A lot of training has been provided with a view of enhancing quality, productivity and competitiveness to different organizations in Nepal since decade. Similarly, a lot of activities on organization development have been going on to improve performance of organizations. These days Total Quality Management (TQM) and ISO 9000 are being advocated as important approaches of enhancing competitiveness and implemented by many forward looking organizations throughout the world. In Nepal too, a number of professionals and managers associated with quality management and productivity management have been adopting the Total Quality Management approach in their respective areas of work.

Despite so much dissemination and numerous quality enhancement programs, a standard training manual on the subject of quality and competitiveness seems to greatly wanting in Nepal. The lack of such a standardized manual has given rise to repetitions and made the work of trainers in the subject tedious. At times, trainees become confused when they are presented with different approaches and different methods by different trainers in different forums.

This training manual *Enhancing Competitiveness through Total Quality Management* has been prepared with the objective of fulfilling such a gap. The contents and slides are taken from different sources by the resource persons who have used them in previous training programs and which have been highly accepted by the participants. The slides and the contents included in this manual may be reproduced by resource persons and other users for their uses. Acknowledgement of the use of materials shall be appreciated. Users of the manual are requested to provide constructive suggestions to make the manual more applicable to Nepalese context.

The purpose of bringing out this training manual would have been served if it could be fruitfully used by practicing managers and professionals, and by teachers, consultants and other resource persons in disseminating knowledge on enhancing competitiveness through Total Quality Management. This will contribute to improve the overall performance of organizations, and bring about a climate of economic development in the nation.

Prof. Dinesh P. Chapagain
Chairman
Network for Quality, Productivity and Competitiveness-Nepal

Kathmandu
12 July 2005
Introduction

Nepal’s membership to the World Trade Organization (WTO) has opened a global market where the country could really benefit from the multi-lateral trading system. This opens up potential export markets for Nepalese products and trade on fair grounds in developed countries provided the products meet standards imposed by those countries. Nepalese stand in the global market is possible only through conscious and continuous efforts to improve quality of products, delivery schedules, services and price – that is, unrelenting focus on total quality management. The customer being the king is truer today than it ever was before. Enterprises that have adopted a human oriented approach to satisfy customers most economically by fostering an attitude of continuous improvement are more likely to be successful in the highly competitive markets. Management by quality is such an approach that integrates the concept of total quality management.

This march through quality cannot really bear fruit without organizations and individuals moving towards the positive image since positive images create positive futures. Appreciative Inquiry is an emerging concept that projects on these positive images of an organization and has been effectively applied in developing new approaches, address and resolve wide range of issues including quality, competitiveness and human resource of organizations which were well accepted by organizational members and lead to positive change.

One facet of positive image of an organization is the demonstration of the commitment to quality through the implementation of a quality management system under the family of ISO Standards. ISO certification could be of immense value for enterprises entering the international markets. ISO (International Organization for Standardization) has been developing voluntary technical standards over almost all sectors of business, industry and technology since 1947. A lot of misconceptions about ISO abound among people that view ISO as ‘product standards’ rather than ‘quality management’ systems. Such misconceptions need to be cleared before considering the implementation of relevant ISO standards understanding the elements of ISO standards.

Whether it is for the effective implementation of ISO standards or for other quality management systems, the top management has to remain committed for it and work through team/s. The inherent strength of employee participation in quality improvement programmes is aptly demonstrated by quality control circles which are recognized as the forte of Japanese management system. The Japanese have successfully utilized the employee participation approach to motivate and bind groups/teams around their organizational goals. Different people behave in different ways and respond differently to situations. A good understanding of the group dynamics and its interplay in the organization is essential to channel the efforts of the groups/teams to solve workplace problems creatively and thus contributing positively in the organization.

The contents of this manual cover seven topics. Standards in the WTO Regime: Opportunity and Threats highlights the background of WTO, its specific standards and their requirements, the opportunities and threats borne out of Nepal’s entry into WTO and the way forward. Principles of Management by Quality deals with the human oriented approach and mindset for quality, and relates with implementation of total quality management. Discovery through Appreciative Inquiry highlights the creation of more effective organizations by focusing on their positive facets and images. Facts on ISO standards and requirements are given in
Demystifying ISO Standards and Certification Process and Elements of ISO 9001:2000 Standards to ally common misconceptions about ISO and to provide general information on the ISO implementation process respectively. Employee Participation and Quality Circle explains the how participation can benefit the management and the organization with specific reference to quality control circle as a successful approach to improve quality in the organization. In the end, a successful example of participation, brainstorming, is highlighted along with group dynamics in An Approach to Group Dynamics.
Contents

Foreword

Introduction

1. STANDARDS IN THE WTO REGIME: OPPORTUNITIES AND THREATS
   - Navin Dahal
     What is WTO?; WTO Agreements-I; WTO Agreements-II; WTO Agreements-III; Nepal’s WTO Membership; Standard Related WTO Agreements; Restricting Trade; Agreement of Technical Barriers to Trade; TBT – Conformity Assessment; SPS Agreement; Products Subjected to SPS Measures; Potential Impacts and Challenges; Way Forward

2. PRINCIPLES OF MANAGEMENT BY QUALITY
   - Dinesh Chapagain
     An Enterprise Model; Productivity Improvement Approaches; What is Productivity?; Profitability, Productivity, Price Recovery Relationship; Factors of Productivity; Quality, Cost and Productivity; Management by Quality or Total Quality Management; Redefining Customers TQM Way; Internal Customers, TQM Way; Redefining Quality TQM Way; Quality (Customers Need) One Dimensional Model; Quality, TQM Way Two Dimensional Model; Quality Improvement; Creating Quality Mindset; Definition of TQM; Scientific Approach; Systematic Approach; Organization-wide Approach; TQM Shared Philosophy; TQM Common Goal; TQM Common Language (Mind Set); TQM Common Approach; Malcolm Baldridge Quality Award for Performance Excellence (USA); European Foundation for Quality Management; FNCCI National Excellence Award

3. DISCOVERY THROUGH APPRECIATIVE INQUIRY
   - Mahesh Gongal
     Introduction to AI – Birth of AI; What is AI; Differences in AI and Problem Solving; Principles of AI – Beliefs; Assumptions; Phases of AI; Growth in Positive Core; Successful Applications

4. DEMYSTIFYING ISO STANDARDS AND CERTIFICATION PROCESS
   - Surendra Shrestha

5. ELEMENTS OF ISO 9001:2000 STANDARDS
   - Surendra Shrestha
     Elements of 9001:2000 Standards; Clauses of 9000:2000; Understanding ISO 9000; Management Commitment (clause 5.1); Process Based QMS Model; Management Commitment - Lessons to Learn; Quality Policy (Clause 5.3); Quality Objective (Clause 5.4); Quality Objectives – Lessons to Learn; Documentation Requirements General (Clause 4.1); Document Hierarchy; Documentation Requirements – Lessons to Learn; Control of Records (Clause 4.2.4); Types of Audit; Internal Audit (Clause 8.2.2); Internal Audit – Lessons to Learn; Management Review (Clause 5.6); Management Review – Inputs
6. EMPLOYEE PARTICIPATION AND QUALITY CIRCLES
   - Dinesh Chapagain

   Defining Problem the QC Way; Decision Making at the top; Employees Working at the Work Floor; Respecting Humanity; Decision Making at the Bottom; Organization for TQM/MBQ; Small Group Activities for Continuous Improvement or Quality Circles (QC); Benefits and Objectives of QCs; Systematic Problem Solving Approach - The PDCA Wheel; The QC Story (7 Steps); STEP 1 - Select Topic (PQCDSM); STEP 2 - Understand Situation and Set Targets; STEP 3 - Plan Activities for Solving Problem; STEP 4 - Analyze Causes; STEP 5 - Identify and Implement Countermeasures; STEP 6 - Check Results & Effectiveness; STEP 7 - Standardize and Establish Control; Basic QC Tools for Problem Solving; Check Sheets; Graphs/Charts; Pareto Diagram; Cause & Effect Diagrams; Other Basic QC Statistical Tools; Histogram; Control Charts; Scatter Diagram; Managerial QC Tools; Affinity Diagrams; Relations Diagrams; Tree Diagrams; Other Managerial Tools; 4 Phases of TQM Implementation; The Trial & Preparation Phase; The Introductory Phase; Steering Committee Function; Role Of Top & Middle Managers in TQM Promotion; The Promotion Phase; The Consolidation Phase

7. AN APPROACH TO GROUP DYNAMICS
   - Ramesh M. Singh

   Group Dynamics; Understanding of Groups; Views of Group Dynamics; Why Individuals Form into Groups; Practical Reasons for Joining Groups; Brainstorming; Barriers to Creative Thinking; Rules of Brainstorming; Positive Notes; Steps in Running a Successful Brainstorming

Bibliography
Standards in the WTO Regime: Opportunities and Threats

Navin Dahal

The World Trade Organisation (WTO) is the only international organisation dealing with global rules of trade between nations. It’s main function is to ensure that trade flows as freely, smoothly and predictably as possible. The establishment of the WTO in 1995 marked the conclusion of the Uruguay Round of negotiations of the General Agreement on Tariffs and Trade (GATT).

The GATT is the post-war multilateral agreement that provides a framework for the conduct of international trade. Its main thrust is to liberalize trade; meaning, tariffs and other restrictions to the entry of exported goods into an importing country must be reduced and removed. The GATT went through several rounds of negotiations, the most ambitious of which is the Uruguay round, launched in Punta del Este in 1986 and concluded in mid-1994 in Marrakesh, Morocco.

In the Uruguay Round, industrialized countries insisted on expanding the principle of "free trade" not only on traditional goods but also in the area of services and investment measures. At the same time, the Uruguay Round highlighted the protectionist stance of industrialized countries when they imposed the rules on intellectual property.

The Uruguay Round brought forth key GATT-WTO Agreements: Agreement on Agriculture (AoA), General Agreement on Trade in Services (GATS), Agreement on Trade-related Intellectual Property Rights (TRIPS), Agreement on Trade-related Investment Measures, Agreement on Sanitary and Phytosanitary Measures (SPS), Agreement on Technical Barriers to Trade (TBT) and the Agreement on Textiles and Clothing.

WTO is about liberalising trade by removing tariff and non-tariff barriers to the movement of goods and services between nations. However, it allows members to restrict the import of goods if it likely to affect the health and safety of plants, animals and human beings. WTO’s standards related agreements allow members to do this. It needs to be noted that the WTO does not require members to have standards.

Standards Related WTO Agreements

Two agreements of the WTO, Agreement on Sanitary and Phytosanitary Measures (SPS) and Agreement on Technical Barriers to Trade (TBT) deal with standards. These agreements allow members to formulate rules and standards to protect plant, animal and human health and the environment. It needs to be understood that the WTO does not set standards. It only allows members to set standards depending on their needs. These standards have to be based on scientific research and should not be higher that what is required for the protection of plant, animal and human health and the environment. The WTO urges members to follow international standards wherever such standards are available.

SPS deals with agricultural and food products and TBT deals with machineries and manufactured products. The TBT Agreement aims that technical regulations and standards, including packaging, marketing, and labeling requirements do not create unnecessary obstacles to international trade. Its provisions apply to product standards (product characteristics, quality, design, and performance). Process standards would be covered only when they have an effect on the product quality. The agreement provides for conformity assessment to see that all requirements on regulations and standards are fulfilled. Products
that are often subjected to technical regulations include machinery and equipment such as boilers, electrical and medical equipments, and consumer articles such as pharmaceuticals, cosmetics and toys.

Fresh fruits and vegetables, fruit juices and other fruit preparations, meat and meat products, dairy products and processed food products are subject to SPS measures.

Nepal became a member of the WTO on 23 April 2004. WTO allows members to impose standards and regulations to Nepal’s exports. Unless Nepalese entrepreneurs upgrade the standards of their products, they are unlikely to be able to export to developed and advanced developing countries. This is possible only through conscious and continuous efforts to improve quality.
What is WTO?
- WTO came into being on 01 January 1995
- It is based on five pillars
  - Promoting rules based multilateral trading system
  - Non-discrimination (Most-Favoured Nations and National Treatment)
  - Transparency
  - Special treatment for less developed countries
  - Effective dispute settlement system
- It has 148 members
- Decisions are made through consensus through a multilateral approach – no scope for unilateralism

WTO Agreements – I
- Major agreements
  - Marrakesh Agreement Establishing the World Trade Organisation
  - General Agreement on Tariffs and Trade (GATT) 1994, including policy issues such as: Trade Related Aspects of Intellectual Property Rights (TRIPS)
  - General Agreement on Trade in Service (GATS)
  - Understanding on Rules and Procedures Governing Settlement of Disputes (DSU)

WTO Agreements – II
- Sectoral issues
  - Agreement on Agriculture (AoA)
  - Agreement on Textiles and Clothing (ATC)
- Standard related issues
  - Agreement on the Application of Sanitary and Phytosanitary Measures (SPS)
  - Agreement on Technical Barriers to Trade (TBT)
- Trade remedy issues
  - Agreement on Anti-dumping (ADA)
  - Agreement on Subsidies and Countervailing Measures (ASCM)
  - Agreement on Safeguards (AS)
Slide 4

WTO Agreements – III

- Procedural issues
  - Agreement on Customs Valuation (ACV)
  - Agreement on Import Licensing Procedure
  - Agreement on Pre-shipment Inspection
  - Agreement on Rules of Origin

- Plurilateral agreements
  - Agreement on Government Procurement
  - Agreement on Trade in Civil Aircraft

Slide 5

Nepal’s WTO Membership

- Applied for membership to the GATT in 1989 after trade stalemate with India
- After the renewal of the Indo-Nepal transit treaty and restoration of democracy momentum was lost
- Obtained ‘observer’ status in 1995
- Formally applied for membership in June 1998
- On 11 September 2003, WTO granted membership to Nepal
- Nepal submitted the instrument of ratification on 23 March 2004
- Became 147th member of the WTO on 23 April 2004

Slide 6

Standard Related WTO Agreements

- Agreement on Technical Barriers to Trade (TBT)
- Agreement on the Application of Sanitary and Phytosanitary Measures (SPS)
Slide 7

Restricting Trade
- To protect human, animal and plant health and safety
- Scientific basis
- Level of protection should not be more than required
- Transparency
- MFN
- National Treatment

Slide 8

Agreement on Technical Barriers to Trade
- TBT Agreement aims that technical regulations and standards including packaging, marketing, and labeling requirements do not create unnecessary barriers to international trade
- Intends to:
  - Protect national security
  - Prevent deceptive practices
  - Protect human health and safety, and animal and plant health
  - Preserve the environment

Slide 9

Agreement on Technical Barriers to Trade
- Covers industrial and agricultural products
- Provisions apply to:
  - Product Standards (product characteristics, quality, design, and performance)
  - Process standards (process and production methods) covered only when they have effect on the quality of product
Slide 10

**TBT – Conformity Assessment**
- Testing of Products
- Assessment of quality management Systems
- Accreditation of procedures

---

Slide 11

**SPS Agreement**
- Countries can adopt these measures:
  - to protect animal or plant life or health within the territory of the Member from risks arising from the entry, establishment or spread of pests, diseases, disease-carrying organisms or disease-causing organisms;
  - to protect human or animal life or health within the territory of the Member from risks arising from additives, contaminants, toxins or disease-causing organisms in foods, beverages or feedstuffs;

---

Slide 12

**SPS Agreement (contd.)**
- to protect human life or health within the territory of the Member from risks arising from diseases carried by animals, plants or products thereof, or from the entry, establishment or spread of pests; or
- to prevent or limit other damage within the territory of the Member from the entry, establishment or spread of pests.
Slide 13

Products subjected to SPS Measures
- Fresh fruits and vegetables
- Fruit juices and other fruit preparations
- Meat and meat products
- Dairy products
- Processed food products

Slide 14

SPS Agreement ...
- Basic rights and obligations
  - Right to take SPS measures necessary for the protection of human, animal or plant life or health
  - But shall ensure that any SPS measure is applied only to the extent necessary to protect human, animal or plant life or health, is based on scientific principles and is not maintained without sufficient scientific evidence
  - Non-discriminatory use of SPS measures

Slide 15

SPS Agreement (contd.)
- Harmonization
- Equivalence
- Risk assessment
- Adaptation to regional conditions
- Transparency
- Dispute settlement
Potential Impacts and Challenges

Positive: promotes a system whereby products are 'once tested, once certified, accepted everywhere'
- facilitate market transaction
- reduce the cost of uncertainty
- increase elasticity of substitution
- promote economies of scale
- provides guidelines for production process
- benchmark for technological capabilities

Potential Impacts and Challenges (contd..)

Negative: means of non-tariff barriers
- Structural problem
- higher compliance cost
- loose definition of standard
- unclear risk assessment
- non-mandatory equivalence

Way Forward
- QUALITY MEANS SURVIVAL
All types of organizations, whether operating with profit or not-for-profit motives, falling under agro-farming, manufacturing, service or trading sector, or whether formalized as private, public, or civil society or government organizations, can be explained with an enterprise model having a process comprising of management and employees to serve customers working with information and availing inputs from suppliers. There is a measurement and standards which is called Metrics that monitors and balances the processors and customers. Quality is, thus a balancing force in enterprises between processors and customers.

Management by Quality is a practice and human oriented approach to satisfy customers most economically inculcating an attitude of mind for continuous improvement in enterprises. In MBQ customers are redefined as internal customers for employees and departments within enterprises, and external customers for service offices, consumers and buyers.

Creating quality mindset in an enterprise with the principle of Management by Quality is promoting organization with a tightly knit group of people having shared purpose and philosophy – Quality comes first, productivity follows and profitability (serviceability) is their logical sequence. Total Quality Management (TQM) approach is defined in short as “Scientific, Systematic and Company-wide activity in which an organization is devoted to customers through its products and services”. TQM helps to create the quality mindset in the organization.

The TQM common goal is to achieve the quality that the customers need most economically. The TQM common languages are put quality first, next process is your customer, work with facts, give importance to the process, always prioritize your action, prevent recurrences of the problems and respect humanity. And, the TQM common approaches are the P-D-C-A cycle, the QC story, the QC circles, the QC tools.

The famous performance measurement models and awards- Malcolm Baldrige Quality Award, European Foundation for Quality Management, Deming Application Award, and FNCCI National Excellence Award exits in many countries and regions which help enterprises to develop their performances with the principles of Management by Quality or Total Quality management.
Slide 1

An Enterprise Model

Slide 2

Productivity Improvement Approaches

- Innovation & System Oriented Approaches
  - Western approach
  - Invention and using technology
- Practice & Human Oriented Approach
  - Eastern approach
  - Using unlimited capability of employees

Slide 3

What is Productivity?

- Technical Definition:
  Output/Input
- Psycho-social Definition:
  Attitude of mind for continuous improvement
- Economic Definition:
  Satisfying customers most economically
Slide 4

PROFITABILITY/PRODUCTIVITY/PRICE RECOVERY RELATIONSHIP

Company A

Company B

Time

Productivity

Profitability

Price Recovery

Slide 5

Factors of Productivity

- **Hardware**: Machines and equipments, etc..
- **Software**: Procedures, Rules, etc..
- **Humanware**: People working in the organization

Slide 6

Quality, Cost and Productivity

<table>
<thead>
<tr>
<th>Quality of Design</th>
<th>Cost</th>
<th>Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑</td>
<td>↑</td>
<td>↔</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality of Conformance</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality</th>
<th>Cost</th>
<th>Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>↑</td>
<td>↑</td>
<td>↔</td>
</tr>
</tbody>
</table>
Management by Quality, or Total Quality Management

- A widely applied techniques for productivity improvement through managing organization mainly focusing on quality and cost
- Applied in manufacturing, service industry, CSOs and also in public offices
- A practice and human oriented approach
- Human oriented tools and techniques
- Originated from Japan with advises from US

Redefining Customers TQM Way

- Customers
  - Buyers - Consumers
- Internal Customers
  - Departmentalization

Internal Customers, TQM Way

- Function A
- Function B
- Function C
- Function D
- Function E
- Function F
- Function G
- Function H
- CUSTOMER
  - Back Office
  - Front Office
Slide 10

Redefining Quality TQM Way

- Attractive quality
- One-dimensional quality
- Must-be-quality
- Indifference quality

Slide 11

QUALITY (Customers Need)
One Dimensional Model

- User's Expectation

Slide 12

QUALITY , TQM Way
Two Dimensional Model
Slide 13

QUALITY IMPROVEMENT

- Low Quality
- Adequate Quality
- Competitive Quality
- Creative Quality

Betray Customers
Satisfy Customers
Delight Customers
Astonish Customers

Suicidal Strategy
Short-term Strategy
Mid-term Strategy
Long-term Strategy

Slide 14

Creating Quality Mindset

Promoting Organization
with a Tightly Knit Group of People
having Shared Purpose and Philosophy

"QUALITY COMES FIRST,
PRODUCTIVITY FOLLOWS,
& PROFIT IS ITS LOGICAL SEQUENCE"

Slide 15

Definition of TQM

In short, TQM is defined as a:
- Scientific
- Systematic
- Company-wide
activity in which
a company is devoted to customers
through its products and services.
Scientific Approach

- Conventional Approach of Problem Solving
  Through experience, intuition & guts
- Scientific Approach of Problem Solving
  Through facts and logic using scientific tools

Analogy with
General Practitioner vs. Large Hospital

Systematic Approach

OBJECTIVES
  (fitness for objectives)

INPUT ➔ SYSTEM ➔ OUTPUT
  Efficiency
  (Output over input)

Organization-wide Approach

- Every Echelon
  [Top management, Middle management, Supervisors, Workers ]
- Every Function
  [Marketing, Operation, Design, Administration, etc.]
- All Objectives
  [Quality, Cost, Delivery, Safety & Morale]
Slide 19

TQM

Shared Philosophy
- Common Goal
- Common Language
- Common Approach

to solve the Quality and Productivity Problems as per the vision and mission of the organization

Slide 20

TQM

Common Goal

The Common Goal is to achieve the quality that the customers need most economically

Slide 21

TQM

Common Language (Mind Set)
- Put quality first, other follows
- Next process is your customer
- Work with facts only
- Give importance to process
- Always prioritize your action
- Prevent recurrences of problems
- Respect humanity
Slide 22

TQM
Common Approach
- The PDCA Wheel
  - Plan-Do-Check-Act
- The QC Story
  - Systematic Problem Solving
- The QC Circle
  - Small Group Activities
- The QC Tools
  - (Basic & Managerial)

Slide 23

Malcolm Baldridge Quality Award for Performance Excellence (USA)

Slide 24

European Foundation for Quality Management
FNCCI National Excellence Award

Drivers (25%) Systems (40%) Results (40%)

1. Institutional Policy, Planning and Commitment 100 points (10%)
2. Organization Form, Work Plan, Development & Deployment 100 points (10%)
3. Operational Information Dissemination & Utilization 100 points (10%)
4. Employees Development 100 points (10%)
5. Work System & Information Dissemination & Utilization 100 points (10%)
6. Customers Satisfaction & Relationship 100 points (10%)
7. Employees Satisfaction 100 points (10%)
8. Performance Results 100 points (10%)
9. Future Plan 100 points (10%)

Drivers (20%) - Systems (40%) - Results (40%)
Discovery through Appreciative Inquiry

Mahesh Gongal

The theory of Appreciative Inquiry was developed by David Cooperrider and Suresh Srivastava in a paper they published in 1986. Appreciative Inquiry (AI) is an imaginative approach to organizational study and learning. It is intended to discover, understand and foster innovation in the internal social relationships and processes of the organization. Appreciative Inquiry is a paradigm shift (from a problem-focused model) for creating organizational change and expanding the realm of the possible in the arenas being explored. Whether the inquiry is about organizations or individuals, a tangible result of the process is a series of propositions that describe the preferred future, based on the high moments of a repeatable past and present. Because the statements are grounded in real experience and history, people know how to repeat their success. Appreciative Inquiry contrasts the commonplace notion that, “organizing is a problem to be solved” with the appreciative proposition that, “organizing is a miracle to be embraced”.

Appreciative Inquiry approach is considered to be closer to human nature, because it integrates different ways of knowing. Appreciative inquiry allows room for emotional response as well as intellectual analysis, room for imagination as well as rational thought. The principles namely constructionist principle, principle of simultaneity, poetic principle, anticipatory principle, and positive principle help to explain the power behind the appreciative approach.

A basic belief of Appreciative Inquiry is that organizations and individuals, like plants are heliotropic in nature, that is they move toward the light or the positive image. A result from research (placebo studies, the Pygmalion effect studies, and positive imagery for athletes) has confirmed that positive images create positive futures.

Appreciative Inquiry is based on a different set of assumptions like one creates more effective organizations by focusing on: what one wants more of, not what one wants less of; whatever one wants more of already exists, even if only in small quantities; to create change by amplifying the positive qualities of a group or organization is easier than by trying to fix the negative qualities. Appreciative Inquiry also assumes that we create the social realities we are trying to understand through the act of inquiry; and getting people to inquire together into the best examples of what they want more of creates it's own momentum toward creating more positive organizations.

There are four phases in the Appreciative Inquiry approach. The core task in the discovery phase is to appreciate the best of "what is" by focusing on peak moments of community excellence – when people experienced the organization in its most alive and effective state. Participants then seek to understand the unique conditions that made the high points possible, such as commitment, leadership, relationships, technologies, values, capacity building or external relationships. They deliberately choose not to analyze deficits, but rather systematically seek to isolate and learn from even the smallest victories. In the discovery phase, participants share stories of exceptional accomplishments, discuss the core life-giving conditions of their community and deliberate upon the aspects of their history that they most value and want to enhance in the future. In the dream phase, participants challenge the status quo by envisioning more valued and vital futures. This phase is both practical, in that it is grounded in the history of organization, and generative, in that it seeks to expand the potential of organization. In the design phase participants create a strategy to carry out their
provocative propositions. The final phase involves the delivery of new images of the future and is sustained by nurturing a collective sense of destiny. It is a time of continuous learning, adjustment and improvisation in the service of shared organizational ideals. The momentum and potential for innovation is high by this phase of the process. Because they share positive images of the future, everyone in an organization realigns their work and co-creates the future. Appreciative Inquiry is a continual cycle. The destiny phase leads naturally to new discoveries of community strengths, beginning the process anew.

Appreciative Inquiry has been effectively applied for many purposes. It has been successful in developing new approaches to address and resolve strategic, quality, competitiveness, human resource and other issues of organizations which were well accepted by organizational members and lead to positive change. Appreciative Inquiry has helped in building common vision where one is currently lacking; creating openness and rapport between people and groups who don't trust each other; creating a positive work climate where a negative one previously prevailed; and discovering, understanding and amplifying the positive forces already existing in organizations.
Introduction of AI

The Theory of AI developed

at:
Weatherhead School of Management
Case Western Reserve University
Cleveland, Ohio, USA

by:
David Cooperrider and
Suresh Srivastva

in:
the 1980s.

Slide 2

What is AI?

Ap-pre’ci-ate, v.

• to increase in value

• to act of recognizing the best in people or the world around us
• affirming past and present strengths, successes, and potentials
• perceive those things that give life (health, vitality, excellence) to living systems
• to increase in value

Introduction of AI (Contd.)

In-quire, v.

• the act of exploration and discovery
• to ask question
• to be open to seeing new potentials and possibilities

Introduction of AI (Contd.)
An organization, which inquires into problems will keep finding problems but

- An organization, which attempts to appreciate what is best in itself will discover more and more that is good.
- Organizing is a miracle to be embraced and organizing is not a problem to be solved

Introduction of AI (contd.)

- AI is about the co-evolutionary search for the best in:
  - people
  - organizations
  - relevant world around them

Introduction of AI (contd.)

<table>
<thead>
<tr>
<th>Appreciative Inquiry</th>
<th>Problem Solving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciating</td>
<td>&quot;Felt Need&quot; Identification of Problem</td>
</tr>
<tr>
<td>&quot;Valuing the best of What is&quot;</td>
<td>Analysis of Causes</td>
</tr>
<tr>
<td>Envisioning</td>
<td>Analysis of Possible Solutions</td>
</tr>
<tr>
<td>&quot;What Might Be&quot;</td>
<td>Action Planning (Treatment)</td>
</tr>
<tr>
<td>Dialoguing</td>
<td>Basic Assumption: Organizing is a Mystery to be Embraced.</td>
</tr>
<tr>
<td>&quot;What Should Be&quot;</td>
<td>Basic Assumption: Organizing is a Problem to be Solved.</td>
</tr>
<tr>
<td>Innovating</td>
<td></td>
</tr>
<tr>
<td>&quot;What Will Be&quot;</td>
<td></td>
</tr>
</tbody>
</table>
Principles of AI

- The Constructionist Principle
- The Principle of Simultaneity
- The Poetic Principle
- The Anticipatory Principle
- The Positive Principle

Beliefs

1. Organizations are not like machines - they don't have an objective reality the way a table or a rock does.

2. Organizations are a social reality and social reality is co-constructed - we create the social systems we are in through our interactions with each other.
Principles of AI (contd.)

3. Important human processes like communication, decision-making, and conflict management are effected more by how the people involved make meaning out of their interactions than by skilful application of any particular technique.

Principles of AI (contd.)

4. Attempts to find or develop the right formula for successful leadership and change are a misguided attempt to treat social reality as if it were objective reality.

Principles of AI (contd.)

Assumptions

1. You create more effective organizations by focusing on what you want more of, not what you want less of.
2. Whatever you want more of already exists, even if only in small quantities.

3. It's easier to create change by amplifying the positive qualities of a group or organization than by trying to fix the negative qualities.

4. Through the act of inquiry we create the social realities we are trying to understand.
5. Getting people to inquire together into the best examples of what they want more of creates its own momentum toward creating more positive organizations.

---

**Slide 17**

**Phases of AI**

- **Discovery**: "What gives life?" (the best of what is)
- **Dream**: "What might be?" (Dream in the world calling)
- **Design**: "What should it be?" (Design in the world calling)
- **Destiny**: "How to empower, learn, and adjust/improvise?" (Co-constructing Destiny)

*Appreciative Inquiry “4-D” Cycle*

---

**Slide 18**

**Growth in Positive Core**

- **Positive Life-Sustaining Core**
- **Positive Life-Giving Core**
- **Positive Life-Ordering Core**
- **Positive Life-Transcending Core**

*Core 4-Cycle*
Slide 19

Successful Applications

- Building common vision where one is currently lacking

Slide 20

Successful Applications (contd.)

- Developing new approaches to:
  - human resource issues
  - quality issues
  - competitiveness issues
  - strategic issues
  that are well accepted by organizational members and lead to positive change

Slide 21

Successful Applications (contd.)

- Discovering, understanding and amplifying the positive forces already existing in organizations
Slide 22

Successful Applications (contd.)

- Creating a positive work climate where a negative one previously prevailed

Slide 23

Successful Applications (contd.)

- Accelerating the development of new teams

Slide 24

Successful Applications (contd.)

- Creating openness and rapport between people and groups who don't trust each other
Demystifying of ISO Standards and Certification Process

Surendra Shrestha

ISO (International Organization for Standardization) has been developing voluntary technical standards over almost all sectors of business, industry and technology since 1947.

With the exception of ISO 9000 and ISO 14000, the vast majority of ISO standards are highly specific. They are documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics to ensure that materials, products, processes and services are fit for their purpose.

To take just one example, ISO standards for such seemingly humble items as bolts, nuts, screws, pins and rivets literally help stop much in the world around us from falling apart - but you're not likely to come across references to them in the business and economic press, nor see companies proudly advertising that they implement them.

Then, in 1987, came ISO 9000, followed nearly 10 years later by ISO 14000, which have brought ISO to the attention of a much wider business community. These are very different from the majority of ISO's highly specific standards.

Both ISO 9000 and ISO 14000 are known as generic management system standards. ISO 9000 is primarily concerned with "quality management" and ISO 14000 is primarily concerned with "environmental management". Both ISO 9000 and ISO 14000 require organizations that implement them to improve their performance continually in, respectively, quality and environmental management. However, neither ISO 9000 nor ISO 14000 are product standards.

Like all ISO standards, ISO 9000 and ISO 14000 are voluntary standards. ISO is responsible for developing, maintaining and publishing the ISO 9000 and ISO 14000 families of standards but ISO does not itself audit or assess the management systems of organizations to verify that they have been implemented in conformity with the requirements of the standards. ISO does not issue ISO 9001:2000 or ISO 14001 certificates.

The auditing and certification of management systems is carried out independently of ISO by more than 750 certification bodies active around the world. ISO has no authority to control their activities. The ISO 9000 and ISO 14000 certificates issued by certification bodies are issued under their own responsibility and not under ISO's name.

The Certification Process

The Top Management has to remain committed for the effective implementation of Quality Management System for Certification Process of respective standard. Either the Top Management should make a team and provide training on ISO and its processes or hire a consultant relevant to the nature of the organization.

There are six steps to ISO 9001:2000/ISO 14001:2004 Certification Processes – identify key processes; design & document system; implement and operate system; internal audits; certification audit; and, maintain registration.

1. **Identify Key Processes**: “You must focus on the process if you are to continually improve your ability to meet your customers’ needs and expectations. There is no substitute for knowing your processes and improving them.” (W. Edwards Deming) ISO 9001:2000 refers to all the processes needed for the organization’s quality management
system and not only to the product realization processes. The quality management system processes include, for example, the management review process, the internal auditing process, and the document control process, among others. The product realization process includes Marketing, Design and Development, Purchasing and store, Production, Quality, Dispatch among others.

2. **Design and documentation system:** Many ISO certified organizations are still “document-driven” rather than “process-driven”. It has been common to hear criticisms of the type “Our organization has a lot of documents, because ISO 9000 requires them”. In fact ISO 9001:2000 has very few explicit requirements for documented procedures. The onus is on the organization to decide where such procedures are needed in order to manage its processes, and to achieve the planned results.

3. **Implement and operate system:** Top Management should take the lead into effective implementation and operate the quality management system to understand its need, importance and benefits to the organisation and should transfer the same message to the employees.

4. **Internal audits:** After effective implementation, the organisation should undergo internal audits by the trained internal auditors. Audits are fact-finding process, so if the internal in-house people are trained the resulting benefits goes to the organisation. The report of internal audits should then be discussed with other inputs to the Management review chaired by the top management.

5. **Certification audit:** After the successful internal audits and management review, the organisation should invite the certification body for the Certification Audit. The auditors from certification body shall assess the effective implementation and compliance with the requirements of the standards. If audit results are satisfactory, the audit recommends your organisation for Certification of respective standard.

6. **Maintain registration:** After the issuance of ISO certificate, the auditors come for surveillances on the planned intervals (six or nine monthly) to ensure the compliance with stated requirements and effective continual improvement.
What is ISO?

- International Organization for Standardization
- ISO Standards developed by national delegations of experts from business, government and other relevant organizations
- More than 140 countries represented
- Non-governmental organization
- Established in 1947, Switzerland Geneva

Standards - A history of development

- NATO Standards AQAPs 21, 24, 29
- BS 5179:1974
- BS 5750:1979
- ISO 9000:1987
- ISO 9000:1994
- ISO 9000:2000

Generic management system standards

- ISO 9000 and ISO 14000 are known as generic management system standards
- Generic means that the same standards can be applied to any organization, large or small, whatever its product - including whether its "product" is actually a service - in any sector of activity, and whether it is a business enterprise, a public administration, or a government department.
Management system refers to what the organization does to manage its processes, or activities in order that the products or services that it produces meet the objectives it has set itself, such as the following:
- satisfying the customer’s quality requirements,
- complying to legal, statutory & regulatory, or
- meeting environmental objectives.

- Customer Focus
- Leadership
- Involvement of People
- Process Approach
- Systematic Approach to Management
- Mutually beneficial Supplier relationship
- Factual based Decision Making
- Continual Improvement

Many requirement are directly related to the Principles, so there is the need to understand these Principles to understand Standard.

Principle 1 — Customer-Focused Organization
Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations.
Principle 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.

Principle 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.

Principle 4 — Process Approach

A desired result is achieved more efficiently when activities and related resources are managed as a process.
Slide 10

**Principle 5 — System Approach to Management**
- Identifying, understanding and managing interrelated processes as a system contributes to the organization’s effectiveness and efficiency in achieving its objectives.

Slide 11

**Principle 6 — Continual Improvement**
- Continual improvement of the organization’s overall performance should be a permanent objective of the organization.

Slide 12

**Principle 7 — Factual approach to decision making**
- Effective decisions are based on the analysis of data and information.
Principle 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.

ISO 9000 and ISO 14000 – Introduction

ISO 9000 is primarily concerned with "quality management system". "Quality management system" the organization shall ensure that its products or services satisfy the customer's, statutory and regulatory requirements.

ISO 14000 is primarily concerned with "environmental management system". "Environmental management system" means what the organization does to minimize harmful effects on the environment caused by its activities.

ISO 9000..before 15th Dec 2003

- ISO 9000:1994 Fundamental & Vocabulary
- ISO 9001, 9002 & 9003 (1994) were series of certification standards
- ISO 9003:1994 [Lab, Inspection, testing]
- ISO 9004:1994 Guidelines for performance
ISO 9000... after 15th Dec 2003

Quality Management System
- ISO 9000:2000 - Fundamentals and vocabulary
- ISO 9001:2000 - Standard Requirements for Certification
- ISO 9004:2000 - Guidelines for performance improvements
- ISO 19011:2002 - Auditing Quality & Environmental systems

Why ISO 9000?
- When the first output of ISO/TC 176 was nearing completion, ISO was already approaching an total of some 9000 published standards. To have significant impact it was decided to give the series the next available round figure - 9000 as a designation because round figures are more memorable.
- At the end of 2002, ISO had 13 544 standards in its portfolio.

What is ISO 14000?
- ISO 14004:2004 - Environmental management systems - General guidelines on principles, systems and supporting techniques.
- The second edition of Environment management system standard cancels and replaces the first edition (ISO 14001:1996), which has been technically revised on 15 November 2004 by Technical Committee ISO TC 207, Subcommittee SC 1.
ISO 9000 & 14000 are NOT Product standards

Neither ISO 9000 nor ISO 14000 are product standards.
Both ISO 9000 and ISO 14000 concern the way an organization goes about its work, and not directly the result of this work.
Both standard concern processes, and not products - at least, not directly. Nevertheless, the way in which the organization manages its processes is obviously going to affect its final product.

Certification, Registration & Accreditation

certification refers to the issuing of written assurance (the certificate) by an independent, external body that has audited an organization’s management system and verified that it conforms to the requirements specified in the standard.
Examples of Certification Bodies are Llyods, SGS, TUV, DNV, ICL etc

Certification, Registration & Accreditation (contd.)

Registration means that the auditing body then records the certification in its client register.
Examples of Registration Bodies are RvA, UKAS, J AS ANZ etc
“Accreditation” refers to the formal recognition by a specialized body - an accreditation body - that a certification body is competent to carry out ISO 9000 or ISO 14000 certification in specified business sectors. In simple terms, accreditation is like certification of the certification body.

Using “accreditation” as an interchangeable alternative for certification or registration is a mistake.

Certification is not compulsory
- An organization can implement ISO 9001 or ISO 14001 without seeking certification.
- Some of the reasons for certifications for independent third-party audit:
  - if it is a contractual or regulatory requirement
  - if it is a market requirement or to meet customer preferences
  - or if you think it will motivate your staff by setting a clear goal for the development of your management system.

1. Identify key processes
2. Design & document system
3. Implement and operate system
4. Internal audits
5. Certification audit
6. Maintain registration
Steps to Certification:

1. Identify key processes
   - Process: series of connected actions; each has a beginning & ending point
   - "Process map" shows relationship between processes throughout organization

2. Documentation system
   - Four "Levels" of documentation
     - Quality Manual with Quality Policies & Objectives
     - Each process is documented into a Procedure
     - Procedures refer to Work Instructions
     - Records - demonstrate conformance to system

3. Implement and operate system
   - Communicate throughout organization
   - Departments perform work as described in procedures
Slide 28

Steps to Certification:
4. Internal Audits
- Trained Internal Auditors
- Documented internal audit plan
- Audit results reviewed by management
- Make corrections & improvements to quality system

Slide 29

Steps to Certification:
5. Certifications Audit
- Documentation reviewed by auditor
- Certifications Body sends audit team
- On-site audit - typically 2-3 days
- Auditors verify that system operates as outlined in procedure manual
- Recommend for registration
- Certificate issued

Slide 30

Third Party Certification System
- IAF
- ISO 9001:2008
- IAF
- IAF
- JAS-ANZ
- IAF
- IAF
- KCC
- Mercantile
Slide 31

Steps to Certification:
6. Maintain Certification
- Continue to operate quality system
- Surveillance audits
  (nine monthly / semi-annual)
- 3-year cycle

Slide 32

Choosing a certification body
- Another point to clarify is whether or not the certification body has been accredited and, if so, by whom.
- Evaluate several certification bodies.
  Bear in mind that the cheapest might prove to be the most costly if its auditing is below standard.
- Establish whether the certification body has auditors with experience in your business sector.

Slide 33

ISO does not carry out ISO 9001:2000 or ISO 14001:2004 certification
- ISO is responsible for developing, maintaining and publishing the ISO 9000 and ISO 14000 families of standards.
- The auditing and certification of management systems is carried out independently of ISO by more than 750 certification bodies active around the world, although the organization does develop voluntary standards and guidelines to encourage good practice by these certification bodies.
Slide 34

ISO's logo is not for use

- ISO has no "ISO 9000 logo" or "ISO 14000 logo"

- ISO is not an auditor, assessor, registrar, or certifier of management systems, products, services, materials or personnel, nor does it endorse any such activities performed by other parties.

Slide 35

Transition to ISO 14001:2004

ISO & IAF have agreed an 18 month transition period between from ISO 14001:1996 to ISO 14001:2004. As a result, no certificates according to ISO 14001:1996 will be valid after May 15 2006.

The revision to the standard would be limited to:
- Enhancing compatibility between ISO 14001 and ISO 9001:2000 and
- Improving the clarity of ISO 14001 based on experience to date without resulting in additional or diminished requirements in comparison.

Slide 36

Certification Process at ICL

- Questionnaire
- Quotation
- Application
- Document Review
- On-Site Assessment (Pre-Assessment / Initial Visit)
- Issue of Certificate
- Surveillances
- Renewal of Certificate

Verification & Corrective Action Required.
Slide 37

ISO - in a capsule

- Document what you do (Creation of Documents)
- Do what you document (Document Control)
- Prove it and Improve it (Analysis of Data)
- Continual Improvement through Corrective and Preventive Action.

Slide 38

Costs of Quality

A rule of thumb says that for every dollar you spend in prevention, you can save $10 in failure and appraisal costs.
Elements of ISO 9001:2000 Standard

Surendra Shrestha

There are many elements of ISO 9001:2000 Standard, however, to make the understanding clear to the top management; only those relevant elements are shared for effective implementation back in the business. Only six elements are discussed, viz. Quality Policy and Objectives; Levels of ISO Documentation; Record Management; Internal Audit Process; Management Review Process; and Suppliers Evaluation.

The quality management system comprises the methods used by top management to establish an organization with the appropriate objectives and policies to ensure that customer’s needs and desires can be met. Customers can include different interested parties such as the purchaser of one product, the employees, the stockholders, the community to which the organization belongs, etc. Organizations cannot survive unless the needs of the customers are determined and satisfied.

Since 1987, the ISO 9000 family of international standards has been used to define the requirements for the management of the quality system. Under the first two revisions of these documents, top management appointed a management representative to oversee the quality management system and to report periodically on its status. Top management was not specifically held responsible for the well-being of the quality management system. However, the 2000 revision of the ISO 9000 standards brings a different way of viewing the management of the quality system, which will certainly affect the management of the organization as a whole.

Under the 2000 revision, the entity responsible for ensuring that the quality management system operates as planned is top management. Although the new standard requires the appointment of a management representative, top management clearly retains the overall responsibility for the well-being of the organization.

Management Responsibility

One entire section of ISO 9001:2000 is entitled “Management responsibility”, but other responsibilities of top management can be found elsewhere in the standard. Let’s examine the specific items, which according to the new standard, must be driven, evaluated, and monitored by top management:

1. **Overall commitment**: Top management bears the responsibility to provide evidence of its commitment to the requirements of the quality management system through a series of specified activities:
   a) Communicating the importance of meeting requirements, whether stated by the customer or from other sources
   b) Establishing the quality policy and objectives
   c) Conducting reviews of the performance of the quality system
   d) Ensuring that the organization can meet the specified policy and objectives by supplying the resources necessary for those in the organization to carry out tasks.

2. **Customer satisfaction**: The ultimate responsibility for customer satisfaction belongs to top management. Since without customer satisfaction, the organization cannot survive, ISO 9001:2000 places this responsibility directly on top management, and not on a
delegate. Top management must ensure that the customers’ requirements are defined and understood, with the goal of not only meeting the stated requirements but even exceeding customers’ expectations.

3. **Quality policy:** Top management has the responsibility to ensure that the defined quality policy includes specified items: The quality policy must be appropriate to the organization, must show a commitment to meeting requirements and to continual improvement, must provide for reviewing quality objectives, must be disseminated throughout the organization, and must be reviewed periodically to ensure continuing suitability.

(Note that “quality policy” as used by ISO can be defined as top management’s formal expression of the organization’s overall intentions pertaining to quality.)

4. **Quality objectives:** Making the generalized goals stated in the Quality Policy more specific, measurable quality objectives must be defined as appropriate throughout the organization.

5. **Management review:** At periodic intervals, top management must review the performance of the quality management system. Among the specified outputs of top management’s review of the quality management system: decisions about whether the quality management system requires updates or changes, the need for continual improvement of the product/service supplied to the customer, and decisions concerning allocation of the organization’s resources to attain the quality policy and objectives.

6. **Supplier evaluation:** The quality of goods and services supplied is critical to the success of certain types of business. Some of today’s businesses are very dependent on agency personnel or sub-contractors, yet my experience indicates that their re-evaluation is not undertaken with the rigour of staff appraisals. Many organisations could benefit with reconsidering supplier relationship management.

Under ISO 9001:2000, top management must obviously drive these issues. While the ISO standard does not specifically say, “You SHALL make a good product”, meeting customer expectations and achieving customer satisfaction could mean the same thing in the long run.

Customer satisfaction belongs ultimately to top management. As the organization moves toward compliance with the 2000 revision of ISO 9001, one should not lose sight of ones responsibilities not only to the financial and business development aspects of the organization, but also to the needs of the quality management system as well.
Elements of ISO 9001:2000 Standard
- Understanding & drafting of Quality Policy & Objectives
- Levels of ISO Documentation
- Record Management
- Internal Audit Process
- Management Review Process

Clauses of ISO 9000:2000
CLAUSE 4: QUALITY MANAGEMENT SYSTEM
CLAUSE 5: MANAGEMENT RESPONSIBILITY
CLAUSE 6: RESOURCE MANAGEMENT
CLAUSE 7: PRODUCT REALIZATION
CLAUSE 8: MEASUREMENT, ANALYSIS AND IMPROVEMENT

Understanding ISO 9000:
- The ISO 9000:2000 standards represent a realistic approach to Quality Management.
- Success of the standards depends on CREDIBILITY:
  - Of the standards themselves
  - Of the people and organizations who teach, implement, audit, certify and accredit.
- Need to ensure people who use the standards are competent to do so.
Management Commitment
(Clause 5.1)
• Top management shall provide evidence of its commitment to the development and implementation of the quality management system and continually improving its effectiveness by:
  • communicating to the organisation the importance of meeting customer as well as statutory and regulatory requirements;
  • establishing the quality policy and quality objectives;
  • conducting management reviews;
  • ensuring the availability of resources.

Process-Based QMS Model

Management Commitment – Lessons to learn
• Assist the management and staff of an organisation to change its mindset and think “process”.
• Too many organisations still think and operate on departmental lines and are insufficiently focused on the steps to be taken to produce and deliver goods and services to customers.

Business benefit: more effective customer service
Quality Policy (Clause 5.3)

- Top management shall ensure that the quality policy:
  - is appropriate to the purpose of the organisation;
  - includes a commitment to comply with requirements and to continually improve the effectiveness of the quality management system;
  - provides a framework for establishing and reviewing quality objectives;
  - is communicated and understood within the organisation; and
  - is reviewed for continuing suitability.

Quality Objectives (Clause 5.4)

- Top management shall ensure that quality objectives, including those needed to meet requirements for product are established at relevant functions and levels within the organisation.
- The quality objectives shall be measurable and consistent with the quality policy.

"IF YOU CAN'T MEASURE, YOU CAN'T MANAGE IT"

- Help senior staff to develop and review realistic quality objectives.
- Quality objectives should be measurable and target oriented, thus driving home the message “if you can’t measure it, you can’t manage it.”

Business benefit: improved business results
Documentation Requirements General (Clause 4.1)

The quality management system documentation shall include:
- documented statements of a quality policy and quality objectives
- a quality manual
- documented procedures required by this International Standard.
- documents required by the organisation to ensure the effective planning operation and control of its processes.
- Records required by this International Standard.

The extent of the quality management system documentation shall be dependent on the following:
- size and type of the organisation;
- complexity and interaction of the processes;
- competence of personnel.

The documentation can be in any form or type of medium.

Document Hierarchy
- Single (one) level
- Two levels
- Three levels
Ensure that an organisation's quality management system accurately describes the way the business works in practice. Implementing ISO 9001:2000 provides a rationale to:

- review all documentation, slimming down where desirable
- eliminate systems duplication; and
- harness IT for more efficient document control.

*Business benefit: improved efficiency*

---

Control of Records (4.2.4)

- Records shall be established and maintained to provide evidence of conformity to requirements and of the effective operation of the quality management system.
- Records shall remain legible, readily identifiable and retrievable
- A documented procedure shall be established to define controls needed for the identification, storage, retrieval, protection, retention time and disposition of records.

---

Types of Audit

- 1st Party - Internal
- 2nd Party - Sub-contractor / Supplier
- 3rd Party - Certification Body
Slide 16

**Internal Audit (Clause 8.2.2)**

- Conduct periodic internal audits to ensure whether the system has been effectively implemented and maintained.
- Plan the audit program taking into consideration the status and importance of the activities and areas to be audited as well as the results of previous audits.
- The audit scope, frequency & methodologies shall be planned.
- Internal audit shall be conducted by personnel other than those who performed the activity being audited.

Slide 17

**Internal Audit (Clause 8.2.2) contd.**

- Documented procedure shall include the responsibilities and requirements for conducting audits, ensuring their independence, recording results and reporting to management.
- Management shall take timely corrective action on deficiencies found during the audit.
- Follow-up actions shall include the verification of the implementation of corrective action, and the reporting of verification results.

Slide 18

**Internal audit – Lessons to learn**

- Make better use of internal quality audits by upgrading the skills of your in-house quality auditors.
- Quality audits need to change from being a chore with standard checklists and tick boxes to becoming a constructive dialogue between auditors and Auditee(s) that improve the ways of working.

*Business benefit: continuous improvement*
Management Review (Clause 5.6)

- Top management shall review the quality management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.
- The review shall include assessing opportunities for improvement and the need for changes to the organisation's quality management system, including quality policy and quality objectives.
- Records from management reviews shall be maintained.

Management Review - Inputs (Clause 5.6.1)
The input to management review shall include information on:
- results of audits;
- customer feedback;
- process performance and product conformance;
- status of preventive and corrective actions;
- follow-up actions from earlier management reviews;
- changes that could affect the quality management system, and
- Recommendations for improvement

Management Review - Lesson to learn
- Management reviews is the key element in QMS.
- Top management has to conduct management review (through meeting or analyzing input reports)
- It is to evaluate effectiveness of the QMS and to be 'platforms for the exchange of new ideas'.
- Top Management (with his team) has to plan the interval for Management review.
- Review could be on periodic basis or need base in normal management meeting but should cover the inputs and outputs required by ISO 9001:2000.

Business benefit: Effective monitoring for continuous improvement
• Use supplier evaluation and re-evaluation, part of the purchasing process,
• Criteria that should be used to select suppliers of services as well as goods and
• Set up service level agreements.

One of the eight management principles of ISO – to develop “mutually beneficial supplier relationships”.

Business benefit: better supply chain management
Employees Participation and Quality Circles

Prof. Dinesh P. Chapagain

TQM asks to respect humanity to make use of unlimited human capability to motivate employees to use their heads and hearts together with their hands. TQM utilizes three approaches of decision making at the organization- the Top-down approach as policy management, bottom-up approach as small group activities (QC) and horizontal approach as cross functional team works, besides the regular and routine management.

Small group activities or Quality Circle (QC) is a small group of volunteer employees who meet together at regular interval at their workplace for about an hour to identify, analyze and solve problems that have to do with their work and work places.

The QC story is 7 steps of systematic problem solving- Identifying problem, observing the features of the problem, planning activities to solve problem, analyzing the root causes of the problem, implementing countermeasures to root causes, evaluating the implementation and standardizing and establishing the control.

The 7 basic QC tools for problem solving are- check sheets, graphs and charts, Pareto analysis, cause and effect analysis, histogram, control charts, scatter diagram, or regression analysis.

The 7 advanced or managerial QC tools for problem solving are- affinity diagram, relations diagram, matrix diagram, tree diagram, arrow diagram, data matrix analysis, and process decision planning chart.

TQM implementation at any enterprise needs to plan its programs in 4 phases. They are- trial and preparation phase, introductory phase, promotion phase and the consolidation phase. The top-managers and middle level managers have to play important roles in making the TQM success in their enterprises.
A problem is a circumstance that a person has perceived consciously or subconsciously and that the person or organization to which he or she belongs must resolve. Actually, it is gap between the present situation and ideal situation.
Slide 4

Respecting Humanity

- Use unlimited human capability
- Take 3-H approach
  - (Hand, Heart & Head)
- Simple is the best
- Improve the process
- Shoe wearers know where the shoe pinches
- Ask them to improve the process

Slide 5

Decision Making at the Bottom

Slide 6

Organization for TQM/MBQ

- Routine Management
  - Day-to-Day work
- Policy Management
  - Top-Down (Issues, Strategy and Objective)
- Cross Functional Team management
  - Critical issues with fixed time frame
- Small Group Activities
  - Voluntary Quality Circle Group
Small Group Activities for Continuous Improvement or Quality Circles (QC)

A Quality Control (QC) Circle is
- a small group of volunteer employees (4 to 12)
- who meet together at regular & same interval
- at their workplace
- for an hour
- to identify, analyze and solve problems
- that have to do with their work and workplace

Benefits and Objectives of QCs
- Self development of the employees
- Mutual development of the team
- Quality improves, waste & cost reduce, productivity improves, etc...
- Competitiveness enhances
- Employees relations enhance
- Attitude of minds directs for continuous improvement

Systematic Problem Solving Approach - The PDCA Wheel

- Plan
- Do
- Check
- Act
Slide 10

The QC Story (7 - Steps)

1. Problem Identification, Select Topic
2. Understand Situation and Set Target
3. Plan Activities for Problem Solving
4. Analyze Causes of the Problem
5. Identify and Implement Countermeasures
6. Check results and Effectiveness
7. Standardize and Establish control

Slide 11

STEP 1
Select Topic (PQCDM)

1. Check the rules and responsibilities of one's workplace
2. Check the policies, issues, strategies and objectives assigned
3. Identify and list problems
4. Evaluate the problems and select a topic

Slide 12

STEP 2
Understand Situation and Set Targets

1. Decide on the characteristics to be addressed
2. Collect Information
3. Understand the situations (Ideal & Present)
4. Decide on targets and time limits for their achievements
Slide 13

**STEP 3**
Plan Activities for Solving Problem

1. Identify activities for problem solving
2. Decide schedule of activities
3. Draw up a detail activity plan (5W & 1H)

Slide 14

**STEP 4**
Analyze Causes

1. Summarize the system of characteristics through Brainstorming
2. Analyze the relationships between characteristics and causes
3. Summarize the results of the analysis
4. Decide which root causes to be tackled first

Slide 15

**STEP 5**
Identify and Implement Countermeasures

1. Propose ideas for countermeasures through Brainstorming
2. Select countermeasures proposals
3. Discuss how to put the countermeasures into effect
4. Draw up action plans for implementation
5. Implement countermeasures
Slide 16

**STEP 6**
Check Results & Effectiveness
1. Check results of improvements
2. Compare results with target values
3. Identify the tangible and intangible benefits

Slide 17

**STEP 7**
Standardize and Establish Control
1. Make the temporary standards official
2. Decide on the method of control
3. Disseminate the correct control methods to all concerned employees
4. Educate and train those responsible
5. Check whether the benefits are being maintained
6. *Continue to solve other problems*

Slide 18

**Basic QC Tools for Problem Solving**

- **Characteristics of QC Tools**
  - Simple: everyone can construct and interpret
  - Visuals: aesthetic and easy to make other realize
- **The tools**
  - Check sheets
  - Graphs/Charts
  - Pareto Analysis/ Diagram
  - Cause & Effect Analysis/ Fishbone Diagram
  - Histogram
  - Control Charts
  - Scatter Diagram or Regression Analysis
Check Sheets
- Used to collect data
- A pre printed form or format
- Purpose:
  - To make data collection easy
  - To arrange data automatically so that they can be used easily later on for analysis
- Some examples of check sheets
  - Check sheet to measure variation in dimension
  - Check sheet to find defects in production
  - Check sheet to identify defect cause

Check Sheets
- a special tool to collect data
- A paper form on which items to be checked are printed already so that data can be collected easily and concisely

<table>
<thead>
<tr>
<th>Days Absent</th>
<th>Frequency</th>
<th>No of</th>
</tr>
</thead>
<tbody>
<tr>
<td>No absent</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>1-5 days</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>6-10 days</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>11-15 days</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>&gt;15 days</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Graphs/ Charts
- Line Graphs
  - For continuous data
  - Mostly used to show the trends, against continuous axis
  - Variation as per time – hours/days/weeks/months/years
- Bar Graphs
  - For discrete data
  - Mostly used to show the difference among variables
  - Where the variables can be interchanged in X-axis
- Pie Charts
  - For ratio data
  - Mostly used to show the proportions of variables
Slide 22

**Graphs & Charts**
- to transfer the information in visual form

- Visual diagrams to illustrate the nature, trends, and proportions
  - Line graph for continuous data
  - Bar graph for discrete data
  - Pie diagram for proportionate data

---

Slide 23

**Pareto Diagram**
- Developed by Italian economist V. Pareto
  - 80:20 principle: Vital few and Trivial many applicable to many fields
  - J.M. Juran used this in solving quality problems
  - A combination graph: Bar and Line
  - Used for prioritization; identifying Vital Few
  - First prepare a Pareto Table and then Pareto Diagram
  - Two types of Pareto Diagram
    - Pareto diagrams by phenomena: Quality, Cost, Delivery and Safety
    - Pareto diagrams by causes: Operator, Machine, Raw material, Operating methods, time, etc..

---

Slide 24

**Pareto Analysis**
- to prioritize problems or causes

- A frequency distribution bar graph kept in descending order of occurrence

---
Cause & Effect Diagrams
- Ishikawa Diagram and/or Fish Bone Diagram
- Used to identify causes
- A structure to collect verbal information in brainstorming
- The fish head is an effect or problem, the fins are causes.
- Major characteristics for causes are mostly Man, Machine, Materials and Methods
- Most often used together with Pareto diagrams

Cause & Effect Analysis
- A qualitative tool to identify causes of problem
- Fish bone diagram or Ishikawa diagram constructed through brainstorming

Other Basic QC Statistical Tools
- Histogram
- Control Charts
- Scatter Diagram and Regression Analysis
**Slide 28**

- **Histogram**
  - To understand the distribution of data
  - A visual representation of the relative sizes of various groups which helps to identify the central tendency, deviations and skewness.

**Slide 29**

- **Control Charts**
  - To identify the trend
  - A graphical device for presenting a running record of suitable sample characteristics.

**Slide 30**

- **Scatter Diagram**
  - To identify the correlations
  - A visual representation of the relationship between two variables.
Managerial QC Tools

1. Affinity Diagrams
2. Relations Diagrams
3. Tree Diagrams
4. Matrix Diagrams
5. Arrow Diagrams
6. Data Matrix Analysis
7. Process Decision Program Charts

Slide 32

Affinity Diagrams

- Also called KJ Method, developed by Dr. J. Kawakita
- Purpose:
  - For pinpointing the problem in a chaotic situation and generating solution strategies
- Advantages:
  - Extract verbal data from chaotic situations and sorting into natural groups
  - Facilitate breakthrough thinking and stimulate fresh ideas
  - Permit the essence of problem to pin down accurately with everyone's agreement
  - Foster team spirit and spur the group into action

Slide 33

Relations Diagrams

- Extension of Cause and Effect Diagram
- Purpose:
  - For finding appropriate solution strategies by clarifying causal relationships in problems with complexity interrelated causes
- Advantages:
  - Understand the complex web of cause and effect diagram
  - Develop consensus among team members
  - Can help to change the format and develop people's thinking
  - Enable priorities to be identified accurately
Slide 34

Tree Diagrams
- Dendrograms, Used in value analysis
- **Purpose:** For systematically perusing the best strategies for attaining objective
- **Advantage:**
  - Allow logically develop strategies to achieve objective
  - Facilitate agreement among group members
  - Identify and clearly display strategies for solving problem

Slide 35

Other Managerial Tools
- Matrix Diagrams
- Arrow Diagrams
- PDPC
- Data Matrix Analysis

Slide 36

4 PHASES OF TQM IMPLEMENTATION
- The Trial & Preparation Phase
- The Introductory Phase
- The Promotion Phase
- The Consolidation Phase
Slide 37

THE TRIAL & PREPARATION PHASE
- The CEO's office investigates methods of introducing TQM & SQC
- The CEO, senior managers, managers attend lectures by outside experts
- The organization’s directors lead discussions of the pros and cons of introducing TQM & Quality Circles
- A Quality Policy is developed and approved by the Board

Slide 38

THE INTRODUCTORY PHASE
- Decide which department, person will be responsible for TQM promotion
- The CEO formally announces that TQM is to be introduced
- Grade-specific QC training is provided
- An organization-wide TQM steering committee is established and its members are appointed
- Improvement activities are carried out

Slide 39

STEERING COMMITTEE FUNCTION
- Determine policies/ objectives
- Evaluate progress of the circles
- Determine how circles will be rewarded or recognized for their good performance
- The following should not be a matter of QC or steering committee’s job
  - Personalities
  - Grievances
  - Policies of the institution
Slide 40

**ROLE OF TOP & MIDDLE MANAGERS IN TQM PROMOTION**

- CEO themselves must understand the TQM & QC concept of employees participation for continuous improvement and take initiative to promote it (Commitment as well as Involvement)
- Departmental managers must:
  - Identify their internal customers and their quality needs
  - Recognize and prioritize the problems they must deal
  - Coach their subordinates continually for improvements
  - Fully support Employees Quality Circles activities providing time, place, etc.

Slide 41

**THE PROMOTION PHASE**

- Introduce policy management and link improvement activities
- Keep on expanding standardization activities and maintain benefits of improvements
- Introduce cross functional activities to tackle the problems of the organization as a whole
- Introduce top-management quality audits
- Apply for certification and National/international quality awards (e.g., Malcolm Baldridge, EFQM, National Excellence Awards, etc.)

Slide 42

**THE CONSOLIDATION PHASE**

- Collect and analyze regularly accurate customer’s quality information
- Conduct Grade-specific quality training
- Manage new products & processes development
- Continue standardized routine management and policy management
- Conduct Quality Circles activities regularly
- Regularly conduct top-management diagnosis
An Approach to Group Dynamics

Ramesh M. Singh

Group Dynamics

Small groups have functioned since the time of the first human family, and today, groups are widely recognized as an important sociological unit of analysis in the study of organizational behaviour. The social process by which people interact with one another in small groups is called group dynamics. They are the interactions and forces among group members – members of both formal and informal work groups, and, now teams in organizations. Groups have properties of their own that are different from the properties of the individuals who make up the group. The synergy that emerges through the relationship among members makes the understanding of group dynamics important for managers as well as team leaders.

Today’s social environment surrounding groups is changing. For example, there is the assumption that today’s young generation are difficult to manage in groups because they have low needs for group affiliation and high needs for individual achievement.

The term group can be defined in a number of different ways, depending on the perspective that is taken. A comprehensive definition of a group in an organization is that its members:
- are motivated to join
- perceive the group as a unified unit of interacting people
- contribute in various amounts to the group processes (that is, some people contribute more time or energy to the group than do others)
- reach agreements and have disagreements through various forms of interaction

Just as there is no one definition of the term group, there is no universal agreements on what is meant by group dynamics. Views of group dynamics:

1. Based on how a group should be organized – stress is on democratic leadership, member participation, overall cooperation
2. Set of techniques – equated with role playing, brainstorming, focus group, group therapy, sensitivity training, team building, transactional analysis, self-managed teams. A recent example is that of “creative abrasion” (the search for a clash of ideas) rather than “personal abrasion” (clash of people). The goal is to develop greater creativity from the group
3. Perspective of the internal nature of groups – how they form, their structure and processes, how they function and affect individual members, other groups and the organization

There are also a number of theories as to why individuals form into groups. They are as follows:

1. Propinquity: Individuals affiliate with one another because of spatial or geographical proximity.
2. Elements of activities, interactions and sentiments: According to this, the more activities persons share, the more numerous will be their interactions and the stronger will be their sentiments; the more the interactions among the people, the more will be their shared activities and sentiments; and, the more the sentiments persons have for one another, the more will be their shared activities and interactions
The major element is interaction. Persons in a group interact with one another not just in the physical propinquity sense, but also to achieve many group goals through cooperation and problem solving.

3. *Balance theory*: Individual X will interact and form a relationship with Individual Y because of common attitudes and values, Z (religion, politics, lifestyle, marriage, work, and authority). Once this relationship is formed, participants strive to maintain a symmetrical balance between the attraction and the common attitudes. Both propinquity and interaction play a role in balance theory.

4. *Exchange theory*: Group dynamics is based on reward-cost outcomes of interaction. A minimum positive level (rewards greater than costs) of an outcome must exist in order for attraction or affiliation to take place. Rewards from interactions gratify needs, whereas costs incur anxiety, frustration, embarrassment or fatigue. Propinquity, interactions and common attitudes all have roles in exchange theory.

5. *Practical reasons of group formation*:
   - Economic: workers form groups to work on a project that is paid for on a group incentive plan such as gain-sharing; they form unions to demand higher wages.
   - Security: united front against indiscrimination, unilateral treatment etc. (adage of strength in numbers)
   - Social needs: strong affiliation desire – belonging to a group or team (belongingness)

**Brainstorming**

Brainstorming is a technique popularized in the 1950s for creative thinking in small groups. It is a technique for helping a group to generate a wealth of ideas in a short span of time about.

The main beauty of brainstorming in a group is deferred judgement or encouraging all kinds of ideas – even unusual and impractical ones – by avoiding criticism, judgement and evaluation. The purpose of deferred judgment is to encourage people to come up with bold, unique ideas without worrying about what others think of them. As a result, the process typically produces more ideas than the conventional approach of alternately thinking and judging. Very little preparation is required for brainstorming. The members of the group participating in brainstorming are enthusiastic, participation is broader than normal, and the group maintains a strong task orientation. Ideas are built upon and extended, and members typically feel that the final product is a team solution.

The members present ideas and clarify them with brief explanations. Each idea is recorded in full view of all members, usually a flip chart. To avoid self-censoring, no attempt to evaluate the ideas is allowed. Group members are encouraged to offer any ideas that occur to them, even those that seem risky or impossible to implement. In a subsequent session, after the ideas have been recorded and a brief period of incubation, the ideas are evaluated.

The success of brainstorming depends on each member’s capacity and willingness to listen to other’s thought, to use these thoughts as a stimulus to spark new ideas of their own, and then to feel free to express them. When this happens, a large number of new and different ideas can emerge. Today, the development of ICT has made it possible for electronic brainstorming. Brainstorming sessions should be designed to be fun and when groups are relaxed, they produce more ideas.
Slide 1

Group Dynamics
- Social process by which people interact face-to-face in small groups
- Kurt Lewin (1930s) – Different kinds of leadership produced different responses in groups
- Elton Mayo & associates (1920s to 30s) – workers tend to establish informal groups that affect job satisfaction and effectiveness

Slide 2

Group Dynamics (contd.)
- Groups have properties different from properties of the individuals who make up the group
  - E.g., molecule of salt (Sodium Chloride) and elements of Sodium and Chlorine
- In groups, no two people can be conceived without their relationship which makes three

Slide 3

Understanding of Groups
Members:
- are motivated to join
- perceive group as unified unit of interacting people
- contribute in various amounts in group processes
- reach agreements and disagreements
Views on Group Dynamics

- How groups should be organized:
  - Democratic leadership, member participation, overall cooperation
- A set of techniques:
  - Role playing, brainstorming, sensitivity training, team building etc.
- Perspective of internal nature of groups:
  - Focus on formation, structure & processes, how they function and affect others

Why individuals form into groups?

- Propinquity
  - Affiliation due to proximity of individuals
- Shared activities, interactions and sensitivity
  - More the shared activities, more interactions and stronger the sentiment
  - Greater the number of interactions, more the activities and sentiments
  - More the sentiments persons have for other persons, more will the shared activities and interactions

Why individuals form into groups? (contd.)

- Balance Theory
  - Individual X + Individual Y → Common attitudes & values Z
  - Religion, politics, lifestyle, marriage, work, authority
Slide 7

Why individuals form into groups?
(contd.)

- Exchange theory
  - Based on reward-cost outcomes of interactions
  - Minimum positive level (reward greater than costs) of an outcome must exist for affiliation to take place
  - Rewards from interaction gratify, but costs incur anxiety, frustration, embarrassment
  - Proximity, Interactions and common attitudes play roles

Slide 8

Practical reasons for joining groups

- Economic need
  - Gainsharing, collective bargaining etc.
  - Individual/mutual benefit
- Security need
  - Against discrimination, unilateral decisions etc.
  - Adage – might in number
- Social need
  - Strong affiliation desire (belongingness)

Slide 9

Brainstorming

- Analytical thinking
  - Logical thinking, conditioned by our learning system (at home and school)
- Lateral thinking
  - Use of creativity, thinking differently, “out of box”
  - Dare to challenge existing models
- Brainstorming more of creative thinking
Slide 10

Barriers to Creative Thinking

- Fear of looking foolish
- Tendency to assume the way things have always been done
- Tendency to evaluate too quickly
- What-I-say-is-right attitude
- Tendency to accept there is only one right answer to every problem

Slide 11

Rules of Brainstorming

Rule 1: No criticism
(without criticism, members will be more willing to suggest better ideas)

Rule 2: Free wheeling
(encourages wild and strange/crazy ideas which are out of the mold)

Rule 3: Generate as many ideas as possible
(don’t stop the flow of ideas; quality increases with the number of ideas presented)

Slide 12

Rules of Brainstorming (cont.)

Rule 4: Piggyback ideas
(encourage to build upon, extend or combine earlier ideas)

Rule 5: Write down all the ideas
(record in full view of all members)

Rule 6: Incubate the ideas before evaluating
(allow time to sleep over the ideas; avoiding the risk of hastening decisions or ‘getting over with it’)
Positive notes

- Members are enthusiastic
- Broader participation
- Strong task orientation
- Very little preparation required
- Increases decision acceptance and team cohesiveness; final product a team solution

Positive notes (contd.)

- Deferred judgement avoids self-censoring
- Encourages innovative and comprehensive ideas and solutions; creative thinking
- Brainstorming rules minimizes negative conflict among members

Steps in Running a Successful Brainstorming

Step 1: Re-state or write up the Rules of Brainstorming
Step 2: Write up the Subject/Topic to be brainstormed (Introduction to the subject)
Step 3: Start the ideas flowing one by one. Pass if stuck.
Steps in Running a Successful Brainstorming (contd.)

Step 4: Record the ideas, even repetitions. (Full list visible to the whole group all the time)
Step 5: Incubate the ideas. (Process of sleeping on it)
Step 6: Evaluate the wealth of ideas generated. (Grouping, extending, deleting, splitting)
Step 7: Minuting/reporting the result of brainstorming

Remember
DEFERRED JUDGEMENT
No criticism
No judgement
No hasty evaluation
Bibliography


Chase, Jacobs, Aquilano ~ *Operations Management for Competitive Advantage*, 10th ed., Pg 278 Exhibit 7.4


Moorehead, Gregory and Ricky W. Griffin (ed. 2001) *Organizational Behaviour: Managing People and Organizations*, Houghton Mifflin Co., New Delhi, India


www.wto.org

www.iso.org/iso/en/iso9000-14000/understand/basics/general/basics_1.html

www.iaf.nu

www.iclcertifications.com

www.appreciativeinquiry.cwru.edu/intro/whatisai.cfm

www.new-paradigm.co.uk/Appreciative.htm

www.gervasebushe.ca/ai5.htm
Contributors

Prof. Dinesh P. Chapagain, an industrial engineering and management graduate having 30 years of industrial experience is currently engaged at Kathmandu University School of Management (KUSOM). His major interest is process re-engineering and human resource development with special focus on productivity and total quality improvement in organizations. He teaches and conducts research in the subjects like TQM, leadership, industrial analysis and competitiveness. He is a senior OD consultant, involved in the institutional development of various private and public sector organizations in Nepal. He has presented papers in international conferences in Mauritius, Sri Lanka, Bangladesh and India on quality and productivity. In addition to publication of various articles in prominent Nepalese journals on labour relations, productivity and quality management, he has also authored a handbook on quality circle in Nepalese language – Quality Circle: Ek Chinari (Quality Circle: An Introduction). He has been a regular resource person of Nepal Administrative Staff College, National Productivity and Economic Development Centre, Management Association of Nepal, Public Administration Association of Nepal and other national institutions for training in quality and productivity management. He has been three times Jury for awarding the FNCCI National Excellence Award. He is Director General of World Council for Total Quality and Excellence in Education, Nepal Chapter (WCTQEE-Nepal), Chairman of the Network, Productivity and Competitiveness - Nepal, and life member of Nepal Engineers Association and Management Association of Nepal. He is decorated with prestigious national awards like the TU Vice-chancellor Medal (1964), Mahendra Bidya Bhusan (1968) and Prabal Gorkha Dakshin Bahu Padak (1986) for his academic and professional excellence.

Mr. Mahesh Gongal is a Division Chief of the National Productivity and Economic Development Centre (NPEDC), Kathmandu. Concurrently, he is also the Director of the Centre for Gender and Management (CGM), Kathmandu He obtained his M. Sc. in Chemistry from the Tribhuvan University, Kathmandu; MBA from the Faculty of Management Studies (FMS), Delhi University, India; and MS in Economics from the University of Mannheim, Germany.

Mr. Gongal has undertaken extensive research and study in the field of organization development, productivity management, and in other functional areas of management, and institutional and socio-economic developments. He has more than two decades of experience in research and consulting services in productivity management and enhancement, human resources development, organization development, project formulation, implementation and monitoring; strategic planning, industrial policy research and planning; enterprise development and others. As a national expert, he has carried out a basic research on productivity, competitiveness and quality jobs for the Asian Productivity Organization (APO), Japan.

Mr. Gongal is qualified for certification of individual Auditors under the IRCA/IATCA QMS Auditor Certification Scheme since he has successfully completed the program on ISO 9000:2000 Series Auditor/Lead Auditor and passed its examination in 2004.

Navin Dahal presently works as Research Director in SAWTEE (South Asia Watch on Trade, Economics and Environment), Kathmandu, Nepal. He has more than 12 years experience in the private, public and development sector. He has the experience of starting and managing a small enterprise for four years. He has also worked extensively in the area of small enterprise development. He has an MBA degree from Asian Institute of Management, Manila, Philippines. He has edited two books and published several research work and writes regularly in the area of international trade and trade related issues.

Ramesh M. Singh is the Director of BISCONS Development and Management Consultants, Kathmandu. An MBA graduate, Mr. Singh has undertaken extensive research and study in various fields of management and development. He has almost 15 years of experience in research and consulting services in quality and total quality management, organizational development, human resources development, labour policy research and socio-economic development working for the private sector, government as well as non-government sectors. He is also involved as a trainer in human resource development, Japanese style management and total quality management. As a resource person, he has made presentations on home-based women workers, labour welfare and total quality management in Nepal, India and Bangladesh. He is also a faculty member of College of Applied Business, Kathmandu teaching Organizational Management and Human Resource Management to bachelors level management students, and assisting in research and project works.

Mr. Singh has been actively involved in human resource development in the country through Nepal AOTS Alumni Society of which he is currently the general secretary. He is also a member of Productivity and Quality Committee of Federation of Nepal Social Chambers of
Surendra Shrestha is Manager of ICL Certifications Nepal Pvt. Ltd., an ISO Standards Certification Company. He has an educational background of Bachelor of Production Engineering from Birla Institute of Technology, Ranchi, India and Masters of Business Administration from Roorkee, India both under scholarships of Colombo Plan and Silver Jubilee Scholarship Scheme respectively. Earlier he had worked with Colgate-Palmolive Nepal Pvt. Ltd. and OSRAM India Pvt. Ltd. By profession he is a Lead Auditor of ISO 9001:2000 and has completed more than 100 maydays of certification audit experiences. He also is a registered co-tutor for ISO 9001:2000 Lead Auditor Course (LAC). His interest is to enhance the productivity and competitiveness of an organisation.