### Behavioral Science. The Secret Weapon to Building Enduring Relationships

Predicting how customers will behave in a market environment is no longer a stab-in-the-dark exercise. Scientific modeling that draws from data sources including behavioral research, econometric analysis, online data, social media and even expert judgment now enables marketers to simulate customer behavior and gauge the effectiveness of price, product, experience, message and media to drive decision making. Behavioral Science removes guesswork, improves ROI and builds enduring customer relationships that affect acquisition, retention, purchase and loyalty.

## The Power of Behavioral Modeling

Marketers can use behavioral economic modeling to inform decisions about product pricing, marketing budgets and most importantly how to deliver the best product/service/bundled offering via the best channels to the prospects and customers most likely to make a purchase.

Advanced techniques such as Strategic Integrated Market Simulation (SIM²) reproduce a particular market ecosystem for purposes of understanding how human behavior influences economic decisions. Derived from both proven and leading-edge academic social science theories, it enables marketers to design and test proposed changes within that environment and to evaluate how customers are likely to make buying decisions. These models allow for testing across competitive alternatives that have a broader range of product features than focus groups, deliver more reliable projections than assumption-driven business case forecasts, and are far more cost-effective than traditional large-scale market surveys. Traditional tools point to what should drive customer decisions; behavioral economic models describe what is likely to drive their decisions and behavior.

### From Idea to Impact: Quantified Innovation is the New Path

How does it work? This behavioral science approach employs principles and practices from statistics, behavioral economics, operations research, and financial accounting. It uses computer science, data and technology to not only drive better acquisition, retention and sales results, but also build stronger relationships with customers by aligning everything 'right' – right product at the right price with the right message in the right place at the right time. The six-step approach to managing uncertainty is:

- 1. **Ideation/Develop Model Specifications.** In this first step, we identify promising ideas, the desired customer behavior objectives, and the corresponding drivers. Then we create a model incorporating all these elements in which a variety of possibilities can be tested using real world data.
- 2. **Create Research Design/Conduct Research.** Applying the principles of statistical design, we generate a research plan to guide data collection, ensuring that all elements of the innovation can be evaluated. Fielding the proprietary research follows.
- 3. **Build Behavioral and Economic Models.** By using econometric techniques, expertise in

the science of modeling, and in-depth business insights, models are constructed that best describe all of the different decision drivers and customer choices.

- 4. **Run Simulations.** Armed with carefully chosen data and a comprehensive, customized model, we evaluate how changes in drivers or environment will impact customer behavior and determine the sustainability of desired outcomes vital to growth.
- 5. **Apply Decision Optimization.** Employing mathematical programming techniques, we can identify the best solution for your business, one which maximizes the attainment of business objectives such as the number of repeat clients or market share within the limits of existing constraints (e.g., limited funds or scarcity of critical skills).
- 6. **Construct Predictive Scorecards.** This final step involves creating an innovation scorecard to communicate critical results and facilitate informed, ongoing investment decisions. By tracking initial predictions against actual results, the scorecard can be calibrated periodically, increasing its predictive accuracy, and providing a powerful tool for long-term strategic planning. During this step we deliver both an Executive Dashboard as well as a scored list of prospects or customers to be used for targeted offers.

### **Strategy Begins When the Modeling Ends**

Once all data and assumptions are integrated into the model, the simulation generates a baseline sales output. After calibrating the model to actual sales, marketers can run what-if scenarios to predict the effect of different strategies in a low-risk environment. The impact of each touch point in changing individual customer perceptions is estimated to uncover the attribution for all paid, owned, and earned touch points.

Tapping into the talent of predictive modelers, data scientists and risk management analysts, marketers unearth actionable findings and then use those insights to shape business decisions, improve financial outcomes and ultimately, build stronger relationships with their consumers.

Let's look at some of the innovative ways marketers have begun to use behavioral economic modeling to impact their relationships with customers.

#### **A Bundling Story** (Product)

A large telecommunications provider recognized the need to develop a bundling strategy that would meet the needs of ever changing mobile customer segments. They employed economic analysis to evaluate competitive scenarios from new entrants to pricing and tactics. Value propositions were modeled to test bundled vs. unbundled offers by segment. Different marketing approaches were also evaluated by offer, by segment and by region.

The big Ah-Hah? Winning the "best" customers requires segment-specific value propositions and alternative channels. Predicted market shares were linked with the economic model to develop estimates of the incremental NPV for each segment and bundle combination. The provider was then able to optimize bundles for each segment. The result? *Solutions that met customers' mobile communications needs...* and \$6.8 billion in incremental NPV from implementing the recommended strategy.

### **Hospital Choice** (Price)

When a Top 10 academic children's hospital needed strategic leadership with their Women's and Infants' Center of Excellence, they employed SIM<sup>2</sup> to uncover invaluable information about capital planning, maternal hospital preferences and obstetrician employment drivers.

A demand model was created to predict the behavioral drivers that influence a woman's choice of hospital for delivering her baby. Fourteen attributes were evaluated from out-of-pocket costs to room guarantee to level of NICU to parking convenience.

The findings? Interestingly, patient safety, not out-of-pocket expense, is the most important decision variable for future mothers and has the most dramatic impact on market share. Patient experience elements including composition of medical team, location of care for mom and baby and convenience of prenatal visits had modest impact on share. This hospital is now positioning their message to better meet the real needs and expectations of patients while also basing their pricing decisions on new, more accurate insights versus generally accepted services pricing reductions.

#### **Retail Design and Choreography** (Place)

A large financial services firm needed to do more than just focus groups if they were going to achieve their strategic mission to transform the business and their retail model. They believed that a lifelong learning model was the key to year-round customer relationships but needed to validate the economic benefits of making this philosophy a reality at retail.

Market Simulation was used to focus on three retail formats: Referral Sites, Hub Sites and Super Store Sites. Additional distribution outlets were also identified – from portable offices to DIY centers to mobile buses and super stores. Changes to the retail environment were also tested from the façade to the floor plan and in-store TV. One of the critical Referral Site treatments included redesigning and aligning the sales choreography.

The learnings? Testing and implementing just a few key changes to the distribution approach, retail sites, and customer choreography has the real potential of adding in millions of dollars over the next five years and the changes serve to be far more responsive to customers resulting in not just increased sales, but much deeper and longer term relationships with customers than ever before.

# **How Are You Making Decisions?**

The biggest mistake you can make as a marketer in 2014 is to base your marketing decisions on benchmarking data, assumptions and guesswork. To optimize profits and relationships, you need a reliable predictive model. Advanced modeling can enable you to understand how proposed changes will alter the behaviors of your customers. By reducing the risk of change, you are free to find the path to greatest value...and vital, long-term relationships with your customers.