INFT 3800
Professional Practice in IT

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LECTURE NOTE – WEEK 5

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Legal Responsibilities

- Legal System for IT practitioners
- Contract agreement
- Intellectual Property, Patents, Copyright,
- Technology Transfer
- Occupational Health and Safety
- Non-Disclosure and Data Protection
- Financial responsibility
- Fintech and Regulation

Legal System for IT practitioners

- Laws vs Ethics
  - Laws carry the authority of a governing body and ethics do not.
  - The purpose of the legal system is to protect each member of society.
  - The legal system is divided into criminal law and civil law
    - Civil law covers a body of laws that governs a country or state and deal with the relationships and encounters between organizational entities, private affairs and citizens. Such as the law of property, law of contracts & employment law.
    - Criminal law deals with crimes against society such as murder, arson, bribery etc.

Legal System for IT practitioners

- Private vs Public Law
  - Private law includes family law, commercial law and labour law that regulates the relationship between individuals and organisations.
  - Public law regulates the structure and administration of government agencies and their relationships with citizens, employees and their governments. This include criminal law and constitutional law.

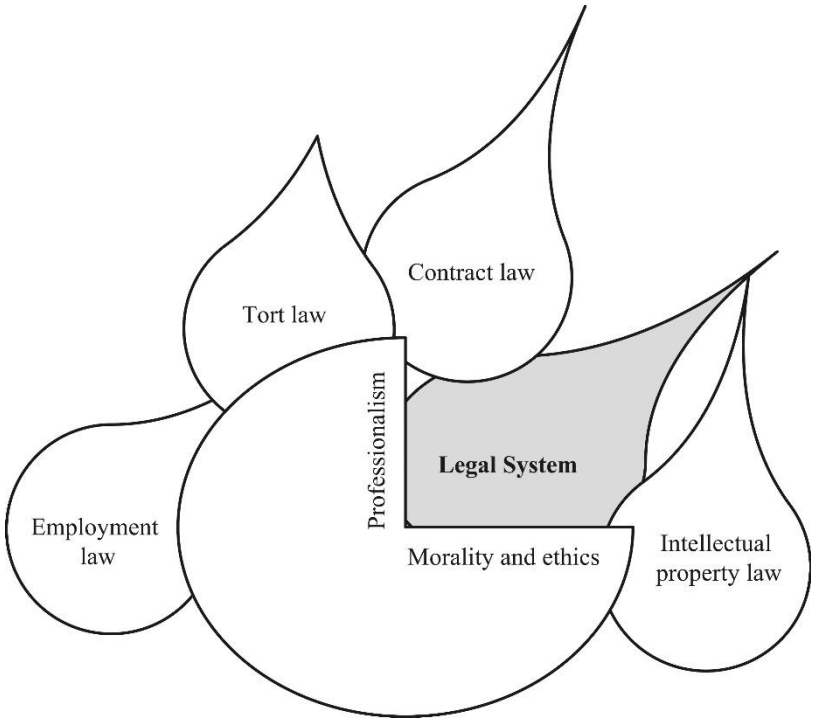


Figure 1. Legal system in the context of engineering and computing

Legal System for IT practitioners

- Why engineering/computing students should learn about law?
  - Thinking like a lawyer VS thinking like an engineer.
  - Law is different from engineering
  - A lawyer usually thinks about duties for action and recognizing danger of not being properly qualified to do something.
  - A lawyer is likely to look to rules o how to act in certain situations considering policies.
  - In some cases, the lawyer puts a premium on being convincing (as opposed to being right).
  - The engineer, on the other hand, puts being right well ahead of being convincing.

Legal System for IT practitioners

- Law basics for a future career
  - Computing professionals or other engineers need to learn about legal systems relevant to their professions.
  - At some points in one`s career, professionals have to deal with the law such as contractual relationships, intellectual properties (IP) tort of law.
  - Deal with other parties such as vendors, contractors, consultants, insurance companies directly or indirectly.
  - This is to be familiar with legal terminology in order to follow regulations, protect work, avoid lawsuits, know the boundaries of liability and comply with government rules.

Legal System for IT practitioners

- Law basics for a future career
  - Professionals may need to understand the various laws regulating employment and workplace.
  - Laws cover everything from hiring practices to workers` compensation.
  - Eg;
    - health and safety laws,
    - laws about stopping discrimination at the workplace,
    - law about regulating medical leave
    - laws about defending worker`s rights

Legal System for IT practitioners

- Example of employment law
  - Under common law, the duties an employer owes to an employee included:
    - An employer must not dismiss an employee without ause or reasonable notice of termination, which my be clear a unequivocal.
    - In carrying out any dismissal, the employer must not act in bad faith.
    - An employer must not force an employee to take a demotion without notice or cause.

Legal System for IT practitioners

- Example of employment law
  - Under common law, the duties an employee owes to an employer included:
    - To attend to work
    - To carry out the lawful orders of an employers
    - To perform duties in a competent manner
    - To serve the employers honestly and faithfully
    - Not to engage in a “conflict of interest”

- Contract and agreement practice are among many aspects of employment law implementation.

Contract agreement

- What is a contract?
- A contract is an exchange of promises, verbal or written, between two or more parties, to do or refrain from doing an act enforceable in a court of law.
- Several elements must be met in order for a court to consider a contract legally enforceable.
- The three most important contractual elements are offer, acceptance and consideration

Contract = Offer + Acceptance + Consideration

Contract agreement

Types of contracts:

- An **express** contract is an actual agreement between parties in which all of the terms are agreed upon and expressed in words either written of verbal.
- An **implied** contract is an agreement where all parties agree to a certain action even though nothing is expressly said or written down.
- A **unilateral** contract involves an action undertaken by one person or group alone.
- A **bilateral** contract is a legally binding contract formed by the exchange of mutual or reciprocal promises.

Contract agreement

A standard form contract;

- Sometimes referred as a contract between two parties that does not allow for negotiations; take it or leave it.
- It is an agreement between two parties or more that employ standardized, non-negotiated provisions to do a certain thing, in which one party has all the bargaining power and uses it to write the contract primarily to his or her advantage.

Contract agreement

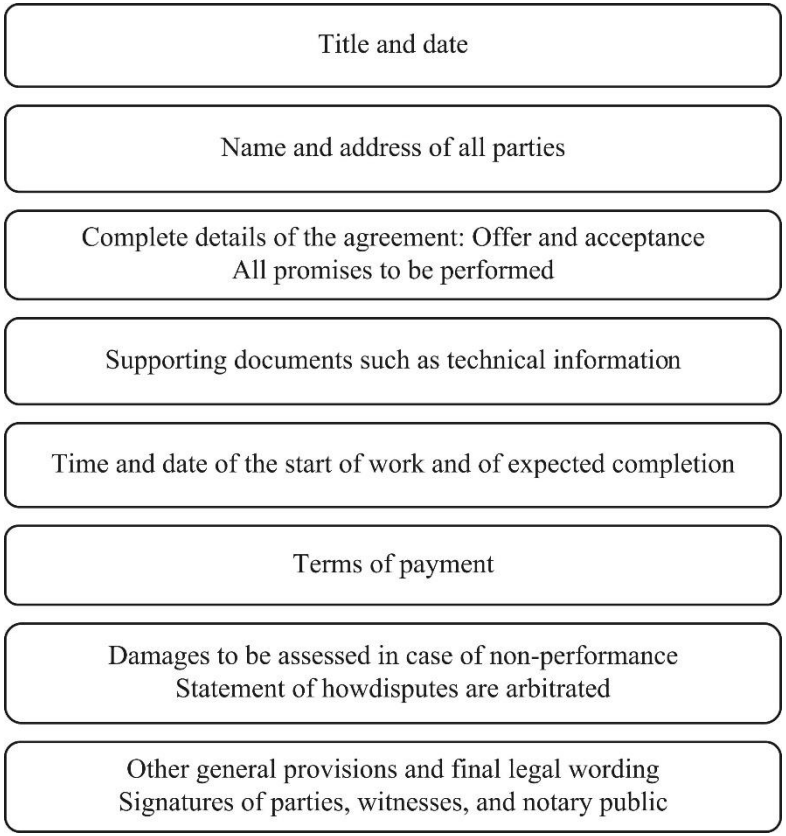


Figure 2. Basic content of a contract

Contract agreement

Discharge and breach of contract

- Breach means that one party had a duty to execute under the contract, and either did not perform or only partially executed that duty.
- Two type of breach:
  - Minor; despite the other party`s failure to completely perform, the performance is enough that the complaining party really got the advantage of the agreement.
  - Material; more serious breaches, occur when the complaining party has not received the considerable benefit of the agreement.

Contract agreement

Two categories of damages if breach of contract claim is proved:

1. Compensatory damage (actual damage); to cover the loss the non-breaching party incurred as a result of the breach of contract.
2. Punitive damage (exemplary damage); to punish or make an example of a wrongdoer who has acted wilfully, maliciously or fraudulently.

Intellectual Property, Patents, Copyright,

- The term “IP” describes intangible property right
- Usually cannot be seen or touched
- Initially created by one`s intellectual creative work
- IP is to give creator/owner the exclusive right to control, and profit form, the results of the work creativity.

Intellectual Property, Patents, Copyright,

- IP Law is a field of law which defines the intellectual creations that are entitled to protection as IP.
- The goal of the law is to promote innovation in a competitive marketplace
- To provide an incentive for people to develop creative works that advance society.
- The law provide guidance to a competitor who desires to produce a new product or use a new process but designing around proprietary territory.
- The IP building blocks of IP Law include patents, copyrights, trademarks etc.

Intellectual Property, Patents, Copyright,

Type of IP Rights

Name	Description
Patent	A grant of right to exclude others from practicing an invention. The patent is treated like personal property and may be assigned, sold, inherited, or licensed.
Copyright	Deals with the rights of intellectual creators in their creation. It is a form of protection given to the authors or creators of original works of authorship. May overlap with patent laws.
Trade Secret	Include any valuable business information that derives its value from secrecy. This is to prevent a competitor from misappropriation of valuable ad confidential information that is not generally available to public. Eg. Secret chemical formula.
Trademark	A specific sign, design, or expression which identifies products or services of a certain source. It protects the source identity of a product or service. Eg. Name, logo, product configuration.

Technology Transfer (TT)

- TT is often understood to be the transfer f IP.
- The process of transforming scientific findings into meaningful products or services for society.
- Knowledge developed within academic institutions is transferred to the industry for development and commercial purposes.

Technology Transfer (TT)

TT Policy

- The goal is not only to commercialize academic IP but also to build the innovative capacities of academic institutions, SMEs and entrepreneurs by facilitating collaborative ventures.
- TT constitute of knowledge transfer
- Knowledge transfer via collaborative research, publishing, consulting, standardization, hiring of graduates etc.

Technology Transfer (TT)

TT Process

- The initial step in the transfer of technology process starts with the recognition of an economic need and accordingly, a business idea.
- If the TT goes on to be developed and adopted, it becomes an innovation.

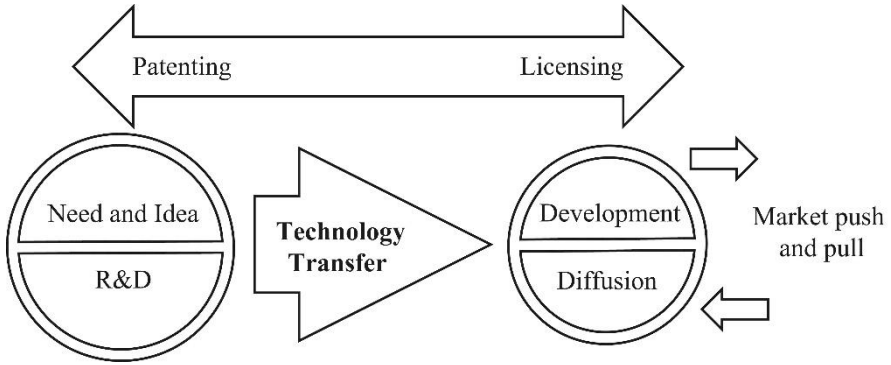


Figure 3. Patenting and licensing as a TT Outcome

Technology Transfer (TT)

TT Process

- Patenting and licensing in particular can be feasible strategies for TT.
- Patents provide incentives to commercialize the cutting edge of technological development.
- Exclude others from making, using, selling, or importing the patented invention for a limited time.
- The rights are given in exchange for full disclosure of the details of the invention.

Technology Transfer (TT)

TT Process

- With licensing, technology owner (licensor) continues to own the technology and gives a defined right to the licensee for the use of the technology.
- The licensee, by the terms of license is permitted to exploit the IP.
- Two type of licenses;
  - Grants an exclusive right to use the technology
  - Non-exclusive rights (the patent owner may transfer the right to use the technology t other companies in the same area).

Technology Transfer (TT)

TT Process

- The main challenge to the commercialization of IP and TT is the period between the creation of an invention and its commercialization.
- Firms maybe reluctant to take on the risk of commercializing unproven inventions.
  - Needs more investment
  - prototypes to prove technical effectiveness
  - Market reserach

Occupational Health and Safety (OHS)

- A planned system of working to prevent illness and injury where you work by recognizing and identifying hazards and risks.
- Health and safety procedure is the responsibility of all persons in the computer and technology industries.
- Give example of OHS in CIT industries.

Occupational Health and Safety (OHS)

- About understanding how to work safely with computers and environments with lots of technology equipment.
- Working with computers can cause workers a number of problems. These include stress, visual discomfort, as well as aches and pains in the hands, wrists, arms or shoulders.
- Common hazards are:
  - Poor postures,
  - incorrect chairs,
  - glare or poor lighting,
  - trip hazards and
  - installation hazards.

Non-Disclosure and Data Protection

- Business organizations hold a lot of confidential information
- Disclosure of information to third parties may impact on:
  - Individuals
  - The organization
- Personal data is anything that identifies a living individual.
- Disclosing personal information may result in ID or financial fraud, unsolicited contact, nuisance calls or loss of customer/client trust as well as infringing the Data Protection Act.

Non-Disclosure and Data Protection

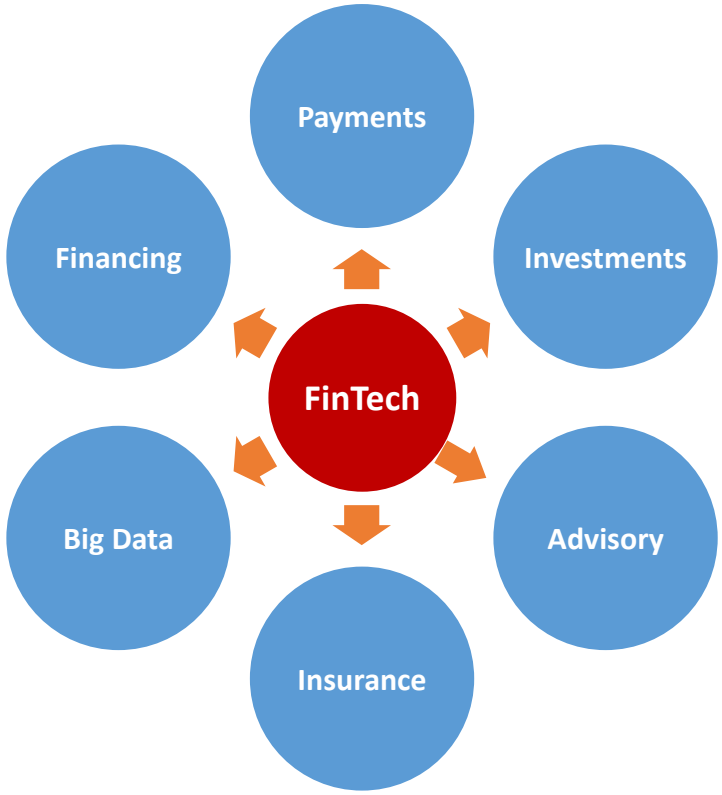
- General measures for security and confidentiality of information
  - Paper-based information
    - Lockable filing cabinets
    - Confidential documents clearly marked
    - Shredding of unwanted copies
  - Computer-held information
    - Adequate virus protection
    - Firewall
    - Access passwords
    - Back-up systems

Financial responsibility

- Some employees, particularly those in the accounting or payroll departments, are responsible for correctly handling the finances of the company.
  - Careful attention to accurate record keeping is important as well as following standard accounting and business practices.
- Others who have access to office petty cash or discretionary funds should use them only for official business purposes.
  - Should turn in accurate receipt records to the accounting department.
- Employees who submit requests for reimbursements should also maintain integrity.
  - When recording mileage and meal expenses.

Fintech and Regulation

- What is Fintech?
  - Describes the intersection between software and technology to deliver financial services.
  - May refer to technical innovation applied in a traditional financial services context or to innovative financial services offerings that disrupt the existing financial services market.



Fintech and Regulation

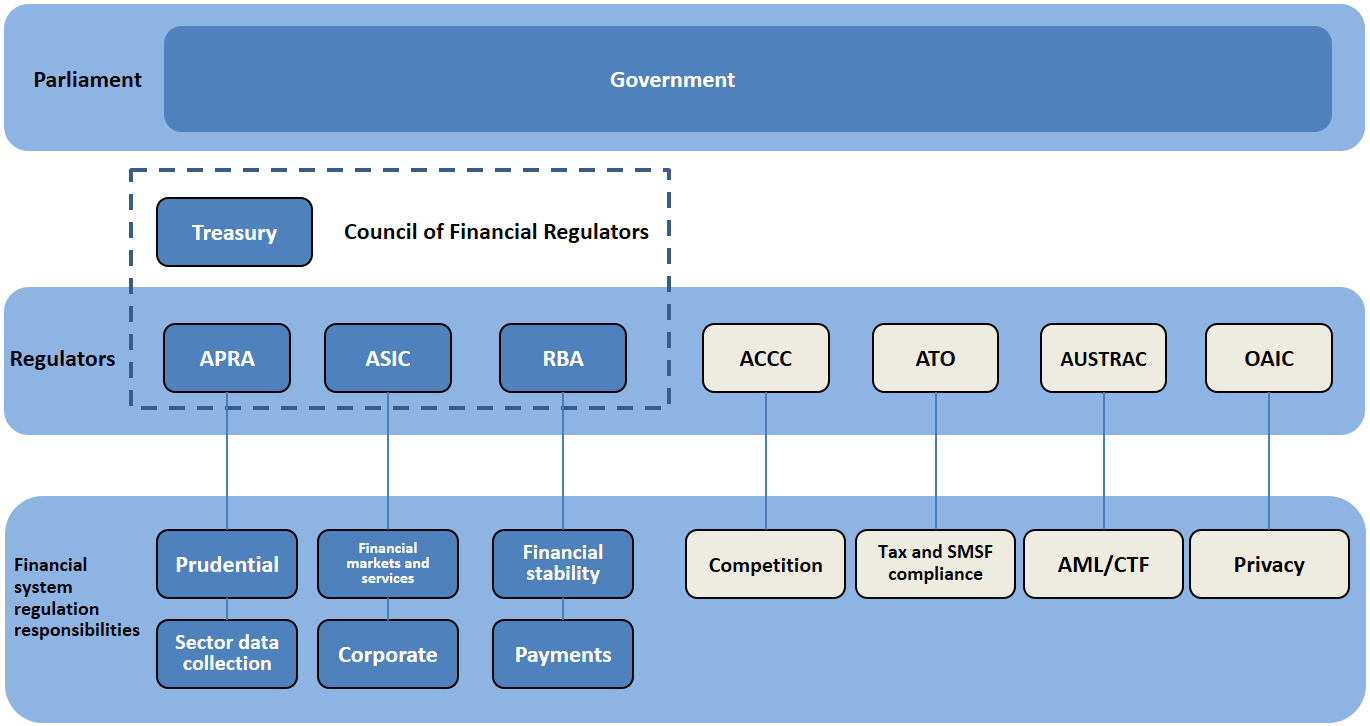
- If you want to run a financial services business (Eg. Fintech), you generally need to be authorised under an AFS licence.
- An Australian financial services (AFS) licence authorises licensees to:
  - provide financial product advice to clients;
  - deal in a financial product;
  - make a market for a financial product;
  - operate a registered scheme;
  - provide a custodial or depository service;
  - provide traditional trustee company services.

Fintech and Regulation

- Australian Securities & Investment Commission (ASIC) assesses applications for AFS licences as practicing its role as regulator of the financial services industry.
- Among the assessment items are to consider whether the applicant:
  - is competent to carry on the kind of financial services business specified in the application;
  - has sufficient financial resources to carry on the proposed business — unless regulated by the Australian Prudential Regulation Authority (APRA); and
  - can meet the other obligations of an AFS licensee.

Fintech and Regulation

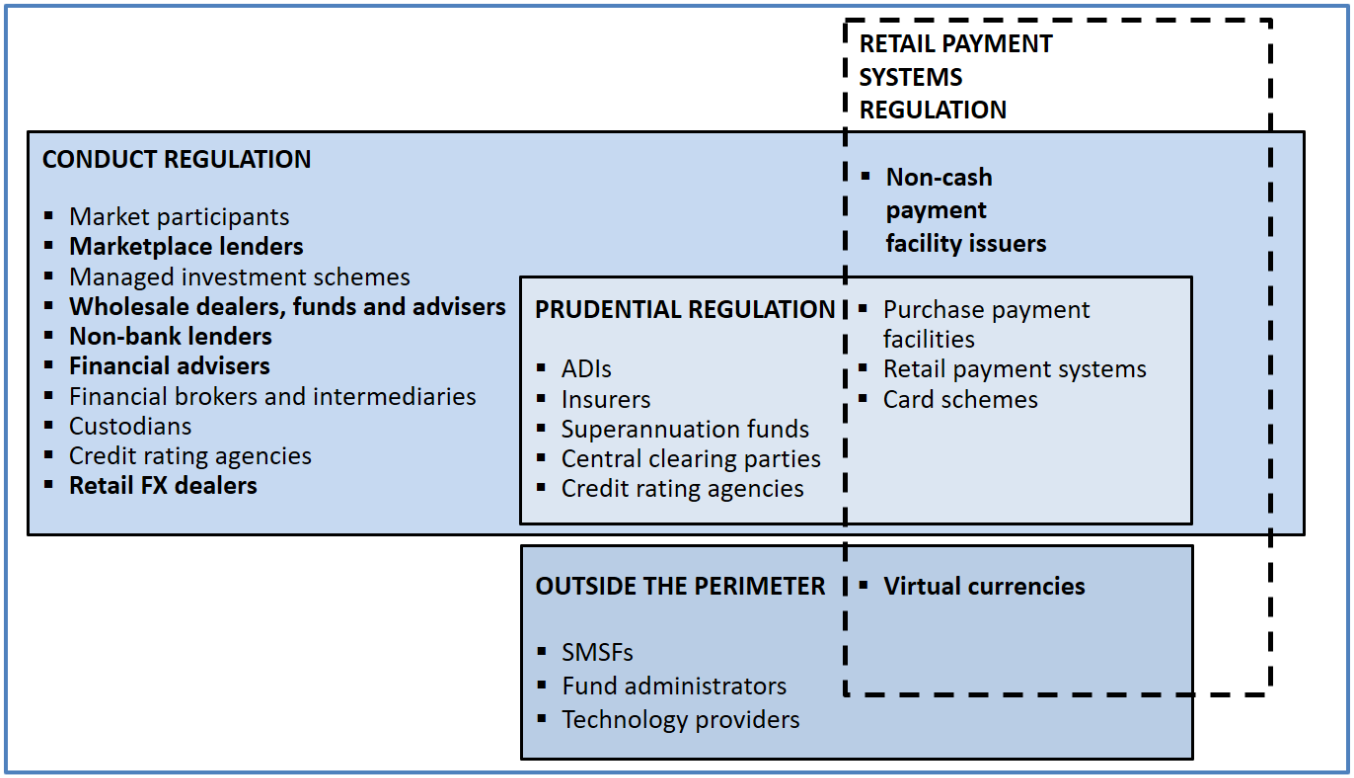
- Australia's financial regulatory framework



Source: FSI Interim Report 2014

Financial responsibility

- Current financial regulatory perimeters



Source: FSI Interim Report 2014

Summaries

- Differentiate between law and ethics
- What does the term IP encompass, and why are organizations so concerned about protecting IP?
- Why is IP protection important?
- What is TT?
- What kind of protection do patents offer?
- What is copyright?
- What is Fintech
- What are the agencies that regulate Fintech in Australia

Next Week

- Leadership theories
- System Thinking Practice
- Leadership in professional practice
- Leadership & design thinking
- Leadership in community of practice (CoP)
- Effective Leadership
- Communication skills for IT professionals
- Research investigation and Referencing

References

- Habash, R. (2019). *Professional Practice in Engineering and Computing: Preparing for Future Careers*. CRC Press.
- Gatrill, M. (2020, May 9). *What is Health and Safety in ICT?* Safewell. https://safewell.co.uk/what-is-health-and-safety-in-ict
- *Office Hazards: Computers and VDUs - what are the guidelines?* (n.d.). OHS Reps. Retrieved March 24, 2021, from https://www.ohsrep.org.au/office_hazards_computers_and_vdus_what_are_the_guideline
- *What is an AFS licence? | ASIC - Australian Securities and Investments Commission*. (n.d.). ASIC. https://asic.gov.au/for-finance-professionals/afs-licensees/do-you-need-an-afs-licence/what-is-an-afs-licence/