

# Driving Strategic Planning with Predictive Modeling

*An Oracle White Paper*  
*Updated July 2008*

# Driving Strategic Planning with Predictive Modeling

**With a functioning strategic planning process, users can visualize the entire range of possible outcomes, plan for the unexpected, and maximize success in making decisions.**

## INTRODUCTION

Uncertainty makes strategic planning complex. Removing, or even mitigating, uncertainty can create unlimited business value. However, most companies lack the strategic planning infrastructure to rise above the unknown. Fortunately, there are solutions to help organizations overcome uncertainty and achieve results.

Oracle's business intelligence, financial planning and predictive modeling tools enable companies to deploy a predictive modeling platform to drive strategic decision-making. Together, these solutions help companies identify and account for the key assumptions that drive business value—enabling good decision-making that leads to predictable results.

## MOST COMPANIES FEEL THE EFFECTS OF UNCERTAINTY

In the Boston Consulting Group *Innovation 2006* report, 72 percent of the surveyed executives ranked investment in innovation as one of their top three strategic priorities for 2006, and planned on increasing their capital expenditure on innovation during that year. However, 52 percent of those executives remained dissatisfied with the financial returns from those investments.

Why? Did something unexpectedly happen to adversely impact the outcomes of their decisions? If so, what was missing from the investment analysis and underlying assumptions? Could they have avoided some of these unsuccessful investments? Undoubtedly, these companies planned for highly satisfactory returns on their investments, yet somehow failed to achieve them.

When planning the strategic direction of the business, organizations, like yours, strive to create returns that will satisfy (even delight) stakeholders. To the extent that you know the future to be uncertain, the measurement and impact of this uncertainty must be captured in your strategic planning process.

## The Challenge in Making the Right Decisions

Making the right decisions requires you to anticipate and plan for possible changes in the future. A common approach to anticipate these changes is to first assess the company's current position by analyzing historical information to understand the company's past.

**Historical data might not extrapolate correctly into the future. You need additional analysis.**

Occasionally, however, there might be very little or no historical precedent. And even if you do have historical data, it might not extrapolate correctly into the future. For example, let's assume your company wanted to launch a new product or compete in a different market. Your company's past and present state can be a good indicator of future performance, but does not guarantee it.

The linkage to making the right actionable decisions still requires additional analysis. To anticipate possible changes in the future, you must start addressing questions about the future possible outcomes, specifically the following:

- Which ones are most likely?
- Which ones matter most?
- Which ones are best for the company?

To answer these questions and plan for the right decisions, you must first ascertain the potential upside and downside of future results and the probability of each outcome actually occurring.



**Figure 1: Understanding the past can help model the future.**

### **Understand the Assumptions Underlying the Strategic Plan**

Every strategic business decision has inherent risk and uncertainty. To make the right decisions, the strategic planning process must focus on understanding the underlying modeling assumptions more thoroughly. It is within these assumptions that risk and uncertainty can be captured to drive the strategic plan. To create good assumptions, organizations must complete three critical steps:

- Make the assumptions realistic.
- Identify the assumptions that matter most.
- Leverage the drivers that can be controlled and monitor those that cannot.

**Assumptions that do not reflect the actual business environment most often lead to inaccurate results and bad decisions.**

### **Make the Assumptions Realistic**

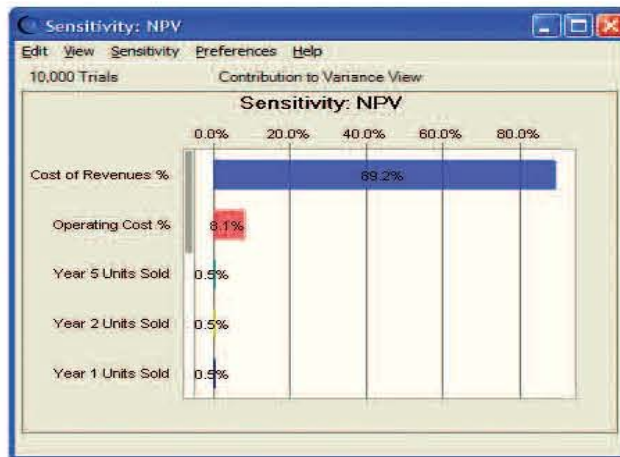
Imagine reviewing a strategic plan that assumes company revenues will grow 4 percent every quarter for the next several years. This growth rate, based on a historical average, ignores the fact that the actual growth rate was sometimes higher or lower than 4 percent in a given period. However, the future revenues of this same company could very well fluctuate beyond 4 percent. If so, then a 4 percent growth rate assumption could deliver misleading results about the future.

Now imagine reviewing a different plan, with scenarios, that assumes company revenues can grow anywhere between 2 and 7 percent every quarter for the next several years. This assumption is based on a combination of an analysis of historical performance and estimates about future market performance. Because of the uncertainty that resides within anticipating future revenues, this assumption methodology offers a more-realistic portrayal of what can happen. If any assumption, such as sales growth or cost of goods sold, can change unexpectedly and land within a range of values, then the strategic plan should be designed to accommodate that level of uncertainty.

### **Identify the Assumptions That Matter Most**

Suppose that your company is considering a new product launch. Some of the key assumptions for this decision depend upon the product's selling price, capital investments, volume sold, cost of sales, and market share position. Most strategic planning decisions will be determined based on the key set of assumptions that matter. But within that set of assumptions and given that any of them could change unexpectedly, will each assumption have the same impact on your plan? Or can some assumptions have a bigger impact than others?

Strategic planning processes require insight into the prioritization of assumptions that matter most and have the biggest impact on the company. Rather than create a strategic plan that is arbitrarily based on a predetermined set of best-case, worst-case, and most likely versions of scenarios, the process should enable the most important assumptions to determine the types of strategic planning scenarios that need to be evaluated. See Figure 2.



**Figure 2: An example set of assumptions mapped against their impact on the results of the model. All assumptions impact the results, but cost of revenues is clearly the most important.**

### **Leverage the Controllable Drivers and Monitor the Uncontrollable Ones**

Key assumptions can be classified roughly into two types: those that you can control (for example, selling price, cash outlays) and those that are imposed by external factors (for example, interest rates, commodity prices). Given those factors, you can exert greater influence on strategic decisions by identifying and understanding the impacts of the drivers you control and of those you monitor.

For example, imagine a situation in which your company must choose among several strategic projects to allocate its scarce resources. For one project, success will be impacted most by consumer lending rates. For another project, success will be driven mainly by the price of the product. Both projects are likely to add value to your company, but only one depends on a driver that is more-controllable by the company (the price of the product). Actionable decisions should be based upon an understanding of the trade-offs between the drivers that you can or cannot control.

### **Predictive Analytics Enhances Strategic Planning Business Performance**

Predictive analytics enables you to accomplish the necessary steps to identify and evaluate risk and uncertainty in strategic decisions. By using predictive analytics, the focus of the strategic planning process shifts from debating arbitrary point estimates toward reaching consensus on the key underlying assumptions with the greatest impact on the results.

To manage strategic planning business performance effectively, the following three components must work together to provide you with the tools and information to make better decisions:

- User confidence in the process
- Integrated modeling and analysis
- Flexible reporting

**Most planning sessions are debates about point estimates. Good planning sessions focus on identifying the key planning assumptions.**

### User Confidence in the Process

Confidence in the modeling integrity of the integrated financial statements as well as confidence in the analysis of the risk and uncertainty in the underlying assumptions is critical. You need robust financial analysis capability that includes prebuilt, fully standardized, and integrated financial statements. In addition, you need the simulation capabilities to model and analyze changes in the assumptions and optimization capabilities to leverage the drivers you control to make the best possible decisions.

### Integrated Modeling and Analysis

To perform sophisticated modeling and analysis, you must be able to access quality information to determine the impact of expected results. You should also be able to quickly and easily make different operating assumptions and create alternative scenarios that are determined by the assumptions that most affect the outcomes. Modeling capabilities should enable customization by facilitating the aggregation and analysis of the strategic plan's individual components (for example, product launch, project evaluation, mergers and acquisitions) to ensure that the results reflect value accurately.

### Flexible Reporting

Flexible reporting enables you, as well as other consumers of strategic planning data, to spot trends early. Graphical, interactive dashboards allow you to quickly leverage opportunities or take corrective action. Enhanced reporting capabilities also provide an intuitive, easy-to-use interface that requires minimal training and support to learn the reporting process.

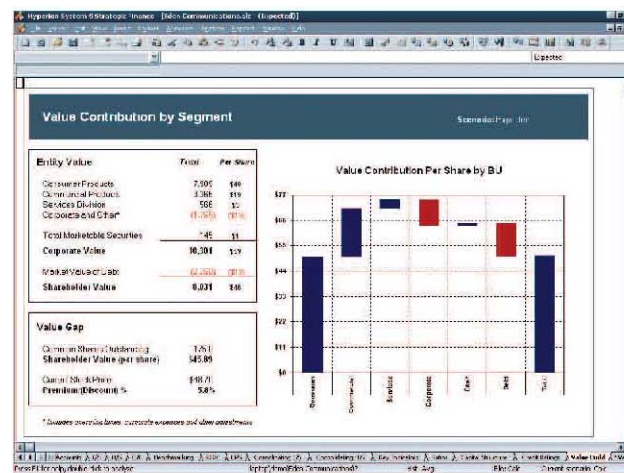


Figure 3: Oracle Hyperion Strategic Finance reporting dashboard.

## **The High Returns from Good Decisions**

Oracle has helped thousands of companies with their strategic decision-making and planning processes for improving business performance.

One example is a North American manufacturing company that had historically managed its strategic planning process using a combination of manually intensive systems. Key components of this company's strategic plan were to evaluate the impact of several hundred potential projects and the potential acquisition of other companies. To support the analysis and evaluation of this strategic plan, the company relied upon a financial modeling environment embedded across multiple decentralized sources—project evaluations would be modeled in one area and merger and acquisition analysis in another.

The problem was that the aggregations consumed more time than the actual analysis required. Oracle enabled this company to standardize its strategic planning process in a centralized environment, and still maintain the flexibility in toggling the key assumptions across the strategic plan. Oracle's solution also enabled the company to gain insight into the assumptions that made the most impact to the company at both the corporate and individual business unit levels. As a result, the company saved millions of dollars by choosing the optimal set of projects and acquisitions and improved business performance.

## **CONCLUSION**

The stakes remain high for finance organizations to determine the strategic direction of their businesses. The unexpected is unavoidable and has the potential for significant impact. Reducing this uncertainty to mere averages or relying on guesswork is certainly not helpful. However, embracing and understanding the risk and uncertainty in your decisions can help you better assess the range of events that are likely to occur and the magnitude of their impact. Therefore, smart companies are re-evaluating the way they do analysis for maximizing decision-making success and are intent on finding ways to improve their strategic planning processes. And they benefit from technology as an enabler.

- Oracle Hyperion Strategic Finance delivers financial statement modeling capabilities for strategic planning, treasury and corporate development analysis. Using packaged financial logic, companies can increase productivity and gain greater analytical insight to understanding shareholder value through minimal model-building efforts and IT support.

- Oracle Hyperion Interactive Reporting provides the most intuitive user-directed query and analysis capabilities available today for strategic dashboards. It delivers its powerful capabilities through an easy-to-use interface that lets users design their own dashboards, then quickly monitor and evaluate information that can be shared across the enterprise.
- Oracle Crystal Ball is a predictive analytics application that delivers simulation and modeling capabilities for analyzing and understanding the key assumptions that have the biggest impact. By effectively integrating this application into the strategic planning process, users can visualize the entire range of possible outcomes, plan for the unexpected, and maximize success in making decisions.

Companies that choose to embrace technology to support strategic planning will gain the ability to make the right decisions and improve business performance; companies that don't, risk getting left behind. And that's for certain.





Driving Strategic Planning with Predictive Modeling  
July 2008

Oracle Corporation  
World Headquarters  
500 Oracle Parkway  
Redwood Shores, CA 94065  
U.S.A.

Worldwide Inquiries:  
Phone: +1.650.506.7000  
Fax: +1.650.506.7200  
[oracle.com](http://oracle.com)

Copyright © 2007, 2008 Oracle. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice.

This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission. Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.