



The Forecasting Value Chain

A QUANTRIX WHITE PAPER



Income Statement

Scenario: High Growth

	Actuals	Forecast	
	Year0	Year1	Year2
Revenue	1,000	1,100	1,210
COGS	500	550	666
Gross Profit	500	550	545
Operating Expenses			
SG&A	250	275	303

Function... = + - * / ^ .. : :: ()

1. Revenue:Year[THIS] = Revenue:Year[PREV] * (1 + ...
Statement Cases::Revenue:Year[THIS])
2. Item = Revenue * 'Income Statement Cases'
Revenue, Total Oper Exp, Gross Profit, EBIT
Income, D&A'

What is the Forecasting Value Chain?

The forecasting value chain is both a concept and a goal. It is defined by the information flows and interactions between forecasting groups and other functional groups within organizations. There are many types of business forecasting – such as demand planning, unit sales forecasting, inventory planning, capacity planning, and financial forecasting, to name just a few. In many companies, forecasts are the primary driver that guides business activity. As such, it is vitally important that forecast models are based on reliable data, encompass the full spectrum of likely scenarios, and are integrated to show the full “cause and effect” of scenario changes to the business. The forecasting value chain mandates that the flow of forecasts to the appropriate constituencies for decision-making should be unfettered and bi-directional. Bi-directional flow means there should be a feedback loop for pervasive understanding of the current and future business environment. Without accurate, comprehensive, and integrated forecasts, companies risk failing to meet customer demands, internal business goals, profitability and continued success.

The Forecasting Challenge

In all too many organizations, there is discontinuity in the distribution and feedback loop of forecasts. Interruptions exist in the flow of information between the groups that develop forecasts and the groups that consume and plan around forecasts. For example, demand forecasters are responsible for developing unit sales forecasts based on historical data and upcoming events, which are calculated and refined with statistical algorithms. These forecasts are typically handed off to the finance team who then develop financial forecasts to view the broad set of financial impacts. Oftentimes, however, they fail to offer timely feedback to the demand planners or make sure they are working with the latest forecast data.

When forecast information flows are discontinuous, the company’s business planning activities cannot be truly aligned which results in eventual crisis where profitability is impacted, customer demands are not met, or other negative outcome. Discontinuity can often be traced to two key factors: technology and process. With technology, information “stovepipes” develop due to the inherent limitations of the forecasting applications. Take, for example, the most pervasive forecasting technology platform – the traditional spreadsheet. Spreadsheets are not designed to accommodate the degree of collaboration, dynamism, flexibility, control and multi-dimensionality critical to the corporate forecasting program. Additionally, stovepipes develop when disparate information systems are implemented yet not integrated in an automated way. Furthermore, the dimensional (e.g. upper and lower statistical boundaries) and contextual information (e.g. seasonality) that should accompany forecast data is often lost as the forecast data is fed into other systems. Finally, stovepipes are caused by process – in other words, the lack

of business rules or workflows that mandate information sharing and collaboration among groups.

Consider the day in the life of the operations manager who creates a unit sales forecast that includes statistically-generated upper and lower boundaries. When he or she sends it to the finance manager, dollar figures are then associated with the forecast. However, in most cases, and in particular where spreadsheets are involved, that contextual data is lost, thus reducing the ability to model and analyze the impact of those possible scenarios. Furthermore, if another product or region is added to the statistical forecast, the financial forecast spreadsheet must be redesigned to incorporate the new dimensions, which is not a trivial task.

The Forecasting Solution

An affordable and readily implemented solution that addresses the Forecasting Value Chain is within reach of most organizations. Two proven forecasting technology leaders, Quantrix and Business Forecast Systems (Forecast Pro), offer easy-to-integrate solutions that enable companies to implement and achieve the Forecasting Value Chain. The solutions deliver highly accurate, multi-dimensional forecasts, data sharing, and business modeling and analytics capabilities. Forecast Pro and Quantrix can be integrated through DataLink, the integration tool that is included with Quantrix Modeler Professional Edition. DataLink offers a Wizard for quick and easy setup, without the need to involve the IT department.

Let's revisit the aforementioned day in the lives of the operations and finance managers. With Forecast Pro, unit sales forecasts with boundaries are generated and saved to a secure location on the network. The finance manager, who has designed a multi-dimensional financial forecast model with Quantrix, uses DataLink to quickly update the forecast model with the latest forecast data. All contextual and dimensional data are pulled over automatically – including cases, products, geographies and any other data. All the possible scenarios can be modeled and the impact on the entire business (through integrated models) and can be analyzed.

The Result

The Forecasting Value Chain conceptualizes the way forecasting and business planning should be performed within successful, dynamic organizations. Companies that implement technologies and processes that build a forecasting value chain will enjoy greater customer satisfaction, profitability, and flexibility for adapting to an ever-changing business environment. Quantrix and Forecast Pro represent a powerful, affordable solution for achieving those goals.