Total Quality Management (TQM)

Total quality management (or TQM) is a philosophy, commitment, as well as a business strategy adopted by an organization that involves the entire work force to work as a team to achieve the company goal. The “couch and player” relationship between employers and workers in a TQM environment is quite different from the “master and servant” relationship of the early 20th century and the “management and union” relationship of the post World War II.

Significant drivers for TQM practices in an organization stem from two basic instincts: business survival and being competitive in the world market. Key issues of TQM rest on product differentiation and customer satisfaction. And the U. S. printing industry is in no exception.

A series of activities in recent years have put greater emphasis on the importance of quality, namely, the Malcolm Baldrige National Quality Award, customer-supplier partnership, and ISO 9000 series quality system standards. Technological advancement, such as automated data collection and faster printing presses also help the worker to work smarter and put quality on a higher ground.

Implementing TQM

Quality awareness. TQM implementation begins with quality awareness. For example, if the more a company is producing, the more the company is losing, then every employee in the company should ask himself or herself the question, "Do I know what poor quality costs my company?" In addition,
everyone needs to know the difference between responsibility and authority. Here, quality should be everyone's responsibility. For example, one must know what's the right thing to do. Further, he should ask himself the question, "What should I do to improve the quality?" However, the quality assurance manager has the authority over many quality related activities. In either case, everyone must be accountable for what they do.

**Understanding quality.** Quality should be defined as "meeting customer's requirement" and "conformance to specifications". The definition of quality would be more meaningful to a supplier if it is interpreted upon a well-defined company quality policy. Further, it is supported by documented practices and procedures along with established standards. Here, standards can be mandatory (such as OSHA and EPA regulations) or voluntary (such as SWOP and ISO 9000). Today, the emphasis of quality has been placed on defect prevention. Thus, the role of inspection is to sample the product to learn about the process variability.

**Understanding customer's needs.** TQM is about meeting and exceeding customer's quality expectations. Heightened customer quality expectations include (1) Fewer non-conforming parts will be expected, (2) Less tolerance for product errors, (3) Less number of suppliers desired, (4) Shorter cycle time from product ordering to product shipment, and (5) Reduced final product inspection. By better understanding customer's needs, better product planning will lead into
the deployment of parts and process planning. Finally, production control and checkpoints will be established to help assure the conformance of product specifications.

Company-wide quality improvement (CWQI)  TQM is about addressing company-wide continuous quality improvement. Several steps are required: (1) to establish a steering committee within the organization designed to implement total quality management. (2) Create a company mission statement. A company’s mission statement is a brief, but accurate, statement of why the business exists and what it plans to accomplish. It is a clear, formally written, and publicized statement of an organization’s purpose. It brings focus for the entire planning process within an organization. It guides the people in the organization to work independently and collectively toward the same organizational objectives. Without a mission statement, an organization will have problem in identifying itself. Conflicting directions due to lack of purposes would lead to the demise of the organization. In a sense, a company without a mission is like a sailing ship without a destination. (3) The development of a strategic plan. It involves representatives from the senior management to various departments working together. By means of a comprehensive and interactive process, the strategic plan will earn the consensus of the entire company and be formally adopted. The process will require an environmental scan, internal assessment, and specification of goals, objectives, and strategic actions. (4) Employee empowerment is the
giving of power, authorizing people at the lowest possible level to make decisions. Empowerment is about making employees comfortably accepting the responsibility for making informed decisions that will better serve their internal and external customers, while successfully completing their work assignments. (5) Training programs for all employees. Training is ranked high for being an effective means to achieve quality. (6) SPC training. The challenge lies in how it can be applied in one's work environment to help understand process variabilities or make decisions on the face of uncertainty. (7) Measurement systems to determine process and product characteristics. (8) Clear definition of customer needs. (9) Development of a process orientation to thinking about quality.

Could TQM Fail?

After spending large sums of money and time for employee training, some business have had no appreciable benefits. What could have gone wrong? There are false starts and failures in implementing TQM programs. The following are some of the reasons why things don’t turn out the way they should:

Due to the senior management  They cannot fully embrace the idea of quality. Their heads may be nodding yes to TQM, but all the other behaviors saying no; They cannot take the time and commit resources to implement; The management expects easy returns and is not patient enough; Attempting to achieve a single, major breakthrough to solve all of the company's quality problems; Delegating the responsibility for quality to a quality assurance manager or
department; Barriers between departments remain and larger quality problems are not tackled; Failing to learn customers' needs and expectations; and the scope of the quality process only applies to manufacturing where quality of the sales, service, office functions, etc. are not addressed.

**Due to middle management** Focusing on the operators as the major source of quality problem and neglecting the fact that sources of variability come from more than just manpower; Department managers resist because they are bogged down with deadlines; They are accustomed to the quick-fix mentality that makes quality improvement an uphill battle; and thinking that the use of statistical process control (SPC) tools *alone* will improve quality.

**Due to workers** Workers think TQM is just another program, a fad which will go away, instead of viewing TQM as a mind set, a way of life; Pronouncements from top management are not heeded by skeptical workers; They fail to properly apply the quality tools available to them.
Bibliography


Quality and Productivity in the Graphic Arts, by Miles and Donna Southworth, Graphic Arts Publishing Company, 1989.


