Legal and commercial aspects

ELEC6211 Project Preparation

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Law

• Difference between Criminal and Civil
• Legislature, Judiciary, Executive
• How law is made
What is Law?

- Rules enforced in court
- Jurisdiction of legal system and laws
  - US & India federal & state
  - UK: England and Wales very few differences from Scotland, Northern Ireland and Isle of Man
- Criminal (Police) or Civil (between People)
  - Criminal: innocent until proved guilty
  - Civil: decide on argument of both parties
Where does law come from?

- **Common Law** - tradition & precedents – also Commonwealth & US
- **Statute Law** – written codes – Parliament legislation – also in Europe
- **UK Houses of Commons & Lords & Royal Assent (can’t veto)**
  - Commons can overrule Lords
  - Primary legislation (Act) Secondary (library)
- **US Congress Senate and House of Representatives & President Assent (can Veto)**
  - Separation of legislature, judiciary & executive
- **Law across borders: internet jurisdiction & extradition**
The Profession

• Profession and Professional
• Professional bodies
• BCS/IET code of conduct
• Reservation of title and function (CEng)
BCS for example

• BCS established 1957 & Royal charter 1984 to promote the study and practice of Computing and to advance the knowledge and education therein for the benefit of the public

• Authority to
  – Set and promote education, experience, standards, codes of practice, disciplinary procedures
  – Disseminate knowledge to members
  – Advise government and regulatory bodies

Professional Conduct

• Standards of behaviour towards society

• Public interest
  – Aware of & comply with laws and regulations (e.g. health, environment, privacy, human rights, discrimination) so can’t work on systems in some countries
  – Address digital divide inequality (e.g. UK elderly, rural African children)

• Professional Competence and Integrity
  – Only undertake work competent to carry out
  – Update skills, be familiar with relevant legislation
Duties

• To relevant Authority (employer, client, university)
  – Due care and diligence & avoid
    • conflicts of interest
    • Disclosing confidential information without permission
    • Misrepresentation

• To Profession
  – Uphold reputation and good standing
Organisations

• Ways to become a legal entity
• Types of legal entity
• Limited Company
• Takeover, merger, management buyout, outsourcing
Type

• Commercial
  – Sole trader: individual liability
  – Partnership: joint liability
  – Cooperative: agriculture special status
  – Limited Company: PLC can sell shares, Private cannot
    • Corporate legal identity
    • Shareholders
    • Owners not liable for debts
    • Must provide information (accounts & report) to Govt (Companies House)

• Non commercial
  – Statutory: act of parliament e.g. NHS
  – Companies limited by guarantee e.g. BCS (can have charitable status & Royal Charter)
Limited Company

- Bought or registered by group of people
- Public signed memorandum of association & articles of association under Companies Act 2006 filed with Companies House
- Optional shareholders private agreement
- Directors appointed to run company
  - Act in good faith for benefit of company
  - Exercise skills and care in carrying out duties
  - Disclose conflicts of interest
  - Not continue to incur debts (personally liable)
  - Annual report & accounts
  - Ensure complies with law (personally liable - Health and Safety at Work Act 1987)
- Executive (employees) Non Executive (Advisory)
- Company Secretary (optional for private) often also Director
Takeovers, Mergers, Outsourcing

• Takeover: acquire majority company shares
  – Benefits: expand customer base, offerings, acquire staff, economies of scale, vertical integration, eliminate competitor
  – Risks: costs outweigh benefits
• Mergers: agree to set up new company
• Management buyout: potential conflicts of interest (e.g. run company down to reduce value)
• Outsourcing (e.g. software development – India)
  – Benefits: Concentrate on core business, IT costs more visible & easier to control, Saves money as more efficient and effective
  – Risk: Losing control and understanding
Contract (i)

- All parties Intentional & competent - provide and receive something
- Contract law based on common law
- Software license: one time fee; annual maintenance charge; marketing license; open source code subject to conditions (Open Source Initiative 1998, Richard Stallman Free software Foundation 1985 GNU project)
- Outsourcing: service level agreement, assets & staff transferred, audit access, IP ownership, duration
- Tailor made/bespoke: specifications & variation, source code, build & install files, documentation, maintenance software, training, test data & results, IP, contract management (meetings, minutes, documentation, staff access, data communications), acceptance procedures, termination
- Consultancy: Daily rate or fixed price; confidentiality, terms of reference, liability control of final report
- Contract hire: services of staff at hourly or daily rate managed by customer
- Time and Materials cost plus contract: when not well specified as no ‘contingency’ required
Contract (ii)

• Liability for defective software:
  – Unfair Contract terms Act 1977 only allows reasonable restrictions to liability:
  – Supply of Goods and Services Act 1982 (reasonable skill)
  – Unclear if software is ‘Goods’

• Health & Safety at Work Act 1974:
  – Provision and maintenance of safe plant & systems
  – Necessary information, instruction, training supervision;
  – Safe workplace & environment
  – Adequate welfare arrangements;
  – Not expose general public to risks

• BCS code:
  – 1a due regard for ... others & environment
  – 2a only undertake work within competence
  – 2b not claim competence not possessed
  – 2c develop professional knowledge and skills
  – 2d knowledge of relevant legislation
Organisational Structure & Management

• Types
• Advantages and Disadvantages
• Effect on employees
Models

• Bureaucratic: Hierarchical tree structure
  – Specialised job for each task
  – Rules for each task
  – Each person reports to only one Manager
  – Only formal relationships (e.g. clients)
• Organic: most small companies
• Matrix: also report to managers of projects
Structures

• By Function: operations, administration, sales & marketing, research & development
• By Geography: Multinational by region
• By Product line: e.g. cars, vans, lorries, parts
• By Market sector: might miss new opportunities
• By Technology: problem that clients may need difficult many different technologies#
• Mixed: e.g. Large multinationals
• Depth: number of layers in heirarchy
• Centralised or decentralised
• Job design: specialisation, rotation, enlargement, enrichment
Legal Aspects for organisations

• All organisation work in a legal framework
• Information Technology is pervasive and will effect all different types of organisations
  – Hence we will look at some of these laws
• But first lets look at some common laws tha also effect us all.
Law across national boundaries

• Criminal law
  – extradition treaty (if illegal in both countries)
  – UK & US extraterritorial jurisdiction (prosecute crimes committed elsewhere)

• International Convention on cybercrime slow for all to ratify (child pornography, copyright infringement, fraud, hacking). US won’t sign for hate material because of 1st amendment

• Civil Law: contracts specify jurisdiction

• Defamation Act 1996: slander (spoken); libel (written)
  – Defence: not author, reasonable care, not known
  – US 1st amendment
Health and Safety

• All organisations need to have a competent person for Health and Safety
  – necessary skills, knowledge and experience to manage health and safety
  – Or buy it in.

• You need a health and safety policy
  – Risk assessment, record and procedures
Environmental Agency

• The are now a how host of regulations
  – Collecting used and waste electrical and electronic equipment
  – Electrical and electronic equipment (EEE): producer responsibility
  – Waste legislation and regulations
  – Water discharge and groundwater activity exemptions
Manufacturing regulations

• Again there are a host of regulations depending on the industry
  – https://www.gov.uk/browse/business/manufacturing/manufacturing-regulations

• **Product liability and safety law**
  – Businesses producing consumer goods must adhere to product safety laws or face legal action with possible fines or even imprisonment.

• **Product safety for manufacturers**
  – Technical and legal requirements for safety, design, packaging and insurance, to ensure products are safe and fit for purpose.
Copyright

- Automatic protection for employer of original source code & documentation for 70 years after death of author
- Can make back up for personal use
- Can decompile to find information
- Can sell right or license use
- Infringements: civil court damages: criminal if stolen/pirated software
- Database right: 15 years, non original content
Patents

- Temporary monopoly on invention to recoup investment e.g. license
- European Patent Convention 1978: invention must be new, inventive step (i.e. not obvious), practical application, not in excluded area (science theory, math method, copyrighted material, scheme, rule, method or program(confused situation))
- Initially apply to one Patent office followed by national full application to all offices within 12 month
- Enforcement: Court & expensive
Trade Marks

• Trade Marks Act 1994: graphical sign - words, designs, letters, numerals or shape
• Stop bogus or counterfeit goods
• Offence: apply unauthorised registered trade mark; stock, sell, offer or import goods with unauthorised trademark
• General Agreement on Tarrifs and Trade (GATT) sanction countries who don’t comply
• Trademark on object as well as packaging.
• Action in civil court even if no registered Trade mark
• Domain names: conflict with trade marks: cybersquatting
Confidential Information

• Non disclosure agreement
• Reasonably understand given in confidence
• Trade secrets: no public disclosure
• Public interest disclosure: 1998 Public Interest Disclosure Act (PIDA)- OK about criminal offence, failure to comply, miscarriage of justice, danger to health and safety, environmental damage, concealment: need to consult with specialist lawyer.
IT related

• There are a number of laws that affect the IT system you are using be it in a factory, design office or software house.
Equality Act 2010

Discrimination

• Age; disability; gender reassignment; marriage and civil partnership; pregnancy or maternity; race, colour, ethnic origin or nationality; religion or belief; sex; sexual orientation

• Direct (person), Indirect (policy)

• Permitted if proportionate means of achieving a legitimate aim

• Employment tribunal: damages & recommendations

• Civil courts: damages

• Written policy; training; procedures
Disability

Reasonable adjustments (BS 8878 & WCAG 2.0)

E.g.

- Colour contrasts
- Text alternative to images
- Keyboard accessible
- Remove time constraints
- Can be read by screen reader
- Text for audio, captions for video
Software Contracts and Licenses

• Purpose of contract types in computer industry
• Main issues
• Types of liability for defective software & factors affecting these
Data Protection

• 1998 Data Protection Act terminology
  – Data: information processed or collected
  – Data controller: person who determines how or why data is processed
  – Personal data: data than can identify a living person including opinions and intentions of others
  – Data subject: individual who is the subject of personal data
  – Sensitive personal data: race, ethnicity, political opinions, religious belief, trade union membership, physical or mental health, sexual life, criminal offences
  – Processing: obtaining, recording, holding, carrying out any operations on it
Data Protection Principles

• Processed fairly & lawfully: consent (explicit if sensitive) or legal/statutory obligation
• Specified lawful purposes: Data controller notifies Information Commissioner
• Adequate, relevant, not excessive
• Accurate and up to date
• Not kept longer than necessary
• Processed in accordance with rights of data subjects
• Appropriate measures against unauthorised or unlawful processing & accidental loss, destruction or damage
• Not transferred outside Europe unless adequate protection (e.g. US Safe Harbour)
Rights of Data Subjects

• Description of data & source
• Explanation of purpose
• People or organisations may be disclosed to
• Prevent processing
  – likely to cause damage or distress
  – Purposes of direct marketing
• Compensation for damages due to violation
Scope

• Relevant filing system or record (paper files)
• Exemptions from Act
  – National security & domestic/household purposes
• Exemptions from subject access
  – If may infringe others’ rights
  – Reference by data controller
  – Examination marks before published
  – Examination content
  – Others at discretion of Secretary of State
• Monetary Penalty (Fines)
Privacy

• Regulation of Investigatory Powers Act 2000 (RIPA) organisations can monitor without consent of user to:
  – Establish facts, compliance, standards
  – Prevent or detect crime
  – Investigate or detect unauthorised use
  – Ensure effective operation (e.g. detect virus, DNS)
  – Find out if private or business
  – Monitor calls to help lines
  – Unable to monitor internet communications
Freedom of Information Act 2000

- Right of access to public authorities information
- Duty to disclose reason for exemptions
- Information Commissioner & Rights Tribunal
- Specify classes of information to publish & cost
- FOI can override DPA e.g. salaries of senior staff & expenses
ISP

• conduit: not liable
• caching: not liable if comply with practice
• Hosting: In Europe not liable only if didn’t know and acted when found out whereas in US treated as conduit
• UK: can be compelled by court to reveal identity of anonymous post
• US: only for serious crime
Pornography

- Obscene publications act 1959 & 1964
  - Offence to publish or possess for publishing for gain
  - Obscene: taken as whole tend to deprave and corrupt, not if public good (e.g. education), expert opinion taken into account
  - Possession of sexually explicit material involving children
- US 1st amendment overrides legal control
- Europe varies by country
- Internet Watch Foundation: hotline informs police and ISPs
- Future? Difficult to censor
Spam

• Unsolicited email
  – Prevent use of others’ computers
  – Machine learning identification
  – Virus detection
  – Stop lists
  – European community directive on Privacy and Electronic Communications (2002/58/EC):
    Consent to receive & Unlawful to conceal send address or not have option to stop
  – US no consent to receive required
Ecommerce regulations

- European Directive 97/7/EC & UK Consumer Protection (Distance Selling) Regulations 2000: telephone or Internet
  - Before contract agreed require
    - Name and address of supplier
    - Description of offer
    - Cost, tax, delivery charge & method
    - Payment method & Cancellation right
    - Communication costs (e.g. telephone call)
    - Length offer is valid for & Duration of contract
    - Terms and conditions
  - Fulfill in 30 days
    - Automatic cancellation right up to 7 days
    - If failed to supply can cancel 3 months
    - Reimburse within 7 days
  - Prompt electronic acknowledgement & information how to correct errors
Computer Misuse Act 1990 (CMA)  
Police and Justice Act 2006 (PJA)

- Unauthorised access to computer with intent
  - £5000 or 12 months (magistrate) 2yrs (Crown Court) prison - extraditable Harm not required
- Making, supplying or obtaining articles for use in computer misuse offences (e.g. hacker toolkits)
  - £5000 or 12 months (magistrate) 2yrs (Crown Court) prison - extraditable Harm not required
- Unauthorised access to computer with intent to commit serious crime
  - £unlimited or 5 years prison
- Unauthorised acts with malicious intent
  - £unlimited or 5 years prison
- Why law has only limited effect
  - Companies avoid publicity
  - Lack of police resources or expertis
  - Legal technicalities
  - Sentences at low end not reflecting seriousness of offence
  - Less publicity for conviction than acquittal
- Computer fraud: Fraud Act 2006
  - Manipulating computer dishonestly to obtain money
  - Specialised expertise to collect and preserve evidence