Analyzability

a dimension of technology in which work can be reduced to mechanical steps and participants can follow an objective, computational procedure to solve problems.

Continuous-process production

a completely mechanized manufacturing process in which there is no starting or stopping.

Core technology

the work process that is directly related to the organization's mission.

Craft technology

technology characterized by a fairly stable stream of activities, but the conversion process is not analyzable or well understood. Engineering technology

technology that tends to be complex because there is substantial variety in the tasks performed, but activities are usually handled on the basis of established formulas, procedures, and techniques.

Flexible manufacturing systems (FMS)

using computers to link together manufacturing components such as robots, machines, product design, and engineering analysis to enable fast switching from one product to another.

Intensive technology

technology that provides a variety of products or services in combination to a client.

Interdependence

the extent to which departments depend on each other for resources or materials to accomplish their tasks.

Job design

the assignment of goals and tasks to be accomplished by employees.

Job enlargement

an expansion of the number of different tasks performed by an employee in a job.

Job enrichment

designing a job to provide greater responsibility, recognition, and opportunities for growth and development.

Job rotation

moving employees from job to job to give them a greater variety of tasks.

Job simplification

the variety and difficulty of tasks performed by a single person are reduced.

Joint optimization

the goal of the sociotechnical systems approach, which states that an organization functions best when the social and technical systems are designed to fit the needs of one another.

Large-batch production

a manufacturing process characterized by long production runs of standardized parts.

Lean manufacturing

a process that uses highly trained employees at every stage of the production process, who take a painstaking approach to details and problem solving to cut waste and improve quality.

Long-linked technology

the combination within one organization of successive stages of production, with each stage using as its inputs the production of the preceding stage.

Multinational stage

the stage of international development in which a company has marketing and production facilities in many countries and more than one-third of its sales outside its home country.

Power distance

the level of inequality people are willing to accept in an organization.

Mass customization

using mass-production technology to quickly and cost-effectively assemble goods that are uniquely designed to fit the demands of individual customers. Mediating technology

technology that allows each department to work independently by virtue of providing products or services that mediate or link clients from the external environment.

Non-core technology

a department work
process that is
important to the
organization but is not
directly related to its
primary mission.

Nonroutine technology

technology characterized by high task variety, and the conversion process is not analyzable or well understood.

Pooled interdependence

the lowest form of interdependence, in which work does not flow between departments.

Reciprocal interdependence

the highest level of interdependence, in which the output of one operation is the input of a second, and the output of the second operation is the input of the first (for example, a hospital).

Routine technology

technology
characterized by
little task variety and
the use of objective,
computational
procedures.

Sequential interdependence

a serial form of interdependence in which the output of one operation becomes the input to another operation.

Service technology

technology characterized by simultaneous production and consumption, customized output, customer participation, intangible output, and being labor intensive.

Small-batch production

a manufacturing process, often custom work, that relies heavily on the human operator and is not highly mechanized.

Sociotechnical systems approach

an approach that combines the needs of people with the organization's need for technical efficiency. Technical complexity

the extent of mechanization of the manufacturing process.

Technology

the work processes, techniques, machines, and actions used to transform organizational inputs into outputs.

Variety

in terms of tasks, the frequency of unexpected and novel events that occur in the conversion process.