

# Healthcare TQM Principles

Prepared by Dr. Hesham Mousli

MHA623  
Healthcare Quality

## Lecture 2



## Intended Objectives

1. Grasp the ten principles of Total Quality Management (TQM) in healthcare.
2. Understand and apply the *Juran* Trilogy for quality planning, control, and improvement.
3. Explore system thinking and its role in healthcare process optimization.
4. Recognize the importance of stakeholder engagement in sustaining quality improvements.

# Ten basic principles

## 1. Productive work is accomplished through processes.

- Each person in the organization is a part of one or more processes.
- **Example: patient discharge process** is a productive workflow that ensures efficient bed turnover and continuity of care.



# Ten basic principles

## 2. Sound Customer-Supplier relationships are absolutely necessary for sound quality management.

- The customer is anyone who is dependent on you as supplier.
- Healthcare customers include, but not limited to:
  - Patients.
  - Families & friends of patients.
  - Physicians and other practitioners.
  - Other healthcare providers.
  - Reviewers/ regulators.
  - Community.



## Ten basic principles

### 3. The main source of quality defects is problems in the process.

- The problem is more often due to a problem in the processes itself than in the individual.
- If people don't want to do the right thing, then the job of the manager/leader is more to enable their talents and energies than to monitor, control, and incentivize.

# Ten basic principles

## 4. Poor quality is costly.

- Poor quality that results from flaws in processes, and then results in decreased customer satisfaction, costs in lost dollars, market share, lost pride, and increased litigation.



## Ten basic principles

### 5. Understanding the variability of processes is a key to improving quality.

- In healthcare, there are uncontrollable variations related to differences among individuals, organ systems, or diseases.
- Issues of patient compliance, practitioner techniques, and influences of comorbidities must be understood in order to account for them and accommodate them.

## Ten basic principles

### 6. Quality control should focus on the most vital processes.

- Identify the most important types and components of processes that influence quality of patient care and improve those.



## Ten basic principles

### 7. The modern approach to quality is thoroughly grounded in scientific and statistical thinking.

- Utilize scientific method/ problem solving process to improve care as part of daily operational activities, like medicine does to a disease.



# Ten basic principles

## 8. Total employee involvement is critical.

- Organizations must encourage and capture ideas from all employees.
- Those who know the most about process details must be empowered to improve them.



## Ten basic principles

### 9. New organizational structures can help achieve quality improvement.

- A steering committee or “*Quality Council*” of top managers does the strategic planning for the training., technical infrastructure, procedures for problem selection, forms of recognition, and systems for evaluating and improving the overall effort itself.

## Ten basic principles

**10. Quality management employs three basic, closely interrelated activities:**

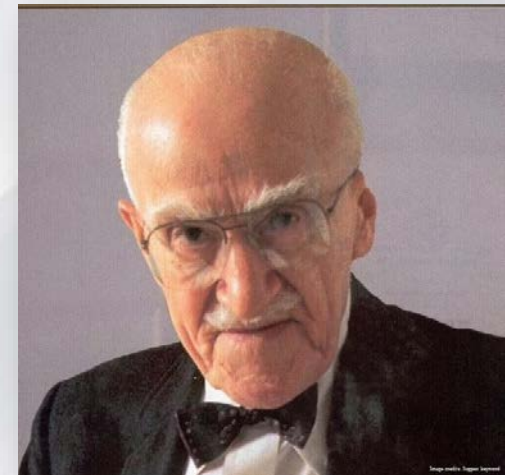
- Quality planning.
  - Quality control, and
  - Quality improvement.
- This is the *Juran* trilogy

Chapter

02

## The Juran Trilogy

- The trilogy is a universal framework for managing quality across all functions, levels, and industries. It consists of three components:
- **Quality Planning.**
  - **Quality Control.**
  - **Quality Improvement.**



# The Juran Trilogy

## A. Quality Planning:

- Define **who the customers are** and **what their needs** are.
- Develop **products, services, or processes** to meet those needs.
- Establish **quality goals** and design processes to achieve them.

# The Juran Trilogy

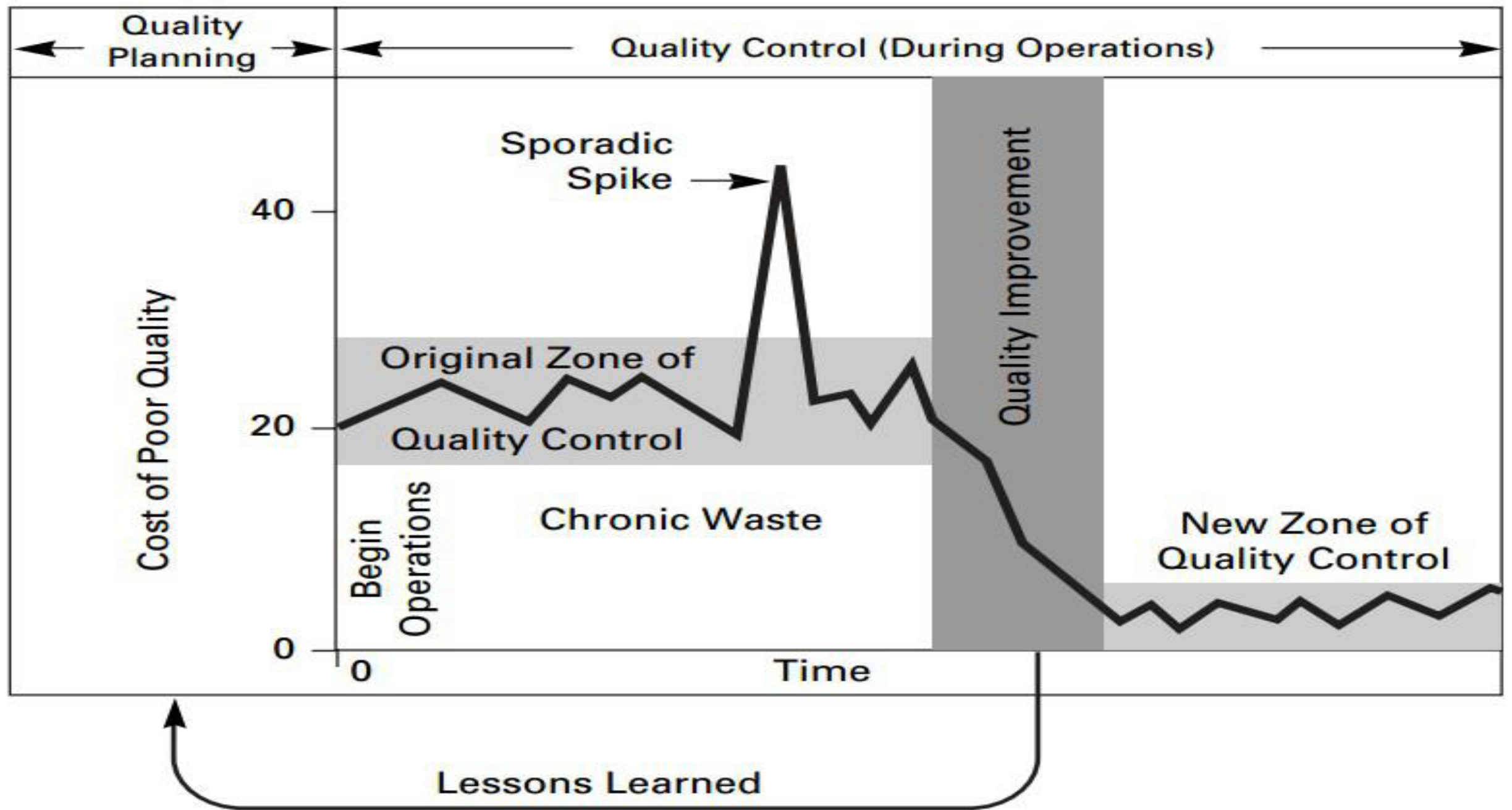
## B. Quality Control:

- **Monitor** and evaluate **process performance**.
- **Compare** actual performance against **quality goals**.
- Take **corrective action** if deviations occur to **keep processes on track**.

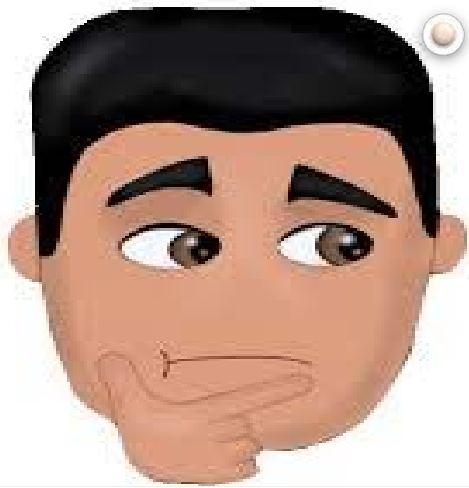
# The Juran Trilogy

## C. Quality Improvement:

- Continuously **identify opportunities** for improvement.
- **Optimize, refine, and adapt** processes to achieve higher levels of quality.
- **Standardize successful improvements** to sustain gains.



SO, what are the main roles  
& functions that are  
fulfilling that trilogy?



# 1. Quality Management (QM)

Chapter

02

- **Patient outcomes and care delivery process measurement, analysis, interpretation, and reporting.**
- **Clinical performance monitoring including complications, appropriateness of procedures, adherence to practice guidelines, protocols or clinical paths.**

# 1. Quality Management (QM)

Chapter

02

- **Organizational systems assessment** e.g.: structure, operational processes, , quality controls, written policies & procedures and protocols (**looking for opportunities to improve quality & efficiency and minimize risks**).
- **Organizational performance improvement** process including **training, team support, measurement & analysis support, documentation, evaluation, and reporting.**

## 2. Patient Safety (PS)

- **Patient safety planning, program implementation, measurements including culture of safety assessment, etc.**
- **Enforcement of policies that encourage open reporting of errors, near-misses, and safety concerns.**



### 3. Utilization Management (UM)

Chapter

02

- Sometimes called **“Case Management”** , or **“Medical Management”**.
- **Reviewing medical necessity and appropriateness.**
- **Resource allocation : timeliness, appropriateness, efficiency, and cost.**

### 3. Utilization Management (UM)

Chapter

02

- Role of **case management/Discharge planning** in some organizations.
- **Screening and assessment.**
- **Appropriate resource/ support allocation, transitions of care.**
- **Care coordination and after care planning.**

## 4. Risk Management (RM)

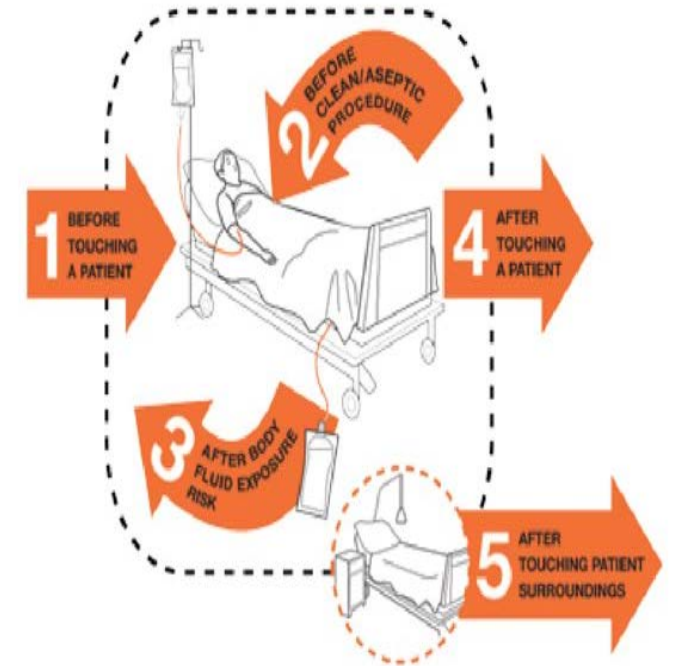
- Clinical occurrences and claims (**OVRs**).
- **Environmental issues**, e.g., safety and preventive maintenance.
- **Mitigation of the effects of negative outcomes** on both the **organization** and the **patient**.



Chapter  
**02**

## 5. Infection Control (IC)

- **Surveillance, identification, and isolation.**
- **Patterns and trends.**
- **Guidelines, policies, and procedures.**
- **Education and training.**



|          |                                            |                                                                                                                                                                        |
|----------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1</b> | <b>BEFORE TOUCHING A PATIENT</b>           | <b>WHEN?</b> Clean your hands before touching a patient when approaching him/her.                                                                                      |
|          |                                            | <b>WHY?</b> To protect the patient against harmful germs carried on your hands.                                                                                        |
| <b>2</b> | <b>BEFORE CLEAN/ASEPTIC PROCEDURE</b>      | <b>WHEN?</b> Clean your hands immediately before performing a clean/aseptic procedure.                                                                                 |
|          |                                            | <b>WHY?</b> To protect the patient against harmful germs, including the patient's own, from entering his/her body.                                                     |
| <b>3</b> | <b>AFTER BODY FLUID EXPOSURE RISK</b>      | <b>WHEN?</b> Clean your hands immediately after an exposure risk to body fluids (and after glove removal).                                                             |
|          |                                            | <b>WHY?</b> To protect yourself and the health-care environment from harmful patient germs.                                                                            |
| <b>4</b> | <b>AFTER TOUCHING A PATIENT</b>            | <b>WHEN?</b> Clean your hands after touching a patient and his/her immediate surroundings, when leaving the patient's side.                                            |
|          |                                            | <b>WHY?</b> To protect yourself and the health-care environment from harmful patient germs.                                                                            |
| <b>5</b> | <b>AFTER TOUCHING PATIENT SURROUNDINGS</b> | <b>WHEN?</b> Clean your hands after touching any object or furniture in the patient's immediate surroundings, when leaving – even if the patient has not been touched. |
|          |                                            | <b>WHY?</b> To protect yourself and the health-care environment from harmful patient germs.                                                                            |

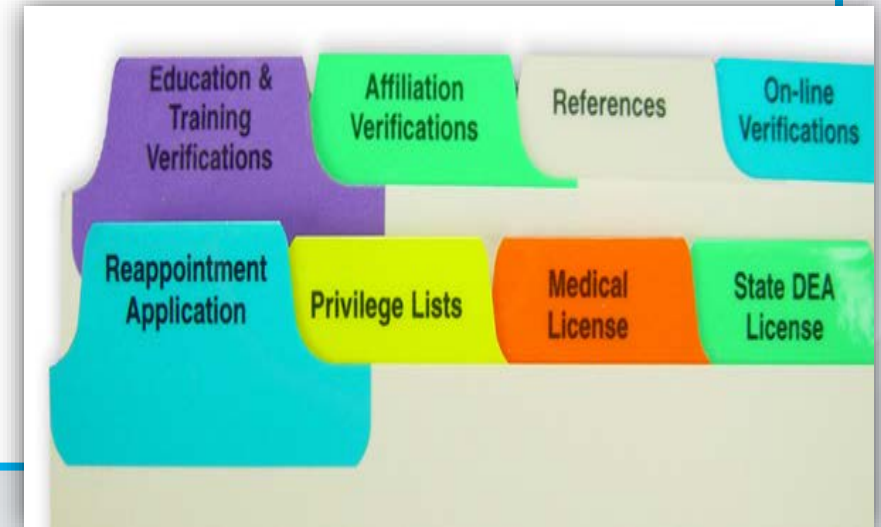
## 6. Practitioner credentialing, privileging, and competency appraisal

- **All independent practitioners**, specific requirements depending on the **setting scope of service**.
- **Medical staff evaluation** at time of **appointment** and **reappointment**.



## 6. Practitioner credentialing, privileging, and competency appraisal

- To a more limited degree, **all employees/contracted staff who provide direct patient care, through skills/competency evaluation.**



## 7. Continuing clinical/ medical education

- Orientation to the components of a comprehensive quality management program and the interrelationships of cost, quality, and risk issues.



## 7. Continuing clinical/ medical education

- Knowledge of, and conforming with performance standards, policies, procedures, and documentation standards.
- Knowledge of, and conforming with performance professionally accepted standards of patient care and practice guidelines.



## Essential Skills for QM, UM, RM, and IC Professionals

- **Data collection, summarization, and aggregation.**
- **Data analysis, displaying, presentation, and communication within the organization.**
- **Information interpretation, sharing , and use.**
- **Ongoing effectiveness oversight.**



# Systems Theory

- **Holistic Perspective:** Systems theory views an organization as an interconnected whole, emphasizing the synergy and interdependence among its individual components.

# Systems Theory

- **Interactions and Connections:** It highlights how the elements within a system interact and rely on each other to function effectively, as originally outlined by Ludwig von Bertalanffy in 1968.

# Systems Theory

- **Not only** can we analyze the organization and its **multiple parts**, but we also need to **recognize** that the **organization** and **each element** are **impacted** by the **environment**.
- **Systems theory** also provides a **framework** by which to **evaluate organizational behavior**.

# Systems Theory

## *Case Study*



## Case Study

*“An urban hospital's emergency department faced prolonged wait times, overcrowding, and low patient satisfaction. Systems thinking was applied to tackle these challenges.”*

# Case Study

## ➤ Approach employed:

1. **System Mapping:** Identified patient flow, bottlenecks, and feedback loops in the ED.
2. **Stakeholder Engagement:** Included input from staff and patients to understand challenges.
3. **Leverage Points:** Targeted key areas like triage, lab result delays, and inpatient bed availability.

# Case Study

## ➤ Interventions:

1. Introduced nurse-led triage to fast-track less severe cases.
2. Implemented a digital system to prioritize ED lab tests.
3. Used real-time bed dashboards to expedite admissions.

# Case Study

## ➤ Outcomes:

1. Wait times reduced by 40% (from 4 to 2.4 hours).
2. Patient satisfaction improved by 25%.
3. Staff efficiency and morale increased.

# Case Study

## ➤ **Learned Lessons:**

1. Systems are interconnected; improving one area impacts others.
2. Engaging stakeholders ensures practical solutions.
3. Continuous evaluation sustains improvements.

# Wrap Up

1. It's crucial to recognize the various dimensions of healthcare quality, its principles, and its impact on cost and patient satisfaction.
2. Quality improvement is process-driven, highlighting the importance of workflows and identifying bottlenecks or inefficiencies.
3. Effective relationships between healthcare providers and stakeholders (patients, families, regulators) are vital for quality management.
4. Holistic perspectives and interconnectedness within organizations are crucial for addressing challenges.

# Wrap Up

5. Total employee engagement and specialized committees (e.g., Quality Councils) are critical to achieving sustainable improvements.
6. Quality management is guided by three core activities: planning, control, and improvement, which must be integrated into organizational workflows.
7. Holistic perspectives and interconnectedness within organizations are crucial for addressing challenges.



Thank You