

# TOPIC 1:

## QUALITY MANAGEMENT FOR ORGANIZATIONAL EXCELLENCE: INTRODUCTION TO TOTAL QUALITY

Academic Year 2023/2024

Week 1

# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (1 OF 12)

- MAJOR TOPICS
  - What is Quality?
  - History of TQM as a Management Concept
  - The Total Quality Approach Defined
  - Two Views of Quality
  - Key Elements of Total Quality
  - Total Quality Pioneers
  - Keys to Total Quality Success
  - How is Six Sigma Achieved?
  - The Future of Quality Management

# GAME ON “QUALITY”

- 10 MINUTES -----

# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (2 OF 12)

- Quality has been defined in a number of ways. When viewed from a consumer's perspective, it means meeting or exceeding customer expectations.
- Historically, quality was referred with different concepts:
  - Statistical data
  - Six sigma
  - Lean systems
  - Team work
  - Customer satisfaction
  - Continuous improvement
  - Employee engagement

# HISTORY AND EVOLUTION OF QUALITY AS A MANAGEMENT CONCEPT

In the early 1900s, “The Father of Scientific Management” Frederick W. Taylor wrote a book: “*The Principles of Scientific Management*;

## A. Frederick Taylor Defined tasks performed under standard conditions:

- **Inspection** was one of these tasks and was intended to ensure that no faulty product left the workshop;
- **Testing** so the products match as the requirements or specifications.
- **Trained inspectors**
- The emergence of **defect prevention** concept which led to quality control.

**B. 1920s --r W. Shewhart developed the application of **statistical methods** for the management of quality in Western Electric Company**

- Control charts and the Plan–Do–Study–Act (PDSA) cycle

# HISTORY AND EVOLUTION OF QUALTY AS A MANAGEMENT CONCEPT

## C. 1940s--- Deming and Faigenbaum

- - Not only products but ALL aspects of management
- **Juran** is one of the disciples of Deming

## D. 1960s---Ishikawa –introduced the concept of **Quality Circle (QC)**

- Quality id not the management issue by all people in the company must get involved
- **Crosby --- Crosby 14 Principles**

# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (3 OF 12)

- Quality and **competitive advantage**;
- The building blocks of competitive advantage are:
  - efficiency,
  - innovation,
  - responsiveness to customers,
  - organizational agility, and
  - quality. a condition or circumstance that puts a company in a favourable or superior business position.

## AGILITY

**Agility** is the ability of an organization to renew itself, adapt, change quickly, and succeed in a rapidly changing, ambiguous, turbulent environment



# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (4 OF 12)

Total quality is an approach to doing business that attempts to maximize an **organization's competitiveness** through the continual improvement of the quality of its products, services, people, processes, and environments.

# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (5 OF 12)

- Key characteristics of the **Total Quality Management** approach are as follows:
  - **strategically based,**
  - **customer focus,**
  - **obsession with quality,**
  - **scientific approach,**
  - **long-term commitment,**
  - **teamwork,**
  - **employee involvement and empowerment,**
  - **continual process improvement,**
  - **bottom-up education and training,**
  - **freedom through control, and**
  - **unity of purpose.**

# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (6 OF 12)

- The rationale for total quality can be found in the need to compete in the global marketplace. Countries that are competing successfully in the global marketplace are seeing their quality of living improve. Those that cannot are seeing theirs decline.
- W. Edward Deming is best known for his *Fourteen Points*, the *Deming Cycle*, and the *Seven Deadly Diseases*.
- Juran – *Juran Ten Steps of Quality* & *Juran Trilogy*

# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (7 OF 12)

- Joseph M. Juran is best known for *Juran's Three Basic Steps to Progress*, *Juran's Ten Steps to Quality Improvement*, the *Pareto Principle*, and the *Juran Trilogy*.

## PARETO PRINCIPLE OF QUALITY

- According to this principle, organizations should concentrate their energy on eliminating the vital few sources that cause the majority of problems.
- Further, both **Juran** and **Deming** believe that systems that are controlled by management are the systems in which the majority of problems occur.

# DEMING'S FOURTEEN POINTS

1. **Constancy of purpose:**

2. **Adopt the new philosophy:**

3. **Cease dependence on mass inspection:**

4. **End lowest tender contracts:**

5. **Improve every process:**

6. **Institute training on the job:**

7. **Institute leadership:**

8. **Drive out fear:**

9. **Break down barriers:**

10. **Eliminate exhortations:**

11. **Eliminate arbitrary numerical targets:**

12. **Permit pride of workmanship:**

13. **Encourage education:**

14. **Take action to accomplish the transformation**

# DEMING CYCLE

## The Deming Cycle

1. Conduct consumer research and use it in planning the product (**plan**).
2. Produce the product (**do**).
3. Check the product to make sure it was produced in accordance with the plan (**check**).
4. Market the product (**act**).
5. Analyze how the product is received in the marketplace in terms of quality, cost, and other criteria (**analyse**).

# DEMING SEVEN DEADLY DISEASES

- 1. Lack of constancy of purpose;
- 2. Emphasis on short-term profits;
- 3. Evaluation of performance, merit rating, or annual review;
- 4. Mobility of top management;
- 5. Running a company on visible figures alone (counting the money)
- 6. Excessive medical costs
- 7. Excessive costs of liability, swelled by lawyers that work on contingency fees



# JURAN'S TRILOGY

- 1. QUALITY PLANNING
- 2. QUALITY CONTROL
- 3. QUALITY IMPROVEMENT

# JURAN TEN STEPS TO QUALITY IMPROVEMENT

1. Establish awareness for the need to improve and the opportunities for improvement.
2. Set goals for improvement.
3. Organize to meet the goals that have been set.
4. Provide training.
6. Implement projects aimed at solving problems.
7. Report progress.
8. Give recognition.
9. Communicate results.
10. Maintain momentum by making annual improvement part of the regular processes

# CROSBY QUALITY PRINCIPLES

- 1. Determination
- 2. Education
- 3. Implementation

# SOME FAMOUS STORIES OF COMPANY'S FAILURE DUE **POOR** **QUALITY PRODUCTS/SERVICES/** **BUSINESS STRATEGIES**

## A. SAMSUNG

- When the Samsung Galaxy Note 7 hit the market earlier this year, everything seemed like it was business as usual for the tech giant.
- -In the world of Samsung was king and had more market share than even the mighty Apple.
- -The Note 7 had been receiving positive reviews and had a strong marketing campaign but there was just one problem – **their phones exploded.**

# SOME FAMOUS STORIES OF COMPANY'S FAILURE DUE **POOR QUALITY PRODUCTS/SERVICES/ BUSINESS STRATEGIES**

## B. POLAROID

- Founded in 1937, Polaroid is best known for its Polaroid instant film and cameras.
- Despite its early success in capturing a market that had few competitors, Polaroid was unable to anticipate the impact that digital cameras would have on its film business.
- Falling into the 'success trap' by exploiting only their (historically successful) business activities, Polaroid neglected the need to explore new territory and enhance their long-term viability.

# SOME FAMOUS STORIES OF COMPANY'S FAILURE DUE **POOR QUALITY PRODUCTS/SERVICES/ BUSINESS STRATEGIES**

## C. KODAK

- At one time the world's biggest film company, Kodak which was established in 1889 could not keep up with the digital revolution, for fear of cannibalizing its strongest product lines.
- For example, Kodak invested billions of dollars into developing technology for taking pictures using mobile phones and other digital devices.
- However, it held back from developing digital cameras for the mass market for fear of eradicating its all-important film business.
- Competitors, such as the Japanese firm Canon, grasped this opportunity and has consequently outlived the giant..
- Kodak filed for bankruptcy in 2012.

# SOME FAMOUS STORIES OF COMPANY'S FAILURE DUE **POOR QUALITY PRODUCTS/SERVICES/ BUSINESS STRATEGIES**

## **D. COMPAQ**

- Compaq was one of the largest sellers of PCs in the entire world in the 1980s and 1990s.
- The company produced some of the first IBM PC compatible computers, being the first company to legally reverse engineer the IBM Personal Computer.
- Compaq ultimately struggled to keep up in the price wars against Dell and was acquired for US\$25 billion by HP in 2002.
- The Compaq brand remained in use by HP for lower-end systems until 2013 when it was discontinued.

# SOME FAMOUS STORIES OF COMPANY'S SUCCESS DUE TO **INNOVATIVE / HIGH QUALITY PRODUCTS/ SERVICES/ BUSINESS STRATEGIES**

## A. BUBBLE WRAP

- Today, you know Bubble Wrap as the protective packing material that's also fun to pop. But that wasn't its original purpose.
- Inventors came up with the concept for *Bubble Wrap* when trying to develop a new type of textured wallpaper. They essentially sealed two shower curtains together.
- But once the wallpaper idea didn't work out, one of the inventors had a brainstorm during a flight that the material could be used to protect products during shipping and transport.



# SOME FAMOUS STORIES OF COMPANY'S SUCCESS DUE TO **INNOVATIVE / HIGH QUALITY PRODUCTS/ SERVICES/ BUSINESS STRATEGIES**

## B. FeDEx

### The launch and rapid expansion of FedEx OnSite

#### The opportunity:

Meet the needs of 30% of customers who prefer to pick up or drop off packages at a retail location, such as Walgreens or Dollar General.

Expand at the rate of 500 locations weekly.

The solution:

The successful launch of FedEx OnSite across 8,000 U.S. locations.

Training of 40,000 couriers at 600 stations.

#### Most valuable QDM Principles:

Quality involves teamwork.

Customers define quality.

# SOME FAMOUS STORIES OF COMPANY'S SUCCESS DUE TO **INNOVATIVE / HIGH QUALITY PRODUCTS/ SERVICES/ BUSINESS STRATEGIES**

## C. XEROX CORP

Xerox Corp. is probably the best example of how a financially powerful company allowed itself to be taken completely by surprise.

In the 1950s and 1960s, Xerox had a lock on a key industrial process -- copying documents. Everybody wanted Xerox copies, and nobody could get them except by leasing a Xerox machine.

The company was growing, and Xerox executives could look at their instruments and see sales, costs and profits at a glance. But they had no meter showing customer satisfaction.

The Xerox machines malfunctioned or broke down regularly, and Xerox executives knew it. They could have sent their designers back to the drawing board to redesign the machines so they wouldn't fail. Instead, they created a service force they could dispatch to fix the machines. As far as Xerox executives were concerned, that solved the problem.

Xerox's customers didn't agree. They didn't want repairs, they wanted machines that didn't break down in the first place. This situation set the stage for the entry of competition, and the Japanese manufacturers rushed in and produced a better design/quality Xerox machine which seldom broke down.

# ONE: THE TOTAL QUALITY APPROACH TO QUALITY MANAGEMENT (9 OF 12)

- Trends affecting the future of quality management include:
  - **demanding global customers,**
  - **shifting customer expectations,**
  - **opposing economic pressures, and**
  - **new approaches to management.**