India became independent in the year 1947.

1950 - 1990 Business scenario

α Industrial growth was very slow and sluggish
α Insignificant market share in world market
α Thrust was towards
• Self Reliance
• Protection from competition
• Nationalization
1990 - Till date Business scenario

The country’s door was opened to foreign investments and the thrust was towards

- **Globalization**
- **Competition**
- **Privatization**
Inspite of differences in the agenda among different political parties one common factor emerged.

“The progress of the country requires economic realignment.”
Crucial issues for the progress of Indian industries in the new millennium

- GLOBAL MARKET SCENARIO
- TOTAL QUALITY MANAGEMENT
- PRODUCT INNOVATION
- HUMAN RESOURCE DEVELOPMENT
- NEW MARKETING STRATEGIES
If corporate India, which has produced poor products for 48 years, *is to survive tomorrow*, a quality revolution is essential.
<table>
<thead>
<tr>
<th>Labour</th>
<th>Skilled</th>
<th>Quality</th>
<th>Cost</th>
<th>Availability</th>
<th>Turnover</th>
<th>Average Grade</th>
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<td>3.30</td>
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<tr>
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<td>Japan</td>
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<td>7.00</td>
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<td><strong>Total</strong></td>
<td>2.80</td>
<td>3.69</td>
<td>5.88</td>
<td>3.96</td>
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## COMPARATIVE INVESTMENT CONDITIONS

**Ideal = 10 Points**

<table>
<thead>
<tr>
<th>Investment Factor / Category</th>
<th>China</th>
<th>India</th>
<th>Indonesia</th>
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<td>Production cost comparison</td>
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<td>Cultural Influences</td>
<td>5.5</td>
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</table>
Launch the TQM Crusade with a Pilot Project

Choose a small, but important, problem, and wield all your quality tools to develop the solution. And communicate the results all over. Prototype miracles can convert sceptics far faster than proselytisation.
Lay down stringent guidelines and checklists for each step of every process. Even if all your people leave tomorrow, operations must be continued by their replacements at the same error-free levels. Institutionalize initiative; don’t individualize it.
Measure and Verify the Effectiveness of Improvements

Gauge the efficacy of each initiative: not just the money saved, but also indicators like delivery accuracy or invoice errors. Broadcast the findings, and use them as starting points for further improvement. If you don’t want your quality to evaporate, evaluate it.
Extend the TQM Drive to Suppliers and Customers

Export your quality practices to suppliers so that the components you use don’t have to be inspected. Use customer tastes to determine your quality standards. Remember, quality must be practiced on the shopfloor, in the kitchen, everywhere.
Empower Workers to Solve Problems Independently

To bind your workforce to quality, give it a free hand. They must have the power to execute the solutions that they develop. Frontline staff must be able to redress complaints without running for approval to the boss. To build a quality empire, empower
TQM - CASE STUDIES FROM INDIAN ORGANISATIONS

- Quality As Leadership
- Quality As Infrastructure
- Quality As Systems
- Quality As Manufacturing
- Quality As After Sales Service
- Quality As Marketing
- Quality As Service
- Quality As HRD
- Perfect Machine Tools
- Mukand
- Modi Xerox
- Ranbaxy
- Thermal
- Hindustan Lever
- HDFC
- Infosys
QUALITY
AS
LEADERSHIP
Perfect Machine Tools
Best Practices - PMT

• Set a personal example of practicing what you preach about quality
• Create the environment for innovation and personal development
• Instill in every employee a sense of pride in the work that he must do
• Invest in training people at all levels in quality theory and practices
• Empower employees to go to any length to satisfy the customer
How PMT Promotes Quality Leadership

GUIDING PRINCIPLES

Product Quality is what is perfect from the customer’s viewpoint

Every Commitment made to the customer must be honored

No matter what the cost the customer must be satisfied

Communicate the idea throughout the company

“Only when a man is free, can be blossom”

Set a Personal Example

Train People

Empower People

Motivate Employees

Create an environment where the employee is free to develop himself

A quality CEO must have:

- A sense of honor
- Pride in his work
- Clarity of Purpose
- A drive for perfection
- A commitment to quality

“Don’t start with the idea that man is bad. Touch the right chords in a worker to get quality”
QUALITY
AS
INFRASTRUCTURE
Mukand
Best Practices - MUKAND

- Do not dogmatically stick to any one TQM model
- Customize every quality ideology to corporate needs
- Create and empower a team only to drive TQM
- Train and retrain workers and managers in TQM
- Calculate the savings from every TQM Project
How Mukand Focuses on the Customer

- Individual urge to service internal customer
- Product Quality
- Process Quality
- Urge to Service external customer
- Customer Delight
- Technology
- Equipment
- SPC
- Qualified personnel
- Technology
- Equipment
- High Quality raw material
- Product application knowledge
- QA Practices
- Individual urge to service internal customer
- Product Service Quality
QUALITY AS SYSTEMS

Modi Xerox
Best Practices - Modi Xerox

• Break down every process into an unambiguous sequence of steps
• Document every process to create a manual for conformance
• Devise systems that can function even if the individuals change
• Keep the processes fixed and the organizational structure flexible
• Use global quality audits to benchmark efficacy of systems
PLANNING FOR QUALITY

- IDENTIFY OUTPUT
- IDENTIFY CUSTOMER
- IDENTIFY CUSTOMER REQUIREMENTS
- TRANSLATE REQUIREMENTS INTO SUPPLIER SPECIFICATIONS
Quality Improvement Process - Modi Xerox

Problem Solving Process:

- Identify and select problem
- Analyze problem
- Generate potential solutions
- Select and plan solutions
- Implement solution
- Evaluate solution

MONITORING for Quality:

- Recycle
- Evaluate results

Organizing for Quality:

- Identify Steps in work process
- Select measurements
- Determine process Capability
QUALITY
IN
MANUFACTURING
Ranbaxy
Best Practices - Ranbaxy

- Automate manufacturing processes as much as possible
- Create completely process-driven manufacturing systems
- Establish a system of color-coding to manage raw materials
- Document work processes and post them at all workstations
- Educate workers continuously on corporate goals
How Ranbaxy Builds Quality into its Production Process

- Raw materials and Packing materials are received in warehouse
- Material is stored in quarantine
- Material is checked for physical damage or short delivery
- Quality Control is notified and material labeled under test
- Sampling and checking is done by quality control
- Insurance procedures are initiated. Vendor is notified
- Recording of environmental conditions
- Printed packaging material is destroyed
- Material is stored in rejects bay
How Ranbaxy Builds Quality into its Production Process

Material is taken to fabrication area

Environmental conditions in fabrication area are checked

Corrected

Recording of environmental conditions

Production

Bulk fabrication takes place

Corrected

Recording of environmental conditions

Quality Checks

Environmental conditions in fabrication area are checked

Corrected

Recording of environmental conditions

Capsules are filled

Reprocessing

Filled capsule sample is checked by Quality Control
How Ranbaxy Builds Quality into its Production Process

- Environmental conditions in fabrication area are checked
- Blister packing takes place
- Environmental conditions in fabrication area are checked
- Filled Capsule sample is checked by Quality Control
- Reprocessing
- Final Product is forwarded for distribution
QUALITY
AS
AFTER SALES SERVICE
Thermax
Best Practices - Thermax

- Ensure that the TQM drive extends to service franchisees
- Empower franchisees to take decisions on the customer’s premises
- Focus on preventive, rather than curative, maintenance
- Log, monitor, and analyze customer complaints every day
- Stipulate deadlines within which franchisees must fix problems
How Thermax Ensures Timely Spares Supply - Tracing the Causes

**IMPORTS**
- Supplier delay
- Delayed Consignment
- Customs Delay

**MAN**
- Delay in releasing order
- Low priority to spares by production*
- Delay

**MATERIALS**
- QC Rejection
- Quality
- Bulk Failures
- Transportation Timemore

**SYSTEM**
- Disproportionate distribution
- Single source

**MATERIAL**
- N.A. in 4 weeks

- Suppliers Default
- Lack of F/U

- Delayed indents to materials
- No review*
- Engg. Specs. Change
- Mini-max levels not in place*

- Variation in cons. pattern
- Material not indented
- Sufficient QTY not intended

* MOST PROBABLE CAUSE
How Thermax Ensures Timely Spares Supply - Tracing the Solutions

INVENTORY LEVELS IN PLACE

METHODS

MEN

MACHINE

SYSTEM

Lead Time

ABC/VED

Cons.

Fix levels by scientific methods*

Identity task force

Periodic review of Suppliers

Upgrading existing software*

Training on new software

Monthly review of VA Items

Interphasing of revised software with existing*

* POSSIBLE SOLUTION
QUALITY
AS
MARKETING
Hindustan Lever
Best Practices - HLL

- Validate every marketing step through customer feedback
- Identify specific business needs for every new product
- Use cross-functional teams to filter out unworkable ideas
- Judge advertising quality against specific parameters
- Depend on market research to finetune communication strategy
How HLL Markets Quality

Unilever global business priorities

Consumer research

Competitor’s move

Research breakthrough

Product Idea

Cross-functional team
- R & D
- Manufacturing
- Marketing
- Finance

Unilever global pool of knowledge

Is it the right time?
- Yes
- No

Project brief
- Business need
- Budget
- Deadline

Action Plan

Wait

Yes

No
How HLL Markets Quality

Key milestone to check progress

STRATEGIC FILTERS
• Cross-functional teams to check whether concept is working

CREATIVE BRIEF
• Reason why
• Objectives
• Brand positioning
• Brand personality
• Target audience
• Budget
• Brand discriminator
• Advertising property

SALES TRACKING
• Trial & repurchase
• Brand switching

Launch Product
Media Models
Launch campaign

Final product

Brief to agency
Research

AD TRACKING
• Ad recall
• Attitudes
• Brand-image associations

Consumer research

Find-Tune

Freshen advertising every year

What Next
QUALITY
AS
SERVICE
HDFC
Best Practices - HDFC

- Reduce paperwork to make it easier for customers
- Reduce the time customers spend waiting in offices
- Identify steps that can be merged or eliminated altogether
- Provide information and reduce transaction times
- Recruit inexperienced people to eliminate de-training
How HDFC is Cutting Loan Disbursal Times

Yesterday (Until 1992)

Visit 1
Customer purchases application form from HDFC offices

Visit 2
Submits form with documents required for credit appraisal

Visit 3
is interviewed by credit appraiser

Visit 4
Submits legal documents to legal appraiser

Visit 5
Collects disbursal cheque

Loan sanctioned by centralised credit committee that meets since a fortnight

Technical officer visits site and submits report. Date given for disbursal

4 - 6 Weeks
How HDFC is Cutting Loan Disbursal Times

Today (Until March 1995)

Visit 1
Customer takes free application form and submits it if he has a salary slip

Visit 2
Submits other documents required for credit appraisal is interviewed

Visit 3
Submits legal documents. Date given for disbursal

Visit 4
Collects disbursal cheque

Loan Sanctioned by branch - level credit committee that meets once a week

Technical Officer visits site and submits report

2-4 Weeks
How HDFC is Cutting Loan Disbursral Times

Visit 1
Collects and submits application form. is Interviewed

Visit 2
Submits all remaining documents

Visit 3
Collect disbursal Cheque

Technical Officer visits site and submits report

Loans Sanctioned daily

Tomorrow (From April 1995)

1Week
QUALITY
AS
HRD
Infosys
Best Practices - Infosys

- Treat employees as customers of the human resource department
- Use the jobline of every employee to install quality checks
- Research workers’ requirements to design benefits and rewards
- Use tests and interviews to ensure suitable skills and mindset
- Adopt 360 degree appraisal to ensure objectivity of assessment
How Infosys applies Quality to HRD

Scout at the best engineering schools

Campus recruitment

Walk-in recruitment

Head-hunting

Ensure Analytical - skills

Written Test

Interview

Induction

Allocation as software developer

Train for specific technology

Ensure leadership and communication skills

Ensure teamwork and high achievement goals

Train for specific technology

Offer special benefits to individuals

Offer stock options after evaluating performance

Use employee feedback to improve work environment

Use 360 degree appraisal objectivity

Ensure constant training, Shuttle between projects

Ensure team spirit and high achievement goals
How Infosys applies Quality to HRD

- Check for management skills, fairness, and ability to meet deadlines
- Check for ability to handle large projects and complicated logistics

Promotions

Movement to technology stream

- Promotion to module leader
- Promotion to project leader

Resignation

- Analyze reason for resignation
- Counsel employee on career plans
- Negotiate retention or release employee
- Send report to employee’s superior and databank

HRD process

Quality Checks
Conclusion

In marching towards the 21st century, Indian corporate have begun the journey of TQM. The journey is very painful. Yet, there is no alternate road for excellence. TQM is both a goal and a path. Therefore, the quality journey is one that can never end.

THANK YOU!