LEGAL ILLEGAL MORAL IMMORAL VAALA CHAPTER

Rights

You have no right to tell me what to do" and "I have the right to do that".

Categorizing Rights

Philosophers often make an important distinction in
the nature and type of (how to consider) rights as:
Negative Rights
Positive Rights

Negative Rights

Negative rights are those rights that require restraint by others.
Examples: My right of not to be killed, robbed, poisoned, harmed, and so on. It requires others to refrain from killing, robbing, and poisoning.
However negative rights do not require that others take action to keep me alive, putting locks and guards to save me from being robbed.

Positive Rights

Positive rights are those which imply others have a duty towards the right holder.
Example: If I have a right to live then not only do others have to refrain from killing me but also, they need to feed me, and keep me safe.

Legal Rights

Legal rights are rights created and applied by the law. The law enforces a statement or code of conduct, a deed to be done, or a rule to follow, and fixes a punishment for violating the law.

Moral Rights

Moral, natural, or human rights are independent of the law. A civilized society's first line of defense is not the law, police, and courts but customs, traditions, and moral values. Behavioral norms, mostly transmitted by example, word of mouth, and religious teachings, represent a body of wisdom distilled over the ages through experience and trial and error.

Moral vs Legal

Moral status leads to letting you decide on the base of good or bad consciousness, religious training, manners etc. Although it does not involve a penalty for violating such rights a feeling of guilt is always there to follow.
Legal status enforces your deeds on the grounds of defined law and has a penalty or punishment for those violating such rights or laws.

Case 1 (Polluting the environment)

Moral status

Don't throw waste paper on the ground it will pollute the
environment

Legal status

Making the case legal how????

Case 2 (Oldies get a seat in a loaded bus)

Moral Status

Youngers should give the oldies a seat, good manners
Legal Status
Label some seats for the oldies and fine those
youngsters who don't give away the seats for the oldies

Case 3 (Password privacy in an organization)

Moral status

No one is supposed to share their password else them
data can be tampered with, stolen, etc.

Legal status

If anyone leaks his/her password, he/she should pay a
fine and suspended for a day.

Profession vs Occupation:

What is the meaning of occupation?

A person involved in a job and earning money is having that job as an occupation
Example: A doctor teaching in a school, college or university has an occupation of teaching. A carpenter, a driver etc.

Differences between Occupation and Profession

A profession needs extensive training and specialized knowledge. On the other hand, an occupation does not need any extensive training. A profession can be called an occupation when a person is paid for his skills, and his deep knowledge. Persons engaged in an occupation are not paid for their knowledge, but only for what they produce. Unlike a person engaged in an occupation, a professional must undergo higher education. A profession tends to be autonomous, whereas, for an occupation, no one has autonomous power; he or she is supervised by another person.

Characteristics of Profession

Getting to the definition of a profession; there is none called hard and fast definition. Thus, professions are often associated with some characteristics briefed as follows:
Mastery of an Esoteric Body of knowledge: usually acquired through
higher education A member of the profession needs this body of knowledge to practice A related characteristic of professions is that they often embrace a division between researchers and practitioners.
Autonomy: Professionals generally have a great deal of autonomy, justified by having esoteric knowledge Professions typically have autonomy both at the collective level as well as in individual practice Profession sets its own standards rather than taking orders or suggestions from outsiders
Formal Organization: Generally, there exists a professional organization that: Controls admission to the profession and sets standards Involved in licensing & expelling its individual members.

PROFESSIONAL BODIES

A profession is typically organized into one or more professional bodies. What is a professional body?
A professional association (also called a professional body, professional organization, or professional society) is usually a nonprofit organization seeking to further a particular profession, the interests of individuals engaged in that profession, and the public interest. A professional body is a group of people in a learned occupation who are entrusted with maintaining control or oversight of the practice of the occupation. A professional body usually starts with a group of people coming together because of a shared interest in a particular type of activity.

Functions of Professional bodies

As the professional body matures, it is likely to develop a range of functions, of which the following are the most important:
establishing a code of conduct to regulate the way members of the body behave in their professional lives and a disciplinary procedure to discipline members who breach (fail to follow or conduct) this code.
establishing mechanisms for disseminating(spreading) knowledge of good practice and new developments to its members, typically through publications and conferences but increasingly also using the worldwide web. Setting standards of education and experience that must be met by people wishing to become members of the body. advising government and regulatory bodies about matters within its area of expertise.

Is Computing A Profession

The field of computing is so diverse and complex the range of those who are called computer professionals is extremely broad Nothing in common except that, in one way or another, they involve the use of computer At first glance, it seem that computing possesses all of these characteristics, though in complex ways.

Are Computer Professionals "Professionals"?

Computer professionals have mastered an esoteric body of knowledge Computer professionals have varying degrees of autonomy depending on where they work There is no single organization governing the profession of computing (ACM, IEEE) Computing is an activity that supports social
institutions which in turn are aimed at fulfilling a variety of social functions
Computing does not appear to be a 'profession' in the strictest sense, the way law and medicine are professions, but it is more of a 'profession' than many other occupations.

SOFTWARE ENGINEERING

Software engineering appears to be one area of computing that is emerging
as a distinct profession within the field of computing. This trend seems to have been created by the initiative of individuals in the field concerned about the quality and safety of the software being produced and sold.
Developing software engineering as a distinct field involves several
activities. For example, it means identifying a unique body of knowledge that a person must possess to be a competent software engineer. It means developing educational requirements (curriculum) such that the person who meets the requirements is more likely to produce quality, safe software than someone without training.
It means developing mechanisms for licensing members. This will include identifying or creating the proper organization for issuing licenses and identifying requirements for obtaining a license, such as passing an exam or acquiring a certain number of years of experience.

SOFTWARE DEVELOPMENT AS ENGINEERING

The development of software and information systems in general is now usually regarded as a branch of engineering and the people who practice
it is engineers. Traditional engineers design and build a wide variety of objects – dams, bridges, airplanes, cars, radio and television transmitters and receivers, computers, plants to make fertilizer or plastics, and so on.

Characteristics of engineering:

There are two constraints that apply to all such activities, and which can be regarded as characteristic of engineering:
First engineering involves designing and building things that must work properly, that is, must meet a set of predetermined requirements concerning their functionality, their performance, and their reliability the process of designing and building the object must be completed within specified constraints of time and budget.

THE STATUS OF ENGINEERS

The legal status of the engineering profession varies a lot from one country to another. however, the position is that:
It is illegal to call yourself an engineer in each state unless you are registered with the State Engineers Registration Board. it is illegal for a company to use the word 'engineering' in its name unless it employs at least one registered engineer,
academic programs including the term engineering in their title must be taught mostly by registered engineers, it is illegal to carry out engineering work except under the supervision of a registered engineer.

Discrimination Vali Slides

WHAT IS DISCRIMINATION?

Discrimination means treating one person or one group of people less favorably than another on the grounds of personal characteristics. Discrimination can be *direct* or *indirect*.

Discrimination Grounds

Sex, Gender, race, color, ethnic origin, or nationality; disability, sexual orientation, religion, and age.

Direct discrimination

Direct discrimination occurs when one person is treated less favorably than another specifically because of their sex or race, and so on.

Examples:

A woman does the same job as a man but is paid less than he is.

A doctor refuses to treat a Chinese because he has no room for any more patients but then accepts an English patient.

A company advertises for a secretary and automatically rejects all male applicants.

Indirect discrimination

Indirect discrimination occurs when an employer imposes conditions that apply to all employees or all applicants but have a disproportionate effect on one group. **Examples**

Advertising a job with the requirement that applicants must be at least 180 cm tall. In the UK, there are many men over 180 cm tall but very few women. The result is that few women can apply for the job.

When allocating public housing, a local authority has a policy of giving priority to the children of existing tenants.

It can be justified if the employer demonstrates that there is a genuine occupational requirement that the offending condition is satisfied.

Act of Parliament Regarding

Employment:

It is unlawful for an employer to discriminate against a person on grounds of their sex or marital status in terms of the arrangements made for recruitment and selection and the terms on which employment is offered.

It is unlawful for an employer to discriminate against an employee on grounds of their sex or marital status regarding opportunities for promotion, transfer, or training or to any other benefits.

It is unlawful for an employer to discriminate against an employee on grounds of their sex or marital status regarding dismissal or redundancy.

It is unlawful for an employer to victimize an employee for bringing a complaint of sex discrimination or for giving evidence in support of another employee's complaint.

It is unlawful for any of the following to discriminate against a person on grounds of sex or marital status: a trade union, a professional body, a registration authority, an employment agency, or a provider of vocational training.

Education:

It is unlawful for a provider of education (public or private, school, college, or university) to discriminate against a person since their sex, in offering admission to the establishment or specific courses, and in providing access to the other benefits and facilities it offers.

The main exceptions to this are that allowance is made for single-sex establishments and that provision for physical education may be different for the two sexes.

Provision of services

- It is unlawful to discriminate on grounds of sex in the provision of goods, facilities, or services. The Act gives several examples including accommodation in a hotel, facilities for entertainment, recreation or refreshment, banking, and insurance services, and so on.
- It is unlawful to discriminate on grounds of sex in selling or letting property.

The main exception to these provisions is for charities that have been founded to help a specific group of people who are all the same sex, for example, single mothers.

DISCRIMINATION ON RACIAL GROUNDS

- The present law is based on the Race Relations Act 1976 and subsequent amendments to it.
- It makes it unlawful to discriminate on grounds of race, color, ethnic origin, or nationality.
- It introduced the idea of indirect discrimination based on race. And it established the Commission for Racial Equality through the merger of the Race Relations Board and the Community Relations Commission.

DISCRIMINATION ON GROUNDS OF DISABILITY

From the 1970s onwards, the government had been encouraging the recruitment of disabled employees into the Civil Service and encouraging employers to take on disabled workers by withholding government contracts from companies that could not demonstrate a commitment to offering opportunities to the disabled

ACT OF 1995: The act makes it unlawful to treat a disabled employee or applicant less favorably because of their disability without justification. The justification must be serious and substantial. Thus, it would be justified to reject a blind applicant for a job as a bus driver or a paraplegic for a job as a lifeguard.

ON GROUNDS OF RELIGION OR BELIEF, OR SEXUAL ORIENTATION

As regards discrimination on grounds of sexual orientation and religious belief, the EU directive is implemented in the UK by the Employment Equality (Sexual Orientation) Regulations 2003 and the Employment Equality (Religion or Belief) Regulations 2003, both of which came into effect in December 2003. These regulations follow the pattern established by the Sexual Discrimination Act 1975 and the Race Relations Act 1976.

Employment Equality (Sexual Orientation and Religion or Belief) Regulations 2003:

They are limited to discrimination in employment, education, and related matters, and do not refer to discrimination in the provision of services or accommodation, for example.

They explicitly make harassment unlawful, defining it as 'unwanted conduct which has the purpose or effect of violating a person's dignity or creating an intimidating, hostile, degrading, humiliating or offensive environment. Although the courts and industrial tribunals had accepted that racial or sexual harassment constituted discrimination, this was not explicitly covered by previous anti-discrimination legislation.

They do not make anybody, such as the Commission for Racial Equality, responsible for promoting the implementation of the legislation nor do they create any new body for this purpose. However, in October 2003, the government announced its plans for a single equality body for the UK to take over the responsibilities of the Equal Opportunities Commission, the Commission for Racial Equality, and the Disability Rights Commission.

DISCRIMINATION ON GROUNDS OF AGE

The Equal Treatment Directive is careful to be quite explicit in allowing for discrimination on the grounds of age in several important cases. It allows, for example:

Special treatment of different age groups to protect them (e.g., not allowing children under a certain age to be employed).

Different premiums for life insurance policies, depending on the age of the person at the time the policy is taken out, and different pension rates depending on the age of retirement (but these must not amount to sex discrimination).

Fixing a maximum age for recruitment based on the need for a reasonable period of employment after training and before retirement.

Fixing a minimum age, a minimum amount of professional experience or a minimum number of years with the company before a person will be regarded as eligible for a given post or eligible for certain employment benefits (e.g., additional annual leave).

AVOIDING DISCRIMINATION

Effective compliance with anti-discrimination legislation in the workplace requires three things:

- a suitable written policy, well-publicized, and freely and easily available.
- a training program for new and existing staff, to ensure that they are all aware of the policy and its importance.
- effective procedures for implementing the policy.

HR VAALA CHAPTER

Individual employees/ unions

The greater attention paid to the rights of individual employees and the need to comply with anti-discrimination legislation has very considerably increased the workload of human resources departments in the UK.

HR Activities

The following list is a summary of the tasks that are expected to undertake with the overall aim of ensuring that the organization has the workforce that it needs:

Ensuring that recruitment, selection, and promotion procedures comply, With anti-discrimination legislation. Staff training and development. Setting up and monitoring remuneration policy. Setting up and monitoring appraisal procedures. Administering dismissal and redundancy procedures. Dealing with contracts of employment.

Workforce planning.

RECRUITMENT AND SELECTION

Human resources managers often make a distinction between the two terms recruitment and selection, using recruitment to mean soliciting applications and selection to mean selecting the applicants to whom offers will be made.

Selection is kept in the hands of the employer, although a member of the recruitment agency staff may sometimes be invited to advise.

Selection tools

A wide range of selection techniques is available and is used in making professional appointments:

A series of one-to-one interviews with senior management and senior technical staff.

Interview by a panel: Several interviewers are involved. This technique is widely used, particularly in the public sector. It tends to favor applicants who are smooth talkers. It is unreliable.

Assessment of references: Great importance is usually attached to references for academic posts and some other posts in public bodies.

Psychometric tests: There are three types. *Ability tests* measure an individual's ability in a general area, such as verbal or numerical skills. *Aptitude tests* measure a person's potential to learn the skills needed for a job. *Personality tests* attempt to assess the characteristics of a person that significantly affect how they behave in their relationships with other people.

Situational assessment: Real-time situations are given to shortlisted candidates. It's the most expensive and used in military officer selection.

Task assessment: Candidates are asked to carry out some of the tasks that they will be required to do in the job. People usually can-do small tasks but are unable to do large tasks so this is unfavorable.

STAFF TRAINING AND DEVELOPMENT

Training and development encompass three main activities: training, education, and development. It is a function concerned with organizational activity aimed at bettering the performance of individuals and groups in the organization. It has been known by several names, including "Human Resource Development", "Human Capital Development" and "Learning and Development".

Staff training and development are of particular importance in high-technology companies, where failure in this respect can threaten the company's performance

It is unfortunate that, when money is tight, it is often the first thing to be cut.

REMUNERATION POLICIES AND JOB EVALUATION

Remuneration is the compensation that one receives in exchange for the work or services performed. Typically, this consists of monetary rewards, also referred to as wages or salary. Several complementary benefits, however, are increasingly popular remuneration mechanisms.

For grading and scaling policies are developed and job evaluations are held.

APPRAISAL SCHEMES

Appraisal (Performance appraisal) is a method by which the job performance of an employee is documented and evaluated

Need of Appraisal?

Appraisal schemes usually involve an appraiser and an appraiser meeting regularly (every six months, every year, even every two years) to discuss the employee's performance and career development under several headings. The result is a report signed by both parties if they cannot agree on certain points this will be recorded in the report.

REDUNDANCY and DISMISSAL

Unfair dismissal

Reasons justifying dismissal, Lack of capability, Misconduct.

Breach of the law, Redundancy,

Constructive dismissal

Dismissal of an employee without valid reasons is unfair

Fair dismissal of an employee but violating a contract is wrongful dismissal

Takeovers and outsourcing

Employees employed by the previous employer when the undertaking changes hands *automatically* become employees of the new employer on the same terms and conditions. It is as if their contracts of employment had originally been made with the new employer. Thus, employees' continuity of employment is preserved, as are their terms and conditions of employment under their contracts of employment (except for certain occupational pension rights).

Representatives of employees affected have a right to be informed about the transfer. They must also be consulted about any measures which the old or new employer envisages taking concerning affected employees.

Public interest disclosures:

The Public Interest Disclosure Act 1998 (PIDA) applies to people at work who raise concerns about criminal behavior, certain types of civil offenses, miscarriages of justice, activities that endanger health and safety or the environment, and attempts to cover up such malpractice.

CONTRACTS OF EMPLOYMENT:

What is a contract?

the written agreement between an employee and their employer can be enforced in a court of law.

A good contract of employment should be written in terms that are easily understood and should avoid legal conflicts.

HUMAN RESOURCE PLANNING

If the human resources department is to ensure that the organization always has available the staff it needs, it must be able to forecast the needs some time ahead.

In a software house, there are three inputs to the human resource planning process:

- Human resource plans from existing projects,
- Sales forecasts
- Forecasts of the likely staff losses in the coming months

JOB DESIGN:

Job rotation: Job rotation, that is, rotating staff through a series of jobs, is the most obvious way of preventing employees from becoming bored with a very narrow and specialized task.

Job enlargement: Job enlargement means increasing the scope of a job through extending the range of its job duties and responsibilities generally within the same level and periphery. Job enlargement involves combining various activities at the same level in the organization and adding them to the existing job

Job enrichment: Job enrichment can be described as a medium through which management can motivate self-driven employees by assigning them additional responsibilities normally reserved for higher-level employees. By doing this, employees *feel* like their work has meaning and is important to the company

Four Important aspects of Consultancy Contract:

Confidentiality: Consultants are often able to learn a lot about the companies for which they carry out assignments and may well be able to misuse this information for their profit.

Terms of reference: It is important that the contract refers explicitly to the terms of reference of the consultancy team, and, in

practice, these are perhaps the commonest source of disagreements in consultancy projects. As a result of their initial investigations, the consultants may discover that they need to consider matters that were outside their original terms of reference, but the client may be unwilling to let this happen, for any one of several possible reasons.

Liability: Most consultants will wish to limit their liability for any loss that the customer suffers because of following their advice. Customers may not be happy to accept this and, in some cases, may insist on verifying that the consultant has adequate professional liability insurance.

Who has control over the final version of the report: It is common practice for the contract to require that a draft version of the final report be presented to the client. The client is given a fixed period to review the report and, possibly, ask for changes. The revised version that is then submitted by the consultant should be the final version.

Time and Materials

A time and materials contract (often referred to as a 'cost plus contract) is somewhere between a contract hire agreement and a fixed price contract. The supplier agrees to undertake the development of the software in much the same way as in a fixed-price contract, but payment is made based on the costs incurred, with labor charged in the same way as for contract hire. The supplier is not committed to completing the work for a fixed price, although a maximum payment may be fixed beyond which the project may be reviewed.

OUTSOURCING

Outsourcing, sometimes known as facilities management, is the commercial arrangement under which a company or organization (the customer) hands over the planning, management, and operation of certain functions to another organization (the supplier).

IT outsourcing contracts are inherently complex and depend very much on individual circumstances. It is not appropriate to go into detail here about such contracts, but the following is a list of just some of the points that need to be addressed:

- how is performance to be monitored and managed?
- what happens if performance is unsatisfactory.
- which assets are being transferred.
- staff transfers.
- audit rights.
- contingency planning and disaster recovery.
- intellectual property rights in software developed during the contract.
- duration of the agreement and termination provisions.

SOFTWARE CONTRACTS AND LIABILITY

WHAT IS A CONTRACT?

A contract is simply an agreement between two or more persons (the *parties* to the contract) that can be enforced in a court of law. The parties involved may be legal persons or natural persons.

ESSENTIALS FOR A CONTRACT

The most essential concerns of a contract are that:
All the parties must intend to make a contract.
All the parties must be competent to make a contract, that is, they must be old enough and of sufficiently sound mind to understand what they are doing.
There must be a 'consideration', that is, each party must be receiving something and providing something.

FIXED PRICE CONTRACTS FOR BESPOKE SYSTEMS

The first type of contract we shall consider is the type that is used when an organization is buying a system configured specifically to meet its needs. Such systems are known as *tailor-made* or *bespoke* systems.
A bespoke system may consist of a single PC equipped with a word processor, a spreadsheet, and a set of macros adapted to the customer's needs or it may consist of several thousand PCs spread across 50 offices in different parts of the world, connected by a wide-area network, with large database servers and a million lines of specially written software.

BESPOKE SYSTEM

The contract for the supply of a bespoke system consists of three parts:
A short *agreement*, which is signed by the parties to the contract: These state who the parties are and, very importantly, say that anything that may have been said or written before does not form part of the contract. The *standard terms and conditions*, which are normally those under which the supplier does business, and A set of *schedules* or *annexes*, which specify the requirements of this contract, including what is to be supplied, when it is to be supplied, what payments are to be made and when, and so on.

ISSUES IN CONTRACT

WHAT IS TO BE PRODUCED

The contract must state what is to be produced Requirements specification, it is important that the reference to the requirements specification identifies that document uniquely; normally this will mean quoting a date and issue number.
Problem: Any changes needed during the contract life

What is to be delivered

The following is a non-exhaustive list of possibilities:
Source code. Command files for building the executable code from the source and for installing it.
Documentation of the design and the code.
Reference manuals, training manuals, and operations manuals.
Software tools to help maintain the code.
User training, training for the client's maintenance staff.
Test data and test results.

OWNERSHIP OF RIGHTS

The contract must also state just what legal rights are being passed by the software house to the client under the contract. Ownership in physical items such as books, documents, or disks will usually pass from the software house to the client, but other intangible rights, known as intellectual property rights, present more problems.

CONFIDENTIALITY

When a major bespoke software system is being developed, the two parties will acquire confidential information about each other.
None of the parties would like the other to disclose its secrets.
It is usual in these circumstances for each party to promise to maintain the confidentiality of the other's secrets, and for express terms to that effect to be included in the contract.

PENALTY CLAUSES

The previous subsection dealt with compensation for delays caused by the client; delays caused by the supplier are handled differently.
Delays in delivering working software are notoriously common; it might therefore be expected that contracts for the supply of software would normally include such a penalty clause. There are three reasons for this:

- Suppliers are very reluctant to accept penalty clauses and anything stronger than the example quoted above is likely to lead to reputable suppliers refusing to bid.
- If the contract is to include penalty clauses, the bid price is likely to be increased by at least half the maximum value of the penalty.
- If the software is seriously late and penalties approach their maximum, there is little incentive for the supplier to complete the work since they will already have received in-stage payments as much as they are going to get.

PROJECT MEETING

Regular progress meetings are essential to the successful completion of a fixed-price contract, and standard terms and conditions should require them to be held. The minutes of progress meetings, duly approved and signed, should have contractual significance in that they constitute evidence that milestones have been reached (so that stage payments become due) and that delay payments have been agreed upon.

PROJECT MANAGERS

Each party needs to know who, of the other party's staff, has day-to-day responsibility for the work and what the limits of that person's authority are. The standard terms and conditions should therefore require each party to nominate, in writing, a project manager. The project managers must have at least the authority necessary to fulfill the obligations that the contract places on them. The limits of their financial authority must be explicitly stated, that is, the extent to which they can authorize changes to the cost of the contract.

INFLATION

In lengthy projects or projects where there is a commitment to long-term maintenance, the supplier will wish to ensure protection against the effects of unpredictable inflation. To handle this problem, it is customary to include a clause that allows charges to be increased by the rise in costs.
The clause should state how often (once a year, twice a year) charges can be increased and how the effect on the overall price is to be calculated.

TERMINATION OF CONTRACT

There are many reasons why it may become necessary to terminate a contract before it has been completed. It is not uncommon, for example, for the client to be taken over by another company that already has a system of the type being developed, or for a change in policy on the part of the client to mean that the system is no longer relevant to its needs. It is essential, therefore, that the contract makes provision for amicably terminating the work. This usually means that the supplier is to be paid for all the work carried out up to the point where the contract is terminated, together with some compensation for the time needed to redeploy staff on other revenue-earning work. The question of ownership of the work so far carried out must also be addressed.

CONSULTANCY

- The product of a consultancy project is usually a report or other document.
- Under normal circumstances, a fee for IT consulting is measured on a per-day, per-consultant basis.
- Fixed-fee IT consulting contract applies to well-defined projects.
- Open-ended consultancy models generally favor the consulting firm, as the consultancy firm is rewarded on a per-day basis, and there is no incentive to complete assignments within a fixed time. The result often is a risk of project and cost overrun.
- The contract is very simple.

CONTRACT HIRE

- Suppliers' responsibility is limited to providing suitably competent people and replacing them if they become unavailable.
- The staff work under the direction of the client.
- Payment is based on a fixed rate for each day worked.
- Ownership of intellectual property rights generated in the course of the work may be needed to be addressed.

DATA PROTECTION VAALA CHAPTER

THE DATA PROTECTION ACT 1984

Use of irrelevant and inaccurate info.
Access by an unauthorized person.
Purpose of use other than for which it was collected.

KEY RESPONSIBILITIES

Protect against misuse of personal information. Example of Misuse: Credit card agency might not give a load to a person because someone who previously lived at the same address defaulted on a load.

TERMINOLOGIES:

Data: Info that is being processed or collected to record as part of some filing system.
Data Controller: A person who determines why or how the data is processed.
Data Processor: Anyone who processes the data on behalf of the data controller.
Personal Data: Data that relates to a living person who can be identified from the data.

DATA PROTECTION PRINCIPLES:

FIRST PRINCIPLE:

"Personal data shall be processed fairly and lawfully and in particular shall not be processed unless (a) at least one of the conditions in Schedule 2 is met and (b) in the case of sensitive personal data, at least one of the conditions in Schedule 3 is also met."

The most significant condition in Schedule 2 of the Act is that the data subject has given their consent. If this is not the case, then the data can only be processed if the data controller is under a legal or statutory obligation for which the processing is necessary. For processing sensitive personal information, Schedule 3 requires that the data subject has given explicit consent.

SECOND PRINCIPLE:

"Personal data shall be obtained only for one or more specified and lawful purposes, and shall not be further processed in any manner incompatible
with that purpose or those purposes."

Data controllers must notify the Information Commissioner of the personal data they are collecting and the purposes for which it is being collected.

THIRD PRINCIPLE:

"Personal data shall be adequate, relevant, and not excessive about the purpose or purposes for which they are processed."

FOURTH PRINCIPLE:

"Personal data shall be accurate and, where necessary, kept up to date."

While this principle is admirable, it can be extremely difficult to comply with.

Fifth Principle:

"Personal data processed for any purpose or purposes shall not be kept for longer than is necessary for that purpose or those purposes."

SIXTH PRINCIPLE:

"Personal data shall be processed by the rights of data subjects under this Act."

SEVENTH PRINCIPLE:

"Appropriate technical and organizational measures shall be taken against unauthorized or unlawful processing of personal data and accidental loss or destruction of, or damage to, personal data."

It implies the need for access control (through passwords or other means), backup procedures, integrity checks on the data, vetting of personnel who have access to the data, and so on.

EIGHT PRINCIPLE:

"Personal data shall not be transferred to a country or territory outside the European Economic Area unless that country or territory ensures an adequate level of protection for the rights and freedoms of data subjects about the processing of personal data."

RIGHTS OF DATA SUBJECTS:

The 1984 Act gave data subjects the right to know whether a data controller held data relating to them, the right to see the data, and the right to have the data erased or corrected if it is inaccurate.

The 1998 Act extends this right of access so that data subjects have the right to receive:

A description of the personal data being held.
An explanation of the purpose for which it is being held and processed.
A description of the people or organizations to which it may be disclosed.
Intelligible statement of the specific data held about them.
A description of the source of the data.
To prevent processing likely to cause damage and distress.
To prevent processing for direct marketing.
To compensation in the case of damage caused by the processing of personal data in violation of the principles of the Act.

PRIVACY:

The starting point is the Regulation of Investigatory Powers Act 2000, which sets up a framework for controlling the lawful interception of computer, telephone, and postal communications.

The Act allows government security services and law enforcement authorities to intercept, monitor, and investigate electronic data only in certain specified situations such as when preventing and detecting crime. Powers include being able to demand the disclosure of data encryption keys.

They can monitor and record communications without the consent of the users of the service, provided this is done for one of the following purposes:

To establish facts, for example, on what date a specific order was placed.
To ensure that the organization's regulations and procedures are being complied with.
To ascertain or demonstrate standards that are or ought to be to be achieved.
To prevent or detect crime (whether computer-related or not).
To investigate or detect unauthorized use of telecommunication systems.
To ensure the effective operation of the system, for example, by detecting viruses or denial of service attacks.

FREEDOM OF INFORMATION:

The primary purpose of the Freedom of Information Act is to provide clear rights of access to information held by bodies in the public sector. Under the terms of the Act, any member of the public can apply for access to such information.

The Act also provides an enforcement mechanism if the information is not made available. The legislation applies to Parliament, government departments, local authorities, health trusts, doctors' surgeries, universities, schools, and many other organizations.

INTELLECTUAL PROPERTY RIGHTS

If someone steals your bicycle, you no longer have it. If someone takes away a computer belonging to a company, the company no longer has it.

If you invent a drug that will cure all known illnesses and leave the formula on your desk, someone can come along, read the formula, remember it, and go away and make a fortune out of manufacturing the drug. But you still have the formula even though the other person now has it as well. This shows that the formula – more generally, any piece of information – is not property in the same way that a bicycle is.

Property such as bicycles or computers is called tangible property, that is, property that can be touched. It is protected by laws relating to theft and damage.

Property that is intangible is known as *intellectual property*. It is governed by a different set of laws, concerned with *intellectual property rights*, that is, rights to use, copy, or reveal information about intellectual property.

DIFFERENT TYPES OF INTELLECTUAL PROPERTY RIGHTS

Copyright is, as the name suggests, concerned with the right to copy something. It may be a written document, a picture or photograph, a piece of music, a recording, or many other things, including a computer program. Patents are primarily intended to protect inventions, by giving inventors a monopoly on exploiting their inventions for a certain period.

Confidential information is information that a person receives in circumstances that make it clear they must not pass it on. Trademarks identify the product of a particular manufacturer or supplier.

COPYRIGHT

Copyright is associated primarily with the right to copy something. The 'something' is known as the work. Only certain types of work are protected by copyright law. The types that concern us here are 'original literary, dramatic, musical or artistic' works. The 1988 Copyright Design and Patents Act states that the term 'literary work' includes a table or compilation, a computer program, preparatory design material for a computer program and certain databases. Copyright comes into existence when the work is written down or recorded in some other way. It is not necessary to register it in any way.

WHAT YOU CAN DO TO A COPYRIGHTED WORK

The law specifically permits certain actions in relation to a copyright work and some of these are of relevance to software. First, it is explicitly stated that it is not an infringement of copyright to make a backup of a program that you are authorized to use. However, only one such copy is allowed. If the program is stored in a filing system with a sophisticated backup system, multiple backup copies are likely to come into existence.

Secondly, you can 'decompile' a program to correct errors in it. You can also decompile a program to obtain the info you need to write a program that will 'interoperate' with it, provided this information is not available to you in any other way.

Thirdly, you can sell your right to use a program in much the same way that you can sell a book you own. However, when you do this, you sell all your rights. You must not retain a copy of the program.

DATABASES

Copyright subsists in a database if 'its contents constitute the author's own intellectual creation'. There are many databases that do not satisfy this criterion but which, nonetheless, require a lot of effort and a lot of money to prepare. Examples might include databases of hotels, pop songs, or geographic data. To encourage the production of such modest but useful databases, regulations were introduced in 1997 to create a special intellectual property right called the database right.

The database right subsists in a database 'if there has been substantial investment in obtaining, verifying or presenting the contents of the database'.

It lasts for 15 years and prevents anyone from extracting or reusing all, or a substantial part of, the database without the owner's permission.

COPYRIGHT INFRINGEMENT

Anyone who, without permission, does one of the things that are the exclusive right of the copyright owner is said to infringe the copyright. Primary infringement takes place whenever any of the exclusive rights of the copyright owner is breached.

Secondary infringement occurs when primary infringement occurs in a business or commercial context. Can lead to heavy fines and even imprisonment. It involves piracy of software for trading or business usage.

OWNERSHIP

As a rule, the copyright in a work belongs initially to its author. If the work is jointly written by several authors, they jointly own the copyright.

If the author is an employee and has written the work as part of his or her job, then the copyright belongs to the employer, unless there is an explicit, written agreement to the contrary.

The employer owns the copyright only if the author is legally an employee. If the author is an independent contractor, he or she will own the copyright unless there is an agreement to the contrary. For this reason, if a company commissions an independent contractor (freelance programmer) to write software, it is important to have a formal agreement regarding ownership of the copyright in the resulting software.

LICENSING

It is very common for the owner of the copyright in a piece of software to license other people or organizations to carry out some of the activities that are otherwise the exclusive right of the copyright owner. The copyright remains the property of the owner, but the *licensees* (the people to whom the software is licensed) acquire certain rights.

PATENTS

A patent is a temporary right, granted by the state, enabling an inventor to prevent other people from exploiting his invention without his permission.

Unlike copyright, it does not come into existence automatically; the inventor must apply for the patent to be granted. However, the protection it gives is much stronger than copyright because the grant of a patent allows the person owning it (the *patentee*) to prevent anyone else from exploiting the invention, even if they have discovered it for themselves.

PATENTS NEED

Patents were originally intended to encourage new inventions and to encourage the disclosure of those new inventions.

Inventors are often hesitant to reveal the details of their inventions, for fear that someone else might copy it. A government-granted temporary monopoly on the commercial use of their invention provides a remedy for this fear, and so acts as an incentive to disclose the details of the invention. After the monopoly period expires, everyone else is free to practice the invention. And because of the disclosure made by the inventor, it is very easy to do so.

WHAT CAN BE PATENTED?

In Europe, the law relating to patents is based on the European Patent Convention. This was signed in 1973 by 27 European countries and came into force in 1978. The UK's obligations under the Convention were implemented in the Patents Act 1977, although there have been some subsequent modifications. The 1977 Act states that an invention can only be patented if it:

- is new.
- involves an inventive step.
- is capable of industrial application.
- is not in an area specifically excluded.

Similar criteria apply to all the countries that are signatories to the Convention.

WHAT PATENT ACT EXCLUDES……

Following the European Patent Convention, the Patents Act 1977 excludes the following: Scientific theories: The theory of gravity cannot be patented although a machine that uses it in a novel way could be.

Mathematical methods: This means, for example, that the methods used for carrying out floating point arithmetic cannot be patented. A machine that uses the ideas can however be patented.

A literary, dramatic, musical, or artistic work or any other aesthetic creation: As we have already seen, these are protected by copyright. The presentation of information: Again, this is covered by the law of copyright. A scheme, rule, or method for performing a mental act, playing a game, or doing business, or a program for a computer.

OBTAINING A PATENT

Unlike copyright, which comes into existence automatically when the protected work is recorded, whether in writing or otherwise, a patent must be explicitly applied for. Applying for a patent can be an expensive and time-consuming business.

Patents are granted by national patent offices. Inventors who want protection in several different countries must, in principle, apply separately to the patent offices of each country.

ENFORCING A PATENT

The grant of a patent is not a guarantee that it can be effectively enforced. If you own a patent, and you find that someone is infringing the patent, you may go to the courts to enforce your rights. The problem is that enforcing a patent that you own or challenging a patent held by someone else is a time-consuming and expensive process.

SOFTWARE PATENTS

In the USA software can be patented if:

It is part of a product that is itself eligible to be patented.

It controls a process that has some physical effect.

It processes data that arises from the physical world.

The European Patent Office has been granting patents for software since 1998, as has the UK Patent Office. Patent offices in different European countries have adopted different policies toward the patenting of software, with the result that there is much confusion about what is and what is not patentable.

The result is that there is a conflict between the law and practice, a very undesirable situation.

TRADEMARKS AND PASSING OFF

The law regarding trademarks in the UK is based on the Trademarks Act 1994, which consolidated and updated existing legislation. The Act defines a trademark as:

any sign capable of being represented graphically which is capable of distinguishing goods or services of one undertaking from those of other undertakings. A trademark may consist of words (including personal names), designs, letters, numerals or the shape of goods or their packaging.

Even where a trademark is not registered, action can be taken in the civil courts against products that imitate the appearance or 'get up' of an existing product. This is known as the tort of 'passing off'.

TRADEMARK

There are comprehensive rules limiting what can be registered as a trademark. Place names and the names of people, for example, will not generally be accepted for registration.

The 1994 Act makes it an offense to:

Apply an unauthorized registered trademark (that is, a registered trademark that you do not own or do not have the owner's permission to use) to goods.

Sell or offer for sale (or hire), goods or packaging that bear an unauthorized trademark.

Import or export goods that bear an unauthorized trademark.

Have during the business, goods for sale or hire goods (or packaging) that bear an unauthorized trademark.

DOMAIN NAMES

Internet domain names are ultimately managed by the Internet Corporation for Assigned Names and Numbers (ICANN). ICANN is an internationally organized, non-profit making corporation. Its main responsibility is ensuring the 'universal resolvability' of internet addresses; that is, ensuring that the same domain name will always lead to the same internet location wherever it is used from and whatever the circumstances. In practice, ICANN delegates the responsibility for assigning individual domain names to other bodies, subject to strict rules.

CYBERSQUATTING

The inconsistencies between the two different systems of registration have made it possible for people to register, as their own domain names, and trademarks belonging to other companies. This is sometimes known as cybersquatting. They then offer to sell these domain names to the owner of the trademark at an inflated price. It is usually cheaper and quicker for the trademark owner to pay up than to pursue legal remedies, even when these are available.

WIPO REPORT I

In 1999, the WIPO published a report entitled 'The management of internet names and addresses: Intellectual property issues. WIPO is an international organization with 177 states as members. The report recommended that ICANN adopt a policy called the Uniform Domain Name Dispute Resolution Policy (UDRP), which includes specific provisions against cybersquatting. This policy has proved reasonably effective. Within two years, over 3,000 complaints had been dealt with by one of the arbitration centers alone, 80 percent being resolved.

WIPO REPORT II

In 2001, WIPO published a second report, 'The recognition of rights and the use of names in the internet domain system'. This addresses conflicts between domain names and identifiers other than trademarks. Examples: The use of personal names in domain names or the use of the names of peoples or geographic areas by organizations that have no connection with them.

Internet Misuse Vaala Chapter

PROBLEMS WITH INTERNET AVAILABILITY:

Defamation, Porn, Spam. These are topics that cannot sensibly be discussed in technical terms alone. There are social, cultural, and legal issues that must all be considered. Different countries approach these issues in very different ways but the internet itself knows no boundaries.

Every country has laws governing what can be published or publicly displayed. Typically, such laws address defamation, that is, material that makes unwelcome allegations about people or organizations, and pornography, that is, material with sexual content. They may also cover other areas such as political and religious comments, incitement to racial hatred, or the depiction of violence. Although every country has such laws, they are very different from each other.

Some countries, for example, consider that pictures of scantily clad women are indecent and have laws that prevent them from appearing in publications and advertisements. In other countries, such pictures are perfectly acceptable. In some countries, publication of material criticizing the government, or the established religion is effectively forbidden, while in others it is a right guaranteed by the constitution and vigorously defended by the courts.

ROLES AND RESPONSIBILITIES OF AN ISP:

The coming of the internet (and satellite television) has made these differences much more apparent and much more important than they used to be. Since material flows across borders so easily, it is both much likelier that material that violates publication laws will come into a country and more difficult for the country to enforce its laws. The roles and responsibilities of ISPs are a central element in the way these issues are addressed, and we, therefore, start by discussing the legal framework under which ISPs operate. Then we shall look at the problems of different legal systems. Only then can we address the specific issues of defamation, porn, and spam.

MERE CONDUIT:

The role of the mere conduit is that in which the ISP does no more than transmit data; in particular, the ISP does not initiate transmissions, does not select the receivers of the transmissions, and does not select or modify the data transmitted. It is compatible with the role of a mere conduit for an ISP to store information temporarily, provided this is only done as part of the transmission process. Provided it is acting as a mere conduit, the regulations provide that an ISP is not liable for damages or any criminal sanction because of transmission.

CACHING:

The caching role arises when the information is the subject of automatic, intermediate, and temporary storage, for the sole purpose of increasing the efficiency of the transmission of the information to other recipients of the service upon their request. An ISP acting in the caching role is not liable for damages or any crime if it:

Does not modify the information.

Complies with conditions on access to the information.

Complies with any rules regarding the updating of the information, specified in a manner widely recognized and used by the industry.

Does not interfere with the lawful use of technology, widely recognized, and used by industry, to obtain data on the use of the information.

Acts expeditiously to remove or to disable access to the information he has stored upon obtaining actual knowledge of the fact that the information at the initial source of the transmission has been removed from the network, or access to it has been disabled, or that a court or an administrative authority has ordered such removal or disablement.

HOSTING:

Where an ISP stores information provided by its customers, it is acting in a

hosting role. In this case, it is not liable for damage or criminal sanctions provided that:

It did not know that anything unlawful was going on.

When a claim for damages is made, it did not know anything that should have led it to think that something unlawful might be going on.

When it found out that something unlawful was going on, it acted expeditiously to remove the information or to prevent access to it, and

The customer was not acting under the authority or the control of the service provider.

CRIMINAL LAWS:

Suppose a person, X, commits a criminal offense in country A and then moves to country B.

Can country A ask that X be arrested in country B and sent back to A so that he can be put on trial?

Or can X be prosecuted in country B for the offense committed in country A?

The answer to the first of these questions is that, provided there exists an agreement (usually called an *extradition treaty*) between the two countries, then in principle X can be extradited, that is, arrested and sent back to face trial in A. However, this can only be done under the very important proviso that the offense that X is alleged to have committed in A would also be an offense in B. What is more, extradition procedures are usually extremely complex, so attempts at extradition often fail because of procedural weaknesses. Within the EU, the recent proposals for a European arrest warrant are intended to obviate the need for extradition procedures.

In general, the answer to the second question is that X cannot be prosecuted in B for an offense committed in A. However, in certain cases some countries, including the UK and the USA, claim *extraterritorial jurisdiction*, that is the right to try citizens and other residents for crimes committed in other countries; in particular, this right is used to allow the prosecution of people who commit sexual offenses involving children while they are abroad. However, the issue of extraterritoriality is much wider than this and attempts to claim extraterritorial jurisdiction make countries very unpopular.

DEFAMATION:

Making statements that will damage someone's reputation, bring them into contempt, make them disliked, and so on.

The Defamation Act 1996 states that a person has a defense if they can prove that:

He was not the author, editor, or publisher of the statement complained, He took reasonable care about its publication, and He did not know, and had no reason to believe, that what he did caused or contributed to the publication of a defamatory statement.

THE INTERNET CONTENT RATING ASSOCIATION:

The Internet Content Rating Association (ICRA) is an international, independent organization whose mission, it claims, is: 'to help parents to protect their children from potentially harmful material on the internet, whilst respecting the content providers' freedom of expression.' Its board includes representatives from the major players in the internet and communications markets.

SPAM:

Unsolicited email sent without the consent of the addressee and without any attempt at targeting recipients who are likely to be interested in its contents.

Stopping Spam: closing loopholes that enable spammers to use other people's computers to relay bulk messages, the use of machine learning and other techniques to identify suspicious features of message headers, the use of virus detection software to reject emails carrying viruses, keeping 'stop lists' of sites that are known to send spam.

Rules for sending spam: Unsolicited emails can only be sent to individuals (as opposed to companies) if they have previously given their consent.

Sending an unsolicited email that conceals the address of the sender or does not provide a valid address to which the recipient can send a request for such mailings to cease is unlawful.

Computer Misuse:

Act 1990:

The Computer Misuse Act creates three new offenses that can briefly be described:

Unauthorized access to a computer, Unauthorized access to a computer to commit a serious crime, Unauthorized modification of the contents of a computer.

Section 01:

A person is guilty of an offense if He causes a computer to perform any function with intent to secure access to any program or data held in any computer, The access he intends to secure is unauthorized, He knows at the time when he causes the computer to perform the function that that is the case.

Section 02:

Section 2 of the Act is concerned with gaining unauthorized access to a computer to commit a more serious offense. A blackmailer might attempt to gain unauthorized access to medical records, for example, to identify people in prominent positions who had been treated for sexually transmitted diseases, to blackmail them. A terrorist might try to get access to a computer system for air traffic control to issue false instructions to pilots to cause accidents to happen.

Section 03:

A person is guilty of an offense if he does any act which causes an unauthorized modification of the contents of any computer; and at the time when he does the act, he has the requisite intent and the requisite knowledge.

Computer Fraud:

Conduct that involves the manipulation of a computer, by whatever method, dishonestly obtain money, property, or some other advantage of value, or to cause loss. Computer fraud involves manipulating a computer dishonestly to obtain Money, Property, and Services, or to cause loss.

Fraud Techniques:

Most of the techniques that are used are much older than computers. Such tricks as placing fictitious employees on the payroll or setting up false supplier accounts and creating spurious invoices are still the commonest type of fraud as they were before computers appeared.

Computer Crime:

Alternatively referred to as cybercrime, e-crime, electronic crime, or hi-tech crime. Computer crimes an acts performed by a knowledgeable computer user sometimes referred to as a hacker that illegally browses or steals a company's or individual's private information. In some cases, this person or group of individuals may be malicious and destroy or otherwise corrupt the computer or data files.