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Identification of Critical Elements That Deter TQM Program Success

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IDENTIFICATION OF CRITICAL ELEMENTS
THAT DETER TQM PROGRAM SUCCESS

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A Culminating Project Presented to the Faculty of the
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ABSTRACT

This thesis reviews the Total Quality Management (TQM) program initially developed in Japan after World War II and its entry into the United States during the early Eighties.

TQM was incubated in Japan and matured into a viable program. TQM offered those who implemented the program improved quality products and improved cooperation between management and the workers for accomplishing common goals and objectives. The program focused on product quality and the belief that customer satisfaction is of key importance.

United States managers were searching for improved management programs to motivate workers, improve production and increase sales and profits. Global competitiveness was beginning to show on management's bottom line and something had to happen quickly. When the TQM program became prominent in the United States management believed they had a management program that

was simple and easy to implement. Armed with the belief that if the program is successful in Japan it would be successful in the United States.

Initial research on TQM programs in the United States indicated success was not as prevalent as in Japan. The question asked was why are enterprises in the United States encountering problems in the implementation of TQM? This thesis focused on identification of critical elements that deter TQM program success.

Research indicated there were key elements that are essential to successful implementation of TQM. A TQM program will fail if the following elements are not properly used in the implementation process. The elements are management commitment, willingness to make cultural changes, empowering employees, permitting employees to participate in the decision making process, continuing extensive employee training and satisfying the customer.

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Chapter I

INTRODUCTION

Management Theory Contributors

One may define management as the process utilized to enable a team to accomplish a task or multiple tasks. This definition does not relate to either efficiency or management expectations; however, most management organizations may believe management is a process to efficiently accomplish work as a team (Weihrich 4).

One may assume; if efficiency is involved in management then managers must be motivated to improve team efficiency. Furthermore, if managers are motivated by monetary rewards, personal fame or recognition, self gratification or maybe immortality then one is to assume that managers will search for any new or improved management philosophy and/or tools that will increase team efficiency (Shelley 11).

The evolution of management probably started when workers were found to produce more as teams than individuals. Maybe, one might assume efficient teams are required to build pyramids and maybe one might

readily assume good managers lead these teams.

Management texts do not identify acknowledgeable management theorists prior to the early twentieth century. The theorists of that time were not recognized authorities and they did not reach immortality in the field of management research.

Frederick W. Taylor "the father of scientific management" supported this concept. He believed early management and labor were both ignorant of a shared destiny in productivity theory (Wehrich 27). If the managers of that time were indeed ignorant then there were no management authorities to enlighten them. Taylor postulated this position first in his book Shop Management (1903) and later in The Principles of Scientific Management (1911). He was the first to gain recognition for team harmony where management and labor both gain through improved efficiencies, higher pay and labor training. This does not mean that all managers of the time quickly recognized what he theorized and then placed his concepts into action. This theme just seemed consistent with other management authorities of the time and was worth considering. During this same time period (1903 to 1933) there were several management theorists who gained recognition for

their research either during Taylor's studies or shortly after his research was published. The major early contributors, before the emergence of modern management thought, were Henry L. Gantt, Frank and Lillian Gilbreth, Henri Fayol, Hugo Munsterberg, George E. Mayo, F.J. Roethlisberger, and Chester I. Barnard.

Henry L. Gantt worked with Taylor and supported his beliefs that management and labor must work together for common gains. Gantt also espoused the need for increased personnel training, improved understanding of management and labor systems, and a better understanding of the human side (28).

Frank and Lillian Gilbreth also supported Taylor's scientific theories. Frank Gilbreth conducted studies related to wasted motions in performing various types of work functions in industry and offices. His wife, Lillian, was known as the "first lady of management". Both came to the conclusion that management did not show interest in the workers; therefore, the workers reflected discontent with the job and performance suffered (29).

The first modern management theorist may have been Henri Fayol from France. Even though, he rose to prominence during the early turn of the Century, Fayol

was known as "the father of modern management theory". His book Administration Industrielle et Generale (1916) identified fourteen principles (table 1) that were significant advances for the time and provided more theoretical depth than his predecessors' (31). The book was not introduced into the United States until 1949.

Table 1

Fayol's fourteen principles

-
- | | |
|-----|---|
| 1. | <u>Division of work</u> - Required for efficiency |
| 2. | <u>Authority/Responsibility</u> - Related factors |
| 3. | <u>Discipline</u> - Required from good managers |
| 4. | <u>Unity of command</u> - Worker has only one superior |
| 5. | <u>Unity of direction</u> - One head and one plan |
| 6. | <u>Subordination of individual to general interest</u> - management reconciles differences |
| 7. | <u>Remuneration</u> - Fair to management and labor |
| 8. | <u>Centralization</u> - Concentration or dispersion of authority |
| 9. | <u>Scalar chain</u> - Chain of command for decisions |
| 10. | <u>Order</u> - organize things and people |
| 11. | <u>Equity</u> - loyalty and devotion from subordinates while management provides kindness and justice |
| 12. | <u>Stability of tenure</u> - high turnover due to bad management |
| 13. | <u>Initiative</u> - drive to develop subordinates |
| 14. | <u>Esprit de corps</u> - need for teamwork and communication |

SOURCE: Koontz, Harold and Heinz Weihrich. "Management". New York: McGraw-Hill Book Company, 1992.

Another management theorist who recognized the worker was Hugo Munsterberg "the father of industrial psychology". Mr. Munsterberg identified three objectives for improved worker productivity in his book Psychology and Industrial Efficiency (1912). The first objective was to find workers whose mental qualities best fit their work assignment. The second was to identify psychological conditions needed for best productivity gains. The last objective was to determine how to influence workers for productivity improvements. His main focus, however, remained with the workers. He believed he could reduce their labor effort, increase wages and improve their "level of life" (33). Notice, "level of life" may equate to the "seventies" management program "Quality of Work Life" (QWL). The QWL program was popular due to its approach to job enrichment and sociotechnical systems(426).

George E. Mayo and F.J. Roethlisberger were also involved with research relating to behavioral sciences and management. They participated in the famous "Hawthorne Studies" at Western Electric Company conducted between 1927 and 1932. The study revealed productivity improvements were due to people being acknowledged on the job (Hawthorne effect) (35).

The last theorist reviewed was Chester I. Barnard a lifelong executive. Barnard published a treatise entitled, The Functions of the Executive (1938). Barnard believed the manager was responsible to maintain a cooperative effort between labor and management.

The management theorists of the past were definitely convinced there had to be some sort of shared understanding between management and the workers. Research seemed to indicate that if management treated the workers with respect and understanding, paid fair wages, provided training, implemented improved processes and trusted the workers then the worker would be more inclined to improve efficiencies and become more loyal to management. This central theme seems to pervade all early theorist thinking. In addition, their research supports their theories. Early theorists proved what was required of management to lead a team resulting in the fulfillment of management directed goals and objectives. It required an improvement in the workers standard of work life. The problem was, no universally accepted management philosophy existed. The managers may have listened to what the theorists suggested. They may

have adopted and implemented various aspects of the suggested philosophies. But, there was no recognition by any one organization that acknowledged their effort as viable in the real world. Of course, one may also wonder why trade unions developed and were sustained through management's philosophy during this period. And, one may note that the theorist at this time did not mention product quality, the customer, the suppliers, the public, the government or anyone other than management and the worker.

Maybe management did not have an opportunity to truly investigate the research performed by these theorists and implement their ideas completely. Maybe there was no reason to improve management skills and education. Maybe, administration was just waiting for the magic elixir of management (Shelley 11).

There was very little published before World War II that would have given management the idea that there was an easy approach with guaranteed success. Since that time there has been considerable research in the area of modern management.

Modern Management

During the discussion of the early theorists it was obvious the theorists would study the management problems for years and then publish their research results and recommendations. There has been a proliferation of literature telling management how to manage their business and the workers. Now, there is no time to spend years-conducting research. One must look for trends, quickly research for supporting evidence and then publish the results. Most managers are attracted to these new books that give a different twist to management philosophy. Too many managers rely on management fads. They are ready to react, regardless of the program prerequisite (11). This desire to jump at the first hint of an elixir can be traced to Quality Management becoming a "buzz word".

Maybe the most famous modern management philosophies were developed during and after the reconstruction of Japanese Industry following World War II. Key American Scientists and Engineers were requested by the Japanese Union of Scientists and Engineers (JUSE) to assist in the reconstruction effort. Joseph Juran was one of these individuals selected in 1954 to help JUSE (Clemmen 9).

Joseph Juran was a quality engineer with Bell laboratories. He had published Management of Inspection and Quality Control (1945) and the Quality Control Handbook (1954). In collaboration with Frank Gryna they later published Quality Planning and Analysis (1980) and Juran's Quality Control Handbook (1988). His expertise in quality control and development of quality systems were of particular interest to JUSE. Japan had decided their product quality was insufficient to meet current and future world demands. They; therefore, were interested in establishing a continuous quality improvement program throughout Japanese Industry.

Another significant contributor to modern management theory was Dr. W. Edwards Deming (Simanaitis 160). Dr. Deming developed what is known as Total Quality Management (TQM). His theories of TQM evolved when he was on the faculty at New York University in the Fifties. During this time he was not acknowledged as a world-renowned researcher or author; however, his theories relating to TQM and statistical quality control appealed to the Japanese and he was requested to join them (Wagner 7).

Probably Joseph Juran and Dr. Deming received most of the accolades for providing Japan with the management philosophies that turned their quality program around. Joseph Juran took the lead in developing quality systems with the appropriate quality standards, testing processes and quality improvement methods. Dr. Deming took the lead in developing a quality management philosophy that would support customer satisfaction, worker participation and continuous quality improvements. The Japanese accepted their teachings and are now recognized as world leaders in producing high quality products. The Japanese will not settle for poor quality parts for use in their products as long as they continue to improve quality. Toyota of Japan stated that TQM philosophy is inherently incapable of producing the level of quality now required by Toyota. Toyota requires "Zero Defects" in their products. There is no acceptance of products that are quality deficient.

Once Joseph Juran and Dr. Deming were acknowledged as world class experts in quality management, some thirty years later they were welcomed to the United States. U.S. Industries were experiencing difficulty

competing at home and abroad. This time lag gave the Japanese a thirty year head start in the development and implementation of quality manufacturing.

Juran and Deming developed the management theory and then provided the proof. The theory works in real life when the audience is receptive. The Japanese were receptive and willing to listen and practice what they were taught. The entire world could see the improvements made in Japan. U.S. management theorized that if it could happen in Japan, surely, it could happen in the United States. Total Quality Management (TQM) was now of age and was ready for U.S. businessmen to take the helm with the new tools for success. The program had been successfully incubated in Japan and was now a viable program.

Total Quality Management

It is important to understand Deming's 14 points to see why the TQM philosophy was immediately grasped as the magic elixir. The formula was obvious. Fourteen simple statements for success. All management had to do was follow the steps and product quality would improve and management and the workers could co-exist in an environment conducive to change.

Table 2

Deming's Fourteen Points

-
1. *Create consistency and continuity of purpose (create constancy of purpose for improvement of product and service).*

Comment: Managers must identify company objectives and goals that are obtainable.

Management and the workers, as a team, must commit themselves to continually improving product quality and services.

2. *Refuse to allow commonly accepted levels of delay for mistakes, defective material, and defective workmanship.*

Comment: Processes and quality systems lead to poor quality if not designed to eliminate quality problems. Quality standards must meet or exceed customer expectations. Work teams must not accept defects, mistakes, poor quality, and inefficient management practices.

3. *Eliminate the need for and dependence upon mass inspection.*

Comment: Quality is derived from processes and the quality system. Management and the workers are responsible for the quality of the product or the service. The workers build quality products, not the inspectors. The workers; however, must be trained in quality control inspection to

work within the quality system. If the worker does not understand customer expectations then the customer will receive only what the worker has built into the product.

4. *Reduce the number of suppliers. Buy on statistical evidence not price.*

Comment: Buyers must develop a supplier evaluation process to determine which suppliers consistently provide the best product for the best value. Buying from the lowest bidder may insure low quality. Buyers and suppliers should understand statistical controls. Buyers should routinely meet with their vendors to establish a common ground for negotiations and continually improve product quality. A small group of suppliers committed to improved quality and reduced costs is better than a multitude of suppliers with no interest in a long term product improvement program.

5. *Search continually for problems in the system (of production and service) and seek ways to improve it.*

Comment: The manager is responsible for the development of a process or system within which the team can function. The team has the responsibility to improve the processes and

systems resulting in improved product and service quality. Managers can delegate responsibility to the team but management is still responsible for maintaining focus. The workers can collect data, evaluate and determine direction to solve quality problems. Management must provide leadership and eliminate obstacles identified by the workers during their problem solving exercises.

6. *Institute modern methods of training using statistics.*

Comment: This may be the most important part of the quality improvement process. Training is the key to success. Untrained managers and workers will not provide the improvements necessary to satisfy the customer. The manager/worker teams must understand all aspects of team building, problem solving and solution implementation and project testing/auditing. The education and experience come first before the team can solve problems rationally with positive results and improvements. For example, the team should understand some of the basics identified below:

- Understand a histogram or process chart
- Construct a "fishbone" chart

- Construct a scatter plot or a derivative
 - Develop and understand a Pareto chart
7. *Focus supervision on helping people to do a better job. Provide the tools and techniques for people to have pride of workmanship.*

Comment: Management must recognize the importance to producing a quality product rather than quantity of product. Management must provide a work environment conducive to providing a quality product. This includes training, equipment, tooling, tools and the building of esprit de corps. In addition, management and the workers must focus on identification and solving problems.

8. *Eliminate fear and encourage two way communications.*

Comment: Fear from the workplace must be eliminated if TQM is to succeed (Suarez 1). Management controls the fear factor through either past performance or worker perceptions. Fear distracts workers from their goals. Fear is a barrier to performance because it is a negative motivator (2). Managers must understand fear and how to eliminate it. The only way to manage fear may be through employee participation programs and improved communications at all levels of the organization (5). Employees need to understand

what is required of them and what affect future planning has on their future with the company (5).

9. *Break down barriers between departments. Encourage problem solving through teamwork.*

Comment: Managers must depend upon team building techniques, problem solving processes, team participation and decision-making to help the team eliminate or significantly reduce barriers between departments. When team members have a vested interest in the success of the program then real gains in quality improvements will be visible.

10. *Eliminate the use of numerical goals, slogans, and posters for the workforce.*

Comments: Numerical goals identified by slogans and posters have a negative effect on employees unless they have developed the goals and have a vested interest in their completion. If management selects the goals then there is the belief that management does not know how they are to attain these goals.

11. *Use statistical methods for continuing improvement of quality and productivity, and eliminate all standards prescribing numerical quotas.*

Comments: Managers are responsible for removing barriers to workers progress in improving quality. Work standards and numerical quotas are

inconsistent with the quest for the quality improvement program. If the target or numerical quota is too high, the workers will sacrifice quality for quantity. If the targets are too low, the team will not try to exceed the target because there is nothing in it for them. Once the team has the necessary training and experience to evaluate the company's goals and have accepted them as their own they will have the capability to determine what levels of production are acceptable to meet the quality standards set by the team.

12. *Remove barriers to pride of workmanship.*

Comment: Management must make a concerted effort to improve communications and provide an environment conducive to pride of workmanship. Workers deserve recognition for a job well done.

13. *Institute a vigorous program of education and training to keep people abreast of new developments in materials, methods and technologies.*

Comment: Managers sometimes underestimate the training needs of team members. Training is effective when knowledge deficiencies are known. This means there must be a process to continually evaluate team member knowledge. The training

program is then tailored around them for a perfect fit.

14. *Clearly define management's permanent commitment to quality and productivity.*

Comment: Management must make a daily effort to enable the workers. If workers believe management does not support the program then they will immediately opt for non-support. All thirteen points of Dr. Deming's must be part of management's philosophy relating to continual quality improvement. Managers and workers must be trained to collect and evaluate information and have the capability to implement a program to solve the problems relating to poor quality.

SOURCE: Deming, W. Edwards. "Out of the Crisis." Cambridge: Massachusetts Institute of Technology, 1986.

Dr. Deming's 14 points (Table 2) are well known by all teams planning to implement a TQM program. TQM program implementation requires a thorough understanding of the 14 points. They all seem simple in concept and maybe that is the reason that the program was so popular in the Eighties. Everyone seemed to understand the concept.

TQM had its beginnings in the United States in the early Eighties. Its main objective was to meet or exceed the expectations of the internal and external customer. The internal customer is the worker in the organization that has a need for a part or service from another worker in the organization. The external customer is the person or organization who purchases the part or the service and sets the level of expected product quality.

The arrival of TQM brought many definitions authored by well known management consultants. John Oakland defined TQM in his book Total Quality Management - The Management of change through Process Improvement. He believed TQM was an approach to improving the effectiveness and flexibility of business as a whole. This explains the term 'total' from functional and organizational perspectives. It is the closest to our comprehensive definition, in which the term 'total' can even go beyond the internal boundaries of the organization (Oakland 1). Oakland provided this definition in 1989 approximately five years after Deming first presented his program in the United States.

A later definition was provided by J.R Jablonski in 1992 in his book Implementing TQM: Competing in the Nineties through Total Quality Management. He defined TQM as the cooperative form of doing business that relies on the talents and capabilities of both labor and management to continually improve quality and productivity through the use of teams. He further stated the three success keys to TQM are participative management, continuous process improvements and the use of teams (Jablonski 1).

Another definition was presented in 1993 by Mohamed Zairi in his book Total quality Management for Engineers. He defined TQM as a positive attempt by organizations concerned to improve structural, attitudinal, behavioral and methodological ways of delivering to the end customer, with emphasis on consistency improvements in quality, competitive enhancements, all with the aim of satisfying or delighting the end customer (Zairi 1). This definition included a wide range of critical elements, such as, leadership, mission/vision statements, quality policies, goals, communication processes, measurement, quality decisions, strategic planning and systems, procedures, specifications and standards. Related

concepts are problem solving, teamwork, innovation and creativity, continuous improvement philosophy, empowerment, incentives and process based production.

The definitions seem to improve with time. As the authors become more familiar with TQM, definitions, in turn, improve. The definitions listed above are those presented by modern management theorists who adopted TQM as a viable management philosophy. During the Eighties TQM was an exciting management subject. During the early Nineties TQM began declining in popularity with management. A 1991 survey of 192 major U.S. companies reported that over one-third of the companies that have been "working on" TQM for eight or more years are dissatisfied (Caldwell 3).

Why during the Eighties did Total Quality Management (TQM) emerge as the touted panacea for management's success but now has lost its importance in the business world? Some managers believed it was simply a management fad where others believed it really was "The Key to Success" (Wartenberg 1). Some management teams rejected it totally, others purported to implement it and still others seriously studied the concept or philosophy and decided to embark upon a new journey of continuous quality improvement (Romano 24).

Those who implemented the program found numerous surprises, problems and misconceptions. Today, one wonders what has become of TQM since companies have invested millions of dollars and several years in the program Caldwell 4). Has the era of TQM passed as many have before or is it still as viable a program as first suggested (Romano 23)?

This study will identify what elements have deterred further acceptance and growth in a Quality Program that originally was believed to improve customer satisfaction, product quality and financial performance. There are many which first believed in the program and were willing to expend significant implementation time and funds (Wittmann 33). These same believers are now disillusioned and convinced the program can not succeed in their environment. Some of the discontented have continued at a very slow implementation rate or have dropped the program in total. Now these same managers are waiting for another program that will replace TQM as the panacea for business success.

Chapter II

LITERATURE REVIEW

Chapter I introduces the reader to management's historical effort to improve business through better management techniques. Deming's "Fourteen Points" were included for a more thorough summary of TQM implementation requirements. Theoretical TQM definitions were also presented by some key management consultants to provide one with an understanding of TQM. Finally, the chapter provided insight into the advantages TQM offered managers and their organizations if they implemented the program.

The TQM implementation concept seems simple when one follows Deming's philosophy. Corporate America has seen positive results from Japan and other countries that successfully implemented TQM. Many U.S. Companies successfully implemented TQM and reaped the rewards. But TQM doesn't work the same every time at every company; in fact, there are times when it doesn't work at all (Paton 35). Those who tried TQM and were unsuccessful in their bid to improve

competitiveness and customer satisfaction through TQM are frustrated and are searching for new programs.

This chapter will focus primarily on literature Research that identified deterrents to the successful implementation of a TQM program. The chapter provides statistical data that support the concept that organizations have encountered extensive problems implementing the program and in many cases have abandoned the plan (Miller 5).

A perspective of TQM is presented through a more detailed definition of expectations for the TQM organization. These expectations are then expanded to include management 'elements' that help improve the environment. TQM by definition will fail if these elements are either absent or partially absent from the implementation process.

TQM Implementation Opinions and Statistics

The literature search was conducted to review opinions from management experts and survey evaluations relating to TQM viability. In many Instances, authors share the same view.

Dr. W. Edwards Deming stated, when discussing if TQM is a fad, "It is a buzzword. I have never used the term, as it carries no meaning" (Romano 22).

Dr. Tom Peters, president of the Tom Peters Group and author of Thriving in a Chaos and Liberation Management, stated,

TQM has failed for three reasons. First, TQM Done right is away of life, not a program. It becomes the religion, organization's logic and culture of the firm. Second, as Dr. Deming has said, and most have ignored, the essence is a belief in the capability of the front-line employees . . . Third, many quality programs are not customer-focused. They are internal programs run by technocrats. (Romano 23)

Wayne Hunicke is president of Advantage Management Systems in Orlando, Florida. He identified the following TQM implementation deterrents. He found management delegated TQM implementation without personal involvement. Managers utilized shortcuts to obtain quick results. A minimal real training effort was established for all employees. He also found decision-making remained at the top and there was no indication management would change their cultural thinking or provide an environment conducive to

employee decision-making. Management would probably not change priorities. Lastly, quality improvements were seen as worker tasks rather than strategies involving all employees (Hunike 2).

Surveys conducted by The Conference Board in 1991 indicated one-third of 192 major U.S. companies that had been "working on" TQM for eight or more years were dissatisfied with the TQM program (Caldwell 3). During the same time, Dave Butler, of Dave Butler Associates in Los Altos, California, identified a survey of 601 senior corporate quality executives relating to their perceptions of TQM. Forty-nine percent of those surveyed had not implemented quality improvement programs (5). In 1994, a TQM rating survey of 3,391 organizations revealed that sixty-seven percent had either implemented or were considering implementing a TQM program (Mercer 19).

Carl Reimann, director of the Malcom Baldrige National Quality Award (MBNQA) program, indicated in 1991 there were 240,000 applications for the award. Two years later, 1993, there were only 145,000 applications (End of Quality 4). The MBNQA program was established to award those organizations that

exhibited excellence in their TQM programs. The MBNQA program; however, does not recognize the quality of a company's products or services (Hart 36). The decline in applicants was attributed to the difficulty in applying and the effort to substantiate and document TQM gains. In many cases, those practicing TQM utilized the MBNQA criteria as a guide to their TQM implementation program (36).

An Ernst and Young report in 1992 challenged some of the major elements of TQM, primarily, benchmarking" and "empowerment". The report found these elements provide little or no boost to some organizations. The investigation also revealed that some of the organizations had been harmed by the program (Miller 5). Another survey indicated that eighty-five percent of U.S. managers thought TQM had failed their organizations (5).

Altmann Weil Pense conducted a survey of the nation's 500 top law firms in 1994. There were 147 respondents, fifty-eight percent indicated they were in the process of considering implementing at least some elements of TQM. The problem was only ten percent had implemented TQM (TQM Talk Cheap 37).

James Ryan, president of North-coast Leadership Inc., indicated sixty-seven percent of the surveyed companies reflected quality efforts failing from 1985 to 1995 (14). Ryan also believed that most executives could identify what must be done to revive stalled quality efforts, but that it is difficult to put these solutions to work.

Another survey with 250 leading U.S. companies in 1994 indicated only sixty-eight percent of the companies used a TQM strategy (Avoid the Fad 19). During 1994, Supervisory Management Magazine conducted a FAX poll. Supervisors and their staff members were asked how they felt about total quality initiatives. Scores were based on a scale of 1 to 5 ("strongly disagree" to "strongly agree"). A score of five was not received for any question. Low scores were given to questions related to communications, agreement on what is important for the company's success and whether managers practice quality or only preach quality (Low Down on Total Quality 4).

A survey of Federal executives in 1994, conducted by the Federal Executive Institute Alumni Association, revealed fifty-two percent of the respondents had a

negative rating of TQM (Reinvention Hurts Morale 2). The Wall Street Journal and Newsweek have also taken turns at challenging the effectiveness of TQM. Evaluations by these publications indicate quality oriented companies still have something to learn (Hunicke 1).

Phillip Crosby, management consultant and author of Quality Is Free, conducted a 1995 survey of the top ten small businesses located in the Willamette Valley in Oregon. His findings revealed only two of the ten had TQM. The others were either involved with alternative quality systems or were utilizing management books and seminars for their quality program (38).

Wayne Hunike stated,

Providers of . . . products and services are just as frustrated. Their profits are shrinking, the competition intensifies, and everyone is struggling to do more with less. Total quality Management (TQM) was supposed to solve these problems, but the projected benefits haven't materialized. (1)

Hunike further summarized that after fifteen years Of hard work, business efficiency remains low, quality processes have been slow to start, difficult to

sustain and many have abandoned TQM (1). He also believes most improvement efforts involve only a small percentage of employees and the TQM results have been hard to quantify (1).

Li Chung Shih, Department of Information and System Management at Hong Kong University of Science and Technology, conducted a study to determine if TQM implementation is possible outside of Japan. Her findings indicated many factory managers believed the program would only work effectively in Japan and was not suited elsewhere (15).

Management consultant's opinions and organization surveys listed above are obviously only a portion of the many surveys conducted and opinions of various interested parties. However, one can readily see the statistics indicate many organizations are not content with TQM as a program.

TQM Perspective

David Butler provided an excellent summary of the "why" and "what" of TQM. The consensus for the need of TQM was based on the concept that a business could not accomplish world-class quality by using the so-

called traditional approaches to managing product and service quality. Where as the traditional approach consists of "inspecting in quality", the TQM approach is to "build quality into the product and/or service" (5).

Butler presented a general description of TQM expectations. Simply stated, if an organization meets these expectations then TQM is in place. Lacking one of these critical expectations will probably result in poor organization performance and give the indication that TQM is not a viable program.

Butler identified twelve expectations/descriptors that an organization possesses if it has implemented TQM properly (5).

1. The ability to recognize customer's future wants and what the organization must do to meet or exceed these expectations.
2. Employees know how to analyze problems by utilization of analytical tools to comprehend information related to the problem.
3. Employees know the most effective data to control in order to satisfy customers and

ensure effectiveness and efficiency. This includes revising standards and procedures as required.

4. The CEO sets one to three crucial goals for the year and these goals become the manager's own goals. The manager then identifies measurable milestones for each goal and personally audits monthly, documents, and sends up through the organization to facilitate diagnosis and improvement.
5. Employees know not only what is meant to be done and how best to do it, but also why and how to improve their performance month by month.
6. Employee teams, consisting of the most appropriate employees, regardless of their job or title meet problems and challenges.
7. Managers use effective planning and problem solving tools on a routine basis.
8. Cross-functional teams assure that the processes of delivering customer requirements are managed on a consistently

high level throughout each sector of the organization.

9. Employees know their suppliers, customers and the needs and capabilities of each. The team seeks methods to improve their interface on a routine basis and agree to measurable standards.
10. Pertinent information is recorded and provided to those who need the information. In addition, improvement activities are audited at all levels to assure that each employee reaches their full potential.
11. Managers see their role as supporting the rest of the organization's improvement activities, and where decision-making is delegated to the lowest level possible.
12. Every year the organization learns from its successes and failures; then applies those lessons learned and treats all problems not as failures, but as opportunities. It is this continuous improvement process that develops the gains for the enterprise over the long haul.

Butler provided the basics for an understanding of TQM expectations. As stated earlier, there seems to be no problem with the TQM process. Follow the TQM expectations and all is well. The problem, however, lies with the implementation of the organization's 'elements' that support and make it possible for the organization to meet these expectations. The organization's typical or average employee does not possess the skills required to meet each of the expectations listed by Butler; such as, knowing what the customer expects or how to analyze problems by using tools to understand variability and related data. These skills are learned through an organization's training program and through communication courses. These programs are administered by an outside firm or performed internally by trained professionals.

These TQM 'elements' have common terminology acknowledged by those involved with TQM implementation. The organization determines 'element' priorities. The typical programs involved with TQM are corporate culture changes and management commitment, management's empowerment of all employees,

employee participation and decision-making, customer satisfaction and quality training for all employees.

Implementation Concerns

A significant effort is required of management to make a commitment to TQM implementation. TQM demands more than some organizations are willing to provide. Those organizations groping for the answer found TQM implementation to be time consuming, difficult to sustain and slow in producing measurable results (Hunicke 1).

Wait Thompson, a consultant in Duluth, Georgia, responded to a Fax Forum from Training & Development Magazine. He believes the biggest mistake in TQM is in "not understanding the time it will take to make it happen" (Is Quality Dead 21).

Robert Masters, author of Overcoming the Barriers to TQM's Success, determined managers did not effectively utilize measurement techniques and lack access to data and results (55). This is why Butler stated that TQM takes time to plan, develop, train, implement and sustain TQM (4). Documentation and the time it consumes are an absolute necessity and when it

does not occur at all levels within the organization TQM fails.

There are three concerns that must be acknowledged and responded to for TQM implementation. TQM requires a significant amount of **Time**. The program is not a quick fix. Team members/employees must be willing to change long-held perceptions and exhibit the willingness to expend significant time to analyze and change methods and processes. TQM takes **Training**. Team members/employees must have the necessary training to perform as a viable team. Members are required to understand current processes and have the ability to determine how these processes are improved. In addition, they must have the skill sets to identify solutions and statistically document resolution. TQM takes **Tenacity**. The team must recognize the need for the program and seek resources and commitment from all members (Butler 4).

Corporate Culture Changes and Commitment

Probably the number one implementation problem is corporate culture changes and commitment. Top Management in many cases does not take the TQM

implementation process seriously (Caldwell 3). Some organizations use the "flavor of the month" promotion (Hunicke 1). Employees hear what top management states as their goals, however, employees know from management's actions that they are not totally behind the program (Is Quality Dead 20).

Shirley identified the need for management to change their role from one of monitoring, controlling, telling, etc., towards one of coaching, facilitating and change. Management incompetence in these areas has caused problems with TQM implementation (271).

There is also the problem with professionals totally understanding TQM and the implementation process. Most professionals view the concept as patronizing. There also seems to be a lack of understanding that TQM requires a strategic plan and this too is driven by top management (Harte 43).

Dr. David Chaudron, managing partner of Chaudron Associates of San Diego, stated,

Management must define the company's mission, its critical indicators of success, its basic organizational structure (lines of business) and its major strategies, as well as decide who will develop the implementation plans. (13)

Other management organizations also believe quality is accomplished by a system such as TQM or code words, such as, continuous improvement, customer satisfaction, benchmarking, etc. (Crosby 38). In 1996, Shelley wrote, "Today, the briefest exposure to what looks like a pattern will result in a book. Like so many other elixirs, it did not fail companies because the idea was bad. TQM failed because managers dealt with it superficially" (11).

Robert Masters identified the number one barrier to plague organizations most often was lack of management commitment and the inability of management to change organizational culture (53).

Eileen Shapiro wrote in her book Fad Surfing in the Boardroom: Reclaiming the Courage to Manage in the Age of the Instant Answers, "Avoid the temptation to implement every new technique and then operate on autopilot" (Abramson 1). Managers are so busy looking for the perfect answer to their business problems that they can not dedicate themselves and their resources to only one program, such as, TQM.

Lakshmi Tatikonda wrote,

Despite spending millions of dollars on quality improvement activities, many firms fail to see significant improvements in quality and profit. While there is no one specific approach to achieve success from quality improvements, the firms that failed show common characteristics as lack of vision, lack of management commitment, organizational structure, company bureaucracy and obsolete accounting systems. (5)

Dave Butler identifies strong quality leadership as an essential attribute of TQM. Many managers have difficulty adopting new management techniques. They, in many cases, cling to long-standing practices that are inconsistent with TQM principles. TQM leaders are required to focus attention on quality improvements and overcome the inevitable inertia and resistance to change. This is done through the creation of clear goals and developing the systems and methods for achieving these goals (4).

Dr. Juran believed the most frequent reason for TQM failure was the failure of upper managers to have personal involvement. The top leaders for successful TQM companies like Motorola and Milliken & Co. did not delegate this responsibility. They provided the personal attention to accomplish the job (Romano 22).

Hunicke found most TQM efforts overlooked three

ingredients, strategy, structure and synergy. There is insufficient effort to connect a strategic plan with mission and organization objectives/goals. Many focus on the objectives and not on the strategy. Example, growing sales by twenty percent is not a strategy. It is an objective or goal. The strategy should identify the action "be the leader in Customer Satisfaction" (2).

Structural barriers to TQM implementation are inconsistent management goals and objectives, inadequate resources (labor, equipment, facilities) and systems misalignment (inconsistent performance evaluations, compensation, promotion policies, sales quotas and production quantity verses quality). Synergy barriers are identified where the workplace is filled with examples of people working "on" each other, rather than "with" each other (2).

Osabeth Kanter, professor in the Harvard Business School and author of 11 books including The Challenges of Organizational Change believes the key deterrent is management's failure to connect TQM programs with business strategies. Research has indicated organizations that have had problems with TQM have

allowed other strategic initiatives to take precedence over TQM programs that are suppose to drive system-wide changes. Furthermore, where the organization drives profit maximization over program development TQM suffers (Phipps 50).

Some organizations are in the process of implementing the ISO 9000 or related ISO programs. This has caused conflict with TQM implementation processes. Resource sharing is difficult in this situation. ISO requires development of a quality system and therefore the emphasis will be on processes and resource management (Black 92).

One of the respondents to a Fax Forum from Training & Development Magazine stated, "If practiced properly- no [it's not a fad]. Without true executive-management and middle-management commitment-yes" (Is Quality Dead 20).

Another comment in the same magazine said management commitment is what makes TQM work. This opinion was shared by majority of Fax Forum respondents. Anthony P. Rao, training coordinator at Buffalo Envelope Company, said the biggest mistake is "jumping into the program thinking that it is an

instant cure for everything wrong in the organization" (Is Quality Dead 21).

Mark Brown, quality consultant with Axis Performance Advisors, believes the number one deterrent to successful TQM implementation is management's demonstrated non-commitment to the program. Managers provided no clear appearance or serious interest in the program. They did not meet with team members to determine what was happening in team meetings and there were no published results from management on program progress (58). In addition, most managers did not provide adequate resources to accomplish the job. Lack of funding revealed a non-commitment from management (58).

Small firms have similar problems implementing the TQM 'elements'. The owner/manager's lack of business experience and knowledge and the shortage of financial and human resources greatly deter successful TQM implementation (Haksever 33).

Gloria Lee, from the Aston business School in England, believes that there are many instances when the smaller organizations do not have the financial or training resources to invest in a TQM program.

Limited resources may cause a partially implemented program to fail due to the organization's inability to continue investing in the program (413).

Jack West, president of the American Society of Quality Control, believes many companies assume canned programs will solve their implementation problems. Management assumes their support is not needed with a canned program. (Romano 24).

The General Accounting Office of the Federal Government conducted a survey of failed TQM implementations. They found the absence of senior management action was uniformly evident (Caldwell 1). These senior managers did not exhibit the willingness and discipline to alter their management behaviors. They did not exhibit a day-to-day effort to reflect the strategic importance of TQM (2).

David Gregerson, vice president for quality at the Carrier Corp., believes most leaders will meet only one or two of the three major factors for TQM success. The three are, management leadership, employee participation and technical systems (Romano 25).

According to surveys conducted by The Conference Board in 1991 in which one-third of 192 major U.S.

companies were dissatisfied with TQM provided evidence that senior management did not become seriously involved with the TQM process (Caldwell 3). The same study revealed senior management was not providing customer feedback into the strategic initiatives for improved customer satisfaction (3).

Another deterrent related to management commitment was organization downsizing. Employees believe this program is not consistent with TQM. They believe TQM caused the downsizing. The TQM National Research Panel in 1994 discussed the relationship between TQM and 'Downsizing Programs'. The panel found that the lack of effective TQM causes the organization to downsize. If management had followed TQM then business would be on the increase and there would be no need for downsizing (Powell 48).

Employee Empowerment

Dr. Arthur Pell stated,

Although it is often difficult for executives who are accustomed to dominating an organization to let others make decisions, it is necessary to loosen the reins. Empowerment in these organizations is not just an abstract idea but a way of life. Move out of the comfort zones. (26)

Maybe the next critical TQM required 'element' is employee empowerment. Empowerment is defined as the action to give official authority or legal power to an employee. Empowerment is one of the first changes recognized by employees; however, many companies during the implementation process neglect it in total or make a half-hearted effort to convince the work force.

Jack Asgar conducted a 1994 survey of all MBNQA participants, 250 leading U.S. companies. The study found that only thirty-five percent of the companies reported utilizing self-directed teams. Self directed teams are possible only when team members are empowered (How to Avoid Fad Trap 19).

Harvey Robbins wrote, in Why Change Doesn't Work, often when the organization calls a big meeting and informs all employees that from now on everyone is encouraged to do whatever is necessary to make customers happy; but "whatever was necessary" had strings attached, and within a couple of weeks those strings were yanked back (3).

Ransom, of Ransom and Associates, an Ohio-based Consulting firm, agreed with Douglas McGregor whom

believed there were three categories of managers: They were Theory X, Theory Y and Theory Z. Theory X managers believe, as described by McGregor, that workers are fully responsible for failure and do not believe that workers should participate in the decision-making process. Theory Y managers believe the opposite. They suggest business success will be greater if employees share responsibility by participating in management decisions. Finally, Theory Z managers conversely use the full power of the organization to reach personal and business goals. In other words, they utilize the organization's resources to the maximum.

The first hurdle for a Theory X manager is to change their relationships with their employees. It is difficult for a Theory X manager to change to a Theory Y or Z manager in a day or to change at all (Baker 19). Theory X managers are incapable of empowering employees and act as a deterrent to TQM. Whereas, Theory Y and Z managers have the ability to change work culture and enable empowerment (19).

Dr. Pell is also a strong believer that TQM requires a drastic change in the manner in which an

organization is managed. This is neither a superficial change in policy nor a veneer that is superimposed on existing structures (26).

Empowerment is ineffective when the company's organizational structure and decision-making processes are weak and staff members do not know they are there for the benefit of the team, not themselves. Failure to provide lower-level management and employees with the accountability for evaluating and recommending proposed new initiatives creates a feeling of fear in the work place. The workers do not want to become risk takers if they believe they will receive disciplinary action for poor problem resolution.

A study was conducted in 1997 by Thilaka Weerakoon, Department of business Studies, Hong Kong Polytechnic University. The study focused on 26 selected manufacturing organizations in the Hong Kong area that were ISO 9000 certified. There were 13 medium sized (150 to 999) organizations selected and 13 large sized (1,000 to 9,999) organizations evaluated. The study concluded the organizations were not realizing the full benefits of TQM due to the lack of empowerment. Lack of empowerment was attributed to a lack of

management commitment. Employees had a negative perception that management was not giving anything to the employees, only to the stockholders (306). Executives in a number of organizations reported employee morale had dropped, tension between management and employees seemed to have increased; yet, management believed that they had an empowered work force. Empowering employees was not the same as the development of teams that work together for a shared destiny.

Employee Participation

Employees need to participate in the decision making process and believe they are contributors to the organization's success. The action taken by many organizations consist primarily of empty goals and objectives. The rewards remained the same, employees still feared taking risks, and managers were not trained to become coaches, obstacle removers, resource providers and communicators. True empowerment was not completed and the employees knew there was not sufficient program backing. Management's effort resulted in continued employee resistance (Ryan 14).

Jack Asgar stated Management's Utopian goal for good business was to always drive decisions to the lowest level, involve teams in the decision making process and satisfy customers (Baker 19).

True employee participation occurs when all employees have the opportunity to participate with management. Employees are held accountable for quality and are given tools and training to fulfill this participative responsibility (Butler 4). Butler believes as others that TQM is based on the assumption that the employees are in the best position to understand and improve product and service quality(4).

David Dairies, a quality officer with First Security Bank, in Portland, Oregon responded to a Fax Forum from Training & Development Magazine in 1995. He stated, "Unless employees buy in, kiss your efforts goodbye" (Is Quality Dead 20). Another respondent, Twohig, said "Not getting feedback from front-line people is one of the greatest mistakes made during implementation" (20).

Research conducted at the University of Southern California reported that North American managers permitted only twelve percent of employees to

participate in teams. The teams were given some degree of control over the day-to-day decisions relevant to their jobs, but they only received information directly related to their tasks (Managers Drag Heels 28).

Robert Masters also determined that managers did not utilize empowerment and teamwork development to accomplish TQM (55). Dr. Chaudron believes team dynamics cause these problems when there was no effort to identify power blocs and interest groups for the team. Management failed to properly communicate with their employees. In addition, there were no feedback groups to assess employees' thoughts and feelings (14).

Lowell Arthur, Denver-based quantum improvement consultant, and the author of Improving Software Quality identified five of the biggest deterrents to TQM. The first was teams focusing on learning and not on results. Arthur said,

Remember, we set goals for the number of people trained and the number of teams started. Wrong goals! Measure success by reductions in defects, cycle time, and the costs of waste and rework. Deming's immortal cry was for 'profound knowledge' (47).

The second mistake was lack of focus. Teams have the opportunity to "brainstorm" problems; however, the problem's resolution must be within the control of the team. There is a tendency to fix other team's problems. The teams are not focused on the Pareto principle where twenty percent of your effort resolves eighty percent of the problems (48).

The third mistake was lack of sponsorship. Teams have difficulty selecting the appropriate problem study. Time should be taken to carefully research the proper problem for study. They should relate to better, faster and cheaper methods (48).

The fourth mistake was trying to involve everyone; not just the people focused on major results. There must be an effort to train the trainer and not involve everyone at the same time. The fifth mistake relates to the fourth, which was teaching theory instead of developing real world experience. It is difficult to learn how to teach the subject without knowing how it actually works in the real world. There must be "a hands on experience" to really teach the subject of TQM and the problem solving processes (48).

Harvey Robbins, New Jersey consultant, found

numerous problems resulting from teams, that prevented TQM from succeeding. Most teams were incapable of determining goals or objectives because of insufficient training. Teams stopped work or were ineffective and arrived at bad decisions. Other problems were personality conflicts and no one was trained to resolve differences and obtain team interaction and consensus. Other key concerns were lack of tools, unwillingness to change, lack of team trust and lack of a fair and consistent reward program (2).

Dave Butler defined continuous improvement as the team's fundamental attribute of TQM. It comes from the belief that all business operations and work activities can be improved. It requires the development of a management approach that encourages management and employees to identify and take advantage of on-going improvement opportunities (4).

One reason for team failure is management and employee attention to internal processes rather than on external results (Harari 41). This may be due to the team's inability to employ problem-solving techniques that engage the employee's creative

processes and call for thinking at a higher level. Among them: brainstorming, force field analyses, cause-effect charts and Pareto analyses (Ryan 14).

Houda Samaha believes that TQM focuses only on improving current practices, but identifying work processes that need revamping or replacing is vital to finding new, more efficient ways of doing business. TQM does not permit breakthrough innovation because it requires the ability to throw out old, unproductive processes and techniques in favor of new, cutting-edge approaches (145).

Dr. Deming found many companies believed slogans, banners, posters and pledge cards were all that was needed to help people improve processes and jobs. Dr. Deming believed employees already want to be proud of their work and need the tools, methods and organizational culture to help them do their jobs. He had considerable problems with the quote from Marshall MacDonald, chairman of the board of Florida Power and Light, "Do it right the first time." Dr. Deming wondered how an employee could do it right the first time when the specifications are in error, the machines do not hold tolerances and there is

insufficient training (Voehl 11).

Many organizations fail TQM when they utilize the committee concept versus the team concept. Committees are comprised of members who have their own agendas and biases. A TQM team is comprised of members who have a single goal/objective (Jacobs 11). Problems arise from teams who are not committed. The member or members may fail to listen to other members, they may not understand team dynamics and they may not understand consensus decision-making (12). A University of Southern California survey found only ten percent of employees in Fortune 1000 companies are engaged in the most sophisticated approaches to participatory management (Managers Drag Heels 27). Those same employees failed to receive the proper training, and the required information and authority to make decisions. The employees become simply uninformed advisors (28).

A communications survey was conducted by Kepner-Tregoe a management consulting firm in Princeton, New Jersey. The survey of more than 1,500 workers and managers in New Jersey emphasized the communication gap between management and workers. The survey found

that most employees felt unmotivated and almost 50 percent thought that their peers were miserable in their jobs. Sixty-seven percent of the managers, though, believed workers were glad to be part of the organization (Joinson 76). Managers believed employees knew what they were doing and enjoyed their work.

Jill Dooney, from the PA Consulting Group of England, believes a major TQM deterrent is the failure of management communications to employees. Employees want to know what is in it for them. Program support is significantly reduced if the answer is unacceptable (142).

Other respondents to a Fax Forum from Training & Development Magazine indicated the biggest mistakes were; lack of follow-through, forcing teams to perform, wrong prescriptions for change, allowing short-term problems to erode support for long term TQM goals, and de-humanizing the work environment (received from a respondent who refused to give his name due to fear in the work place). It is this fear that limits some team members from participating.

Some employees embrace or accept change. Others

resist it. Fear causes team members to discount quality, neglect integration effort, mistake the means for the end, and punish resisters. Fear is real; it will not be driven from the workplace because employees and managers are human. As such, they have spoken or unspoken fears, fear of others, fear of situations, and fear of themselves not measuring up. Instead of fighting or denying it organizations must be practical, honest, realistic and make fear work for them (Shearer 98).

Webster New Collegiate Dictionary, 1975 defines fear as an unpleasant, often strong emotion caused by awareness of danger (Fear). Fear is also often confused with anxiety. The psychological literature shows no universal differentiation between the two states (Suarez 1). Dr. Deming suggested elimination of fear is necessary to create an environment of trust and cooperation, essential to initiating and sustaining a TQM effort.

Dr. Suarez is the Director Research and Technical Review Division for Total quality Leadership Office in Arlington, Virginia. He believes a common problem with leadership activities, related to TQM

implementation, is the inability of the leader to identify when fear is present and how to redirect this energy. Typical fears found in the workplace are fear of reprisal and receiving poor appraisals. These fears generate attitudes of "please-the-boss," "look-good-at-any-cost," and "just-do-what-you're-told". This leads to lower work quality, displeasure with the customer and reprisal against the organization (2). James Ryan echoed Dr. Suarez. Fear in the workplace is a deterrent and must be driven away if implementation is to progress successfully (15).

The performance appraisal process, especially, forced distribution, is not acceptable to Dr. Deming and his TQM process and philosophy. The recommendation is to develop an alternate to the traditional appraisal process to more closely eliminate the factors that are not controlled by the employee (Boudreaux 23).

Ernst and Young's research indicated improper use and poor development of teams resulted in TQM implementation problems. They found many teams were working on too many projects at the same time. In addition, they found procedures and processes were not

simplified resulting in lengthy cycle's to get things done (Jugenheimer 1).

Employee Training

Failure to provide quality training may well be the most important factor in TQM's lack of success (Brown 58). Many managers obtain canned training programs for distribution for all to view and learn. Training requires detailed planning to ensure that all employees obtain the best and most appropriate training (58).

Deming and Juran based their work on using hard skills such as statistical techniques and other methodologies to identify and solve problems. Employees who do not have these skills and those related to their job are at a disadvantage and this affects the TQM program (Pell 27). The organizations fail to train their employees and leaders in such areas as ethics, quality, customer orientation, vision, working in heterogeneous work groups, cultural differences and interpersonal relations. People are "cross trained" to learn the jobs that others are doing. The concept of people being hired to do just

one type of work is over (27). Leaders require additional training in organization, communication, delegation and controlling (27).

Art Wittmann believed the problems of insufficient training were reflected in the need for TQM process changes. TQM requires a constant "measure and improve . . . measure and improve" process. Failure to train makes this activity impossible (33).

TQM fails when trained leaders are not available. Leadership training requires feedback to measure training success. Managers lacking proper training should take additional courses to strengthen their coaching skills (Brown 58).

Maybe the most difficult training task falls within the area of quality tool training. Employees are not receiving adequate tool utilization knowledge for the job. Hands-on experience is not taught in all organizations, usually there is only classroom training. Classes must be relevant to the job (58).

Another respondent; Sandy Rocheleau, a quality education manager with Ames Rubber in New Jersey, said that the most common mistake was lack of training for all employees "in the principles, language, methods

and tools of TQM. All employees must hear the same quality vocabulary" (Is Quality Dead 21)

Masters also discovered managers did not provide adequate or sufficient continuous training and education to accomplish TQM initiatives (54). Ryan also believed many organizations failed to make the connection between continuous learning and TQM. U.S. firms spend less than 1.5 percent of payroll on training, while our competitors in other developed countries spend 5 to 7 percent. Employees must continually acquire new knowledge and skills and apply them in the changing workplace (15).

Mike Evans, British Steel at Shotton Works in England, believes training is one of the most critical aspects of TQM implementation. His company during the 1994/1995 period expended 33,000 worker-days of training for \$5 million. During 1995/1996 another \$6.5 million was expended (62).

Marty Wartenberg is a corporate training consultant at the University of California, Irvine. He recognized the five management fundamentals as planning, organizing, staffing, directing and controlling; however, he believes the skills for the

21st century manager are motivation, communication, coaching, conflict resolution, problem solving, decision making and change management. The prescription for failure, according to Wartenberg, is when management believes there is no need for training in these areas (62).

Forbes Magazine published an article identifying lack of proper training and poor information systems as deterring a successful TQM implementation effort. In addition, they stated that development of poor objectives/goals slows the process (Way too Short 72).

Research conducted in 1996 showed a lack of organization for training in terms of policies, records, planning and review of the training undertaken in the companies studied. Numerous problems were encountered with the training which are related to time, finances, personnel, and lack of adequate training program information. This also included knowledge of the means of obtaining external support for the training (Examination of Quality Training Needs 1).

Lack of training continues to be a source of TQM failure. The lack of funding is directly related to

program success. For example, the Air Force budgeted over \$34 million for training in 1996. This training provided four hours of classroom effort for 850,000 personnel. The Air Force believed this was sufficient; however, a smaller organization may require more training or less training (Hoff 202). The training requirement depends upon the organizations cost benefit analysis.

Many organizations may not provide the initial training provided by the armed services. The typical recruit in the armed services receives six weeks of extensive basic training and from eight weeks to two years of specialized training. Part of this program provides the basics for TQM training.

Customer Satisfaction

Irwin Gross is professor of marketing and the executive director of the Institute for the Study of Business Markets at Pennsylvania State University. He wrote,

- There are three perils that cause TQM failure:
- 1) customers may express satisfaction or dissatisfaction to gain advantage;
 - 2) resources used to relieve customers'

expressed dissatisfactions often are misspent; and 3) using customer satisfaction to measure performance may detract from the business's economic performance. (56)

Masters also determined that management did not pay adequate attention to internal and external customers (54). Internal customers are those who work within the organization and external customers are those who purchase or receive goods or services from the organization.

McConnell suggests a problem with TQM failure relates to the inability of an organization to focus their attention firmly on the customer. They do not strive to meet or exceed the customer's needs. The organization's structure is so bureaucratic it becomes the customer but not the real paying customer (5).

A large part of customer satisfaction is employee satisfaction with the organization's cultural environment (Brown 59). Employees are not asked if they are able to contribute to the company and many have no decision-making responsibility or authority. Finally, employees are not asked if they have the necessary training to perform the work as required or the understanding of TQM and its principles (59).

In a report in Human Resources Management, "Why Quality Initiatives are Failing." Daniel Steininger stated that the leaders of a company that manages for total quality must serve employees first. Employees who feel valued and respected will perform at a higher level and from the customer's perspective, these employees are the corporation (Ryan 15).

Ryan indicated this is not a new management concept. He believes management is reluctant to go to the employees, admit to mistakes and ask for their help in fixing the problems. It is easier to abandon the quality initiative and move on to something else (14).

Tom Stewart of Fortune Magazine believes management's focus on "internal customers" is dangerous to the success of TQM. He believes the internal customer does not always have the ability to determine what level of quality is required to support their individual departments. They may expect too much or too little. Stewart suggested; teams focus on the external customer - the one with the money (119).

Obviously, the paying customer has a priority; however, Richard Blackburn, associate professor of

business administration at the University of North Carolina at Chapel Hill, believes there are departments in the organization that have no external customers. He believes that the Human Resources Department is one that does not have an external customer. He found that if the HR department does not provide training resources or quick response for the internal customer, Human Resources becomes a deterrent to TQM implementation (69).

Chapter Summary

This chapter summarizes the literature search conducted to determine typical deterrents to a successful TQM implementation program. There are ample literary sources available for review. The literature abounds with information presented by acknowledged management consultants, executives and various surveys conducted by universities and prominent independent research organizations. The literature sampled was reviewed and the evidence indicated that many organizations experienced serious problems with TQM implementation.

The major TQM implementation problems or

deterrents were attributed to management's failure or inability to, provide management commitment, empower employees, permit employee participation and decision-making, understand customer satisfaction, and adequately train all employees. A more detailed study of these elements and their effect on TQM implementation will proceed in Chapter III.

Chapter III

SELECTIVE REVIEW AND EVALUATION OF RESEARCH

Chapter III introduces the reader to more details relating to the TQM implementation deterrents identified in Chapter II. Most of the authors identified in Chapter II obtained their information through existing research performed by others or by conducting surveys of corporate executives who were familiar with or believed they were familiar with the TQM implementation procedures. Their input is more closely analyzed in the following pages.

All of the research data collected in Chapter II pertained to the central theme of this paper, to determine deterrents to the successful implementation of a TQM program. The research indicated that all managers are continuously searching for a better method to manage an organization. They will search until they find one that is acceptable for their organizations.

The research indicates numerous management theories

abound concerning management techniques and there are indications that TQM was an excellent candidate for total acceptance in the business world. The opinions of management experts in the field and surveys conducted clearly revealed that TQM has inherent implementation problems. More clearly stated, TQM will fail if management does not have a plan and a reason to incorporate TQM into the organization. A key precept of TQM is the belief that management has to understand their customer's expectations. There is no TQM if the customer is not satisfied. In order to accomplish this, there must be a recognized unifying need to muster employees support behind the program.

The program must fit within the confines of a culturally acceptable environment in the organization for the 'elements' to grow and sustain the program. The research indicated that the first step was missing in the majority of the organizations who tried and unsuccessfully failed in their attempt to implement TQM. Management's total commitment to the program was absent which was evident to the managers and the employees.

In addition to the lack of management commitment

researchers discovered the leading 'elements' missing from the unsuccessful organizations were lack of employee empowerment, employee participation and decision-making, employee TQM training (team building, problem solving, solution analyses, documentation, benchmarking and auditing) and inadequate understanding of customer expectations (Masters 54).

Data Research Methods

The research data collected in Chapter II summarized research from some fifty-one authors. In each case, the author identified one or more sources for his or her comments or opinions on the subject of TQM implementation problems. There were approximately twelve surveys listed in Chapter II that were conducted by the same authors who listed their opinions after conducting the surveys. The Wall Street Journal and Newsweek Magazine conducted two of the surveys. These surveys may have been more familiar to readers due to their global circulation.

The surveys were conducted, for the most part, on large organizations that would have more management experience and resources to implement a program

properly. There were some surveys conducted on smaller manufacturing organizations; however, the results were the same as with the large organizations.

The surveys identified in Chapter II requested that over 4,200 organizations give their opinions on various TQM issues. Only those issues related to TQM implementation deterrents were reviewed and evaluated. Simply stated the respondents were requested to identify if they had implemented TQM, were thinking of implementing TQM, and whether the program was a success or failure. Additional questions were asked related to what 'elements' the respondents believed caused the downfall of the program.

It was simple for the respondents to identify if the organizations had or had not implemented the program. It was more difficult to determine why the program had failed or why the program was not implemented. This required the respondents to give opinions. These opinions may have been based on facts or speculation. One may surmise that if the respondents had not been TQM trained then the respondents would not have known what was required to implement TQM. This would have made it extremely

difficult to determine root cause for program failure.

Researcher's Conclusion Evaluation

There is no doubt that the research data is accurate related to which organizations accepted or rejected the TQM program. The opinions offered by the respondents with failed programs indicated what 'elements' were missing from the implementation program. Since all 'elements' are necessary for implementation, it was easy to determine that the authors had properly interpreted the surveys. The respondents presented their reasoning as to why the program failed and indicated that either one or more of the 'elements' were not included as part of the implementation program.

The survey statistics reflect that the majority of the organizations that implemented the program dropped the program and all of the surveys centered on the five 'elements' that were necessary for the implementation process.

The time frame considered most effective in determining TQM implementation deterrents was from 1991 through 1997. TQM started in the early eighties

Nearly a decade was offered before studies indicated there were problems with TQM. No information was found that indicated organizations are currently implementing the program in 1998. Organizations have either accepted the program and are sustaining the program or they have decided TQM was not viable for one reason or another and have abandoned the program.

There seem to be no limitations acknowledged by the researchers. The process they followed to collect and then to analyze the data seemed consistent. They all arrived at the same conclusion. The evidence seems quite clear. TQM is not the magic elixir as it was first believed and the deterrents for a successful program have been derailed due primarily to lack of management support.

Chapter IV

RESULTS

Research conducted to determine the deterrents to TQM success resulted in some interesting findings. First, more insight was gained on what TQM is and what it is not. Secondly, the study identified how and why TQM began initially as a highly touted easily implemented and results oriented management program of the future and for the future. Finally, it reflected why manager's loss faith in the program and why managers still do not know how to implement mutually beneficial programs for management and the workers.

The study provided linkage between turn-of-the Century Management Theorists and the introduction of TQM during the eighties. Early theorists believed a relationship must exist between management and the workers to improve production efficiency and job training. TQM also requires the development of a bond between management and the workers to reach mutual goals and objectives.

Henry Fayol identified fourteen principles for

management success. Division of labor, authority, discipline, worker loyalty and devotion, management kindness/justice, worker initiative, team esprit de corps, etc. These principles were a break through when Fayol presented them to management. Today, Fayol's principles are well recognized by managers and believed to be the basics for management. Managers who fail to recognize the value of these principles could not obtain worker support and would; therefore, fail in their management task.

The early management theorists after Fayol did not have the opportunity to fully test their theories of management and worker cooperation; whereas, TQM was tested in-depth with excellent results in Japan. It was the real time testing that allowed TQM to gain momentum in the United States. Japan had started gaining a competitive edge on the United States through improved quality products that provided customer satisfaction with price and quality. The environment was conducive for the early development of TQM in the United States.

Managers immediately recognized TQM as an easily developed program with outstanding results. This

belief was evident when Deming identified his fourteen points to improved Quality Management. The points were simply stated and managers readily assumed that all that was required to implement the plan was to follow these simple fourteen points.

The result, a significant number of business organizations investigated TQM and identified internally how the program would be implemented quickly to gain an early advantage. There were books prepared for management's ingestion and consultants were readily available for consultation on how and when to develop TQM in the workplace.

Management recognized a foundation of certain precepts, also known as TQM elements, were required to improve quality and productivity. Management recognized there was a cultural difference between the current workplace culture and the new required culture for the incubation and maturation of the TQM program. The study indicated that management also recognized the inherent need to make a firm commitment to the workers and the enterprise if the program was to succeed. The other precepts, employee empowerment,

employee participation, employee decision making, customer satisfaction, quality training, etc. would follow.

The research on enterprises planning for a TQM program revealed three primary difficulties encountered by the enterprise. One, the program was more time consuming than initially envisioned by management. Resources were required that exceeded management's expectations. Extensive training was required for both managers and workers. Teams were unable to obtain historical data required to develop improvement plans because the data was not available or had not been developed in the past.

Two, the program was difficult to sustain. More resources were required to maintain daily TQM activities. More training was required as the teams matured and became more participative in team decisions. Management commitment was changing as other priorities moved TQM to a lower priority.

Three, the results envisioned by management and the workers were slow to materialize. Management's placement of a high priority to develop the program

weakened as quick financial and quality gains were not evident. Workers complained of not participating in real enterprise decision making. The workers believed they were not really empowered and management was not continuing to support the program with visual management participation. Worker training did not continue to ensure employees understood the TQM program. Employees did not have the extensive training required to enable them to identify problems and develop solutions. Management was giving negative signals to the workers. Workers responded with the attitude that nothing has changed and it is business as usual. Any gains were lost through apathy.

The results of this study indicate true deterrents to the implementation of a TQM program. The program is simplistic in nature, but difficult to implement without a well-built foundation to support management's and worker's expectations.

Chapter V
DISCUSSION

Summary

Results summarized in Chapter IV present a rather discouraging view of TQM. Management theorists in the past have indicated a need for management and workers to co-exist in harmony; thereby, improving efficiency and training. Modern day theorists in the eighties brought the advent of customer satisfaction through improved product quality and value by implementing TQM. The customer satisfaction concept ensures the customer will continue buying the product as long as they are satisfied.

TQM requires building a foundation or creating an environment conducive to support TQM precepts or elements. These primary elements are management commitment, cultural changes, employee empowerment, employee participation, employee decision making, customer satisfaction, quality training and elimination of fear within the workplace.

The research conducted and summarized in this study clearly indicates the primary deterrent to a successful TQM program implementation is lack of management's support or commitment. When management failed to totally support the program the implementation failed. In addition, when management recognized other enterprises encountering TQM implementation problems they believed they would have the same problems. This was again a reflection of lack of management commitment. The program sounded good initially; however, during implementation support faltered.

The next major deterrent to implementation relates to the cultural changes necessary within the organization to develop an environment conducive to program development. The authors researched believed most managers recognized what must be done to improve relations with the workers; however, they lacked the management commitment and training to build the TQM teams into viable problem solving entities.

Management failed to recognize that workers are not enabled without extensive training. In addition, workers as well as managers require extensive TQM team

building and problem solving training. Employees embraced the concept of participating in making decisions based on management's introduction of employee empowerment. As the management support weakened so did the decision-making. What management had given they also took back.

Management's introduction into the world of TQM revealed there were significant costs involved with the training programs necessary to develop managers and workers into well organized participative and decision making teams.

The initial training activities were designed to bring managers and workers together for the common good of the enterprise. Fear and distrust had to disappear and open discussions and trust would emerge as the replacements. When workers recognized management had lost interest in the program, fear and distrust immediately replaced open discussions and trust.

Organizations that failed had common problems. Management would recognize the program was not developing as quickly as initially planned, implementation costs were increasing and the financial

gains were not evident. Many managers quickly responded by eliminating the required resources for the program; thereby, causing the program to immediately fail. Again, reflecting management's lack of program commitment.

The TQM program was basically identified as a simple plan to obtain management commitment. This was easy because management wanted an easy method to improve competitiveness. TQM worked well in Japan with significant improvements in quality and customer satisfaction. Everyone was looking at TQM, so why not? The required elements for success were also simple. Prepare posters and campaign slogans. This would indicate management's interest and commitment to the program. Train the employees, empower them and let them participate in decision making activities.

The problem, many organizations did not evaluate the program in totality and develop a program where TQM would be consistent with their strategic plan. Those who failed to implement or were unable to sustain the program failed to recognize the need for long-range goals of making small continuous gains verses break through gains. The American enterprises

were expecting the large gains. The Japanese, on the other hand, recognized the need for small continuous gains over a long period of time. That is one of the reasons why the program succeeded in Japan. In addition, Japan was able to use TQM as a stepping stone to gain worldwide recognition for their product quality.

The precepts of TQM continue to be an excellent management tool. Utilizing the program will generate significant rewards if the enterprise is there for the long haul. Those who have sustained the program have placed themselves in a more competitive position for the next Century.

This study indicates clearly that management's commitment is of paramount importance for successful TQM program implementation. The management commitment enables the new teams to develop through training to reach the necessary levels of competence so they can be empowered to make decisions relating to the enterprise. Fear is eliminated, mutual trust prevails and management and workers cooperation matures.

This study has contributed knowledge on how to avoid the pitfalls prevalent in the TQM implementation

program. Close adherence to the findings in this study will enable the reader to develop a TQM program consistent with enterprise strategic goals.

Commitment to a plan that has been fully explored noting all resource requirements and time will result in a successful program. Training becomes the keystone for success after management makes the necessary commitment to the enterprise and the workers.

Limitations

There were no limitations noticed in the research. The authors researched had an excellent grasp of the TQM program and fully recognized the commitment required by the enterprise to succeed. Most of the authors had researched the subject with supporting research results. The study was directed to identify where organizations encountered problems with the implementation program. Most participants were candid in their remarks; but, there is always the probability of fear or reprisal within the organization for one to freely tell the researcher what problems really exist within the organization.

It was assumed that the data obtained in research was truthful and limited fear was involved or the participant was protected.

Suggestions for Future Research

Information from an organization's President or Chief Operating Officer, etc. would add more credence as to why they believed the program failed. It would be difficult to believe they would say they were the reason it failed. They may believe their subordinates, senior management, may have failed the organization. It may have been them that failed to make the commitment not the President.

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