TOTAL QUALITY MANAGEMENT AND LEADERSHIP PERSONALITY

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ABSTRACT

In recent years, the philosophy of Total Quality Management (TQM) has received much attention. [1,2,3] This philosophy espouses that quality achievement in products or services is a never-ending process and primarily a management responsibility, not that of the worker. It is also known as a philosophy of continuous improvement TQM has been lauded as the management style of the 1990s and beyond. TQM, however, is not the traditional style of management known to U.S. industry.[4,9] It is proposed that management leadership personality preference has an affect on the degree to which TQM is successful in its implementation. The Myers-Briggs Type Indicator (MBTI) can bean effective tool investigating management leadership personality.

This paper highlights the ingredients within a company that are necessary to properly implement the philosophy of TQM. We discuss first the history of TQM, then the history and use of the Myers-Briggs Type Indicator (MBTI) as a personality inventory used in industry to assess personality of management and the worker, and finally how proper use of both Deming's philosophy and the MBTI can contribute to successful implementation of TQM.

TOTAL QUALITY MANAGEMENT

Outline of Total Quality Management

Dr. Edwards Deming was credited with comprehensively defining the philosophy of management called TQM, the philosophy of continuous improvement.[5] Dr. Deming outlined what was termed "continuous improvement" in the U.S. and Kiazan in Japan by developing a list of "fundamental principles", known as Deming's 14 points, for management to follow. [1] These points define TQM as a philosophy of management, not as a tool or a process. This is a key concept because a tool can be picked up and put down as perceived to be needed by the user — a philosophy on the other hand is attitudinal, where tools are used to support the philosophy. For many in the TQM movement Deming's 14 points define the essence of the TQM philosophy. [1]

TQM can be defined as a philosophy with a set of concepts and tools for allowing all employees to be focused on continuous improvement. The successful use of this philosophy requires the collection of data from a process under consideration, the use of brainstorming (a method of obtaining new ideas to solve a problem), advanced experimental models for problem solving, and broadly-based reward and recognition of the worker.[5]

The customer, whether internal (the person who receives another's work) or external (the final consumer), must be recognized as one of the most important factors in the process of TQM. [1] McDonnell [6] suggested that a Total Quality Management System (TQMS) is both a philosophy and a discipline intended to change how people work. He contends that the TQMS system should be aimed at total customer satisfaction — obtained by producing the highest quality products at the lowest possible price.

Talley [7] defined TQM as a new management philosophy that is consistent with Deming's definition of continuous improvement. Talley, as well as Deming, believed that managing for quality meant making major

changes to the corporate culture. Such changes include a radical shift in the philosophy of an organization and an ongoing commitment at all organizational levels to seek continuous improvement. As well, in order for this corporate culture change to take place, top management must take the leading role.

Usilaner and Dulworth[8] found that TQM, when properly implemented, had far-reaching positive effects on employee relations, operating procedures, customer satisfaction, and financial performance. Expected outcomes of successful implementation include: (a) higher and less variable quality of product, (b) quicker and less variable response all the way to the final user, (c) lower cost through quality improvement of the product or service and waste elimination, (d) increased market share, and (e) increased company growth.[5,9]

In summary, TQM is a philosophy that requires a radical cultural shift from traditional to new management styles in an organization. The philosophy recognizes the customer, both internal and external, as the ultimate influencer of a product's or service's quality. The philosophy of TQM also recognizes the employee as the most valuable resource of an organization. As captured by Deming's 14 Points, tapping this resource requires training and retraining, removing fear in the workplace, encouraging pride in workmanship, and providing tools instead of slogans or numerical goals to accomplish tasks.

TQM Implementation

In order for TQM to be implemented effectively, a corporate culture change must take place. Top management must take the leading role and be willing to accept the responsibility of the company's failure or success.[7] Japanese managers have adopted the philosophy of TQM as the nationally-acclaimed way of doing business.[1] In the U. S., however, implementation of TQM has had more failures reported than successes. 10 These failures can be attributed to companies that "change" their old ways of doing business by simply renaming them.]] For example, a company may claim to adopt TQM but actually not implement it as a philosophy. Rather, they would simply implement some of the tools used by TQM oriented companies. Companies that are most successful in implementing TQM possess one major attitude: If it's not broken, then improve it. *[2]

Waldman[9] and Bahls[13] proposed that the culture of a company has much to do with the successful implementation of TQM, although little empirical research has been conducted to reinforce this proposition. Usilaner and Dulworth[8] found that corporate cultures indicative of excessive hierarchy, rigidity, and a lack of trust between management and labor are incongruent with TQM. Therefore, companies possessing this climate must change in order for TQM to be successfully implemented. They also stated that such changes take substantial time (about 6 years).

Management at the top levels of an organization are responsible for implementation of TQM. If top management refuses to get involved and support the new philosophy, it will most likely fail. Top management must support this philosophy both monetarily and morally or TQM will probably not survive.[1] Here-in we find the source of energy for all company-wide projects in industry (be they TQM implementation or anything else), management leadership. This paper suggests that in studying management leadership personality we can be lead to a more complete understanding of the needs for successful TQM implementations.

Personality, Behavior and Culture for TQM

Personality and behavior of leadership have much to do with TQM implementation. Forsha 14 suggested that behavior affects the acceptance of new ideas and philosophies. Managers implementing TQM must regard the ideas and concerns of their clientele and employees. Bushe[15] stated that a culture nonconducive to TQM may allow only those leaders to emerge who emphasize short-term productivity goals, associated rewards for goal attainment, and maintaining organizational agendas rather than providing new agendas.[9]

In order for TQM to be effective, certain aspects of leadership have been cited as necessary:

1. Top management needs to give workers more power over their tasks, allowing them to make decisions.[16]
2. TQM is systematic; the entire organization must be viewed as an interconnected whole. 17

3. Top management must maintain a long-term perspective, not just a view of short-term goals such as quarterly results. [12]

4. Top management must be a role model, walking the talk. [12]

-5. Top management must inspire confidence by encouraging personal development of workers and simply saying thanks. [12]

6. Top management must ensure that workers' needs are met. 18

7. Individual goals must be recognized and respected. [2]

8. The need for employee training and retraining must be recognized. [1,2]

9. Employee self-efficacy beliefs and ideological values must be enhanced. [26]

One of the strongest personality characteristics needed from top management in order to appropriately implement TQM is genuine concern and respect for the people that work for them. It is necessary for management to realize that most all workers have an intrinsic motivation to do their job well, and it is the management's responsibility to provide the tools to do so.]

An understanding of the personality preference type of top management personality, therefore, would be helpful in assessing proper implementation of TQM. The Myers-Briggs Type Indicator, a personality inventory. is a tool that can be used to gain this understanding. [19]

MYERS-BRIGGS TYPE INDICATOR

History of Myers-Briggs

Categorizing types as they relate to personality has a 65-year history. Briggs and Myers both became fervent followers of C.G. Jung, a Swiss-born psychiatrist, after reading his works. [20] Jung believed that behavior is not random and can therefore be classified — that behavior is not the result of psychological sicknesses, abnormalities, or disproportionate drives but instead is directly correlated to personality preferences. According to Jung, these preferences emerge early in life and form the basis of an individual's personality. These preferences become the basis for an individual's attractions (and aversions) to people, tasks, and events during his or her entire life.

During the 1930s, Myers and Briggs observed and developed ways of measuring type differences. During World War II, they recognized that people were working at jobs that were not suited to their abilities. They then set out to create a psychological instrument that would explain type differences based on Jung's theory of personality preferences. They named their instrument, which identified 16 different personality types, the Myers-Briggs Type Indicator (MBTI). The intent of this instrument was to establish a taxonomy of individual preferences that would promote a more constructive understanding of the differences among people.

Kroeger and Thuesen [20] believe that as the proper placement of people in the workforce becomes more and more important in order to be competitive, the use of the MBTI becomes increasingly important. They believe that people properly placed will be happier doing what they are doing therefore, more competitive. They also believe that personality is very slow to change. It takes long periods of time and day-to-day effort to make substantial changes to personality.

According to McCrae and Costa [21], the MBT1 is an unusual personality assessment device because of three reasons: "(a) It is based on classic theory, (b) it purports to measure types rather than traits or continuous variables, and (c) it is widely used to explain an individual's personality characteristics not only to professionals but also to the individual and his or her coworkers, friends, and family".

The MBTI Described

The MBTI consists of four personality category preferences that make up an individual's personality "type" (e.g., ISTJ, ENTP, INFP, etc.). 21 The first three categories are directly from Jung, the fourth was added by Myers and Briggs. A personality type is not a measure of excellence; rather, it is an indication of the

environment, or attitude, that individuals are most comfortable in and work best with. According to Myers and Briggs, these preferences as defined by the MBTI are broken into four categories as in Table 1 below:

Table 1: Categories of the Myers-Briggs Personality inventory 21

Category One: Extroversion versus Introversion

Extroversion (E):   Is comfortable with people and things, expresses emotions easily, and is friendly, talkative, and easy to know.

Introversion (I):   Is comfortable with ideas and thoughts, does not express emotions easily, and is reserved, quiet, and hard to know.

Category Two: Sensing versus Intuitive

Sensing (S):   Uses the 5 senses to become aware of things, likes precise and routine work, is not comfortable with solving new problems, and takes pleasure in the current moment.

Intuitive (N):   Uses unconscious ideas or association to become aware of things and likes solving new problems, planning for the future, and forging ground in new areas.

Category Three: Thinking versus Feeling

Thinking (T):   Uses logic, makes decisions based on facts, likes to analyze and organize, doesn't like to confront or express emotions, and is skeptical when approaching problems.

Feeling (F):   Likes relationships to work well, enjoys pleasing people, is sensitive to others, makes decisions based on values and impact upon people, and is trusting when approaching problems.

Category Four Judging versus Perceiving

Judging (J):   Is orderly and organized, likes to finish tasks, likes to make quick decisions, and likes to make plans.

Perceiving (P):   Is curious, adapts well to change, likes to start many projects but may have trouble finishing them, and may have difficulty making decisions.

When taking the MBTI each person gets a score on each of the eight preferences. Per Myers and Briggs, the highest score per category indicates their preference for that category and therefore becomes a portion of their personality type (i.e., ISTJ, ENFP, etc.). This is not to say that individuals are "graded' as either an E or an I (for example), rather it provides a measure to what degree a person may have a natural preference for E-type behavior versus I-type behavior. Myers and Briggs stress that with the MBTI there are no "right" answers (thus the reason it is called an inventory versus a test). Each individual's score is meaningful to them only

Testing Using the Myers-Briggs Type Indicator

The MBTI has been used by US industry in a number of areas, including: job assignment, performance appraisal evaluation, strategic planning, negotiating, and marketing.[20] The list on organizations that have used the MBTI in one manner or another includes: Allied Signal, Apple, AT&T, Citicorp, Exxon, General Electric, Honeywell, and 3M — as well as many churches, the US Airforce and many others, Personnel managers have

used the MBTI for: identifying leadership styles, training employees to work together better, conflict resolution and forming complementary work teams.[23] Moore [22] stated that widespread use of the MBTI in executive circles has provided substantial opportunities for data collection. Moore also stated that the use of the MBTI when used-with managers is intended to help managers better understand the way other managers relate to them. It also aids in team-building, improving customer service, reconciling group differences, career-planning, adapting to change, analyzing troublesome behavior among employees, and facilitating competitive strategic thinking. All of these outcomes are ingredients to the philosophy of TQM. Mills, Robey, and Smith [24] empirically studied top project management personality type using the MBTI. They found the typical project management personality was found to be either ESTJ or ISTJ (either Extroverted or Introverted, Sensing, Thinking, and Judging). This finding is congruent with the idea that top project management personnel are only concerned with getting the job done, even at the cost of personnel. Mills et al. [24] associated this ESTJ or ISTJ personality with the following characteristics: hard-nosed, insensitive, goal-oriented, unemotional, cold-blooded, demanding, self-dependent, impatient with hesitation, and insistent on getting the job done.

Kroeger and Thuesen [20] also found that ESTJ or ISTJ is the predominate personality type of top managers. Their study of 2004 top management personnel from industry revealed important information pertaining to preferences of personality (Table 1). A compilation of these preferences showed that approximately 6 l% of top managers in the United States possess the ESTJ or ISTJ personality type.

Table 1: Identification of Top Managers Possessing Specific Preferences of MBTI

Element	o/o of Preference	Element	o/o of Preference
• Extroversion	47.1	• Thinking	95.4*
• Introversion	52.9	• Feeling	4.6
Total	100.0	Total	100.0
• Sensing	66.1*	• Judging	87.6*
• Intuition	33.9	• Perceiving	12.4
Total	100.0	Total	100.0

Note: N = **2004,** underlined numbers indicate insignificance between the two numbers. * Indicate primary preference of that category

Additionally, Kroeger and Thuesen [20] discovered certain characteristics of personality types in their study. They found these characteristics to be: Sensing (S) people tend to take the attitude that if it's not broken, then don't fix it. This thought process in itself goes against the philosophy of continuous improvement that advocates, if its not broken, improve upon it. As well, Sensitive-Thinking (ST) types preferred hard data and logical analysis in reaching decisions with little feeling associated with the decision. They perceived more risk and were more reluctant to adopt a project. The Intuitive-Thinking (IT) types preferred logic to test several premises before coming to a decision. Intuitive-Feeling (IF) types believed that decisions could not be made without considering the context of the problems. Moro (1990) indicated that Sensitive Feeling (SF) executives tended to seek consensus from the group forming their decisions. They were more tolerant of risk and more likely to adopt a project which is in line with the philosophy of TQM.

IMPLICATIONS

The literature indicates that very little empirical research has been performed on the effects of TQM ant{ how top management personality or behavior relates to implementation of TQM. Many theories have been proposed for TQM, and many theoretical articles have been written about TQM, but none have attempted to assess the personality of top management as it relates to successful implementation of TQM. The Myers-Briggs Test Indicator offers the possibility to bring the issues of TQM and personality together so as to better understand the successful implementation process of the philosophy of TQM.

The authors are currently active in developing a research plan and strategy to research the manner in which management leadership personality affects the implementation of TQM. As an example, Figure 1 provides a hypothetical model that could serve as a basis to analyze the relationship between TQM implementation and four factors: (a) CEOs' personality types, (b) their belief in TQM as a philosophy. (c) their time period of commitment to TQM implementation, and (d) their level of commitment to employee education within the company.
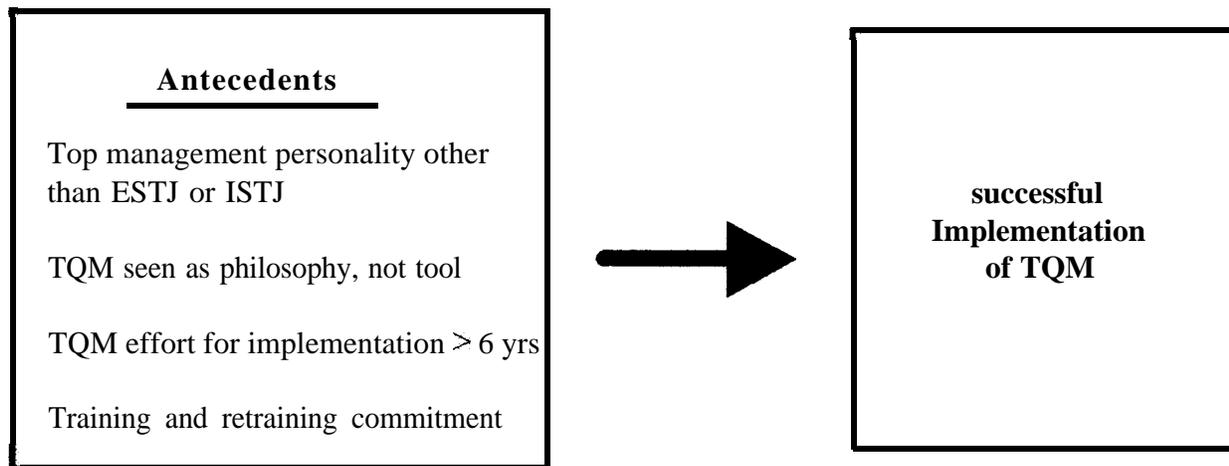
Antecedents

Top management personality other than ESTJ or ISTJ

TQM seen as philosophy, not tool

TQM effort for implementation > 6 yrs

Training and retraining commitment

→ **successful Implementation of TQM**

Figure 1: Hypothetical Model For Analyzing Leadership Personality Effects on TQM

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