

# Integrating Core QMS Insights: A Year-End Review for Future Excellence

Presented by | Sundeep Agarwal



# Speaker Introduction

## **SUNDEEP AGARWAL**

*Medical Device Expert & Consultant*

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An expert in medical and IVD devices & life sciences, Mr. Sundeep Agarwal is a speaker, trainer and consultant in the field of Quality Assurance, Regulatory Affairs, QMS, GMP, Software Validation, Artificial Intelligence, Combination Devices, GCP, Design & development, Risk Management and Industrial Manufacturing. He is a lead auditor for medical devices and has expertise in ISO 13485, EU MDR, IVDR, CE Certification, CER, PMS, USFDA, 510(K), ISO 14971, MDSAP.





## W. Edwards Deming

William Edwards Deming (October 14, 1900 – December 20, 1993) was an American business theorist, engineer, management consultant, statistician, and writer. Educated initially as an electrical engineer and later specializing in mathematical physics. He is also known as the father of the quality movement and was hugely influential in Japan post-WWII.

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“  
*Quality is everyone's responsibility.*  
”

# Key Takeaways:





# Standard Operating Procedures (SOPs)





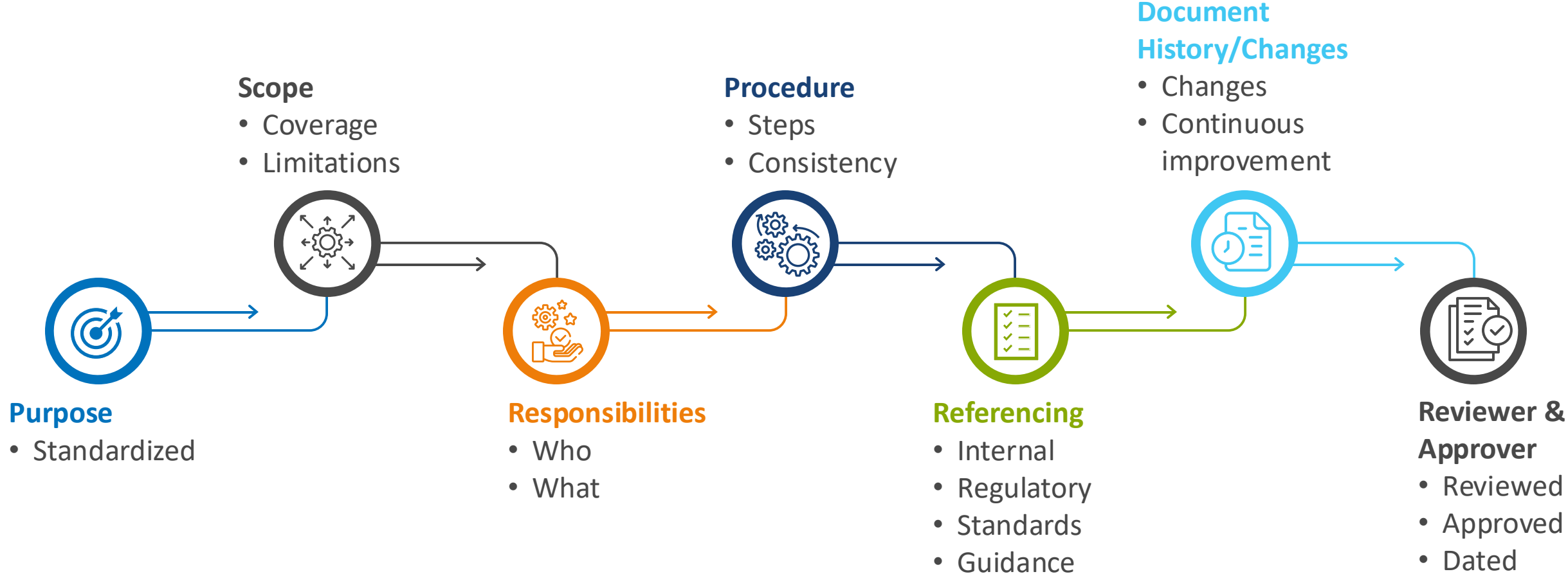
## Standard Operating Procedure:

A standard operating procedure (SOP) is a written **set of instructions** (or defined procedure) for carrying out a particular **task or work**.

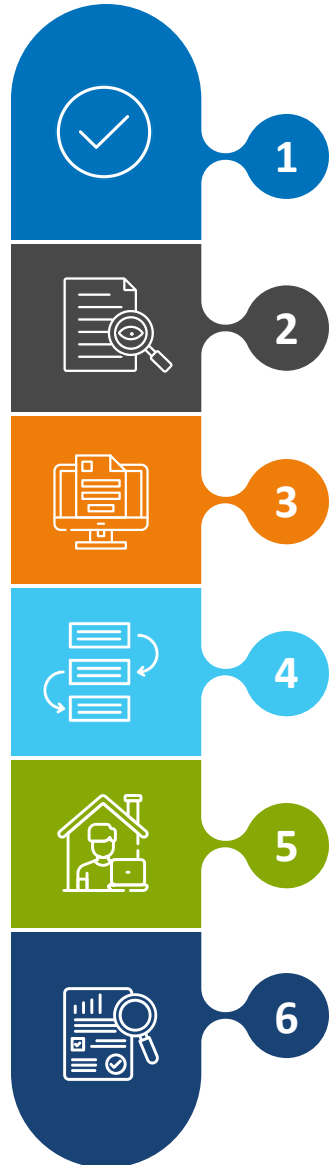
SOPs seek to **minimize ambiguities** and failure to **adhere to regulatory requirements** while increasing **effectiveness**, high-quality output, and **consistency of performance**.



# Well-structured SOPs minimize errors, deviations, and inefficiencies: General Content of an SOP



# Standard Operating Procedure (SOP): Best practices



**Clear and Concise:** Easy to understand, State the purpose. Be specific

**Well-Structured (and preferably digitalize using an EQMS):** Numbered steps, Easy Navigation, Access digitally

**Appropriate Detail and Sequence:** Adequate but avoid excessive detail. Chronological order, Practical, Incorporate Visual Aids

**Roles & Responsibilities:** Clearly defined for each process or task.

**Compliance and Regulations:** Address relevant regulatory, and industry standards. Aligns with legal and quality standards.

**References, Version Control, Approver and Reviewer, Document History.**



## Poll Question no. 1

“We have all SOPs in place but now require updating them based on today's learning”

- A. Yes
- B. No





# Root Cause Analysis (RCA)



# What is Root Cause Analysis (RCA):



RCA is a process to analyze problems or events to identify (What happened, How it happened, Why it happened) to determine the exact cause(s) of the problem to conclude the most appropriate solution for the problem.

Root cause analysis is not a one-size-fits-all methodology.

Root cause analysis is part of a more general problem-solving process and an integral part of continuous improvement.

# What are practical sources that triggers potential problems?



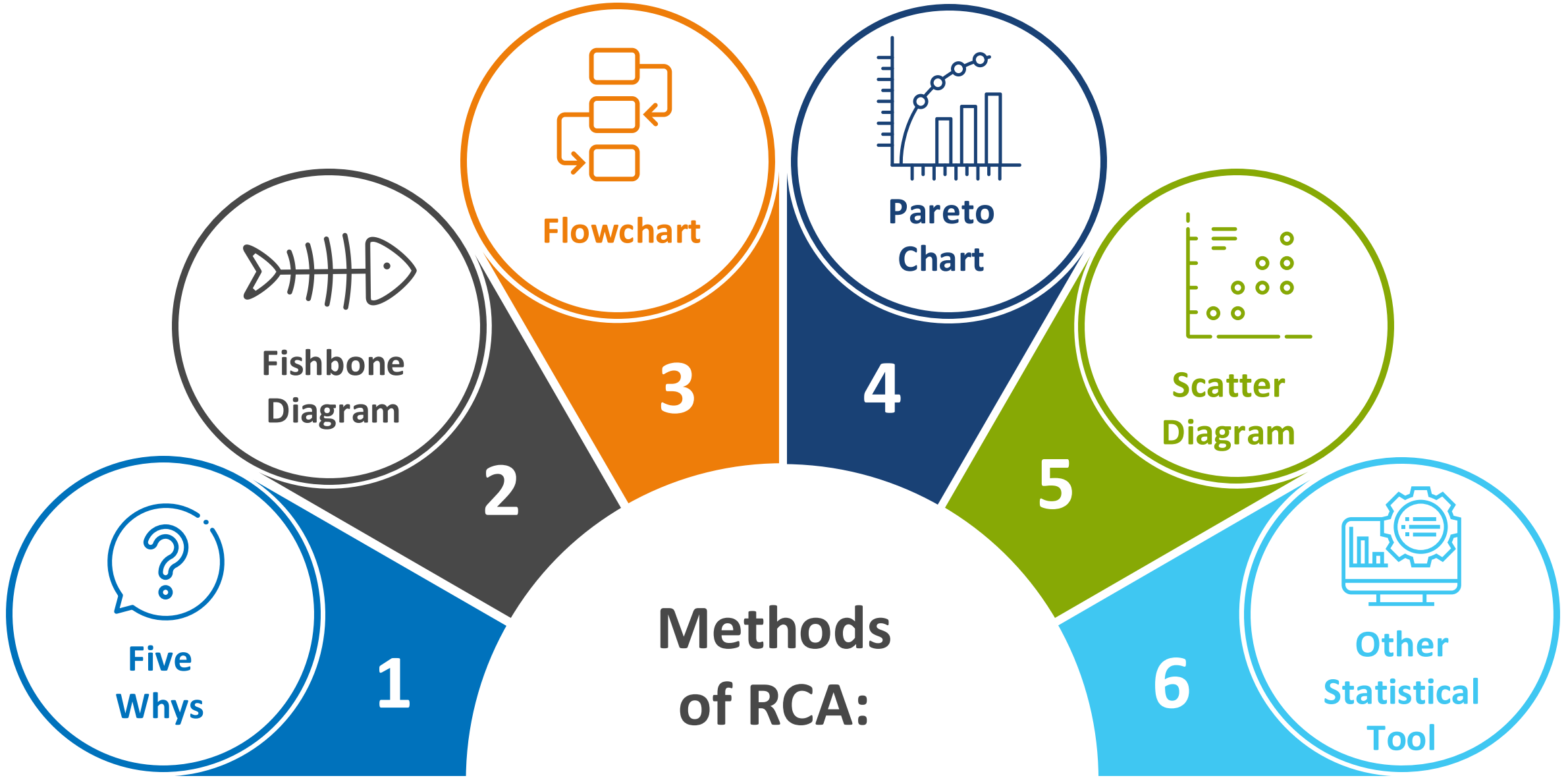
## INTERNAL

1. Nonconforming raw material report
2. Process Control Data
3. Mistakes in production process
4. Test/Inspection data
5. Out of specification (OSS) products
6. Device History Records/Batch records
7. Internal Audits
8. Nonconforming material reports
9. Faulty machines and measuring equipment's
10. Rework and Scrap/Yield Data,
11. Untrained employees/workers
12. Management Review Meetings
13. Risk Analysis



## EXTERNAL

1. Supplier Controls
2. Raw material inspection
3. Customers Complaints
4. Servicing repairs
5. Adverse Event
6. Regulatory Authority findings
7. External Audits
8. Similar products/devices from competitors
9. Risk Analysis
10. Usability problems



**Methods  
of RCA:**

# Corrective and Preventive Action (CAPA) Process

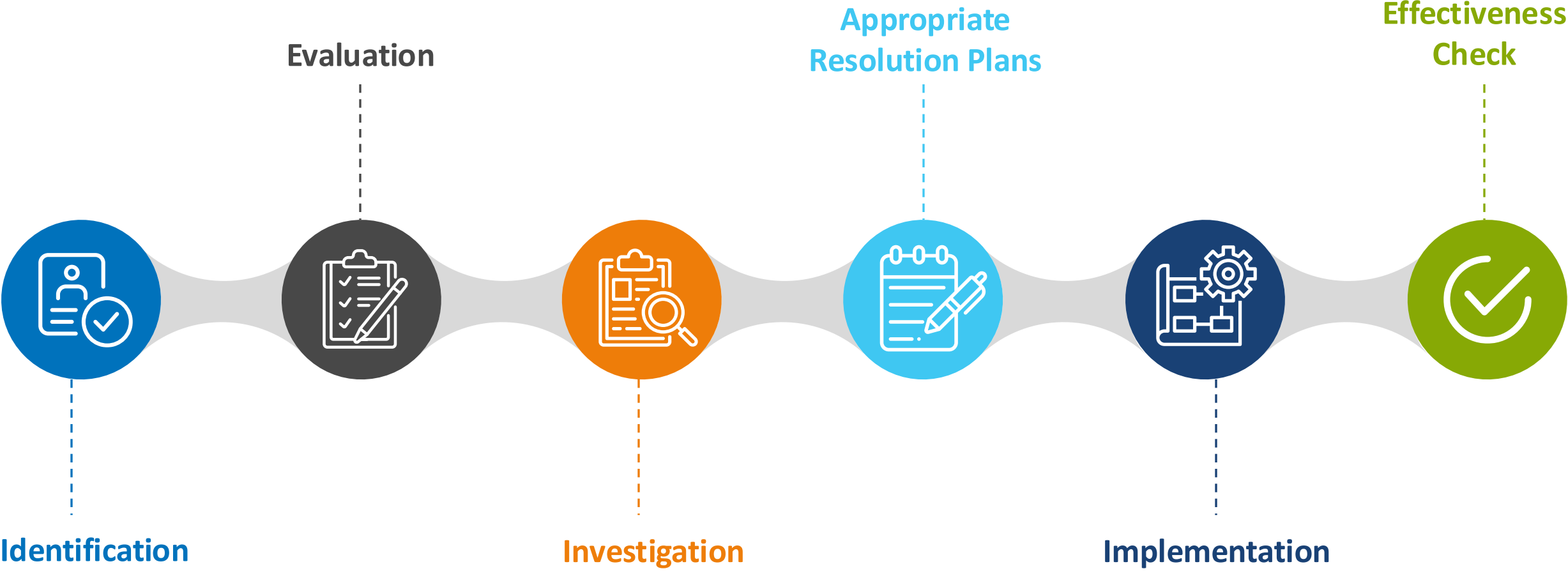


Image Source: <https://www.compliancequest.com/capa-corrective-and-preventive-action/>

## Poll Question no. 2

“As an organization, currently we do face a lot of problems investigating and handling CAPA”

- A. Yes
- B. No





# Internal audits





# Internal and External Audits: Spot the 5 differences

## Internal Audit

- Conducted by trained personnel within the organization
- Verify organization QMS processes and procedures adhere to internal policies, industry standards, and regulatory requirements.
- Assessment: Efficiency and effectiveness of organization's QMS.
- Risk Identification: Identifying potential risks and vulnerabilities within the QMS
- Continuous Improvement: Using audit findings to implement corrective and preventive actions (CAPA) to enhance processes and prevent issues from recurring.

## External Audit

- Audit involves an independent third party, a regulatory body
- Ensures the organization's QMS complies with industry regulations, standards, and customer requirements.
- Determination: Organization's QMS meets the criteria for a specific certification or accreditation.
- Supplier Evaluation: Customers may perform audits to assess their suppliers' QMS
- Credibility and Assurance: External audits provide stakeholders, including customers and regulatory bodies, with independent assurance that the organization maintains a robust QMS

## Poll Question no. 3

### Are you stressed or tensed?

Please have a look at the image and honestly answer if this is something you feel every time when it comes to audit.

**A. Yes**

**B. No**



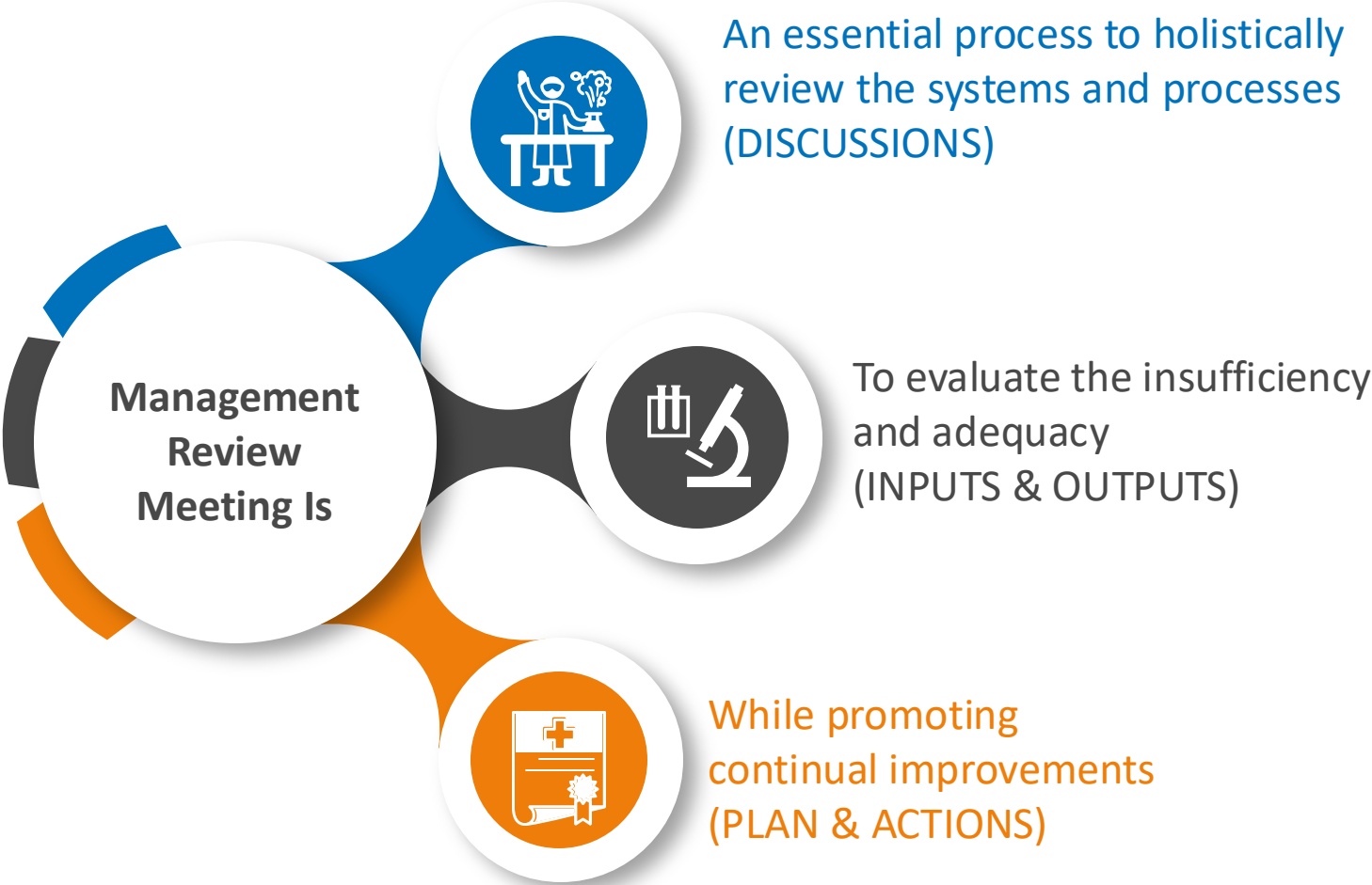
Image Source: [www.newtimes.co.rw](http://www.newtimes.co.rw)



# Management Review Meetings (MRM)



# Meaning of MRM:

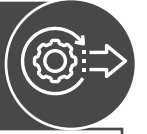


# MRM – Inputs & Outputs:



## INPUT

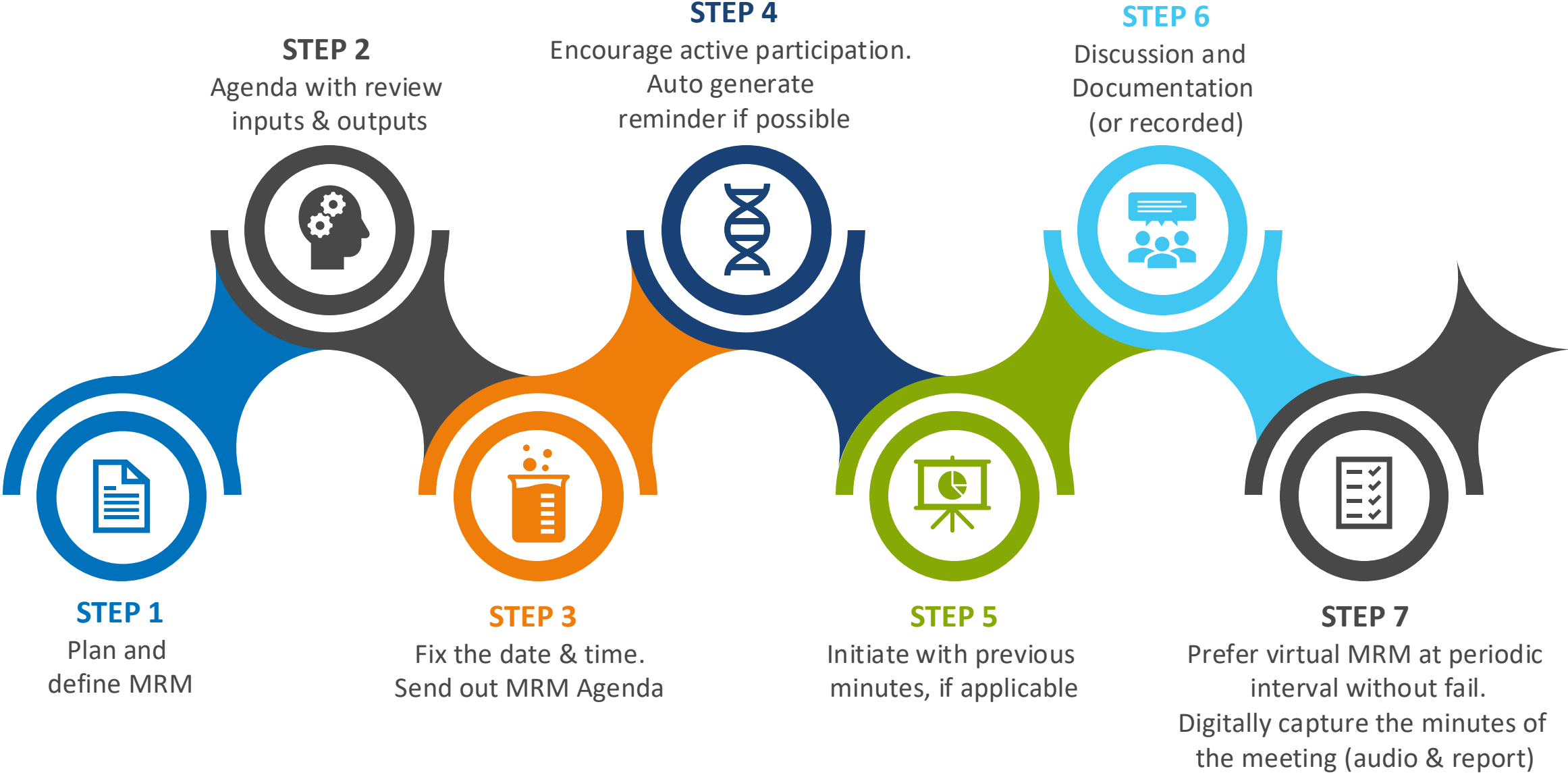
- Customer satisfaction, complaints, feedback
- The extent to which quality objectives have been met
- Process performance and conformity of products and services
- Monitoring and measurement of processes, products & their results
- Corrective actions & preventive actions
- Internal results, third party inspections, regulatory authority audits and their outcomes
- The performance of external providers, suppliers and subcontractors' evaluation
- Opportunities for improvement
- Issues and applicable new or revised regulatory/legal requirements,
- Environmental, social, occupational health and safety performance of the organization (if applicable)
- Any adverse or severe adverse events, vigilance, FSCA activities (if applicable).



## OUTPUT

- Any improvement, or technology or method needed to maintain the suitability, adequacy, and effectiveness of the quality management system and its processes
- The need for changes to quality management system supporting continual improvement including, equipment's, machineries, infrastructure, resources (including manpower) and requirements.
- Changes needed to respond to applicable new or revised regulatory requirements/legal / environmental /Occupational and health safety (if applicable).

# Best Practices:





## Cost of Quality (CoQ)





## W. Edwards Deming

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“

*The biggest cost of poor quality is when your customer buys it from someone else because they didn't like yours*

”





# Measuring Cost of Quality

The basic equation for Cost of Quality is the sum of Cost of Good Quality (CoGQ) and Cost of Poor Quality (CoPQ).

$$\text{CoQ} = \text{CoGQ} + \text{CoPQ}$$

$$\text{CoGQ} = \text{PC} + \text{AC} \text{ (Prevention Cost, Appraisal Cost)}$$

$$\text{CoPQ} = \text{IFC} + \text{EFC} \text{ (Internal Failure Cost, External Failure Cost)}$$

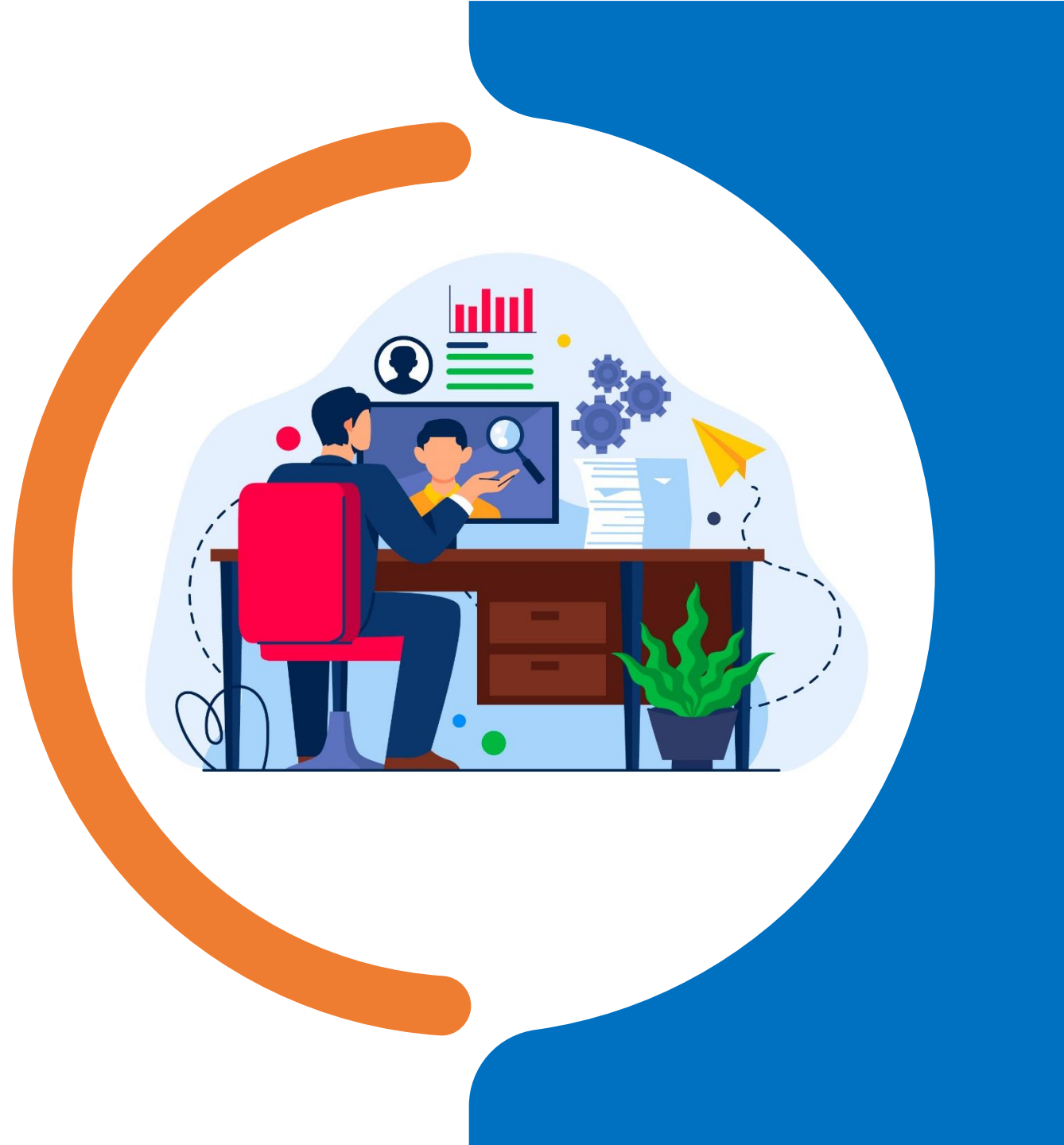


# Cost of good quality (CoGQ) vs cost of poor quality (CoPQ):

What is the Cost of Good Quality (CoGQ)?		What is the Cost of Poor Quality (CoPQ)?	
The Cost of Good Quality (CoGQ) represents investments made to prevent poor quality and ensure high-quality products and services.		The Cost of Poor Quality (CoPQ) denotes the financial setbacks incurred by a company resulting from subpar products or services. It encompasses all expenses tied to errors, defects, and inefficiencies throughout the production and delivery process.	
Prevention Costs	Appraisal Costs	Internal Failure Costs	External Failure Costs



# Remote Audits



## Remote Audits:

*Remote audits refer to the use of information and communication technologies (ICT) to gather information, interview an auditee, etc., when “face-to-face” methods are not possible or desired. (ISO 19011).*



**Remote  
audit**

*Audit performed off-site through the use of information and communication technology  
[Synonyms: E-audit, virtual audit].*

# Remote Audits

A joint survey (August 2021) of **4320** people took part on both sides of the audit, assessment and evaluation process (by the IAF, ILAC and ISO) shows that many are ready to embrace new methods and procedures in remote audits, assessments and evaluations.



**79 %** said that they would like to see blended (remote and on-site) or remote procedures used in the future.

**80 %** agreed that remote procedures give the same confidence as on-site audits.

**91.5 %** felt that a substantial increase in remote techniques will stimulate the use of new processes.

**97.5 %** agreed to some extent that new technologies and alternative techniques should be used.

**Source:** <https://www.iso.org/news/ref2737.html>

[https://www.iso.org/files/live/sites/isoorg/files/news/News\\_archive/2021/10/Ref2737/Survey\\_IAF\\_ILAC\\_ISO\\_2021](https://www.iso.org/files/live/sites/isoorg/files/news/News_archive/2021/10/Ref2737/Survey_IAF_ILAC_ISO_2021)

## Poll Question no. 4

ComplianceQuest should contact me for an initial level of discussion on how digitization, EQMS and Automation can help our organization

- A. Yes
- B. No





## Concluding remarks!



“

**Cost is more important than quality, but quality is the best way to reduce cost.**

”

### **Genichi Taguchi**

Taguchi, was an engineer and statistician from Japan.

1950s onwards, he developed a methodology for applying statistics to improve the quality of manufactured goods – Taguchi methods



# About ComplianceQuest



# About ComplianceQuest

Transform to a fully connected business with a next-generation AI-Powered Product Lifecycle, Quality and Safety management platform, built on Salesforce.

300,000+  
Users

1000+  
Customer Sites

100M+  
Active Records being  
Managed

1000+  
Man years  
Domain Expertise

Award  
Winning  
Solution

Best  
5000  
169  
2019

Frost & Sullivan

Worldwide  
Direct and Partner  
Locations



Financially Strong



Quality & Compliance  
begins at home and  
with Salesforce



Recognized



Time Tested and Proven

# Achieve your Quest for Digital Operations

CQ intelligently automates operations from product innovation to customer success



Embedded & Advanced Analytics

Collaboration (Chatter, MS Teams)

2-Way Portal

Alerts and Notification

Forms Designer/Runner

Mobile

Pre-Validated

Ratings

CQ.AI

MyCQ for casual users

PLATFORM POWERED BY

# THANK YOU



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