How an optimized Activity-Based Plan Addresses

The Limitations of Current Planning Applications

| Application | Activity-Based Plan | Marketing Mix Modeling | Supply Chain Network Design | Optimized Activity- Based Plan |
|---|--|--|--------------------------------------|---|
| Planning Issue | Develop an activity-based plan | Size and allocate all or a portion of planned marketing budget | Design least cost supply chain | Given a traditionally developed activity- based plan, optimize it for 1) maximally profitable forecast 2) optimally feasible and sustainable supply chain |
| Model is activity-based | Yes | No | Yes | Yes |
| ABC data readily available | Yes | No | No | Yes |
| How are alternatives evaluated (i.e., solver)? | Scenario analysis (i.e., what will happen if we | Prescriptive analysis (i.e., What is the best X?) | Prescriptive analysis (i.e., What | Prescriptive analysis (i.e., What |
| Supply chain is a variable, prescriptively | do X?) No | No | is the best X?) Yes | is the best X?) Yes |
| Forecast is a variable, prescriptively | No | Yes | No | Yes |
| Entire income statement modeled | Yes | No | No | Yes |
| Objective function | Profit | Profit proxy: contribution margin by product | Cost | Profit |

| Forecast Optimally Profitable | No | No | n/a | Yes |
|--|---|--|--|--|
| Supply chain both optimally feasible and sustainable to support forecast | No | No | Yes | Yes |
| Reference Articles | Wiley's Journal of Corporate Accounting and Finance, <u>"Enterprise</u> <u>Master Plan: Next-</u> <u>Generation Planning with</u> <u>Activity-Based Costing</u> ," May-June, 2015, pages 71-77 | Hanssens, Parsons, Schultz, <i>Market</i> <i>Response Models,</i> "Integrating Market response Models in Sales Forecasting at Polaroid," pages 391-393 | <u>Article</u> on <u>INSIGHT's web site</u> | See <u>optimized</u> <u>Activity-Based Plan</u> |