Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Activity-based costing (ABC)

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Automated storage/retrieval system (AS/RS)

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Bonded warehouse

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Cost object

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Cross-docking

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Cross-docking warehouse

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Direct costs

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Distribution center (DC)

A high-density rack inventory storage system that uses robotics to sort, store, and retrieve items in a warehouse.

A cost accounting system that accumulates costs based on the activities performed on products or services that consume resources and then uses cost drivers to allocate these costs to products or other bases such as customers, markets, or projects. It attempts to allocate overhead costs on a more realistic basis than by using direct labor or machine hours. See: absorption costing, activity-based cost accounting.

In activity-based cost accounting, anything for which a separate cost measurement is desirable. This may include a product, customer, project, or other work unit.

Secured and monitored buildings or parts of buildings designated for storing imported merchandise. Goods can be exported from a bonded warehouse without paying additional duty, and they are managed by a government or private organization. See: duty paid warehouse.

A warehouse or portion of a warehouse used for cross-docking. See: cross-docking.

The concept of packing products on incoming shipments so they can be easily sorted at intermediate warehouses or for outgoing shipments based on final destination. The items are carried from the incoming vehicle docking point to the outgoing vehicle docking point without being stored in inventory at the warehouse. Syn.: direct loading. See: inbound staging.

Typically a finished goods warehouse designed for demand-driven rapid distribution to retailers (retail DCs), wholesalers, or direct shipments to customers (order fulfillment centers). Cross-docking warehouses are another type of DC. See: cross-docking.

1) In traditional cost accounting, variable costs that can be directly attributed to a particular job or operation. Direct material and direct labor are traditionally considered direct costs. 2) In activity-based cost (ABC) accounting, a cost that can specifically be traced and is economically feasible to track to a particular cost object (e.g., the units produced, a production line, a department, a manufacturing plant).

Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Driver

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Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Private warehouse

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Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Public warehouse

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Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Spot stock warehousing

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Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Throughput

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Term
Tracing

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Term
Warehouse

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Module 4
Section A: Identify Warehouse Strategy, Ownership, and Roles

Term
Warehousing

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A company-owned warehouse.

1) In activity-based cost accounting, an operation that influences the quantity of work required and the cost of an activity. Syn.: cost driver. 2) In theory of constraints, an underlying cause that is responsible for several observed effects. 3) In transportation, the person who operates a motor vehicle.

Positioning seasonal items in proximity to the market. When the season ends, these items are either disposed of or relocated to a more centralized location.

The warehouse space that is rented or leased by an independent business providing a variety of services for a fee or on a contract basis. These services can include product inspection, product rating, and repackaging. These facilities are typically located near primary roads, railways, or inland waterways to facilitate rapid receiving and shipping of products. See: duty paid warehouse.

In activity-based cost accounting, connecting resources to activities to cost objects using underlying causal drivers to understand how costs occur during normal business activities.

1) The rate at which the system generates goal units. Because throughput is a rate, it is always expressed for a given time period, such as per month, week, day, or even minute. If the goal units are money, throughput is an amount of money per time period. In that case, throughput is calculated as revenues received minus total variable costs and then divided by units of the chosen time period. 2) In warehousing, it represents the number of goods that are moving through the warehouse at any given moment.

The activities related to receiving, storing, and shipping materials to and from production or distribution locations.

A facility where goods and materials are stored in anticipation of demand or disposition.

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Break-bulk

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
First expiry first out (FEFO)

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Fixed-location storage

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Part-to-picker system

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Pick slots

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Picker-to-part system

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Picking list

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Random-location storage

A picking methodology assuring that the usage shelf life of items is optimized. This techique is used for those goods that have expiration or shelf-life dates.

1) The process of dividing truckloads, railcars, or containers of homogeneous items into smaller, more appropriate quantities for use. 2) A distribution center (DC) that specializes in break-bulk activities. 3) Unitized cargo in bales, boxes, or crates that is placed directly in a ship's holds rather than in containers. See: break-bulk warehousing.

A classification of materials handling equipment for order picking in which the pick location is brought to a stationary order picker (e.g., via a carousel or automated storage and retrieval system (AR/RS).

A method of storage in which a relatively permanent location is assigned for the storage of each item in a storeroom or warehouse. More space may be needed to store parts than in a random-location storage system, but fixed locations become familiar to warehouse personnel. See: random-location storage.

A materials handling approach for order picking in which the picker goes to the product location (e.g., forklifts or order picking trucks).

Areas on shelves in a warehouse where products are stored.

A storage technique in which parts are placed in any space that is empty when they arrive at the storeroom. Although this random method requires the use of a locator record to identify part locations, it often requires less storage space than a fixed-location storage method. Syns.: floating inventory location system, floating storage location. See: fixed-location storage.

A document that lists the material to be picked for manufacturing or shipping orders. Syns.: disbursement list, material list, stores issue order, stores requisition.

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Replenishment

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Slip sheets

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Sorting

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Unit load

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Warehouse receiving

Module 4
Section B: Formulate Warehouse Processes and Order Flow

Term
Warehouse storage

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Capacity

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Cube utilization

Thin sheets of fiberboard or plastic on which product is stacked These are used as an alternative to wood pallets because they take up little space in warehouses or shipping containers. They sometimes are used in place of a pallet if the items are not strong enough to withstand being stacked on heavy pallets.

Relocating material from a bulk storage area to an order pick storage area and documenting this relocation.

A shipping unit made up of a number of items. Bulky material is arranged or constrained so the mass can be picked up or moved as a single unit. This reduces materials handling costs. A unit load is often shrink-packed on a pallet before shipment.

The function of physically separating a homogeneous subgroup from a heterogeneous population of items.

The use of a building or other structure as a planned space for storing goods and materials.

A key process in warehouse operations that ensures the correct product has been received, in the right quantity, in the right condition, and at the right time.

A measurement of the utilization of the total storage capacity of a vehicle storage bay, container, type of warehouse equipment, or entire warehouse. The intent is to minimize unused horizontal or vertical space.

1) The capability of a system to perform its expected function. 2) The capability of a worker, machine, work center, plant, or organization to produce output per time period. Capacity required represents the system capability needed to make a given product mix (assuming technology, product specification, etc.). As a planning function, both capacity available and capacity required can be measured in the short term (capacity requirements plan), intermediate term (rough-cut capacity plan), and long term (resource requirements plan). Capacity control is executed through the input/output control report of the short-term plan. Capacity can be classified as budgeted, dedicated, demonstrated, productive, protective, rated, safety, standing, or theoretical. See: capacity available, capacity required. 3) The required mental ability to enter into a contract.

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Efficiency

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Honeycombing

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Rated capacity

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Software-as-a-service (SaaS)

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Standard time

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Task interleaving

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Utilization

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Warehouse management system (WMS)

The practice of moving a pallet of merchandise to an area where the space is not exhausted, resulting in a vacant space not usable for the storage of other items. This is one of the hidden costs of warehousing.

A measurement (usually expressed as a percentage) of the actual output relative to the standard output expected. Efficiency measures how well something is performing relative to existing standards; in contrast, productivity measures output relative to a specific input (e.g., tons per labor hour). Efficiency is the ratio of (1) actual units produced to the standard rate of production expected in a time period, (2) standard hours produced to actual hours worked (taking longer means less efficiency), or (3) actual dollar volume of output to a standard dollar volume in a time period.

A software licensing and distribution model that provides access to applications via the internet on a subscription basis. A service provider hosts the application at its data center and customers access it through a web browser. This is often referred to as on-demand software and used by companies to avoid purchasing, implementing and maintenance costs.

The expected output capability of a resource or system. Capacity is traditionally calculated from such data as planned hours, efficiency, and utilization. The rated capacity is equal to hours available × efficiency × utilization. Syns.: calculated capacity, effective capacity, nominal capacity, standing capacity.

Performing multiple tasks concurrently, e.g., assigning multiple picking orders to a single picker to pick concurrently or performing a cycle count of a location while picking an item.

The length of time that should be required to (1) set up a given machine or operation and (2) run one batch or one or more parts, assemblies, or end products through that operation. It is used in determining machine requirements and labor requirements. It assumes an average worker who follows prescribed methods and allows time for personal rest to overcome fatigue and unavoidable delays. It also is frequently used as a basis for incentive pay systems and as a basis of allocating overhead in cost accounting systems. Syn.: standard hours. See: standard.

A computer application system designed to manage and optimize workflows and the storage of goods within a warehouse, including receiving and storing goods, fulfilling orders, shipping, and tracking movement. It often interfaces with automated data capture, enterprise resource planning (ERP) systems, and robotics.

1) A measure (usually expressed as a percentage) of how intensively a resource is being used to produce a good or service. This measure compares actual time used to available time. Traditionally, it is calculated as the ratio of direct time charged (run time plus setup time) to the clock time available. Utilization is a percentage between 0 percent and 100 percent that is equal to 100 percent minus the percentage of time lost due to the unavailability of machines, tools, workers, and so forth. See: efficiency, productivity. 2) In theory of constraints, activation of a resource that productively contributes to reaching the goal. Over-activation of a resource does not productively utilize a resource. 3) In warehousing, the consolidation of several units into fewer larger units to reduce handling. See: available time.

Module 4
Section C: Evaluate Warehouse Facility Layout Decisions and Manage Performance

Term
Yard management system (YMS)

Module 4
Section D: Incorporate Packaging

Term
Dunnage

Module 4
Section D: Incorporate Packaging

Term
Packaging

Module 4
Section D: Incorporate Packaging

Term
Pallet

Module 4
Section D: Incorporate Packaging

Term
Unitization

Module 4
Section E: Incorporate Materials Handling and Warehouse Automation

Term
Automated guided vehicle system (AGVS)

Module 4
Section E: Incorporate Materials Handling and Warehouse Automation

Term
Conveyor

Module 4
Section E: Incorporate Materials Handling and Warehouse Automation

Term
Customs-Trade Partnership Against Terrorism (C-TPAT)

The packing material used to protect a product from damage during transport. Some industries use the term to refer specifically to returnable packaging only.

A system that organizes and directs the traffic of all vehicles in the parking yards located at various industrial buildings like warehouses, distribution centers (DCs), and manufacturing plants.

A platform designed to be loaded with materials or packages and moved by a forklift or pallet jack.

Materials surrounding an item to protect it from damage during storage, handling, and transportation. See: packing and marking.

A material handling network that automatically routes devices, such as carts or pallet trucks, from one location to another through the use of guided paths or electronic navigation systems.

The consolidation of boxes, cartons, and packages into one larger unit to make handling, identification, and transportation easier and more efficient. See: containerization, palletization.

A joint government-business endeavor for imports (not exports) to increase the security of supply chains and U.S. borders. Initiated by U.S. Customs and Border Protection (CBP), C-TPAT involves voluntary cooperation of supply chain participants such as importers, carriers, brokers, warehouse operators, and manufacturers. Participants audit their logistical system security and answer a security questionnaire in exchange for a likely (but not guaranteed) faster customs-clearing process and fewer inspections.

A device following a fixed route that has the capability of moving material between points in a facility. This device commonly is used when there is a high volume of flow along the route.

Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Materials handling

Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Part-to-picker system

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Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Pick-to-light

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Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Pick-to-voice system

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Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Picker-to-part system

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Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Put-to-light

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Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Sorting

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Module 4

Section E: Incorporate Materials Handling and Warehouse Automation

Term

Warehouse automation

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A classification of materials handling equipment for order picking in which the pick location is brought to a stationary order picker (e.g., via a carousel or automated storage and retrieval system (AR/RS).

The movement and storage of goods inside a production or distribution facility. This represents a capital cost and is balanced against the operating costs of the facility.

A method of performing order-picking activities in a warehouse or distribution center (DC) using voice recognition technology. Syn.: voice pick system.

A pick system that uses software to light up displays at each pick location to guide the human picker to the necessary picking location.

A process that uses lights to ensure materials are placed in the correct locations. It is also used to ensure that picked items are placed correctly.

A materials handling approach for order picking in which the picker goes to the product location (e.g., forklifts or order picking trucks).

The utilization of mechanical or electronic devices to complete tasks related to storing, retrieving, and moving inventory as a substitute for labor resources. It is used for cost savings, added security, and to keep human workers out of sensitive environments.

The function of physically separating a homogeneous subgroup from a heterogeneous population of items.