A Management Flight Simulator for Strategy Communication and Organizational Alignment

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Our client, BellSouth Telecommunications, is facing dramatic changes in the marketplace. Until recently, BellSouth, a multi-billion dollar regional telephone provider based in Atlanta, has been operating under a regulated environment in providing local land-line telephony services. With the accelerated deregulation of the US telecommunications industry, it is now facing increased competition from long distance telephone providers, other regional providers and new players in the industry. Competition from cellular phone companies is also increasing as the quality of wireless communication continues to improve and the cost continues to decrease. In addition, new technology is making it possible for other companies with a wire to the house - cable television providers and electric utilities - to offer local telephone access.

To compete in this highly competitive marketplace, the thought leaders at BellSouth developed a comprehensive strategy that they call the "BST Agenda." However, to implement the strategy successfully, their first challenge was to communicate the strategy to each individual in the organization involved in its implementation. These individuals numbered in thousands, had lived in a long tradition of a telephone giant, and had to be prepared to be agile to the marketplace changes. These individuals needed to understand not only what the strategy was, but also why it was a good strategy, and why alternative strategies might be less competitive. Our client realized that to communicate the strategy effectively, the conventional forms of communication such as slogans, pamphlets, speeches and seminars would be limiting because they are fundamentally not good at communicating the dynamics of a strategy. They realized that a computer simulation that helps users explore the dynamics of the strategy would be useful.

As part of an overall strategy communication effort, we worked with BellSouth to develop a management flight simulator (MFS), with an underlying systems dynamics model, that captured the thinking behind the strategy. This MFS allows its users to explore the complex dynamics surrounding BellSouth's business, and to think critically about what strategies will enable BellSouth to compete. Through this thought process, many BellSouth employees have internalized the organization's strategy, not just to a point where they can articulate it, but to the point where they have changed their behavior to be aligned with the organization's strategy.

Figure 1 below illustrates the interface of the MFS. The MFS allows its users to make enterprise-wide decisions including decisions on product and service development, marketing, and human resources, and demonstrates the effects of the decisions over time. Effects have been modeled on corporate financials, on key performance indicators, as well as on softer cultural issues such as morale. A user of the MFS making decisions that are consistent with BellSouth's strategy would observe the positive outcomes of the strategy. By attempting alternative strategies, the user would be able to understand their consequences.

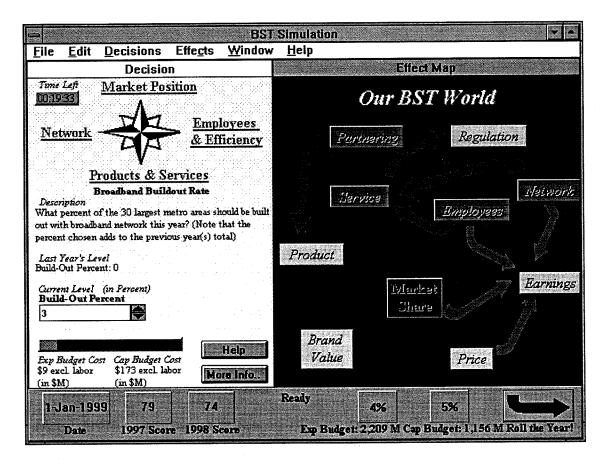


Figure 1: BellSouth Management Flight Simulator

Although the BellSouth MFS had to be a learning tool, more importantly, it had to be a change management tool. For it to be able to communicate the BellSouth Agenda to a large audience effectively, it had to have an easy-to-use interface and reflect BellSouth's understanding of their world. The fact that there was a systems dynamics model behind the interface had to be transparent. BellSouth personnel were interested in learning the strategy and learning about systems thinking in the context of the strategy. They were less interested in the academics of systems dynamics. They were also less interested in perspectives from other industries or a different perspective within their industry; they

were more interested in thinking about their own business. Therefore, the MFS has been created to closely depict the world that BellSouth employees live in.

To further reflect BellSouth reality and the difficulties involved with change, the MFS emulates some "unwritten rules of the game" - resistance to change anticipated within the organization. The world in the MFS includes a series of fictional characters who make comments as the simulation progresses. For example, during the course of the simulation, the user has the option of teaming with a wireless provider to offer wireless service in regions not served by BellSouth. If the user pursues this strategy, a fictional character Armstead Hill from the network organization objects, and the following message appears:

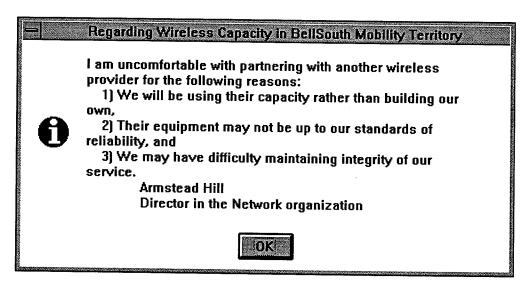


Figure 2: Message illustrating resistance to change

The focus on change management influenced not only the content of the MFS but also the approach in developing it. The MFS had to be accepted as a reasonably accurate reflection of our client's world both by the thought leaders whose perspective was being modeled, and by those within the organization who would use it. Therefore, the model not only had to be reasonably accurate, but also had to be perceived to be accurate. Any flaws obvious to those using the simulation would be taken as evidence that the model was about some other situation, not about their world. To achieve reasonable accuracy as well as perception of accuracy, the construction of the model involved active participation of the thought leaders. Furthermore, significant effort was expended in testing and validating the MFS to make it accurate and robust. As a result, we have been able to create a MFS that manifests a compelling case for change, that the organization believes in, and that is helping drive individuals to change behavior.

Developing a robust MFS also required a sound technical architecture and supporting software packages. The MFS has been constructed using Powersim TM , Microsoft

AccessTM, Visual BasicTM, and RobohelpTM. PowersimTM provides the systems dynamics modeling and simulation capability. Microsoft AccessTM database is used to store and access data. The application written in Visual BasicTM provides the user-interface and controls the communication of data via DDE with PowersimTM and via the Microsoft Jet Engine API with Microsoft AccessTM. Finally, RobohelpTM was used to build the on-line help system.

The overall strategy communication process includes a multi-day executive training workshop focused on the BST Agenda. The MFS is used as a part of this training. Teams of 8-15 people discuss what decisions should be made in each year of the simulation, and compete for the best final score after six simulated years. After the simulation session, the teams are combined into a larger group for a facilitated discussion of the learnings.

These discussions following the simulation session are key to sharing the learnings, and having some fun. The discussions often include a lively award ceremony. Winning teams are sometimes rewarded fake monetary bonuses to reflect the profits they made for the organization. The worst performing teams are embarrassed, in jest, and asked to provide explanations. Funny remarks made during the simulation sessions are also quoted and shared. A remark once made by a team not performing too well and seeing the bright red danger signals all over the screen was, "with all those damn red lights, it looks like a Christmas tree!" On a more serious note, the discussions are focused on what the strategy is, why it is a good strategy, and why alternative strategies are less effective. The discussions also include what the strategy means for various parts of the organization, what actions need to be taken, and what behaviors need to be changed to successfully implement the strategy. At the end of the discussions, to reinforce the learnings, the same teams go through a subsequent session using the MFS. Beyond the training workshop, participants can receive individual copies of the MFS to further explore the strategy. So far, about 900 BellSouth employees have used the MFS.

The MFS provides our client with a fundamentally different form of communication. In conventional strategy communication involving paper or speech, the strategy is transferred from one media to each individual's state of mind whereby they understand the strategy. Such communication generates an "external voice" to communicate, external to the human mind. To the contrary, the MFS generates an "internal voice" coming from within the mind. The MFS guides individuals through an exercise of rigorous thinking that leads them to talk to themselves about what the strategy should be, and is. This allows individuals to have a belief and ownership in the strategy, which drives them to change their behavior.

As our client progresses through the implementation of their strategy, they continue to apply management flight simulators to deal with change management issues. Behind the success of every management flight simulator in achieving business objectives, there is a systems dynamics model.