

Research and concepts

Factors affecting a senior management culture change for total quality metamorphosis

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Abstract

A three-year joint research study focuses on the in-depth investigation of the quality parameters that are necessary to bring about change in senior management (SM) culture for improved leadership quality, as well as factors of "how" to succeed in its implementation. Analysis reveals overall agreement on the most important success factors, which are presented in this paper. This enables the development of an analytic model (one based on quantitative results and one based on qualitative results) for a CEO's culture change implementation process, required to achieve total quality metamorphosis (TQm) and SM leadership.

Introduction to managing culture change

Management commitment and leadership, continued improvement and, above all, culture change are considered the cornerstones for a successful total quality management (TQM) implementation. The major reason that many programs fail is that the chief executive does not commit himself to actively support, participate and lead quality initiatives.

A total quality organization can reach excellent customer service only if senior management (SM) is convinced or forced to understand, adopt and commit to implementing total quality in the entire organization. It is a case of changing the culture, the attitudes and the way of thinking of the senior management towards a quality revolution. Changing culture is hard and it takes time. How can this culture change be accomplished in the best and the most suitable way in an organization?

It is proposed that leadership for quality improvement through culture change must come from the executive level. Fundamental organizational change is not a bottom-up process. The CEO must lead change through total quality metamorphosis (TQm) by determining the guiding management principles and practices. TQm can be accomplished by management's adoption of an analytic, universal model addressing the key success factors and practices that have consistent impact on performance toward quality of service. The main objective of this investigation is to present the major quality parameters and identify the key success factors that are necessary to effect a focused management culture change towards leadership in quality (Angeli, 1997). Through the combination and implementation of the key success factors in the various morphs (steps, stages), a complete total quality metamorphosis (TQm) (transformation, change) can be achieved.

The concept of culture change in relation to quality improvement is well established: "We are entering a new economic world where companies will survive only if they pay attention to quality. In order to bring an organization into the quality revolution the organization leader must have, as his primary personal job responsibility, quality and culture" (Deming, 1986). Similarly, "To become a total quality organization means changing the company culture by changing its

management style and its attitudes” (King, 1994). Understanding the importance, and dynamics, of organizational culture is critical if a TQM initiative is to be successful. Senior officers who overemphasize the application of systems to the detriment of developing “shared values” will fail to maximize the benefits of TQM.

Today’s customers are concerned with how they are dealt with as individuals and how their needs are met. Ultimately, the customer is paramount to any organization, and thus the underlying philosophy of total quality management (TQM) ultimately focuses on how to satisfy customer needs and requirements. Thus organizations must focus on achieving a customer-driven service quality.

Various research into why customers stop being customers reveals that around two thirds of customers leave because of an attitude indifference, rudeness or lack of service from staff. So service quality to customers should be of top priority to any manager. According to a survey by Digital Equipment Co, 90 per cent of senior executives think service is the most important way a company can differentiate itself from its competitors.

Culture sums up the way organizations function. It reflects the understanding and assumptions upon which work is performed. It reflects what is acceptable and what is not, what behavior and actions are to be encouraged and discouraged. Culture can be defined as “the way we get things done around here” (Atkinson, 1990a). It is an arduous process; the planning horizon to put the TQM basics into place is at least ten years. However, provided that TQM is effectively introduced, benefits can be realized in the short term through the successful completion of improvement projects.

There is no single or “best” way of beginning the process of quality improvement. There are, however, common elements and principles which apply to all organizations. Every organization is different in terms of its people, culture, history, customs, prejudices, structure, products and/or services, technology and processes. What works in one organization, or situation, may not necessarily work in another. This is why executives need to be wary of the people who sell “TQM packages”. The most important factors in a successful TQM change are the senior managers’ long-term commitment to TQM, leadership and the realization that the process of quality

improvement is cost-effective. Through this paper an attempt will be made to deliver factors which will address, and be applicable to, the majority of organizations. “TQM goes beyond the philosophy and practices of QC and QA. It is a strategy concerned with changing the fundamental beliefs, values and culture of a company, harnessing the enthusiasm and participation of every employee, whether manufacturing or service oriented, towards an overall idea of continuous improvement” (Atkinson, 1990b).

The research study and methodology used

Among the researchers who addressed corporate culture change was Black, in his thesis (1994) he stated “The ratio scale identifies senior executive commitment, active quality leadership by all managers and encouragement of a company-wide quality culture as the most important element of a total quality approach”. The reason that culture change is so difficult and time consuming is that the entire concept is based on people’s minds, attitudes, ways of thinking and ways of acting. In each of the previous studies, one could identify five to 30 ways on “how to” manage culture change. Sources revealed several common ways, some new ways and some the same although expressed in differed terms. In the following pages the methodology followed for the identification, selection, and analysis of the large volume of information through the use of QFD will be briefly explained.

Information and literature search

During the course of our research study, the opinions, ideas and instructions of academics, practitioners and quality gurus from more than 160 reputable and scholarly sources (case studies, surveys, reports, journals, data banks, books etc.) were extracted, filtered, summarized and grouped. These are presented in the form of short instruction/statements to senior management on “how to” manage culture change in their organization.

Evaluation, correlation, filtering and grouping the factors

The next step was the laborious process of evaluating all information collected. Ideas or statements of different authors were filtered combined, codified and grouped under common characteristics. This process

resulted in three lists of factors containing the statement, the text and the associated authors, academics and practitioners.

Finally 72 “whats” under nine groups, 165 “hows” under 19 groups and 73 “2nd level hows” under 11 groups were identified. Each factor was accompanied with its related text (Angeli, 1997) which was a summary of all sources addressing the particular factor.

Construction of the tree affinity diagram

The last part of evaluation step was the development of the affinity diagram correlating and linking “whats” with “hows” in accordance with academics’ opinion. The construction of the affinity diagram before the QFD matrix development is vital (Lawrence and Stinnect, 1994). “Hows” were linked with the 72 “whats”, key success factors. Similarly, any statement, existing practice, or specific instruction related to implementing a “how” was linked to one or more “2nd level how”. This tree diagram was subsequently used in the development of the detailed tree diagrams shown, in part, in Figure 2 correlating and linking “whats” with “hows” in accordance with academics’ opinion.

The keywords “whats” and “hows” were purposefully used because these are the basic elements of the quality function deployment (QFD), which was selected to be the tool to analyse and correlate the enormous amount of information collected.

Presentation of key success factors

The 72 “what” requirements for CEO culture change

An expanded list of the 72 key success parameters, grouped according to common characteristics, is shown in Appendix 1. “Whats” groups were classified based on the steps suggested by Jablonski and Hartman (1990) for TQM implementation. The key success factors are written in the form of short statements.

The 165 “How to” successfully effect culture change factors

The complete list of 165 “how” factors, showing senior management how to arrive at culture change subdivided into 19 groups is shown in Appendix 2.

The 73 “2nd Level hows” related to the “how to” factors

The complete list of the 73 specific instructions, techniques, methodologies, etc. for

achieving or enhancing the above-mentioned 165 “hows” is shown in Appendix 3. Each “how” can address one or more “how”, or “what”, or none of them. These correlations can, for those who are interested, only be seen on the large QFD modified matrix or the tree diagram (Angeli, 1997) in the principal research report.

International survey

In any QFD matrix there is always a “rating” column indicating for each factor what the weighing factor is. Under normal conditions that rating number is a product of teamwork and evaluation within an organization or by survey. This was not the case of the current research. A set of questionnaires was formulated containing the “whats” and distributed to CEOs and practitioners from 15 countries worldwide, who were asked to then grade those “what” requirements. The survey results from the 200 responders are summarized in Table I where all “whats” were ranked in accordance to their average number (X). The average, X , value was used as a weighing factor in the QFD matrices. RGE denotes the range (spread) and the last two values the minimum grade and maximum. The CEOs were selected in international conferences in India and Israel. Some of them receive a traceable questionnaire from the author by returned air mail.

Development of the modified QFD matrix phase I

Various methods and techniques have been reported by practitioners when dealing with large volumes of information and parameters that require tabulation, correlation, analysis, etc. Watson (1994) from Xerox used the analytical hierarchy process (AHP) to assist in prioritization. Lawrence and Stinnect (1994) used a series of tree diagrams to help SM translate plans into specific actions. The great majority of authors, including Guzy and Marcia (1992) GlushKorsky *et al.*, (1995), Mann and Helbleib (1992), Kaneko (1991), Smith and Angeli (1995), Angeli (1992) and many others, used quality function deployment (QFD) to address similar cases, for the evaluation of ideas and concepts.

An important question was whether the QFD matrix could accommodate so many parameters. This question was partially answered by Hunter and Van Landingham (1994), who described the Siemens Industrial

Table I International summary survey results

Codes	Rank	Requirements and key success factors for CEO culture change	AVG X	RGE R	MIN. GRD	MAX. GRD
W25	1	Acceptance that the customer is paramount and its meaning	91.79	50	50	100
W141	2	Quality leadership	87.92	35	65	100
W35	3	Company's perception of quality	87.50	40	60	100
W127	4	Strong top down commitment	87.30	50	50	100
W70	5	Adequate SM support	86.76	40	60	100
W145	6	Support of the board of directors	86.25	55	45	100
W80	7	SM consistency, accountability and responsibility	86.25	60	40	100
W126	8	Ownership and internalized SM commitment	86.23	100	0	100
W2	9	Vision where company is going (goals, values, ethics)	85.49	60	40	100
W75	10	Acceptance of change	85.17	40	60	100
W4	11	Clear, vision-led strategic and holistic approach to change	83.82	50	50	100
W180	12	Corporate team spirit (teamwork)	83.68	50	50	100
W370	13	SM must find time for changing culture	83.45	75	25	100
W125	14	Form an action plan with actionable first steps	82.42	50	50	100
W165	15	Need to motivate change and people	82.42	50	50	100
W365	16	Continued monitoring and assessment of improvements auditing, feedback	82.41	80	20	100
W315	17	Effective decision-making system	82.03	80	20	100
W350	18	Develop a strong culture	79.83	80	20	100
W155	19	Establish a top-level quality improvement committee	79.71	95	5	100
W150	20	Process insider denominator, facilitator	79.35	95	5	100
W280	21	Identify and communicate improvement information	79.35	50	50	100
W220	22	Influence or convince management and gain enthusiasm	79.25	100	0	100
W55	23	Attention to stakeholder interests (participation)	78.13	95	5	100
W140	24	Management leadership role - style- values	78.05	70	30	100
W50	25	Synergy between quality and participation	78.00	60	40	100
W335	26	Increase managers' effectiveness as change agents	77.12	65	35	100
W295	27	Focus on processes, systems, plans, improvements	77.06	60	40	100
W380	28	Managers create a safe environment to take the risks of change	76.76	65	35	100
W320	29	Strategic planning	76.61	70	30	100
W345	30	Policy deployment: planning, implementation, reviewing	76.60	65	35	100
W200	31	Managers' perception of quality factors	76.50	45	50	95
W10	32	Understanding the change, its meaning/managing implementation	76.38	95	5	100
W65	33	Building learning and development capabilities	76.18	65	35	100
W6	34	Effective and capable board members and competent directors	76.09	90	10	100
W85	35	Co-operation among managers	76.00	90	10	100
W325	36	Increase managers' effectiveness as change agents	75.89	85	15	100
W210	37	Gain the benefits of empowered employees	75.78	65	35	100
W100	38	Market competition - competitors - pressures	75.43	72	25	100
W290	39	Recognition and celebration of successes	74.67	60	40	100
W185	40	Quality overall performance information	74.53	60	40	100
W115	41	CEO problem(s) recognition	73.94	50	50	100
W20	42	Management skills, techniques, of practices, style, traits	73.38	55	40	95
W3	43	Common vision definition	72.26	100	0	100
W105	44	SM assessment/system (performance appraisal)	71.82	90	5	95
W15	45	Efficient utilization of resources	70.83	90	10	100
W1	46	Board room vision	70.65	95	5	100
W160	47	Anticipate resistance to change	69.68	80	20	100
W215	48	Managers gain credibility by developing reputation for performance	68.67	85	10	95
W330	49	Managers create a safe environment to take the risks of change	68.59	65	25	90
W340	50	Learn and apply the system of profound knowledge	67.88	80	20	100
W60	51	Emphasis on social humanistic dimensions and quality of life issues	66.86	90	10	100
W190	52	Adequate managerial and organizational infrastructure (business structure)	66.83	85	10	95

(Continued)

Table I

Codes	Rank	Requirements and key success factors for CEO culture change	AVG X	RGE R	MIN. GRD	MAX. GRD
W90	53	Joint union-driven quality initiatives	66.52	100	0	100
W230	54	Co-operation between the quality profession and managers	66.03	100	0	100
W170	55	Management of transition and stages	64.17	75	25	100
W305	56	Benchmarking world-wide	63.50	80	20	100
W30	57	Assessment of future threats and opportunities	63.45	95	5	100
W310	58	Believe in the unexpected/ mastering paradox unpredictability	63.17	95	5	100
W135	59	Highly resilient people	62.78	90	10	100
W300	60	Use consultants/gurus to support SM	57.50	80	10	90
W203	61	Maintain managers' health by managing stress positively	55.31	100	0	100
W95	62	Changes in regulations, laws, policies, partnership	54.82	95	5	100
W260	63	SM characteristics (age, attitudes, gender, etc.)	54.64	100	0	100
W375	64	Changed applicability to the type and size of organization	54.55	90	10	100
W225	65	Institutionalize total quality	52.12	100	0	100
W235	66	QM has to be given academic status	52.06	100	0	100
W45	67	Crisis and urgency as an agent for change	51.47	100	0	100
W335	68	Increase managers' effectiveness as change agents	51.21	90	0	90
W240	69	Co-operation of companies and government	49.33	90	5	95
W250	70	Formal managers' qualifications	47.41	90	0	90
W360	71	Budget cutting threat	44.24	95	0	95
W110	72	Political systems changes and liberalization	40.30	90	0	90

Automation case. They used QFD (one of the largest matrix 40 “whats” × 103 “hows”) in 1990 to help identify product feature elements unique to various market segments. Mindful of Hunter’s words, “Don’t let the simplicity of QFD scare you away”, it was decided that QFD would be used in this research to help identify the key factors in the study. The QFD tool was used as the model, the filter and the funnel to deliver a prioritized set of improvement parameters which, if implemented using the “hows”, can subsequently lead culture change towards metamorphosis. The concept and design problem first used by Mann and Helbleib (1992) and modified by the author for this research is shown on Figure 1.

The 72 “whats” and 165 “hows” were entered into a specially designed QFD software package (ASI, 1996). Several separate exercises were executed using a series of modified QFD matrices incorporating the opinions/evaluations of academics, practitioners and the author.

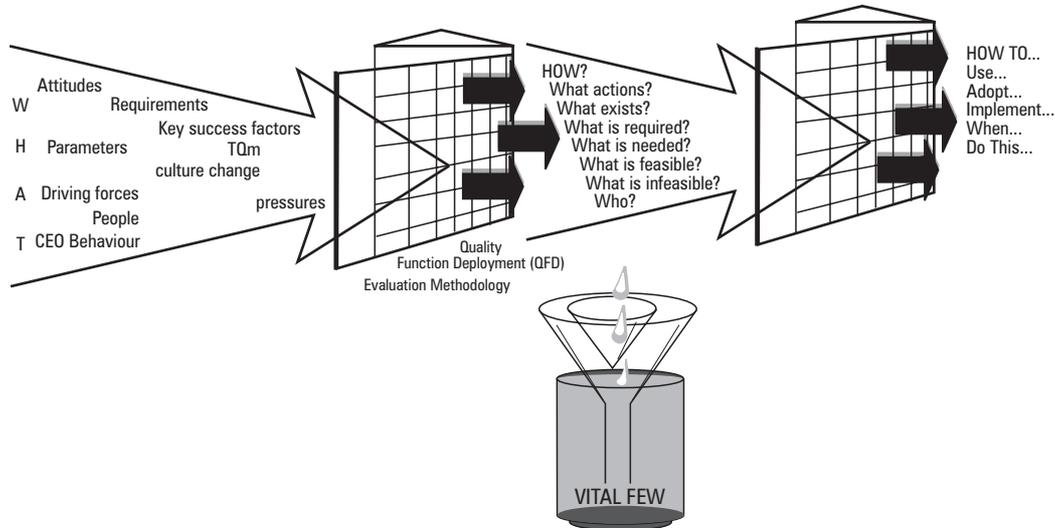
The results of every exercise and matrix were transferred into one large spreadsheet file using the Dynamic Data Exchange (DDE) of the QFD software, for additional calculations. All results of the four exercises (rank, percentage numbers, importance numbers) were then copied back to the

original QFD matrix which was modified by developing and adding special rows, columns and calculations “rooms”. This methodology enables the reader to see in one QFD matrix the results of a series of previously executed QFD matrices and exercises. The modified QFD “house of culture change” matrix (Angeli and Jones, 1996) with thousands of cells (46 per cent of which were full) was developed by the author using the previously mentioned methodology. There were over 33,000 relationships, assessments, correlations, etc. to be analyzed if every cell was to be addressed. Apart from the modifications, the chart contains all information, assessments etc. of a traditional QFD house (such as side and top roof correlating main and sub groups, improvement directions, difficulty in achieving a factor, “how” importance bar charts, comparison of the combination assessments of the four exercises, and many others).

Development of QFD matrix II

As mentioned earlier, 73 2nd-level “hows” were identified, and each one was related with one or more “how”. So 44 “hows” from QFD Phase I were selected to become “whats” in Phase II (or the planning phase) with the basic criterion for selection being that at least one “2nd-level how” addresses one “how”. In the QFD Phase II matrix all “2nd level hows”

Figure 1 Concept design and study problem



are more specific in giving instructions on “how to do things”, when, what, how many, etc. The main objective was to recommend to management certain specific actions, ways and means on how to change things or, how to initiate change in their organization.

QFD matrices summary results

From the two large QFD matrices (Phases I&II) three sets of key success parameters factors are shown: “whats”, “hows” and “2nd level hows”. The first list shows the top 15 “whats” in rank order from QFD Phase I:

- Quality leadership.
- Anticipate resistance to change.
- Ownership and internalized SM commitment.
- Clear vision-led strategic and holistic approach to change.
- Adequate SM support.
- Increase managers’ effectiveness as change agents.
- Process insider denomination, facilitation.
- Management skills, techniques practices, styles.
- Need to motivate change and people.
- Management leadership role-style value.
- Company’s perception of quality.
- Acceptance of change.
- Form an action plan with actionable first steps.
- Management at transition and stages.

From the Phase I QFD matrix the top 15 “hows” in rank order are summarized below, indicating the “hows” which are related or can address the majority of “whats”:

- High level of communication and similar views.
- Delivery of the appropriate training to management.
- Good operational and strategic plan.
- Adopt continuous improvement of quality.
- Communicated goals and understood by everyone.
- Leaders with adaptable behaviors and culture leadership skills.
- Reward and recognition system.
- Information sharing, two-way communication teams.
- Inspiring and motivating people.
- Company’s human relation policy.
- Use outside facilitator, a professional, guru, champion.
- Have a strong SM quality steering committee.
- Conduct a quality survey.
- Have a small quality directorate of internal consultants.
- Gain acceptance for culture change.

The last list contains the top 15 “2nd level hows”, from the QFD phase II, where specific instructions on how to successfully implement the “hows” are given below:

- Adopt 5Ps behaviors: positive, proactive, participative, productive, pioneering.
- Participation in development of devices such as surveys, sensing groups, etc.
- Managers’ competency.
- Provide teams with clear directions and choices.
- Define what change is required.

- Build trust and inspire team work.
- SM characteristics of a superior leader.
- SM meetings devoted to quality issues.
- Company mission and vision, health and safety, in-house courses.
- Personnel analysis (company's human resources).
- Written statement to classify/describe future and changes.
- Employee satisfaction goals.
- Facilitate team in creating its own action plan and support.
- Use of quality audit checklists and orientation questionnaires.
- Leadership styles: defective, participating, delegating.

Development of the final qualitative model of culture change

The aim of the project was to develop an analytic universal model addressing the key success factors and practices that have consistent impact on the organization. The analytic quantitative model has already been previously developed and explained in detail using a scientific tool and methodology (QFD).

Based on the results of the preceding investigations a universal model of factors, practices and instructions for managers was developed. The model considered the following:

- The results of “whats” and “hows” of phase I.
- The results of “2nd level hows” phase II.
- The results of top 15 “hows”.
- The order, and “whats” and “hows” groupings.
- Representative sample from each group in accordance with their importance.
- Literature search and factors associated text.
- Models previously developed by other authors during literature search.

The main objective of the model was to demonstrate ideas, provide guidelines and instructions. From each group of “whats” and “hows” the top, in rank, were selected with two or three similar factors being combined in one instruction. The combination of several drawings and diagrams was chosen to build and operate the model in order to include many groups and sub-groups in one chart; “2nd level hows” is a sub-group of “hows” and “hows” is a sub-group of group “whats”.

Using the associated text for the “whats” factors, 14 steps for achieving culture change

towards TQm were identified. The top factors from each group were identified and combined with similar factors always using the side correlation matrix. Special attention was taken in developing the steps of the model to reflect and secure the correct order that managers should follow, to implement total quality metamorphosis and leadership through culture change. The most important factor “acceptance that the customer (internal and external) is paramount and appreciate its meaning to the company” is considered to be the cornerstone of any process and should always seriously be considered at any of the 14 steps of the TQm process. That is why it is shown in Figure 2 as a solid column on which all steps depend and it represents the driving force for any action and activity. The model of culture change to TQm is shown as a modified flow diagram in Figure 2.

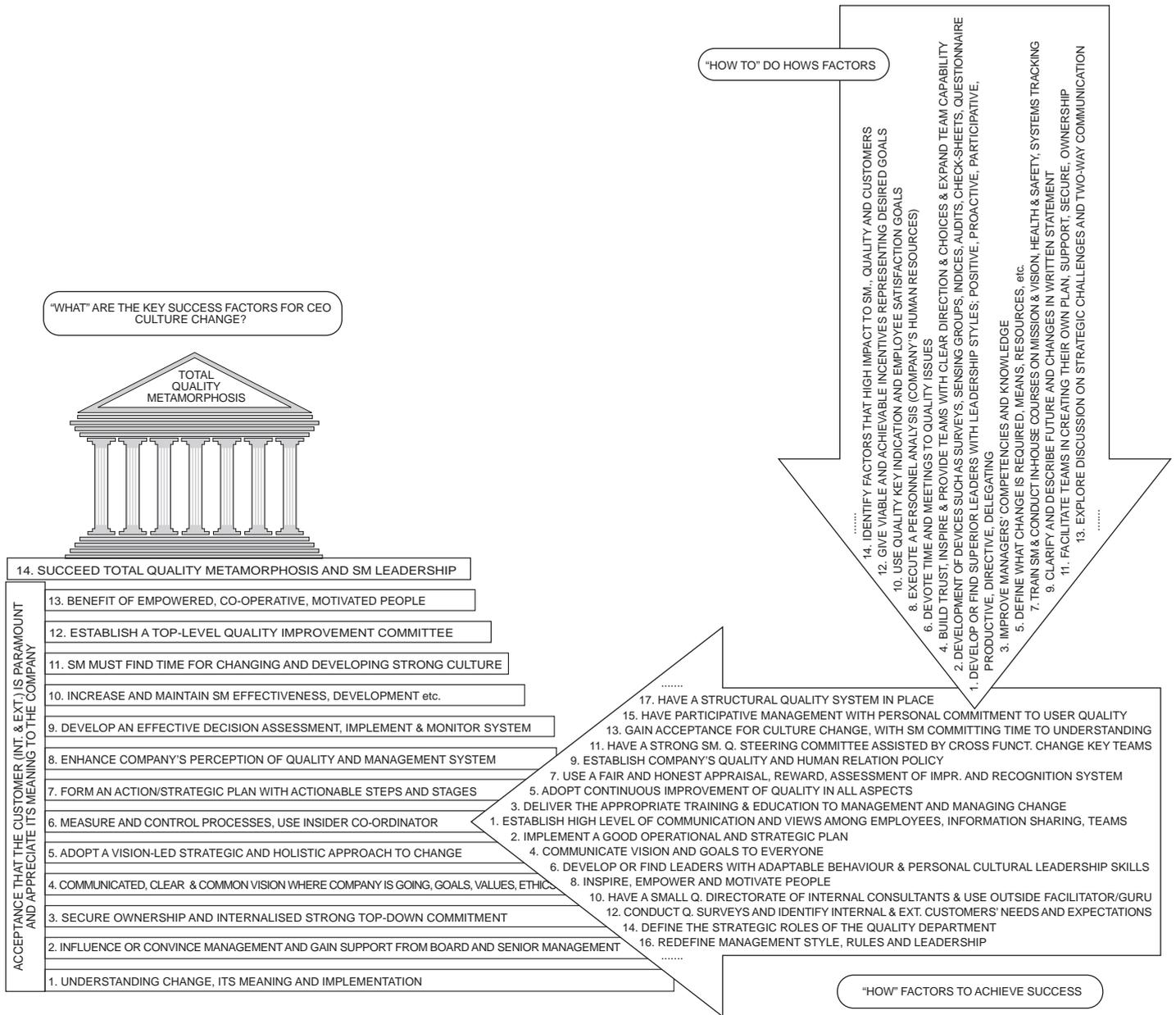
A big arrow representing the forces, power, and methodologies of implementing the “whats” steps was chosen to represent the most important combinations of “hows”. The most important “how” starts from the tip of the arrow with the rest of the “hows” lying to the left and to the right of the arrow in accordance with their importance. What is important is all “hows” represent one joint force aiming in one direction, namely that of TQm and leadership. Factors can be changed, added, replaced by similar ones but without breaking the unity and direction.

Those “hows” could in turn be achieved assisted, or implemented using the “2nd level hows” represented by the driving force shown in the model. Those 14 “hows” were selected or grouped from the text and the lists above. All those “2nd level hows” are again pointing in the same direction. The number is of no importance, more “hows” could be added or removed as long as the structure of the model is not significantly modified.

Conclusions

Managers are the key factor in any change situation. If the manager understands, is convinced or is forced to adopt the new philosophy of quality leadership, it is possible to change not only his or her way of thinking but also that of subordinates. Successful change is a matter of time; for some it will occur easily and quickly; for others it will be slower and more difficult. Using the large list of factors, each manager can identify, adapt and use

Figure 2 The model of principal factors for harnessing SM culture change for total quality metamorphosis



those he or she believes are most suitable for the organization or most applicable to the existing culture and attitudes. Some of the results of the laborious QFD exercises were presented. Many combinations and rearrangements of data could be undertaken. What it is important to stress and demonstrate here is the power of QFD matrices and associated software, especially when teams are dealing with large volumes of inter-related information which is difficult to measure. This is the first time QFD technique was used for service quality with so many parameters. In conclusion, QFD matrices can be developed for use further as:

- a model for management change;

- a basis for management to add, modify or remove change factors and develop additional factors suitable to their own needs;
- a tool to identify a company's perception on quality matters as well as the status of the company in relation to universally accepted quality activities, and its competitors or customers;
- a management model for relating and correlating factors;
- a source of indicators, lessons and recommendations, such as direction of improvement of each factor, difficulty of achieving a factor, common group factors, positive and negative correlations, degree of rela-

relationship between factors, consistency agreement and sensitivity to input data.

Another important element of this paper was to demonstrate the methodology and steps following in dealing with a large volume of information, i.e. collecting data, grouping, filtering, analysing, presenting them using various techniques. Finally using a well known scientific tool (QFD) to identify and extract the “vital few” for model development.

“There is no quick fix, easy solution, universal panacea, (single) quality management tool or technique, system or assessment method which will provide all the answers; there are no ready-made packages which can be plugged in and will guarantee success” (Atkinson, 1990a). It is an extremely arduous process. The planning horizon to put culture adaptation or change leading to total quality metamorphosis (TQM) into place, greatly depends on management commitment. In any change process the “number one” key success factor should always be considered: “recognizing that the customer is paramount and appreciating his value to the company”.

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Appendix 1

54 Internal factors

Understanding management change

- Understanding the change, its meaning and how to manage implementation
- Managers work to create and foster a safe environment to take the risks of change
- Adequate senior management support
- Ownership and internalized senior management commitment
- Consistent and demonstrated strong top-down commitment specified by vision
- Obtain support of the board of directors
- Managers gain trust and credibility by developing reputation for performance
- Influence or convince management to accept changes and gain enthusiasm for the value of changes
- Use crisis and urgency as an agent for change

Vision goals policy

- Boardroom vision and its implementation
- Communicated vision of where company is going (goals, values, ethics)
- Common vision definition and how is translated into rules, systems, norms, management style, etc.
- Clear, vision-led, strategic and holistic approach to change
- All must believe and accept change
- Managers’ perception factors that influence quality

Measurement and control

- Senior management assessment system (performance appraisal)

Process insider nominator, facilitator, co-ordinator (change manager)
Overall quality performance information (system, method, collection, etc.)
Institutionalize total quality (management system)

Strategic planning

Efficient utilization of resources required for managing change
Form an action plan with actionable first steps
Anticipate and expect resistance to culture change
Management of transition periods and stages or phases
Focus on processes, systems, plans, improvements affecting change
Emphasis on strategic planning process
Simplify reality: cope with focused and sustained programs of change

Systems

Company's perception and understanding of quality
Adequate managerial and organizational infrastructure (business structure)
Effective decision-making system
Policy deployment: a systematic means of planning, implementation, reviewing organizational change
Develop a strong culture (values, norms, shared expectations and effectiveness, etc.)
Continuous monitoring of change process and initiatives towards TQ (assessment of improvements, auditing, feedback, plans, etc.)

Developing capability

Effective and capable board members and competent directors
Management skills, techniques, practices, styles, traits
Synergy between quality and participation of management leading organizational culture change
Building learning and development capabilities of management
SM consistency, accountability and responsibility
CEO problem recognition
Highly resilient people
Maintain managers' health by managing stress positively.
Senior management characteristics (age, attitudes, gender, etc.)

Increase managers' effectiveness as change agents
Learn and apply the system of profound knowledge
Senior management must find time for changing culture

Working together

Interpersonal and co-operation among managers
Establish a top-level quality improvement committee
Corporate team spirit (teamwork)
Gain the benefits of empowered employees
Meet management's wants and needs (what is important to management)
Identify and communicate improvement information

Leadership

Management leadership role - style - values
Quality leadership
Need to motivate change and people
Recognition and celebration of successes

18 External factors

Customer

Recognizing that the customer is paramount and appreciating his value to the company

Plans - strategy

Downsizing threat (in employees, buildings, officers, etc.)
Budget-cutting threat

Political and market

Assessment of future threats and opportunities
Develop joint union-driven quality initiatives
React to changes in regulations, laws, policies and partnership
Awareness of market competition - competitors - pressures
Changes in political system and liberalization
Co-operation among companies, union and government
Believe in the unexpected/mastering paradox and unpredictability

Human resources - people

Attention to stakeholder interests (participation)
Emphasis on social and humanistic dimensions and quality of life issues
Use consultants/guru to support senior management

System

Co-operation between a strong quality professional and managers
Quality management has to be given academic status
Managers' formal academic skills and qualifications
Benchmarking worldwide
Changes applicability to the type and size of organization

Appendix 2

142 Internal factors

Managing change

Managers knowledgeable of how to change
Creation crisis to foster change
Positive use of dynamics of change
Apparent crisis
Understand importance of SM behavior change
Communicate the reasons for change
Understand and gain acceptance for culture change
Redefinition of management style and roles
Speed of change
Creation of change readiness
Enhanced degree of stability and reduced fear of change
Sequence and structure changes to obtain consistency
Creation of an environment of accountability toward culture change

Vision - goals - objectives

Aspirations turned into achievements
Strong values
Set measurable and achievable objectives
Vision, goals communicated so that they are understood by everyone
SM understanding of vision, strategy and match them together
Set clear expectations and parameters for performance and behavior
Common core values of company related to its people

Projects/strategy management

Development and deployment long-term strategy
Review of strategic issues
Selection of a good project
Effective pilot program
Process improvement thinking, understanding, variation; data
Having culture which supports quality
Good operational and strategic plan

Evaluation of interim progress on long-term quality initiatives
Action plan formulated and communicated by SM
Coaching strategies
Strategic role of the quality department

Recommendations - actions

Need for local managers
Demonstrate solutions that fit management interests
Troubleshooting
Maintain enthusiasm through publicity and celebration
Adjust to disruptions in the workplace
Emphasis on physical environment, safety and ethical management

Training - improvements - education

Managers receiving training on "managing change"
SM trained in quality
Development and education
Self-renewal and development
Managers learn to delegate work to others
Support of employee development
Appropriate training for management

Techniques - methods

Tailored TQM programs for company
IBM's dynamic stability model
McKinsey 7-S framework
Introduction to activity-based management (ABM)
Investing in people technique (IIP)
Myers-Briggs personality type indication (MPTI)
Visual strategic thinking paradigms methodology (VSTP)
Participate and execute benchmark projects
Peters MBWA
Managing organizational change methodology (MOC)
Develop feedback mechanisms
Willingham six-step model (AIDINC)
Consideration of Howard's corollary axiom
Timothy's principle
Joshua's axiom

Management skills

Managers with personal leadership skills
Be a learning board
Bridge theory and practice
SM acquires skills in communication and analysis
Mixing management styles
Leaders apply team-leadership skills
CEO personal commitment to user quality

SM with diverse experience
Negotiation and compromise
Inspiring and motivating people
Leaders with skills in global diplomacy
Leaders with adaptable behavior and cultural leadership skills
SM are role model and lead by example
Managers have coaching in behavior and leadership skills
Managers with a listening and learning style
Secure ownership and participation
Knowledge of power and control
Re-engineering management
Project management tasks

Teamworking

Chairman and directors' teamworking
Updated reports on vision implementation team on progress
Empowered staff
Good communication among company executives
Consistency of staff meeting
SM quality steering committee
High level of communication and views
Small quality directorate of internal consultants
Facilitate teams and avoid conflicts
Agreements between management and employees
Teamwork: employee involvement (in the change process)
Cross-cultural and functional change key teams
Self-directed, motivated improvement teams or QCs
Communication of best practices and initiatives in the organization
Information sharing - two-way communication, teams

Resources

Efficient use of group resources and R&D.
Development of talents, positive performance, and strengths of staff
Use of expertise, technology and know-how
Use of facilities, equipment, products and money
Adequate quality resources available
The higher the status of the quality manager the better
Divide and conquer

Quality matters

Do not fight resistance, just validate (expend it)
Proof of viability of the quality approach

High level of quality awareness
Management-led quality culture
Common quality language
Operational quality responsibilities
Operational role of the quality department
Strategic role of the quality department
Operational quality requirements

People

Self-motivation
Quality professionals with focus on quality
A resilient SM workforce
Process denominator, facilitator, coordinator, quality manager
Cope with the stress of uncertainty
Indexes of internal customer satisfaction
Assessment of improvements and actions
Quality performance measurement - quality costs

Reward

Directors' award for aspects of quality attainment

Quality systems-policies

Quality system auditing
Fair and honest appraisal system
Company's quality policy
Open system and philosophy
Structured quality system
Reward and recognition system
Company's human relations policy (fair treatment)
Ownership of the system is paramount
Adequate organizational structure
Determine a system for monitoring individual's commitment

Senior Management

Management business and management fundamentals reviewed by directors
Participative management
Business structure (that fits the market)
SM understanding of its role
Management's attention
Measurement of managers' quality performance
SM commitment of time to understand the subject
Continuous improvement of quality
Effective management time (space for the manager)
Managers 35-50 yrs old, best performance
High but reasonable standards of performance
Management actions

23 External factors

Customer care

Identification of external customers' needs and expectations
Pressures from market, customers, board, etc.
Indexes of external customer satisfaction
A quality survey/measure customers' satisfaction

Market

Identification of profit sources
Evaluation of competitors, products, demographics, market, legislation
Establishment of relations and collaboration with diverse companies
Assessment of the company's quality position
Emphasis on competitors

Political

Union leaders focus on quality
Co-operation among governments (transnational, teleworking, etc.)
Shaping of the political dynamics of change

People

Staff networking with suppliers
Staff networks with community
Imported staff and managers
Local and foreign managers work together in seminars
Selection of the right consultant
Use of "gurus" 14 management principles
Use of outside facilitator, quality professional, guru, champion
Managers with college or university degree

Innovation - Technology

Joint activities: exchanges, research, conferences, venture, etc.
External quality strategies
Adaptation to new demands

Appendix 3

Recommended actions

Key motivator: profit, productivity, prestige, peace of mind
Showing individuals that their gains will outweigh losses
Avoid over-sophistication
Ensure that CI is built into implemented solutions
Participation of chairman or CEO in activities
Identify factors that have high impact on customers
Ensure achievement in reasonable time
Maximize financial benefit to business
Identify factors that have high impact on SM

Create accountability linkages between money and employees

Communications

Two-day CEO and boardroom forum
Written statement to clarify/describe future and changes

Training courses - programs

SM programs: "Management in the '90s"
Crosby's quality training program
Communication program
Person-to-person dialogue
Training on job descriptions, reward systems reporting relations
SPC, DOE, QFD
Top managers receive greater expenditure on training than others
Usage of languages, books, magazines, courses, actions
Manager training
Company mission and vision, health and safety in-house course
Encouragement of learning and development by building creative working environments
Training and workshops
Ownership: counseling, vision workshops, cascade principle
Talking keywords: e.g. customer satisfaction, Q team etc.
Training programs: (see text)
Training on systems tracking and auditing, i.e. ISO 9000 criteria
Training on competitive benchmarking

Senior management skills

Use discrepancies to create dissatisfaction
Leaders mobilize groups, provide models, rewards, etc.
SM calendar (where time is spent)
Provide sources of stability: structures, people, physical locations, timetables, etc.
SM showed commit time to read books, attend conferences, courses, study best practices, network expertise
Broaden work without sacrificing depth of experience in strategic areas
Do not delegate responsibility of quality and productivity improvements
Managers' competency
Adopt 5Ps behavior: positive, proactive, participative, productive, pioneering
SM characteristics of a superior leader
CEO duties regarding management, and collecting ideas
Deploy activity-based management (ABM)

Leadership styles: directive, participating, delegating

Facilitation of coaching and operational strategic planning skills

Problem solving, decision making, facilitation, project planning, critical thinking

Change management

Define what change is required

Obtain agreement on the initial implementation steps

Explore discussion on strategic challenges

Change dynamics: individual, group, inter-group, organizational, societal and global

Use of posters and slogans in change campaigns

Team building

Implement recommendations of teams

Expand team capability

Make the most of team differences

SM meetings devoted to quality issues

Facilitate team in creating its own action plan and support

Assist team in measuring performance

Provide team with clear directions and choices

Build trust and inspire teamwork

Information collection/analysis/performance

Evaluate the cost of poor quality

Survey on company's customer satisfaction compared with their competitors' customers

Use quality key indication goals

Participation in development of devices such as surveys, sensing groups, consultants, interviews, communication channels, follow-up

Validate: produce statistics, evidence, ISO 9000, teams, etc.

Identify customers' needs and expectations

Establish a customer feedback process

Measure degree of customer satisfaction

Market analysis (customers and competitors)

Personnel analysis
(company's human resources)

Cost analysis

SM to investigate successful quality companies

Reward

Employee satisfaction goals

Rewards and benefits

Give viable and achievable incentives representing desired goals

Use of quality audit checklists and orientation questionnaires