Hong Kong Society for Quality

World Quality Month & Day Seminar

Quality Excellence Model - MBNQA & EFQM

Preliminary comparison study among ISO 9001, MBNQA and EFQM

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Content

- Introduction to the 8 management principle in ISO 9001
- Introduction to the criteria of the Malcolm Baldrige National Quality Award (MBNQA) and its Performance Excellence Framework
- Introduction to the scoring for the European Foundation for Quality Management (EFQM) Excellence Award and its Model
- Comparison those models similarity and disimilarity

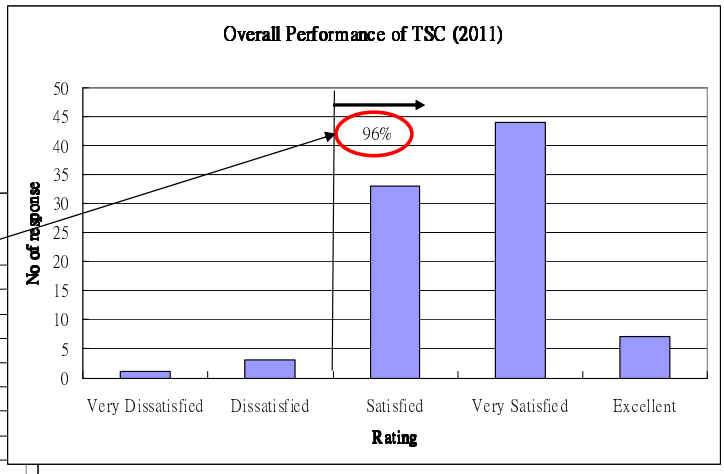
Introduct of ISO 9001

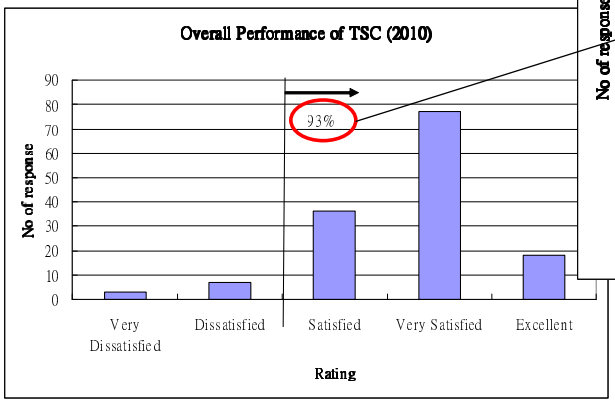
- Eight Quality Management Principles employed in Technology Support Centre (TSC) of HKSTP

- **Customer Focus**
- **Leadership**
- **Involvement of People**
- **Process Approach**
- **Systems Approach to Management**
- **Continual Improvement**
- **Factual Approach to Decision-making**
- **Mutually Beneficial Supplier Relationship**

Customer Focus

- **Understand current and future customer needs, meet customer requirements and exceed expectations.**





Leadership

- Establish unity of purpose and the direction of the organization.
- Top Management Commitment
- Mr. Allen Yeung (Vice President – BDTS) share vision of HKSTP in Month Mass Communication Meeting for BDTS (included TSC)

Mass Communication Meeting

Involvement of People

- People at all levels need to be involved so that their abilities are used to achieve the organization's objectives
- In each centre has regular operation meeting for staff instruction and feedback.

Regular Operation Meeting

Process Approach

- System of activities which uses resources to transform inputs into outputs
- Result is achieved most effectively and efficiently if all activities are managed as a process.

✓ Identify each processes in Quality Manual (4.2.2)

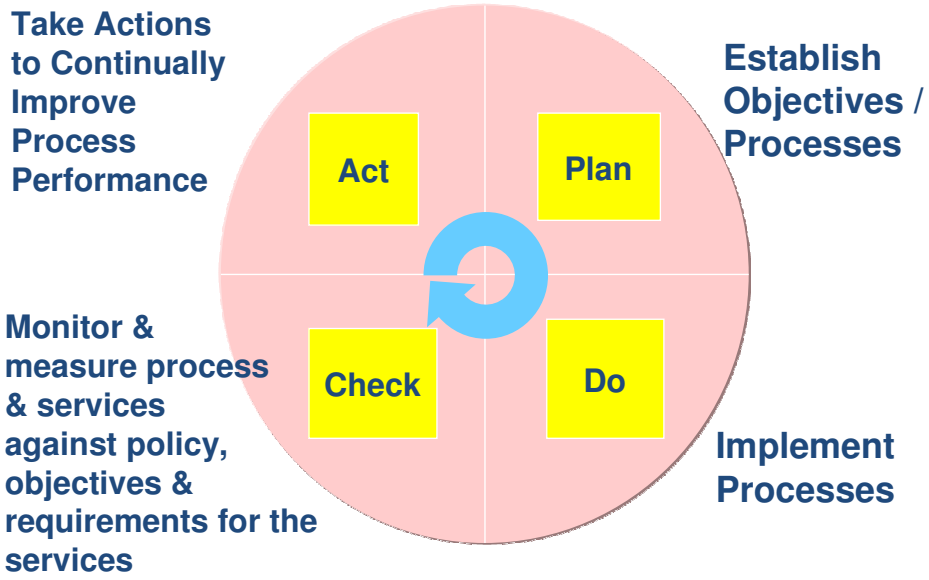
✓ List main operation processes (7)

✓ Design & Development Process (7.3)

✓ Control of Equipment (7.6)

✓ Process Characteristic analysis for monitoring and measurement (8)

Employed PDCA Approach



Systems Approach to Management

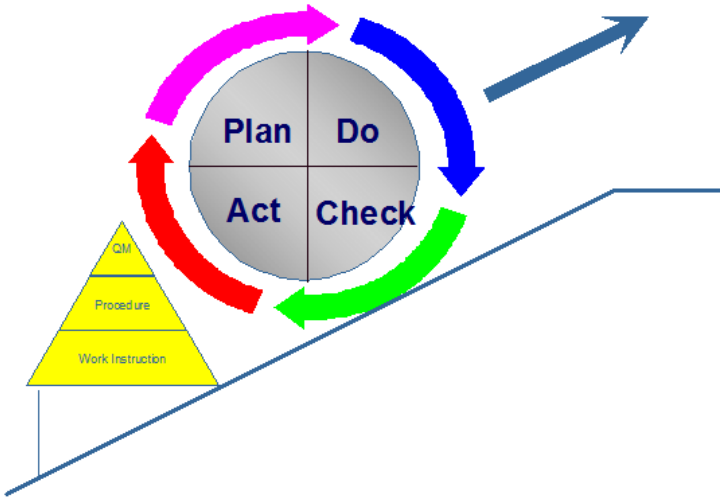
- Identifying, understanding and managing a system of interrelated processes in order to achieve objectives, enhance organization's effectiveness and efficiency.
- TSC has quarterly Quality Meeting invited all centre's quality representatives to participate.
- Internal Quality Audit was performed regularly.

Quarterly TSC Quality Meeting

Internal Quality Audit

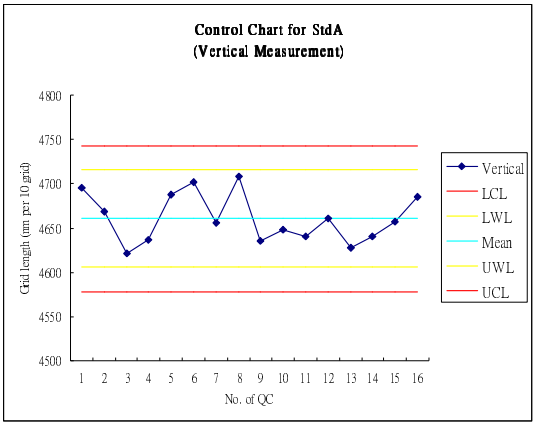
Continual Improvement

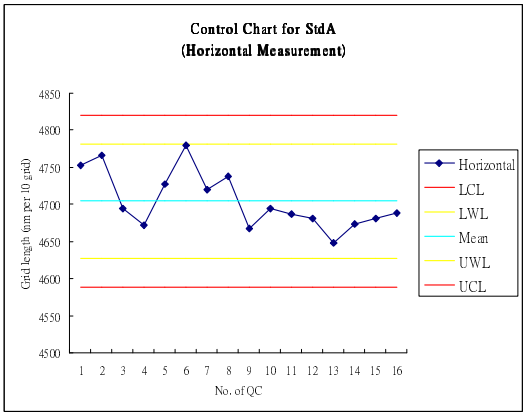
- Overall performance in organization should be a permanent objective of the organization.



Factual Approach to Decision-making

- Effective decisions are based on the analysis of true data and information.
- Analysis of data



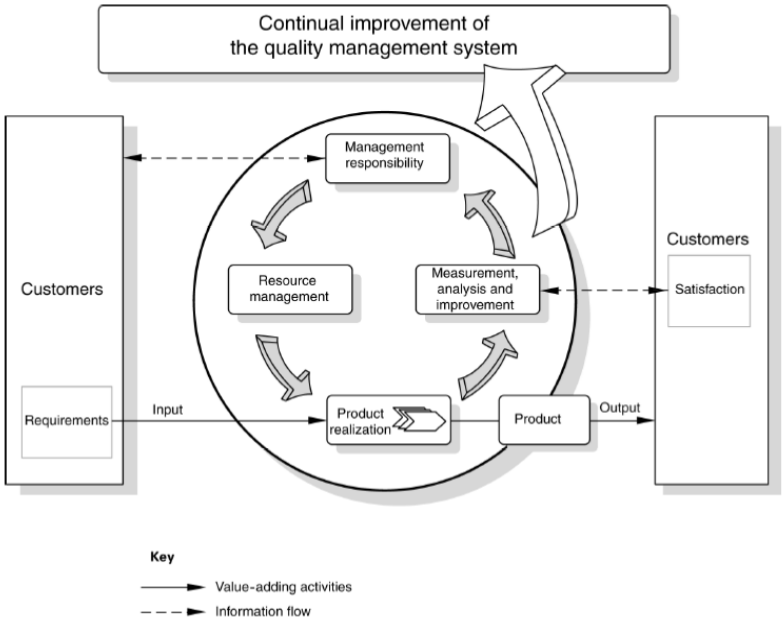


Mutually Beneficial Supplier Relationship

- Interdependent and mutually beneficial relationship enhances ability of both to create value.
- Approval Supplier List
- Supplier-Chain Management
  - Design new product with supplier
  - Process review to increase efficiency
  - Win-win relationship

ISO9001 QMS Model

ISO9001: 2008
Generic Management Requirement
Clause 4 Quality Management System
Clause 5 Management Responsibility
Clause 6 Resource Management
Clause 7 Product Realization
Clause 8 Measurement, Analysis and Improvement



Introduction of MBNQA

History (The 25th Anniversary)

Malcolm Baldrige National Quality Improvement Act of 1987, Public Law 100-107

- Created award program to
- identify/recognize role-model businesses
- establish criteria for evaluating improvement efforts
- disseminate/share best practices
- Expanded to health care and education (1998)
- Expanded to nonprofit sector (2005)

Core Values and Concepts

- Visionary Leadership
- Customer-driven Excellence
- Organizational and Personal Learning
- Valuing Workforce Members and Partners
- Agility
- Focus on the Future
- Managing for Innovation
- Management by Fact
- Societal Responsibility
- Focus on Results and Creating Value
- Systems Perspective

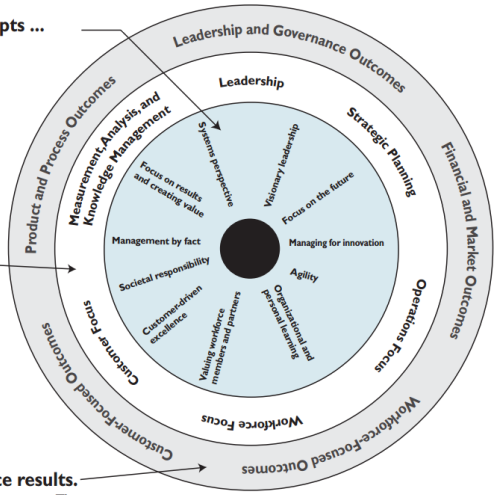
Core Values and Concepts

The Role of Core Values and Concepts

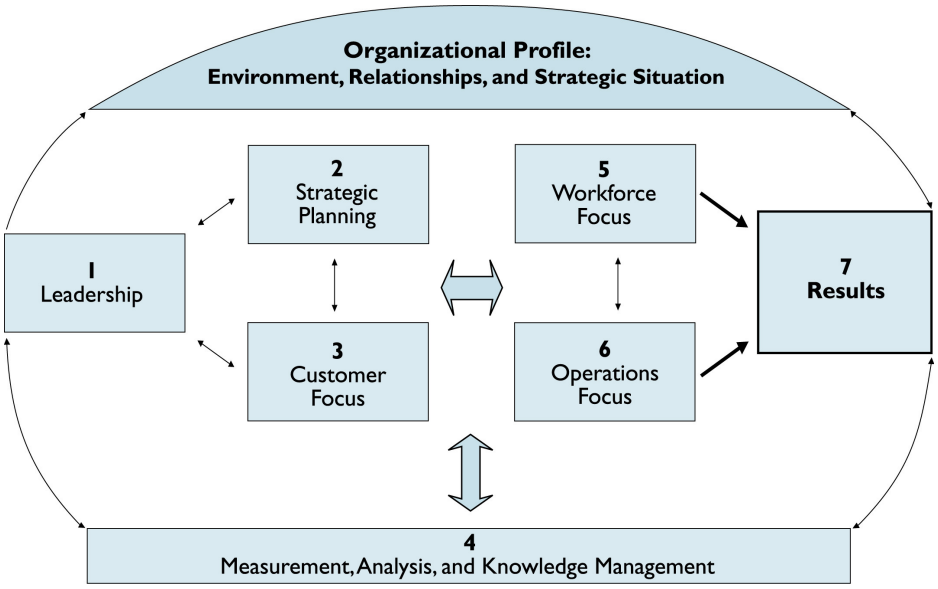
The Criteria build on
core values and concepts ...

which are embedded in
systematic processes ...
(Criteria categories 1–6)

yielding
performance results.
(Criteria category 7)



Criteria Framework: A "Systems" Perspective



Baldrige Criteria

- Leadership
  - Examines senior leaders' personal leadership and involvement in creating/sustaining values, direction, performance expectations, as well as, fulfilling legal, ethical, and societal responsibility, etc.
- Strategic Planning
  - Examines how the organization sets strategic directions and objectives, how it determines key action plans and how plans are translated into an effective performance management system

Baldrige Criteria

- Customer Focus
  - Examines how the organization determines customer's voice, and how it enhances long-term marketplace success with customers, and employs their information to improve and identify opportunities for innovation.
- Measurement, Analysis and Knowledge Management
  - Examines the IT management and effectiveness of the use of data, information and knowledge assets to support key organizational processes and the performance management system

Baldrige Criteria

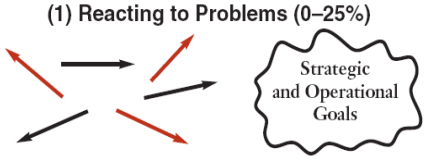
- Workforce Focus
  - Examines how the workforce is enabled to develop and utilize its full potential, how it's aligned with organization's overall mission, strategy and action plans, and efforts to build and maintain an environment conducive to performance excellence
- Operation Focus
  - Examines key aspects on the improvement of work systems and work processes, including customer-focused design, product and service delivery processes, and partnering processes involving, to deliver value and sustainability to organization success

Baldrige Criteria

- Business Results
  - Examines the organization's performance and improvement in key business areas, including Product and Process, Customer-Focused, Workforce-Focused, Leadership and Governance, Financial and Market Outcomes

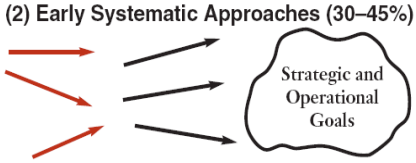
Steps toward Mature Processes

(1) Reacting to Problems (0–25%)



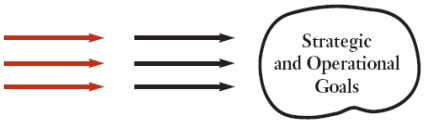
Operations are characterized by activities rather than by processes, and they are largely responsive to immediate needs or problems. Goals are poorly defined.

(2) Early Systematic Approaches (30–45%)



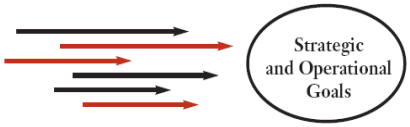
The organization is at the beginning stages of conducting operations by processes with repeatability, evaluation and improvement, and some early coordination among organizational units. Strategy and quantitative goals are being defined.

(3) Aligned Approaches (50–65%)



Operations are characterized by processes that are repeatable and regularly evaluated for improvement, with learnings shared and with coordination among organizational units. Processes address key strategies and goals of the organization.

(4) Integrated Approaches (70–100%)



Operations are characterized by processes that are repeatable and regularly evaluated for change and improvement in collaboration with other affected units. Efficiencies across units are sought and achieved through analysis, innovation, and the sharing of information and technology. Processes and measures track progress on key strategic and operational goals.

Scoring System

- Independent review: ADLI – Process Items
  - Approach (A)
  - Deployment (D)
  - Learning (L)
  - Integration (I)
- Independent review: LeTCI – Results Items
  - Level (Le)
  - Trends (T)
  - Comparisons (C)
  - Integration (I)

ADLI Process Evaluation

- A = Approach
  - Methods or processes used to meet the requirements of the criteria included "Systematic and Fact-based", "Appropriate for the Item requirements" and "Effectiveness", etc.
- D = Deployment
  - Addressing the requirements of an Item
  - included all work units, locations, shifts, stakeholders, product lines, or employees, as appropriate.
- L = Learning
  - New knowledge or skills acquired through evaluation, study, experience, and innovation.
- I = Integration
  - The harmonization of plans, processes, information, resource decisions, actions, results, and analysis to support key organization-wide goals.

LeTCI Result Evaluation

- Le = Performance Levels
  - Performance levels permit evaluation relative to past performance, projection goals, and appropriate comparisons.
- T = Trends
  - A minimum of 3 data points is needed to begin to ascertain a trend. More data points are needed to define a statistically valid trend.
- C = Comparisons
  - Establishing the value of results by their relationship to similar or equivalent measures. Comparisons can be made to results of competitors, industry averages, or best-in-class organizations.
- I = Integration
  - Connection to important customer, product and service, market, process and action plan performance measurements identified in the Organizational Profile and in Process Items.

MBNQA Scoring System

Example: Assessment Scoring Summary

		Score	# of Points
1	**Leadership**		
1.1	Organizational Leadership (70 points)	XX%	YY
1.2	Social Responsibility (50 points)	XX%	YY
2	**Strategic Planning**		
2.1	Strategy Development (40 points)	XX%	YY
2.2	Strategy Deployment (45 points)	XX%	YY
3	**Customer and Market Focus**		
3.1	Customer and Market Knowledge (40 points)	XX%	YY
3.2	Customer Relationships and Satisfaction (45 points)	XX%	YY
4	**Information and Analysis**		
4.1	Measurement/Analysis of Organizational Performance (45 pts)	XX%	YY
4.2	Information and Knowledge Management (45 pts)	XX%	YY
5	**Human Resource Focus**		
5.1	Work Systems (35 pts)	XX%	YY
5.2	Employee Learning and Motivation (25 pts)	XX%	YY
5.3	Employee Well-Being and Satisfaction (25 pts)	XX%	YY
6	**Process Management**		
6.1	Value Creation Processes (50 pts)	XX%	YY
6.2	Support Processes (35 pts)	XX%	YY
7	**Results**		
7.1	Customer Focused Results (75 pts)	XX%	YY
7.2	Product and Service Results (75 pts)	XX%	YY
7.3	Financial and Market Results (75 pts)	XX%	YY
7.4	Human Resource Results (75 pts)	XX%	YY
7.5	Organizational Effectiveness Results (75 pts)	XX%	YY
7.6	Governance and Social Responsibility (75 pts)	XX%	YY

Introduction of EFQM

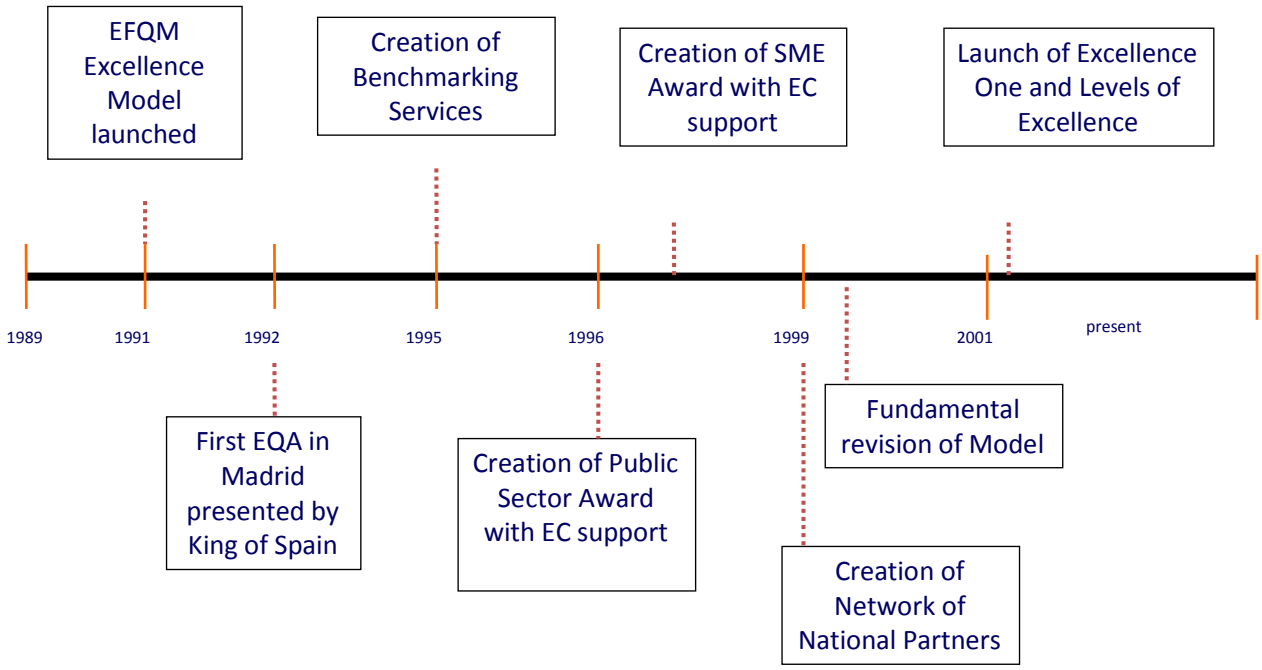
- To stimulate and, where necessary, to assist management in adopting and applying the principles of organisational excellence
- To improve the competitiveness of European Industry and to close the gap of competitiveness between Europe and US/Japan
- Supported by the European Commission in The European Quality Promotion Policy

History of EFQM

- Founded in 1989 by 14 leading European organisations :

- BT plc
- Robert Bosch GmbH
- Bull SA
- Ciba-Geigy AG
- Dassault Aviation
- AB Electrolux
- Fiat Auto Spa
- KLM - Royal Dutch Airlines
- Nestlé AG
- Philips Electronics NV
- Ing. C. Olivetti & C.S.p.A.
- Renault
- Gebr. Sulzer AG
- Volkswagen AG

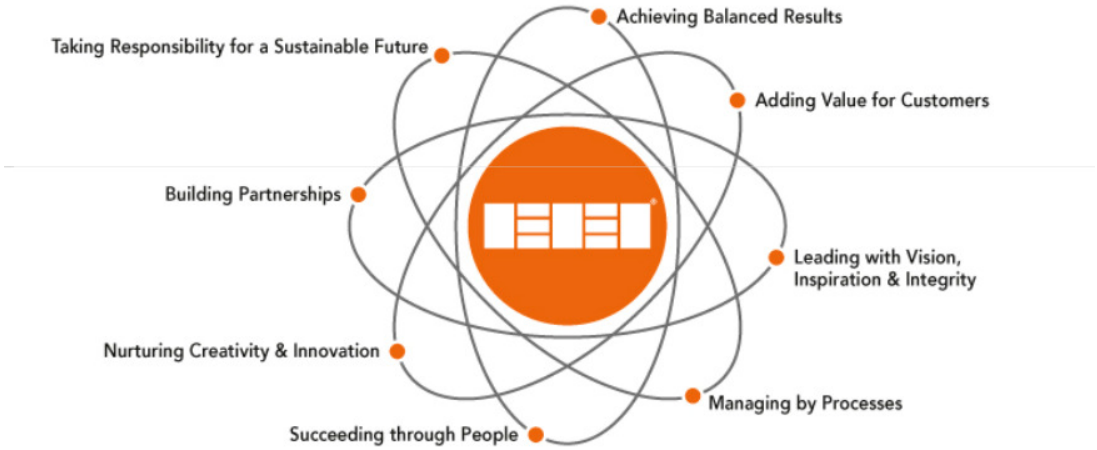
EFQM Key Milestones



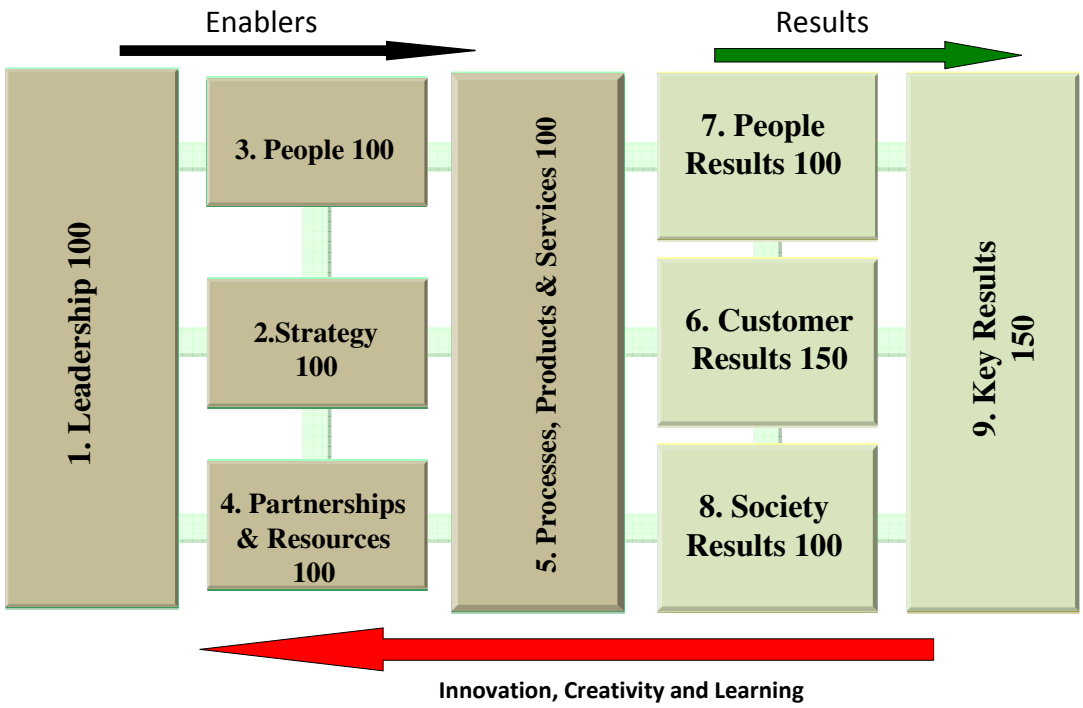
EFQM Fundamental Concepts of Excellence

- Achieving Balanced Results
- Adding Value for Customer
- Leading with Vision, Inspiration & Integrity
- Managing by Processes
- Succeeding through People
- Nurturing Creativity & Innovation
- Building Partnerships
- Taking Responsibility for a Sustainable Future

EFQM Fundamental Concepts of Excellence



The EFQM Excellence Model



EFQM Criteria

- Leadership (Enabler)
  - who shape the future and make it happen, acting as role models fro its values and ethics and inspiring trust at all time
- Strategy (Enabler)
  - Policies, plans, objectives and processes are developed and deployed to deliver the strategy

EFQM Criteria

- People (Enabler)
  - create a culture that allows the mutually beneficial achievement of organizational and personal goals
- Partnerships & Resources (Enabler)
  - plan and manage external partnerships, suppliers and internal resources in order to support strategy and policies and the effective operation of processes

EFQM Criteria

- Processes, Products and Services (Enabler)
  - design, manage and improve processes, products and services to generate increasing value for customers and other stakeholders
- Customer Results
  - a set of performance indicators to determine the successful deployment of their **strategy** and supporting policies, based on the **customers**' needs and expectations (over at least 3-yr)

EFQM Criteria

- People Results
  - a set of performance indicators to determine the successful deployment of their **strategy** and supporting policies, based on their **people** needs and expectations (over at least 3-yr)
- Society Results
  - a set of performance indicators to determine the successful deployment of their **societal and ecological strategy** and related policies, based on their **relevant external stakeholders**' needs and expectations (over at least 3-yr)

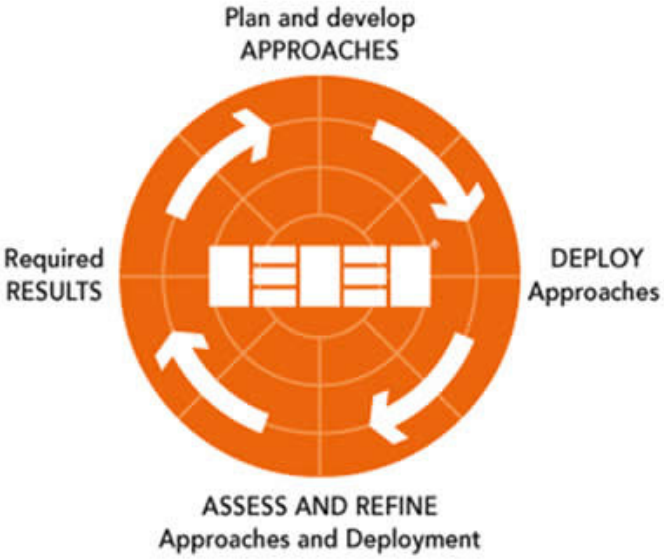
EFQM Criteria

- Key Results
  - a set of key financial and non-financial results to determine the successful deployment of their **strategy**, based on their **key stakeholders**' needs and expectations (over at least 3-yr)
  - Key Strategy Outcomes:
    - Financial outcomes
    - Performance against budget
    - Volume of key products or services delivered
    - Key process outcomes

RADAR Logic

- It is a dynamic assessment framework and powerful management tool providing a structured approach to questioning the performance
  - Determine the **RESULTS**
  - Plan and Develop an integrated set of **APPROACHES**
  - **DEPLOY** the Approaches in a systematic way
  - **ASSESS AND REFINE** the Approaches and Deployment

RADAR


Plan and develop
APPROACHES
Required
RESULTS
DEPLOY
Approaches
ASSESS AND REFINE
Approaches and Deployment

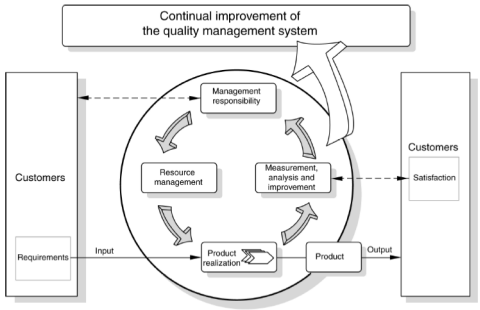
RADAR attributes to assess

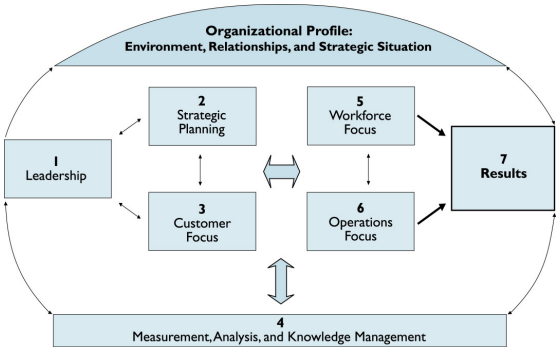
Analysis of ENABLERS	
Elements	**Attributes to assess**
APPROACH	• Sound • Integrated
DEPLOYMENT	• Implemented • Systematic
ASSESSMENT AND REFINEMENT	• Measurement • Learning and Creativity • Improvement and Innovation

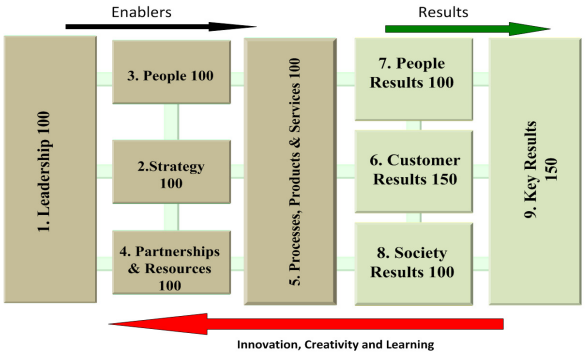
Analysis of RESULTS	
Elements	**Attributes to assess**
RELEVANCE AND USABILITY	• Relevance • Integrity • Segmentation
PERFORMANCE OUTCOMES	• Trends • Targets • Comparisons • Causes

Comparison ISO 9001, MBNQA and EFQM

- Code Values and Principles
- Excellence Model Approach







Principles Comparison

ISO 9001 8 Quality Management Principles	MBNQA Core Values and Concepts	EFQM Fundamental Concepts
Customer Focus	Customer-driven Excellence	Adding Value for Customer
Leadership	Visionary Leadership	Leading with Vision, Inspiration & Integrity
Involvement of People	Valuing Workforce Members and Partners	Succeeding through People
Process Approach	Agility	Managing by Processes
Systems Approach to Management	Systems Perspective	
Continual Improvement	Organizational and Personal Learning Focus on the Future Societal Responsibility	Taking Responsibility for a Sustainable Future
Factual Approach to Decision-making	Management by Fact	
Mutually Beneficial Supplier Relationship	Valuing Workforce Members and Partners	Building Partnerships
	Managing for Innovation	**Nurturing Creativity & Innovation**
	Focus on Results and Creating Value	**Achieving Balanced Results**

Models Comparison (I)

MBNQA		ISO 9001		EFQM	
1	**Leadership (120 pts.)**	**5**	**Management responsibility**	**1**	**Leadership (10%)**
1.1	Senior Leadership (70 pts.)				
1.1a	Vision, Values, and Mission	**5.1** **5.3** 5.4.1	**Management commitment** **Quality policy** Quality objectives	1a	Leaders develop the Mission, Vision, Values and ethics and act as role models.
1.1b	Communication and Organizational Performance	5.5.3	Internal communication	1e	Leaders ensure that the organization is flexible and manages change effectively.
1.2	Governance and Societal Responsibilities (50 pts.)				
1.2a	Organizational Governance	5.5.1 5.5.2 **5.6** 8.2.2	Responsibility and authority Management representative **Management review** Internal audit	1b	Leaders define, monitor, review and drive the improvement of the organization's management system and performance.
1.2b	Legal and Ethical Behavior	7.2.1	Determination of requirements related to the product	1c	Leaders engage with external stakeholders.
1.2c	Societal Responsibilities and Support of Key Communities			1d	Leaders reinforce a culture of excellence with the organization's people.
2	**Strategic Planning (85 pts.)**	**5.4**	**Planning**	**2**	**Strategy (10%)**
2.1	Strategic Development (40 pts.)				
2.1a	Strategy Development Process	5.4.2	Quality management system planning	2b	Strategy is based on understanding internal performance and capabilities.

Models Comparison (II)

2.1b	Strategic Objectives	5.4.1	Quality objectives		
2.2	Strategy Implementation (45 pts.)				
2.2a	Action Plan Development and Deployment	**7.1**	**Planning of product realization**	2c	Strategy and supporting policies are developed, reviewed and updated.
2.2b	Performance Projections	**7.5**	**Production and service provision**	2d	Strategy and supporting policies are communicated, implemented and monitored.
3	**Customer Focus (85 pts.)**	**5.2**	**Customer focus**	**5**	**Processes, Products and Services (10%)**
3.1	Voice of the Customer (45 pts.)	7.2.1 7.2.2	Determination of requirements related to the product Review of requirements related to the product	2a	Strategy is based on understanding the needs and expectations of both stakeholders and the external environment.
3.1a	Customer Listening	7.2.3	Customer communication		
3.1b	Determination of Customer Satisfaction and Engagement	8.2.1	Customer satisfaction		
3.2	Customer Engagement (40 pts.)				
3.2a	Product Offerings and Customer Support	7.5.4	Customer property	5b	Products and Services are developed to create optimum value for customers.
3.2b	Building Customer Relationships	**7.2**	**Customer-related processes**	5e	Customer relationships are managed and enhanced.
4	**Measurement, Analysis, and Knowledge Management (90 pts.)**			**4**	**Partnerships & Resources (10%)**
4.1	Measurement, Analysis, and Improvement of Organizational	**8**	**Measurement, analysis and improvement**		

Models Comparison (III)

	Performance				
4.1a	Performance Measurement	8.2.3 **8.3**	Monitoring and measurement of processes **Monitoring and measurement of product**		
4.1b	Performance Analysis and Review				
4.1c	Performance Improvement	**8.5**	**Improvement**		
5	**Workforce Focus (85 pts.)**	**6**	**Resource management**	**3** **4**	**People (10%)** **Partnerships & Resources (10%)**
5.1	Workforce Environment (40 pts.)	**6.4**	**Work environment**	3a	People plans support the organization's strategy.
5.1a	Workforce Capability and Capacity	6.2.2	Competence, training and awareness	3b	People's knowledge and capabilities are developed.
5.1b	Workforce Climate	**6.2** 6.2.1	**Human resources** General	3d	People communicate effectively throughout the organization.
5.2	Workforce Engagement (45 pts.)				
5.2a	Workforce Performance			3c	People are aligned, involved and empowered.
5.2b	Assessment of Workforce Engagement	8.2.2	Internal audit	3e	People are rewarded, recognized and cared for.
5.2c	Workforce and Leader Development				
6	**Operations Focus (85 pts.)**	**7**	**Product realization**	**5**	**Processes, Products and Services (10%)**
6.1	Work Systems (45 pts.)			**4**	**Partnerships & Resources (10%)**
6.1a	Work System Design			4a	Partners and suppliers are managed for sustainable benefit.

Models Comparison (IV)

				5a	Processes are designed and managed to optimize stakeholder value.
6.1b	Work System Management	**4**	**Quality management system**	5d	Products and Services are produced, delivered and managed.
6.1c	Emergency Readiness	**8.4**	**Control of nonconforming product**		
6.2	Work Processes (40 pts.)				
6.2a	Work Process Design	**7.3**	**Design and development**	5c	Products and Services are effectively promoted and marketed.
6.2b	Work Process Management	7.5.1	Control of production and service provision		
7	**Results (450 pts.)**			**6,7,8,9**	**Results (50%)**
7.1	Product and Process Outcomes (120 pts.)				
7.2	Customer-Focused Outcomes (90 pts.)			**6**	**Customer Results (15%)**
7.3	Workforce-Focused Outcomes (80 pts.)			**7**	**People Results (10%)**
7.4	Leadership and Governance Outcomes (80 pts.)			**8**	**Society Results (10%)**
7.5	Financial and Market Outcomes (80 pts.)			**9**	**Key Results (15%)**

Conclusion

- Similarity - Principles
  - ISO 8 Management Principles included in both MBNQA and EFQM
- Disimilarity - Principles
  - ISO missing Innovation and Results
- MBNQA is stronger on "Systems Perspective"
- EFQM is stronger on "Managing by Processes"