ONE EIGHTY

A new perspective for your enterprise performance

January, 2012

Forecast for Max Actionable Profit

Upcoming Events

- Let it Roll Beyond Budgeting Conference
  April 18-20
  Houston
- APQC 2012 KM Conference
  April 23-27
  Houston

People in the News

- Clifton Williams and Derek Sandison, recipients of the 2011 Robert A. Bonsack Award for Distinguished Contribution in the Advancement of Cost Management

Link

- **More operation detail**

This is the fifth and final in a series of One Eighties devoted to elaborating on a topic first described in the final paragraphs of the February, 2008 One Eighty on **Planning and Budgeting** , "*Imagine relaxing the assumption of a fixed forecast to solve for the optimum level of sales and marketing investment that provides the highest profit and ROI*".

A simple proof of concept model, developed as a prototype to test the feasibility of optimized planning, demonstrated profit improvements of 25-150% depending on the scenario. (Contact John Miller for details)

This was accomplished by employing an optimization technique that has been applied successfully for the 40+ years since the commercialization of mathematical programming techniques like linear and integer programming.

The technique has been used to solve long lead time (a year or more) supply chain design questions such as mergers, the number, location, and size of raw material suppliers, manufacturing facilities, production processes, distribution centers, and cross docks.

It has also been used to address shorter lead time questions (days – 1 year). Examples include capacity planning, distribution methods and policies, inventory analyses, make vs. buy decisions, cost vs. service tradeoffs and supply/demand seasonality.

Traditionally, the technique assumed a fixed forecast and minimized the supply chain costs required to make and fulfill the forecast. By relaxing the **assumption of a fixed forecast**, it is now possible to design, simultaneously the most profitable forecast **AND** supply chain..

What makes the forecast actionable is the **operational supply chain detail underlying the forecast** including capacities and constraints on the activities at the appropriate level of detail.

The potential is, truly, a **next generation Financial Planning and Analysis** capability that combines the predictive analytics of planning response functions with the mathematical programming optimization techniques of supply chain network design.

This integration of predictive analytics and optimization was characterized by Brenda Dietrich, IBM Fellow and VP, at the April, 2009 INFORMS practitioner conference as being at the **frontier of business analytics.**

The future is here; isn't it time to act?

Alan Dybvig in partnership with INSIGHT, Jeff Karrenbauer, President.

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