

**UNIT IV**  
**SAFETY, RESPONSIBILITIES AND RIGHTS**

**Safety and Risk – Assessment of Safety and Risk – Risk Benefit Analysis and Reducing Risk -Respect for Authority – Collective Bargaining – Confidentiality – Conflicts of Interest – Occupational Crime – Professional Rights – Employee Rights – Intellectual Property Rights (IPR) – Discrimination.**

**SAFETY AND RISK :**

Safety is always of prime concern. Everyone demands safe products and serious in order to avoid harm. The concept of safety varies from person to person because of different perception. For example, a sharp cutting tool in the hands of a child will never be safe as it can be in the hands of an adult. Of-course one has to pay for safety. Absolute safety which satisfies all individual under all conditions is not at all possible.

**CONCEPT OF SAFETY:**

- There are various approached for defining concept of safety.

According to William W.Lowrance- " A thing is safe if its risks are judged to be acceptable". The judgement about safety are value judgement.

The Lawrence definition of safety can be modified after considering these conditions

**(1) When the risk is underestimate**

- For example, we buy an electric iron by judging that it is very safe. But while using it we get hospitalized on getting a serious electric shock. Then we realize that we were wrong in our earlier judgement.

**(2) When the risk is overestimated**

- For example, we unnecessary think that fluoride in drinking water will kill us. As per Lawrance definition the fluoride water is unsafe hence judge its risks to be unacceptable. But our ordinary concept of safety allows us to consume water inspite of such irrational judgements.

**(3) When no judgement about risks are made**

- For example, we never think about the safety of vehicle we drive i.e. we simply do not think about it. By Lowrance definition-the vehicle is neither safe nor unsafe.
- These must be some outside mechanism to decide whether our judgements about safety are correct and about acceptable risk.

The modified definition of safety is –

A thing is safe if, its risks were fully known and the risks must be judged acceptable in the light of settled value principles.

- Safety is frequently expressed in terms of degree and comparisons. Frequently the word a like-fairly safe, relatively safe are used. It indicates the degree to which an individual judge on the basis of their settled values and decide that the risks of any thing are more or less acceptable in comparison with the risks of other thing. For example, travelling by air is safer than travelling by road.

**RISKS:**

- A risk is the possibility that something unwanted and harmful may happen. We take risk when we use something which is not safe. The risk may include badly harm, economic loss or environmental degradation. Ultimately risks may cause
  - Delay in job completion
  - Faulty products
  - Uneconomical solutions
    - Environmental injury
    - Technological problems
  - Safety is prime concern on good engineering practice. Now the effects from new technology also causing 'new risks'. They are called as new because -
    1. They are now identifiable. The effects have crossed certain threshold in the environment. Also because of changes in risks measuring techniques and the magnitude of the risks it has.
    2. Changed public perception.

The public perception has changed because of education experience and media attention.

- Certain natural hazards like flood can be greatly reduced. Disaster also emerges due to combination of factors hence the risk.

#### **ACCEPTABILITY OF RISKS:**

- William Rowe defines the acceptability of risk as "A risk is acceptable when the affected are not afraid about it".
- The fearness is dependant on how the risk is received and tackled. The risk is influenced by following factors.
  - a. Whether the risks is voluntary
  - b. Knowledge of harm from risk
  - c. Job related risks
  - d. Effects of risky situation

#### **LESSONS FOR ENGINEER:**

- The engineer's face two major problems with public conceptions of safety.

##### **1. Optimistic attitude :**

- The optimistic attitude about the situation i.e. things are familiar and have not hurted us before. Also we have better control it hence no real risks.

##### **2. Feared attitude :**

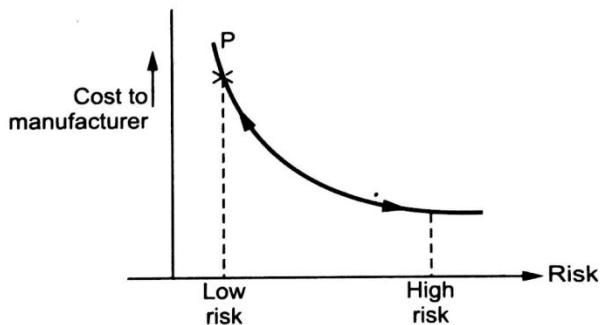
- The feared people feel that an accident which harms or kills occur infrequently.
- The experienced industrial workers think that those who fear the effects of air pollution, toxic wastes are emotional. This is actually misinterpretations by thoughtful citizens. An engineer must be aware by such misperceptions and should consider this view in their design. It is not advisable to assume that education will change the public's view of underestimation or overestimation of risks.

#### **ASSESSMENT OF SAFETY AND RISK:**

- Absolute safety can not be achieved and of course improved safety in engineering costs more. Besides the products which are not safe costs more in terms of warranty expenses, loss of customer and goodwill losses due to injuries, losses because of downtime of machines etc. Hence for an engineering concern and customer it is necessary to reach some understanding of risks and costs associated to reduce it. The costs associated with high safety is called as **primary cost** while costs associated with high risk (low safety) is called as **secondary cost**. The secondary cost includes warranties, loss of customer and goodwill, down time of machines, while primary costs are products costs and of safety measures.

#### Primary cost curve :

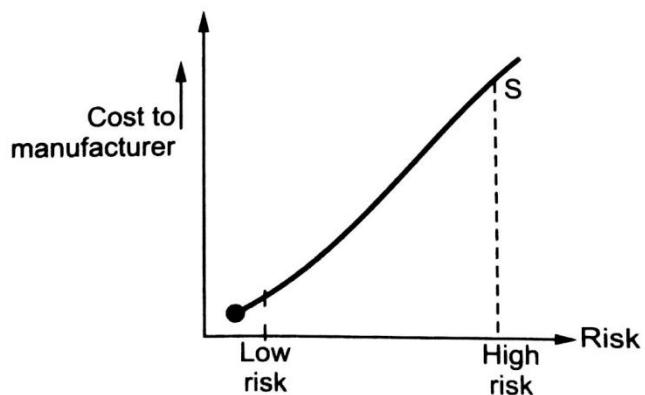
- Fig. shows primary cost course. It is a curve between risk and cost to manufacturer. Initially, the cost to manufacturer higher risk is low and it increases with reductions in risk.



**Fig. Primary cost curve**

#### Secondary cost curve

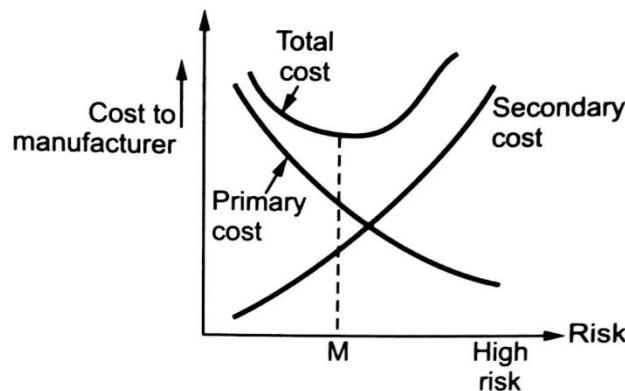
- The secondary curve is shown in Fig. The secondary cost had low initial or product cost with high risk and low safety.



**Fig. Secondary cost curve**

## Total cost

- The point where slope of primary and secondary cost curves are equal in magnitude but opposite in direction is called as **minimal total cost**.



**Fig. Total cost curve**

- When all costs are quantifiable, then the minimum total cost is the ultimate goal. Because at minimum total cost (M), the incremental saving in primary cost (slope of p) are nullified by an equal incremental increase in secondary cost (slope of s). The highest acceptable risk must be below this point M because at this point minimum risk occurs at minimum cost.

## Knowledge of Risk

- In engineering practice, the historical data and experience provides, better information about safety of product. The historical data is available in different forms at different sources. The required data can be collected. However there is lack of few data and information because –
  - Some industries are not freely showing the information available with them.
  - Energizing new technology, the data available for old technology is not useful.
- Some companies believe that releasing or showing technical information (experience) may affected their competitive position, the incompetent industries become competent to them.

## Uncertainties in Design

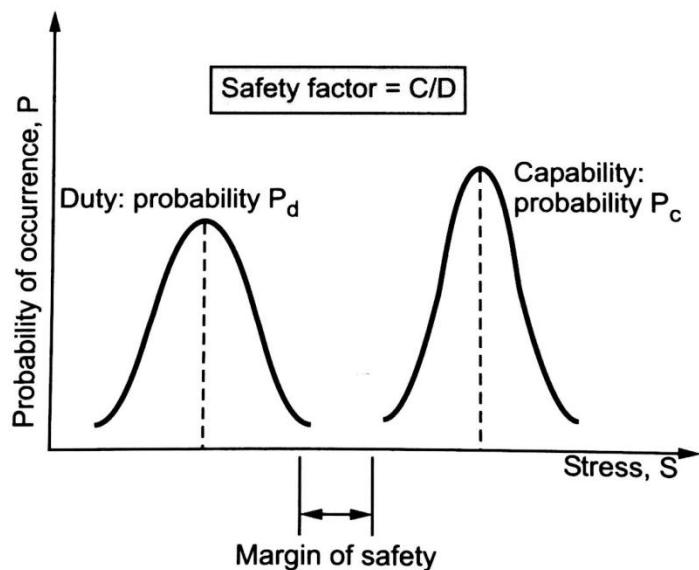
- Risk is not purposely designed for any product. The risk associated with any product is due to limitations or uncertainties faced by design engineer, application engineer or productions engineer. Also uncertainties like
  - Qualities of material used for product
  - Skill in designing



- Skill in manufacturing
- Environmental conditions
- Unaware about operating conditions.
- Also affects the product risk. The stresses due to anticipated duty and product capability also causes to added to the risk.
- Any problem is called as safe when its capability exceeds its duty or load. It requires exact knowledge of actual capability and actual duty. There may be variation in stress calculated by the engineer under specific conditions and the stress which is materializes. It is because of tolerances of the components used in the product.

### Probability Density Curves for Stress

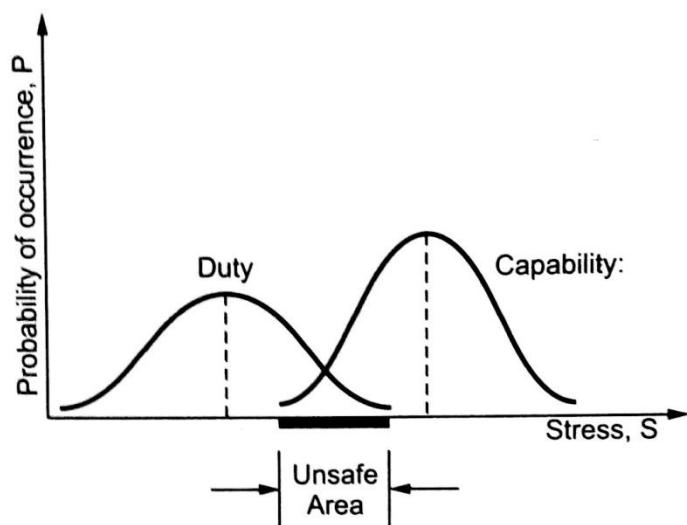
- In an engineering system the probability density (PD) curves for duty and capability are shown in Fig. The stress(s) is shown on x-axis and probability is shown on y-axis.



### Probability density curves

- The capability curve shows the relation between probability of capacity (strength) to corresponding stress, while the duty curve shows the stress under various load.
- The points C and D shows the peak values of the curves. The peak values are the **expected values** of capability and duty, while all other values over the curve are **nominal values**. The **safety factor** is curve defined as C/D.

- In reality the capability and duty curves take some flatter shape at its peak because of increased variances. When there is overlap in duty and capability stresses, the overlap portion is referred to as **unsafe area** and the gap between these curves is referred to as **margin of safety**.
  - Margin of safety is more exact measure of safety, But to measure it is a difficult task, Fig. shows duty and capability curves when both curves overlap and unsafe area is shown.



## Probability curves with margin of safety

## Testing for Safety

- Widely accepted measure of safety is 'safety factor' which has some conceptual ambiguities. The engineers can ensure safety by this experience also by the experience gained by other engineers, if the experience is shared properly. The most prominent way of gaining experience is through tests under specific conditions.
  - The information gained through tests is a valuable source of information. Various tests like destruction test, prototypes test, Fatigue test, repetitive test are used depending upon the product or working conditions of product.

### When Testing is Inappropriate

- All when products cannot be applied to destructive type of testing because of risky events. To avoid risk, different type of testings are applied.
    - a) Simulation
    - b) Scenario analysis
    - c) Failure mode
    - d) Effect analysis

## Testing strategies for safety

### Some commonly used testing methods:

Using the past experience in checking the design and performance.

**Prototype testing.** Here the one product tested may not be representative of the population of products. Tests simulated under approximately actual conditions to know the performance flaws on safety. Routine quality assurance tests on production runs.

The above testing procedures are not always carried out properly. Hence we cannot trust the testing procedures uncritically. Some tests are also destructive and obviously it is impossible to do destructive testing and improve safety.

In such cases, a simulation that traces hypothetical risky outcomes could be applied.

### Scenario Analysis (Event -> Consequences)

Failure Modes & Effects Analysis (Failure modes of each component)

### Fault Tree Analysis (System Failure -> Possible Causes at component level)

What if there is a combination of factors?

All Analysis pre-suppose a thorough understanding of the physical system

### Failure modes and effect analysis (FMEA) :

This approach systematically examines the failure modes of each component, without however, focusing on relationships among the elements of a complex system.

### Fault Tree Analysis (FTA) :

A system failure is proposed and then events are traced back to possible causes at the component level. The reverse of the fault-tree analysis is 'event – tree analysis'. This method most effectively illustrates the disciplined approach required to capture as much as possible of everything that affects proper functioning and safety of a complex system.

## RISK BENEFIT ANALYSIS AND REDUCING RISK :

Risk-benefit analysis is the comparison of the risk of a situation to its related benefits. For research that involves more than minimal risk of harm to the subjects, the investigator must assure that the amount of benefit clearly outweighs the amount of risk. Only if there is favorable risk benefit ratio, a study may be considered ethical.

### Risk Benefit Analysis Example

Exposure to personal risk is recognized as a normal aspect of everyday life. We accept a certain level of risk in our lives as necessary to achieve certain benefits. In most of these risks we feel as though we have some sort of control over the situation. For example, driving an automobile is a risk most people take daily. "The controlling factor appears to be their perception of their individual ability to manage the risk-creating situation." Analyzing the risk of a situation is, however, very dependent on the individual doing the analysis. When individuals are exposed to involuntary risk, risk which they have no control, they make risk aversion their primary goal. Under these circumstances individuals require the probability of risk to be as much as one thousand times smaller than for the same situation under their perceived control.

### Evaluations of future risk:

- Real future risk as disclosed by the fully matured future circumstances when they develop.
- Statistical risk, as determined by currently available data, as measured actuarially for insurance premiums.
- Projected risk, as analytically based on system models structured from historical studies.
- Perceived risk, as intuitively seen by individuals.

Air transportation as an example:

- Flight insurance company - statistical risk.
- Passenger - perceived risk.
- Federal Aviation Administration(FAA) - projected risks.

### How to Reduce Risk?

1. Define the Problem
2. Generate Several Solutions
3. Analyse each solution to determine the pros and cons of each
4. Test the solutions
5. Select the best solution
6. Implement the chosen solution
7. Analyse the risk in the chosen solution
8. Try to solve it. Or move to next solution.

#### **Risk-Benefit Analysis and Risk Management**

Informative risk-benefit analysis and effective risk management are essential to the ultimate commercial success of your product. We are a leader in developing statistically rigorous, scientifically valid risk-benefit assessment studies that can be used to demonstrate the level of risk patients and other decision makers are willing to accept to achieve the benefits provided by your product.

**Risk-Benefit** Systematically quantify the relative importance of risks and **Modeling** benefits to demonstrate the net benefits of treatment

**Risk-Benefit** Quantify patients' maximum acceptable risk for specific **Tradeoffs** therapeutic benefits

#### **RESPECT FOR AUTHORITY:**

- Most of us work for someone else. The companies we work for and the people we answer to are in positions of authority over us. But an alarming people have no regard for that authority. Employers must have legitimate authority over employees. Without lines of authority in an organization, everyone is free to do their own thing, and chaos would soon ensue. Authority can be categorized as
  1. Institutional authority
  2. Expert authority

#### **INSTITUTIONAL AUTHORITY:**

- Institutional authority is given to individuals to carry out their tasks within the institution. To achieve organization goal, authority relationship is required. Organization allows everyone to take decision in critical condition. For identifying the areas of personal responsibility and accountability, institutional authority is used.
- Institutional authority defined within the institutions. It is institutional right given to a people. Employee must exercise the power based on the resources of the institution. Within the organization different tasks are assigned to each employee according to their rank or post held. For example, manager tasks. It includes to allocate many, resource, to make policy decisions, projects and other related topics. To perform all these tasks by manager, organization given authority to manager i.e. requisite the authority.



## Expert Authority

- Expert authority derives from a special competence, knowledge or skill. Expert authority can exist in individuals who have no institutional authority. For example, health is doctors authority, transportation is civil engineer authority, computer software for computer engineer authority. Authority of leadership is one of the key competencies for any organization management. Institutional authority should not be equated with expert authority.

## Authority Versus Power

- Real power amounts to the ability to inspire, persuade or direct others to accomplish objectives. An individual might have a good deal of institutional authority and resources, but if he or she lacks leadership skills, can be quite ineffective in getting employees to produce for the company or organization or institution.
- Institution authority carries its allotment of the resources needed to complete tasks. On the other hand, someone having expert authority and respect of colleagues or even simply charisma might be able to motivate or otherwise persuade people to excel. Highly respected engineers of proven integrity may have power within an organization exceeding their explicit institutional rights.

## Morally Justified Authority

- Institutional authority is the right to exercise certain kinds of power. This rights is bestowed by the rules of the institution or organization, and duties falls on individuals because of the office they hold or because of the rights of others to direct them. But these are a creation of the institution and not a morally justified set of rights and duties. We are not saying that there is anything necessarily wrong or immoral about these institutional rights and duties. Institutional rights and duties are not synonymous with morally justified rights and duties. It is simply that they are not necessarily derived from widely held moral values. These rights and duties may be established as means to the end of meeting institutional goals. Before anyone could judge whether a particular act of institutional authority is morally justified, one would have to know
  - a) Whether the institutional goals themselves are morally defensible.
  - b) Whether that particular act violates basic moral duties.
- The relationship between moral rights and duties and institutional rights and duties is complicated. An employee does take on some moral obligations to meet their institutional duties when they accept employment. Institutional rights and human rights cannot be equated. Happiness, liberty and rights to life are human

rights. Human rights are possessed by virtue of being a person, not by virtue of being a member of an institution. An employment contract can be viewed as a morally conditioned promise. Any promise to act immorally is either invalid or overridden by moral considerations. From the above discussion, we say that

1. Engineers may have an institutional duty to obey, but taking all things into account, their moral duty is not to obey.
2. An employer may have institutional authority to direct engineers to do something morally unjustified.

## **Employer Authority and Employee Duties**

When an engineer accepts an offer of employment, a contract is created in which the engineer, as an employee, agree to use his or her ability to achieve the employers legitimate goals. The employer has a duty under the same contract to treat the engineer in a professional manner but also clearly acquires the authority to direct the engineer. The need for authority is obvious, particularly in large organization, where the lack of direction could be lead to chaos and bankruptcy. The employer has management authority to direct the resources of the company, whereas the engineer has technical authority to exercise the special knowledge and skill acquired through university education and practical engineering experience. In a well-run organization the distinction between management and technical authority will be well defined.

### **Illegal Acts**

An engineer may be asked to perform an act that the engineer considers unethical and that is also clearly contrary to the law. The law may be a criminal law, a civil or business law, a regulation made under the authority of an act, or an infringement of trademark, copyright or industrial design legislation.

### **Paramount Obligations**

It is in the dealing with conflicts such as that implied above that the engineer has to decide which moral duty is to take precedence. Code of ethics usually start of with some ringing statement about a paramount obligation to protect public health, safety, and welfare. This puts at a lower level of importance, the duties of loyalty and faithful service to an employer. Paramount means a chief in importance or deserving primary emphasis. Employers have enormous power over employees, and the price of opposing the legitimate institutional authority and failing to meet obligations to an employer can be high.

- A reasonable interpretation to the notion of paramount obligations is that of deserving most emphasis in the minds of engineers, engineering societies and the wider community, rather than in the philosophically technical sense of duty to the public always taking precedence. In the end one has to make a reasoned moral judgement, taking all considerations into account, where the balance occurs indicates what action should be taken. The ordering of priorities, out of context, and without exception is not always possible. Let us read the following case as example for this.
- "A design group develops a new electronic circuit. This electronic circuit is used in clock radios. By using this circuit, clock radios average life is increase from 5 years to 7 years. At the same time, the manufacturing cost will increase by only one percent". When this proposal is presented to top management, it is rejected on the grounds that it is not cost effective. The group direct that further work on the design be terminated. Does the design groups obligation to the public outweigh the employers directive ?
- In the above case, we conclude that the employers action is within his legitimate authority, and the moral obligation of loyalty to the employer is more important than the possible benefit to the public. After all it is a business decision. It might even be that it is a bad decision, because a competitor might well make such an improvement and take away market share. But it is the employer's rights to make it. Also the question of public safety has not arisen, and the effect of innovations such as these are very hard to predict. The engineer is taking on a lot to base a moral argument on presumptions of the good to the public in this case. At last, the engineers must weight their obligations to the public, their employers, their colleagues. Exceptionless ordering of priorities is not always possible.

#### **COLLECTIVE BARGAINING :**

**Collective bargaining** is a process of voluntary negotiation between employers and trade unions aimed at reaching agreements which regulate working conditions. Collective agreements usually set out wage scales, working hours, training, health and safety, overtime, grievance mechanisms and rights to participate in workplace or company affairs.

The union may negotiate with a single employer (who is typically representing a company's shareholders) or may negotiate with a federation of businesses, depending on the country, to reach an industry wide agreement. A collective agreement functions as a labor contract between an employer and one or more unions. Collective bargaining consists of the process of negotiation between representatives of a union and employers (generally represented by management, in some countries[which?] by an employers' organization) in respect of the terms and conditions of employment of employees, such as wages, hours of work, working conditions and grievance-procedures, and about the rights and responsibilities of trade unions. The parties often refer to the result of the negotiation as a collective bargaining agreement (CBA) or as a collective employment agreement (CEA).

Different economic theories provide a number of models intended to explain some aspects of collective bargaining:

1. The so-called Monopoly Union Model (Dunlop, 1944) states that the monopoly union has the power to maximise the wage rate; the firm then chooses the level of employment. Recent literature has started to abandon this model

2. The Right-to-Manage model, developed by the British school during the 1980s (Nickell) views the labour union and the firm bargaining over the wage rate .

3. The efficient bargaining model (McDonald and Solow, 1981) sees the union and the firm bargaining over both wages and employment (or, more realistically, hours of work).The underlying idea of collective bargaining is that the employer and employee relations should not be decided unilaterally or with the intervention of any third party. Both parties must reconcile their differences voluntarily through negotiations, yielding some concessions and making sacrifices in the process.

Both should bargain from a position of strength; there should be no attempt to exploit the weaknesses or vulnerability of one party. With the growth of union movement all over the globe and the emergence of employers' association, the collective bargaining process has undergone significant changes. Both parties have, more or less, realized the importance of peaceful co-existence for their mutual benefit and continued progress.

## **CONFIDENTIALITY :**

**Confidentiality** is an ethical principle associated with several professions (e.g., medicine, law, religion, professional psychology, and journalism). In ethics, and (in some places) in law and alternative forms of legal dispute resolution such as mediation, some types of communication between a person and one of these professionals are "privileged" and may not be discussed or divulged to third parties. In those jurisdictions in which the law makes provision for such confidentiality, there are usually penalties for its violation.

Confidentiality has also been defined by the International Organization for Standardization (ISO) in ISO-17799 [1] as "ensuring that information is accessible only to those authorized to have access" and is one of the cornerstones of information security. Confidentiality is one of the design goals for many cryptosystems, made possible in practice by the techniques of modern cryptography.

Confidentiality of information, enforced in an adaptation of the military's classic "need to know" principle, forms the cornerstone of information security in today's corporations. The so called 'confidentiality bubble' restricts information flows, with both positive and negative consequences.

Both the privilege and the duty serve the purpose of encouraging clients to speak frankly about their cases. This way, lawyers will be able to carry out their duty to provide clients with zealous representation. Otherwise, the opposing side may be able to surprise the lawyer in court with something which he did not know about his client, which makes both lawyer and client look stupid. Also, a distrustful client might hide a relevant fact which he thinks is incriminating, but which a skilled lawyer could turn to the client's advantage (for example, by raising affirmative defenses like self-defense). However, most jurisdictions have exceptions for situations where the lawyer has reason to believe that the client may kill or seriously injure someone, may cause substantial injury to the financial interest or property of another, or is using (or seeking to use) the lawyer's services to perpetrate a crime or fraud.

In such situations the lawyer has the discretion, but not the obligation, to disclose information designed to prevent the planned action.

## **Need for Authority**

Authority is needed since

- a) Allowing everyone to exercise uncontrolled individual discretion creates chaos (confusion).
- b) Clear lines of authority identifies areas of personal responsibility and accountability.

## **Institutional Authority and Expert Authority**

### **Institutional authority**

'The institutional right given to a person to exercise power based on the resources of the institution'. It is acquired, exercised and defined within institutions.

It is given to individuals to perform their institutional duties assigned within the organisation. There is not always a perfect match between the authority granted and the qualifications needed to exercise it.

### **Expert authority**

'The possession of special knowledge, skill or competence to perform some task or to give sound advice'. Engineers may have expert authority but their institutional authority, may only be, to provide management with analysis of possible ways to perform a technical task, after which they are restricted to following management's directive about which option to pursue. In large companies, engineers, advisors and consultants in staff function carry expert authority, while institutional authority is vested only with line managers.

### **Authority Vs Power**

Ineffective persons, even if vested with authority by their institution, may not be able to summon the power their position allows them to exercise. On the other hand, people who are effective may be able to wield greater power that goes beyond the authority attached to the positions they hold. Highly respected engineers of proven integrity belong to this class.

### **Authority - Morally justified**

#### **Observations on authority.**

An employer who has institutional authority may direct engineers to do something that is not morally justified.

Engineers may feel that they have an institutional duty to obey a directive that is morally unjustified, but their moral duty, all things considered, is not to obey.

To decide whether a specific act of exercising institutional authority is morally justified, we need to know whether the institutional goals are themselves morally permissible or desirable and whether that act violates basic moral duties.

### **'Zone Of Acceptance' of Authority**

'A subordinate is said to accept authority whenever he permits his behaviour to be guided by the decision of a superior, without independently examining the merits of that decision' - Herbert Simon

Simon notes that all employees tend to have a 'zone of acceptance' in which they are willing to accept their employer's authority. Within that zone, an individual, relaxing his own critical faculties, permits the decision of the employer to guide him.

Employees generally do not make an issue of questionable incidents on morality, out of a sense of responsibility to give their employer leeway within which to operate and often not to risk their jobs.

The problem increases when employees slowly expand the boundaries of tolerance and rationalize it. This only shows that engineers should never stop critically reviewing the employer's directives especially on moral issues.

### **'Faithful Agent Argument'**

National Society of Professional Engineers (NSPE) Code states, "The engineer .....will act in professional matters for client, or employer as a faithful agent or trustee.....He will not actively participate in strikes, picket lines or other coercive action" meaning that when one is a faithful trustee of one's employer he cannot actively participate in any collective forcible action.

Board of Ethical Review argued that engineers have a higher standard than self interest and that their ethical duty is to act for their employer as a faithful agent or trustee.

Collective bargaining is inconsistent with loyalty to employers because it

- is against the desires of the employer
- uses force or coercion against the employer and
- involves collective and organized opposition.

But every instance of such conduct need not be unethical.

An example:

Three engineers sincerely feel that they are underpaid. After their representations to their bosses are in vain, they threaten their employer, politely, that they would seek employment elsewhere. Here, even though, they act

against the desires of their employer and have acted collectively, they have not acted unethically or violated their duty.

**Conclusion:** 'Faithful agency' only concerns with performing one's duty but does not mean that safety, salary and other economical benefits cannot be negotiated from a position of strength. Employee's duty to employer does not mean unlimited sacrifice of self-interest.

'Public Service Argument'- Collective bargaining.

- 'Public Service Argument' is an argument against collective bargaining.
- The paramount duty of engineers is to serve the public.
- Unions, by definition, promote the interests of their members and whenever there is a clash of interests, the interest of the general public is ignored by them. Though the argument is a valid one, it looks at the worst possible scenarios with unions and decides that engineering unions act only irresponsibly.
- A body of engineers can promote engineers' interest within limits set by professional concern for the public good.

**Benefits of Collective Bargaining.**

- a) Unions have created healthy salaries and high standard of living of employees.
- b) They give a sense of participation in company decision making.
- c) They are a good balance to the power of employers to fire employees at will.
- d) They provide an effective grievance redressal procedure for employee complaints.

**Harms Caused by Collective Bargaining.**

- a) Unions are devastating the economy of a country, being a main source of inflation
- b) With unions, there is no congenial (friendly), cooperative decision making.
- c) Unions does not promote quality performance by making job promotion and retention based on seniority.
- d) They encourage unrest and strained relations between employees and employers.

**Confidentiality or confidential information'**

- Information considered desirable to be kept secret.
- Any information that the employer or client would like to have kept secret in order to compete effectively against business rivals.
- This information includes how business is run, its products, and suppliers, which directly affects the ability of the company to compete in the market place
- Helps the competitor to gain advantage or catch up

**Privileged information, Proprietary information and Patents.**

- **Privileged information:**  
Information available only on the basis of special privilege' such as granted to an employee working on a special assignment.
- **Proprietary information:**  
Information that a company owns or is the proprietor of. This is primarily used in legal sense. Also called Trade Secret. A trade secret can be virtually any type of information that has not become public and which an employer has taken steps to keep secret.
- **Patents:**  
Differ from trade secrets.  
Legally protect specific products from being manufactured and sold by competitors without the express permission of the patent holder.  
They have the drawback of being public and competitors may easily work around them by creating alternate designs.

**Obligation of Confidentiality**

1. Based on ordinary moral considerations:

**I. Respect for autonomy:**

Recognizing the legitimate control over private information (individuals or corporations).

This control is required to maintain their privacy and protect their self-interest.

## **II. Respect for Promise:**

Respecting promises in terms of employment contracts not to divulge certain information considered sensitive by the employer

## **III. Regard for public well being:**

Only when there is a confidence that the physician will not reveal information, the patient will have the trust to confide in him.

Similarly only when companies maintain some degree of confidentiality concerning their products, the benefits of competitiveness within a free market are promoted.

## **2. Based on Major Ethical Theories:**

All theories profess that employers have moral and institutional rights to decide what information about their organization should be released publicly.

They acquire these rights as part of their responsibility to protect the interest of the organization.

All the theories, rights ethics, duty ethics and utilitarianism justify this confidentiality but in different ways.

### **Effect of Change of Job on Confidentiality**

- Employees are obliged to protect confidential information regarding former employment, after a change of job.
- The confidentiality trust between employer and employee continues beyond the period of employment.
- But, the employee cannot be forced not to seek a change of job.
- The employer's right to keep the trade secrets confidential by a former employee should be accepted at the same time, the employee's right to seek career advancement cannot also be denied.

## **CONFLICT OF INTEREST :**

Conflict of Interest arises when two conditions are met:

1. The professional is in a relationship or a role that requires exercising good judgment on behalf of the interests of an employer or client

2. The professional has some additional or side interest that could threaten good judgment in serving the interests of the employee or client.

E.g. When an engineer is paid based on a percentage of the cost of the design and there is no incentive for him to cut costs- The distrust caused by this situation compromises the engineers' ability to cut costs and calls into question his judgement.

'An act of gift' and 'An act of bribe'

'A gift is a bribe if you can't eat, drink or smoke it in a day'.

'If you think that your offer of acceptance of a particular gift would have grave or merely embarrassing consequences for your company if made public, then the gift should be considered a bribe'.

'Bribe can be said to be a substantial amount of money or goods offered beyond a stated business contract with the aim of winning an advantage in gaining or keeping the contract'.

Here 'substantial' means that which is sufficient to distort the judgment of a typical person.

### **Conflict of Interest created by Interest in other companies**

- When one works actually for the competitor or subcontractor as an employee or consultant.
- Having partial ownership or substantial stock holdings in the competitor's business.
- It may not arise by merely having a spouse working for sub-contractor to one's company, but it will arise if one's job also includes granting contracts to that subcontractor.
- Tempting customers away from their current employer, while still working for them to form their own competing business.
- Moonlighting usually creates conflicts when working for competitors, suppliers or customers but does not conflict when working for others without affecting the present employer's business. 'Moonlighting' means working in one's spare time for another employer.

### **Conflicts of Interest created by Insider information**

- Using inside information to set-up a business opportunity for oneself or family or friends.
- Buying stock in the company for which one works is not objectionable but it should be based on the same information available to the public.
- The use of any company secrets by employee to secure a personal gain threatens the interest of the company.

#### **Avoiding Conflicts Of Interests**

- Taking guidance from Company Policy
- In the absence of such a policy taking a second opinion from a coworker or manager. This gives an impression that there no intention on the part of the engineer to hide anything.
- In the absence of either of these options, to examine one's own motives and use the ethical problem solving techniques.
- One can look carefully into the professional codes of ethics which uniformly forbid conflicts of interest. Some of these codes have very explicit statements that can help determine whether or not the situation constitutes conflict of interest.

#### **Types Of Crime**

- **Domestic crime** Non-accidental crime committed by members of the family
  - **Professional Crime** -When crime is pursued as a profession or day to day occupation
  - **Blue collar crime (or) Street crime** -Crime against person, property (theft, assault on a person, rape)
  - **Victimless crime**-Person who commits the crime is the victim of the crime. E.g. Drug addiction
  - **Hate crime** -Crime done on the banner of religion, community, linguistics
  - **OCCUPATIONAL CRIME**
  - ✓ Occupational crimes are illegal acts made possible through one's lawful employment.
  - ✓ It is the secretive violation of laws regulating work activities.
  - ✓ When committed by office workers or professionals, occupational crime is called 'white collar crime'.
  - ✓ **People Committing Occupational Crimes**
  - Usually have high standard of education
  - From a non-criminal family background
  - Middle class male around 27 years of age (70% of the time) with no previous history
  - No involvement in drug or alcohol abuse
  - Those who had troublesome life experience in the childhood (Blum)
  - People without firm principles (Spencer)
  - Firms with declining profitability (Coleman, 1994)
- Firms in highly regulated areas and volatile market -pharmaceutical, petroleum industry.(Albanese, 1995)

#### **Price Fixing**

An act was passed, which forbade (prevented) companies from jointly setting prices in ways that restrain free competition and trade. Unfortunately, many senior people, well respected and positioned were of the opinion that 'price fixing' was good for their organizations and the public.

#### **Employees Endangering Lives of Employees**

Employers indulge in exposing their employees to safety hazards. They escape criminal action against them, by paying nominal compensations even if their crimes are proved in court. And even this happens only when the victim sues company for damages under civil law.

#### **Engineers' Moral Rights**

Engineers' moral rights fall into categories of **human, employee, contractual and professional rights**.

#### **PROFESSIONAL RIGHTS:**

The right to form and express one's professional judgment freely

The right to refuse to carry out illegal and unethical activity

The right to talk publicly about one's work within bounds set by confidentiality obligation

The right to engage in the activities of professional societies

The right to protect the clients and the public from the dangers that might arise from one's work

The right to professional recognition of one's services.

### **Right of Professional Conscience**

- There is one basic and generic professional right of engineers, the moral right to exercise responsible professional judgment in pursuing professional responsibilities.
- Pursuing these responsibilities involves exercising both technical judgment and reasoned moral convictions.
- This basic right can be referred to as the right of professional conscience.

### **Right of Conscientious Refusal**

The right of Conscientious refusal is the right to refuse to engage in unethical behaviour and to refuse to do so solely because one views it as unethical.

Two situations to be considered.

1. Where there is widely shared agreement in profession as to whether an act is unethical .Here, professionals have a moral right to refuse to participate in such activities.

2. Where there is room for disagreement among reasonable people over whether an act is unethical.

Here, it is possible that there could be different ethical view points from the professional and the employer. In such cases the engineers can have a limited right to turn down assignments that violates their personal conscience only in matters of great importance such as threats to human life. This right also depends on the ability of the employer to reassign the engineer to alternate projects without serious economic hardships to the origin.

The right of professional conscience does not extend to the right to be paid for not working.

### **Right to Recognition**

Right to Recognition involves two parts.

The right to reasonable remuneration gives the moral right for fighting against corporations making good profits while engineers are being paid poorly. Also is the case where patents are not being rewarded properly by the corporations benefiting from such patents.

The other right to recognition is non-monetary part of recognition to the work of engineers.

But what is reasonable remuneration or reasonable recognition is a difficult question and should be resolved by discussions between employees and employers only.

### **Professional Rights & Ethical Theories**

**1. Rights Ethics:** The most basic human right, which needs no justification, as per A.I.Meldon, is to pursue one's legitimate (those that do not violate others' rights) interests. The right to pursue legitimate interests gives a person right to pursue professional moral obligations. This may be viewed as a human right of conscience directly derived from the basic human right.

### **2. Duty Ethics:**

- I have a right to something only because others have duties or obligations to allow me (and not interfere) to do so.
- If we derive the meaning of 'others' as employers, then the basic professional right is justified by reference to others' duties to support or not interfere with the work related exercise of conscience by professionals.

### **3. Utilitarianism:**

- Public good can be served by allowing professionals to meet their obligations to the public.
- These obligations arise due to the professional's role in promoting public good.
- The basic goal of producing the most good for the greatest number of people is enough to justify the right of professional conscience.

## **EMPLOYEE RIGHTS:**

- Employee rights involves the status of an employee. Rights may be moral or legal. Employee rights also include some professional rights. These rights denotes the relationship between employer and employee. Professional rights is also the employee rights. Employee rights include fundamental human rights relevant to the employment situation.

### **Employee bill of rights**

- Employee rights as the "black hole in American Rights" by David Ewing editor of the Harvard Business Review. This bill is apply to the government organization not to a business.

### **Choice Of Outside Activities:**

- All employees have the right to select or do their own choice of activities without retribution from employers. This is part of their basic human right. Let us consider this example, one of the worker of Ford motor company service department was fired because he bought a new American motors Rambler instead of a Ford automobile. The rights of employees to pursue outside activities become limited at the point where those activities lead to violating duties of their jobs. An employee has a right to smoke, but how that right is exercised at the work place is limited by the employer's right to create a pleasant and safe work place for other employees. The employers have the right to take action when outside activities constitute a conflict of interest. Employees have every right to date and marry employee of companies that are suppliers for or competitors of one's company. Employees have no right to consistently sabotage their employers interests during off hours.

### **PRIVACY:**

- A broad definition of the right privacy is that "The right to be left alone the most comprehensive of rights, and the right most valued by a free people. The right to privacy has four aspects.
  1. Protection from unreasonable intrusion upon one's isolation.
  2. Protection from appropriation of one's name or likeness.
  3. Protection from unreasonable publicity given to one private life.
  4. Protection from publicity that unreasonably places one in a false light before the public.
- Following are the examples of the employers conflicts with the right employees have to privacy :
  1. Because of employee theft, a manufacturer of expansive pocket computers has suffered losses. Almost all employee is involved in it. Hidden camera is installed without notifying the company employees.
  2. Without checking with its company employes management gives the sociologist full access to its personnel files. Where the sociologist has hired as a consultant to a large construction firm. In this firm, there is personal conflicts in one of the division.
  3. Without taking the permission of the engineer, the supervisor unlock and searches the desk of an engineer when he was on vacation.
- This type of examples involve abuse of employer prerogatives. Most of them involve a clash between the right to privacy of employees and the right of employers to effectively manage a corporation. Respect for people entails allowing them some degree of control over who has knowledge about their personal conversations. A rights ethicist would appeal directly to the human right to personal freedom. People should be free to maintain some control over what personal information about themselves is revealed to others. Gathered information about employees should be reserved solely for legitimate employer use. It is not

permissible to give it to outsiders. Employers should be viewed as having the same trust relationship with their employees.

- Privacy is valuable because of the following reasons -
  1. Without privacy other will have access to sensitive information that they can use.
  2. The value of privacy stems from a more basic value : respect for persons.
  3. People tend to be intolerant of different lifestyles, having your personal information made public will make you subject to undeserved ridicule and derision.

#### **Right to privacy violated :**

- Right to privacy involves a three place relation between a person A, some information X, and another person B. The right to privacy is violated only when B deliberately comes to posses information X about A, and no relationship between A and B exists which could justify B's coming to know X about A. .... by philosopher George Brenkert.

#### **Drug Testing**

- Do employers have the moral right to screen out employees whose drug use outside of work has no effect on their job performance ? Substance abuse, or rather the abuse of persons by harmful substances is a serious problem in the work place. In construction and in other engineering industries, alcohol and drugs contribute to lost work days, increased medical cost, inefficient productivity, poor quality work and safety problems. These effects of substance abuse impact not only the drug user, but also other employees, the employer and clients. mention of drug abuses brings to mind illegal drugs, but some legal drugs are among the most harmful.
- Mandatory testing for drugs has been implemented in some industries, such as transportation industry, where impaired judgement can result in significant injuries and deaths to innocent parties. In no way can use of alcohol or drugs in the workplace be condoned or sanctioned. A user cannot be a 100% performer, if her/she is using alcohol or drugs in the work place. A user as a less than 100% performer, cheats the company in his performance. He/she cheats himself/herself, too, by giving performance that may cost the individual chances for pay raises and promotion.
- In a work place where machinery use is involved, the user runs the risk of injury to himself and possibly to others, because his reaction time has slowed down. In quality control or other functions where decisions must be made quickly, and

where the decision affects the operations of other department it is absolutely critical that the decision maker not be under the influence of drugs or alcohol.

### **Argument from job performance**

1. Use of illegal drugs adversely affects job performance thereby leading to lower productivity, higher costs and consequently lower profits.
2. Therefore, having information about whether an employee uses illegal drugs helps prevent these negative effects and thus helps increase productivity and profits.
3. Employers contract employees to do certain work and are thereby entitled to have that work done by those employees.
4. Knowledge of an employee's use of illegal drugs is relevant to her employment contract.
5. Therefore, knowledge of an employee's use of illegal drugs does not violate that employee right to privacy.

### **WHISTLE-BLOWING AND ITS FEATURES :**

Whistle blowing is an act of conveying information about a significant moral problem by a present or former employee, outside approved channels (or against strong pressure) to someone, in a position to take action on the problem.

The features of Whistle blowing are:

- **Act of Disclosure:** Intentionally conveying information outside approved organizational channels when the person is under pressure not to do so from higher-ups.
- **Topic:** The information is believed to concern a significant moral problem for the organization.
- **Agent:** The person disclosing the information is an employee or former employee. • **Recipient:** The information is conveyed to a person or organization who can act on it.

### **Types of Whistle Blowing**

**External Whistle blowing:** The act of passing on information outside the organisation.

**Internal Whistle blowing:** The act of passing on information to someone within the organization but outside the approved channels.

Either type is likely to be considered as disloyalty, but the second one is often seen as less serious than the latter. From corporations' point of view both are serious because it leads to distrust, disharmony, and inability of the employees to work together.

**Open Whistle blowing:** Individuals openly revealing their identity as they convey the information.

**Anonymous Whistle blowing:** Individual conveying the information conceals his/her identity.

### **Procedures to be followed before Whistle Blowing**

- Except for extreme emergencies, always try working through normal organizational channels.
- Be prompt in expressing objections.
- Proceed in a tactful manner with due consideration to the feelings of others involved.
- As much as possible, keep supervisors informed of your actions, both informally and formally.
- Be accurate in observations and claims and keep all formal records documenting relevant events.
- Consult colleagues for advice and also to avoid isolation.
- Consult the ethics committee of your professional society before going outside the organization.

- Consult a lawyer regarding potential legal liabilities.

A great deal of introspection and reflection are required before WB. Motive should neither be for revenge upon fellow employee, supervisor or company nor in the hope of future gains like book contracts or speaking tours etc.

### **Conditions to be satisfied before Whistle Blowing**

Richard T. De George suggests the following:

1. The harm that will be done by the product to the public is serious and considerable.
2. The individual makes his/her concern known to his/her superiors.
3. If one does not get any proper response from immediate superiors, then one should exhaust the channels that are available within the organization including the board of directors.
4. One must have documented evidence that would convince a reasonable and impartial observer that one's view of the situation is correct and the company policy is wrong.
5. There must be strong evidence that making the information public will in fact prevent the threatened serious harm.

### **Prevention of Whistle Blowing**

The following actions will prevent/reduce whistle blowing:

1. Giving direct access to higher levels of management by announcing 'open door' policies with guarantee that there won't be retaliation. Instead such employees should be rewarded for fostering ethical behavior in the company.
2. This gives greater freedom and promotes open communication within the organization.
3. Creation of an Ethics Review Committee with freedom to investigate complaints and make independent recommendations to top management.
4. Top priority should be given to promote ethical conduct in the organization by top management.
5. Engineers should be allowed to discuss in confidence, their moral concerns with the ethics committee of their professional societies.
6. When there are differences on ethical issues between engineers and management, ethics committee members of the professional societies should be allowed to enter into these discussions.
7. Changes and updatings in law must be explored by engineers, organizations, professional societies and government organizations on a continuous basis.

## **INTELLECTUAL PROPERTY RIGHTS:**

**Intellectual property (IP)** is a term referring to a number of distinct types of creations of the mind for which property rights are recognized—and the corresponding fields of law. Under intellectual property law, owners are granted certain exclusive rights to a variety of intangible assets, such as musical, literary, and artistic works; discoveries and inventions; and words, phrases, symbols, and designs. Common types of intellectual property include copyrights, trademarks, patents, industrial design rights and trade secrets in some jurisdictions.

Richard Stallman argues that, although the term intellectual property is in wide use, it should be rejected altogether, because it "systematically distorts and confuses these issues, and its use was and is promoted by those who gain from this confusion." He claims that the term "operates as a catch-all to lump together disparate laws [which] originated separately, evolved differently, cover different activities, have different rules, and raise different public policy issues" and that it confuses these monopolies with ownership of limited physical things Stallman advocates referring to copyrights, patents and trademarks in the singular and warns against abstracting disparate laws into a collective term.

Some critics of intellectual property, such as those in the free culture movement, point at intellectual monopolies as harming health, preventing progress, and benefiting concentrated interests to the detriment of the masses, and argue that the public interest is harmed by ever expansive monopolies in the form of copyright extensions, software patents and business method patents.

There is also criticism because strict intellectual property rights can inhibit the flow of innovations to poor nations. Developing countries have benefitted from the spread of developed country technologies, such as the internet, mobile phone, vaccines, and high-yielding grains. Many intellectual property rights, such as patent laws, arguably go too far in protecting those who produce innovations at the expense of those who use them. The

Commitment to Development Index measures donor government policies and ranks them on the "friendliness" of their intellectual property rights to the developing world.

Other criticism of intellectual property law concerns the tendency of the protections of intellectual property to expand, both in duration and in scope. The trend has been toward longer copyright protection (raising fears that it may some day be eternal). In addition, the developers and controllers of items of intellectual property have sought to bring more items under the protection. Patents have been granted for living organisms, and colors have been trademarked. Because they are systems of government-granted monopolies copyrights, patents, and trademarks are called intellectual monopoly privileges, (IMP) a topic on which several academics, including Birgitte Andersen and Thomas Alured Faunce have written.

In 2005 the RSA launched the Adelphi Charter, aimed at creating an international policy statement to frame how governments should make balanced intellectual property law.

Intellectual property rights is a legal concept that confers rights to owners and creators of the work, for their intellectual creativity. Such rights can be granted for areas related to literature, music, invention etc, which are used in the business practices. In general, the intellectual property law offers exclusionary rights to the creator or inventor against any misappropriation or use of work without his/her prior knowledge. Intellectual property law establishes an equilibrium by granting rights for limited duration of time.

Every nation has framed their own intellectual property laws. But on international level it is governed by the World Intellectual Property Organization (WIPO). The Paris Convention for the Protection of Industrial Property in 1883 and the 'Berne Convention for the Protection of Literary and Artistic Works' in 1886 were first conventions which have recognized the importance of safeguarding intellectual property. Both the treaties are under the direct administration of the WIPO. The WIPO convention lays down following list of the activities or work which are covered by the intellectual property rights

- Industrial designs
- Scientific discoveries
- Protection against unfair competition
- Literary, artistic and scientific works
- Inventions in all fields of human endeavor
- Performances of performing artists, phonograms and broadcasts
- Trademarks, service marks and commercial names and designations
- All other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

### **Types of Intellectual Property Rights**

Intellectual Property Rights signifies to the bundle of exclusionary rights which can be further categorized into the following heads-

#### **Copyright**

Copyright, one of the form of intellectual property right, offers exclusive rights for protecting the authorship of original & creative work like dramatic, musical and literary in nature. Symbolized as "©", here the term .

#### **Patent**

A patent is termed as the exclusionary rights given by the government or the authorized authority to its inventor for a particular duration of time, in respect of his invention. It is the part of the intellectual property right .

#### **Trademark**

The trademark or trade mark, symbolized as the ® and ™, is the distinctive sign or indication which is used for signifying some kind of goods or/and services and is distinctively used across the business .

#### **Trade Secrets**

Trade secret points towards a formula, pattern, any instrument, design which is kept confidential and through which any business or trade can edge over its rival and can enjoy economic gain. Trade secrets can be .

#### **Utility Model**

The utility model is the intellectual property right for protecting the inventions. It is somehow described as the statutory monopoly which is bestow upon for the fixed duration of time in exchange to the inventor for .

#### **Geographical Indication**

Geographical Indication (GI) signifies to the name or sign, used in reference to the products which are corresponding to the particular geographical area or somewhat related to the origin like town, region or nation.

### **Industrial Design Rights**

Industrial design rights are defined as the part of the intellectual property rights which confers the rights of exclusivity to the visual designs of objects which are generally not popular utilitarian.

### **Advantages of Intellectual Property Rights**

Intellectual property rights help in providing exclusive rights to creator or inventor, thereby induces them to distribute and share information and data instead of keeping it confidential. It provides legal protection and offers them incentive of their work. Rights granted under the intellectual property act helps in socio and economic development.

### **Intellectual Property Rights in India**

India has defined the establishment of statutory, administrative and judicial framework for protecting the intellectual property rights in the Indian territory, whether they connotes with the copyright, patent, trademark, industrial designs or with other parts. Tuning with the changing industrial world, the intellectual property rights have continued to strengthen its position in the India. In 1999, the government has passed the important legislation in relation to the protection of intellectual property rights on the terms of the worldwide practices and in accordance to the India's obligations under the Trade Related Aspects of Intellectual Property Rights. It consists of -

- The Patents(Amendment) Act, 1999 which was passed on 10th March, 1999 in the Indian Parliament for amending the Patents Act of 1970 which in turns facilitate to establish the mail box system for filing patents and accords with the exclusive marketing rights for the time period of 5 years.
- The Trade Marks Bill, 1999 was passed in the India parliament during the winter session for replacing the Trade and Merchandise Marks Act, 1958. It was passed on 23rd December, 1999.
- The Copyright(Amendment) Act, 1999 was passed by both upper house and lower house of the Indian parliament and was later on signed by the Indian president on 30th December, 1999.
- The sui generis legislation was approved by both houses of the Indian parliament on 23rd December, 1999 and was named as the Geographical Indications of Goods (Registration & Protection) Bill, 1999.
- The Industrial Designs Bill, 1999 was passed in the Upper House of the Indian parliament for replacing the Designs Act, 1911.
- The Patents (Second Amendment) Bill, 1999 was introduced in the upper house of the parliament for further amending the Patents Act 1970 and making it compliance with the TRIPS.

Along with the above legislative measures, the Indian government has introduced several changes for streamlining and bolstering the intellectual property administration system in the nation. Several projects concerning to the modernizing of the patent information services and trademark registry have been undergone with the help of the World Intellectual Property Organization/ United Nations Development Programme.

## **DISCRIMINATION:**

**Discrimination** is a sociological term referring to the prejudicial treatment of an individual based solely on their membership (whether voluntary or involuntary) in a certain group or category. Discrimination is the actual behavior towards members of another group. It involves excluding or restricting members of one group from opportunities that are available to other groups. The United Nations explains: "Discriminatory behaviors take many forms, but they all involve some form of exclusion or rejection." Discriminatory laws such as redlining have existed in many countries. In some countries, controversial attempts such as racial quotas have been used to redress negative effects of discrimination.

Racial discrimination differentiates between individuals on the basis of real and perceived racial differences, and has been official government policy in several countries, such as South Africa in the apartheid era, and the USA. In the United States, racial profiling of minorities by law enforcement officials has been called racial discrimination.[3] As early as 1865, the Civil Rights Act provided a remedy for intentional race discrimination in employment by private employers and state and local public employers. The Civil Rights Act of 1871 applies to public employment or

employment involving state action prohibiting deprivation of rights secured by the federal constitution or federal laws through action under color of law. Title VII is the principal federal statute with regard to employment discrimination prohibiting unlawful employment discrimination by public and private employers, labor organizations, training programs and employment agencies based on race or color, religion, gender, and national origin.

### **Age discrimination**

Age discrimination is discrimination on the grounds of age. Although theoretically the word can refer to the discrimination against any age group, age discrimination usually comes in one of three forms: discrimination against youth (also called adultism), discrimination against those 40 years old or older,[11] and discrimination against elderly people.

In the United States, the Age Discrimination in Employment Act prohibits employment discrimination nationwide based on age with respect to employees 40 years of age or older. The Age Discrimination in Employment Act also addresses the difficulty older workers face in obtaining new employment after being displaced from their jobs, arbitrary age limits. On the other hand, the UK Equality Act 2010 protects young employees as well as old. Other countries go even further and make age discrimination a criminal offence.

In many countries, companies more or less openly refuse to hire people above a certain age despite the increasing lifespans and average age of the population. The reasons for this range from vague feelings younger people are more "dynamic" and create a positive image for the company, to more concrete concerns about regulations granting older employees higher salaries or other benefits without these expenses being fully justified by an older employees' greater experience. Unions cite age as the most common form of discrimination in the workplace. Workers ages 45 and over form a disproportionate share of the long-term unemployed – those who have been out of work for six months or longer, according to the U.S. Bureau of Labor Statistics.

Some people consider that teenagers and youth (around 15–25 years old) are victims of adultism, age discrimination framed as a paternalistic form of protection. In seeking social justice, they feel that it is necessary to remove the use of a false moral agenda in order to achieve agency and empowerment.

This perspective is based on the grounds that youth should be treated more respectfully by adults and not as second-class citizens. Some suggest that social stratification in age groups causes outsiders to incorrectly stereotype and generalize the group, for instance that all adolescents are equally immature, violent or rebellious, listen to rock tunes, and do drugs. Some have organized groups against age discrimination.

Ageism is the causal effect of a continuum of fears related to age. This continuum includes:

- Ephebiphobia: the fear of youth.
- Gerontophobia: the fear of elderly people.
- Pediaphobia: the fear of infants or small children.

Related terms include:

- Adultism: Also called adultarchy, adult privilege, and adultcentrism/adultocentrism, this is the wielding of authority over young people and the preference of adults before children and youth.
- Jeunism: Also called "youthism" is the holding of beliefs or actions taken that preference 'younger' people before adults.

### **Sex and Gender discrimination**

Though gender discrimination and sexism refers to beliefs and attitudes in relation to the gender of a person, such beliefs and attitudes are of a social nature and do not, normally, carry any legal consequences. **Sex discrimination**, on the other hand, may have legal consequences.

Though what constitutes sex discrimination varies between countries, the essence is that it is an adverse action taken by one person against another person that would not have occurred had the person been of another sex. Discrimination of that nature in certain enumerated circumstances is illegal in many countries.

Currently, discrimination based on sex is defined as adverse action against another person, that would not have occurred had the person been of another sex. This is considered a form of prejudice and is illegal in certain enumerated circumstances in most countries.

Sexual discrimination can arise in different contexts. For instance an employee may be discriminated against by being asked discriminatory questions during a job interview, or because an employer did not hire, promote or wrongfully terminated an employee based on his or her gender, or employers pay unequally based on gender.

In an educational setting there could be claims that a student was excluded from an educational institution, program, opportunity, loan, student group, or scholarship due to his or her gender. In the housing setting there could be claims that a person was refused negotiations on seeking a house, contracting/leasing a house or getting a loan based on his or her gender. Another setting where there have been claims of gender discrimination is banking; for example if one is refused credit or is offered unequal loan terms based on one's gender.

Another setting where there is usually gender discrimination is when one is refused to extend his or her credit, refused approval of credit/loan process, and if there is a burden of unequal loan terms based on one's gender. Socially, sexual differences have been used to justify different roles for men and women, in some cases giving rise to claims of primary and secondary roles.