

## Leading Innovation and Change: Best Practice Case Study

Client - a company synonymous with the term innovation. Since its inception, the company founders have instilled a belief in unique product creation, including life altering product innovations such as the light bulb envelope, TV tube, and optical waveguides. This concept of innovation has been deemed one of the company's most essential quality programs, bridging functional groups within the organization, renewing itself through continued time and iterations. For the client, innovation not only challenges traditional ways to thinking, but has become a key impetus to drive change. Innovation converts ideas into opportunities.

The client began its journey with the realization that the rate of new product development would be insufficient to maintain company profitability in the future. In the late 1970's and early 1980's there was a cycle of small pockets of promising technological advances, defensive moves, and diminishing returns. Previously the company's innovation processes had been defined only within the areas of research, product development, and engineering. The client began by analyzing past innovations and the successes and failures associated with each, and benchmarking their own best practices and lessons learned.

The client has defined innovative effectiveness as: requiring an understanding of overall corporate and business strategies; developing organizational roadmaps based on customers, the market, competitors, strengths and weaknesses, and resources; ability to evaluate, prioritize, and select projects; and executing the selected project well. The key elements of innovation intervention are: an innovation task force, composed of key innovators; the utilization of company history as a resource for innovation; a focus on strengths and resources in a project of paramount importance, referred to as "flexible critical mass;" and a two-and-a-half-day innovation conference for 200 company leaders which focuses on reintroducing the innovation process.

Through the work conducted by the task force, not only were successes analyzed, but so were areas in which the organization had fallen short over the years. By improving innovation by 10% per year, costs could be cut in half, and doubling that rate would be equivocal to doubling the RD&E spending level. This success would come down to the restoration of simple fundamentals:

- An environment and culture of energy and enthusiasm
- Entrepreneurial behavior at all levels
- The right people in the right places
- Sound business and technological strategies
- Improved processes for nurturing ideas
- Organizational mechanisms that could support the organization's drive for results.

Critical success factors also emerged from the client's innovation conference, focusing on: training programs at all levels within the company which would become a part of project reviews and the deployment of employees; rise of internal entrepreneurial behavior; and continued organizational self-examination.

As the innovation process continued, the company realized the need to develop links between technology, marketing, and manufacturing. It had become clear that "Innovation... was the glue that bound all functions into a cohesive team of inventors, producers, and innovators." From these successes, a program was launched -- to reengineer key business processes through continuous improvement of best practices. The overarching goal was to get the most from their innovative efforts. Together, the team sought to reengineer the process by which "creates, identifies, evaluates, prioritizes and executes against market opportunities."

Additional benefits of cross-functionality during innovative processes have been:

- A common language and understanding between teams of people;

- A framework to hold together the team in a global sense;
- All functions can actively participate in the production of the project from the beginning;
- Assistance in outlining deliverables;
- Shared ownership of the project; and
- An ability to balance between market requirements, manufacturing capabilities, and technological capabilities.

Continually, the company requires that employees undergo innovation training and follow a thorough set of guidelines and tools geared toward product innovation. As time passes, these training opportunities have been extended to more teams and functional units, continuing the idea of establishing and cementing a common language. This effectiveness on behalf of innovation has yielded large returns for the client; in 1994, total sales of products less than four years old was 30%, by 2001 that number increased to 80%. Through morning meetings, technical tutorials, research reviews, and communities of practice, is creating awareness. "It is about how scientists, engineers, technicians, and commercial managers are sharing knowledge, experience, and perspective on a regular basis. In doing so, they are optimizing, leveraging, reusing this key knowledge, experience and perspective... this translates into new product and process innovation - ideas into dollars." Through this mechanism, the company increases the number of people and disciplines involved, increases sharing between functionalities, and provides necessary tools for reuse. The innovation process is viewed as an iterative process where learning ties together the organization.

An example of continued innovation at the company is the fusion process and success of the Eagle2000 program. In the 1960's the client manufactured automobile windshields, a market which did not produce success. In the 1970's they were a producer of sunglass lenses and television tubes. Extending their presence in the display market, they began making flat panel glass for liquid crystal display applications like laptop computers, PDA's, and flat screen televisions. The Eagle2000 program allowed the company to make larger, lighter, thinner, and higher resolution displays for computers and home entertainment systems. Through the innovation process incorporating manufacturing, marketing, and technology, the client has guaranteed that the production process has met all performance requirements. A cross-functional team was established at the program's inception to diminish the existence of problems that may arise down the road when manufacturing is not involved in the early stages of development.

At the company, technology is never lost. There remains a continuous focus on the "knowledge reuse quotient" and the "learning machine." The company increases the number of perspectives they obtain within the organization, therefore extending the knowledge reuse base. Building a "knowledge (technology) warehouse," or archive, increases reuse by creating an area in which one can research and identify areas of past technology attempts and growth. The type of collaboration taking place ensures interactive collaboration, which will yield greater resource availability, contain costs, assist in company growth and stability, and create larger target populations.

The client also utilizes learning coaches who become learning advisors within the organization. These coaches are trained to be innovation project managers, skilled in the areas of adult learning and innovative effectiveness. Coaches join teams of participants and encourage them to share their knowledge, cross boundaries, and become effective collaborators. By being involved with more than one team, the coach acts as a bridge, cross-fertilizing the population of participants with knowledge.

The client has learned many lessons through the initiation of this innovation project; they know to:

- Start with a strong and visible champion who has a passion for innovation;
- Establish a link between the initiative and the company's goals and values;
- Form an iterative yet flexible process;

- Encourage cross-functionality;
- Leverage best practices and lessons learned; and
- Know who the customer is and what their requirements are.

Today, innovation is a continued focus. This dynamic process which features cross-functional and cross-disciplinary integration has enabled the company to make better, faster decisions. The rigid flexibility allows people and projects to overcome internal and external obstacles and provide increased opportunities. The client nurtures its innovation processes and uses them as a means through which to succeed.