

Exam : Operations Management

**Title : WGU Operations
Management (C215, VDC2)**

Version : DEMO

1.Which definition used for quality evaluates how well a product performs its intended function?

- A. Fitness for use
- B. Support services
- C. Value for price paid
- D. Psychological criteria

Answer: A

Explanation:

The concept of quality as “fitness for use” evaluates how well a product or service performs its intended function from the customer’s perspective. This definition was strongly emphasized by quality pioneer Joseph Juran and is widely adopted in Operations Management and Total Quality Management (TQM) frameworks.

Fitness for use means that a product must not only meet technical specifications but must also perform reliably, safely, and effectively in real customer usage conditions. For example, a shoe that looks attractive but causes discomfort or wears out quickly is not “fit for use,” even if it meets internal manufacturing standards.

This definition contrasts with other quality perspectives:

Support services focus on after-sales service, not the product’s core function.

Value for price paid evaluates perceived value, which includes cost considerations.

Psychological criteria relate to image, aesthetics, or brand perception.

Operations Management emphasizes fitness for use because it directly links design, production, and customer satisfaction. Products designed without considering how customers actually use them often lead to defects, complaints, and warranty costs—even if internal quality standards are met.

Fitness for use also reinforces cross-functional coordination, especially between marketing (understanding customer needs), design (translating needs into specifications), and operations (producing consistently). This definition supports continuous improvement by encouraging organizations to reduce variability, improve reliability, and focus on customer-defined quality rather than internally defined metrics alone.

2.Which total quality management (TQM) process was developed to stress management's responsibility for quality?

- A. Statistical quality control charts
- B. Fitness quality for use
- C. 14 points for quality improvement
- D. Product design quality

Answer: C

Explanation:

The 14 Points for Quality Improvement, developed by W. Edwards Deming, explicitly stress management’s responsibility for quality and form a foundational element of Total Quality Management (TQM).

Deming argued that quality problems are systemic, meaning they originate primarily from management-controlled processes rather than individual workers. His 14 Points call on leadership to create an environment where quality can thrive through long-term thinking, process improvement, and employee involvement.

Key management-focused principles include:

Creating constancy of purpose

Adopting a new philosophy of quality

Eliminating dependence on inspection

Driving out fear in the workplace

Breaking down departmental barriers

Instituting leadership instead of supervision

Unlike statistical quality control charts, which are technical tools, Deming's points define managerial behavior and organizational culture. "Fitness for use" is a definition of quality, not a management system, and product design quality focuses only on one stage of the product lifecycle.

In Operations Management, Deming's framework reshaped how organizations view quality—shifting responsibility upward to leadership, not downward to operators. This philosophy underpins continuous improvement, employee empowerment, and long-term competitiveness.

By emphasizing leadership accountability, the 14 Points integrate quality into strategy, operations, supplier relationships, and workforce management, making them one of the most influential contributions to modern quality management.

3.Which total quality management (TQM) process consists of 13 published standards and guidelines?

A. ISO 1400

B. ISO 9002

C. ISO 9001

D. ISO 9000

Answer: D

Explanation:

ISO 9000 is the family of international quality management standards consisting of 13 published standards and guidelines that define the fundamentals and vocabulary of quality management systems. The ISO 9000 family provides a systematic framework for ensuring consistent processes, customer satisfaction, and continuous improvement across organizations. It does not certify products; rather, it certifies that an organization's processes are controlled, documented, and continuously improved.

Key distinctions:

ISO 9000: Overview, concepts, and terminology

ISO 9001: Certification standard specifying requirements

ISO 9002: (Now obsolete) Previously focused on production and installation

ISO 1400: Environmental management standards, not quality

Operations Management values ISO 9000 because it promotes:

Process standardization

Documentation and traceability

Preventive rather than corrective quality control

Consistency across suppliers and partners

ISO 9000 supports TQM by embedding quality into organizational systems, not relying on inspection alone. Certification signals reliability and discipline to customers and global partners, especially in supply chains.

By establishing a common quality language and structure, ISO 9000 enables organizations to align operations, reduce variability, and sustain long-term operational excellence.

4. A company manufactures shoes using a quality management system. The company needs to put a process in place to measure any defects. The company would like to measure the number of defects and observe the number of occurrences to isolate the particular defect.

Which quality tool should the company use to focus on correcting this particular issue?

- A. Scatter diagram
- B. Control chart
- C. Flowchart
- D. Checklist

Answer: D

Explanation:

A checklist is the most appropriate quality tool when the objective is to count defects and track their frequency of occurrence.

Checklists are simple yet powerful tools used to collect structured data consistently. In this scenario, the shoe manufacturer wants to identify which defects occur most frequently (e.g., stitching errors, sole defects, size mismatches). A checklist allows inspectors to mark each occurrence systematically, enabling later analysis.

Why not the others?

Scatter diagrams analyze relationships between variables.

Control charts monitor process stability over time.

Flowcharts document process steps.

In Operations Management, checklists are often the first step in defect analysis. Once data is gathered using a checklist, other tools like Pareto charts or control charts can be applied for deeper analysis.

Checklists support continuous improvement by:

Ensuring consistency in inspections

Reducing human error

Providing factual data for decision-making

Enabling root-cause analysis

They are especially useful in early-stage quality investigations where the goal is visibility, not yet process control. By identifying dominant defects, organizations can prioritize corrective actions efficiently.

5. Which quality control tool should be used to monitor the current status or end result of a process?

- A. Checklist
- B. Flowchart
- C. Control chart
- D. Scatter diagram

Answer: C

Explanation:

A control chart is the primary quality control tool used to monitor the current status and end results of a process over time.

Control charts, a core component of Statistical Process Control (SPC), distinguish between:

Common-cause variation (natural process variation)

Assignable-cause variation (abnormal, correctable issues)

By plotting data points against upper and lower control limits, control charts help operations managers determine whether a process is stable or out of control.

Why control charts are ideal:

They provide real-time monitoring

They detect trends before defects occur

They support preventive quality management

They reduce reliance on inspection

Other tools serve different purposes:

Checklists collect data

Flowcharts map processes

Scatter diagrams analyze correlations

Operations Management emphasizes control charts because they support process-based quality, aligning with TQM and Six Sigma philosophies. Instead of fixing defects after they occur, organizations can intervene early, reducing cost and improving consistency.

Control charts reinforce continuous improvement by enabling data-driven decisions, reducing variability, and stabilizing production processes—making them indispensable in modern quality management systems.