

Statistical Forecasting Applications

Application	Marketing Mix Modeling	Sales Resource Optimization	Business Forecast** Extrapolative*	Business Forecast** Explanatory*
Planning Issue	Size and allocate all or a portion of planned marketing budget	Size and allocate all or a portion of planned sales force budget	Develop a product(s) forecast	Develop a product (s) forecast
How forecast developed	Multiple time series	Multiple time series	One time series	Multiple time series
Marketing plans drive forecast (i.e., they are independent variables)	Yes	Yes	No	Yes
Marketing response functions required	Yes	Yes	No	Yes
Forecast's use	Within marketing	Within sales	Within enterprise	Within enterprise
How forecast optimized	Prescriptively	Prescriptively	n/a	Descriptively (i.e., scenario analysis)
Objective function	Profit proxy: contribution margin by product	Profit proxy: contribution margin by product	n/a	Profit proxy: contribution margin by product
Best possible forecast, financially	No	No	n/a	No
Best possible forecast, operationally (e.g., observe constraints)	No	No	n/a	No
Reference Articles	Hanssens, Parsons, Schultz, <i>Market Response Models</i> , "Integrating Market response Models in Sales Forecasting at Polaroid," pages 391-393	Sinha and Zoltners, "Sales-Force Models: insights from 25 Years of Implementation, <i>Interfaces</i> 31:3, Part 2 of 2, May-June 2001	Morlidge and Player, <i>Future Ready</i> , pages 110-112 Hanssens, Parsons, Schultz, <i>ibid</i> , pages 316-316, 377-378, 386-389	D.M.Hanssens, " Order Forecasts, Retail Sales and the Marketing Mix for Consumer Durables ", <i>Journal of Forecasting</i> , June-July 1998.