



Case Study

The Setting: A large international pharmaceutical company

The Challenge: Determine the revenue from a new drug.

The Team: A small group of marketing managers

Mandate for Management:

Don't predict the future, create it!

The need to forecast runs deep. Every organization wants to know as much as possible about the future so that plans and preparations can be put in place to meet it. However, despite the deep-felt need for a crystal ball, such a device has yet to be developed. Indeed, predicting the future is likely to remain a very inexact science for some time to come. There is chance. There are imponderable complexities. And, there's always the inventiveness of the competition.

Many firms are beginning to see forecasting in a different light. Rather than seeking to predict the future, they're instead striving to *create* it! The shift in perspective is important. It leads managers to ask not "What are revenues going to be" but rather "What can we do to generate as much revenue as possible?" Responsibility for performance is seen as depending less on the whim of the gods and more on the individuals within the organization whose job it is to make revenues "happen."

The *iThink* software is an ideal tool for supporting this shift from a reactive to a proactive approach to the future. The software enables managers to capture the actual relationships that generate performance, rather than merely identifying a set of factors that are correlated with it.

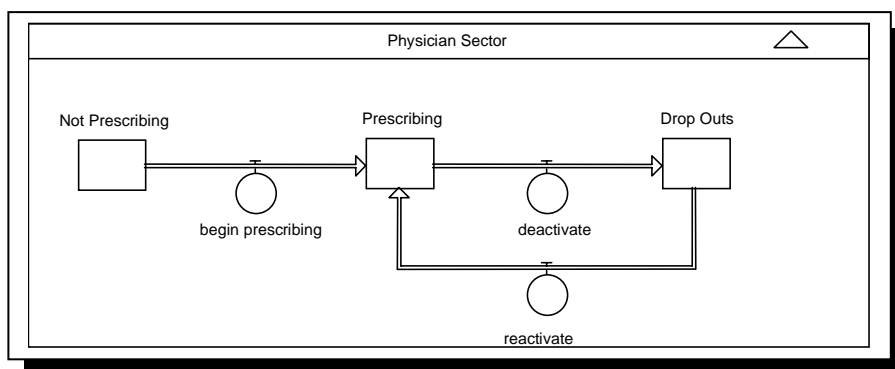
Step 1: Focus the Effort. Focusing the effort was a relatively straightforward task. The managers had been charged with predicting revenues from the introduction of a new drug. Since the drug was the first of its type to reach the market, there was no historical data to rely on. And the economic climate was uncertain, so even the backdrop was unpredictable. With these givens, the team decided to figure out how to "create" the future!

Step 2: Map. Using the *iThink* software, the team began by mapping the "physics" that would underlie sales of the new drug. To their surprise, they discovered that the map was not very different from the basic flow-of-physician infrastructure responsible for generating the sales of any drug! A simplified version of the physician sector of the map, which they developed, appears below.

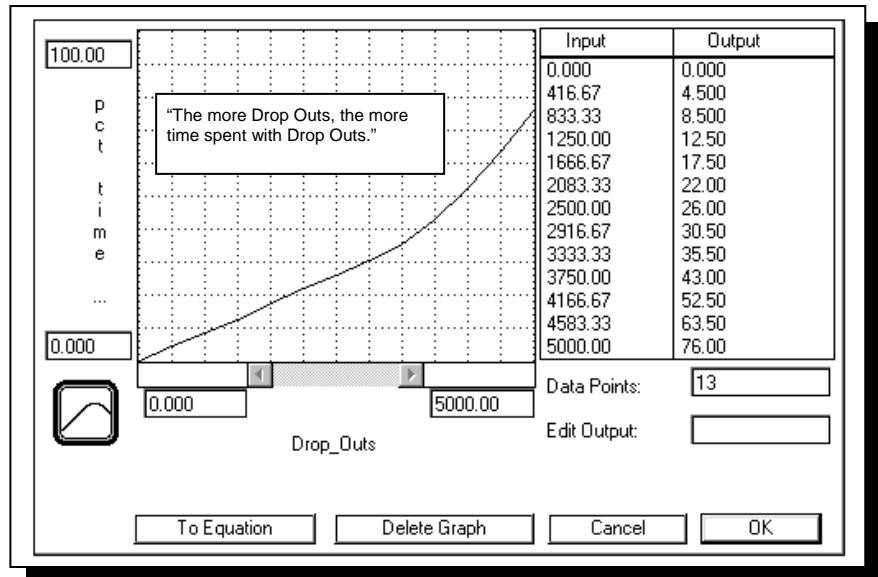
The three basic stocks of Not Prescribing, Prescribing, and Drop Outs existed for every drug that the firm sold. Team members recognized that, in every case, it was the Prescribing Physician stock that was responsible for generating the firm's prescription revenues. Thus, discussion began to focus on the dual questions of how to fill this stock as quickly as possible, and how to prevent it from draining into Drop outs.

Step 3: Model. After the team completed the mapping process, focus shifted to filling in the logic of the underlying relationships. One of the areas that attracted a lot of the team's attention was sales force time allocation. Specifically, the team speculated quite a bit about how the sales force actually allocated its time between trying to generate new prescribers, servicing existing prescribers, and attempting to

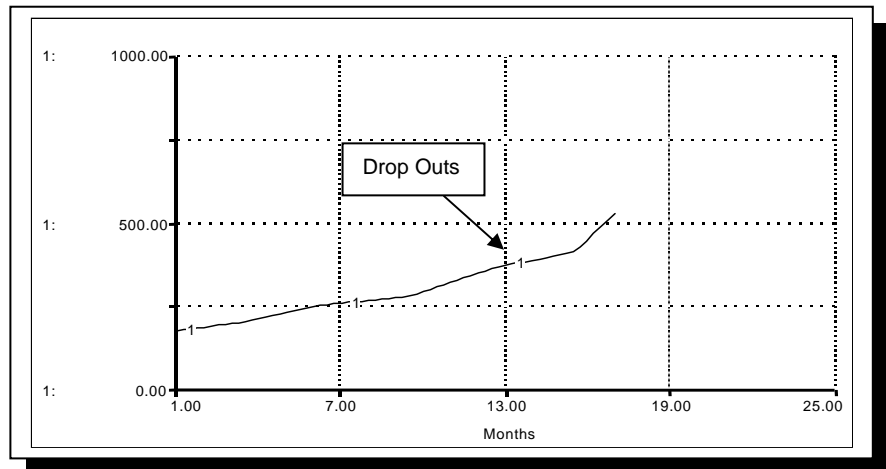
re-capture drop outs. The team hypothesized that the way in which the sales force chose to distribute its time among the three classes of physicians would have a very substantial impact on prescription sales. One of the behavioral relationships that the team sketched into the model (using the *iThink* software's graphical function) related the magnitude of Drop Outs to the fraction of time that the team felt the sales force would allocate to this class of physician.



Step 4: Simulate. Initial simulations confirmed the teams intuitions concerning the importance of sales force time allocation. The team discovered that by allocating increasing amounts of time to seeking to re-capture Drop Outs as this population grew, the sales force probably was making a serious mistake. The more time spent with Drop Outs, the less time sales people spent with prescribers. This meant that more prescribers dropped out, thereby leading the sales force to spend even less time with prescribers! A vicious cycle with potentially devastating consequences for sales was hypothesized.



Thus the natural inclinations of sales people (i.e., not to let their customer base erode) appeared to be leading them into a reinforcing cycle in which time allocated to prescribers was dwindling. As the marketing team had no conclusive evidence that such a cycle was indeed operating, they decided to conduct an experiment involving several key sales force people. The idea was to use the *iThink* software to create a simulation of the new product's introduction. By exercising the software in the "gaming" mode, the model could be run for a few months, and then pause. At each pause, the sales people would have a chance to observe how things were going (i.e. in particular, how the stock of Drop Outs was growing). They could make a decision about how to reallocate their time in response. The simulation then could be resumed and run until the next pause, when a new reallocation decision could be made.



By conducting such an experiment, the team felt they would be able to directly observe how sales people behave, rather than waiting to observe actual sales force behavior – after it may have been too late! The graph depicted above illustrates in an *iThink* software generated graph showing Drop Outs during a "pause". The experiment supported the notion that sales people inclination was to attempt to re-capture drop outs. This had significant implication toward revenue projections.

Step 5: Implement. Once the vicious cycle was revealed, sales people were quick to alter their behavior. And, sales growth followed just as quickly! By using the *iThink* software to determine ways to *increase* sales, rather than to *project* them, the pharmaceutical firm experienced one of the best new product introductions in its history.