management and forecasting, contact me: tommi.ylinen@relexsolutions.co.uk / +44 20 3318 7246. An hour's meeting is all it takes to assess your company's situation and to define the first steps!