

MGT 350 Study Guide

What is management?

Organizations - Collections of people who work together and coordinate their actions to achieve a wide variety of goals, or desired future outcomes.

Management - The planning, organizing, leading, and controlling of human and other resources to achieve organizational goals efficiently and effectively.

An organization's resources include assets such as people and their skills, know-how, and experience, machinery, raw materials, computers and IT, patents, financial capital, and loyal customers and employees.

Organizational performance - A measure of how efficiently and effectively a manager uses resources to satisfy customers and achieve organizational goals. Organizational performance increases in direct proportion to increases in efficiency and effectiveness.

Efficiency - A measure of how well or how productively resources are used to achieve a goal.

Effectiveness - A measure of how the appropriateness of the goals an organization is pursuing and of the degree to which the organization achieves those goals.

The Four Principle Tasks of Management

1. Planning - Identifying and selecting appropriate goals
2. Organizing - Structuring working relationships in a way that allows organizational members to work together to achieve organizational goals
3. Leading - Articulating a clear vision and energizing and enabling organizational members so that they understand the part they play in achieving organizational goals
4. Controlling - Evaluating how well an organization is achieving its goals and taking action to maintain or improve performance

Organizational structure - A formal system of task and reporting relationships that coordinates and motivates organizational members so that they work together to achieve organizational goals.

Empowerment - The expansion of employees' knowledge, tasks, and decision-making responsibilities.

Self-managed team - A group of employees who assume responsibility for organizing, controlling, and supervising their own activities and monitoring the quality of the goods and services they provide.

Groupthink - A pattern of faulty and biased decision making that occurs in groups whose members strive for agreement among themselves at the expense of accurately assessing information relevant to a decision.

Competitive advantage - The ability of one organization to outperform other organizations because it produces desired goods or services more efficiently and effectively than they do.

Job specialization - The process by which a division of labor occurs as different workers specialize in different tasks over time.

Authority - The power to hold people accountable for their actions and to make decisions concerning the use of organizational resources.

Rules - Formal written instructions that specify actions to be taken under different circumstances to achieve specific goals.

Standard operating procedures (SOPs) - Specific sets of written instructions about how to perform a certain aspect of a task.

Norms - Unwritten, informal codes of conduct that prescribe how people should act in particular situations.

Unity of command - A reporting relationship in which an employee receives orders from, and reports to, only one superior.

Centralization - The concentration of authority at the top of the managerial hierarchy.

Esprit de corps - Shared feelings of comradeship, enthusiasm, or devotion to a common cause among members of a group.

Hawthorne effect - The finding that a manager's behavior or leadership approach can affect workers' level of performance.

Organizational behavior - The study of the factors that have an impact on how individuals and groups respond to and act in organizations.

Theory X - A set of negative assumptions about workers that lead to the conclusion that a manager's task is to supervise workers closely and control their behavior.

Theory Y - A set of positive assumptions about workers that lead to the conclusion that a manager's task is to create a work setting that encourages commitment to organizational goals and provides opportunities for workers to be imaginative and to exercise initiative and self-direction.

Informal authority - Can result from technical knowledge, moral character, job expertise, and the ability to lead.

Organizational environment - The set of forces and conditions that operate beyond an organization's boundaries but affect a manager's ability to acquire and utilize resources.

Self-esteem - The degree to which a manager feels good about himself or herself and their capabilities.

Internal locus of control - The tendency to locate responsibility for one's fate within oneself.

External locus of control - The tendency to locate responsibility for one's fate in outside forces and to believe that one's own behavior has little impact on outcomes.

Negative affectivity - The tendency to experience negative emotions and moods, to feel distressed, and to be critical of oneself and others.

Terminal value - a lifelong goal or objective that an individual seeks to achieve.

Instrumental value - A mode of conduct that an individual seeks to value.

Value system - The terminal and instrumental values that are guiding principles in an individual's life.

Attitude - A collection of feelings and beliefs.

Job satisfaction - The collection of feelings and beliefs that managers have about their current jobs.

Ethics - The inner-guiding moral principles, values, and beliefs that people use to analyze or interpret a situation and then decide what is the "right" or appropriate way to behave.

Stakeholders - The people and groups that supply a company with its productive resources and so have a claim on and stake in the company.

Moral Rights model of ethics - An ethical decision is one that best maintains and protects the fundamental or inalienable rights and privileges of the people affected by it.

Utilitarian rule - An ethical decision is a decision that produces the greatest good for the greatest number of people.

Codes of ethics - Formal standards and rules which spell out how managers can make ethical decisions within the organization.

Societal ethics - Standards that govern how members of a society should deal with one another in matters involving issues such as fairness, justice, poverty, and the rights of the individual.

Organizational ethics - The guiding practices and beliefs through which a particular company and its managers view their responsibility toward their stakeholders.

Distributive justice - A moral principle calling for the distribution of pay raises, promotions, and other organizational resources to be based on meaningful contributions that individuals have made and not on personal characteristics over which they have no control.

Ethics ombudsman - A manager responsible for communicating and teaching ethical standards to all employees and monitoring their conformity to those standards.

Glass ceiling - A metaphor alluding to the invisible barriers that prevent minorities and women from being promoted to top corporate positions.

Procedural justice - A moral principle calling for the use of fair procedures to determine how to distribute outcomes to organizational members.

Stereotype - Simplistic and often inaccurate beliefs about the typical characteristics of particular groups of people.

Bias - The systematic tendency to use information about others in ways that result in inaccurate perceptions.

Schema - An abstract knowledge structure that is stored in memory and makes possible the interpretation and organization of information about a person, event, or situation.

Similar-to-me effect - The tendency to perceive others who are similar to ourselves more positively than we perceive people who are different.

Steps in Managing Diversity Effectively:

1. Secure top management commitment
2. Strive to increase the accuracy of perceptions
3. Increase diversity awareness
4. Increase diversity skills
5. Encourage flexibility
6. Pay close attention to how organizational members are evaluated
7. Consider the numbers
8. Empower employees to challenge discriminatory behaviors, actions, and remarks
9. Reward employees for effectively managing diversity
10. Provide training utilizing a multipronged, ongoing approach
11. Encourage mentoring of diverse employees

Quid quo pro sexual harassment - Asking for or forcing an employee to perform sexual favors in exchange for receiving some reward or avoiding negative consequences.

Hostile work environment sexual harassment - Telling lewd jokes, displaying pornography, making sexually orientated remarks about someone's personal appearance, and other sex-related actions that make the work environment unpleasant.

Global environment - The set of global forces and conditions that operate beyond an organization's boundaries but affect a manager's ability to acquire and utilize resources.

Task environment - The set of forces and conditions that originate with suppliers, distributors, customers, and competitors and affect an organization's ability to obtain inputs and dispose of its outputs because they influence managers on a daily basis.

General environment - The wide-ranging global, economic, technological, sociocultural, demographic, political, and legal forces that affect an organization and its task environment.

Suppliers - Individuals and organizations that provide an organization with the input resources that it needs to produce goods and services.

Distributors - Organizations that help other organizations sell their goods or services to customers.

Customers - Individuals and groups that buy the goods and services that an organization produces.

Competitors - Organizations that produce goods and services that are similar to a particular organizations goods and services.

Potential competitors - Organizations that presently are not in a task environment but could enter if they so choose.

Barriers to entry - Factors that make it difficult and costly for an organization to enter a particular task environment or industry.

Economies of scale - cost advantages associated with large operations.

A supplier's bargaining position is strong when the supplier is the sole source of an input and the input is vital to the organization.

When new competitors enter an industry, competition increases while prices decrease.

Technology - The combination of skills and equipment that managers use in the design, production, and distribution of goods and services.

Technological forces - Outcomes of changes in the technology that managers use to design, produce, or distribute goods and services.

Sociocultural forces - Pressures emanating from the social structure of a country or society or from the national culture.

Social structure - The arrangement of relationships between individuals and groups in a society.

National culture - The set of values that a society considers important behavior that are approved or sanctioned in that society.

Demographic forces - Outcomes of changes in, or changing attitudes toward, the characteristics of a population, such as age, gender, ethnic orientation, and social class.

Political and legal forces - Outcomes of changes in laws and regulations, such as the deregulation of industries, the privatization of organizations, and the increased emphasis on environmental protection.

Globalization - The set of specific and general forces that work together to integrate and connect economic, political, and social systems across countries, cultures, or geographical regions so that nations become increasingly interdependent and similar.

Global outsourcing - When organizations use labor from other countries in order to lower their production costs.

Free-trade doctrine - The idea that if each country specializes in the production of the goods and services that it can produce most efficiently, this will make the best use of global resources.

Folkways - The routine social conventions of everyday life.

Mores - Norms that are considered to be central to the functioning of society and to social life.

Individualism - A worldview that values individual freedom and self-expression and adherence to the principle that people should be judged by their individual achievements rather than by their social background.

Collectivism - A worldview that values subordination of the individual to the goals of the group and adherence to the principle that people should be judged by their contribution to the group.

Power distance -The degree to which societies accept the idea that inequalities in the power and well-being of their citizens are due to differences in individuals' physical and intellectual capabilities and heritage.

Achievement orientation - A worldview that values assertiveness, performance, success, and competition.

Nurturing orientation - A worldview that values the quality of life, warm personal friendships, and services and care for the weak.

Uncertainty avoidance - The degree to which societies are willing to tolerate uncertainty and risk.

Long-term orientation - a worldview that values thrift and persistence in achieving goals.

Short-term orientation - A worldview that values personal stability or happiness and living for the present.

Representative democracy - When the citizens of a country elect officials to run their government.

National culture - The values norms, beliefs, laws, and customs that unite the citizens of a country.

Exporting - Making products at home and selling them abroad.

Importing - Selling at home products that are made abroad.

Licensing - Allowing a foreign organization to take charge of manufacturing and distributing a product in its country or world region in return for a negotiated fee.

Franchising - Selling to a foreign organization the rights to use a brand name and operating know-how in return for a lump-sum payment and share of the profits.

Strategic alliance - An agreement in which managers pool or share their organization's resources and know how with a foreign company, and the two organizations share the rewards and risk of starting a new venture.

Joint venture - A strategic alliance among two or more companies that agree to jointly establish and share the ownership of a new business.

Wholly owned foreign subsidiary - Production operations established in a foreign country independent of any local direct involvement.

Programmed decision making - Routine, virtually automatic decision making that follows established rules or guidelines.

Nonprogrammed decision making - Nonroutine decision making that occurs in response to unusual, unpredictable opportunities and threats.

Intuition - feelings, beliefs, and hunches that come readily to mind, require little effort and information gathering, and result in on-the-spot decisions.

Judgment - The manager's ability to develop a sensible opinion based on the way that he or she evaluates the importance of the available information.

Reasoned judgment - A decision that takes up time and effort to make and results from careful information gathering, generation of alternatives, and evaluation of alternatives.

Classical decision-making model - A prescriptive approach to decision making based on the assumption that the decision maker can identify and evaluate all possible alternatives and their consequences and rationally choose the most appropriate course of action.

Administrative model - An approach to decision making that explains why decision making is inherently uncertain and risky and why managers usually make satisfactory rather than optimum decisions.

Optimum decision - The most appropriate decision in light of what managers believe to be the most desirable future consequences for the organization.

Bounded rationality - Cognitive limitations that constrain one's ability to interpret, process, and act on information.

Risk - The degree of probability that the possible outcomes of a particular course of action will occur.

Uncertainty - Unpredictability.

Satisficing - Searching for and choosing an acceptable, or satisfactory, response to problems and opportunities, rather than trying to make the best decision.

Time constraint - When the information available to a manager is incomplete because the manager must make a decision quickly.

Heuristics - Rules of thumb that simplify decision making.

Devil's advocacy - Critical analysis of a preferred alternative, made in response to challenges raised by a group member who, playing the role of the devil's advocate, defends unpopular or opposing alternatives for the sake of argument.

Delphi technique - A decision-making technique in which group members do not meet face-to-face but respond in writing to questions posed by the group leader.

Decision-making criterion:

Legality - Managers must ensure that a possible course of action is legal and will not violate any domestic and international laws or government regulations.

Ethicalness - Managers must ensure that a possible course of action is ethical and will not unnecessarily harm any stakeholder group.

Economic feasibility - Managers must decide whether the alternatives are economically feasible—that is, whether they can be accomplished given the organization's performance goals.

Practicality - Managers must decide whether they have the capabilities and resources required to implement the alternative, and they must be sure that the alternative will not threaten the attainment of other organizational goals.

Brainstorming - A group problem-solving technique in which managers meet face-to-face to generate and debate a wide variety of alternatives from which to make a decision.

Planning - Identifying and selecting appropriate goals and courses of action; one of the four principal functions of management.

Strategy - A cluster of decisions about what goals to pursue, what actions to take, and how to use resources to achieve goals.

Mission Statement - A broad declaration of an organization's purpose that identifies the organization's products and customers and distinguishes the organization from its competitors.

Levels of Planning: Corporate, Business or Divisional, Functional or Departmental

Corporate-level plan - Top management's decisions pertaining to the organization's mission, over-all strategy, and structure.

Corporate-level strategy - A plan that indicates in which industries and national markets an organization intends to compete.

Business-level plan - Divisional managers' decisions pertaining to divisions' long-term goals, overall strategy, and structure.

Business-level strategy - A plan that indicates how a division intends to compete against its rivals in an industry.

Functional-level plan - Functional managers' decisions pertaining to the goals that they propose to pursue to help the division attain its business-level goals.

Functional-level strategy - A plan that indicates how functional managers intend to increase the value of the organization's goods and services.

Policy - general guide to action.

Rule - Formal, written guide to action.

Standard Operating Procedure - Written instruction describing the exact series of actions that should be followed in a specific situation.

SWOT analysis - A planning exercise in which managers identify organizational strengths, weaknesses, and environmental opportunities and threats.

Low-cost strategy - Driving the organization's costs down below the costs of its rivals.

Differentiation strategy - Distinguishing an organization's products from the products of competitors on dimensions such as product design, quality, or after-sales service.

Focused low-cost strategy - Serving only one segment of the overall market and trying to be the lowest-cost organization serving that segment.

Focused differentiation strategy - Serving only one segment of the overall market and trying to be the most differentiated organization serving that segment.

Vertical integration - Expanding a company's operations either backward into an industry that produces inputs for its products or forward into an industry that uses, distributes, or sells its products.

Diversification - Expanding a company's business operations into a new industry in order to produce new kinds of valuable goods or services.

Related diversification - Entering a new business or industry to create a competitive advantage in one or more of an organization's existing divisions or businesses.

Unrelated diversification - Entering a new industry or buying a company in a new industry that is not related in any way to an organization's current businesses or industries.

Job design - The process by which managers decide how to divide tasks into specific jobs.

Job simplification - The process of reducing the number of tasks that each worker performs.

Job enlargement - Increasing the number of different tasks in a given job by changing the division of labor.

Job enrichment - Increasing the degree of responsibility a worker has over his or her job.

Cross-functional team - A group of managers brought together from different departments to perform organizational tasks.

Feedback - The extent to which actually doing a job provides a worker with clear and direct information about how well he or she has performed the job.

Chain of command - The relative authority that each manager has - The hierarchy of authority.

Control systems - Formal target-setting, monitoring, evaluation, and feedback systems that provide managers with information about how well the organization's strategy and structure are working.

Feedforward Control - Control that allows managers to anticipate problems before they arise.

Concurrent control - Control that gives managers immediate feedback on how efficiently inputs are being transformed into outputs so that managers can correct problems as they arise.

Feedback control - Control that gives managers information about customers' reactions to goods and services so that corrective action can be taken if necessary.

Steps in the Control Process:

1. Establish the standards of performance, goals, or targets against which performance is to be evaluated.
2. Measure actual performance
3. Compare actual performance against chosen standards of performance.
4. Evaluate the result and initiate corrective action (that is, make changes) if the standard is not being achieved.

Specific-difficult goals - Challenge and stretch managers' ability but are not out of reach and do not require an impossibly high expenditure of managerial time and energy. These are often referred to as stretch goals.

Recruitment and selection - first component of HRM system. Used to attract and hire new employees who have the abilities, skills, and experiences that will help an organization to achieve its goals.

Training and development - Ensures that organizational members develop the skills and abilities that will enable them to perform their jobs effectively in the present and the future.

Performance appraisal and feedback - Serves two different purposes. It provides managers with the information they need to make good HR decisions. Feedback from performance appraisals serves a developmental purpose for members of an organization.

Pay is the fourth component.

The last component is labor relations. IT encompasses the steps that managers take to develop and maintain good working relationships with the labor unions that may represent their employees' interests.

Outsource - Managers contract with people who are not members of their organization to produce goods and services.

Job description - The process of identifying and describing in writing the tasks, duties, and responsibilities for a specific job.

Performance tests - Tests that measure a job applicant's performance on actual tasks of the job.

Needs assessment - An assessment of which employees need training or development and what type of skills or knowledge they need to acquire.

Training - Teaching organizational members how to perform their current jobs and helping them acquire the knowledge and skills they need to be effective performers.

360-Degree appraisal - A performance appraisal by peers, subordinates, superiors, and sometimes clients who are in a position to evaluate a manager's performance.

Motivation - Psychological forces that determine the direction of a person's behavior in an organization, a person's level of effort, and a person's level of persistence.

Intrinsically motivated - Behavior that is performed for its own sake.

Extrinsically motivated - Behavior that is performed to acquire material or social rewards or to avoid punishment.

Persistence -The degree to which an employee keeps trying when faced with obstacles to the accomplishment of a goal.

Input - Anything a person contributes to his or her job or organization.

Outcome - Anything a person gets from a job or organization.

Maslow's hierarchy of needs:

Highest-level needs to lowest-level needs: Self actualization, esteem needs, belongingness needs, safety needs, and physiological needs.

Equity theory - A theory of motivation that focuses on people's perceptions of the fairness of their work outcomes relative to their work inputs.

Goal-setting theory - A theory that focuses on identifying the types of goals that are most effective in producing high levels of motivation and performance and explaining why goals have these effects. To stimulate high motivation and performance, goals must be specific and difficult.

Merit pay plan - A compensation plan that bases pay on performance.

Employee stock option - A financial instrument that entitles the bearer to buy shares of an organization's stock at a certain price during a certain period of time or under certain conditions.

Commission pay - A merit pay plan that managers base pay on a percentage of sales.

Leader - The person who inspires, motivates, and directs the activities of others so that they work toward organizational goals.

Personal leadership style - The specific ways in which a manager chooses to influence other people.

Legitimate power - The authority that a manager has by virtue of his or her position in an organization's hierarchy.

Reward power - The ability of a manager to give or withhold tangible and intangible rewards.

Coercive power - The ability of a manager to punish others.

Expert power - Power that is based on the special knowledge, skills, and expertise that a leader possesses.

Referent power - Power that comes from subordinates' and coworkers' respect, admiration, and loyalty.

Empowerment - expanding employees' tasks and responsibilities.

Consideration - Behavior indicating that a manager trusts, respects, and cares about subordinates.

Relationship oriented leaders - Leaders whose primary concern is to develop good relationships with their subordinates and to be liked by them.

Task-oriented leaders - Leaders whose primary concern is to ensure that subordinates perform at a high level.

Task structure - The extent to which the work to be performed is clear cut so that a leader's subordinates know what needs to be accomplished and how to go about doing it; a determinant of how favorable a situation is for leading.

Path-goal theory - A contingency model of leadership proposing that leaders can motivate subordinates by identifying their desired outcomes, rewarding them for high performance and the attainment of work goals with these desired outcomes, and clarifying for them the paths leading to the attainment of work goals.

Contingency models of leadership - Take into account the situation or the context within which leadership occurs.

Trait model of leadership - Focused on identifying the personal characteristics that cause effective leadership. Some of these characteristics are intelligence, skills, expertise, knowledge, dominance, high energy, tolerance for stress, abilities, integrity, honesty, and maturity.

Group - two or more people who interact with each other to accomplish certain goals or meet certain needs.

Team - A group whose members work intensely with one another to achieve a specific common goal or objective.

Synergy - Performance gains that result when individuals and departments coordinate their actions.

Formal group - A group that managers establish to achieve organizational goals.

Informal group - A group that managers or nonmanagerial employees form to help achieve their own goals or meet their own needs.

Command group - A group composed of subordinates who report to the same supervisor; also called department or unit.

Task force - A committee of managers or nonmanagerial employees from various departments or divisions who meet to solve a specific, mutual problem, also called an ad hoc committee.

Self-managed work teams - A group of employees who supervise their own activities and monitor the quality of the goods and services they provide.

Research and development team - A team whose members have the expertise and experience needed to develop new products.

Interest group - An informal group composed of employees seeking to achieve a common goal related to their membership in an organization.

Group size - Compared with members of large groups, members of small groups tend to interact more with each other and find it easier to coordinate their efforts, be more motivated, satisfied, and committed, find it easier to share information, and be better able to see the importance of their personal contributions for success.

Group roles - A set of behaviors and tasks that a member of a group is expected to perform because of his or her position in the group.

Role making - Taking the initiative to modify an assigned role by assuming additional responsibilities.

Group norms - Shared guidelines or rules for behavior that most group members follow.

Group cohesiveness - The degree to which members are attracted to or loyal to their group.

Communication - The sharing of information between two or more individuals or groups to reach a common understanding.

Sender - The person or group wishing to share information.

Message - The information that a sender wants to share.

Encoding - Translating a message into understandable symbols or language.

Noise - Anything that hampers any stage of the communication process.

Receiver - The person or group for which a message is intended.

Medium - The pathway through which an encoded message is transmitted to a receiver.

Decoding - Interpreting and trying to make sense of a message.

Verbal communication - The encoding of messages into words, either written or spoken.

Nonverbal communication - The encoding of messages by means of facial expressions, body language, and styles of dress.

Information richness - The amount of information that a communication medium can carry and the extent to which the medium enables the sender and receiver to reach a common understanding.

Information overload - The potential for important information to be ignored or overlooked while tangential information receives attention.

Grapevine - An informal communication network along which unofficial information flows.

Filtering - When the sender of a message withholds part of the message because he or she feels that the receiver will not want to receive certain information.

Information distortion - Changes in the meaning of a message as the message passes through a series of senders and receivers.

Jargon - Specialized language that member of an occupation, group, or organization develop to facilitate communication among themselves.

Organizational conflict - The discord that arises when the goals, interests, or values of different individuals or groups are incompatible and those individual or groups block or thwart one another's attempts to achieve their objectives.

Interpersonal conflict - A conflict between individual members of an organization, occurring because of differences in their goals or values.

Intragroup conflict - Conflict that arises within a group, team, or department.

Interorganizational conflict - Conflict that arises across organizations.

Overlapping authority - When two or more managers, departments, or functions claim authority for the same activities or tasks.

Compromise - A way of managing conflict in which each party is concerned about not only its own goal accomplishment of the other party and is willing to engage in a give and take exchange and make concessions.

Collaboration - A way of managing conflict in which both parties try to satisfy their goals by coming up with an approach that leaves them better off and does not require concessions on issues that are important to either party.

Political strategies - Tactics that managers use to increase their power and to use power effectively to influence and gain the support of other people while overcoming resistance or opposition.

Benchmarking - The process of comparing one company's performance on specific dimensions with the performance of other, high-performing organizations.

Data - Raw, unsummarized, and unanalyzed facts.

Information - Data that are organized in a meaningful fashion.

Real-time information - Frequently updated information that reflects current conditions.

Information technology - The set of methods or techniques for acquiring, organizing, sorting, manipulating, and transmitting information.

Timely information - Information that is available when the manager needs it in order to make a good decision.

Complete information - Gives managers all the information they need to exercise control, achieve coordination, or make an effective decision.

Relevant information - Information that is relevant is useful and suits a manager's particular needs and circumstances.

Networking - The exchange of information through a group or network of interlinked computers.

Operations management - The management of any aspect of production that transforms inputs into finished outputs.

Quality - Refers to goods and services that are reliable, dependable, and satisfying and which do the job that they were designed for.

Quality circles - Groups of employees who meet regularly to discuss ways to increase quality.

Inventory - The stock of raw materials, inputs, and component parts that an organization has on hand at a particular time.

Just in time (JIT) inventory - A system in which parts or supplies arrive at an organization when they are needed, not before.

Facilities layout - The strategy of designing the machine-worker interface to increase operating system efficiency.

Total Quality Management (TQM) - A management technique that focuses on improving the quality of an organization's products and services. The following are steps in TQM:

1. Build organizational commitment to quality
2. Focus on the customer.
3. Find ways to measure quality.
4. Set goals and create incentives.
5. Solicit input from employees.

Price/attribute relationship - The higher the price, the more desired attributes the customer is able to get.

Flexible manufacturing - The set of techniques that attempt to reduce the costs associated with the product assembly process or the way services are delivered to customers.

Product life cycle - The way demand for a product changes in a predictable pattern over time.

Quantum product innovation - The development of new, often radically different, kinds of goods and services because of fundamental shifts in technology brought about by pioneering discoveries.

Incremental product innovation - The gradual improvement and refinement to existing products that occurs over time as existing technologies are perfected.

Product development - The management of the value-chain activities involved in bringing new or improved goods and services to the market.

Entrepreneurship - An individual who notices opportunities and decides how to mobilize the resources necessary to produce new and improved goods and services.

Entrepreneur - A manager, scientist, or researcher who works inside an organization and notices opportunities to develop new or improved products and better ways to make them.