

4TH D L SHAH MEMORIAL LECTURE

"A Changing Dimension on Quality" - Deming Experience

Dr. N. Ravichandran, Chief Executive Officer, Lucas-TVS Ltd, Chennai.



Mr. B. Banerjee, Mr. H. K. Taneja,
Dr. N. Ravichandran,
Mr. Khushroo Khambata, Dr. H. M. Mehta



Mr. H. K. Taneja, Trustee of D L Shah Trust
giving update on
Late D. L. Shah and the Trust



Mr. Jatin Patel, Technical Director, ASPEE
introducing to Chief Guest Dr. N. Ravichandran



Mr. B. Banerjee presenting welcoming
bouquet to Dr. N. Ravichandran



Dr. N. Ravichandran, CEO, Lucas-TVS Ltd.,
delivering the lecture



Mr. B. Banerjee, Dr. H. M. Mehta &
Mr. Khushroo Khambata presenting silver
memento to Dr. N. Ravichandran



Mr. B. Banerjee, Mr. H. K. Taneja, Chief Guest
Dr. N. Ravichandran, Mr. Khushroo Khambata,
Dr. H. M. Mehta



Audience



Mr. Santosh Khadagade proposing vote of thanks

D. L. Shah Memorial Lecture was held on February 2, 2013 at Hall of Harmony Nehru Centre Worli, Mumbai – 400 018.

Mr. B. Banerjee – President of NCQM, welcomed the guests and dignitaries, Mr. Khushroo Khambata – CEO of D. L. Shah Trust (DLST), Mr. H. K. Taneja – Trustee of DLST, Dr. H. M. Mehta – Trustee of NCQM and Chief Guest Dr. N. Ravichandran – CEO, Lucas-TVS Ltd., Chennai. Mr. B. Banerjee gave the welcome address with an update on NCQM and its activities.

Mr. H. K. Taneja – Trustee of D. L. Shah Trust, gave an update on profile and achievements of Late D. L. Shah and on the activities of the D. L. Shah Trust.

Mr. Jatin Patel, Technical Director, American Spring & Pressing Works Ltd., (ASPEE) introduced the chief guest and speaker, Dr. N. Ravichandran.

Dr. N. Ravichandran delivered the lecture on **"A Changing Dimension on Quality" – Deming Experience** followed by question and answer session. The lecture was very informative, enlightening and inspiring.

Mr. B. Banerjee, Dr. H. M. Mehta and Mr. Khushroo Khambata presented a silver plaque memento as a gesture of appreciation to Dr. N. Ravichandran. Mr. Santosh Khadagade - Hon. Secretary, NCQM proposed a vote of thanks to all concerned who made the event successful.

The evening concluded with refreshments and tea

“A Changing Dimension on Quality” - Deming Experience

Dr. N. Ravichandran, Chief Executive Officer, Lucas-TVS Ltd, Chennai.

1. Plan for the lecture

The entire lecture is structured under six board headings. They are:

- Changing global scenario
- Challenges
- Delivering Customer Value
- Quality Evolution
- Future Focus
- Conclusion

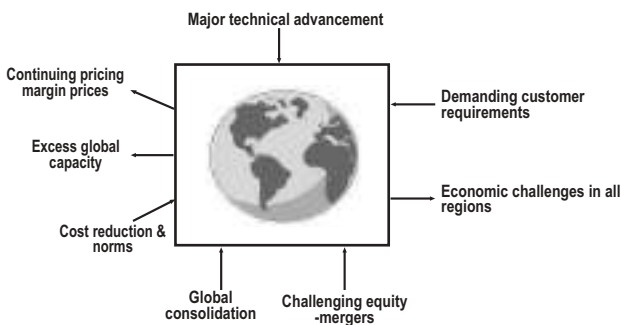
Highlights on each of the above are provided in subsequent paragraphs.

2. Changing Global Scenario

2.1 Competitiveness in the Global Business Environment

- Fast changing Business Environment is characteristic of 21st Century.
- Rapid pace of Globalisation & Technological progress has changed market conditions & competitive strength.
- Business potential depends on Quality, Speed, Technical superiority, Services and Product differentiation.

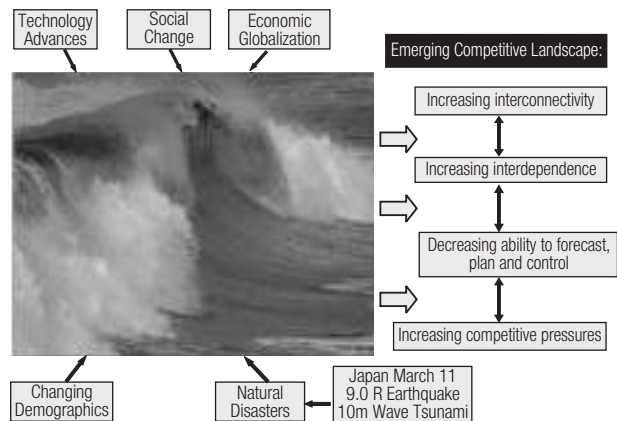
2.2 The world in which we do business



2.3 Changing Business Environment

Yesterday	Today
Natural resources defined power	Knowledge is power
Leaders commanded and Controlled	Leaders empower and coach
Shareholders came first	Customers come first
Production determined availability	Quality determines demand
Everyone was competitor	Everyone customer
Value was extra	Value is everything

2.4 Forces Creating Waves of Environmental Change



2.5 Evidence of Declining Corporate Lifetime

The average lifetime of the largest industrial enterprises (listed in Fortune 500) is less than forty (40) years, roughly half the lifetime of a human being!

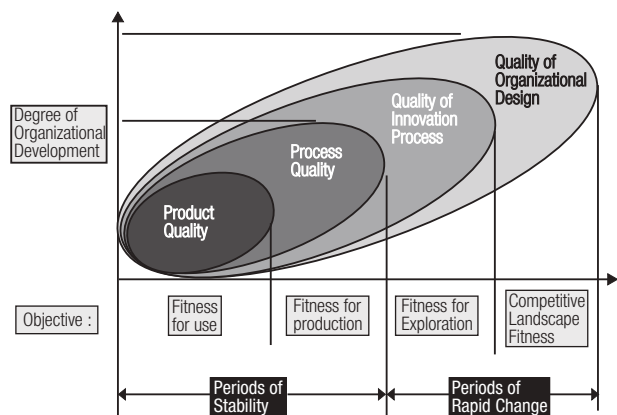
Royal Dutch/Shell Survey, 1970

Over the last sixty years, the average lifetime of companies on the S&P 500 list has declined by 80% from 75 years to 15 years

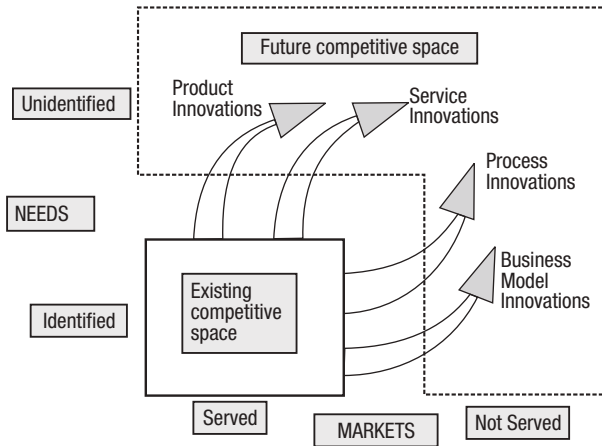
John Hagel III, Fast Strategy, 2007

Year	Corporate Lifetime, Yrs
1947	75
1970	40
2007	15

2.6 Evolution in the Concept of Quality

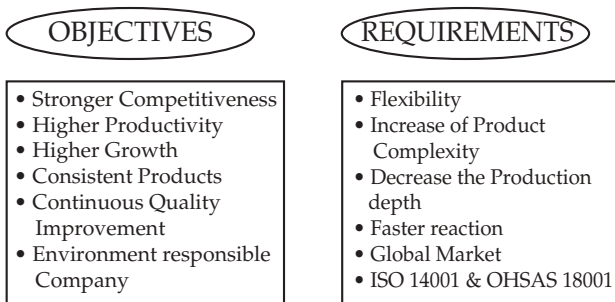


2.7 Approaches for Exploring the Future Competitive Space.

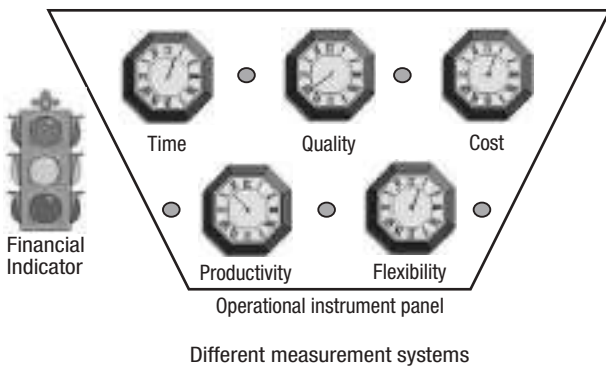


3. Challenges

3.1 Challenges of Global Market

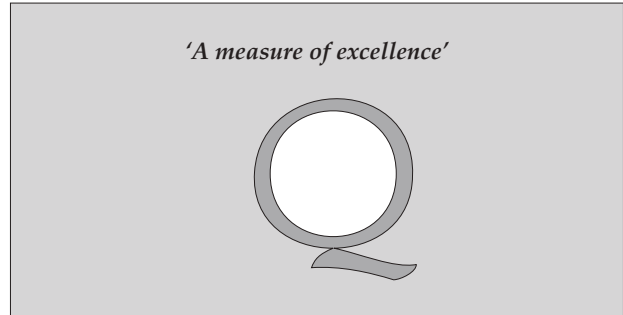


4. Delivering customers value



5. Quality evolution

5.1 Quality – A measure of excellence



5.2 Quality definition

Subjective term for which each person has his or her own definition. In technical usage, quality can have two meanings:

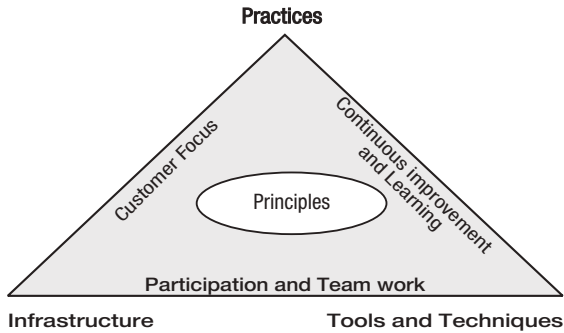
One as characteristics of a product or service that bear on its ability to satisfy stated or implied needs and another a product or service free from deficiencies

Note: ISO 9000 : 2008 version defines Quality as “Degree to which a set of inherent characteristics fulfils requirements”.

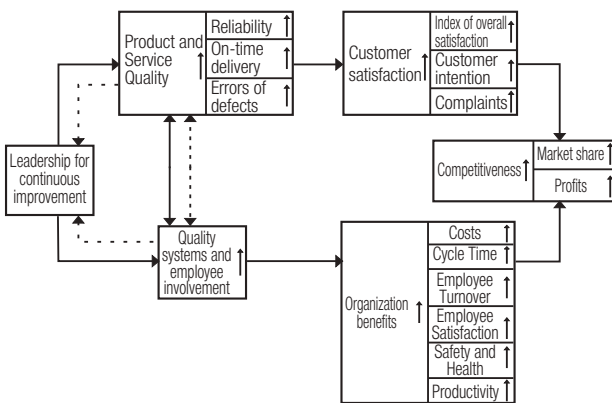
5.3 Philosophies & Frameworks

W EDWARDS DEMING	PHILIP B CROSBY	KAORU ISHKAWA
<ul style="list-style-type: none"> ➤ There are no shortcuts to Quality. ➤ No Quick Fixes. ➤ Improvement requires full commitment and support from top. ➤ Extensive training needed. ➤ Participation of all employees needed. 		
CLAUS MOLLER	CRR RAO	GENICHI TAGUCHI
SHIGEO SHINGO	PC MAHALANOBIS	

5.4 Scope of total quality



5.5 Total quality module

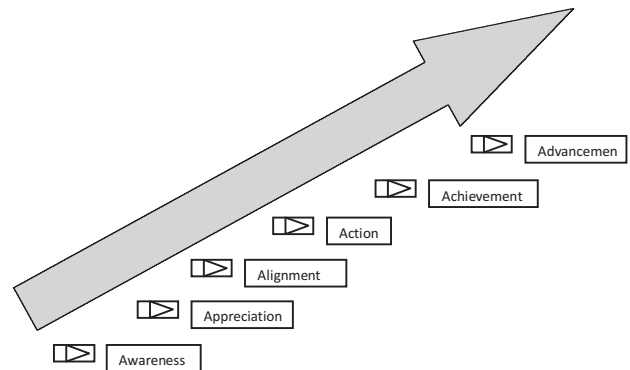


6. Future focus

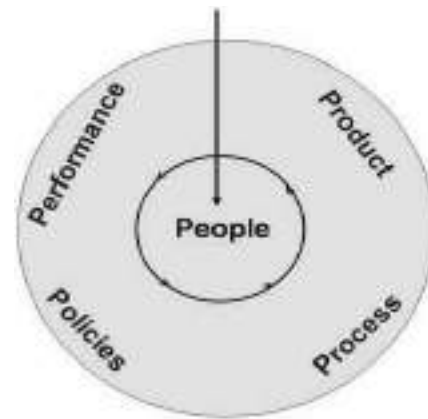
6.1 Future quality system

S. No.	Area	Conventional Quality System	Current Quality System	Future Quality System
1	Customer	Customer Satisfaction	Customer Satisfaction	Customer loyalty
2	Management	Leadership not stressed	Leadership mentioned	Inspiring leadership to help people reach their full potential
3	Employees	Taylorism, Fear driven drudgery	A few experts rest of people passive	True empowerment, freedom, joy in the workplace
4	Organization	Vertical structure Tall Pyramid	Departments the norm	Flat pyramid, teams the building block
5	System	ISO-9000; QS-9000	Quality mindedness promoted	World class system business excellence a superordinate value
6	Tools	7QC Tools, PDCA & B-D	Classical DOE	Shainin DOE, MEOST, QFD, TPM, NOAC, VE & Cycle time
7	Design	Design in isolation	Computer simulation	Design in half the time, half the defects, half the costs, half the manpower
8	Suppliers	Dictatorial & remote control relationship	Laissez-Faire	Win-win partnership, based on ethics, trust & active help
9	Manufacturing	Leans on inspection	Leans on	Leans on perfection
10	Field	Service contracts to cover product weaknesses	FMEAs	MEOST, built in diagnostics
11	Support services	No business on quality	Quality appreciation	Quality initiatives
12	Measurement / results	Quality improvement for its own sake	Encourages return on quality investment - 2:1 to 4:1	Return on quality investment over 10:1; profit improvement: minimum 2:1

6.2 The approach



6.3 What makes the difference



6.4 Twelve steps

1. Customer orientation
2. Participation
3. Training
4. Motivation
5. Products and Services
6. Processes and Procedures
7. Information
8. Suppliers
9. Culture
10. Planning
11. Communication
12. Accountability

6.5 Five value Systems

1. Pride
2. Desire
3. Teamwork
4. Attention to detail
5. Follow through

6.6 Quality in architecture



Built in 1010 AD by Raja Raja Chola in Thanjavur, Brihadishwara Temple also popularly known as the 'Big Temple' has turned 1000 years in 2010



Construction of the Taj Mahal began in 1632, it was completed in 1648 and the surrounding buildings and garden were finished five years later.

6.7 Quality in paintings



Tanjore paintings have a very rich heritage. This style of painting has been followed widely by the people in Southern Tamil Nadu for the past two centuries. The art flourished in Tanjavoor, pronounced Tanjore, the capital city of the Chola dynasty, and thus got its name. Maratha princes, Nayaks of Vijaynagar dynasty, Rajus communities of Tanjore and Trichi and Naidus of Madurai patronized the art of **Tanjore painting from 16 to 18th centuries**. Tanjore paintings are deeply rooted in tradition and still innovative within limits. This art is sacred and dedicated.

6.8 Leadership quality



What he has preached, practiced

6.9 Consistency in quality



Right First time Every time

6.10 Quality of captaincy



Good decisions without ambiguity

6.11 Adaptation of 8 QMS principles at Lucas – TVS

1. Customer focused organization
2. Leadership
3. Involvement of people
4. Process orientation
5. System approach to management
6. Continuous Improvement
7. Factual approach to decision making
8. Mutually beneficial supplier relationships

6.11.1 Customers focus

Organization depend in their customers and therefore should understand current and future needs, met customer requirements and strive to exceed customer expectations. This requires:



1. Identification of customers (Internal & external)
2. Understanding stated and implied needs / expectations.
3. Establishing measures of satisfaction customer needs / expectations.
4. Determining how far customer needs are being met at present.
5. Efficient processing of customers complaints.
6. Establishing customers focus down the line including distributors
7. Seeking customers' feedback and its analysis for taking measures to improve customer satisfaction.

6.11.2 Leadership



Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives. This requires the following steps:

1. Establish long term vision and strategy.
2. Enlist others in a common vision by appealing to their values, interests, hopes and dreams.
3. Search for challenging opportunities to change, grow, innovate and improve.
4. Experiment, take risk and learn from the mistakes.
5. Foster collaboration by promoting cooperative goals and building trust.
6. Strengthening others by sharing information and power and increasing their discretion and visibility.
7. Set an example by behaving in the ways that is consistent with the stated values.
8. Plan small wins that promote consistent progress and build commitment.
9. Recognize individual contributions to the success of every project.

6.11.3 Involvement of people



People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.

- Employees must be treated with dignity and respect.
- They must be trained to build competence where required.
- Each employee must know what exactly is required to be done and where possible must be able to assess the quality of his work.
- Fear must be totally removed from the organization and employees must be encouraged to bring out weakness in the system.

6.11.4 Process approach



A desired result is achieved more efficiently when related resources and activities are managed as a process.

1. Planning off processes to meet customer requirements.
2. Process capability study and qualification of process.
3. Establishment of mechanism to keep process under control.
4. Ownership of process with full responsibility of quality.
5. Verification of product/ service for conformance before instruments.
6. Maintenance/ calibration of process equipments and measuring instruments.
7. Analysis of process data for improvement.

6.11.5 System approach to management



Identifying, understanding and managing a system of interrelated processes for a given objective improves the organization's effectiveness and efficiency. This requires -

1. Clear objectives.
2. Organizational structure with well defined authority and responsibility.
3. Planning for Quality .
4. Control of functions affecting quality.
5. Coordinating of interrelated processes.
6. Audit mechanism for self regulated organization.
7. Analysis of process data for improvement

6.11.6 Continual improvement



Continuous improvement should be a permanent objective of the organization. This requires:

1. Measurement of quality.
2. Analysis of quality data and investigations for non conformities.
3. Seeking opportunities for improvement rather than reacting to quality problems.
4. Benchmarking.
5. Organization for quality improvement like quality circles, quality improvement teams for taking up specific projects.
6. Review of Q.I.P's (Quality improvement Projects) by top management.
7. Recognition of significant achievements.

6.11.7 Factual approach to decision making



Effective decisions are based on the analysis of data and information. This requires :

1. Recording of data on:
 - Quantitative production
 - Equipment failures
 - Process conditions
 - Delivery performance
 - Customer complaints
 - Quality costs
 - Supplier performance.
2. Ensuring the data is accurate, reliable and accessible.
3. Analysis of data to understand the impact on organizational performance and cost implications and for deciding corrective actions.
4. Data on results of application of corrective action.

6.11.8 Mutually beneficial supplier relationships

An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value. This requires :

1. Consideration of quality capability while selecting vendors.
2. Specification of quality on purchase documents.
3. Clear understanding of supplier needs.
4. Mutual trust and share responsibility and accountability.
5. Clear and open communication.
6. Mutual commitment for continuous improvement.

6.12 Quality, Cost and Profit relationship: Traditional thinking

Many people think that quality costs money and adversely affects profits. But these costs are the costs of doing it wrong first time.

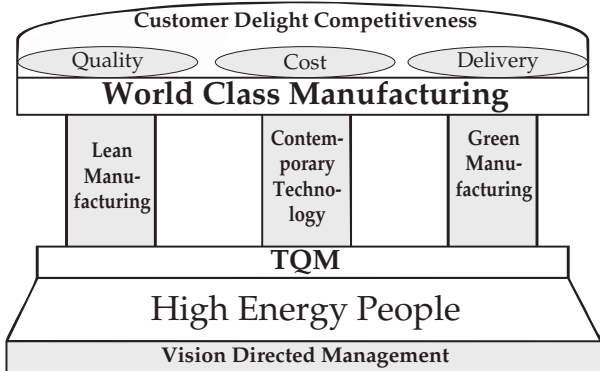


Hence if we design the product right first time, build it right first time - we save all the costs of redesign, rework, scrap, resetting, repair, warranty work etc.

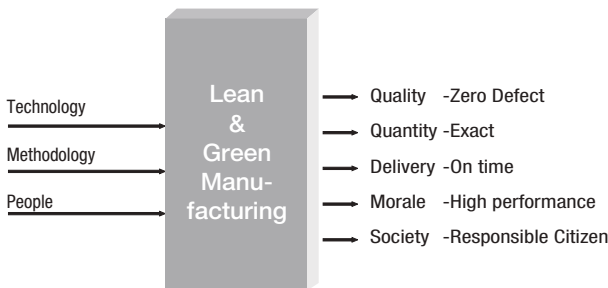
This quality in the long run results in increased profitability. This is a paradigm shift on quality and profit.

7. Conclusion

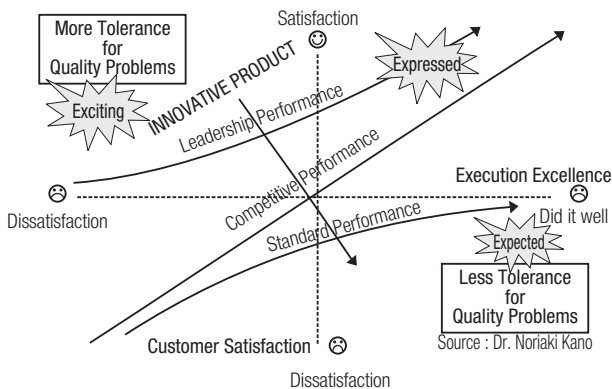
7.1 Lean Green Model



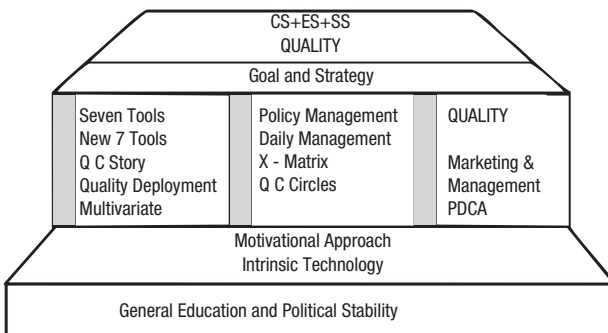
7.2 Lean Green Manufacturing



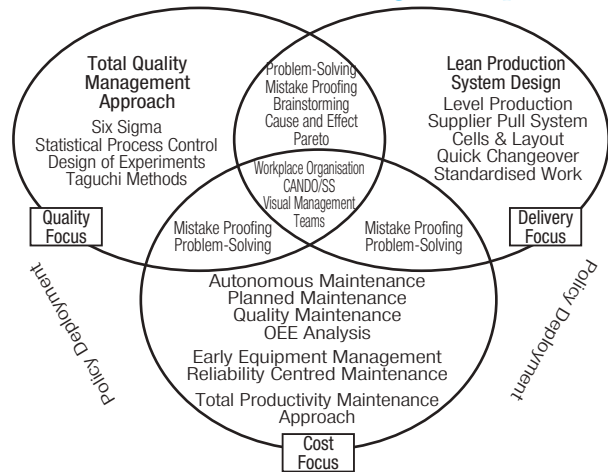
7.3 Seeking performance excellence



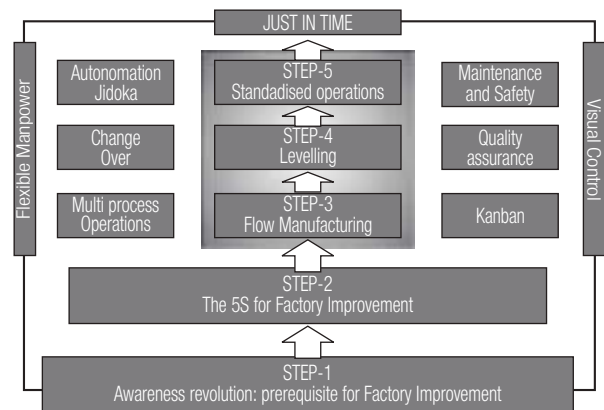
7.4 Dr. Keno's houses of TQM



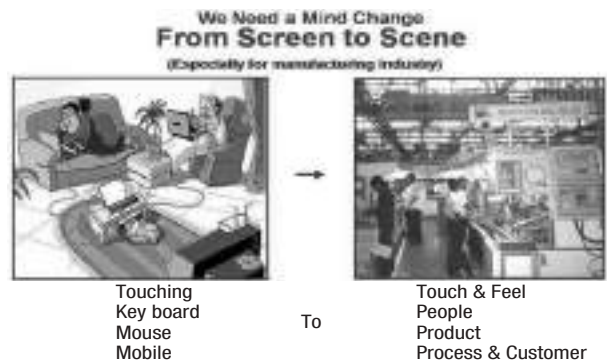
7.5 World class manufacturing techniques



7.6 Our journey towards manufacturing excellence



7.7 Mind change: From Screen to Scene



7.8 Culture change

A/c Culture	AC	Achievement Culture
PC Culture	PC	Performance Culture
Information carrier Culture	IC	Improvement Culture
Argument Culture	AC	Alignment Culture
Cell Culture (Cell Phone)	CC	Cell Culture (Natural Group)
Talk Culture	TC	Target Culture
Fault Culture	FC	Focus Culture
Defect Culture	DC	Distinction Culture
Waste Culture	WC	Wealth Culture

Vision without action is merely a dream.
Action without vision passes the time.
Vision with action can change the world.



The journey to 100 miles begins
with a single step



Conclusion:

If all of us understand the market scenario, the opportunities and the challenges and develop strategies, enthuse employees and implement World Class Practices.....

THE WORLD IS OUR MARKET PLACE



National Centre for Quality Management (NCQM) was established in 1985 by a group of eminent Industrialists and Professionals. It is a premier institution engaged in promoting quality culture in Indian economic sectors through services like training, education, publication, research and advisory services. It is a Society registered under Bombay Public Trust Act, 1950.

NCQM is a 'not-for-profit' organization supported by various categories of members. Membership of NCQM contributes to the cause of quality, encourages continuous improvement and provides sustained support to NCQM. A member can join this organization any time during the year.

Member Services / Benefits

Valid members can avail of the services and benefits from NCQM as under :

- Free participation in periodic lectures / seminars organised by NCQM at various locations.
- Quarterly newsletters to all categories of members.
- Discount in NCQM services & publications
- Opportunity to interact with experienced professionals.
- Use of Library facilities.
- Formal certificate as a member, which can be displayed.

Categories of Membership

Membership of NCQM will constitute the following categories :
Admission Charges Rs. 500/-

	Category	Annual * Subscription
a	Patron	Rs. 7,500/-
b	Institutional Member	Rs. 5,000/-
c	Corporate Member (organization)	Rs. 2,000/-
d	Fellow / Senior Member	Rs. 1,000/-
e	Member (Individual)	Rs. 500/-
f	Student Member	Rs. 300/-

* Plus Service Tax as applicable (12.36%)

International Membership

The international membership will be of two categories. No admission fee will be charged.

Category of Membership	Annual Subscription (US \$*)
Organization	250/- USD
Member (Individual)	50/- USD

* Annual Subscription could be paid in equivalent Indian Rupees also.

For details of membership, log on to : www.ncqm.com
For any queries, please contact :
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ed@ncqm.com / ncqm@vsnl.com