

Appendix B

Glossary

This list includes some of the terms and common words that have acquired a special meaning in the field of quality management. Some first appeared in other books by the same author, others have been compiled for this book or taken from books already mentioned in the bibliography.

3 Ms. These are three Japanese words associated with lean production

- M1 Muda (Waste).
- M2 Muri (Overburden).
- M3 Mura (Unevenness).

5 Why's. These typically refer to the practice of asking, five times, why a failure has occurred in order to get to the root cause.

5 Ss. These Japanese words apply to the visual management of a workspace

- S1 Seiri (straighten up). Differentiate between the necessary and unnecessary and discard the unnecessary.
- S2 Seiton (put things in order).
- S3 Seido (clean up). Keep the workplace clean.
- S4 Seiketsu (personal cleanliness). Make it a habit to be tidy.
- S5 Shitsuke (discipline). Follow the procedures, adhere to the policies and exemplify the values.

6 Ms. These are the six words that are used to title the arms in a fishbone diagram. The words vary but the most commonly used Ms are:

- M1 Machines.
- M2 Methods.
- M3 Materials.
- M4 Measurements.
- M5 Milieu (Surrounding Environment).
- M6 Manpower.

One could also add Money, Management.

7 Wastes. These

- W1 Overproduction.
- W2 Excess inventory.
- W3 Waiting time.
- W4 Unnecessary transportation.
- W5 Unnecessary movement.
- W6 Over processing or incorrect processing.
- W7 Defects.

8D. A problem solving method that is structured into eight disciplined steps. The 8 basic steps are:

- D1 Establish a team.
- D2 Describe the problem.
- D3 Develop interim containment.
- D4 Define and verify root cause.
- D5 Choose permanent corrective action.
- D6 Implement corrective action.
- D7 Prevent recurrence.
- D8 Recognize and reward the contributors.

(Note: some of these terms are not consistent with ISO 9000 definitions for corrective and preventive action)

Acceptance Authority. The organization having the right to decide on the acceptability of something, typically products, services, designs, projects or proposals for changing a design or project. Also referred to as Design Authority and Project Authority.

Acceptance criteria. The standard against which a comparison is made to judge conformance.

Accreditation. A process by which organizations are authorized to conduct certification of conformity to prescribed standards.

Activity. An element of work that produces an output required by a process. Activities comprise tasks or operations.

Adequate. Suitable for the purpose.

Appropriate. Means suitable for its purpose or to the circumstances and requires knowledge of this purpose or circumstances. Without criteria, an assessor is left to decide what is or is not appropriate based on personal experience.

Approved. Something that has been confirmed as meeting the requirements.

Assessment. The act of determining the extent of compliance with requirements.

Assurance. Evidence (verbal or written) that gives confidence that something will or will not happen or has or has not happened.

Audit. An examination of results to verify their accuracy by someone other than the person responsible for producing them. (See also ISO 9000 Clause 3.9.1)

Authority. The right to take actions and make decisions.

Authorized. A permit to do something or use something that may not necessarily be approved.

Autonomation. Automation with the human touch. The purpose is to free equipment from the necessity of constant human attention, separate people from machines and allow workers to staff multiple operations. In Japanese the word is Jidoka. (See also *Error proofing*)

Balanced Scorecard. A strategic planning and review methodology that enables organizations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results.

Benchmarking. A technique for measuring an organization's products, services and operations against those of its competitors resulting in a search for best practice that will lead to superior performance.

Business management system. The set of interconnected and managed processes that function together to achieve the business objectives.

Business objectives. Objectives the business needs to achieve in order to accomplish its mission. These are usually derived from an analysis of stakeholder needs and expectations.

Business process. A process that is designed to deliver outputs that satisfy business objectives.

Calibrate. To standardize the quantities of a measuring instrument.

Capability index C_p . The capability index for a stable process defined as the quotient of tolerance width and process capability where process capability is the 6σ range of a process's inherent variation.

Capability index C_{pk} . The capability index which account for process centring for a stable process using the minimum upper or lower capability index.

Certification body. (See *Registrar*)

Certification. A process by which a product, process, person or organization is deemed to meet specified requirements.

Class. A group of entities having at least one attribute in common or a group of entities having the same generic purpose but different functional use.

Clause of the standard. A numbered paragraph or subsection of a standard containing one or more related requirements such as 7.2.2. Note: Each item in a list is also a Clause.

Codes. A systematically arranged and comprehensive collection of rules, regulations or principles.

Commitment. An obligation a person or an organization undertakes to fulfil i.e. doing what you say will do.

Common cause. Random variation caused by factors that are inherent in the system.

Competence. The ability to demonstrate *use* of education, skills and behaviours to achieve the results required for the job.

Competence-based assessment. A technique for collecting sufficient evidence that individuals can perform or behave to the specified standards in a specific role (Shirley Fletcher).

Competent. An assessment decision that confirms a person has achieved the prescribed standard of competence.

Concession. Permission granted by an acceptance authority to supply product or service that does not meet the prescribed requirements. (See also ISO 9000 Clause 3.6.11)

Concurrent engineering. (See also *Simultaneous engineering*)

Continual improvement. A recurring activity to increase the ability to fulfil requirements. (ISO 9000)

Contract loan. An item of customer-supplied property provided for use in connection with a contract that is subsequently returned to the customer.

Contract. An agreement formally executed by both customer and supplier (enforceable by law) which requires performance of services or delivery of products at a cost to the customer in accordance with stated terms and conditions. Also agreed requirements between an organization and a customer transmitted by any means.

Contractual requirements. Requirements specified in a contract.

Control charts. A graphical comparison of process performance data to computed control limits drawn as limit lines on the chart.

Control methods. Particular ways of providing control which do not constrain the sequence of steps in which the methods are carried out.

Control procedure. A procedure that controls product or information as it passes through a process.

Control. The act of preventing or regulating change in parameters, situations or conditions.

Controlled conditions. Arrangements that provide control over all factors that influence the result.

Core competence. A specific set of capabilities including knowledge, skills, behaviours and technology that generate performance differentials.

Corrective action. Action planned or taken to stop something from recurring. (See also ISO 9000 Clause 3.6.5)

Corrective maintenance. Maintenance carried out after a failure has occurred that is intended to restore an item to a state in which it can perform its required function.

Criteria for workmanship. Acceptance standards based on qualitative measures of performance.

Critical success factors (CSFs). Those factors on which the achievement of specified objectives depend.

Cross-functional team. (See *Multidisciplinary team*)

Customer complaints. Any adverse report (verbal or written) received by an organization from a customer.

Customer feedback. Any comment on the organization's performance provided by a customer.

Customer supplied product. Hardware, software, documentation or information owned by the customer which is provided to an organization for use in connection with a contract and which is returned to the customer either incorporated in the supplies or at the end of the contract.

Customer. An organization or person that receives a product from another organization and includes Consumer, client, end user, retailer, beneficiary and purchaser.

Cusum Chart. A type of control chart (cumulative sum control chart) used to detect small changes between 0–0.5 sigma. Cusum charts plot the cumulative sum of the deviations between each data point (a sample average) and a reference value, T. Unlike other control charts, one studying a cusum chart will be concerned with the slope of the plotted line, not just the distance between plotted points and the centreline.

Data. Information that is organized in a form suitable for manual or computer analysis.

Define and document. To state in written form, the precise meaning, nature or characteristics of something.

Demand creation process. A key business process that penetrates new markets and exploits existing markets with products and a promotional strategy that influences decision-makers and attracts potential customers to the organization.

Demand fulfilment process. A key business process that converts customer requirements into products and services in a manner that satisfies all stakeholders.

Demonstrate. To prove by reasoning, objective evidence, experiment or practical application.

Department. A unit of an organization that may perform one or more functions. Units of organization regardless of their names are also referred to as functions (see *Function*).

Design and Development. Design creates the conceptual solution and development transforms the solution into a fully working model. (See also ISO 9000 3.4.4)

Design of experiments. A technique for improving the quality of both processes and products by effectively investigating several sources of variation at the same time using statistically planned experiments.

Design review. A formal documented and systematic critical study of a design by people other than the designer.

Design. A process of originating a conceptual solution to a requirement and expressing it in a form from which a product may be produced or a service delivered.

Disposition. The act or manner of disposing of something.

DMAIC. Define, Measure, Analyse, Improve and Control – the problem solving technique at the heart of Six Sigma programmes.

Documented procedures. Procedures that are formally laid down in a reproducible medium such as paper or magnetic disk.

DPMO. Defects per million opportunities – the units of measure for process capability.

Effectiveness of the system. The extent to which the system fulfils its purpose.

Embodiment loan. An item of customer-supplied property provided for incorporation into product that is subsequently supplied back to the customer or a party designated by the customer.

Employee empowerment. An environment in which employees are free (within defined limits) to take action to operate, maintain and improve the processes for which they are responsible using their own expertise and judgement.

EMS. Environmental management system. The set of interconnected and managed processes that function together to achieve the organization's environmental goals.

Ensure. To make certain that something will happen.

Establish and maintain. To set-up an entity on a permanent basis and retain or restore it in a state in which it can fulfil its purpose or required function.

Evaluation. To ascertain the relative goodness, quality or usefulness of an entity with respect to a specific purpose.

Evidence of conformance. Documents which testify that an entity conforms to certain prescribed requirements.

Executive responsibility. Responsibility vested in those personnel who are responsible for the whole organization's performance. Often referred to as top management.

Fagan inspection. A software inspection technique in which someone other than the creator of a product examines it with the specific intent of finding errors. Software Inspections were introduced in the 1970s at IBM, which pioneered their early adoption and later evolution. Michael Fagan helped develop the formal software inspection process at IBM, hence the term "Fagan inspection".

Failure mode effects analysis (FMEA). A technique for identifying potential failure modes and assessing existing and planned provisions to detect, contain or eliminate the occurrence of failure. (See also *Risk assessment*)

FIFO. First in first out. A term used to describe a method of inventory control.

Final inspection and testing. The last inspection or test carried out by the organization before ownership passes to the customer.

Finite element analysis. A technique for modelling a complex structure.

First party audits. Audits of a company or parts thereof by personnel employed by the company. These audits are also called Internal Audits.

Follow-up audit. An audit carried out following and as a direct consequence of a previous audit to determine whether agreed actions have been taken and are effective.

Force majeure. An event, circumstance or effect that cannot be reasonably anticipated or controlled.

Function. In the organizational sense, a function is a special or major activity (often unique in the organization) which is needed in order for the organization to fulfil its purpose and mission. Examples of functions are design, procurement, personnel, manufacture, marketing, maintenance etc.

Geometric dimensioning and tolerancing. A method of dimensioning the shape of parts that provides appropriate limits and fits for their application and facilitates manufacturability and interchangeability.

Grade. Category or rank given to entities having the same functional use but different requirements for quality; e.g. hotels are graded by star rating and automobiles are graded by model. (See also ISO 9000 Clause 3.1.3)

Hazard. Anything that may cause harm to people, product, property or the natural environment.

Hazard analysis. The process of collecting and evaluating information on hazards and conditions leading to their presence to decide which are significant for food safety and therefore should be addressed in the HACCP plan. (ISO 15161)

HACCP. Hazard Analysis and Critical Control Point. A technique used particularly in the food industry for the identification of hazards and control of risks.

The CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. (ISO 15161)

Hoshin kanri. A Japanese term for a systems approach to goal achievement. *Hoshin* means a course, a policy, a plan or an aim. *Kanri* means administration, management, control, charge of or care for. Also known as policy deployment but it goes further than this.

IAF. International Accreditation Forum.

Identification. The act of identifying an entity, i.e. giving it a set of characteristics by which it is recognizable as a member of a group.

Implement. To carry out a directive.

Implementation Audit. An audit carried out to establish whether actual practices conform to the documented quality system. Note: Also referred to as a Conformance Audit or Compliance Audit.

Importance of activities in auditing. The relative importance of the contribution an activity makes to the fulfilment of an organization's objectives.

Indexing. A means of enabling information to be located.

In-process. Between the beginning and the end of a process.

Inspection authority. The person or organization that has been given the right to perform inspections.

Inspection, measuring and test equipment. Devices used to perform inspections, measurements and tests.

Inspection. The examination of an entity to determine whether it conforms to prescribed requirements. (See also ISO 9000 Clause 3.8.2)

Installation. The process by which an entity is fitted into a larger entity.

Integrated management. The understanding and effective direction of every aspect of an organization so that the needs and expectations of all stakeholders are justly satisfied by the best use of all resources. (IQA – Integrated Management Special Interest Group)

Integrated management system. A management system that enables the organization to achieve all its objectives in a manner that satisfies the needs and expectations of all stakeholders. Synonymous with Business Management System. Often perceived to be the amalgamation of quality, environmental, health and safety management systems and other similar systems.

Intellectual property. Creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. Intellectual property is divided into two categories: Industrial property and Copyright.

Interested party. Person or group having an interest in the performance or success of an organization which normally includes: Customers, owners, employees,

contractors, suppliers, investors, unions, partners or society. However, interested parties can be benevolent or malevolent and the latter group might include terrorists, criminals and competitors whose only interest is to harm the organization. (See also *Stakeholder*)

ISO. International Organization for Standardization.

Issues of documents. The revision state of a document.

Just-in-time. A method of lean production where the demand comes from the end of the process through to the beginning so that the only parts that are delivered are those that are needed at the time they are needed.

Kanban. A Japanese word for “tag” or “ticket” or “sign board”. These tickets are used as a means of picking up and receiving the right quantity of parts required by a process thus ensuring parts are delivered just-in-time by preceding processes.

Key performance indicators (KPI). The quantifiable characteristics that indicate the extent by which an objective is being achieved. (See also *Stakeholder success measures*)

Lagging measures. Measures that indicate an aspect of performance long after the conditions that created it have changed (e.g. profit and return on capital).

Leading measures. Measures that indicate an aspect of performance while the conditions that created it still prevail (e.g response time, conformity).

Lean production. A method of production that is demand driven (pull) rather than supply driven (push) as with mass production. There is zero waiting time, zero inventory, line balancing and reduction in process time with less space required for materials and finished product. This results in product being produced only to satisfy a demand. In lean production the person goes to the job and performs multiple tasks.

Line balance. Balancing the resources in a process or number of processes by optimizing speeds, feeds, batch size, number of workstations, operators, idle time, changeover time, cycle time and process yield.

Manage work. To manage work means to plan, organize and control the resources (personnel, financial and material) and the tasks required to achieve the objective for which the work is needed.

Management representative. The person management appoints to act on their behalf to manage the management system.

Management system. The set of interconnected and managed processes that function together to achieve the organization’s goals. A qualifying prefix would describe a management system that achieves the organization’s goals relative to this qualifying prefix (e.g. a quality management system achieves the organization’s quality goals).

Mass production. A method of production that is supply driven based on sales forecasts rather than firm orders. It produces large amounts of standardized

products on parallel production lines that stretch from raw materials to finished product (vertical integration). In mass production the job comes to the worker who passes it on to the next worker to perform the next operation on the line.

Master list. An original list from which copies can be made.

Measures. The characteristics by which performance is judged. They are the characteristics that need to be controlled in order that an objective will be achieved. They are the response to the question “*What will we look for to reveal whether the objective has been achieved?*”

Measurement capability. The ability of a measuring system (device, person and environment) to measure true values to the accuracy and precision required.

Measurement uncertainty. The variation observed when repeated measurements of the same parameter on the same specimen are taken with the same device.

Mission management. A key business process that determines the direction of the business, continually confirms that the business is proceeding in the right direction and makes course corrections to keep the business focused on its mission.

Modifications. Entities altered or reworked to incorporate design changes.

Monitoring. To check periodically and systematically. It does not imply that any action will be taken.

Motivation. An inner mental state that prompts a direction, intensity and persistence in behaviour.

Muda. The Japanese term for waste.

Multidisciplinary team. A team comprising representatives from various functions or departments in an organization, formed to execute a project on behalf of that organization.

Nationally recognized standards. Standards of measure that have been authenticated by a national body.

Nature of change. The intrinsic characteristics of the change (what has changed and why).

Objective evidence. Information that can be proven true based on facts obtained through observation, measurement, test or other means. (See also ISO 9000 Clause 3.8.1)

Objective. A result to be achieved usually by a given time.

Obsolete documents. Documents that are no longer required for operational use. They may be useful as historic documents.

OEM. Original Equipment Manufacturer.

Operating procedure. A procedure that describes how specific tasks are to be performed. (Might be called a *Work instruction*)

Organizational goals. Where the organization desires to be, in markets, in innovation, in social and environmental matters, in competition and in financial health.

Organizational interfaces. The boundary at which organizations meet and affect each other expressed by the passage of information, people, equipment, materials and the agreement to operational conditions.

Performance index P_{pk} . The performance index accounts for process centring and is defined as the minimum of the upper or lower specification limit minus the average value divided by 3σ .

Performance indicators. Quantifiable measures of performance related to specific objectives. They respond to the question "What would we expect to see happening if this objective had been achieved?" (See also *Measures*)

Plan. Provisions made to achieve an objective.

Planned arrangements. All the arrangements made by the organization to achieve the customer's requirements. They include the documented policies and procedures and the documents derived from such policies and procedures.

Poka-yoke. Japanese term that means "mistake proofing", a concept introduced by Shigeo Shingo to Toyota in 1961. It is a device that prevents incorrect parts from being made or assembled, or prevents correct parts being assembled incorrectly. Previously the term baka-yoke was used but as this means fool proofing and is rather offensive it was discontinued. Even mistake proofing has evolved into "error proofing" to avoid the personal implications. Error proofing is one of the two pillars of the Toyota Production System (TPS).

Policy. A guide to thinking, action and decision.

Positive recall. A means of recovering an entity by giving it a unique identity.

Positively identified. An identification given to an entity for a specific purpose which is both unique and readily visible.

Potential nonconformity. A situation that if left alone will in time result in nonconformity.

Predictive maintenance. Work scheduled to monitor machine condition, predict pending failure and make repairs on an as-needed basis.

Pre-launch. A phase in the development of a product between design validation and full production (sometimes called pre-production) during which the production processes are validated.

Prevent. To stop something from occurring by a deliberate planned action.

Preventive action. Action proposed or taken to stop something from occurring. (See also ISO 9000 Clause 3.6.4)

Preventive maintenance. Maintenance carried out at predetermined intervals to reduce the probability of failure or performance degradation; e.g. replacing oil filters at defined intervals. Also referred to as Planned maintenance.

Procedure. A sequence of steps to execute a routine activity. (See also ISO 9000 Clause 3.4.5)

Process. A set of interrelated activities that use behaviours and resources to produce a result. An effective process would be one in which the interrelated activities use behaviours and resources to achieve a prescribed objective. (See also ISO 9000 Clause 3.4.1)

Process approach. An approach to managing work in which the activities, resources and behaviours function together in such a relationship as to produce results consistent with the process objectives.

Process capability. The inherent ability of a process to reproduce its results consistently during multiple cycles of operation.

Process description. A set of information that describes the characteristics of a process in terms of its purpose, objectives, measures, design features, inputs, activities, resources, behaviours, outputs, constraints, measurements and reviews.

Process management. The management of organizations as a series of interconnected processes that function together to achieve the goals of the organization.

Process measures. Measures used to judge the performance of processes. They are generally a response to the question "What will we look for to reveal whether the process objectives have been met?"

Process parameters. Those variables, boundaries or constants of a process that restrict or determine the results.

Product realization. All those processes necessary to transform a set of requirements into a product or service that fulfils the requirements.

Product. Anything produced by human effort, natural or manmade processes. Result of a process. (ISO 9000-2)

Production. The creation of products.

Proprietary designs. Designs exclusively owned by the organization and not sponsored by an external customer.

Prototype. A model of a design that is both physically and functionally representative of the design standard for production and used to verify and validate the design.

Purchaser. One who buys from another.

Purchasing documents. Documents that contain the organization's purchasing requirements.

Qualification. Determination by a series of tests and examinations of a product, and its related documents and processes that the product meets all the specified performance capability requirements.

Quality. The degree to which a set of inherent characteristics fulfils a need or expectation that is stated, generally implied or obligatory. (ISO 9000)

Quality assurance. Part of quality management focused on providing confidence that quality requirements will be fulfilled. (ISO 9000)

Quality characteristics. Any characteristic of a product or service that is needed to satisfy customer needs or achieve fitness for use.

Quality circles (or QC Circles). A group of volunteers who perform activities within a process participating continuously together for the purpose of self-development, mutual development, control and improvement of the process. (Derived from the texts of Kaoru Ishikawa)

Quality conformance. The extent to which the product or service conforms to the specified requirements.

Quality control. A process for maintaining standards of quality that prevents and corrects change in such standards so that the resultant output meets customer needs and expectations. (See also ISO 9000 Clause 3.2.10)

Quality costs. Costs incurred because failure is possible. The actual cost of producing an entity is the no failure cost plus the quality cost. The no failure cost is the cost of doing the right things right first time. The quality costs are the prevention, appraisal and failure costs.

Quality function deployment. A technique to deploy customer requirements (the true quality characteristics) into design characteristics (the substitute characteristics) and deploy them into subsystems, components, materials and production processes. The result is a grid or matrix that shows how and where customer requirements are met.

Quality improvement. Part of quality management focused on increasing the ability to fulfil quality requirements. (ISO 9000)

Quality management system requirements. Requirements pertaining to the design, development, operation, maintenance and improvement of quality management systems.

Quality management system. The set of interconnected and managed processes that function together to achieve the organization's quality goals. (See also ISO 9000 3.2.3)

Quality objectives. Those results which the organization needs to achieve in order to improve its ability to meet the needs and expectations of all the stakeholders.

Quality planning. Provisions made to achieve the needs and expectations of the organization's stakeholders and prevent failure.

Quality plans. Plans produced to define how specified quality requirements will be achieved, controlled, assured and managed for specific contracts or projects.

Quality problems. The difference between the achieved quality and the required quality.

Quality requirements. Those requirements which pertain to the features and characteristics of a product, service or process which are required to be fulfilled in order to satisfy a given need.

Quarantine area. A secure space provided for containing product pending a decision on its disposal.

Registrar. An organization that is authorized to certify organizations. The body may be accredited or non-accredited.

Registration. A process of recording details of organizations of assessed capability that have satisfied prescribed standards.

Regulator. A legal body authorized to enforce compliance with the laws and statutes of a national government.

Regulatory requirements. Requirements established by law pertaining to products, services or processes.

Remedial action. Action proposed or taken to remove a nonconformity (see also *Corrective and Preventive action*).

Representative sample. A sample of product or service that possesses all the characteristics of the batch from which it was taken.

Resources. Something of which there is an available supply that can be called on when needed. Resources include time, personnel, skill, machines, materials, money, plant, facilities, space, information, knowledge etc. Resources are used by processes resulting in some being reusable and others changed, lost or depleted by the process.

Resource management. A key business process that specifies, acquires and maintains the resources required by the business to fulfil the mission and disposes of any resources that are no longer required.

Responsibility. An area in which one is entitled to act on one's own accord or able to respond by virtue of having caused an event.

Review. Another look at something.

Rework. Continuation of work on a product to make it conform to the specified requirements without additional procedures or techniques.

Risk. The likelihood of something happening that could have a positive or negative effect. Also: the combination of the probability of an event and its consequences. (ISO/IEC Guide 73)

Risk assessment. A study performed to quantify potential risks associated with a particular event or situation. It identifies hazards or failure modes, their effect on people, product, property or natural environment, the probability of their occurrence and detection and the severity of their effect in order to identify provisions taken or needed to eliminate, control or reduce the root cause. (See also *FMEA, HACCP*)

Risk management. The process whereby organizations methodically address the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities. (A Risk Management Standard IRM 2002)

Scheduled maintenance. Work performed at a time specifically planned to minimize interruptions in machine availability; e.g. changing a gearbox when machine is not required for use (includes predictive and preventive maintenance).

Shall. A provision that is binding.

Should. A provision that is optional.

Simultaneous engineering. A method of reducing the time taken to achieve objectives by developing the resources needed to support and sustain the production of a product in parallel with the development of the product itself. It involves customers, suppliers and each of the organization's functions working together to achieve common objectives.

Six sigma. Six standard deviations.

SMS. Safety management system.

Special cause. A cause of variation that can be assigned to a specific or special condition that does not apply to other events.

Specified requirements. Requirements prescribed by the customer and agreed by the organization or requirements prescribed by the organization that are perceived as satisfying a market need. Such requirements may or may not be documented.

Stakeholder. A person or an organization that has freedom to provide something to or withdraw something from an enterprise. (See also *Interested party*)

Stakeholder measures. Measures used to judge the performance of an organization. They are generally a response to the question, "What measures will the stakeholders use to reveal whether their needs and expectations have been met?" (See also *Key performance indicators*)

Statistical control. A condition of a process in which there is no indication of a special cause of variation.

Status of an activity (in auditing). The maturity or relative level of performance of an activity to be audited.

Status. The relative condition, maturity or quality of something.

Subcontract requirements. Requirements placed on a subcontractor that are derived from requirements of the main contract.

Subcontractor. A person or company that enters into a subcontract and assumes some of the obligations of the prime contractor.

System. An ordered set of ideas, principles and theories or a chain of operations that produce specific results.

System audit. An audit carried out to establish whether the quality system conforms to a prescribed standard in both its design and its implementation.

System effectiveness. The ability of a system to achieve its stated purpose and objectives.

Targets. The level of performance to be achieved, e.g. Standard, specification, requirement, budget, quota, plan.

Task. The smallest component of work. A group of tasks comprise an activity.

Technical interfaces. The physical and functional boundary between products or services.

Tender. A written offer to supply products or services at a stated cost.

Theory of constraints. A thinking process optimizing system performance. It examines the system and focuses on the constraints that limit overall system performance. It looks for the weakest link in the chain of processes that produce organizational performance and seeks to eliminate it and optimize system performance.

TQM Total quality management. A management philosophy and company practices that aim to harness the human and material resources of an organization in the most effective way to achieve the objectives of the organization. (BS 7850: 1992)

Traceability. The ability to trace the history, application, use and location of an individual article or its characteristics through recorded identification numbers. (See also ISO 9000 3.5.4)

Unique identification. An identification that has no equal.

Validation. A process for establishing whether an entity will fulfil the purpose for which it has been selected or designed. (See also ISO 9000 3.8.5)

Values. The fundamental principles that guide the organization in accomplishing its goals. They are what it stands for such as integrity, excellence, innovation, inclusion, reliability, responsibility, equality, fairness, confidentiality, safety of personnel and property etc. These values characterize the culture in the organization.

Value engineering. A technique for assessing the functions of a product and determining whether the same functions can be achieved with fewer types of

components and materials and the product produced with fewer resources. Variety reduction is an element of value engineering.

Verification activities. A special investigation, test, inspection, demonstration, analysis or comparison of data to verify that a product or service or process complies with prescribed requirements.

Verification requirements. Requirements for establishing conformance of a product or service with specified requirements by certain methods and techniques.

Verification. The act of establishing the truth or correctness of a fact, theory, statement or condition. (See also ISO 9000 Clause 3.8.4)

Waiver. (See *Concession*)

Work breakdown structure. A structure in which elements of work for a particular project are placed in a hierarchy.

Work environment. A set of conditions under which people operate and include physical, social and psychological environmental factors. (ISO 9000:2000)

Work flow. A method of manufacture whereby value is added to the product in each process as it moves along a production line. Invented in 1910 by Charles Sorensen, first President of Ford Motor Company.

Work instructions. Instructions that prescribe work to be executed, who is to do it, when it is to start and be complete and if necessary how it is to be carried out.

Work packages. An assembly of related work elements.

Workflow system. A method of manufacture whereby value is added to the product in each process as it moves along a production line. Invented in 1910 by Charles Sorensen, first President of Ford Motor Company.

Workmanship criteria. Standards on which to base the acceptability of characteristics created by human manipulation of materials by hand or with the aid of hand tools.

Zero defects. The performance standard achieved when every task is performed right first time with no errors being detected downstream.

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