Software License and Contracts

IT5206 - Professional Practice

Level III - Semester 5

Intended Learning Outcomes

At the end of this lesson, you will be able to;

- Contrast ethical and legal issues as related to information technology.

- Identify organization and human resource management concepts.

- Identify ethical, legal, and privacy issues related to Information Technology.

List of sub topics

4.1 What is a contract?

4.2 License agreements

    4.2.1 Retail Software Agreements

    4.2.2 Corporate Software Agreements

4.3 Outsourcing

4.4 Contracts for Custom Built Software

    4.4.1 Structure of the contract

    4.4.2 The introductory section

    4.4.3 What is to be produced

    4.4.4 What is to be delivered

    4.4.5 Ownership of rights

    4.4.6 Confidentiality

    4.4.7 Payment terms

    4.4.8 Calculating payments for delays and changes

List of sub topics

4.4.9 Penalty clauses

4.4.10 Obligations of the client

4.4.11 Progress meetings

4.4.12 Acceptance procedure

4.4.13 Warranty and maintenance

4.4.14 Termination of the contract

4.4.15 Arbitration

4.4.16 Inflation

4.5 Contracts for Consultancy and Contract Hire

4.6 Liability for Defective Software

4.7 Health and Safety

4.1 What is a Contract?

- A contract is 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.

- There is no specific form for a contract description.

- In England and Wales a contract need not be written down.

4.1 What is a Contract?

The following things are essential for a contract:

- All the parties must intend to make a contract.

- All the parties must be competent to make a contract.

  They should have enough age.

  They should be mentally matured to understand what they are doing.

- There must be a 'consideration'.

  Each party must be receiving something and providing something.

4.1 What is a Contract?

- Contract law is largely based on common law.

- The existing contract law is capable to handle contracts for the provision of computers, software, and related services.

- However, with the advent of the internet and e-commerce, new rules are now required to address issues like electronic signatures and which country's laws should apply to online transactions when the participants are in different countries.

4.2 License Agreements

❑ It is unusual for customer to 'buy' software in the strict sense of the word 'buy'.

❑ What is usually bought is a copy of the software with a license to use it in certain ways.

❑ There are two main types of license.

- Retail

- Cooperate

4.2 License Agreements

4.2.1 Retail Software Agreements

- Software aimed at a mass market and selling for a one-off fee of a few tens or hundreds of pounds per copy.

- Large organizations can negotiate bulk licenses for multiple copies at a significant discount, and in some situations site licenses may be offered covering all computers on a given site.

- The license is usually granted in perpetuity.

- The license excludes any provision for the user to receive updates, corrections, or assistance, with the possible exception of a help line.

- If a new version is required, the user must buy it from scratch.

4.2 LICENCE AGREEMENTS

4.2.2 Corporate Software Agreements

- Software aimed at large organizations.

- It generally targets a market with fewer than 100 clients and is quite specialized.

  However Human Resources Management and Customer Relationship Management, may have many thousands of customers.

- Typically, there is a substantial up-front license fee of several thousands of pounds along with an annual fee that is about equal to 20% of the initial fee and is referred to as a maintenance fee.

- The fees may well depend on usage:

  The annual fee for a payroll package, will depend on the number of employees . A computer-aided design package will depend on the maximum number of simultaneous users.

4.2 LICENCE AGREEMENTS

4.2.2 Corporate Software Agreements

- The customer receives assistance with initial installation and configuration, ongoing upgrades (including those required to comply with legislative changes), and a helpful and quick help line in return for these significant fees.

- Training and consultancy are available but the fees are high.

- Suppliers of this sort of software rely on such incidental income to maintain their profitability.

4.2 LICENCE AGREEMENTS

- Software licenses are usually long and complicated.

- Open-source licenses for software allow anyone to use the source code and other design material, either in its original form or after modification, subject to certain conditions.

- Software covered by an open-source license is usually, but not invariably, available free of charge.

- Typical conditions to be found in open-source licenses include requirements to keep the names of the authors and a statement of copyright in the code and only to re-distribute the software under identical license conditions.

4.2 LICENCE AGREEMENTS

- Closely related to open-source software is 'free software', a concept promoted by the Free Software Foundation, established by Richard Stallman in 1985 to support the GNU project.

- A completely different type of license is a **marketing license**.

- Companies that produce software packages frequently do not have the resources or expertise to market the software outside their own countries and they therefore license agents to sell it for them in other countries.

- Marketing licenses are normally granted for a fixed period; they may be restricted to a specified geographical area or to specific types of platform.

4.2 LICENCE AGREEMENTS

- Computer games are usually produced by fairly small companies that have no capacity to market their games.

- The marketing company agrees to pay the supplier a fixed percentage of the income it receives from each sale of the package.

- At the end of the two-year period, the supplier may choose to renew the license, if sales have been satisfactory, or it may look for a new agent in the hope of increasing sales.

4.3 Outsourcing

❑ IT outsourcing contracts are usually complicated and depend on individual circumstances.

❑ The following is a list of points that need to be addressed:

1. How the performance is monitored and managed?

2. What happens if performance is unsatisfactory?

3. Which assets are being transferred?

    It is important to agree on precisely what is to be transferred.

    Very often IT staff will be transferred to the supplier.

4. Audit rights.

    The customer needs to ensure that both its external auditors and its internal auditors have adequate access rights to be able to fulfil their duties.

4.3 Outsourcing

5. Contingency planning and disaster recovery.

6. Ownership of the intellectual property rights in software developed during the contract.

7. Duration of the agreement and termination provisions.

❑ The first two items above are key element in IT outsourcing and are often treated as a separate agreement known as a **service level agreement**.

4.4 Contracts for Custom Built Software

4.4.1 Structure of the contract

A contract might consist of:

➢ A short introductory section, which specifies, among other things, the names of the parties to the contract.

➢ A set of standard terms and conditions.

➢ A set of appendices or annexes.

4.4 Contracts for Custom Built Software

4.4.2 The introductory section

- The first part of the contract is brief.

- It states that it is an agreement between the parties whose names and registered addresses are given.

- It is dated and signed by authorized representatives of the parties.

- It begins with a set of definitions of terms used in the course of the agreement.

- The following slides discuss the issues which must be addressed by the standard terms and conditions.

4.4 Contracts for Custom Built Software

4.4.3 What is to be produced

- It is necessary that the contract states what is to be produced.

- There are usually two levels of reference here: the standard terms and conditions refer to an annex and the annex then refers to a separate document which constitutes the requirements specification.

- It is important that the reference to the requirements specification identifies that document uniquely.

4.4 Contracts for Custom Built Software

4.4.4 What is to be delivered

- Producing software for a client is not, usually, a matter of simply handing over the text of a program which does what is required.

- It is important, therefore, that the contract states (usually in an annex) what precisely is to be provided.

- The following is a non-exhaustive list of possibilities:

  1. Source code.

  2. Command files for building the executable code from the source and for installing it.

  3. Documentation of the design and of the code.

4.4 Contracts for Custom Built Software

4.4.4 What is to be delivered

4. Reference manuals, training manuals and operations manuals.

5. Software tools to help maintain the code.

6. User training.

7. Training for the client's maintenance staff.

8. Test data and test results.

4.4 Contracts for Custom Built Software

4.4.5 Ownership of rights

- Contract should 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 discs will usually pass from the software house to the client.

- However, intangible rights, known as intellectual property rights, present more problems.

- Software is potentially protectable by a number of intellectual property rights, such as copyright, design rights, confidentiality and trade marks.

- It is important for the contract to state precisely who is to own these rights.

4.4 Contracts for Custom Built Software

4.4.5 Ownership of rights

- If the client is granted a license, the following matters should be dealt with in the contract:

1. Duration of the license.

2. State whether the licensee can assign or transfer the license to another.

3. Scope of the license: does the license cover use on one particular computer, or can the software be run on other machines.

4. Confidentiality.

4.4 Contracts for Custom Built Software

4.4.6 Confidentiality

- A second area of intellectual property law which should be considered in a software contract is confidentiality.

- The commissioning client may well have to pass confidential information about its business operations to the software house.

- The software house may not want the client to divulge to others details of the program content or other information gleaned about its operations by the client.

- 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.

4.4 Contracts for Custom Built Software

4.4.7 Payment terms

- The standard terms and conditions will specify the payment conditions.

- An annex will usually specify a pattern of payments like the following:

1. An initial payment of, say, 15 per cent of the contract value becomes due on signature of the contract.

2. Further stage payments become due at various points during the development, bringing the total up to, say, 65 per cent.

3. A further 25 per cent becomes due on acceptance of the software.

4. The final 10 per cent becomes due at the end of the warranty period.

4.4 Contracts for Custom Built Software

4.4.7 Payment terms

- Such a pattern has advantages for the supplier in that it reduces the financial risk arising from possible insolvency of the client or from default for other reasons and it reduces possible cash flow difficulties.

- In negotiating the payment pattern, the supplier will usually seek to have the stage payments becoming due on fixed calendar dates while the client will try to have them tied to the achievement of specific project milestones.

4.4 Contracts for Custom Built Software

4.4.8 Calculating payments for delays and changes

- The contract should therefore make provision for payments to compensate for the wasted effort, incurred.

  - When the client fails to provide information on a due date.

  - When changes are requested which result in extra work.

- The contract must specify the process by which these extra payments are to be calculated.

- An annex will include daily charging rates for each grade of staff employed on the contract and the amount of extra effort to be paid for will be agreed at progress meetings.

4.4 Contracts for Custom Built Software

4.4.9 Penalty clauses

- Delays caused by the supplier are handled differently.

- The normal mechanism used is to include a penalty clause which provides that the sum payable to the supplier is reduced by a specified amount for each week that acceptance of the product is delayed, up to a certain maximum.

    - A contract of value £1 million, the penalty might be specified as £5,000 per week up to a maximum of £100,000.

4.4 Contracts for Custom Built Software

4.4.10 Obligations of the client

- In almost all cases where work is being carried out for a specific client, the client will have to fulfil certain obligations if the contract is to be completed successfully.

- The following is a (non-exhaustive) list of possibilities:

1. Provide documentation on aspects of the client's activities or the environment in which the system will run.

2. Provide access to appropriate members of staff.

3. Provide machine facilities for development and testing.

4. Provide accommodation, telephone and secretarial facilities for the company's staff when working on the client's premises.

5. Provide data communications facilities to the site.

4.4 Contracts for Custom Built Software

4.4.11 Progress meetings

- Regular progress meetings are essential to the successful completion of a fixed price contract.

- It is advisable that standard terms and conditions 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.

4.4 Contracts for Custom Built Software

4.4.12 Acceptance procedure

- Acceptance procedures are a critical part of any fixed price contract.

- They provide the criteria by which successful completion of the contract is judged.

- Client should provide a fixed set of acceptance tests and expected results and that successful performance of these tests shall constitute acceptance of the system.

- Other points to be addressed under this heading are

  - Who shall be present when the tests are carried out.

  - What happens if the tests are not completed successfully.

4.4 Contracts for Custom Built Software

4.4.13 Warranty and maintenance

- Once the product has been accepted, it is common practice to offer a warranty period of, typically, 90 days.

- Any errors found in the software and reported within this period will be corrected free of charge.

- Once the warranty period is over, the supplier may offer, or the client demand, that maintenance will continue to be available on request.

- Since such maintenance is likely to involve enhancement of the software rather than simply correction of faults, the resources required are unpredictable.

- Maintenance will therefore usually be charged on a time and materials basis.

4.4 Contracts for Custom Built Software

4.4.14 Termination of the contract

- There are many reasons why it may become necessary to terminate a contract before it has been completed.

    - The client to be taken over by another company which already has a system of the type being developed.

    - 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, that the contract make provision for terminating the work in an amicable manner.

- 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.

4.4 Contracts for Custom Built Software

4.4.15 Arbitration

- Court action to resolve a contractual dispute is likely to be expensive.

- It is common practice for contracts to include a statement that, in the event of a dispute that cannot be resolved by the parties themselves, they agree to accept the decision of an independent arbitrator.

- Both bodies maintain lists of qualified arbitrators who have the necessary technical understanding.

- Some organizations may be unwilling to accept an arbitration clause because they feel that they are signing away some of their legal rights.

4.4 Contracts for Custom Built Software

4.4.16 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 which allows charges to be increased in accordance with the rise in costs.

- The Government publishes several different financial indices.

- The most appropriate one for the purposes of this type of contract is the Business Costs Index.

- 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.

4.5 Contracts for Consultancy and Contract Hire

- Contract hire is an arrangement in which the supplier agrees to supply the customer with the services of a certain number of staff at agreed daily or hourly charge rates.

- The customer takes responsibility for managing the staff.

- Either party can terminate the arrangement at fairly short notice, typically one week.

- The supplier's responsibility is limited to providing suitably competent people and replacing them if they become unavailable or are adjudged unsuitable by the client.

4.5 Contracts for Consultancy and Contract Hire

- Payment is on the basis of a fixed rate for each man day worked (the rate depends on the experience and qualifications of the staff).

- Freelance agreements under which individuals sell their own services to clients on a basis are similar to contract hire.

- Consultancy is an up-market version of contract hire.

- Consultants are experts who are called in by an organization to assess some aspect of its operations or its strategy and to make proposals for improvements.

4.5 Contracts for Consultancy and Contract Hire

- Consultancy projects are usually undertaken for a fixed price but the form of contract is very much simpler than the fixed price contracts so far described.

- There are two reasons for this.

  1. The sums of money are comparatively small and neither side stands to lose a great deal.

  2. Although it is possible to demonstrate that a software does not work correctly and thus that the supplier has failed to fulfil the contract, it is not usually possible to demonstrate unequivocally that a report fails to fulfil a contract.

4.5 Contracts for Consultancy and Contract Hire

There are four important aspects of a consultancy contract.

1. Confidentiality.

2. Terms of reference.

3. Liability.

4. Who has control over the final version of the report.

4.5 Contracts for Consultancy and Contract Hire

- A time and materials 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 on the basis of 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.

- Many of the complications of fixed price contracts still occur with time and materials contracts – ownership of rights, facilities to be provided by the client, progress monitoring arrangements.

4.6 Liability for Defective Software

- Suppliers of software and hardware are very reluctant to give a contractual commitment that it is fit for any purpose whatsoever.

- Standard terms and conditions will contain a clause that tries to limit the supplier's liability if it turns out that the software or hardware is defective.

- Most contracts will limit the extent of any liability either to the purchase price of the product or to some fixed maximum figure.

- If the product completely fails to work, the supplier agrees to refund the purchase price or possibly a bit more if some other maximum is specified.

4.6 Liability for Defective Software

- It is not possible to limit the damages payable if a defect in the product causes death or personal injury.

- Thus if a company supplies software to control a light railway link and a defect in the software leads to an accident in which people are killed or injured, then any clause in the contract for the supply of that software that claims to restrict liability will not be enforceable in respect of the claims for damages for the deaths and injuries.

- This restriction is an important one for companies that produce safety critical software and it also led at least one hardware supplier to refuse to sell its products to the nuclear industry.

4.6 Liability for Defective Software

- However, although this is very relevant when buying, say, a motor car, it is not very relevant to most individuals or companies when dealing with software, because the software that they use or develop is very unlikely to cause death or personal industry.

- They are much more likely to be concerned about software that doesn't do what it was claimed to do or that has too many bugs to be usable.

- At this point we need to distinguish between consumer sales and non-consumer sales.

4.6 Liability for Defective Software

- The most important requirement of the Sale of Goods Act in the context of software is that goods sold must be fit for the purpose for which such goods are commonly supplied.

- This means, for example, that if you buy a printer for use on your computer at home, it must be capable of printing reliably and clearly, at a usable speed.

- Software is intangible. It has never been satisfactorily decided whether or not it comes under the definition of 'goods' and hence it is not clear whether the Sale of Goods Act 1979 applies to the sale of software.

4.6 Liability for Defective Software

- It was generally thought that it applied to the sale of retail software or software sold under '**shrink-wrapped**' licenses (licenses that are deemed to come into operation when the package containing the disk on which the software is supplied is opened).

- However, with the coming of the internet, software is typically downloaded and users are asked to tick a box saying that they accept the license conditions. It is not at all clear that the Sale of Goods Act applies in such cases.

4.7 Health and Safety

- The Health and Safety at Work Act (1974) completely changed the approach to safety in Britain.

- It is critical to comprehend how the Act affects information systems engineers.

- The Act states: 'It shall be the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees'.

- Software engineers should particularly concerned about the following:

  1. Provision and maintenance of safe plant.

  2. Provision and maintenance of safe systems of work.

  3. Provision of such information, instruction, training, and supervision as necessary.

  4. Ensuring the workplace is maintained in a safe condition.

  5. Provision and maintenance of a safe working environment and adequate welfare arrangements.

4.7 Health and Safety

- A criminal offense results from a failure to adhere to the Health and Safety at Work Act.

- In serious cases, can lead to criminal proceedings being taken against individuals.

- Trains, ships and airplanes are all places where people work and where the general public are present.

- The safety obligations listed above therefore apply to them.

- They all include software-controlled equipment and accidents may occur as a result of defects in that software.

- Modern manufacturing plants are usually software controlled and can be dangerous; robots in particular can be dangerous for people working with them.

4.7 Health and Safety

- Modern chemical plants, oil refineries, and power stations, especially nuclear ones, are all software controlled and software failures can result in accidents that affect not only the workforce but also the general public.

- An organization that undertakes to develop safety-related software without employing staff who are familiar with the appropriate development techniques is likely to be in breach of the Health and Safety at Work Act.

- The clause in the BCS Code of Conduct (and similar clauses in other codes) regarding claims of competence are also relevant.