.

Competitive Drug Marketing Strategy (CompeteRx™)

Competitive Drug Marketing Strategy Challenges

Expenditures to drive drug sales often equal if not exceed upstream costs incurred to develop new pharmaceuticals and win FDA approval. Key trends in marketing pharmaceuticals include:

- Declining marginal ROI for direct physician marketing (Detailing and Sampling)
- Poor understanding of the efficacy of Direct-to-Consumer advertising (DTC)
- Critical public and political attention to high drug prices and large promotional budgets
- Escalating pressure for manufacturers to do "more with less" while pipelines replenish
- Increasing involvement of consumers in healthcare decisions
- Growing complexity in drug prescription and purchasing behaviors, due to trends such as formularies, Internet pharmacies, DTC-driven demand

The central problem in downstream drug investment is to allocate "marketing mixes" ─ or spend rates across available marketing and sales channels ─ to drive sales goals effectively. If your firm adopts a new and effective marketing mix, your competitors will detect that success quickly, thanks to market data subscription services such as IMS Health. Once alerted, your competitors will likely respond with counter-strategies to reverse your gains and retake market share. To prevent this, you need to *anticipate* likely competitor responses and design adaptive strategies to defeat these counter-measures.

Actionable Marketing Mix Strategies that Reflect Competitor Responses

Most analytic techniques for "optimizing" marketing mixes assume a static world, in which key factors remain constant while you execute your strategy. In reality, drug markets shift continually, driven by competition and disruptive events such as drugs losing patent protection; new market entrants; new safety/efficacy studies; changing FDA regulations; and modifications to healthcare payer policies. Static models are ineffective in dynamic markets.

Our CompeteRx™ decision support solution is different from static models because CompeteRX allows drug companies to develop marketing mix strategies that reflect *both environmental changes and anticipated responses by competitors*. CompeteRx enables you to "test drive" marketing mix strategies, dynamically projecting their likely performance under diverse scenarios of future market conditions. Key performance metrics include: drug market share, net sales, profit, and overall value (NPV).

Benefits

CompeteRx permits brand managers to prepare systematically for expected market changes. Key events include scheduled launches of competing branded drugs or the loss of patent protection for a drug, which is typically followed by the appearance in the market of generic products. For example, CompeteRx was used to model the domestic market for proton pump inhibitor drugs prescribed for GERD, or gastroesophageal reflux disease, such as Nexium® and Protonix®.

Brand managers also leverage CompeteRx as an Early Warning System: current strategies are monitored over time, to re-validate initial assumptions or to detect emerge problems promptly. CompeteRx then facilitates development and validation of mid-course modifications in the face of inevitable market changes.

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CompeteRx produces an electronic audit trail of strategic decision-making processes. It provides a unique interactive tool for communicating and reviewing marketing mix strategies; training; and continuous improvement. CompeteRX standardizes best practices decisions across brands and markets

Bottom line: CompeteRx provides a virtual environment for playing out drug marketing strategies in realistic dynamic competitive contexts and understanding their likely consequences. It reduces risk and improves confidence and consistency in strategic marketing decisions.

Technical Approach

CompeteRx combines powerful scenario planning methods to model drug markets with advanced behavioral simulation technology. CompeteRx scenarios incorporate the following input factors:

- Characteristics of your target market and current economic conditions
- The drug companies competing in a particular market (or expected to enter that market)
- The drugs that you and your competitors either sell or intend to sell in the future
- Your candidate marketing mix strategies
- Available business intelligence on your competitors' marketing practices and strategies
- Other uncertainties, such as changes in regulations or reimbursement policies

The CompeteRx simulation engine leverages a model published by researchers at MIT's Sloan School of Management that predicts market size and market share allocations. We extended the Sloan model to address the problem of competitive behaviors through technologies including complex adaptive systems, game theory, system dynamics and event-based programming.

CompeteRx is unique in its ability to model and project *adaptive* behaviors, based on decision rules that capture anticipated competitor responses. These behavioral rules, which require no programming, allow you to leverage *available business intelligence* about your competitors' prior response patterns to market changes, their strategic goals, budgets, financial positions, etc.

Finally, CompeteRx provides analytic tools to explore the simulated results of prospective strategies, *and to compare them across alternate scenarios*. Analytics include time series plots of key performance metrics; reports that isolate salient changes — trends, events, and decisions; and summary financial reports. These tools assist you to identify unintended consequences, such as the risk of damaging price wars, and refine your strategies to eliminate them. CompeteRx boosts your development of *robust* marketing mixes — which are strategies that perform well *across* diverse scenarios of future market conditions.

About DecisionPath

DecisionPath helps business and government organizations make and manage critical decisions more effectively. CompeteRx was developed using our patent-pending ForeTell® decision support software platform. ForeTell makes scenario planning actionable by incorporating key participants and candidate strategies into its "what-if" projections. DecisionPath invites inquiries about CompeteRx from pharmaceutical and biotechnology companies as well as consultants to these companies.