

Quality Gurus: A Framework for Comparison and Implications

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Abstract – Today, when consumers are Quality conscious, leadership in the market, can only be attained through quality products and services. The concept of “quality” is subjective, and it means different things to different people. Therefore, the purpose of this paper is to analyse various Quality Guru Concepts and Approaches within industries. This paper also provides an overview and understanding of the literature on Quality. The objective is to determine various critical factors from various philosophies for successful implementation. This paper is presented in three parts: firstly, it discusses Quality, views on Quality with the ideas of changing definitions; secondly, it examines various approaches of the quality guru and concludes by synthesizing the information in the literature into a coherent framework in an attempt to portray the key components of various quality concepts of various experts.

Quality is regarded as a prime weapon and has become an essential seal of approval in the eyes of customers. The Globalisation has resulted in increased economic competition and a growing awareness of the value of quality product and services to success. Today, when consumers are Quality conscious, leadership in the market, can only be attained through quality products and services. The concept of “quality” is subjective; meaning different things to different people resulted in various definitions, none of which is universally accepted. The definition of quality depends largely on the orientation of the individual involved. As Reeves and Bednar, (1994) point out, no single definition of quality fits every situation with respect to measurement, generalizability, usefulness to management, and relevance to customers. Quality is regarded as a multidimensional concept Garvin (1984).

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OBJECTIVES OF THE RESEARCH AND METHODOLOGY

The objective of this paper is to provide an overview of the literature on Quality and is an attempt to cover a complete framework for various matters. This paper, briefly describes the philosophies, teachings and the key features of selected gurus such as Deming(1986), Juran(1988), Feigenbaum, Ishikawa, Taguchi, Shingo and Crosby(1979). These seven are considered by many to be the main gurus of quality. In addition, paper tries to develop a comparative matrix of key philosophies and factors of each guru. This will enable the managers and researchers to compare the various methods in a systematic fashion, thus assisting the management to choose a particular method rationally. Alternatively, by knowing their work also allowed us to develop a better understanding of their contributions to the literature on quality

LEADERSHIP THROUGH QUALITY

All the philosophies of the Total Quality Management Gurus provide guidance and best practices to management. According to Evan & Linsays (2011),

the philosophies of Deming, Juran and Crosby viewed a quality as imperative in future competitiveness in global market, make top management commitment an absolute necessity. Some of the few expert who have made contributions to the field of quality management regarded as Quality Gurus can be identified as:

- I. The Early Americans (early 1950s) who took the messages of quality to the Japanese were: WW. Edwards Deming, Joseph M. Juran, A.V. Feigenbaum
- II. The Japanese (late 1950s onwards) who developed new concepts in response to the American's messages were Dr. Kaoru Ishikawa, Dr. Genichi Taguchi, Shigeo Shingo
- III. The New Western Wave (1980s) who follow Japanese industrial success, have given rise to increased quality awareness in the West mainly Philip Crosby

ANALYSIS AND INTERPRETATION

The below matrix describes and analyse the Philosophies, Approaches, Quality Measurement parameters and Strategies of various gurus. There are several points of common acceptance of various philosophies which is considered to be a base. The Role of Upper Management in Quality is considered to be imperative by all and can't be ignored. The Deming with Juran believed that most of the quality problems are management oriented others also agreed that one could not attain Quality without having top management support. Although their views overlap in important respects each emphasized on prevention over detection, believed top management must be intimately involved in quality improvement, and viewed quality as a powerful competitive weapon.

Comprehensive Analysis of various Philosophies in terms of Similarities and Distinctions

	Deming	Juran	Feigenbaum	Ishikawa	Taguchi	Shingo	Crosby
Definition	Quality is meeting the (stated) requirements of the customer	Quality is fitness for use	Quality is what the user, the customer, says it is. It creates value for customers, employees, and ultimately investors.	Quality was a thought revolution and based on the respect for humanity and customer's need	Ideal Quality is refer as reference point or target value	Quality is mistake proof	Conformance to the requirements not as goodness or elegance
Basic orientation toward Quality	Technical	Process	Technical	Human Dimension	Technical, proactive	Motivational	Motivational
Philosophy	Management by Positive Co-operation.	Quality Trilogy	Quality is an ethic Consumer-oriented Quality Control	Next process as customer	Focuses on parameters or design	Those who are not dissatisfied will never make any progress & Flow must go on	Do It Right First Time
Management Commitment	Demings 14 points	Commitment of all Levels	Involvement of Top Management	He urged top level to take Quality Control Courses as they are responsible to create Quality Awareness and Culture	Requires a new way of thinking about product development & the key to competitive leadership is timely introduction of new quality products	Lead with humility and respect every individual	Crosby's 14 Points and his Four Absolute requires top level involvement
Cause	Management Responsible for 90% problems	Vital Few Trivial Many and 80% management responsibility	Quality which is everybody's job can become nobody's job	Over-reliance on the quality professional would limit the potential for improvement	Variability is inherent in design	System of feedback provides information about defects too late	Management is responsible for lack of communication and commitment
Strategy	Problem-faced' Problem solved by using 14 points structure	Steering Council by using The project-by-project approach	TQC Consumer-oriented Quality Control	Consumer-oriented Quality Control by using his 14 points	Quality must be Engineered not inspected	Detect errors before they become defects through a system of ZQC	Quality vaccine
Action Plan and Solution	PDCA Cycle and Statistical Measures	<ul style="list-style-type: none"> Quality Trilogy Top Management Involvement Juran Principle Cost of poor Quality Breakthrough 	<ul style="list-style-type: none"> Continuous Improvement Innovation Companywide process Human element in Quality Control 	<ul style="list-style-type: none"> CWQC Quality Circle Fishbone diagram Decisions are based on facts Participative Management 	<ul style="list-style-type: none"> Taguchi Methods to minimize noise i.e. variation Robust Design Quality Engineering Taguchi 8 point Approach 	<ul style="list-style-type: none"> (ZQC) Poka-Yoke Methods Successive checks and self-checks SMED JIT 100% inspection over sampling 	<ul style="list-style-type: none"> Performance standard must be Zero Defects, Measurement of quality is the Price of Non-Conformance System of quality prevention Preventative Quality Control Education through 6C's
Quality Measurement	Statistical Analysis and Variability Reduction	External and Internal dimension	Hidden Plant i.e. proportion of capacity wasted by not getting it right the first time	Cause and Effect Diagram helps in reducing problems by identifying the root cause	Quality Loss Function i.e. minimizing the loss to society	<ul style="list-style-type: none"> Zero defects Ideal set up change is no change at all 	Prevention doesn't require measurement

These Quality experts differ on such fundamental issues such as the definition of quality, approaches to

measurement, targets for improvement, and the roles and responsibilities of managers, production workers, and quality professionals. All gurus considered that measurement is important to quality improvement efforts, but they differed in their approach of measurement. Juran Feigenbaum and Crosby viewed the cost of quality as the focus of measurement. Crosby recommended that companies should estimate the costs of quality, but he is not very much interested in measuring improvement. Deming does not use the cost of quality as a focus of measurement. He considered that the "unknown" costs, such as loss of a customer, are far more important than visible parameters. Deming and Shingo gave greater emphasis to quantitative methods (statistical methods) as a means of analyzing and improving the production process. Crosby focused on defect free goal, Ishikawa Cause and Effect diagram, Feigenbaum Hidden Plant concept while Taguchi considered Robustness of Design as Quality Improvement Tool and measurement parameter.

The examination of Quality experts framework has revealed that in many respects these frameworks complement one another. Therefore, a blending salient feature of these frameworks is the best approach for the establishment of critical factors for quality management. Therefore, the following Ten Critical Success Factors have emerged out of the above analysis: Customer Satisfaction, Top Management Commitment, Education and Training, Information and Analysis, Involvement, Culture, Strategic Quality Management, Suppliers, Design and Process Quality Management. Exploring their shared views and individual differences it is found that Quality is not a quick fix to address management problems. It is not a program, but a transformation. Their philosophies are more to the approach of systematic problem solving for example Ishikawa Diagram, Deming Wheel, Poka-Yoke by Shingo, and Zero Defects by Crosby. The research shows that these concepts are dependent on each other and are difficult to work in isolation (i.e. Overlapping of concept in most of the companies).The key to successful implementation of quality principles and methods is tied to leadership. The research work shows some interesting results that the Quality concepts being followed in the industry always existed under probably different or no nomenclature at all. Only their implementation and impact on the Organisation's efficiency has never been considered seriously. There is also a sector of people who believe the opposite asserting that Quality has gained importance only because of the growing choices in the market and this tool has been devised only recently to provide Customer, the King of market; the value for his money.

It is to be concluded that Quality guru has his own distinctive approach which provides understanding of the concept of total quality management. Quality concepts should not be considered as the fragmented programme, but it should be Holistic View embedded in the organisation at all levels. The research suggested that it is not quality management, but

management of quality, that counts and varies organisation to organisation depending on environment and culture of the organisation . At the heart of a quality culture is a commitment to continuous improvement based on the belief that within any situation or any activity, there is always room to improve. The goal is to achieve perfection and it applies to every piece in the puzzle: people, processes and products. All must work together for achieving Overall Excellence. Thus, it is right to say **"Quality is a journey not destination"**.

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