2/3/2018

Industrial Management and Accountancy

Hum 2113

[incomplete]

rmShoeb
CSE_16

Industrial Management

Organization

A group of people working together in structured and coordinated fashion to achieve a set of goals. The goals may include profit, the discovery of knowledge, national defense and coordination of various local charities or social satisfaction. Because organizations play such a major role in our lives, understanding how they operate and how they are managed is important.

Management

Management is a set of activities that direct at an organization's resources with the aim of achieving organizational goals in an efficient and effective manner.

The last phrase in our definition is especially important because it highlights the basic purpose of management-to ensure that an organization's goals are achieved in an efficient and effective manner.

Figure: Management in Organizations
Basic managerial activities include planning and decision making, organizing, leading, and controlling. Managers engage in these activities to combine human, financial, physical, and information resources efficiently and effectively and to work toward achieving the goals of the organization.

All organizations use four basic kinds of resources from their environment: *human, financial, physical, and information.*

Human resources include managerial talent and labor. Financial resources are the capital used by the organization to finance both ongoing and long-term operations. Physical resources include raw materials, office and production facilities, and equipment. Information resources are usable data needed to make effective decisions.

Managers are responsible for combining and coordinating these various resources to achieve the organization's goals.

Four basic managerial functions or activities: *planning and decision making, organizing, leading, and controlling.*

Efficiency

By efficient, we mean using resources wisely and in a cost effective way.

Effectiveness

By effective, we mean making the right decisions and successfully implementing them.

Efficient but not **Effective.** [EDIT]
Effective but not **Efficient.** [EDIT]
Both **Efficient** and **Effective.** [EDIT]
Neither **Efficient** nor **Effective.** [EDIT]

Successful organizations are both efficient and effective.

Managers

A manager is someone whose primary responsibility is to carry out the management process. In particular, a manager is someone who plans and makes decisions, organizes, leads, and controls human, financial, physical and information resources.
The manager's job is unpredictable and fraught with challenges, but it is also filled with opportunities to make a difference. Good managers can propel an organization into unprecedented realms of success, whereas poor managers can devastate even the strongest of organizations.

Nature of Management

Human needs are largely satisfied through economic activities of organized groups and associations. In their own interest, people should join together and accomplish common goals through cooperation. However, to be more effective in this pursuit, it is essential that group efforts should be properly organized, directed and coordinated. In other words, there is a need for management. Therefore, management is as old as civilization or organized life. The systematic study of management, however, has evolved only in the last six or seven decades.

"'Management is the creation and control of technological and human environment of an organization in which human skill and capacities of individuals and groups had full scope for their effective use in order to accomplish the objectives for which an enterprise has been set up. It is involved in the relationships of the individual, group, the organization and the environment. "-*Prof. A. Dasgupta (1969)*
The literature on management has grown at an unprecedented rate in recent times, particularly after World War II. This in turn has greatly helped in improving research, teaching and practice of management as a branch of study. But such a growth has also given rise to differences of opinion and approach.
So we have the operational school of management thought, the mathematical school, the human behavior school, the systems school and the decision-theory school. These divergent views relating to management have made the task of defining management extremely difficult.
Operationally, management may be defined as a dynamic process concerned with getting things done through and with the efforts of others by harnessing human and other resources of the institution-business or otherwise-and creating an environment favorable to performance by people for the accomplishment of desired objectives with minimum of unsought consequences.
Today, the efficiency of management distinguishes one organization from the other, as it adds to competitive strength. Different authorities have defined management differently. But irrespective of the differences in approach and environment, the management process is essentially the same in all organized activities and at all levels in an organization.

Meaning of Management

Before going into the details, let us first review the definitions of management given by the experts in the field. Here we have arranged the definitions chronologically and subsequently we have categorized them into different approaches.

1. *F.W. Taylor (1911), the father of scientific management*: Management is the art of knowing what you want to do in the best and cheapest way.
2. *R.C. Davis (1951):* 'Management is the function of executing leadership anywhere. '
3. *E.F.L. Brech (1953):* Management is concerned with seeing that the job gets done; its tasks all centered on planning and guiding the operations that are going on in the enterprise.'

4. *Peter Drucker (1954), who attempted to narrow the debate*: 'It is a multipurpose organ that manages a business and manages managers and manages workers and work. '
5. *Willium Spriegel (1955):* Management is that function of an enterprise which concerns itself with the direction and control of various activities to attain the business objectives. Management is essentially an executive function; it deals particularly with the active direction of the human effort…'
6. *Mary Gushing Niles (1956):* 'Good management or scientific management, achieve a social objective with the best use of human and material energy and time and with satisfaction for the participants for the public. '
7. *Lawrence A. Appley (1956), who reinforced the logic further*: 'Management is the development of people and not the direction of things…Management is personnel administration. '
8. *Stanley Vance (1959):* 'Management is simply the process of decision making and control over action of human beings for the express purpose of attaining pre-determined goals. '
9. *Harold Koontz (1961):* Management is the art of getting things done through and with people in formally organized groups. It is the art of creating the environment in which people can perform and individuals could cooperate towards attaining of group goals. It is the art of removing blocks to such performance, a way of optimizing efficiency in reaching goals. '
10. *John F. Mee (1963):* 'Management is the art of securing maximum results with a minimum of effort so as to secure maximum prosperity and happiness for both employer and employee and give the public the best possible service.'
11. *James L. Lundy (1968):* 'Management is principally the task of planning, coordinating, motivating and controlling the efforts of others towards a specific objective. '
12. *Prof. A. Dasgupta (1969), the father of Indian management education*: Management is the creation and control of technological and human environment of an organization in which human skill and capacities of individuals and groups find full scope for their effective use in order to accomplish the objectives for which an enterprise has been set up. It is involved in the relationships of the individual, group, the organization and the environment.
13. *Dalton E. McFarland (l970):* '…that process by which managers create, direct, maintain and operate purposive organizations through systematic, coordinated, cooperative human effort. '
14. *Theo Haimann and William G. Scott (I970):* 'Management is a social and technical process which utilizes resources, influences human action and facilitates changes in order to accomplish organizational goals.
15. *Joseph Massic (1973):* '... the process by which a cooperative group directs action towards common goals.
16. *Robert L. Trewatha and M. Gene Newport (1976):* '…the process of organizing, planning, actuating and controlling an organization's in order to achieve a coordination of the human and material resources essential in the effective and efficient attainment of objectives. '
17. *Howard M. Carlisle (1976):* '…the process by which the elements of a group are integrated, coordinated and/or utilized so as to effectively and efficiently achieve organizational objective. '
18. *George R. Terry (1977):* 'Management is a distinct process consisting of planning, organizing, actuating and controlling, performed to determine and accomplish the objectives by the use of people and resources. '

Different Dimensions of Management

On reviewing the definitions, we observe that management basically aims in accomplishing goals and objectives through the efforts of people.

Further review of the definitions reveals that the definition of management has the following different dimensions:

Productivity orientation
Frederick Winslow Taylor and John F. Mee have pioneered this concept. Their definitions are primarily concerned with increased productivity.

Human relations orientation
Lawrence A. Appley and Harold Koontz pioneered this concept. Their definitions of management primarily emphasize on relationships among people.

Decision-making orientation
Definitions under this category focus on decision making as the primary function of management. Ross Moore and Stanley Vance were the pioneers of this concept.

Leadership orientation
The proponents of this concept have highlighted leadership as the essence of management. Donald J. Clough and Ralph C. Davis are two pioneers who relate management with leadership.

Process orientation
Management as a process has been defined by numerous authors like James L Lendy, Dalton E. McFarland, Howard M. Carlisle, E.F.L. Brech, Robert L Trewatha, M. Gene Newport and George R. Terry. Till now we have only discussed the different definitions of management and their orientation.

Management is optimization of constraining resources to achieve some intended goals. 'Resources' is a broad term and it encompasses everything that we require as inputs, including knowledge and in formation inputs. Resources are not available in abundance. There always exist resource constraints. Every organization tries to achieve its charted goals and objectives through efficient management and proper allocation of scarce resources.

Important Characteristics and Features of Management
In the context of various definitions of management and subsequent discussions, we can enumerate important characteristics and features of management as under:

1. Management is an organized activity.
2. Management is aligned with organizational objectives.
3. Management optimizes constraining resources.
4. Management works with and through people.
5. Management is decision making.
6. Management is a science as well as an art.
7. Management is universal and intangible.
8. Management is an inter-disciplinary approach.
9. Management is a social process.
10. Management is a strategic function.
11. Management is a profession.

Since most of the above points are self-explanatory, we shall now discuss only management as profession.

The Management Process

Although there is a basic logic for describing these activities in this sequence (as indicated by the solid arrows), most managers engage in more than one activity at a time and often move back and forth between the activities in unpredictable ways (as shown by the dotted arrows). The functions of management do not usually occur in a tidy, step-by-step fashion. Managers do not plan on Monday, make decisions on Tuesday, organize on Wednesday, lead on Thursday, and control on Friday. At any given time, a manager is likely to be engaged in several different activities simultaneously. Indeed, from one setting to another, managerial work is as different as it is similar. The similarities that pervade most settings are the phases in the management process. Important differences include the emphasis, sequencing, and implications of each phase. Thus the solid lines in the figure above, indicate how, in theory, the functions of management are performed. The dotted lines, however, represent the true reality of management.

Functions of Management

Planning

Planning means setting an organization's goals and deciding how best to achieve them. It is deciding in advance what is to be done. It is the future course of action. It is the first and foremost task of management. It includes:

- Establishing goals and standards,
- Developing rules and procedures,
- Developing plans and forecasting.

<u>Decision Making</u>

Decision making, a part of the planning process, involves selecting a course of action from a set of alternatives. It is the act of choosing one alternative among a set of alternatives.

<u>Decision Making Process</u>

1. Identifying Alternatives
2. Evaluating Alternatives
3. Choosing the best Alternative
4. Putting it to Practice
5. Follow-up

<u>Decision Making Conditions</u>

Certainty

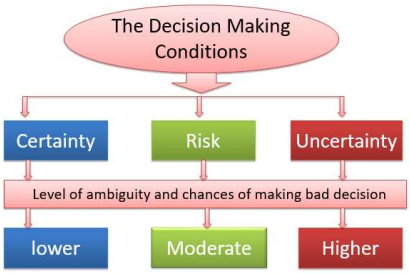
A condition in which the decision maker clearly knows the potential payoffs and costs.

Risk

A condition in which the potential payoffs and costs are all associated with probability estimates.

Uncertainty

A condition in which the decision maker does not know the potential payoffs and costs.



Planning and decision making help maintain managerial effectiveness by serving as guides for future activities. In other words, the organization's goals and plans clearly help managers know how to allocate their time and resources.

Organizing

Once a manager has set goals and developed a workable plan, the next management function is to organize people and the other resources necessary to carry out the plan. Specifically, *organizing involves determining how activities and resources are to be grouped.*

Basic elements:

- job design
- departmentalization
- authority relationships
- span of control
- line and staff roles

Leading

Some people consider leading to be both the most important and the most challenging of all managerial activities. *Leading is the set of processes used to get members of the organization to work together to further the interests of the organization.*

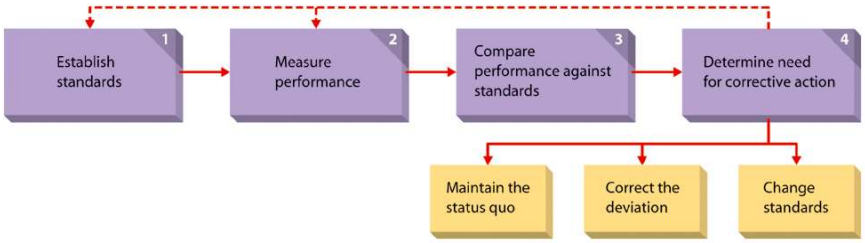
Activities and processes:

- motivating employees
- influencing others
- managing interpersonal relations and communication
- managing work groups and teams

Controlling

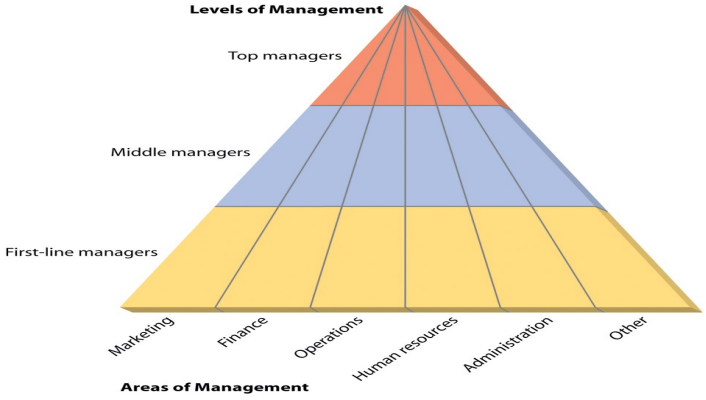
The final phase of the management process is *controlling, or monitoring the organization's progress toward its goals.* As the organization moves toward its goals, managers must monitor progress to ensure that it is performing in such a way as to arrive at its "destination" at the appointed time.

A good analogy is that of a space mission to Mars. NASA does not simply shoot a rocket in the general direction of the planet and then look again in four months to see whether the rocket hit its mark. NASA monitors the spacecraft almost continuously and makes whatever course corrections are needed to keep it on track. Controlling similarly helps ensure the effectiveness and efficiency needed for successful management.



Levels and Areas of management

Managers can be differentiated according to their level in the organization. Although large organizations typically have a number of **levels of management,** the most common view considers three basic levels: top, middle, and first-line managers.



Top Managers

Top managers make up the relatively small group of executives who manage the overall organization. Titles found in this group include *president, vice president and chief executive officer (CEO).* Top managers create the *organization's goals, overall strategy and operating policies.* They also officially *represent the organization* to the external environment by meeting with government officials, executives of other organizations and so forth.

The job of a top manager is likely to be complex and varied. Top managers make decisions about such activities as acquiring other companies, investing in research and development, entering or abandoning various markets and building new plants and office facilities. They often work long hours and spend much of their time in meetings or on the telephone. In most cases, top managers are also very well paid. In fact, the elite top managers of very large firms sometimes make several million dollars a year in salary, bonuses, and stock.

Middle Managers

Middle management is *probably the largest group of managers* in most organizations. Common middle-management titles include *regional manager, operations manager and division head. Middle managers are responsible primarily for implementing the policies and plans developed by top managers and for supervising and coordinating the activities of lower-level managers.* Plant managers, for example, handle inventory management, quality control, equipment failures and minor union problems. They also coordinate the work of supervisors within the plant.

In recent years, many organizations have thinned the ranks of middle managers to lower costs and eliminate excess bureaucracy. Still, middle managers are necessary to bridge the upper and lower levels of the organization and to implement the strategies developed at the top. Although many organizations have found that they can indeed survive with fewer middle managers, those who remain play an even more important role in determining how successful the organization will be.

First line Managers

First-line managers supervise and coordinate the activities of operating employees. Common titles for first-line managers are *supervisor, coordinator, and office manager*. Positions like these are often the first held by employees who enter management from the ranks of operating personnel.

In contrast to top and middle managers, first-line managers typically spend a large proportion of their time supervising the work of subordinates.

Areas of management

Managers can be differentiated into marketing, financial, operating, human resource, administration and other areas.

Fundamental Management Skills

- Technical Skills

  Technical skills are the skills necessary to accomplish or understand the specific kind of work being done in an organization. Technical skills are especially *important for first- line managers*. These managers spend much of their time training subordinates and answering questions about work-related problems. They must know how to perform the tasks assigned to those they supervise if they are to be effective managers.
- Interpersonal Skills

  Managers spend considerable time interacting with people both inside and outside the organization. For obvious reasons, then, the manager also needs interpersonal skills-the ability to *communicate with, understand and motivate both individuals and groups*. As a manager climbs the organizational ladder, s/he must be able to *get along with subordinates, peers and those at higher levels of the organization*. Because of the multitude of roles managers must fulfill, a manager must also be able to work with suppliers, customers, investors and others outside of the organization. Although some managers have succeeded with poor interpersonal skills, a manager who has good interpersonal skills is likely to be more successful.
- Conceptual Skills

  Conceptual skills depend on the manager's *ability to think in the abstract*. Managers need the mental capacity to *understand the overall workings of the organization and its environment,* to grasp *how all the parts of the organization fit together* and to *view the organization in a holistic manner*. This allows them to think strategically, to see the big picture and to make broad-based decisions that serve the overall organization.
- Diagnostic Skills

  Successful managers also possess diagnostic skills or *skills that enable a manager to visualize the most appropriate response to a situation*. A physician diagnoses a patient's illness by analyzing symptoms and determining their probable cause. Similarly, a manager can diagnose and analyze a problem in the organization by studying its symptoms and then developing a solution.
- Communication Skills

  Communication skills refer to the manager's *abilities both to effectively convey ideas and information to others and to effectively receive ideas and information from others*. These skills enable a manager to transmit ideas to subordinates so that they know what is expected, to coordinate work with peers and colleagues so that they work well together properly and to keep higher-level managers informed about what is going on. In addition, they help the manager listen to what others say and to understand the real meaning behind letters, reports and other written communication.
- Decision-making Skills

Effective managers also have good decision-making skills. Decision-making skills refer to the manager's *ability to correctly recognize and define problems and opportunities and to then select an appropriate course of action to solve problems and capitalize on opportunities*. No manager makes the right decision all the time. However, effective managers make good decisions most of the time. And when they do make a bad decision, they usually recognize their mistake quickly and then make good decisions to recover with as little cost or damage to their organization as possible.

- Time-management Skills

  Effective managers usually have good time management skills. Time management skills refer to the manager's *ability to prioritize work, to work efficiently and to delegate appropriately*. As already noted, managers face many different pressures and challenges. It is too easy for a manager to get bogged down doing work that can easily be postponed or delegated to others. When this happens, unfortunately, more pressing and higher-priority work may get neglected.

Principles of Administrative Management

1. Division of labor
   - It is the principle of job specialization.
   - It will enhance the employee's expertise about the particular job.
2. Authority and accountability
   - It clearly defines the rights and responsibility of manager.
   - It defines the area of action, initiative and responsibility of each manager.
3. Discipline
   - Members in an organization need to respect the rules and agreements that govern the organization.
   - discipline will result from
     - good leadership at all level of organization
     - fair agreements
     - judiciously enforced penalties for infractions
4. Unity of command
   - It is the safeguard against dualism of control.
   - Each employee must receive his or her instructions about a particular operation from only one person.
5. Unity of direction

   Those operations within an organization that have the same objectives should be directed by only one manager.
6. Superiority of general interest over individual interests.
7. Remuneration (পারিশ্রমিক)
   - Adequate remuneration secures a committed work force and sustains employee's interest and participation.
   - Compensation for work done should be fair to both employees and employer.
8. Centralization
   - Decreasing the role of subordinates in decision making is centralization; increasing their role is decentralization.
   - Manager should retain final responsibility but they also need to give their subordinates enough authority to do their jobs properly.
9. Scalar chain
   - It is the principle of the chain of command.
   - It discourages level jumping unless and until serious situation occurs.

10. Order
    - Materials and people should be in the right place at the right time.
11. Equity
    - It secures loyalty of employees and their cooperation.
    - Manager should be both friendly and fair to their subordinates.
12. Stability and security

    It is a basic motivation for attention to work, interest and sustained efforts of the employees.
13. Initiative

    Subordinates should be given freedom to imagine and carry out their plans even some mistakes result.
14. Esprit de corps
    - It means cooperation and fellow feeling.
    - It means everybody helps everybody else in a close spirit of teamwork.

Principles of Scientific Management

1. Develop a science for each element of a worker's job that replaces rule of thumb.
2. Use scientific method rather than intuition and experience to determine the work methods and tools.
3. Lay down standard time, standard methods, tools and working conditions for each task.
4. Functional specialization should be a part of every job.
5. Scientific selection, training and development of workers.
6. Planning and scheduling of the work to ensure availability of materials and other resources at the right place, right time and in proper condition.
7. Wage incentives should be an integral part of each job.
8. Close co-operation between management and workers to accomplish work in accordance with scientific method.
9. Planning should be separated from doing.

Scientific management is concerned with improving the performance of individual workers. Whereas scientific management deals with the jobs of individual employees, administrative management focuses on managing the total organization.

The duration for short term planning is less than one year.
Budget is an example of short run.
The duration for middle term planning is less than 5 years but more than one year.
Long term planning has more duration than that. It is called strategic plan.
Vision/Goal/Perpose-> Where the company is headed.
Mission->What the company is doing now.
Objective
Target-> you have to attain your objectives into measurable and attainable.
Developing rules
Policy-> A general guideline of executing performance
Once a policy is set, it cannot be changed easily.
Labor turnover

1. Salary increase
2. Benefit increase
3. Increasing job security
4. Changing hiring standard

Evaluating alternatives
Follow up
Difference between leader and manager
Monitoring Establish Standard

The two factors theory-given by Frederick Herzberg

Hygiene factor	Motivators Factor
1. Company policy 2. Administration 3. Supervision 4. Salary Directly related to job dissatisfaction. If all the factors are present perfectly, there will be no dissatisfaction, but there will be no satisfaction also.	1. Advancement 2. Achievement 3. Recognition 4. Responsibility Directly related to job satisfaction.

Job characteristics model
Dimensions

1. Skill variety
2. Task identity
3. Task significance
4. Autonomy
5. Feedback

Inventory Concepts/Control
Costs of holding high inventory

1. Interest/opportunity cost
2. Storage and handling cost
3. Taxes, insurance and shrinking

Costs of holding low inventory

1. Customer service
2. Ordering
3. Setup
4. Labor and equipment utilizer
5. Transportation
6. Payment to suppliers

Inventory

- Raw materials
- Finished goods

Reason of customer service lost

- Back order
- Stockout

EOQ- Economic Order Quantity/ ELS- Economic production Lot Size
The lot size that minimizes total annual holding and ordering/setup cost.

Lead time
The time taken to place of an order and receiving the goods at hand.

ROP- Re-Order Point
The point in inventory at which a fresh order is made up by an EOQ.

Safety Stock

Equations:

1. $EOQ = \sqrt{\frac{2DS}{H}}$ 2. $TBO = \frac{EOQ}{D} \times Time$ 3. $IP = OH + SR - BO$	$D = annual\ demand$ $S = setup\ or\ ordering\ cost\ per\ order$ $H = holding\ cost\ per\ unit$ $OH = On - Hand\ inventory$ $SR = Scheduled\ Receipt$

4. $ROP = Average\ Demand\ during\ Lead\ Time + Safety\ Stock$ 5. $Safety\ Stock = Z\sigma_L, \quad \sigma_L = \sigma_t\sqrt{L}$ 6. $Holding\ Cost = \frac{EOQ}{2} \times H$ 7. $Ordering\ Cost = \frac{D}{EOQ} \times S$ 8. $ELS = \sqrt{\frac{2DS}{H} \times \frac{P}{P-D}}$ 9. $Production\ time\ of\ each\ cycle = \frac{ELS}{P}$	$IP = Inventory\ Position$ $BO = Back\ Order$ $\sigma = Standard\ Deviation$ $P = Production\ rate$ $d = demand\ rate$ $L = Lead\ time$ $TBO = Time\ Between\ Order$ $\sigma_t = Standard\ deviation\ of\ timely\ demand$ $Z = propality\ value$

Open Order

Plant Layout কারখানা বিন্যাস

What is layout planning?

- Layout planning involves decision about the physical arrangement of economic activity centers needed by the factory's various process.

Economic activity center can be anything that consumes space.

Before a manager makes a decision, he has to address 4 questions-

1. What centers should be layout included?
2. How much space and capacity does each center need?
3. How should each centers space be configured?
4. Where should each center be located?

Types of layout-

1. Flexible flow layout- resources are arranged by functions.
2. Lone flow layout- work stations are arranged in a linear path.
3. Hybrid layout- combination of flexible and linear flow layout.
4. Fixed position- operation site is fixed in a place.

Accountancy

Accountancy is the process of identifying, recording, measuring and communicating the economic events of an organization to the interested users of the information.

যে সমস্ত ঘটনার কারনে কোনও ব্যক্তির অর্থনৈতিক অবস্থার পরিবর্তন ঘটে, তাই Economic Events.

As a starting point to the accounting process, a company **identifies** the **economic events relevant to its business**. A vital element in communicating economic events is the accountant's ability to **analyze and interpret** the reported information. Analysis involves use of ratios, percentages, graphs, and charts to highlight significant financial trends and relationships. Interpretation involves **explaining the uses, meaning, and limitations of reported data**.

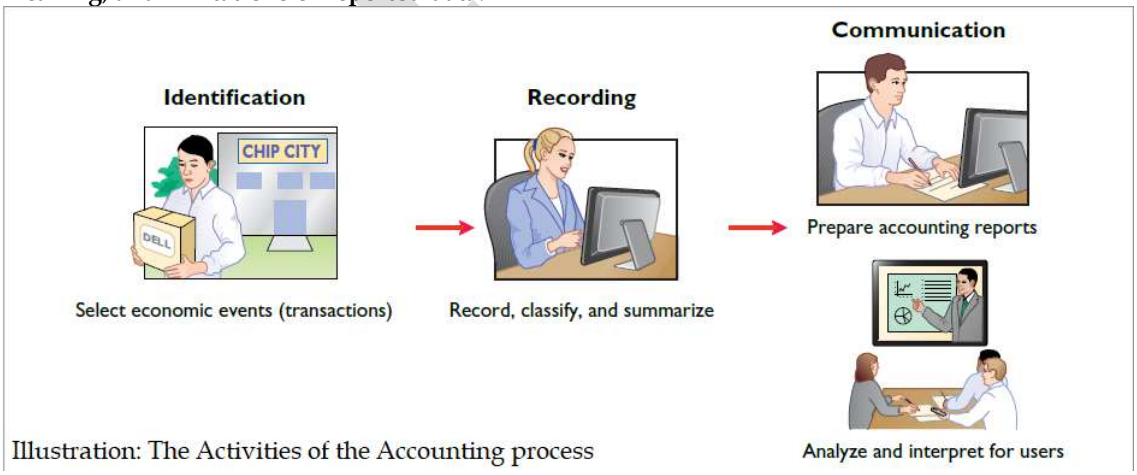
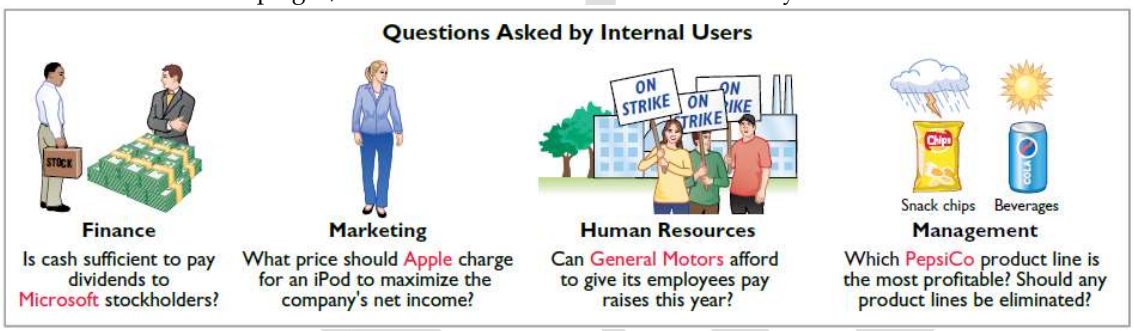


Illustration: The Activities of the Accounting process

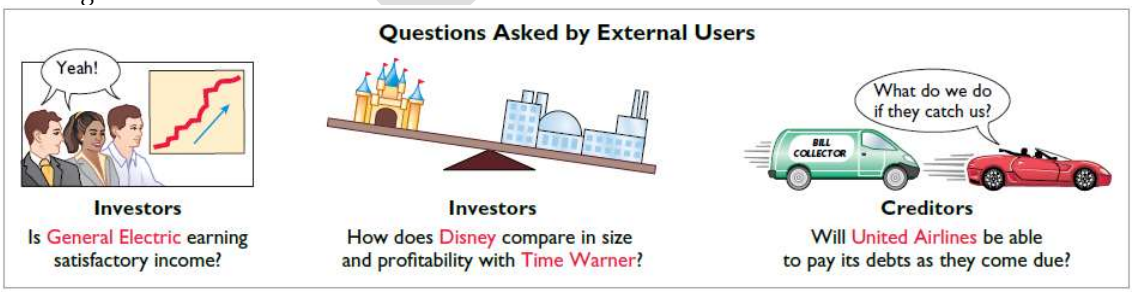
The accounting process **includes** the bookkeeping function. **Bookkeeping** usually involves **only** the recording of economic events. It is therefore just one part of the accounting process. In total, accounting involves **the entire process of identifying, recording, and communicating economic events**.

Who uses the data?
The financial information that users need depends upon the kinds of decisions they make. There are two groups of users.

1. Internal users: **Internal users** of accounting information are managers who plan, organize, and run the business. These include marketing managers, production supervisors, finance directors, and company officers. In running a business, internal users must answer many important questions, as shown in Illustration-
   To answer these and other questions, internal users need detailed information on a timely basis. **Managerial accounting** provides internal reports to help users make decisions about their companies. Examples are financial comparisons of operating alternatives, projections of income from new sales campaigns, and forecasts of cash needs for the next year.



2. External users: **External users** are individuals and organizations outside a company who want financial information about the company. The two most common types of external users are investors and creditors. **Investors** (owners) use accounting information to decide whether to buy, hold, or sell ownership shares of a company. **Creditors** (such as suppliers and bankers) use accounting information to evaluate the risks of granting credit or lending money. Illustration shows some questions that investors and creditors may ask.
   Financial accounting answers these questions. It provides economic and financial information for investors, creditors, and other external users. The information needs of external users vary considerably. **Taxing authorities**, such as the Internal Revenue Service, want to know whether the company complies with tax laws. **Regulatory agencies**, such as the Securities and Exchange Commission or the Federal Trade Commission, want to know whether the company is operating within prescribed rules. **Customers** are interested in whether a company like **Tesla** will continue to honor product warranties and support its product lines. **Labor unions** such as the **Major League Baseball Players Association** want to know whether the owners have the ability to pay increased wages and benefits.



What are the benefits to the company and its employees of making the financial statements available to all employees? (Go to **WileyPLUS** for this answer and additional questions.)

There are two parts in accountancy.

1. Basic Accountancy
2. Cost Accountancy

5 important terms of accounting-

1. Asset
2. Liability
3. Owner's equity
4. Revenue
5. Expense

Basic accounting equation

Asset= Liability+ Owner's Equity

Assets must equal the sum of liabilities and owner's equity. Liabilities appear before owner's equity in the basic accounting equation because they are paid first if a business is liquidated. The accounting equation applies to all **economic entities** regardless of size, nature of business, or form of business organization. It applies to a small proprietorship as well as to a giant corporation. The equation provides the **underlying framework** for recording and summarizing economic events.

Asset

Assets are resources a business owns. The business uses its assets in carrying out such activities as production and sales. The common characteristic possessed by all assets is **the capacity to provide future services or benefits**. In a business, that service potential or future economic benefit eventually results in cash inflows (receipts). For example, consider Campus Pizza, a local restaurant. It owns a delivery truck that provides economic benefits from delivering pizzas. Other assets of Campus Pizza are tables, chairs, jukebox, cash register, oven, tableware, and, of course, cash.

Tangible Assets are those that have a physical substance, such as currencies, buildings, equipment etc. **Intangible Assets** lack of physical substance and usually are very hard to evaluate. They include patents, copyrights, trademarks, trade names etc.

There are two values of an asset-

1. Book value
2. Market value

[**Note:** Raw material isn't asset, it is expense.]

Liability

Liabilities are claims against assets—that is, existing debts and obligations. Businesses of all sizes usually borrow money and purchase merchandise on credit. These economic activities result in payables of various sorts:

• Campus Pizza, for instance, purchases cheese, sausage, flour, and beverages on credit from suppliers. These obligations are called **accounts payable**.

• Campus Pizza also has a **note payable** to First National Bank for the money borrowed to purchase the delivery truck.

• Campus Pizza may also have **salaries and wages payable** to employees and **sales and real estate taxes payable** to the local government.

All of these persons or entities to whom Campus Pizza owes money are its **creditors**. Creditors may legally force the liquidation of a business that does not pay its debts. In that case, the law requires that creditor claims be paid **before** ownership claims.

Internal Liability [EDIT]

External Liability [EDIT]

Owner's Equity

The ownership claim on total assets is **owner's equity**. The assets of a business are claimed by either creditors or owners. To find out what belongs to owners, we subtract the creditors' claims (the liabilities) from assets. The remainder is the owner's claim on the assets—the owner's equity. Since the

claims of creditors must be paid **before** ownership claims, owner's equity is often referred to as **residual equity**.

[**Note:** In some places, we use the term "owner's equity" and in others we use "owners' equity." *Owner's* (singular, possessive) refers to one owner (the case with a sole proprietorship). *Owners'* (plural, possessive) refers to multiple owners (the case with partnerships or corporations).]

Increases in Owner's Equity

In a proprietorship, owner's investments and revenues increase owner's equity.
Investments by owner are the assets the owner puts into the business. These investments increase owner's equity. They are recorded in a category called **owner's capital**.
Revenues are the **gross increase in owner's equity resulting from business activities entered into for the purpose of earning income**. Generally, revenues result from selling merchandise, performing services, renting property, and lending money. Common sources of revenue are sales, fees, services, commissions, interest, dividends, royalties, and rent. Revenues usually result in an increase in an asset. They may arise from different sources and are called various names depending on the nature of the business. Campus Pizza, for instance, has two categories of sales revenues—pizza sales and beverage sales.

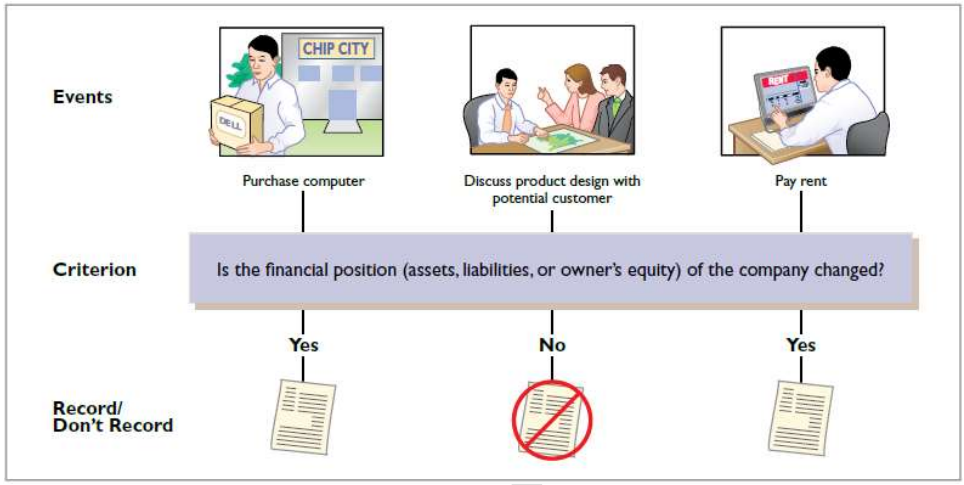
Decrease in Owner's Equity

In a proprietorship, owner's drawings and expenses decrease owner's equity.
Drawings: An owner may withdraw cash or other assets for personal use. We use a separate classification called **drawings** to determine the total withdrawals for each accounting period. **Drawings decrease owner's equity.** They are recorded in a category called owner's drawings.
Expenses are the cost of assets consumed or services used in the process of earning revenue. They are **decreases in owner's equity that result from operating the business**. For example, Campus Pizza recognizes the following expenses: cost of ingredients (meat, flour, cheese, tomato paste, mushrooms, etc.); cost of beverages; salaries and wages expense; utilities expense (electric, gas, and water expense); delivery expense (gasoline, repairs, licenses, etc.); supplies expense (napkins, detergents, aprons, etc.); rent expense; interest expense; and property tax expense.
In summary, owner's equity is increased by an owner's investments and by revenues from business operations. Owner's equity is decreased by an owner's withdrawals of assets and by expenses.

Basic Equation	Assets	=	Liabilities	+	Owner's Equity				
Expanded Equation	Assets	=	Liabilities	+	Owner's Capital	−	Owner's Drawings	+ Revenues	− Expenses

Transactions

Accounting deals with all the events which have a dual impact on the basic accounting equations and ultimately both sides are equal, is considered as Transaction.
Transactions (**business transactions**) are a business's economic events recorded by accountants. Transactions may be external or internal.
External transactions involve economic events between the company and some outside enterprise. For example, Campus Pizza's purchase of cooking equipment from a supplier, payment of monthly rent to the landlord, and sale of pizzas to customers are external transactions.
Internal transactions are economic events that occur entirely within one company. The use of cooking and cleaning supplies are internal transactions for Campus Pizza. Companies carry on many activities that do not represent business transactions. Examples are hiring employees, responding to e-mails, talking with customers, and placing merchandise orders. Some of these activities may lead to business transactions. Employees will earn wages, and suppliers will deliver ordered merchandise. The company must analyze each event to find out if it affects the components of the accounting equation. If it does, the company will record the transaction.



Each transaction must have a dual effect on the accounting equation. For example, if an asset is increased, there must be a corresponding

1. Decrease in another asset
2. Increase in a specific liability, or
3. Increase in owner's equity.

Two or more items could be affected. For example, as one asset is increased $10,000, another asset could decrease $6,000 and a liability could increase $4,000. Any change in a liability or ownership claim is subject to similar analysis.

Transaction Analysis

Transaction (1)-Investment by owner: RM Shoeb starts a smartphone app development company which he names Echo. On January 14, 2018, he invests $15,000 cash in the business.

Basic Analysis	The asset Cash increases $15,000, and owner's equity (identified as Owner's Capital) increases $15,000.

Equation Analysis

	Assets	=	Liabilities	+	Owner's Equity	
	Cash	=			Owner's Capital	
(1)	+$15,000	=			+$15,000	Initial investment

Transaction (2)-Purchase of equipment for cash: Echo purchases computer equipment for $7,000 cash.

Basic Analysis	The asset Cash decreases $7,000, and the asset Equipment increases $7,000.

Equation Analysis

	Assets			=	Liabilities	+	Owner's Equity
	Cash	+	Equipment	=			Owner's Capital
	$15,000						$15,000
(2)	−7,000		+$7,000				
	$ 8,000	+	$7,000	=			$15,000
	$15,000						

Transaction (3)-Purchase of supplies on credit: Echo purchases for $1,600 from Mobile Solutions headsets and other computer accessories expected to last several months. Mobile Solutions agrees to allow Echo to pay this bill in October. This transaction is a purchase on account (a credit purchase). Assets increase because of the expected future benefits of using the headsets and computer accessories, and liabilities increase by the amount due to Mobile Solutions.

Basic Analysis	The asset Supplies increases $1,600, and the liability Accounts Payable increases $1,600.

Equation Analysis

	Assets					=	Liabilities	+	Owner's Equity
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital
	$8,000				$7,000				$15,000
(3)			+$1,600				+$1,600		
	$8,000	+	$1,600	+	$7,000	=	$1,600	+	$15,000
			$16,600						$16,600

Transaction (4)-Services performed for cash: Echo receives $1,200 cash from customers for app development services it has performed. This transaction represents Echo's principal revenue-producing activity. Recall that **revenue increases owner's equity**.

Basic Analysis	The asset Cash increases $1,200, and owner's equity increases $1,200 due to Service Revenue.

Equation Analysis

	Assets					=	Liabilities	+	Owner's Equity			
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital	+	Revenues	
	$8,000		$1,600		$7,000		$1,600		$15,000			
(4)	+$1,200										+$1,200	Service Revenue
	$9,200	+	$1,600	+	$7,000	=	$1,600	+	$15,000	+	$1,200	
			$17,800						$17,800			

Transaction (5)-Purchase of advertising on credit: Echo receives a bill for $250 from the *Daily News* for advertising on its online website but postpones payment until a later date. This transaction results in an increase in liabilities and a decrease in owner's equity.

Basic Analysis	The liability Accounts Payable increases $250, and owner's equity decreases $250 due to Advertising Expense.

Equation Analysis

	Assets					=	Liabilities	+	Owner's Equity				
	Cash	+	Supplies	+	Equipment	=	Accounts Payable	+	Owner's Capital	+	Revenues	−	Expenses
	$9,200		$1,600		$7,000		$1,600		$15,000		$1,200		
(5)							+250					−$250	Advertising Expense
	$9,200	+	$1,600	+	$7,000	=	$1,850	+	$15,000	+	$1,200	−	$ 250
			$17,800						$17,800				

The cost of advertising is an expense (rather than an asset) because the company has **used** the benefits. Advertising Expense is included in determining net income.

Transaction (6)-Services performed for cash and credit: Echo performs $3,500 of app development services for customers. The company receives cash of $1,500 from customers, and it bills the balance of $2,000 on account.

Basic Analysis	Three specific items are affected: The asset Cash increases $1,500, the asset Accounts Receivable increases $2,000, and owner's equity increases $3,500 due to Service Revenue.

Equation Analysis

	Assets						=	Liabilities	+	Owner's Equity				
	Cash	+	Accounts Receivable	+	Supplies	+ Equipment	=	Accounts Payable	+	Owner's Capital	+ Revenues	−	Expenses	
	$9,200				$1,600	$7,000		$1,850		$15,000	$1,200		$250	
(6)	+$1,500		+$2,000								+3,500			Service Revenue
	$10,700	+	$ 2,000	+	$1,600	+ $7,000	=	$1,850	+	$15,000	+ $4,700	−	$250	
			$21,300							$21,300				

Transaction (7)-Payment of expenses: Echo pays the following expenses in cash for September: office rent $600, salaries and wages of employees $900, and utilities $200.

Basic Analysis	The asset Cash decreases $1,700, and owner's equity decreases $1,700 due to the specific expense categories (Rent Expense, Salaries and Wages Expense, and Utilities Expense).

Equation Analysis

	Assets						=	Liabilities	+	Owner's Equity			
	Cash	+	Accounts Receivable	+	Supplies	+ Equipment	=	Accounts Payable	+	Owner's Capital	+ Revenues	−	Expenses
	$10,700		$2,000		$1,600	$7,000		$1,850		$15,000	$4,700		$ 250
(7)	−1,700												−600 Rent Expense −900 Sal. and Wages Exp. −200 Utilities Exp.
	$9,000	+	$2,000	+	$1,600	+ $7,000	=	$1,850	+	$15,000	+ $4,700	−	$1,950
			$19,600							$19,600			

Transaction (8)-Payment of Accounts payable: Echo pays its $250 *Daily News* bill in cash. The company previously [in Transaction (5)] recorded the bill as an increase in Accounts Payable and a decrease in owner's equity.

Basic Analysis	This cash payment "on account" decreases the asset Cash by $250 and also decreases the liability Accounts Payable by $250.

Equation Analysis

	Assets				= Liabilities	+ Owner's Equity			
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	= Accounts Payable	+ Owner's Capital	+ Revenues	− Expenses	
	$9,000	$2,000	$1,600	$7,000	$1,850	$15,000	$4,700	$1,950	
(8)	−250				−250				
	$8,750	+ $2,000	+ $1,600	+ $7,000	= $1,600	+ $15,000	+ $4,700	− $1,950	
		$19,350				$19,350			

Transaction (9)-Receipt of Cash on account: Echo receives $600 in cash from customers who had been billed for services [in Transaction (6)]. Transaction (9) does not change total assets, but it changes the composition of those assets.

Basic Analysis	The asset Cash increases $600, and the asset Accounts Receivable decreases $600.

Equation Analysis

	Assets				= Liabilities	+ Owner's Equity			
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	= Accounts Payable	+ Owner's Capital	+ Revenues	− Expenses	
	$8,750	$2,000	$1,600	$7,000	$1,600	$15,000	$4,700	$1,950	
(9)	+600	−600							
	$9,350	+ $1,400	+ $1,600	+ $7,000	= $1,600	+ $15,000	+ $4,700	− $1,950	
		$19,350				$19,350			

Transaction (10)-Withdrawal of cash by owner: RM Shoeb withdraws $1,300 in cash from the business for his personal use.

Basic Analysis	The asset Cash decreases $1,300, and owner's equity decreases $1,300 due to owner's withdrawal (Owner's Drawings).

Equation Analysis

	Assets				= Liabilities	+ Owner's Equity				
	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	= Accounts Payable	+ Owner's Capital	− Owner's Drawings	+ Revenues	− Expenses	
	$9,350	$1,400	$1,600	$7,000	$1,600	$15,000		$4,700	$1,950	
(10)	−1,300						−$1,300			Drawings
	$8,050	+ $1,400	+ $1,600	+ $7,000	= $1,600	+ $15,000	− $1,300	+ $4,700	− $1,950	
		$18,050					$18,050			

Observe that the effect of a cash withdrawal by the owner is the opposite of the effect of an investment by the owner. **Owner's drawings are not expenses.** Expenses are incurred for the purpose of earning revenue. Drawings do not generate revenue. They are a **disinvestment**. Like owner's investment, the company excludes owner's drawings in determining net income.

Summary of Transactions

	Assets				= Liabilities	+ Owner's Equity				
Transaction	Cash	+ Accounts Receivable	+ Supplies	+ Equipment	= Accounts Payable	+ Owner's Capital	− Owner's Drawings	+ Rev.	− Exp.	
(1)	+$15,000					+ $15,000				Initial invest.
(2)	−7,000			+$7,000						
(3)			+$1,600		+$1,600					
(4)	+1,200							+$1,200		Service Revenue
(5)					+250				−$250	Adver. Expense
(6)	+1,500	+$2,000						+3,500		Service Revenue
(7)	−600								−600	Rent Expense
	−900								−900	Sal./Wages Exp.
	−200								−200	Utilities Expense
(8)	−250				−250					
(9)	+600	−600								
(10)	−1,300						−$1,300			Drawings
	$ 8,050	+ $1,400	+ $1,600	+ $7,000	= $1,600	+ $15,000	− $1,300	+ $4,700	− $1,950	
		$18,050					$18,050			

[**Note:** If transaction is made by cheque, then effect will be on bank, not cash.]

Exercise:

Transactions made by Virmari & Co., a public accounting firm, for the month of August are shown below. Prepare a tabular analysis which shows the effects of these transactions on the expanded accounting equation:

1. The owner invested $25,000 cash in the business.
2. The company purchased $7,000 of office equipment on credit.
3. The company received $8,000 cash in exchange for services performed.
4. The company paid $850 for this month's rent.
5. The owner withdrew $1,000 cash for personal use.

Solution:

	Assets		= Liabilities +	Owner's Equity					
Transaction	Cash	+ Equipment	= Accounts Payable	+ Owner's Capital	− Owner's Drawings	+ Revenues	− Expenses		
(1)	+$25,000			+$25,000					
(2)		+$7,000	+$7,000						
(3)	+8,000					+$8,000			Service Revenue
(4)	−850						−$850		Rent Expense
(5)	−1,000				−$1,000				Drawings
	$31,150	+ $7,000	= $7,000	+ $25,000	− $1,000	+ $8,000	− $850		
	$38,150			$38,150					

Difference between Accounting and Transaction [EDIT]

Public Accounting

Individuals in **public accounting** offer expert service to the general public, in much the same way that doctors serve patients and lawyers serve clients. A major portion of public accounting involves **auditing**. In auditing, a certified public accountant (CPA) examines company financial statements and provides an opinion as to how accurately the financial statements present the company's results and financial position. Analysts, investors and creditors rely heavily on these "audit opinions," which CPAs have the exclusive authority to issue.

Taxation is another major area of public accounting. The work that tax specialists perform includes tax advice and planning, preparing tax returns, and representing clients before governmental agencies such as the Internal Revenue Service.

A third area in public accounting is **management consulting**. It ranges from installing basic accounting software or highly complex enterprise resource planning systems, to performing support services for major marketing projects and merger and acquisition activities.

Many CPAs are entrepreneurs. They form small- or medium-sized practices that frequently specialize in tax or consulting services.

Private Accounting

In **private** (or **managerial**) **accounting**, you would be involved in activities such as cost accounting (finding the cost of producing specific products), budgeting, accounting information system design and support, and tax planning and preparation. You might also be a member of your company's internal audit team. In response to SOX, the internal auditors' job of reviewing the company's operations to ensure compliance with company policies and to increase efficiency has taken on increased importance. Alternatively, many accountants work for not-for-profit organizations such as the **Red Cross** or the **Bill and Melinda Gates Foundation**, or for museums, libraries, or performing arts organizations.

Governmental Accounting

Another option is to pursue one of the many accounting opportunities in governmental agencies. For example, the Internal Revenue Service (IRS), Federal Bureau of Investigation (FBI), and the Securities and Exchange Commission (SEC) all employ accountants. The FBI has a stated goal that at least 15 percent of its new agents should be CPAs. There is also a very high demand for accounting educators at public colleges and universities and in state and local governments.

The Recording Process

Debits and Credits

They are commonly abbreviated as **Dr.** for debit and **Cr.** for credit. They **do not** mean increase or decrease, as is commonly thought. We use the terms **debit** and **credit** repeatedly in the recording process to describe **where** entries are made in accounts.

An account shows a **debit balance** if the total of the debit amounts exceeds the credits. An account shows a **credit balance** if the credit amounts exceed the debits.

Debit and Credit Procedure

Remember that each transaction must affect two or more accounts to keep the basic accounting equation in balance. In other words, for each transaction, debits must equal credits. The equality of debits and credits provides the basis for the **double-entry system** of recording transactions.

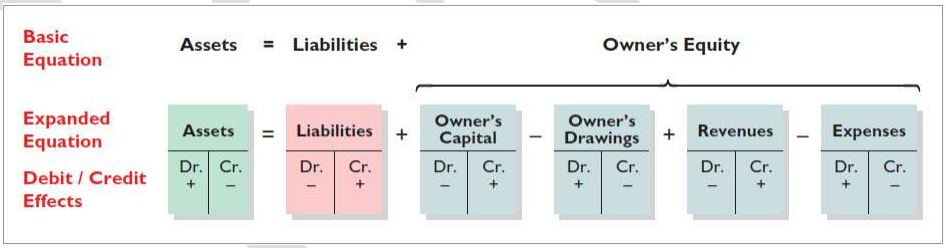
Under the double-entry system, the dual (two-sided) effect of each transaction is recorded in appropriate accounts. This system provides a logical method for recording transactions and also helps ensure the accuracy of the recorded amounts as well as the detection of errors. If every transaction is recorded with equal debits and credits, the sum of all the debits to the accounts must equal the sum of all the credits.

Dr. /Cr. Procedures

Debits	Credits
Increase assets	Decrease assets
Decrease liabilities	Increase liabilities
Decrease owner's capital	Increase owner's capital
Increase owner's drawings	Decrease owner's drawings
Decrease revenue	Increase revenue
Increase expense	Decrease expense

Asset accounts normally show debit balances. That is, debits to a specific asset account should exceed credits to that account. Likewise, **liability accounts normally show credit balances**. That is, credits to a liability account should exceed debits to that account.

Credits to revenue accounts should exceed debits. Debits to expense accounts should exceed credits. Thus, revenue accounts normally show credit balances, and expense accounts normally show debit balances.



[**Note:** Debtors- দেনাদার
Creditors- পাওনাদার
Asset কে বাড়িয়ে দেখানো যাবে না।
Liability কে কমিয়ে দেখানো যাবে না।]

Accounting Cycle

1. Preparation of Journal
2. Preparation of Ledger Accounts
3. Preparation of Trial Balance
4. Preparation of Financial Statement
5. Analysis of Financial Statement

Rules and regulations that we have to follow:
GAAP-Generally Accepted Accounting Principles
There are four principles-

1. Historical cost principle

2. Revenue recognition principles
3. Matching principles
4. Full disclosure principles

Matching expenses and revenue
Material information: The decision which influence the decision making of a user.

There are four assumptions-
1. Economic or separate entity assumption
2. Going concern assumption
3. Periodicity assumption
4. Monitory value assumption

All the data are recorded for a particular period of time.
All the assets will be represented in terms of money.

There are four limitation-
1. Cost benefit relationship
2. Materiality
3. Industrial practice
4. Conservatism-not disclosing every information

There are three types of organizations-
1. Merchandise
2. Service
3. Manufacturing

Preparation of Journal
Companies initially record transactions in chronological order (the order in which they occur). Thus, the **journal** is referred to as the book of original entry. For each transaction, the journal shows the debit and credit effects on specific accounts.
Typically, a general journal has spaces for dates, account titles and explanations, references, and two amount columns.
The journal makes several significant contributions to the recording process:
1. It discloses in one place the **complete effects of a transaction**.
2. It provides a **chronological record** of transactions.
3. It helps to **prevent or locate errors** because the debit and credit amounts for each entry can be easily compared.

Rules:
1. Personal accounts-> যে বাক্তি বা প্রতিষ্ঠান সুবিধা ভোগ করে সে হয় Debit। আর যে বাক্তি বা প্রতিষ্ঠান সুবিধা প্রদান করে সে হয় Credit।
2. Real account/ Asset account-> Transaction-এর মাধ্যমে asset বেড়ে গেলে debit আর asset কমে গেলে credit।
3. Nominal account
   a. Revenue-> আয় বেড়ে গেলে credit এবং আয় কমে গেলে debit।
   b. Expense-> debit credit
4. Liability accounts->> increase-> Credit decrease-> debit

Journal book
It is a book where the transactions are recorded chronologically according to date in the basis of debit and credit.
There are two ways to prepare a journal book.
1. American
2. British

Journal Book
(Company name)
(Time period)

Company name				
Date	Particulars	Reference	Debit	Credit
(American method)	Cash A/C debit	-	x	-
	Capital A/C credit (Transaction has to be explained here for later understanding)		-	X
(British method)	Cash A/C debit to capital A/C (Transaction has to be explained here for later understanding)	-	X -	- X

(We will use the British method here.)

Example:
A company made a sale of 50000 taka. So,
Cash asset increase=50000 taka
Owner's equity increase=50000 taka

Date	Particulars	Reference	Dr.	Cr.
25.03.2018	Cash A/C Dr. to sales A/C	-	50000 -	- 50000

(1) The company made a sale of 50000 taka to Mr. X on due. So,
Debtors asset increase=50000 taka
Owner's equity increase=50000 taka

(2) Mr. X paid his debts. So,
Cash asset increase=50000 taka
Debtors asset decrease=50000 taka

(3) Mr. X was allowed a discount of 5000 taka. So,
Cash asset increase=45000 taka
Debtors asset decrease=50000 taka
Expense increase=5000 taka

(4) The company made a purchase of 50000 taka from Mr. Rahim on due.
(5) The company got a discount of 5000 taka.
(6) Rent was paid by cheque.

So, the journal book for all these transactions will be,

Date	Particulars	Reference	Dr.	Cr.
1	Mr. X A/C Dr. to Sales A/C		50000 -	- 50000
2	Cash A/C Dr. to Mr. X A/C		50000 -	- 50000
3	Cash A/C Dr. Discount Allowed Dr. to Mr. X A/C	-	45000 5000 -	- - 50000
4	Purchases A/C Dr. to Mr. Rahim A/C		50000 -	- 50000
5	Mr. Rahim A/C Dr. to Sales A/C		50000 -	- 45000

	to Discount received		-	5000
6	Rent A/C Dr. to Bank A/C		5000 -	- 5000
Total			X	Y

In a journal book, X and Y will always be equal.

Depreciation

Depreciation is a method of reallocating the cost of tangible asset over its useful life span of it being in motion.

Suppose, a company a machine spending 100000 taka and it has a life cycle of 100 years. So,

Book value=100000 taka

Every year (for the next 100 years), the transaction will included in the journal book like this,

Depreciation A/C Dr. 1000 taka to Machineries A/C 1000 taka.

Ledger account (খতিয়ান হিসাব)

The entire group of accounts maintained by a company is the **ledger**. The ledger provides the balance in each of the accounts as well as keeps track of changes in these balances.

A **general ledger** contains all the asset, liability, and owner's equity accounts.

Companies arrange the ledger in the sequence in which they present the accounts in the financial statements, beginning with the balance sheet accounts. First in order are the asset accounts, followed by liability accounts, owner's capital, owner's drawings, revenues, and expenses. Each account is numbered for easier identification.

The ledger provides the balance in each of the accounts. For example, the Cash account shows the amount of cash available to meet current obligations. The Accounts Receivable account shows amounts due from customers. Accounts Payable shows amounts owed to creditors.

There are two methods of preparing a ledger account.

1. British
2. American

American method is also called three column method because it has three columns for balance. We will use this method.

Example:

Cash ledger

Date	Exp.	Ref.	Dr.	Cr.	Balance
1.2.18	To capital A/C	-	500k	-	500k

Trial balance রেওয়ামিল

Particulars/ accounts	Ledger folio	Dr.	Cr.
cash	…	xxx	-
…	…	…	…

Debit	Opening stock, purchases, sales return, salary, rent, machinaries furniture, land, depreciation, carriage(পণ্য পরিবহণ খরচ), cash, bank, stationary, bad debts, debtors,
credit	Purchage return, sales, creditors, provision for bad debts

Bad debts- অনাদায়ী দেনা

Provision for bad debts- অনাদায়ী দেনা সঞ্চিতি

Closing stock- should not be posted on trial balance

Financial statement

For mercendise and service org.

-income statements

-cash statements

-owner's equity statements

-balance sheet

For manufacturing firm
-trading accounts ক্রয় বিক্রয়
Actual goal is to calculate the gross profit.
Profit=Revenue-Expense
Revenue->periodic revenue
Expense->product oriented expense
->periodic expense
-profit and loss accounts লাভ খতি
-balance sheet বৈষয়িক বিবৃতি

Trading Account
X company LTD.
For the year ended 31 Dec. 2017

Particulars	Amount	Particulars	Amount
Left hand side	Or, debit side	Right hand side	Or, credit Side
Opening Stock	XX	Sales-XX	
Purchase-XX		Sales return-XX	
Purchase return-XX		-XX	XX
-XX	XX	Closing stock	XX

The credit side must be greater. Otherwise, there will be no profit.
[Wages-> product oriented]
[Salary-> period oriented]
Freight duty

Profit & Loss Account
X company ltd.
For the year ended 31 Dec, 2017

Particulars	Amount	Particulars	Amount
Interest paid	XX	Gross profit	XX
Discount allowed	XX	Interest received	XX
Commission paid	XX	Discount received	XX
Carriage outwards	XX	Commission received	XX
Carriage inwards	XX		XXX
Salary-XX			
Advance-(-)XX			
Unpaid-(+)XX			
-XX	XX		
Rent	XX		
Insurance	XX		
Stationary	XX		
Bad debts-XX			
Provision for bad debts-XX			
-XX	XX		
Depreciation-			
Furniture-XX			
Machinaries-XX			
Building-XX			
-XX	XX		
Net Profit	XX		
	XXX		

In case of loss-

Particulars	Amount	Particulars	Amount
		Net Loss	XX

			XXX

Balance Sheet
As on 31 Dec 2017

L+OE	Amount	Asset	Amount
Capital-XX Net profit-(+)XX Withdrawal-(-)XX		Fixed asset Current asset	
-XX	XX	Building-XX	
Income-XX		Depreciation-XX	
Income tax-(-)XX	XX	-XX	XX
-XX		Furniture-XX	
Bank loan	XX	Depreciation-XX	XX
Creditors		-XX	XX
Accounts		Land	XX
-payable-XX		Closing asset	
-unpaid-XX	XX	Debtors-XX	
-XX		Bad debts-(-)XX	
Expenses		Provision-(-)XX	
-salary-XX		XX	XX
-rent-XX		Account receivable	XX
-insurance-XX		Cash & bank	XX
XX	XX	Advance expenses	XX
	XXX		XXX

Cost accounting
Cost is the monitory value of any sacrificed which is given up to receive some benefits.
Price=Cost+Profit
If a part of cost is used or expired, then that part of cost is called expense.
On the basis of manufacturing/production perspective, cost is of two types.
→ manufacturing cost (product oriented cost/product cost)

- Direct material→cost can be traced per unit
- Direct labor→cost can be traced per unit
- Manufacturing overhead→all the cost to produce something except direct material and direct labor.
  First two are called "prime cost".

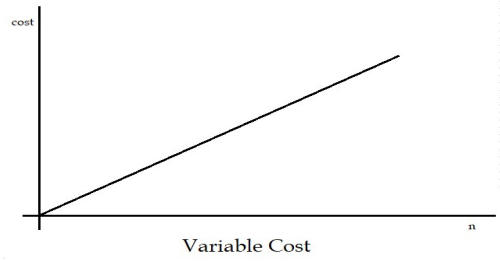
→ non-manufacturing cost (period oriented/period cost)

- Administrative cost →the cost to run the company smoothly
- Selling cost →cost to transport material on the basis of order by customer.

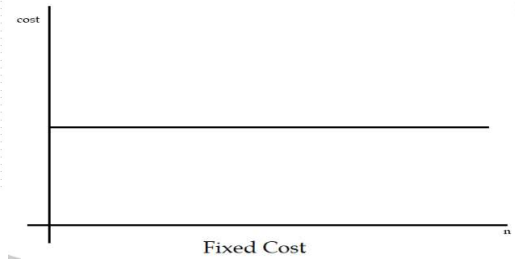
Opportunity cost is considered as the potential benefit that is given up when alternative is selected over another.
Sunk cost is the cost that has been incurred in the past and cannot be changed by any decision taken now or in future.
Differential cost and Revenue

On the basis of activity level, cost is of two types-

- Variable cost →the cost that varies in total in direct proportion to the change the level of activity. (per unit cost is fixed, it's the total cost that varies)
- Fixed cost →the cost that remains fixed up-to a relevant range whatever the activity is/regardless the change in activity, is considered as the fixed cost.



Variable Cost



Fixed Cost

Conversion cost→direct labor+manufactuaring overhead
Cost Sheet →representation of cost (manufacturing cost)
WIP→Work In Process
FG→Finished Goods

[Resources:

1. Lecture notes of KF
2. Lecture notes of MRI
3. Class lecture of Naj_CSE_16
4. Accounting principles-Kieso
5. Practice in Accountancy-Basu and Das
6. Managerial Accounting-Garrison
7. Management-Ricky W. Griffin
8. Management- Ritzmen
9. Wikipedia]