

Chapter 1
An Overview of Ethics

What is Ethics?

- **Ethics**

- Ethics is a code of behavior that is defined by the group to which an individual belongs
- Ethical behavior conforms to generally accepted norms and help members of a group understand their roles and responsibilities

- **Morality**

- Morals are the personal principles upon which an individual bases his or her decisions about what is right and what is wrong; Morals are core beliefs formed and adhered to by an individual
- For example, many of us have a core belief that all people should be treated with respect

What is Ethics?

- **Virtue and Vice**

- People also develop habits that make it easier for them to choose between good and bad
- A **virtue** is a habit that inclines people to do what is acceptable, and a **vice** is a habit of unacceptable behavior
- Fairness, generosity, and loyalty are examples of virtues, while vanity, greed, envy, and anger are considered vices
- People's virtues and vices help define their personal value system—the complex scheme of moral values by which they live

What is Ethics?

- Although nearly everyone would agree that certain behaviors are wrong, opinions about what constitutes right and wrong behaviors can vary dramatically; For example, attitudes toward software piracy range from strong opposition to acceptance of the practice as a standard approach
- Individual views of what behavior is moral may be impacted by a person's age, cultural group, ethnic background, religion, life experiences, education, and gender along with many other factors
- Even within the same society, people can have strong disagreements over important moral issues

What is Ethics?

- Issues such as abortion, the death penalty, same-sex marriage, marijuana usage are continuously debated, and people on both sides of these debates feel that their arguments are on solid moral ground. The reality is that the world has many systems of beliefs about what is right and wrong, each with many proponents
- Life is complex, and on occasion, you will encounter a situation in which the ethics of the group to which you belong are in conflict with your morals

What is Ethics?

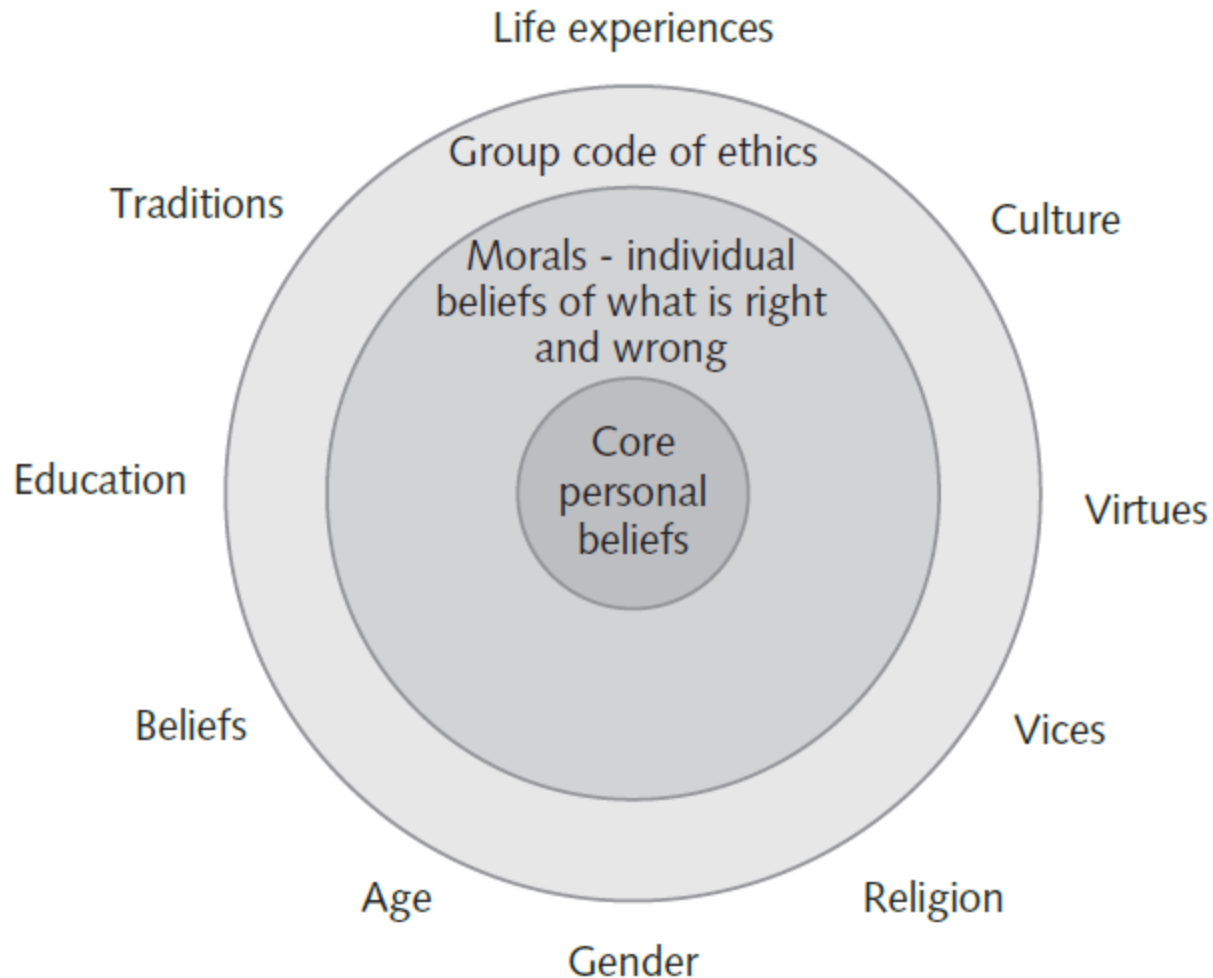


Fig. Ethics, morals and some factors that help define them

What is Ethics?

- **Importance of Integrity**

- A person who acts with integrity acts in accordance with a personal code of principles
- Acting with integrity is to extend to all people the same respect and consideration that you expect to receive from them
- If you are consistent and act with integrity, you apply the same moral standards in all situations
- Many ethical dilemmas are not as simple as right versus wrong but involve choices between right versus right

What is Ethics?

- **Difference between Moral, Ethics, and Laws**
 - **Morals:** one's personal beliefs about right and wrong
 - **Ethics:** standards or codes of behavior expected of an individual by a group
 - **Law:** system of rules that tells us what we can and cannot do
 - Laws are enforced by a set of institutions (police, courts, law-making bodies)
 - Violation of a law can result in censure, fines, and/or imprisonment
 - Laws can proclaim an act as illegal, although many people may consider the act immoral—for example, using marijuana to relieve stress and nausea for people undergoing chemotherapy treatment for cancer

Ethics in the Business World

- Ethics has risen to the top of the business agenda because the risks associated with inappropriate behavior have increased
- Many companies have collapsed and/or bailout due to unwise and/or unethical decision making in organizations
- Numerous corporate officers and senior managers have been sentenced to prison terms for their unethical behaviour

Ethics in the Business World

- Several trends have increased the likelihood of unethical behaviour
 - Greater globalization has created a much more complex work environment that spans diverse cultures and societies, making it more difficult to apply principles and codes of ethics consistently
 - Many organizations are finding it more difficult to maintain revenue and profits. Some organizations do unethical behavior to maintain profits
- Employees, shareholders, and regulatory agencies are also increasingly sensitive
- Both executives and lower-level employees, can find themselves in the middle of an ethical dilemma

Corporate Social Responsibility

- Corporate social responsibility (CSR) is the concept that an organization should act ethically by taking responsibility for the impact of its actions on its shareholders, consumers, employees, community, environment, and suppliers
- An organization's approach to CSR can encompass a wide variety of tactics—from donating a portion of net profit to charity to implementing more sustainable business operations or encouraging employee education through tuition reimbursement
- Setting CSR goals encourages an organization to achieve higher moral and ethical standards

Corporate Social Responsibility

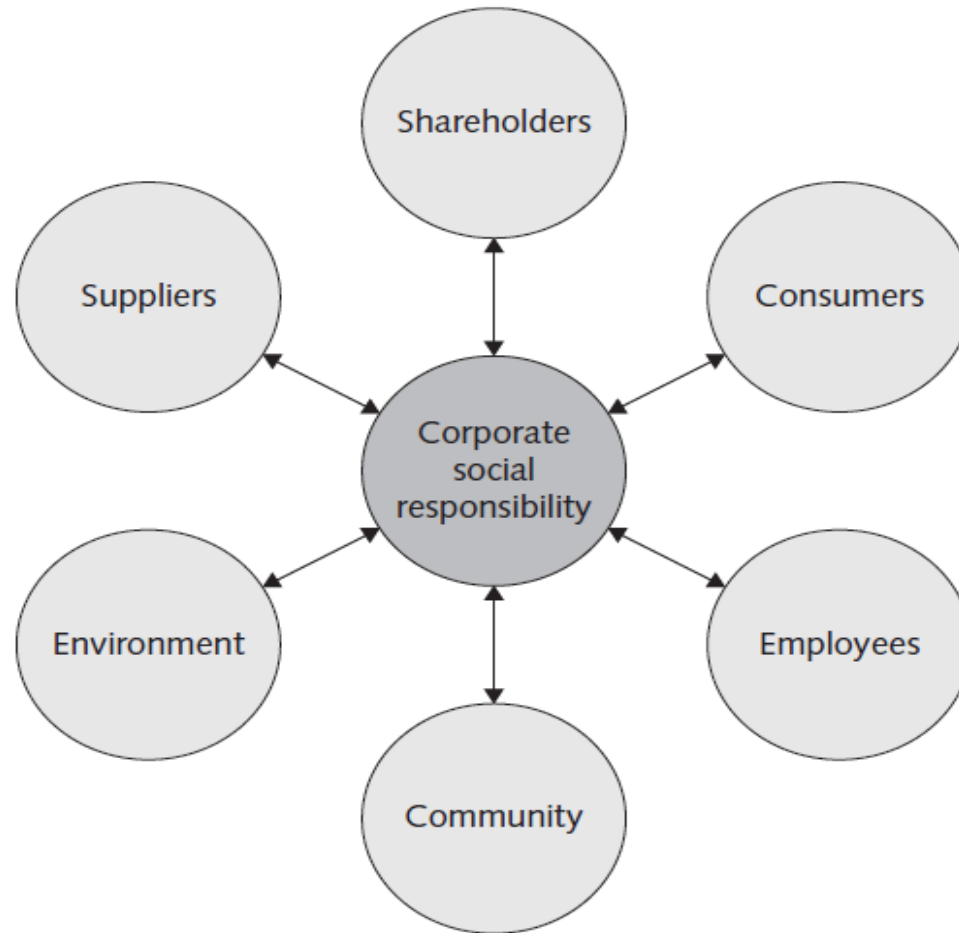


Fig: An organization's program CSR affects its shareholders, consumers, employees, community, environment, and suppliers

Corporate Social Responsibility

- Supply chain sustainability is a component of CSR that focuses on developing and maintaining a supply chain that meets the needs of the present without compromising the ability of future generations to meet their needs
- Supply chain sustainability takes into account issues such as fair labor practices, energy and resource conservation, human rights, and community responsibility
- Many organizations define a wide range of corporate responsibility areas that are important to them, their customers, and their community

Why Fostering CSR and Good Business Ethics is Important?

- Organizations have at least five good reasons to pursue CSR and good business ethics
 - Gaining the goodwill of the community
 - Creating an organization that operates consistently
 - Fostering good business practices
 - Protecting the organization and its employees from legal action
 - Avoiding unfavorable publicity

Why Fostering CSR and Good Business Ethics is Important?

- **Gaining the goodwill of the community:**
 - Although organizations exist primarily to earn profits or provide services to customers, they also have some fundamental responsibilities to society
 - Companies often declare these responsibilities in specific CSR goals
 - Many organizations initiate or support socially responsible activities, which may include making contributions to charitable organizations and non-profit institutions, providing benefits for employees in excess of any legal requirements, and devoting organizational resources to initiatives that are more socially desirable than just profitable

Why Fostering CSR and Good Business Ethics is Important?

- Socially responsible activities create good will and good will makes it easier for corporations to conduct business
- **Creating an Organization that Operates Consistently:**
 - Organizations develop and abide by values to define a consistent approach for dealing with the needs of their stakeholders - shareholders, employees, customers, suppliers, and the community
 - Consistency ensures that employees know what is expected of them and can employ the organization's values to help them in their decision making

Why Fostering CSR and Good Business Ethics is Important?

- Consistency also means that stakeholders know what they can expect of the organization
- Most companies share the following values for consistency
 - Operate with honesty and integrity, staying true to organizational principles
 - Operate according to standards of ethical conduct, in words and action
 - Treat colleagues, customers, and consumers with respect
 - Strive to be the best at what matters most to the organization
 - Value diversity
 - Make decisions based on facts and principles

Why Fostering CSR and Good Business Ethics is Important?

- **Fostering Good Business Practice:**
 - Good ethics means good business and improved profits
 - Companies that produce safe and effective products avoid costly recalls and lawsuits
 - Companies that provide excellent service retain their customers instead of losing them to competitors
 - Companies that develop and maintain strong employee relations enjoy lower turnover rates and better employee morale
 - Suppliers and other business partners prefer to work with fair and ethical companies

Why Fostering CSR and Good Business Ethics is Important?

- All these factors tend to increase revenue and profits while decreasing expenses
- Ethical companies tend to be more profitable over the long term than unethical companies
- Bad ethics can lead to bad business results and can have a negative impact on employees with negative attitudes that destroy employee commitment to organizational goals and objectives, creates low morale, fosters poor performance, erodes employee involvement in organizational improvement initiatives, and builds indifference to the organization's needs

Why Fostering CSR and Good Business Ethics is Important?

- **Protecting the organization and its employees from legal action:**
 - U.S. Supreme Court established that an employer can be held responsible for the acts of its employees; The principle established is called respondeat superior, or “let the master answer”
 - Organizations should establish effective ethics and compliance programs to prevent and detect misconduct in the workplace
 - Officers of companies should not be given light sentences if their ethics programs fail to deter criminal activity within their firms

Why Fostering CSR and Good Business Ethics is Important?

- **Avoiding unfavorable publicity:**
 - The public reputation of a company strongly influences the value of its stock, how consumers regard its products and services, the degree of oversight it receives from government agencies, and the amount of support and cooperation it receives from its business partners
 - Thus, many organizations are motivated to build a strong ethics program to avoid negative publicity
 - Customers, business partners, shareholders, consumer advocates, financial institutions, and regulatory bodies will usually regard more favourably to ethical organizations

Improving Business Ethics

- *A well-implemented ethics and compliance program and a strong ethical culture can improves business ethics*
- Characteristics of a successful ethics program
 - Employees willing to seek advice about ethical issues
 - Employees feel prepared to handle situations that could lead to misconduct
 - Employees are rewarded for ethical behavior
 - Employees are not rewarded for success obtained through questionable means
 - Employees feel positive about their company

Improving Business Ethics

- Some of the actions corporations can take to improve business ethics are:
 - Appoint a Corporate Ethics Officer
 - Require Board of Directors to Set and Model High Ethical Standards
 - Establish Corporate Code of Ethics
 - Conduct Social Audits
 - Require Employees to Take Ethics Training
 - Include Ethical Criteria in Employee Appraisals
 - Create an Ethical Work Environment

Improving Business Ethics

- **Appoint a Corporate Ethics Officer:**
 - A corporate ethics officer (also called a corporate compliance officer) provides an organization with vision and leadership in the area of business conduct
 - This officer aligns the practices of a workplace with the stated ethics and beliefs of that workplace, holding people accountable to ethical standards
 - Ideally, the corporate ethics officer should be a well respected, senior-level manager who reports directly to the CEO
 - They come from diverse backgrounds, such as legal staff, human resources, finance, auditing, security, or line operations

Improving Business Ethics

- Typically, the ethics officer tries to establish an environment that encourages ethical decision making
- Specific responsibilities include:
 - Responsibility for compliance, that is, ensuring that ethical procedures are put into place and consistently adhered to throughout the organization
 - Responsibility for creating and maintaining the ethics culture envisioned by the highest level of corporate authority
 - Responsibility for being a key knowledge and contact person on issues relating to corporate ethics and principles

Improving Business Ethics

- **Require Board of Directors to Set and Model High Ethical Standards:**
 - Board oversees the organization's business activities and supervise the management team
 - Board members conduct themselves according to the highest standards for personal and professional integrity and set standard for ethical conduct and ensure compliance with laws and regulations
 - They set example of high-level ethical behaviour and intervene in order to stop unethical behavior
 - They create an environment in which employees feel they can seek advice about appropriate business conduct, raise issues, and report misconduct

Improving Business Ethics

- **Establish Corporate Code of Ethics:**

- A code of ethics is a statement that highlights an organization's key ethical issues and identifies the overarching values and principles that are important to the organization and its decision making
- It includes a set of formal, written statements about the purpose of an organization, its values, and the principles that should guide its employees' actions
- It focuses employees on areas of ethical risk relating to their role in the organization, offer guidance to help them recognize and deal with ethical issues, and provide mechanisms for reporting unethical conduct and fostering a culture of honesty and accountability within the organization

Improving Business Ethics

- A code of ethics should be developed with employee participation and fully endorsed by the leadership
- It should be easily accessible by employees, shareholders, business partners, and the public
- It must continually be applied to decision making and emphasized as an important part of its culture
- Breaches in the code of ethics must be identified and dealt with appropriately

1. Intel conducts business with honesty and integrity
2. Intel follow the letter and script of the law
3. Inter employees treat each other fairly
4. Intel employees act in the best interests of Intel and avoid conflicts of interest
5. Intel employees protect the company's assets and reputation

Intel's five principles of conduct

Improving Business Ethics

- **Conduct Social Audits:**
 - An increasing number of organizations conduct regular social audits of their policies and practices
 - In a social audit, an organization reviews how well it is meeting its ethical and social responsibility goals and communicates its new goals for the upcoming year
 - This information is shared with employees, shareholders, investors, market analysts, customers, suppliers, government agencies, and the communities in which the organization operates

Improving Business Ethics

- **Require Employees to Take Ethics Training:**
 - Personal convictions about right and wrong behavior could be improved through education
 - Code of ethics must be promoted and continually communicated within the organization, from the top to the bottom using
 - Examples of how to apply the code of ethics in real life
 - Comprehensive ethics education program in small workshop formats that encourages employees to act responsibly and ethically
 - Hypothetical but realistic case studies that apply organization's code of ethics
 - Examples of recent company decisions based on principles from the code of ethics

Improving Business Ethics

- A critical goal of such training is to increase the percentage of employees who report incidents of misconduct; thus, employees must be shown effective ways of reporting such incidents; In addition, they must be reassured that such feedback will be acted on and that they will not be subjected to retaliation
- Formal ethics training not only makes employees more aware of a company's code of ethics and how to apply it but also demonstrates that the company intends to operate in an ethical manner
- The existence of formal training programs can also reduce a company's liability in the event of legal action

Improving Business Ethics

- **Include Ethical Criteria in Employee Appraisals:**
 - Managers are including ethical conduct as part of an employee's performance appraisal
 - Ethical criteria for performance appraisal include:
 - Treating others fairly and with respect
 - Operating effectively in a multicultural environment
 - Accepting personal accountability for meeting business needs
 - Continually developing others and themselves
 - Operating openly and honestly with suppliers, customers, and other employees

Improving Business Ethics

- These factors are considered along with the more traditional criteria used in performance appraisals, such as an employee's overall contribution to moving the business ahead, successful completion of projects and tasks, and maintenance of good customer relations
- In a recent survey, about two-thirds of organizations reported that they include ethical conduct as a performance measure in employee evaluations

Improving Business Ethics

- **Creating an Ethical Work Environment:**

- Most employees want to perform their jobs successfully and ethically, but good employees sometimes make bad ethical choices
- Some employees may feel pressure to engage in unethical conduct to meet management's expectations, especially if the organization has no corporate code of ethics and no strong examples of senior management practicing ethical behaviour
- Employees must have a knowledgeable resource to discuss perceived unethical practices: a manager, Legal or Internal Audit Department, Business Unit's legal counsel or anonymously through internal Web site

Improving Business Ethics

Question	Yes	No
Does your organization have a code of ethics?		
Do employees know how and to whom to report any infractions of the code of ethics?		
Do employees feel that they can report violations of the code of ethics safely and without fear of retaliation?		
Do employees feel that action will be taken against those who violate the code of ethics?		
Do senior managers set an example by communicating the code of ethics and using it in their own decision making?		
Do managers evaluate and provide feedback to employees on how they operate with respect to the values and principles in the code of ethics?		
Are employees aware of sanctions for breaching the code of ethics?		
Do employees use the code of ethics in their decision making?		

Managers Checklist for establishing an ethical work environment

Including Ethical Considerations in Decision Making

- Decision making process generally follow five steps
 - Develop problem statement
 - Identify alternatives
 - Evaluate and choose alternative
 - Implement decision
 - Evaluate results

Including Ethical Considerations in Decision Making

- **Develop problem statement:**
 - A problem statement is a clear, concise description of the issue that needs to be addressed
 - A good problem statement answers the following questions:
 - What do people observe that causes them to think there is a problem?
 - Who is directly affected by the problem?
 - Is anyone else affected?
 - How often does the problem occur?
 - What is the impact of the problem?
 - How serious is the problem?

Including Ethical Considerations in Decision Making

- It is the most critical step in the decision-making process
- Without a clear statement of the problem or the decision to be made, it is useless to proceed
- If the problem is stated incorrectly, the chances of solving the real problem are greatly diminished
- Carefully gather and check key facts for validity to develop good problem statement; Do not make any assumptions
- Seek information and opinions from a variety of people to broaden your frame of reference

Including Ethical Considerations in Decision Making

- **Identify alternatives:**
 - During this stage, we identify several alternative solutions to the problem
 - Brainstorming with others will increase your chances of identifying a broad range of alternatives and determining the best solution
 - During any brainstorming process, try not to be critical of ideas, as any negative criticism will tend to shut down the discussion, and the flow of ideas will dry up; Simply write down the ideas as they are suggested and ask questions only to gain a clearer understanding of the proposed solution

Including Ethical Considerations in Decision Making

- **Evaluate and Choose alternative:**
 - The set of alternatives must be evaluated based on numerous criteria, such as effectiveness of addressing the issue, the extent of risk associated with each alternative, cost, and time to implement
 - An alternative that sounds attractive but that is not feasible will not help solve the problem
 - As part of the evaluation process various laws, guidelines, and principles may apply; You certainly do not want to violate a law that can lead to a fine or imprisonment for yourself or others

Including Ethical Considerations in Decision Making

- Consider the likely consequences of each alternative from several perspectives: What is the impact on you, your organization, other stakeholders (including your suppliers and customers), and the environment? Does this alternative do less harm than other alternatives?
- The alternative selected should
 - be ethically and legally defensible to a collection of your co-workers, peers, and your profession's governing body of ethics
 - be consistent with the organization's policies and code of ethics
 - take into account the impact on others
 - provide a good solution to the problem

Including Ethical Considerations in Decision Making

- **Implement Decision:**

- Once an alternative is selected, it should be implemented in an efficient, effective, and timely manner
- Implementation makes changes; The bigger the change, the greater the resistance to it; Communication is the key to helping people accept a change; Stakeholders must be given answer to the following questions:
 - Why are we doing this?
 - What is wrong with the current way we do things?
 - What are the benefits of the new way for you?

Including Ethical Considerations in Decision Making

- A transition plan must be defined to explain to people how they will move from the old way of doing things to the new way
- It is essential that the transition be seen as relatively easy and pain free
- It may be necessary to train the people affected, provide incentives for making the change in a successful fashion, and modify the reward system to encourage new behaviors consistent with the change

Including Ethical Considerations in Decision Making

- **Evaluate Results:**

- The implemented alternate is monitored to see if the desired effect was achieved and observe its impact on the organization and the various stakeholders
- This evaluation may indicate that further refinements are needed; If so, return to the problem development step, refine the problem statement as necessary, and work through the process again
- We may also need to redo some of the implementation steps if the alternate was implemented in a poor fashion so the desired results were not achieved

Ethics in Information Technology

- The growth of the Internet and social networks; the ability to capture, store, and analyse vast amounts of personal data; and a greater reliance on information systems in all aspects of life have increased the risk that information technology will be used unethically
- Some examples that raise public concern about the ethical use of information technology:
 - Governments around the world have implemented various systems that enable the surveillance of their citizens and are struggling to achieve the proper balance between privacy and security

Ethics in Information Technology

- Many employees have their email and Internet access monitored while at work from employers
- Millions of people have downloaded music and movies at no charge violating copyright laws
- Organizations contact millions of people worldwide through unsolicited email (spam) and text messages
- Hackers break into databases of financial and retail institutions to steal customer information and then use it to commit identity theft
- Students have been caught plagiarizing content for their term papers
- Websites use cookies and spywares to track their online purchases and activities of customers

Managing IT Worker Relationship

- IT workers typically become involved in many different work relationships, including those with employers, clients, suppliers, other professionals, IT users, and society at large
- In each relationship, an ethical IT worker acts honestly and appropriately

Managing IT Worker Relationship

- **Relationship Between IT Workers and Employers:**
 - IT workers and employers have a critical, multifaceted relationship that requires ongoing effort by both parties to keep it strong; They typically agree on the fundamental aspects of this relationship before the worker accepts an employment offer
 - These issues may include job title, general performance expectations, specific work responsibilities, drug-testing requirements, dress code, location of employment, salary, work hours, and company benefits

Managing IT Worker Relationship

- Many other aspects of this relationship may be addressed in a company's policy and procedures manual or in the company's code of conduct, if one exists; Such manual or code of conduct might include protection of company secrets; vacation policy; time off allowed for a funeral or an illness in the family; tuition reimbursement; and use of company resources, including computers and networks
- Other aspects of this relationship develop over time, depending on circumstances; Some aspects are addressed by law; Some issues are specific to the role of the IT worker and are established based on the nature of the work or project (for example, programming language to be used)

Managing IT Worker Relationship

- IT workers must set an example and enforce policies regarding the ethical use of IT
- IT workers often have the skills and knowledge to abuse systems and data or to enable others to do so; Software piracy is an area in which IT workers may be tempted to violate laws and policies
- **Trade secrecy** is another area that can present challenges for IT workers and their employers
 - Employers worry that employees may reveal trade secrets to competitors, especially if they leave the company
 - Companies often require employees to sign confidentiality agreements and promise not to reveal the company's trade secrets

Managing IT Worker Relationship

- Another issue that can create friction between employers and IT workers is **whistleblowing**
 - Whistle-blowing is an effort by an employee to attract attention to a negligent, illegal, unethical, abusive, or dangerous act by a company that threatens the public interest
 - Whistle-blowers often have special information based on their expertise or position
 - The employee might report problem to people outside the company, including state or federal agencies that have jurisdiction
 - Obviously, such actions could have negative consequences on the employee's job, perhaps resulting in retaliation and firing

Managing IT Worker Relationship

- **Relationship Between IT Workers and Clients:**
 - IT workers provide services to clients; Sometimes clients are co-workers who are part of the same company or part of a different company
 - In relationships between IT workers and clients, each party agrees to provide something of value to the other; Generally speaking, the IT worker provides hardware, software, or services at a certain cost and within a given time frame; The client provides compensation, access to key contacts, and perhaps a work space; This relationship is usually documented in contractual terms; The two parties must work together to be successful

Managing IT Worker Relationship

- Typically, the client makes decisions about a project on the basis of information, alternatives, and recommendations provided by the IT worker
- The client trusts the IT worker to use his or her expertise and to act in the client's best interests
- The IT worker must trust that the client will provide relevant information, listen to and understand what the IT worker says, ask questions to understand the impact of key decisions, and use the information to make wise choices among various alternatives
- The responsibility for decision making is shared between the client and the IT worker

Managing IT Worker Relationship

- Ethical problems arise with the relationship between IT workers and their clients if IT consultants or auditors recommend their own products and services or those of an affiliated vendor to remedy a problem they have detected; Creates a conflict of interest
- Problems can also arise during a project if IT workers do not provide full and accurate reporting of the project's status; After the truth comes out, finger-pointing and heated discussions about cost overruns, missed schedules, and technical incompetence can lead to charges of **fraud, misrepresentation, and breach of contract**
 - **Fraud** is the crime of obtaining goods, services, or property through deception or trickery

Managing IT Worker Relationship

- **Misrepresentation** is the misstatement or incomplete statement of a material fact; If the misrepresentation causes the other party to enter into a contract, that party may have the legal right to cancel the contract or seek reimbursement for damages
- **Breach of contract** occurs when one party fails to meet the terms of a contract; Further, a **material breach of contract** occurs when a party fails to perform certain express or implied obligations, which impairs or destroys the essence of the contract; In case of material breach of contract, the non-breaching party can either: (1) rescind the contract, seek restitution of any compensation paid under the contract to the breaching party, and be discharged from any further performance under the contract or (2) treat the contract as being in effect and sue the breaching party to recover damages

Managing IT Worker Relationship

- When IT projects go wrong, aggrieved parties might charge fraud, fraudulent misrepresentation, and/or breach of contract; The vast majority of such disputes are settled out of court, and the proceedings and outcomes are concealed from the public; IT vendors have become more careful about protecting themselves from major legal losses by requiring that contracts place a limit on potential damages
- Most IT projects are joint efforts in which vendors and customers work together; Assigning fault when such projects go wrong can be difficult

Managing IT Worker Relationship

- Frequent causes of problems in IT projects include the following
 - **Scope creep** – Changes to the scope of the project or the system requirements
 - **Poor communication** – Miscommunication or a lack of communication between customer and vendor
 - **Delivery of an obsolete solution** – The vendor delivers a system that meets customer requirements, but a competitor comes out with a system that offers more advanced and useful features
 - **Legacy systems** – Customer fails to reveal information about legacy systems or databases that must connect with the new hardware or software at the start of a project and implementation becomes extremely difficult

Managing IT Worker Relationship

- **Relationship Between IT Workers and Suppliers:**
 - IT workers deal with many different hardware, software, and service providers
 - Building a good working relationship with suppliers encourages the flow of useful communication as well as the sharing of ideas; Such information can lead to innovative and cost-effective ways of using the supplier's products and services
 - IT workers can develop good relationships with suppliers by dealing fairly with them and not making unreasonable demands; Aggressive behavior does not help build a good working relationship

Managing IT Worker Relationship

- Suppliers strive to maintain positive relationships with their customers in order to make and increase sales; To achieve this goal, they may sometimes engage in unethical actions – for example, offering an IT worker a gift that is actually intended as a bribe; IT workers should not accept a bribe from a vendor, and they must be careful when considering what constitutes a bribe; For example, expensive dinner invitations may seem innocent, but may be perceived as bribery
- **Bribery** is the act of providing money, property, or favors to someone in business or government in order to obtain a business advantage; The person who offers a bribe commits a crime and the recipient is guilty of a crime

Managing IT Worker Relationship

- In some countries, gifts are an essential part of doing business; But, at what point does a gift become a bribe, and who decides?
- The table below shows the key distinctions between bribes and gifts

Bribes	Gifts
Are made in secret, as they are neither legally nor morally acceptable	Are made openly and publicly, as a gesture of friendship or goodwill
Are often made indirectly through a third party	Are made directly from donor to recipient
Encourage an obligation for the recipient to act favorably toward the donor	Come with no expectation of a future favor for the donor

Managing IT Worker Relationship

- **Relationship Between IT Workers and other Professionals:**
 - Professionals often feel a degree of loyalty to the other members of their profession; As a result, they are often quick to help each other obtain new positions but slow to criticize each other in public
 - Professionals also have an interest in their profession as a whole, because how it is perceived affects how individual members are viewed and treated
 - Professionals owe each other an adherence to the profession's code of conduct
 - Experienced professionals can also serve as mentors and help develop new members of the profession

Managing IT Worker Relationship

- A number of ethical problems can arise among members of the IT profession
 - **Resume Inflation:** Resume inflation involves lying on a resume claiming competence in an IT skill that is in high demand; An IT worker might benefit in the short term from exaggerating his or her qualifications, such an action can hurt the profession and the individual in the long run; Many employers consider lying on a resume as grounds for immediate dismissal; Some studies have shown that around 30 percent of all U.S. job applicants exaggerate their accomplishments, while roughly 10 percent “seriously misrepresent” their backgrounds

Managing IT Worker Relationship

Area of exaggeration	Frequency (%)	How to uncover the truth
Embellished skill set	57	Verification of licenses and/or certifications with accrediting agency
Embellished responsibilities	55	Thorough background and reference checks
Dates of employment	42	Thorough background and reference check
Job title	34	Thorough background and reference check
Academic degrees earned	33	Verification of education claims with educational institutions
Companies worked for	26	Thorough background and reference check
Accolades/Awards	18	Thorough background and background check

Table: Most frequent areas of resume falsehood or exaggeration

Managing IT Worker Relationship

- **Sharing Corporate Information:** Because of their roles, IT workers may have access to corporate databases of private and confidential information about employees, customers, suppliers, new product plans, promotions, budgets, and so on; It might be sold to other organizations or shared informally during work conversations with others who have no need to know; Revealing such private or confidential information is grounds for termination in many organizations and could even lead to criminal charges

Managing IT Worker Relationship

- **Relationship Between IT Workers and IT Users:**
 - The term IT user refers to a person who uses a hardware or software product; IT users need the product to deliver organizational benefits or to increase their productivity
 - IT workers develop, install, service, and support the product and services for IT users based on needs and capabilities of the IT users that best meet their needs; They also have a key responsibility to establish an environment that supports ethical behaviors by users; such as discourages software piracy, minimizes the inappropriate use of corporate computing resources, and avoids the inappropriate sharing of information

Managing IT Worker Relationship

- **Relationship Between IT Workers and Society:**
 - Society expects significant benefits and not to cause harm through IT worker's actions; This expectation is met by establishing and maintaining professional standards that protect the public
 - The actions of an IT worker can affect society; For example, a systems analyst may design a computer-based control system and failure or an error in the system may put workers or people at risk; IT workers have a relationship with members of society
 - There are a number of professional organizations that provide useful professional codes of ethics to guide actions that support the ethical behavior of IT workers

Encouraging Professionalism of IT Workers

- A professional is one who possesses the skill, good judgment, work habits and has the training and experience to do a job well
- Organizations – including many IT organizations – are desperately seeking workers who have the following characteristics of a professional:
 - Expert in the tools and skills needed to do their job
 - Adhere to high ethical and moral standards
 - Produce high quality results
 - Meet their commitments
 - Communicate effectively
 - Train and develop others who are less skilled or experienced

Encouraging Professionalism of IT Workers

- IT workers of all types can improve their profession's reputation for professionalism by
 1. subscribing to a professional code of ethics
 2. joining and participating in professional organizations
 3. obtaining appropriate certifications, and
 4. supporting government licensing where available

Encouraging Professionalism of IT Workers

- **Professional Code of Ethics:**
 - A professional code of ethics states the principles and core values that are essential to the work of a particular occupational group
 - Practitioners in many professions subscribe to a code of ethics that governs their behavior
 - Most codes of ethics created by professional organizations have two main parts: The first outlines what the organization aspires to become and the second typically lists rules and principles by which members of the organization are expected to abide
 - Many codes also include a commitment to continuing education for those who practice the profession

Encouraging Professionalism of IT Workers

- Following a professional code of ethics can produce benefits to individual, profession, and the society:
 - Ethical decision making – Adherence to a professional code of ethics means that practitioners use a common set of core values and beliefs as a guideline for ethical decision making
 - High standards of practice and ethical behavior – Adherence to a code of ethics reminds professionals the responsibilities and duties
 - Trust and respect from the general public – Adherence to a code of ethics enhances public trust and respect for professionals and their profession
 - Evaluation benchmark – A code of ethics provides an evaluation benchmark that a professional can use as a means of self-assessment

Encouraging Professionalism of IT Workers

- **Professional Organizations:**

- No single formal organization of IT professionals has emerged as preeminent, so there is no universal code of ethics for IT workers
- IT workers need network with others, seek out new ideas, and continually build on their personal skills and expertise; Membership in an organization enables you to associate with others of similar work experience, develop working relationships, and exchange ideas; These organizations disseminate information through email, periodicals, websites, social media, meetings, and conferences; Many of organizations have also developed codes of ethics

Encouraging Professionalism of IT Workers

- Four of the most prominent IT-related professional organizations are:

1. **Association for Computing Machinery (ACM)** – The ACM was founded in 1947 under the name *Eastern Association for Computing Machinery*, which was changed the following year to the Association for Computing Machinery. ACM is a US-based international learned society for computing. It is the world's largest scientific and educational computing society. The ACM is a non-profit professional membership group, claiming nearly 100,000 student and professional members as of 2019. Its headquarters are in New York City. The ACM is an umbrella organization for academic and scholarly interests in computer science. Its motto is "Advancing Computing as a Science & Profession". (www.acm.org)

Encouraging Professionalism of IT Workers

- 2. Institute of Electrical and Electronics Engineers Computer Society (IEEE-CS):** The Institute of Electrical and Electronics Engineers (IEEE) covers the broad fields of electrical, electronic, and information technologies and sciences. The IEEE-CS is one of the oldest and largest IT professional associations, with about 60,000 members; Founded in 1946, the IEEE-CS is the largest of the 38 societies of the IEEE. The society sponsors many conferences, applications-related and research-oriented journals, local and student chapters, technical committees, and standards working groups. (www.computer.org)

Encouraging Professionalism of IT Workers

- 3. Association of Information Technology Professionals (AITP):** AITP started in Chicago in 1951, when a group of machine accountants got together and decided that the future was bright for the IBM punched-card tabulating machines they were operating – a precursor of the modern electronic computer. They were members of a local group called the Machine Accountants Association (MAA), which first evolved into the Data Processing Management Association in 1962 and finally the AITP in 1996. The AITP provides IT-related seminars and conferences, information on IT issues, and forums for networking with other IT workers. Its mission is to provide superior leadership and education in information technology, and one of its goals is to help members make themselves more marketable within their industry. (<https://www.aitp.org>)

Encouraging Professionalism of IT Workers

- 4. SysAdmin, Audit, Network, Security (SANS) Institute:**
The SANS Institute provides information security training and certification for a wide range of individuals, such as auditors, network administrators, and security managers. Each year, its programs train some 12,000 people, and a total of more than 165,000 security professionals around the world have taken one or more of its courses. SANS publishes a semiweekly news digest (NewsBites), a weekly security vulnerability digest (@Risk), and flash security alerts. At no cost, SANS makes available a collection of some 1,200 research documents about various information security topics. SANS also operates Internet Storm Center – a program that monitors malicious Internet activity and provides a free early warning service to Internet users – and works with Internet service providers to thwart malicious attackers. (www.sans.org)

Encouraging Professionalism of IT Workers

- **Certification:**

- Certification indicates that a professional possesses a particular set of skills, knowledge, or abilities, in the opinion of the certifying organization
- Unlike licensing, which applies only to people and is required by law, certification can also apply to products and is generally voluntary
- IT-related certifications may or may not include a requirement to adhere to a code of ethics, whereas such a requirement is standard with licensing
- Numerous companies and professional organizations offer certifications, and opinions are divided on their values of these certifications

Encouraging Professionalism of IT Workers

- Many employers view certifications as a benchmark that indicates mastery of a defined set of basic knowledge; Some employers, on the other hand, are rather cynical about the value of certifications because certification is no substitute for experience and doesn't guarantee that a person will perform well on the job
- Most IT employees are motivated to learn new skills, and certification for recognition and careers; Others view certification as just another means for product vendors to generate additional revenue with little merit attached

Encouraging Professionalism of IT Workers

- Deciding on the best IT certification – and even whether to seek a certification – depends on the individual's career aspirations, existing skill level, and accessibility to training; The questions that should be considered are:
 - Is certification relevant to your current job or the one to which you aspire?
 - Does the company offering the certification have a good reputation?
 - What is the current and potential future demand for skills in this area of certification?

Encouraging Professionalism of IT Workers

Category	Certification	Certifying organization
Security	CompTIA Security+	Computer Technology Industry Association
Security	Certified Security Analyst	International Council of E-commerce Consultants (EC)
Forensics	Certified Computer Examiner	The International Society of Forensic Computer Examiners
Governance	Certified in the Governance of Enterprise IT	ISACA
Project management	Project Management Professional	Project Management Institute

Common IT industry certifications

Encouraging Professionalism of IT Workers

– Vendor Certification:

- Many IT vendors – such as Cisco, IBM, Microsoft, SAP, and Oracle – offer certification programs for those who use their products; Those who successfully complete the program can represent themselves as certified users of a manufacturer's product
- Depending on the job market and the demand for skilled workers, some certifications might substantially improve an IT worker's salary and career prospects
- To become certified, one must pass a written exam; a few certifications also require a hands-on lab exam that demonstrates skills and knowledge; It can take years to obtain the necessary experience required for some certifications

Encouraging Professionalism of IT Workers

- Courses and training material are available to help speed up the preparation process, but such support can be expensive

Category	Certification
MAC OS X	Apple Certified Technical Coordinator
Cisco Hardware	Cisco Certified Design Associate
Cisco Networking	Cisco Certified Network Professionals
Cisco Networking	Cisco Certified Internetwork Expert
Microsoft Products	Microsoft Certified Professional
Citrix Products	Citrix Certified Administrator (CCA)
Oracle Database	Oracle Database 12c: Certified Expert Performance Management and Tuning
Salesforce software	Salesforce.com Certified Administrator

Common vendor-specific certifications for IT workers

Encouraging Professionalism of IT Workers

- **Government Licensing of IT Professionals:**
 - A government license is government-issued permission to engage in an activity or to operate a business
 - The goal is to protect public health, safety, or welfare
 - Licensing often requires that the recipient pass a test of some kind
 - Some professionals must be licensed, including certified public accountants (CPAs), lawyers, doctors, various types of medical and daycare providers, and some engineers

Encouraging Professionalism of IT Workers

– The Case for Licensing IT Workers:

- Failures to software systems can result in human injury or even death
- As a result of the increasing importance of IT in our everyday lives, the development of reliable, effective information systems has become an area of mounting public concern
- Licensing of IT workers would strongly encourage IT workers to follow the highest standards of the profession and practice a code of ethics
- Without licensing, there are no clear, well-defined requirements for heightened care and no concept of professional malpractice

Encouraging Professionalism of IT Workers

– Issues associated with government licensing of IT Workers:

- There are few licensing programs for IT professionals
- No universally accepted core body of knowledge
- Unclear who should manage content and administration of licensing exams
- No administrative body to accredit professional education programs
- No administrative body to assess and ensure competence of individual workers

Encouraging Professionalism of IT Workers

– IT Professional Malpractice:

- **Negligence** is defined as not doing something that a reasonable person would do or doing something that a reasonable person would not do
- **Duty of care** refers to the obligation to protect people against any unreasonable harm or risk
- If a court finds that a defendant actually owed a duty of care, it must then determine whether the duty was breached; A **breach of the duty of care** is the failure to act as a reasonable person would act
- Professionals who breach the duty of care are liable for injuries that their negligence causes; This liability is commonly referred to as **professional malpractice**

Encouraging Ethical use of IT Resources among Users

- IT users face many ethical issues and organizations can encourage the ethical use of IT by their employees as more companies allows to access corporate information systems, data, and the Internet using smartphones, tablets, and laptops along with PCs, and other devices
- **Common Ethical issues for IT Users:**
 - **Software Piracy:**
 - **Software piracy** is a term used to describe the act of illegally using, copying or distributing software without ownership or legal rights; Corporate IT usage policies and management should encourage users to report instances of piracy and to challenge its practice

Encouraging Ethical use of IT Resources among Users

– Inappropriate Use of Computing Resources:

- Some employees use their computers to surf popular websites that have nothing to do with their jobs, participate in chat rooms, view pornographic sites, and play computer games
- These activities erode worker's productivity and waste time
- Furthermore, activities such as viewing sexually explicit material, sharing lewd jokes, and sending hate email could lead to lawsuits and allegations that a company allowed a work environment conducive to racial or sexual harassment

Encouraging Ethical use of IT Resources among Users

– Inappropriate Sharing of Information:

- Every organization stores vast amounts of information that can be classified as either **private** or **confidential**
- **Private data** include data about employees and customers; **Confidential information** describes a company and its operations, including sales and promotion plans, staffing projections, manufacturing processes, product formulas, tactical and strategic plans, and research and development
- An IT user who shares this information with an unauthorized party, even inadvertently, has violated someone's privacy or created the potential that company information could fall into the hands of competitors

Encouraging Ethical use of IT Resources among Users

- **Supporting Ethical Practice of IT Users:**
 - Since, the growing use of IT has increased the potential for new ethical issues and problems, many organizations develop **policies** to protect against abuses
 - Although policy cannot stop wrongdoers, it can set forth the general rights and responsibilities of all IT users, establish boundaries of acceptable and unacceptable behavior, and enable management to punish violators
 - Adherence to a policy can improve services to users, increase productivity, and reduce costs

Encouraging Ethical use of IT Resources among Users

- Companies can take several actions when creating an IT usage policy as discussed below.
- **Establishing Guidelines for Use of Company Hardware and Software:**
 - Company provides clear rules that govern the use of computers and associated software at home; Companies negotiate contracts with software manufacturers and provide PCs and software so that IT users can work at home; Other companies help employees buy hardware and software at corporate discount rates
 - The goal should be to ensure that employees have legal copies of all the software they need to be effective, regardless of whether they work in an office, on the road, or at home

Encouraging Ethical use of IT Resources among Users

– Defining an Acceptable Use Policy:

- An acceptable use policy (AUP) is a document that stipulates restrictions and practices that a user must agree to in order to use organizational computing and network resources
- It is an essential information security policy
- Most organizations require that employees sign an acceptable use policy before being granted a user or network ID
- An effective acceptable use policy is clear and concise and contains the following five key elements:
 1. Purpose of the AUP – Why is the policy needed and what are its goals?
 2. Scope – Who and what is covered under the AUP?

Encouraging Ethical use of IT Resources among Users

3. Policy – How are both acceptable use and unacceptable use defined; what are some examples of each?
 4. Compliance – Who is responsible for monitoring compliance and how will compliance will be measured?
 5. Sanctions – What actions will be taken against an individual who violates the policy?
- Members of the legal, human resources, and information security groups are involved in creating the AUP; It is the organization's information security group that is responsible for monitoring compliance to the AUP; Information security (infosec) group's responsibilities include managing the processes, tools, and policies necessary to prevent, detect, document, and counter threats to digital and nondigital information, whether it is in transit, being processed, or at rest in storage

Encouraging Ethical use of IT Resources among Users

Table: Managers checklist for establishing an IT usage policy

Question	Yes	No
Is there a statement that explains the need for an IT usage policy?		
Does the policy provide a clear set of guiding principles for ethical decision making?		
Is it clear how the policy applies to the following types of workers? <ul style="list-style-type: none">• Employees• Part-time workers• Temps• Contractors		

Encouraging Ethical use of IT Resources among Users

Does the policy address the following issues?

- Protection of the data privacy rights of employees, customers, suppliers, and others
- Control of access to proprietary company data and information
- Use of unauthorized or pirated software
- Employee monitoring, including email, wiretapping and eavesdropping on phone conversations, computer monitoring, and surveillance by video
- Respect of the intellectual rights of others, including trade secrets, copyrights, patents, and trademarks
- Inappropriate use of IT resources, such as Web surfing, personal emailing, and other use of computers for purposes other than business
- The need to protect the security of IT resources through adherence to good security practices, such as not sharing user IDs and passwords, using “hard-to-guess” passwords, and frequently changing passwords
- The use of the computer to intimidate, harass, or insult others through abusive language in emails and by other means

Are disciplinary actions defined for IT-related abuses?

Is there a process for communicating the policy to employees?

Is there a plan to provide effective, ongoing training relative to the policy?

Has a corporate firewall been implemented?

Is the corporate firewall maintained?

Encouraging Ethical use of IT Resources among Users

- Structuring Information Systems to Protect Data and Information:**
 - Organizations must implement systems and procedures that limit data access to just those employees who need it
- Installing and Maintaining a Corporate Firewall:**
 - A firewall is hardware or software (or a combination of both) that serves as the first line of defense between an organization's network and the Internet; A firewall also limits access to the company's network based on the organization's Internet-usage policy
 - A firewall can be configured to serve as an effective deterrent to unauthorized web surfing by blocking access to specific objectionable websites, incoming email from certain websites, emails with certain kinds of attachments, companies, or users

Encouraging Ethical use of IT Resources among Users

– Compliance:

- Compliance means to be in accordance with established policies, guidelines, specifications, or legislation
 - DoD 5015 (U.S. Department of Defense's Design Criteria Standard for Electronic Management Software applications) standard defines mandatory functional requirements for records management software used within the Department of Defense
 - Oxley Act of 2002 defines requirements for a system of internal control to govern the creation and documentation of accurate and complete financial statements
 - U.S. Health Insurance Portability and Accountability Act of 1996 (HIPAA) requires employers to ensure the security and privacy of employee healthcare data

Encouraging Ethical use of IT Resources among Users

- Failure to be in compliance with specific pieces of legislation can lead to criminal or civil penalties specified in that legislation; Failure to be in compliance with legislation can also lead to lawsuits or government fines
- Major challenge to comply with multiple government and industry regulations that are sometimes in conflict, frequently modified and updated; To meet this challenge:
 - Implement software to track and record compliance actions like frequent updates
 - Hire management consultants for advice and training
 - Create Chief Compliance Officer position

Encouraging Ethical use of IT Resources among Users

- Organizations establish audit committees; Audit committee is a subset of the board of directors with oversight for the following activities:
 - The quality and integrity of the organization's accounting and reporting practices and controls, including financial statements and reports
 - The organization's compliance with legal and regulatory requirements
 - The qualifications, independence, and performance of the company's independent auditor (a certified public accountant who is not associated with the company)
 - The performance of the company's internal audit team
- In some cases, audit committees have uncovered violations of law and have reported their findings to appropriate law enforcement agencies

Encouraging Ethical use of IT Resources among Users

- In addition to an audit committee, most organizations also have an internal audit department whose primary responsibilities include the following:
 - Determine that internal systems and controls are adequate and effective
 - Verify the existence of company's assets and maintain proper safeguards over their protection
 - Measure the organization's compliance with its own policies and procedures
 - Ensure that institutional policies and procedures, appropriate laws, and good practices are followed
 - Evaluate the adequacy and reliability of information available for management decision making