AT&T UNIT IS FIRST U.S. MANUFACTURER TO CAPTURE JAPAN'S TOP QUALITY PRIZE

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AT&T Corporation
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Dallas, Texas -- AT&T Power Systems, a unit of AT&T Microelectronics, has become the first American manufacturer to win Japan's prestigious Deming Prize for quality management.

The Award was announced earlier today in Tokyo.

The Deming Prize was established in 1951 by the Union of Japanese Scientists and Engineers (JUSE), to honor W. Edwards Deming, an American whose quality methods helped Japanese companies achieve great commercial success in the aftermath of World War II. The prize, given annually, recognizes companies who have achieved significant gains in performance through Total Quality Management (TQM).

Receipt of the Deming Prize grows out of the unit's commitment in 1990 to TQM as the core philosophy of its business. However, AT&T Power Systems' use of TQM went beyond mandating Japanese quality principles. With TQM as a foundation, every individual in the company was challenged to accept personal responsibility for the success of the business, and to focus attention and resources on external and internal customer satisfaction.

"People want to be empowered and involved. Together we combined the discipline of TQM with the creativity of the individuals in our workforce. With the help of Bob Seemer, an American industrial engineer trained by Japanese TQM gurus like Akao, Ishikawa, Kano, and Kume, we adapted Japanese TQM to American manufacturing culture by building on the individuality of American workers," said Andrew M. Guarriello, Chief Operating Officer of AT&T Power Systems.

"The roots of today's Total Quality Management can be traced to the work of three AT&T scientists and quality pioneers -- Walter Shewhart, W. Edwards Deming and Joseph Juran," Guarriello added. "This award tells me quality in manufacturing has come full circle."

Since engaging Seemer in April 1990, the AT&T Power Systems unit has seen continuous gains not only in customer satisfaction, but also in productivity, quality and employee involvement. For example:

- The number of customers increased six times.
- Sales revenue grown by 20 percent.
- Operating return on assets (ROA) comparable to top 50 U.S. corporations.
- Customer satisfaction improved to industry-leading position.
- Product shipped to customers' request dates 95% of the time.
- Outgoing quality (ppm) improved by a factor of twenty.
- New product and introduction (NPI) cycle time reduced by one-half.

- Inventory and investment cut in half.
- Quality Improvement teams grown from zero to almost 300.
- Employee suggestions increased form 50 to 7000 per year.
- ISO 9000 certification for all locations.
- All chlorofluorocarbon (CFC) usage and toxic air emissions eliminated.
- More than 98 percent of all possible items recycled.
- “Workplace of the Future” model of union-management cooperation.

In Pursuit of Excellence: The AT&T Power Systems TQM Initiative

Introduction

AT&T Power Systems, a strategic business unit of AT&T Microelectronics headquartered in Mesquite, Texas, provides a variety of power products and energy systems for the data processing and telecommunications industries. As their contribution to the success of the overall AT&T Corporation, the 4,200 employees of Power Systems worldwide design, develop, manufacture, and market electronic power systems, components, and power supplies to an increasingly international marketplace.

In the past ten years, AT&T has been transformed from a large telecommunications monopoly focused on providing universal telephone service for the USA into a highly competitive global business whose mission is to provide a full range of communications services and technology -- anytime and anywhere. The new AT&T is no longer hierarchical and bureaucratic, but is instead a collection of smaller, highly focused businesses. Each has its own customers, markets, competitors, and accountabilities.

AT&T Power Systems is a very successful example of the “new” AT&T businesses. It has been reformulated in less than five years from an internally focused cost center within the parent company to a successful, globally competitive enterprise. To achieve this rapid and far-reaching result, the business unit’s leaders utilized the services of Bob Seemer, President of Florida-based Competitive Technologies (CTi) and his consulting team to integrate the concepts of Total Quality Management and six sigma with multiple initiatives and processes. Following are the key elements of the CTi transformation strategy:

1. Engage the leadership team – commit to success.
2. Define and formalize the mission.
3. Establish a vision of what success looks like.
4. Translate the mission into Key Performance Indicators (KPIs) with targets.
5. Prioritize the KPI gaps.
6. Develop a strategic plan to close the KPI gaps.
7. Develop the core and support process system.
8. Develop the integrated measurement system.
9. Deploy the measures to the employee performance appraisal system – creating “Golden Threads”.

10. Train the workforce to use CTi's Process Management and QIC Story logic models, and six sigma statistical tools for analysis and decision making.
11. Engage the workforce to improve process quality through Daily Work, QIC Stories, Poka Yoke, and suggestions.
12. Systematically improve all processes using CTi's Process Management and QIC Story logic models.
13. Review performance at all levels, rigorously.
14. Recognize and reward excellence.

Power Systems has become a prototype for successfully instituting major cultural and organizational change within AT&T, and is winning increasing acclaim externally as well.

History of AT&T Power Systems

Begun as the Dallas works in 1970, the Power Systems facility in Mesquite (a suburb of Dallas, Texas) was at that time a Western Electric manufacturing plant, responsible for building electronic switching systems. In 1983, these switching products were transferred elsewhere, and all power products manufactured for parent AT&T were consolidated in Dallas. Since that time, the facility has become an increasingly important supplier of products not only for AT&T, but also for other technology firms worldwide.

In 1988, the scope of operations was enhanced when AT&T Power Systems was established as a Strategic Business Unit of AT&T Microelectronics. This was followed a year later by the relocation of product marketing and management personnel to the Dallas facility, along with research and development employees previously located in New Jersey. With this move, Power Systems truly became an end-to-end business unit.

To enhance the synergy afforded by this consolidation, the Power Systems management team launched the "Dallas Vision" project, an initiative involving physical, organizational, and philosophical changes that soon led to the adoption of Total Quality Management as the management system for the future.

These changes, revolutionary in scope and impact, were not undertaken lightly. Power Systems before the consolidation in 1988 was not a healthy organization. Its sales were predominantly within the parent AT&T Corporation, and it was losing money. It was also burdened with a number of mature and declining product lines, and consisted of numerous locations separated by thousands of miles.

A "value added" analysis of the business at that point (along with the co-location of marketing, research, and development with manufacturing in Dallas) led to consolidation of several locations; significant reduction of the professional staff; elimination of several layers of management; and establishment of small internal business units, each focused on a particular customer community.

These units became the key building blocks of the organization, such as engineering, manufacturing, and product management -- to develop and manufacture products for its customers. Core functions -- such as human resources, finance, research, marketing and sales -- are provided by smaller organizations designed to support the internal business units.

Concurrently with the value-added study and formation of the new Power Systems organizational structures, the business unit's approach to manufacturing was also completely revamped. The Dallas facility, which contains 900,000 square feet of floor space, was arranged into small "focused factories" -- each with its own end-to-end capability to accept incoming material, manufacture, and ship finished products. The focused factory design was guided to a large extent by modern Just-in-Time (JIT) manufacturing principles. Among numerous advantages, one benefit of converting to focused factories was additional floor space that now accommodates co-located engineering staff.

Implementation of Total Quality Management

In April, 1990, the leaders of Power Systems made a far-reaching decision, agreeing to manage the business using Total Quality Management. Using Seemer's hybrid approaches to Total Quality Management and Lean Manufacturing, they adopted the key principles of Japanese style TQM, began to integrate these principles into the AT&T culture, and through Seemer, eventually sought the help of the Union of Japanese Scientists and Engineers (JUSE) in preparing for the Deming Prize examination. The TQM criteria developed within Power Systems were selected to ensure the company's ongoing focus on high standards for customer orientation, process excellence, employee involvement and continuous improvement.

To lead both the business and the implementation of TQM, the Chief Operating Officer and senior representatives of each internal business unit and core function formed a Quality Council and quickly began the arduous journey toward excellence that has now resulted in the Deming prize.

There are three major distinct components of TQM as it has evolved within the Power Systems. The first is Quality Policy and Strategy Deployment, the process of aligning the company's attention and resources on a few high-priority, customer-focused issues for the purpose of achieving breakthrough improvements in performance. The second is Daily Work or Process Management, a process of defining, measuring, and managing the day-to-day work of individuals and groups to obtain incremental improvements. The third component is Quality Improvement. This includes a structured, team-based problem-solving methodology known as the CTi Quality Improvement and Control (QIC) Story customized for AT&T by Seemer. Over the course of four years, AT&T Power Systems underwent a remarkable transformation to become recognized as one of the world's premier organizations. At the time of this release, more than 90,000 AT&T employees worldwide have been trained in the QIC Story methodology, including 1992 Malcolm Baldrige winners AT&T Transmission Systems, and Universal Card, Bell Laboratories, and AT&T International units in Asia, Europe, and the Middle East.

Dallas Power Systems' and AT&T's corporate leadership teams are currently finalizing plans to formally accept the Deming Prize in Tokyo, later this year.