



Exam-Notes

IT Professional Practice (Monash University)

Exam Notes

Week 2:

Developing Professional Skills

- Information Technology Professional Practice focuses on generalist skills, including awareness of the expectations which accompany working in professional environments.
- The information technology professional needs to be able to prepare for and adapt to the changing future
- There are a number of aspects that are the focus of this chapter, particularly various forms of communication and professional issues. This includes understanding the conventions associated with various modes of communication, such as:
 - Cover letters and Curriculum Vitae when seeking employment
 - Report writing
 - Meeting minutes
 - Use of e-mail and other contemporary modes such as social media
 - Developing skills and understanding to work effectively as part of a team, including how to effectively contribute to meetings

1.2 – Introduction to IT Professional Practice

- **Historical development of Information and Communications Technology**
 - Humans have used various methods to communicate, process and store/ retrieve information for thousands of years
 - Computing devices progressed from pre-mechanical (devices such as the abacus) to the mechanical computers of the late 19th and early 20th century, and then to the electronic computing devices of today
 - We are currently living in the 'information age'. This has been driven by the development of:
 - Low-cost computing
 - High speed communications networks
 - Advances in information storage and retrieval
- **Information Technology as a Profession**
 - Definition of IT as a profession – includes the creating, design, and testing of IT devices or network systems, as well as the application, configuration and support of IT devices and network systems
 - The Australian Computer Society (ACS) defines ICT profession and the roles as:

CBOK categories	SFIA Category	Description
Technology Building	Solution Development and Implementation	Specialised programming and engineering roles involved in building systems from the ground up. This stream accounted for a majority of ICT jobs in the 1980s and 1990s.
Technology Resources	Service Management – Strategy, Design	Organisational roles that provide and support the networked infrastructure underpinning technology building and implementation.
Service Management	Service Management – Transition, Operation	Roles concerned with the ongoing operation of ICT in an organisational context and the structuring of the interactions of ICT technical personnel with business customers and users.
Outcomes management	Business Change	Business technology roles that are critical in managing and implementing change across organisations. ICT roles integrated into business units attempting to leverage competitive advantage from packaged software implementations.
	Procurement and Management Support	Includes supply management, quality management, quality assurance and conformance.
	Strategy and Architecture	Strategic roles implementing organisational strategy by aligning business and ICT strategic planning.

- **IT Professional Attributes**
 - Below is a prioritised list of attributes desired in new graduates compiled by Monash from discussions with employer representatives.

- Capacity to learn new skills
- Effective use of Information and Communication Technologies
- Capacity for enquiry and research
- Capacity to analyse and solve problems
- Capacity co-operation and teamwork
- Ability to operate in an international and multicultural context
- Numeracy
- Interpersonal skills with colleagues and clients
- Oral communication skills
- Written communication skills
- Most skills listed are general, not technical. There is strong indication from employers that general skills are more highly valued than technical skills
- These attributes are also integral for both understanding and undertaking employment-seeking communications
- **IT Professional Roles**
 - Database Administrator
 - Usability Consultant
 - User Experience Expert
 - Business Analyst
 - Web Designer
 - Software Engineer Project
 - Manager Programmer
 - Systems Analyst
 - Management Consultant
 - Games Developer
- **IT Professional Environments**
 - There are many physical settings in which you may work. These include:
 - **Individual offices** – where staff have their own personal office, making it easy to concentrate and remove interruptions (this is becoming less common as office space is at a premium).
 - **Open plan offices** – where staff have individual cubicles, and commonly need to use other rooms for private meetings
 - **Hot-desking** – where staff do not have pre-allocated spaces because they may work off site and come into the office for short periods of time.
 - **Telecommuting** – where staff are able to work from home or other locations, commonly via a VPN or other network.

1.3 – Communications – Basic Theory

- **Basic Communications Concepts**
 - Communications may be considered in terms of four components:

Communication structure

Who is speaking?
To whom it is said?

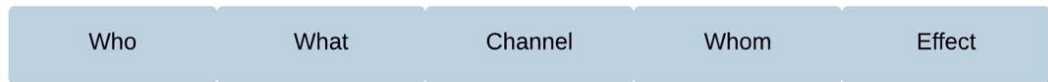


How it is said (format, structure, tone)?
What is said (context purpose of the communication)?

➤ Formal Communications Models

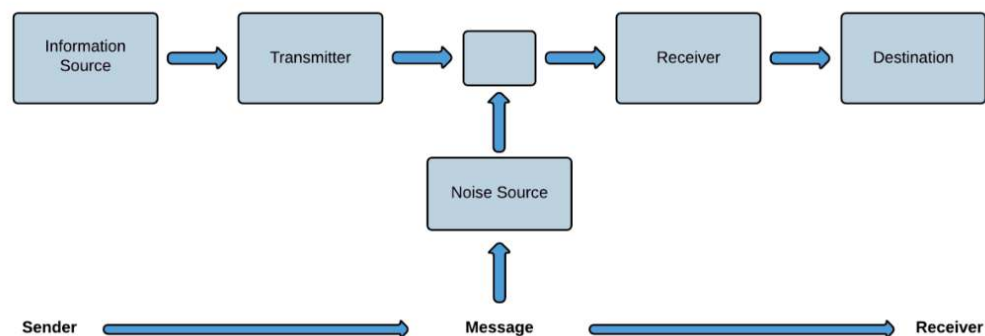
○ Lasswell's Communication Model

- Harold Lasswell developed an influential communication model. Lasswell suggested that to understand or craft a communication, we should answer the following questions:



○ The Shannon-Weaver Model

- Claude Shannon and Warren Weaver published a mathematical communications model which is similar to Lasswell's model. The Shannon-Weaver model introduces the concept of 'noise'. It suggests that communication includes who is communicating, what their message is, how it is sent, and the noise or interference between what is sent and then what is received



- In the Shannon-weaver model, the 'noise' which may disrupt the communication occurs in the channel (so it may be viewed as technical). However, we may also consider noise as growing out of semantic issues or other communications issues

○ Priestly's Paradox

- Author John Boyton Priestly suggested that the more we elaborate our method of communication, the less we actually communicate. In an era where the vast majority of our communications are 'elaborated' by technological layers, are we communicating less effectively? Alternatively, is the trend toward short communications, such as SMS and instant messaging a reduction in the 'elaboration' of our communication, meaning we communicate more effectively?

Tips for ensuring effective communication for IT professionals

- Have and show empathy, and understand the perspective of the listener.
- Consider the receiver of your communication, IT is full of technical jargon, so not everyone will understand the IT terms and acronyms used.
- Avoid sounding superior. It is easy to sound superior if you are talking about something technical to someone who is not technical (don't 'show off').
- Face to face or direct communication can often resolve confusion or misunderstandings, particularly in the case of texts, chat or emails.
- End conversations by agreeing on the next steps. Agree on who will do what and when this will be done by.

2.1 – Types of Communication

- Communication – The process by which people exchange information or express their thoughts and feelings
- **Types of Communication**
 - Written
 - Verbal, which includes speaking and listening
 - Nonverbal, where someone might take meaning from your facial expressions or body language



- Team based communication - is how we communicate to those in a team we are working with, ensuring we can effectively collaborate and cooperate
- Organisational communication – in our context relates to how we communicate with those in the workplace on work related matters
- Public media – where we discuss oral communication

2.2 – Intra-personal Communications

- Intra-personal communication relates to the internal expressions and understanding that occur within ourselves and others
 - Processes that help, but sometimes also distort or block, communication messages within an individual
- **Emotional Intelligence and Competency**
 - This concept is based on an individual's capability to recognise and utilise emotion to interact and communicate more effectively
 - The ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions
 - Emotional competency has been described as:
 - Personal and social skills that lead to superior performance in the world of work

Emotional competence divided into aspects of personal and social competence

Personal competence: how we manage ourselves:

- Self-awareness: knowing one's internal states, impulses and resources
- Self-regulation: managing one's internal states, impulses and resources
- Motivation: emotional tendencies that guide or facilitate achievement of goals

Social competence: how we manage relationship with others:

- Empathy: awareness of others' feelings, needs and concerns
- Social skills: adeptness at inducing desirable responses in others

(Eunson, 2012, Fig. 9.1)

2.3 – Interpersonal Communications

- Interpersonal communication focuses on the essential skills needed for effective communication
- Interpersonal communication – can be described as the process of sending and receiving information between two or more individuals
 - Processes that help, but sometimes distort or block, the communication of messages between individuals

2.3.1 – Assertiveness Skills

- Assertiveness can be described as obtaining our desired outcomes from others without contravening their rights
- Communicating with appropriate assertiveness enables us to be effective in:
 - Giving and receiving compliments
 - Making requests
 - Standing up for your legitimate rights
 - Refusing requests
 - Expressing personal opinions, including disagreement
 - Expressing justified annoyance, displeasure and anger
- **Assertiveness techniques**
 - **Say “no”**
 - Explaining to someone that you cannot satisfy or fulfil their requests can be delicate. It is important to try and avoid being condescending
 - Rather, speak with a clear, firm voice, politely and without strain
 - Follow up your negative response with an explanation
 - **Dismiss/redirect Conversation**
 - If someone is focussing on something we think is unimportant, we can explain that (the dismissal), and then suggest what we should be focussing on (the redirection)
 - **Questioning to Prompt Awareness**
 - By asking certain questions, we can bring a matter to someone's attention. This is a way of challenging their thinking, so we ought to consider how they fell

Exam Questions

- Assume that you are speaking to an audience of 10 or so colleagues from our own work area. List three kinds of non-verbal communications that could be used to gauge the engagement of the audience so far
- Assume that your manager asked you at a very short notice to deliver a set of data that is rather
- What is 'globalisation'? And what kind of skills does it demand IT professionals to acquire?
- Assume that Alex, your junior colleague, has been untypically late for work for three out of the last 10 days. He also missed a meeting without notice, and this resulted in Alex getting requirements of his task wrong, wasting 2 days of coding time. Alex has been at the company for 3 years and is considered a brilliant programmer by his colleagues. He is usually on time for everything, though he does not socialize

Week 3:

3.1 – Research and Finding Information

- **What is Research?**
 - Research can be defined as actively finding information new to the researchers
- **Four Main Stages of Research**

Collection	Seeking information and acquiring data for our research
Analysis	Filtering and transforming data into information. This involves looking at what we have, discarding what is not useful or valuable and turning anything valuable we have found into something useful for our research.
Synthesis	Processing information to understand connections. This is the stage where we look at all the information we have and work out how the different pieces connect with one another, and begin to look at the bigger picture formed by what we have found.
Insight	Achieving deep understanding of our research and how it connects with other knowledge, not only in our field but potentially in other fields as well.

➤ Research Styles

- Research is more than just finding information, even if it entails finding information in a variety of ways
- Research is a very particular form of information seeking which is usually premised on answering a question or testing a hypothesis
- In order to be successful, research may involve answering a series of sub-questions in addition to the main question
- Below is a list of three different approaches researchers may take when seeking answers to their research questions

1. Theoretical research where a researcher may propose a theory about a matter	<i>Example:</i> In Vivek's search for information he finds a paper discussing the role of cognition. No data has been gathered the author discusses other studies and draws conclusions from them
2. Quantitative research where a researcher conducts research and collects data which is numerical in nature. This data may come from an experiment, a survey or testing a computer program.	<i>Example:</i> Another paper Vivek finds is an experiment where users are asked to evaluate an interface in a lab. All the users perform the same tasks at the same time. The researchers (the paper's authors) collect the data at the end of the experiment and they use statistical software to analyse the data and draw conclusions.
3. Qualitative research where a researcher conducts research and collects data which is non numerical. Data such as interviews and observations.	<i>Example:</i> Vivek finds a paper where users of a system are observed in their interactions. After they have completed the task set by the researchers they are interviewed. The data from the interview is then analysed and combined with the observations the researchers are able to draw conclusions.

➤ Finding Information

- Library Shelves
- Catalogues
- Electronic Databases
- The Internet
 - When was the site last updated?
 - Who created the site?
 - What is the purpose of the site?

➤ Spiders and Metacrawlers

- A spider is an automated process which conducts a simple search
- A metacrawler displays results from multiple search engines

➤ Where to Start

- When we identify a piece of information we must also answer questions for ourselves, such as:
 - Is this information relevant?
 - What is it useful for?
 - Do you need to keep it?
- To make research easier follow these simple steps:
 - **Conduct literature search/survey:** When conducting research on a particular topic, it is important to know what other people have already written on that topic, or what other work has been done in that field. This will help you to ensure that your research comes up with something new, and is not covering old ground and what is already known.
 - **Start with secondary and tertiary research:** Often when we start our research, we may know little or nothing about the topic. Primary data sources (where the data came from first) will often have a very narrow focus. This means it is easier for us to start by looking at secondary and tertiary sources to give us a good overview of existing work on the topic. From there we can delve deeper into particular sources of primary data that are most relevant to our research.
 - **Assess their reported sources and verify their content:** Once we have our secondary and tertiary sources, we need to look at the primary sources they have referenced in order to determine their credibility

3.2 – Sources and Attributes of Information

➤ Sources of Information

1. Primary data Definition: Primary data can be considered “data that lie closest to the source truth”. (Leedy, 1997 p. 101) That is the original data that was collected and analysed by the researcher/s.	Some examples of primary data sources include experimental data, meeting records, questionnaires and interviews, diaries or archives. Primary data may be published in the form of research articles in refereed journals, conference papers, reports or “monographs”.
2. Secondary data Definition: Secondary data is the “reanalysis or previously collected survey or other data that were originally gathered by others” (Neuman, 2003 p. 322)	Some examples of secondary sources are sources that cite or quote primary sources or interpret these sources. A secondary source may be an account or review of a primary source for example a set of interviews. Secondary data may be published in the form of review articles in journals, journalistic news stories or textbooks.
3. Tertiary data Definition: Tertiary data is where a researcher brings together data from both primary and secondary sources. Encyclopaedias are considered tertiary data sources.	Examples of tertiary data include citation or quotations of primary and secondary sources, interpretations or accounts of primary and secondary material. Tertiary data may be published as encyclopaedias, almanacs, year books, text books, dictionaries, manuals, databases and abstracts.

➤ Attributes of Information

- Currency – refers to how up-to-date the information is. It should be as relevant and recent as possible
- Accuracy – refers to whether the information is correct
- Authority – Consists of a number of factors:
 - Who the author of the source is
 - Where the information was published
 - What sources were used to support the information
- Accessibility – Refers to how easy it is to find a resource or understand the information inside it
- Stability – refers to how likely the information is to remain the same

➤ Presenting information

- Reports – Whatever form our report takes, it should include the following:

- In business it will start with an executive summary which highlights the key findings/actions required
- A clear statement of what we set out to do and/or find.
- Definition of any key terms with the necessary background.
- Explanation of what we have found.
- Clarification of any difficulties or challenges that arose along the way.
- What the findings mean in the context.
- Identification of possible future lines of enquiry/actions.
- Presentation – Before presenting our information, we have to ask ourselves the following questions:
 - Who is the audience?
 - What is the purpose of the presentation?
 - What (if any) preferences do they have in terms of media?
 - What (if anything) do they already know about the topic?
 - What (if any) constraints must be considered?

3.5 – Citing and Referencing

➤ Reference Lists and Bibliographies

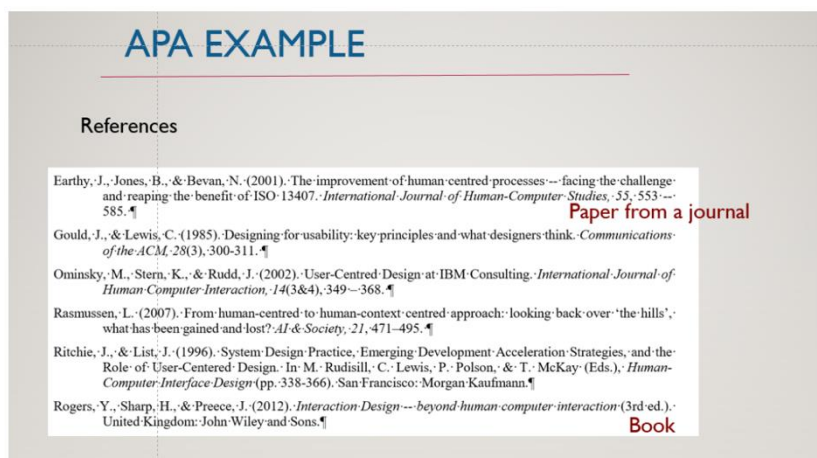
- A reference list or bibliography goes at the end of your document, or at the end of specific sections/chapters within your document. Note that reference lists and bibliographies are not the same thing
 - **Bibliography:** This provides a list of works that are relevant to your topic, but you may not have referred to directly.
 - This only includes books, but also other sources such as videos, websites and articles
 - **Reference list:** This includes works that you specifically refer to (whether through paraphrasing or direct quotes) in your work.
 - This also includes all types of works where you have referred to them directly

➤ Referencing Systems

- Referencing systems are used to refer the reader to further information elsewhere without disturbing the flow of the text.
- Three main reasons for providing references:
 - To show there is support for your idea
 - Provide details of any author/source you may quote
 - Ensure someone else can find the same material
- There are two aspects to referencing:
 - The in-text citation where the author and year are provided
 - The reference list where the full details of the reference can be found

➤ APA 6th edition

- References are organised in alphabetical order by authors' surname



➤ Harvard System

HARVARD EXAMPLE

Rogers et al. (2012) (pp. 327) notes that the UCD principles proposed by Gould and Lewis (1985) are more of a philosophy than a design technique. There is no one universally accepted approach to UCD; most approaches however share common characteristics. This is not surprising as any design approach involving users can be difficult to implement and manage (Ritchie and List, 1996; Earchy et al., 2001). Based on ISO 13407 (Earchy et al., 2001) suggests the activities in UCD include planning the human-centred design process, identifying the user/organisational requirements, specifying the context of use, producing and evaluating the designs. The UCD approach taken by IBM as described by (Ominsky et al., 2002) apart from focusing on users and frequent evaluations also includes designing with a multi-disciplinary team and watching what competitors do.

Note: similar to APA but all authors not listed, replaced with 'et al.'

References

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- RASMUSSEN, L. 2007. From human-centred to human-context-centred approach: looking back over 'the hills', what has been gained and lost? *AI & Society*, 21, 471-495.
- RITCHIE, J. & LIST, J. 1996. System Design Practice, Emerging Development Acceleration Strategies, and the Role of User-Centred Design. In: RUDISILL, M., LEWIS, C., POLSON, P. & MCKAY, T. (eds.) *Human-Computer Interface Design*. San Francisco: Morgan Kaufmann.
- ROGERS, Y., SHARP, H. & PREECE, J. 2012. *Interaction Design -- beyond human computer interaction*. United Kingdom, John Wiley and Sons.

Key difference is the names of the author/s are in upper case where they are lower case in the APA format.

➤ IEEE (Institute of Electrical and Electronics Engineers) Style

IEEE EXAMPLE

Authors are listed if they are reference in the text as they are here.

Rogers, et al. [4] (pp. 327) notes that the UCD principles proposed by Gould and Lewis [3] are more of a philosophy than a design technique. There is no one universally accepted approach to UCD; most approaches however share common characteristics. This is not surprising as any design approach involving users can be difficult to implement and manage [8, 9]. Based on ISO 13407 [9] suggests the activities in UCD include planning the human-centred design process, identifying the user/organisational requirements, specifying the context of use, producing and evaluating the designs.

Where a reference is provided in support of a statement just a number is used to identify the source.

References

3. Gould, J. and C. Lewis, *Designing for usability: key principles and what designers think*. Communications of the ACM, 1985, 28(3): p. 306-311.
4. Rogers, Y., H. Sharp, and J. Preece, *Interaction Design -- beyond human computer interaction*, 3rd ed. 2012, United Kingdom: John Wiley and Sons, 519.
5. Usability, N. *ISO 13407: Human-centred design processes for interactive systems*. 2014. [cited May 2014]. Available from: <http://www.usability.gov/iso13407/index.html>.
6. Rasmussen, L. *From human-centred to human-context-centred approach: looking back over 'the hills', what has been gained and lost?* AI & Society, 2007, 21: p. 471-495.
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8. Ritchie, J. and J. List, *System Design Practice, Emerging Development Acceleration Strategies, and the Role of User-Centred Design*, in: *Human-Computer Interface Design*, M. Rudisill, et al., Editors. 1996, Morgan Kaufmann: San Francisco, p. 338-368.
9. Earchy, J., B. Jones, and N. Bevan, *The improvement of human-centred processes -- facing the challenge and reaping the benefit of ISO 13407*. *International Journal of Human-Computer Studies*, 2001, 55: p. 553--585.
10. Ominsky, M., K. Stern, and J. Rudd, *User-Centred Design at IBM Consulting*. *International Journal of Human-Computer Interaction*, 2002, 14(3&4): p. 349--368.

The authors are not in alphabetical order but in number order matching where in the text they were used.

➤ Reference format

Journal volume and issue number

Webpage, title and URL

Conference name and place

- Adams, D., & Johnson, N. (2008). The journal list and its use: motivation, perceptions, and reality. *European Journal of Information Systems*, 17(2), 158-162.
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Full list of authors (in text only et al used)

Page numbers

➤ Paraphrasing and Quotation

- The two main methods of including information from other sources in your work are paraphrasing and quotation
 - **Quotation:** A quotation is using the exact words of another author or source such as a website within the text in quotation marks
 - **Paraphrasing:** Paraphrasing is not using an author's exact words but rephrasing those words but keeping the idea

**QUOTING AND PARAPHRASING:
EXAMPLE**

Quoting: In this paragraph the text in quotation marks is a quote from an author, Norman. These are the exact words as they appear in his book.

User-Centred Design (UCD), also known as human-centred design (Norman, 2005) is not new and today is widely accepted and used in the development of systems particularly where user interests must be taken into account. It is a "philosophy based on the needs and interests of the user, with an emphasis on making products usable and understandable" (Norman, 1990 pp. 188).

Paraphrasing: In this paragraph the Norman's definition/idea, his words have been rephrased by the author of this paper to capture the essence of what was said but not exactly what he said.

User-Centred Design (UCD), also known as human-centred design (Norman, 2005) is not new and today is widely accepted and used in the development of systems particularly where user interests must be taken into account. Norman, (1990 pp. 188) describes UCD more as a philosophy as distinct from a development method and one that understands the needs and interests of users, the aim is to ensure what is built works for users.

➤ Plagiarism

- Plagiarism is fraud that occurs when a researcher steals the ideas or writings of another and uses them without citing the source

Week 4:

4.1 – Oral Presentations as a Form of Communication

➤ Advantage of Oral Delivery

- There are a number of significant advantages connected with live oral delivery
- Oral Delivery:
 - Allows use of the attributes unique to verbal communications, such as voice modulation, eye contact and body movement
 - Can be more dynamic than other forms of communication. This allows the speaker to tailor to the specific audience and actively manage the audience's engagement
 - Enables the use of supplementary materials such as audio/visual materials, slides and video, or even interactive

➤ Disadvantage of Oral Delivery

- Hecklers
- Talk during the presentation
- Ask questions before the speaker is ready for questions
- Walk in late or leave early

4.2 – Preparing Oral Presentations

➤ Pre-preparation: Know Your Context

- Oral presentations can have varying characteristics in terms of:
 - Size of Audience
 - Time Allowed
 - Speaker's objective and the surrounding context
 - Audience member characteristics

➤ Presentation Objectives

- When starting to prepare for a presentation, we should begin by setting out the purpose of our presentation
- The more precisely we are able to define our objective during preparation, the easier it becomes to prepare and structure presentation content and deliver effectively
- Informational presentations will convey specific information about a topic and may include research, statistics and/or facts
- Motivational presentations are designed to raise awareness, change attitudes or gather support for an issue

➤ **Audience**

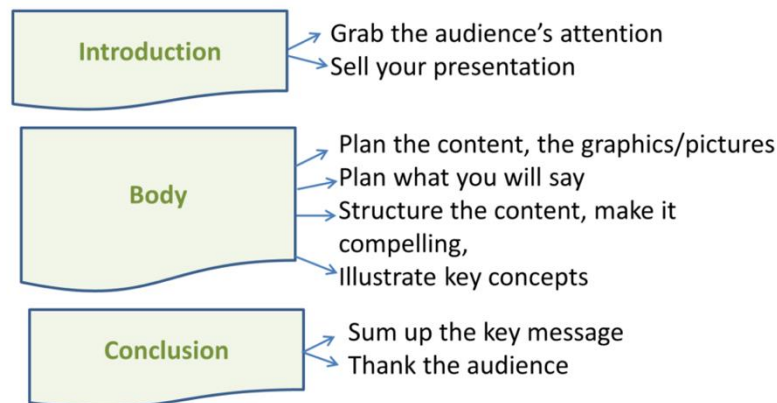
- During the preparation phase, it is important to tailor the presentation for the audience to which we will be speaking

➤ **Forum**

- This includes aspects such as the size of the space, which may or may not reflect the size of our audience
- The forum also includes the technology available to support our delivery

4.2.1 – Structuring Presentation Content

- This involves setting out content in a logical and coherent way that makes it easier for our audience to understand
- The Narrative Paradigm
 - Walter Fisher (1989) suggested that people understand communication through a narrative or 'storytelling' paradigm
- **Use and Effective Introduction and Conclusion**
 - Maurice Chevalier suggested that it was most important to start very well and to finish very well; the middle would take care of itself
 - An effective introduction and conclusion are an integral part of successful presentations, ensuring our audience remembers our main points
 - Effective introductions and conclusions will generally reflect:
 - The presentation structure
 - Each other
- **Include Useful and Compelling**
 - In addition to building an effective structure, we also need to decide what specific content to include in the presentation
 - Select content that your audience is likely to find interesting



➤ **Preparation Take Time**

- This preparation time may include:
 - Setting out objectives and understanding the context
 - Planning, structuring and generating content
 - Refining presentation structure and materials
 - Preparing and visual aids
 - Preparing speaking notes
 - Rehearsing

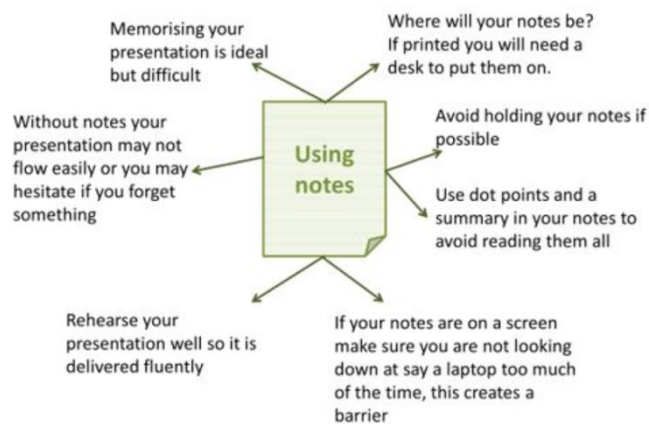
4.2.2 – Using Visual Aids

- **Presentation Slides and Other A/v Aids**
 - Audio/Visual aids give presenters versatility in how to present information to their audience

Visual aid elements	Design considerations
Content	<ul style="list-style-type: none"> • Don't overload the audience with information • Keep content to a minimum • Minimise clutter on the slides so the audience focuses on you the presenter not on the slides
Font type and size	<ul style="list-style-type: none"> • Should be easy to read so the audience grasps the information quickly • Use a standard font and size on all slides where possible. • Do not use all caps • Watch colour contrast • Minimise the number of colours used
Animation and other embellishments	<ul style="list-style-type: none"> • Avoid animations unless necessary – should serve a purpose not be for entertainment • Too many slide transitions can be annoying
Images/figures/video	<ul style="list-style-type: none"> • Use these to explain concepts more effectively particularly concepts which are difficult or inefficient to explain with language alone

4.2.3 – Presentation Logistics

➤ Using (or Not Using) Notes



➤ Managing the Presentation Environment

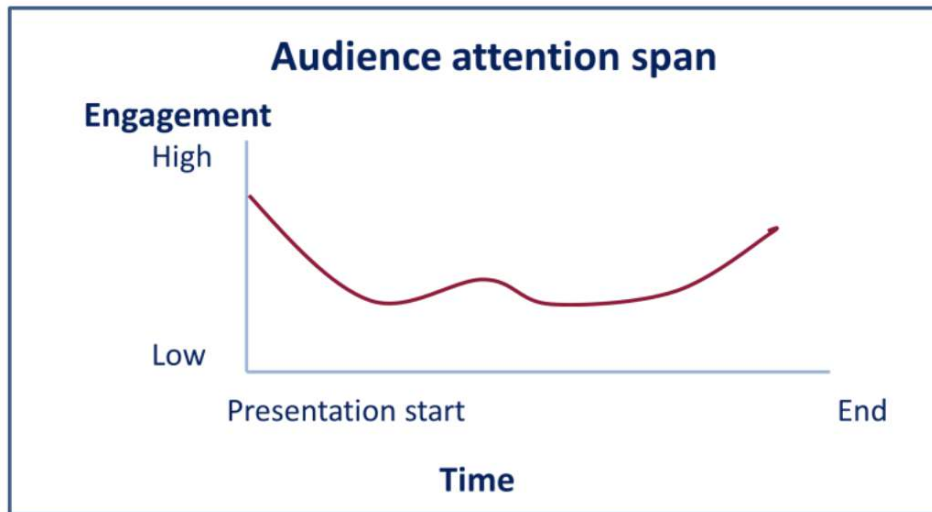
- It is important to be familiar with the presentation environment, including:
 - AV/presentation equipment
 - Lectern
 - Microphone and volume levels
 - Lighting and controls
 - Managing where to stand/multiple speakers. This includes making sure that movements or transitions between speakers do not distract your audience

➤ Final preparations for delivery

- Clothing
- Go to the bathroom before beginning the presentation
- Stand upright where people can see you and the presentation
- Bring a drink in case your mouth gets dry
- Observe your audience:
 - Before, during and after the breaks
 - Seek feedback. Pay attention to the audience's body language and mood

4.3 – Delivering Oral Presentations

- Verbal and non-verbal communications are integral to engaging our audience and delivering effective presentations.
- The audience is usually attentive at the start of a presentation, but as time goes on their attention will wane



➤ The intra-personal Aspect of Presentation Delivery

- When delivering oral presentations, it is important to acknowledge and manage our internal mental state
- Before and during presentations, we may find ourselves feeling anxious or excited, or some other emotion. Our response to these emotions may affect our delivery
- It is important to be mindful of our emotions so that we can deliver effectively, without letting our emotions disrupt the flow of our delivery
- Often, the more prepared we are to present, the easier it is to manage our emotions

➤ Managing Timing

- An integral part of any presentation delivery is managing timing. Presenters must pay attention to time, to ensure that audience expectations in terms of timing are met.
- Sometimes, depending on how well we have planned our timing or if there have been discussions with the audience, we may need to modify our content delivery
- This may not be ideal, but being able to respond dynamically is part of being an effective presenter

➤ Managing Discussions and Taking Questions

- Our presentation should be planned with consideration given to how much or whether or not we plan on having a discussion or taking questions from our audience

➤ Keeping the audience engaged

- Here are 10 techniques to use to help hold your audiences attention
 - Begin with something the audience is interested in. Hopefully they are listening to you because they have an interest in what you are saying
 - Let the audience know why you are personally interested and expert in the topic
 - If there was a speaker before you, if relevant connect your presentation's key point with theirs
 - Ask a key question of the audience at the start. You won't be looking for an answer, but you will encourage your audience to think about what the answer might be and why they want to know the answer
 - Make it clear what the audience will learn from your presentation
 - If you have a statistic, present it
 - Use relevant diagrams and graphics to attract the attention of the audience
 - Tell relevant personal stories and anecdotes to hold the audience's attention
 - Keep the presentation short and on time
 - Humour, well-judged, can engage an audience

4.3.1 – Presentations: Non-verbal Communications

➤ Body Posture and Movement

- Here are some suggestions for how we should use our bodies during presentations to communicate more effectively:
 - Stand with an open posture, opening your shoulders/torso toward the audience
 - Avoid closed or 'defensive' postures and submissive postures
 - Until you become more confident moving around in a controlled way, the easiest thing to do is to set your feet about shoulder-width apart, with a slightly open posture

- It is okay to move around a little during the presentation, as long as you don't distract the audience. Make sure not to walk in the way of the presentation slides, and always come back to standing in an open posture
- **Using Hand Gesture to Enhance Communication**
- **Making Eye Contact**
 - It can be difficult to make eye contact when there is a larger audience. In this case, we can let our eyes rest on sections of the audience, rather than making eye contact with individuals, so that we have chance of connecting with the whole audience
 - Avoid looking at just one or two people only, as this can be disconcerting for those you are looking at all the time
- **Importance of eye contact**
 - Here are five reasons why we should make eye contact in an oral presentation:
 - It will help you concentrate on your presentation more and give you more confidence
 - You will look more authoritative in what you are saying
 - People will engage more with you and will actively listen when look directly at them
 - It can help you slow down when you speak so your communication is more effective
 - Making eye contact changes put facial expression, helping the audience connect more with us

Week 5:

5.1 – Meetings – Purpose and Structure

- **Structure of Meetings**
 - Meetings can be structured in many ways
 - They can be formal or informal, subject to elaborate systems of rules and conventions, or completely without ceremony
- **Formal meetings**
 - Are usually well structured
 - Have rules and regulations that provide the framework for the meetings
 - Are designed to allow all members to participate, but interactions are generally limited by the formal procedures
 - Generally focus on the one who manages the meeting and the discussions
 - Will generate some final decisions, whereas other decisions may be deferred to later meetings
- **Informal meetings**
 - Not well-structured
 - Usually help to exchange information, solve problems, make decisions and set goals
 - Designed to be task-oriented with group participation, feedback and interaction, usually leading to the final decision and action
 - Not necessarily in a formal setting
- **Purpose of Meetings**
 - When meetings are managed properly, they can be a dynamic arena in which:
 - Problems are solved
 - Decisions are made
 - Actions are planned and taken
 - Information is shared
 - Group morale is boosted
 - Communication quality and quantity are maximised
 - Satisfaction, rapport, synergy and effectiveness are experienced by all present
 - Well-run meetings are an effective way of:
 - Planning strategies
 - Providing and clarifying information
 - Encouraging problem-solving
 - Coordinating efforts
 - Motivating
 - Allowing for exchange of ideas
 - Evaluating performance
 - Giving and receiving feedback
 - Building a team

5.1.1 – Keys to a Successful Meeting

- **How to have a Successful meeting**

- Define the purpose: What is the purpose of the meeting? What does it need to achieve?
- Select the participants: Determine who needs to be there. There is little point in forcing someone to sit through a long meeting when they could get the information they need from documents emailed around later, or if the matter does not involve them.
- Provide sufficient notification: People generally dislike being asked to attend a meeting at the last minute (and they may already be busy). Give them time to organise themselves and fit the meeting into their schedule.
- Prepare a realistic agenda: Depending on the length of the meeting, the number of items you can get through may be limited. Don't try to cram too many things in.
- Arrange a suitable venue: The venue should be easily accessible for all attendees. If it involves only staff within the organisation, then a location at that organisation's premises may be ideal. If it is between two or more organisations, a neutral location somewhere between the two offices may be better.
- Follow proper procedures: Ensure that meeting procedures are followed to keep everyone on track.
- Provide prompt feedback to all participants: Actions or results of the meeting should be communicated to the participants as soon as possible.
- Prepare an action list: Outline who is responsible for jobs or tasks decided upon in the meeting.
- Keep an accurate record: A secretary should take notes for the minutes to ensure that all information required and all decisions made in the meeting are recorded.
- Follow up: Check to make sure that those responsible for completing their tasks are on track to complete those tasks.

➤ Preparation

- Before a meeting you need to work out the five Ws:
 - Why?
 - Information sharing
 - Decision making
 - Information dissemination
 - Symbolic
 - Social
 - Who?
 - Consider who specifically needs to be there to:
 - Provide information
 - Offer advice
 - Offer specialised expertise
 - Authorise action
 - When?
 - The length and timing of a meeting depends on a number of factors
 - Where?
 - What?

➤ Seating Arrangements

- Sight lines: Can everyone see?
- Acoustics: Can everyone hear?
- Long rectangular tables: "traditional", focus on power, with the leader sitting at one end
- Round tables: Ideal. Everyone is evenly spaced and can see one another's actions and reactions
- Oval tables: A compromise between rectangle and round tables
- Square: If a square table is too large, it can be problematic for people sitting in the corners

5.1.2 – Terminology and Procedures

➤ Agenda and Minutes

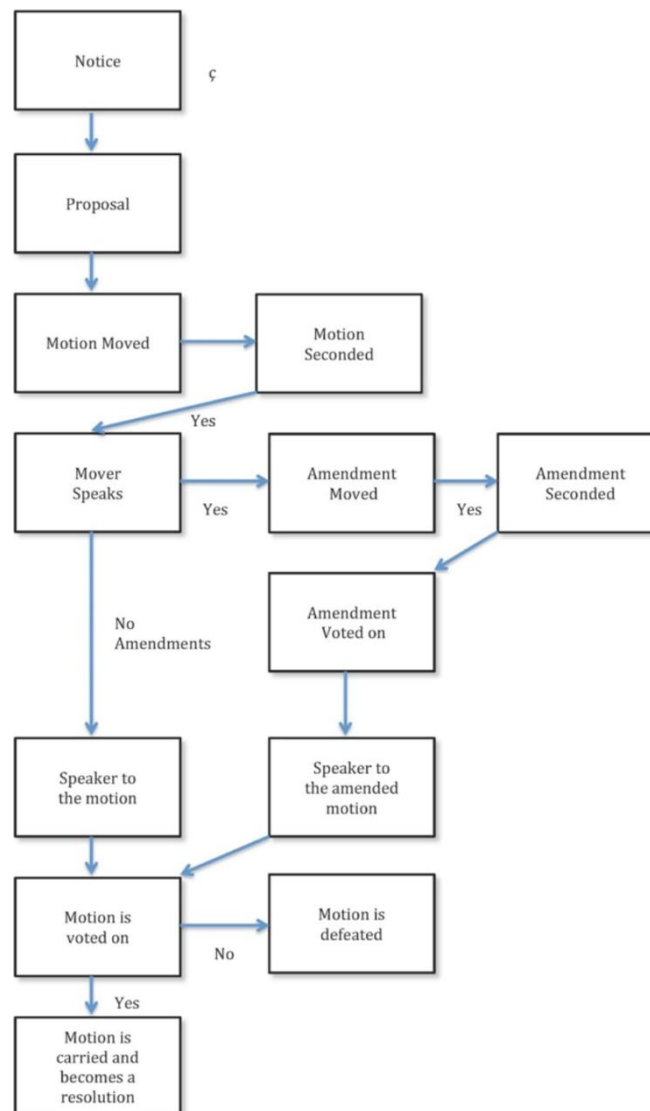
- Agendas and minutes are the two meeting-related documents you will encounter most often
- The agenda acts as a plan for a meeting. It provides a timetable for the meeting, states who will speak to which items and details the meeting contents. The secretary usually prepared the agenda in consultation with the chairperson
- Minutes are record of what actually went on at the meeting, what was said by who
- Minutes are important because they are the formal record of what went on and particular decisions that were made

➤ Other terminology

- Standing orders: the rules used to manage the work of a committee. They govern the procedure of the committee.
- Point of order: a tool which is used to draw attention to a breach in rules, an irregularity in procedure, the irrelevance or continued repetition of a speaker or the breaching of established practices or contradiction of previous decisions
- Quorum: the minimum number of people who must be present for the meeting to transact any business. The quorum is normally in the constitution of an organisation or sometimes in the By-Laws
- Motion: A formal proposal for action or change put to a meeting that calls for those present to vote for or against it. It is a way of getting definite decisions out of the meeting

5.1.2.1 – Motions – Making a decision

- Making a decision in a formal meeting requires a certain process to be followed. This process is laid out below:
 - Notice
 - Proposal
 - Motion
 - Moved Second Amended Vote
 - Casting Vote. The chairperson does not usually vote unless the vote is tied. Then the chairperson votes it is called a casting vote
 - Resolution
- A motion is usually put forward in writing, and put on the agenda. A motion must be seconded by another member before discussion. The chairperson then asks members to speak for and against the motion. At this point, the motion may be amended



➤ **Right of reply**

- After general discussion, before the vote, the originator of the motion has a chance to reiterate and emphasise the main points
- When voting for the motion, the voting process is specified by the organisation's standing orders

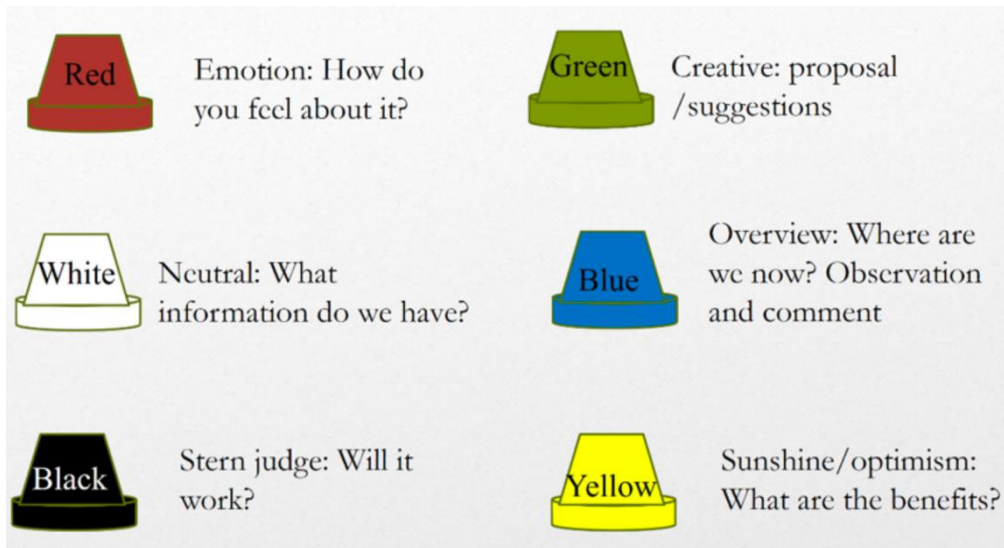
5.1.3 – Meeting Participants – Members

➤ **Members' responsibility**

- For a meeting to go smoothly, it is important that they:
 - Prepare – they can do this by:
 - Read the agenda and minutes of the previous meeting and any attachments or reports circulated prior to the meeting
 - Prepare (in writing) any proposals and motions you wish to put to the meeting
 - Give reasons for any proposal
 - Present any relevant background information
 - Catch member's attention
 - State your main points clearly in the discussion
 - Understand the procedure – members should understand and follow proper meeting procedures, including:
 - Addressing the meeting through the chairperson; remember formal procedure
 - Not doing things out of order such as jump to other agenda items
 - Not re-opening a debate after a motion has been voted on
 - They should also practise general courtesy and meeting manners:
 - Arrive on time
 - Follow the agenda
 - Avoid interruptions
 - Avoid distractions
 - Don't interrupt others while they are speaking
 - Let the chair run the meeting
 - Contribute as appropriate

➤ **5.1.3.1 – Thinking Hats**

- **Why do we attend meetings?**
 - The reasons they attend meetings are varied and include:
 - They see the need
 - They are involved with the intent of the meeting
 - They are required to attend by their boss or by virtue of their position in an organisation
 - They like the social side of meetings
- **The de Bono System**
 - The de Bono Hats system is a tool for group discussion and individual thinking
 - It is a way of classifying the way people think by using coloured "thinking hats"
 - Each hat has a function
 - The general classifications are as follows:



➤ 5.1.4 – Meeting Participants – Chairperson

○ Participants

- In every meeting, the participants take on different roles:
 - Chairperson
 - Deputy Chairperson
 - Secretary
 - Members

○ Duties of the Chairperson

- The chairperson has a number of duties they must perform before and during each meeting



- The chairperson has a number of other formal duties, including:
 - Interpreting and clarifying points and issues
 - Summarising points of agreement
 - Moving discussion forward
 - Encouraging participation from all attendees
 - Bringing discussion to a resolution

➤ 5.1.5 – Meeting Communication

○ Communication at Meetings

- In order for the effective exchange of idea and decision making to take place, a high level of communication between members is needed. This can be achieved in a number of ways:
 - All members, as well as the chairperson, need to create a positive atmosphere, support and encourage contributions, reconcile disagreements and reduce tensions
 - Members need to be willing to negotiate, modify their position and admit to errors
 - Encouraging and facilitate discussions and contributions by listening, giving feedback, motivating others and influencing opinion

- Avoid defensive or dysfunctional behaviours
- **Barriers to Effective Communication**
 - These apply not only to meetings, but to communication in general:
 - Poor verbal skills
 - Inappropriate non-verbal behaviours
 - Ineffective listening
 - Unwillingness to contribute ideas
 - Unwillingness to listen to others
 - Unwillingness to use power and implement decisions
- **Minutes**
 - There are a number of things all minutes documents should include:
 - Name of meeting
 - Date and time of meeting
 - Attendance (who was there) and apologies (who was absent)
 - Numbered items (from the agenda)
 - Action after each item and who is responsible
 - Details of any motions who moves them and outcomes
 - Time meeting was closed
- **Outcomes**
 - Provide feedback to the participants as soon as possible. Include an action list
 - Follow-up should be done before the next meeting
- **After the Meeting**
 - Complete and confirm the minutes
 - Follow up on action items
 - Establish sub-committees where appropriate
 - Track progress
 - Keep key stakeholders informed

5.2 – Job Interviews

➤ 5.2.1 – Interview Preparation

- **Selection Criteria**
 - Selection criteria are the skills, attributes, experience and education that the employer has defined as being essential or desirable for satisfying the requirements of the job
 - It is important to identify and clarify what the employer is looking for so that you can demonstrate that you have what they want
- **Learning Styles**
 - Fleming's (2001) VAK/VARK model describes three learning styles:
 - Auditory
 - Visual
 - Kinaesthetic
 - Consider which style you are, knowing your preferred style of learning may help you better understand some of your strengths and weaknesses
- **Multiple Intelligence Theory**
 - The Multiple Intelligence Theory (Gardner, 1983) is related to “emotional intelligence.” It describes the different types of intelligence people have:
 - Linguistic
 - Logical-mathematical
 - Musical
 - Bodily-kinaesthetic
 - Spatial
 - Interpersonal
 - Intrapersonal

➤ 5.2.2 – The Interview

- **Skills and Attributes Checklist**
 - In an interview, the employer will ask you questions about yourself which may be tricky to answer without some forethought. Some things you should be aware of are:
 - Your strongest skills

- The areas in which you are most knowledgeable
 - The strongest parts of your personality
 - The thing you do best
 - The skills you should develop
 - Your key accomplishments
 - Why you want to work for the organisation
- **“Tell us about yourself”**
 - This is a common interview question that enables you to highlight your key attributes and strength.
 - It is a good idea to prepare and practice an answer to this question, but don’t make it sound memorised
 - This is one way you could structure your answer:
 - Brief introduction
 - Key accomplishments
 - Key strengths (demonstrated by these accomplishments)
 - How you see yourself performing and developing in the program/position
- **The STAR Approach**
 - S = Situation: Briefly describes the situation or scene
 - T = Task: Say what needed to be done to address the situation and what your role and responsibilities were
 - A = Action: Say what you did and how you did it. Include your reason if they are useful or relevant
 - R = Result: Say what happened as a result of your clients
- **Dress**
 - Your appearance should reflect not just how you want to look. Ideally, your dress and appearance should suit what you know about the company. Things to consider:
 - Choice of clothing: Should be conservative and appropriate to a business environment. It should also be cleaned and ironed
 - Appropriate shoes: Should be clean/polished
 - Accessories: Should be conservative
 - Hairstyle/hair grooming: Should be neat and clean
 - Personal hygiene: Clean fingernails, brushed teeth
- **Etiquette**
 - Punctuality: Know your route/destination and plan to be 15 minutes early. It can be useful to visit the interview venue before the actual interview to familiarise yourself with the area and how long it takes you to get there
 - Greeting: First impressions are important when you meet the interviewer. Smile make good eye contact and use a firm handshake
 - Turn your phone off: Your phone should be completely off
- **Manner**
 - Be enthusiastic, interested, positive, confident and bright, but not arrogant. Listen
 - Avoid yes/no answers. Expand and elaborate
 - Be aware of who the interviewer are. Look at them and talk to them
- **Non-verbal Communication**
 - Maintain eye contact
 - Speak at a moderate pace, volume, and pitch
 - Use head and face to agree with both positive and negative statements
 - Don’t fidget
 - Keep hands in an open position
 - Keep arms, legs and feet uncrossed
 - Lean forward slightly
 - Try to appear calm and relaxed
- **Answering Questions**
 - It is worth practising the following:
 - Anticipate what questions may be asked and prepare general points. Don’t memorise answers as it can sometimes sound like you are just ‘reciting’

- Prepare a bank of relevant examples or personal anecdotes you can use to answer questions
- Consider how much to say in your answer. Elaborate and expand where required, but don't waffle
- Show confidence, enthusiasm and good communication skills
- **Asking Questions**
 - It is important for you to ask questions in the interview as well
 - This not only helps you clarify anything you may be unsure of. It also demonstrates to the interviewer that you are truly interested in the job
 - Think of at least two questions to ask the interviewer. Focus on questions related to the role
 - Don't ask a question for which you should know the answer from your company research
 - Don't ask about salary at the interview
- **Closing**
 - Thank the panel for their time, smile and shake hands. Reiterate your interest but don't appear too desperate
 - Don't evaluate your performance until you leave the room
 - Don't apologise

5.2.3 – Types of Interviews

➤ **Stress Interviews**

- Stress interviews are a deliberate attempt to see how you handle yourself under duress
- The interviewer may be sarcastic or argumentative, or may keep you waiting
- Expect this to happen and, when it does, don't take it personally
- Answer each question, and ask for clarification when needed
- The interviewer may also lapse into silence at some point during the questioning

➤ **One-On-One Interview**

- It has been established that you have the skills and education necessary for the position
- The interviewer wants to see if you will fit in with the company, and how your skills will complement the rest of the department
- Your goal in a one-on-one interview is to establish rapport with the interviewer and show him or her that your qualifications will benefit the company

➤ **Screening Interview**

- A screening interview is meant to weed out unqualified candidates and are often conducted by a consulting company engaged in a search process for the right candidate
- Interviewers will work from an outline of points they want to cover, looking for inconsistencies in your resume and challenging your qualifications

○ **Telephone Interview**

- Telephone interviews are merely screening interviews meant to eliminate poorly qualified candidates so that only a few are left for personal interviews

○ **Lunch Interview**

- The same rules apply in lunch interviews as in those held at the office

➤ **Committee Interview**

- Committee interviews are a common practice. You will face several members of the company who have a say in whether you are hired.
- When answering questions from several people, speak directly to the person asking the question; it is not necessary to answer to the group
- In some committee interviews, you may be asked to demonstrate your problem-solving skills
- The committee will outline a situation and ask you to formulate a plan that deals with the problem. You don't have to come up with the ultimate solution
- The interviewers are looking for how you apply your knowledge and skills to a real-life situation

➤ **Group Interviews**

- A group interview is usually designed to uncover the leadership potential of prospective managers and employees who will be dealing with the public
- The front-runner candidates are gathered together in an informal, discussion-type interview

- The goal of the group interview is to see how you interact with others and how you use your knowledge and reasoning powers to with others over

➤ **What Interviewers look for**

- Behaviour
- Interaction with other and interpersonal ability
- Communication skills
- Impression made
- Contribution and participation in team work
- Persuasiveness and ability to influence others
- Leadership and delegation
- Organisation and planning skills
- Ability to handle stress
- Ability to deal with feedback
- Ability to give constructive feedback
- Problem solving and analytical skills

Week 6

6.1 – Teamwork – Benefits and Limitations

- **Team:** A team is described as “ a small number of people with complementary skills who are committed to a common purpose, performance goals and approach for which they hold themselves mutually accountable
 - Team work is “the process of working collaboratively with a group of people in order to achieve a goal
- **Why Teamwork?**
 - **Positives:**
 - Synergy – The team’s performance is greater than the sum of its equal parts (the team achieves more than all the team members could achieve working individually)
 - Increased productivity through more effective problem solving and innovation
 - Higher quality decisions given the different perspectives brought to the decision-making
 - Improved processes
 - Increased quality of work
 - Reduced turnover and absenteeism
 - Increased employee morale
 - **Limitations:**
 - Groupthink:
 - It is often the case that as groups become closer, their thinking aligns, this can outweigh the benefits of different perspectives
 - Symptoms include:
 - Illusion of invulnerability
 - Rationalisation
 - Belief in inherent morality
 - Stereotyping opponents
 - Direct pressure to conform within group
 - Self-censorship
 - Solutions for avoiding groupthink:
 - Examine alternatives, generate contingency plans
 - Appoint a devil’s advocate (someone who has to propose a different idea)
 - Social loafing – the tendency of some group members to put in less effort if they believe their underperformance will not be noted

6.2 – The Challenge of Teams

- **Value of Teams**
 - Teams are a potential win/win for employees and organisations with improved outcomes
 - Teams allow organisations to ‘get more’ from employees
 - In order for teams to succeed within an organisation, the organisational culture has to change
 - There is a range of models for teams:

Team models

Structure	Self managed, joint decision making	→	Structured leadership
Purpose	Function - oriented	→	Project-oriented
Duration	Limited time	→	Ongoing

- Sale, et al (1992), suggest that self-managed work teams can lead to:

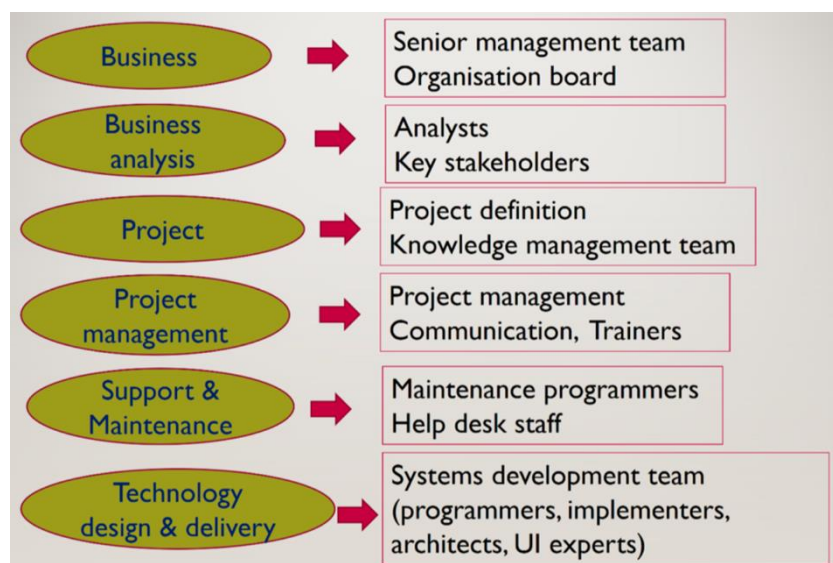
- Reduced absenteeism
- Increased productivity
- Increased employee satisfaction, morale and cohesiveness
- A multi-skilled workforce
- Increased flexibility in work practices
- Decreased need for managers

➤ Challenges of Teams

- Though teamwork has benefits, critics have also noted a number of problems. Team approach criticised as:
 - A covert form of control; using employees' desire for less direct control from above as a way of making them work harder
 - A means to secure employee knowledge and compliance on the cheap
 - A distraction from an organisation's real problems

6.3 – Teams in IT

➤ Types of teams in IT



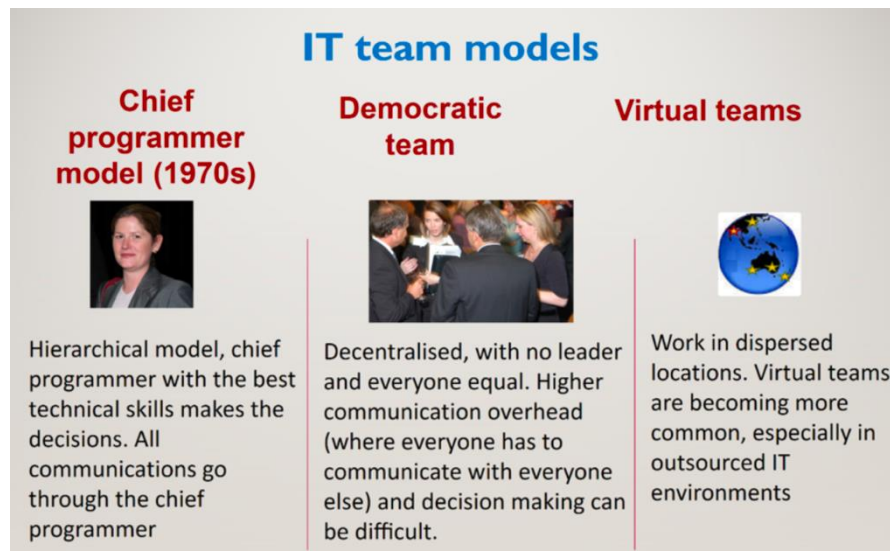
➤ Software development teams

- Developing software is too large and complex for a single programmer to develop on their own in the time available
 - It is also unlikely one programmer will have the skills to complete the program

- There are a number of reasons why IT projects are assigned to different work teams including:
 - The range of skills needed
 - In any workplace there are time pressures
 - Increase in quality
 - More effective

➤ Team Models

- Matthew and McLees (2015), argue that building an effective IT team requires strong leadership to guide the project
- They identified two important elements in team leadership:
 - Developing credibility and influence among team members
 - Establishing a vision and goals for the team
- In IT three common approaches are:
 -



6.4 – Team Member Roles and Development Stages

➤ Team Member Roles

- The roles can be task-related or facilitating
- Other roles can be negative, where team members are defensive or hinder and undermine the progress of the team

➤ Team Development Stages

- Forming
 - Known as 'getting to know you' or 'ice-breaking' stage
 - Group members attempt to identify what tasks they should be working on and begin to develop a sense of the group's independence
- Storming
 - Socio-emotional responses to task demands come to the fore, along with conflicts over leadership, control and influence
 - There are also misunderstandings about role and style behaviours and norms, conflicting goals, poor feedback and listening, ineffective group decision-making and problem-solving processes
- Norming
 - Where formal and informal norms begin to emerge and cohesion between members begin to develop
 - Opinions are now stated more readily and are received in a less defensive manner
- Performing
 - Where the balance of rules and roles emerge
- Adjourning
 - Where the group reaches closure on its task

➤ Team Processes

- Most groups will develop processes or ways in which the team should behave and manage its business
 - Some things may be formal and others may be informal
 - Formal
 - Formal rules help define how the group will behave
 - Informal norms are less specific and tend to be unofficial

6.5 – Effective Teams

➤ Elements of Effective Team

- Teams generally require all or at least most of the following if they are to be effective:
 - A clear plan to achieve shared goals
 - Clear roles
 - Effective communication processes
 - An optimal size
 - Excellent interpersonal and technical skills
 - Open and trusting relationships with one another
 - Accountability to the organisation
 - Reward structure that are team-based
- Effective teams require team members who:
 - Are team focused rather than individually focused
 - Are content and process oriented
 - Can handle conflict
 - Are great communicators
- Teams also require an effective leader who can:
 - Challenge the process
 - Inspire a shared vision
 - Enable others to act

➤ Building an Effective Team

- Katzenbach & Smith suggest successful teams will share these common approaches:
 - Ensure the team understands the urgency and direction of what is required
 - Members of teams should be selected based on their skills rather than their personalities
 - There needs to be clear rules of behaviour
 - Set achievable goals early
 - The teams should be regularly challenged in their thinking
 - Teams should spend time together
 - Ensure there is regular positive feedback
- Ineffective teams fail when:
 - They do not have enough time
 - They do not have enough resources
 - The resources they have are ineffective
 - They have no management support
 - There are technological challenges

6.6 – Team Issues – Problems and Solutions

➤ Internal Problems

- Problems include:
 - Unconstructive meetings where there are no outcomes or one-sided discussions take place
 - Meeting where the agenda take precedence over decision-making
 - Personal attacks
 - A weak sense of direction for the team
 - Skill gaps in the team
 - Different levels of commitment by team members
 - Poor leadership that needs help
 - Poor time management
- Belbin (1981) says a successful team know how to mix and match different personality types:
 - The Monitor-Evaluator: May provide a good overview of various options facing group, but not able to excite others into action
 - The Team Worker: Helps keep group together, but can be indecisive
 - The Plant: Is creative but may not communicate well, or attend to details
 - The Company Worker/Implementer: Practical thinker whose perceived lack of enthusiasm for radical thinking may frustrate other team members

➤ Common Solutions

- Shared Goals: Having shared goals can help a team be more successful, though it is not always necessary. In some teams, the members' goals may merely be mutually compatible rather than identical

- Motivation: It is important that team members feel motivated to complete the work
- Clear decision-making structure: Robbins and Finley (2000) identify seven basic approaches to team decision-making:
 - Consensus: Everyone agrees with the decision or feels the same way
 - Majority rule: The decision is made based on what most people in the group think
 - Minority rule: a small sub-set of the team has the power to make decisions
 - Averaging there is compromise between the team members for them to agree on a 'middle ground'
 - Expert: When a team lacks the knowledge or skills to make a decision, they may bring in an expert to guide them
 - Authority rule without discussion: A dictator-like scenario where the leader makes all the decisions without no input from other team members
- Planning: Galvin, Prescott and Huseman (1992) argue that small groups can learn from the notion:
 - Defining and analysing the problem
 - Establishing criteria for a solution
 - Proposing possible solutions
 - Evaluating possible solutions
 - Selecting a solution
 - Plotting a course of action
- Realistic Expectations: Setting unrealistic goals (and inevitably failing to meet those goals) can lead to decreased morale and have a negative impact on future performance

➤ **Problems External to the Team**

EXTERNAL PROBLEMS AND SOLUTIONS	
PROBLEM	SOLUTION
• Lack of resources (time, \$\$, staff, equipment)	• Team leader meets with management regularly, raises resource issues early
• Poor communication within the organisation and other teams	• Team leader circulates team outcomes to organisation regularly, communicates organisational information to team.
• Lack of management support.	• Team leader raises issue with management. Promotes team successes and outcomes.
• Invisibility of the team within the organisation	• Communication ensures successes of the team are widely circulated.

Week 7

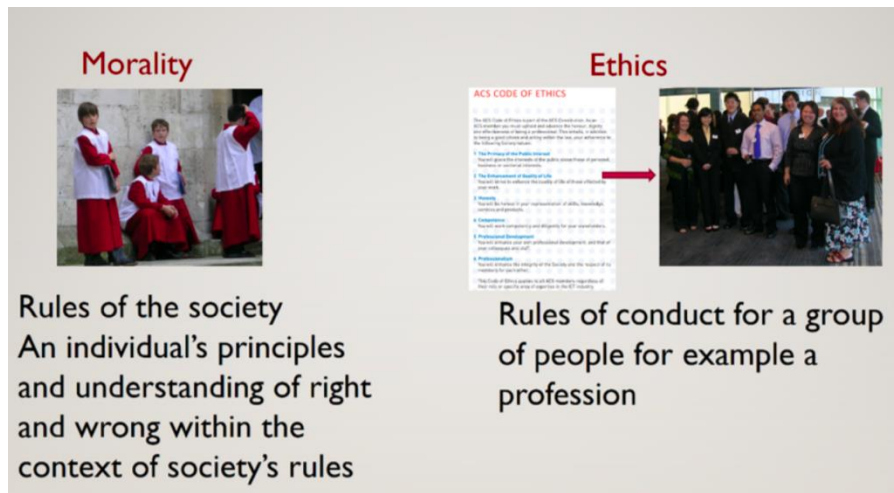
Chapter 7.1 – Introduction to Ethics

➤ **Introduction to Ethics**

- Everyone in society shares core values. There are two main ways we view the world:
 - Selfish point of view: Consider only ourselves and our core values
 - Ethical point of view: Respect other people and their core values

➤ **Definitions**

- Often *morality* and *ethics* are used interchangeably. However, they are different
 - Morality: Refers to a society's rules of conduct describing what an individual ought to do and ought not to do in various situations
 - Ethics: the philosophical study of morality, a rational examination into people's moral beliefs and behaviour



7.1.1 – Ethical Theories

➤ Ethical Theories

- Ethical theories provide a foundation for solving ethical problems we may encounter
- There are a number of ethical theories which may be applicable depending on the culture or context

➤ Rule oriented approaches

- A rule based approach sets rules to follow. The rules that are set must be followed irrespective of the consequences
- Even if there are logical or rational reasons not to follow the rules in certain circumstances, they must be adhered to. Examples are:
 - The golden rule
 - Human Rights
 - Kantian ethics
 - The Ten Commandments

➤ Consequence oriented approaches

- Consequences oriented approaches involve making decisions based on the likely consequences. There are no fixed rules; each decision must be made on a case by case basis
- This means that different responses to the same problem could be considered best in different circumstances
- Rather than following set rules, people can disagree on moral issues. Examples include:
 - Relativism (argues that morality is relative to someone's culture)
 - Ethical Egoism (you make decisions based on what is best for you)
 - Principle of Utility (decisions are right if they promote greater happiness)

7.2.1 – Professions and Professional Societies

➤ What is a profession?

- Some of the characteristics of a profession are:
 - Initial professional education
 - Accreditation
 - Skills development
 - Certification
 - Licensing
 - Professional development
 - Code of ethics
 - Professional society
- Whether a computer-related career is truly a profession, it has to meet the following characteristics:
 - Certification and licensing not required
 - College degree not required
 - Apprenticeship not required
 - Membership of a professional society is optional
 - No specific requirements for continuing education
- Professional Societies:
 - ACS: The Australian Computer Society – www.acs.org.au
 - ACM: The Association of Computing Machinery – www.acm.org
 - IEEE: The Institute of Electrical and Electronic Engineers – www.ieee.org

- BCS: British Computer Society – www.bcs.org
- Refer to (pg. 128 of textbook)

➤ Company Membership

- Other societies offer membership to companies:
 - AISS: Australian Information Industry Association – aiia.com.au
 - AIMIA: Australian Interactive Multimedia Industry Association – aimia.com.au
 - IIA: Internet Industry Association – iia.net.au

➤ Purpose of Professional Societies

Value of professional societies to individuals
 From the Australian Computer Society (ACS)
<https://www.acs.org.au/about-the-ac/s/about-us>

<p>Ensure members realise their professional ambitions</p> <p>Provides opportunities to network with others in the industry</p> <p>Take advantage of professional development opportunities.</p> <p>Help members realise their professional ambitions globally</p>	<p>Help members be the best they can be</p> <p>Provide a range of resources to help with career development</p> <p>Ensure skills are internationally recognised through the ACS certification program</p>
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Be connected with new opportunities

○ Reasons for

businesses and organisations to belong to a professional society are:

- Promote the development of IT
- Advance research into IT (often with funding)
- Develop policies and ethical standards of IT use
- Maintain technical standards throughout IT and Communications
- Build communities of IT specialist worldwide
- Develop community understanding and appreciation of IT

7.2.2 – Ethical Codes

➤ ACS Code of Ethics: Values and Ideals

- There are six main values, each with sub-clauses giving specific instances
 1. The Primacy of the Public Interest – You will place the interests of the public above those of personal, business or sectional interests
 2. The Enhancement of Quality of Life – You will strive to enhance the quality of life of those affected by your work
 3. Honesty – You will be honest in your representation of skills, knowledge services and products
 4. Competence – You will work competently and diligently for your stakeholders
 5. Professional Development – You will enhance your own professional development, and that of your staff
 6. Professionalism – You will enhance the integrity of the ACS and the respect of its members for each other

➤ List of Fundamental Principles

- Be impartial
- Disclose information that others ought to know
- Respect the rights of others
- Treat others justly
- Take responsibility for your actions and inactions
- Take responsibility for the actions of those you supervise
- Maintain your integrity
- Continually improve your abilities
- Share your knowledge, expertise and values

➤ Software Engineering Code of Ethics

- **Public** – should be consistent in dealing with the public interest

- **Client and Employer** – will act in the best interest of their client and/or employer
- **Product** – should make sure their products meet the highest professional standards possible
- **Judgement** – will maintain integrity and independence with respect to their professional judgement
- **Management** – managers should subscribe to and promote an ethical approach to the management of software development and maintenance
- **Profession** – should advance the integrity and reputation of the profession
- **Colleagues** – should be fair to and support their colleagues
- **Self** – should ensure they participate in lifelong learning in the practice of their profession and promote an ethical approach to practice

7.2.3 – Ethical Issues

➤ Views on Ethical Dilemmas

- Information professionals are caught in a web of sometimes conflicting needs, torn between the demands of:
 - Users
 - Society
 - Employers
 - Their own needs
 - Some current ethical dilemmas

➤ Common Ethical Issues of IT Users

- Inappropriate sharing of information
- Supporting the ethical practices of IT users by defining and limiting the appropriate use of IT resources
- Developing, communicating and enforcing written guidelines
- Encouraging employees to respect corporate IT resources. Use them to enhance their job performance
- Effective guidelines to allow some level of personal use

Week 8

8.1 – Employment Contracts

➤ Non-disclosure agreements (NDA)

- A non-disclosure agreement is an agreement between two or more people or organisations and is legally binding
- Non-disclosure agreements:
 - Restrict the sharing of confidential information with others
 - Specify what is confidential, how long the agreement runs for and how long the parties must keep the information confidential
 - May be unilateral (one-way) or multilateral (restricting all parties)
 - Most often do not require confidentiality, particularly if the information is public or the recipient subsequently discovered the information through another source, or the recipient had prior knowledge of the information
- These exceptions will depend on how the NDA is written

➤ Non-compete clauses

- Non-compete clauses restrict an employee's ability to work for direct competitors or in the immediate geographic location

8.2– Intellectual Property

➤ Trade Secrets – a piece of confidential information – facts and knowledge. It is often regarded as the property of a company

- Intellectual Property includes:
 - Inventions
 - Literary and artistic works
- IP, however, is territorial, that means it should be applied for on a country-by-country basis

➤ Why does IP exist?

- Intellectual property exists to protect the owners of the work
- Exclusive rights to IP form a 'social bargain' with creators
 - This social bargain provides incentive to create, as creators know that they will be able to commercially leverage their creations
- Intellectual property does not necessarily have a physical manifestation

8.2.1 – Trade Secrets

➤ A trade secret has these main attributions:

- It is not publicly available

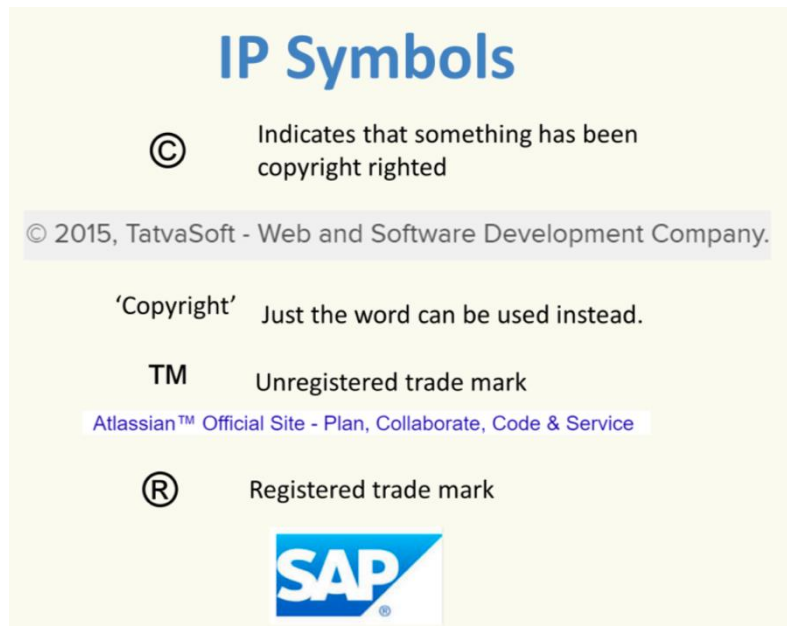
- It may be used by the information holder to gain economic benefit by virtue of its confidentiality
- The information holder must make efforts to keep it confidential

➤ **Issues for IT Professionals**

- Trade secrets lose their protection once they become public, so they may become compromised

8.2.2 – Copyright

- Copyright: a legal construct granting the creator of an original work a set of exclusive rights on that work for a limited time. Copyright covers the expression of an idea, not the idea itself



- The copyright owner has exclusive rights which include:
 - Copying (reproduction)
 - Distribution
 - Adaptation
 - Public performance and display
 - Production of derivative works

➤ **Australian Copyright Law**

- Classes of creative works covered by copyright include:
 - Literary works
 - Photographs and films
 - Dance choreography
 - Musical compositions and audio recordings
 - Drawings
 - Sculptures
 - Radio and TV broadcasts
 - Computer software
- Basic principles of copyright. These are:
 - Copyright is automatic
 - It is possible to register a copyright. This is useful for commercially leveraging a work or enforcing copyright
 - Companies developing software are subject to royalties
 - There must be a registered ownership of a copyright before someone can be sued for infringement
- There are two different types of copyright violation: direct and indirect
 - Direct infringement – unauthorised exact copies of protected works
 - Derivative works – unauthorised use of a substantial part of a copyright work in a new work

➤ **Issues for IT professionals – copying code or other documents**

- Copyright covers specific programming code, rather than the conceptual idea behind the code
- Document templates and precedents likewise cover the specific document content, rather than their conceptual basis

➤ Important Court Cases

Case Study - Apple v Samsung

In 2012 a US court determined that Samsung had violated a number of Apple's patents, including 'tap-to-zoom' and 'bounce back scrolling'. However, in 2015 a German court threw out a patent claim by Apple against Motorola on its swipe to unlock design. The court agreed that the user friendly display was already well established and so the patent was not therefore based on an invention.

Case Study - IBM vs SCO

In this quite complicated case, [SCO group sued IBM](http://en.wikipedia.org/wiki/SCO_v._IBM) (http://en.wikipedia.org/wiki/SCO_v._IBM), alleging that IBM had contributed proprietary unix code into open source distributions of Linux without valid authorization. They also used these allegations to seek significant licensing fees from corporate Linux users. Although SCO was accused of being a copyright troll (seeking to only make money from litigation), the IBM case continued for a long time. This created significant uncertainty for IBM and many corporate Linux users.

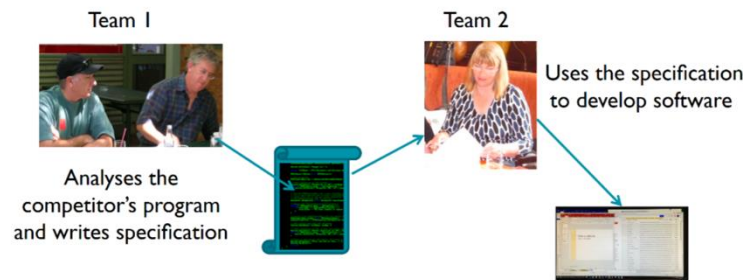
➤ Avoiding

Safe Software Development

- Reverse engineering is may be legally acceptable. However, companies must protect against unconscious copying, One suggested two stage solution is known as a 'clean room'

copyright issues –

Example of a clean room



➤ Corporate

- When creating something during our employment, most often the copyright is owned by our employer
 - Any materials created as part of a course are owned by the university
- The less for IT professionals is never to take code, documents or other copyrighted material to a new employer
- Occasionally, employees can have clauses inserted into their contracts which give them ownership of the material

Ownership

our work involves

8.2.3 – Copyright Creep

➤ Copyright Creep – The Ongoing Expansion of Copyright

- Originally, copyright only protected printed works, and only for a period of 14 years. Copyright terms are now for the life of the creator

➤ Expansion of copyright scope and enforcement

- Copyright originally covered only printed works
- This was expanded to cover all the various other types of creative works described
- In a digital age, technology results in most uses of copyrighted works being copies, because it is in the nature of electronic devices to copy in order to function

➤ Exceptions to copyright

- There are some exceptions to the exclusive rights of copyright owners
- Courts consider four factors:
 - Purpose and character of use
 - Nature of the work
 - Amount of the work being copied
 - Effect on market for the work

Suggested copyright exceptions



Anti-Counterfeiting Trade Agreement

- As part of the negotiations for the draft Anti-Counterfeiting Trade Agreement, copyright industries sought to have world governments require ISPs to actively engage in policing copyright infringement
- Procedurally, there would be no judicial oversight or requirement of proof of infringement; allegations would be enough

8.2.4 – Trademarks

- Trademarks are distinctive identifiers of goods or services restricted for use by the owner. They may take the form of words, phrases, logos, symbols, photos or some combination of these elements
- Trademark protection lasts as long as the trademark is in use

8.2.5 – Patents

- A patent provides the owner with a set of exclusive rights to prevent others from making, using, or selling the invention for a period of 20 years, in exchange for public disclosure of the invention
 - Patents are granted by application
- **Software Patents**
 - Software Patents – The Foundation of a Free Information Infrastructure (FFII) suggest that a software patent could be defined as a “patent on any performance of a computer realised by means of a computer program”
- **The Mobile Patent Wars**
 - Patents may be used offensively by suing others for infringement, or defensively by using the threat of their use to discourage others from suing

8.3 – Alternative Responses to the Expansion of Copyright

- **Open-Source Software**
 - Open-Source Software – OSS is a software developed by a community of users but may be licensed (Linux). The license includes the source. The source is released allowing users to examine, distribute, change and improve the original code
 - An OSS license will also include the obligation to distribute the source and binary together, or at least to make the updated code availability publicly
- **Benefits of Open-Source Software**
 - Gives everyone the opportunity to improve programs and new versions of programs appear more frequently
 - It eliminates tension between obeying laws and helping others
 - Programs belong to the entire user community
 - It shifts the focus from manufacturing to service
- **Disadvantages of Open-Source Software**
 - Without critical mass of developers, quality can be poor
 - Without an ‘owner’, incompatible versions may arise
 - No one formally responsible for updates and bug fixes
 - Relatively weak graphical user interfaces
 - Poor mechanism for stimulating innovation. No companies will spend billions on new program
- **Creative Commons**
 - Creative Commons License – The license lets the owner of the work decide how others may use the work

- A Free Creative Commons license indicates which kinds of copying are okay and which rights are retained by the owner

Week 9

9.1 – Organisations and Organisational Communication

➤ Organisations – Classical Approach

- Many points of interest in the classical approach are:
 - The organisation behaves as a single unit, regardless of size or diversity
 - The organisation has a clearly identifiable purpose or goal
 - The people who work in or belong to the organisation share that goal and they work cooperatively to achieve the goal
 - Employees or members of the organisation place the interests of the organisation ahead of their own individual interests
 - The organisation uses rational, scientific analysis as the basis for deciding on the right organisation structure and activities for achieving its goal

➤ Organisational Characteristics

- Four factors or characteristics are used to describe organisations:
 - Function or purpose
 - Interface with customers/clients and suppliers
 - Size
 - Structure for internal management and control
- These four factors all affect information use and flow:
 - Type of information
 - Volume and complexity of information
 - Who accesses what information
 - The importance of information to the organisation's survival

➤ Organisational Goals and Objectives

- **Goals**
 - Goals – are broad descriptions of what an organisation plans to achieve
- **Objectives**
 - Objectives – are operational statements describing what an organisation will do to achieve the goals; objectives must be measurable

➤ Organisational Functions

- Organisational functions are a set of essential functions needed to achieve the objectives. Functions may be primary or secondary
 - **Primary Functions** – Are directly related to goals/objectives
 - **Support Functions** – maintain the functioning of the organisation itself

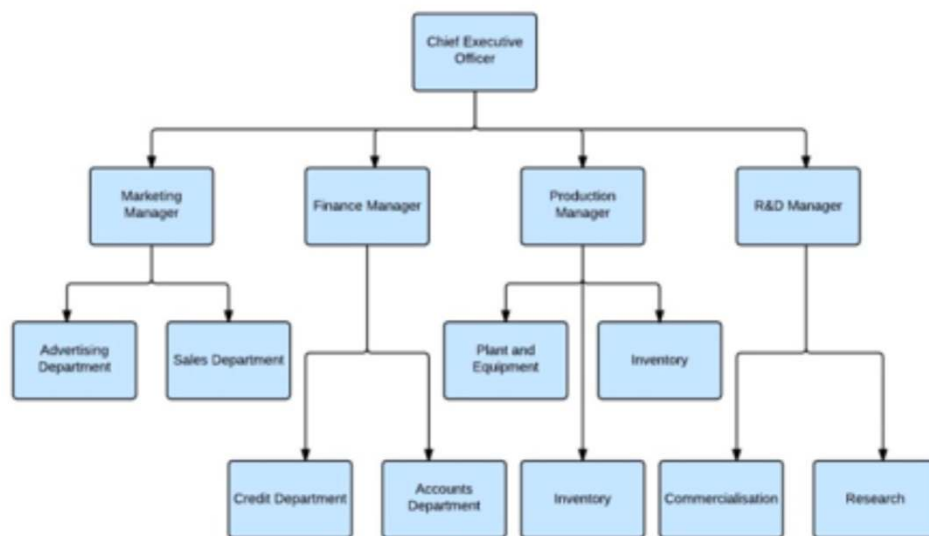
9.1.2 – Organisational Communication

- The first two definitions of organisational communication take a traditional view:
 - “the communications transactions between individuals and/or groups at various levels and in different areas of specialisation that are intended to design and redesign organisations, to implement designs, and to co-ordinate day-to-day activities”
 - “the display and interpretation of messages among communication units who are part of a particular organisation. An organisation is comprised of communication units in hierarchical relations to each. Other and functioning in an environment
- The most recent definitions below are expanded, and include stakeholders and individuals within organisations:
 - “internal communication is understood here as the strategic management of interactions and relationships between stakeholders at all levels within organisations”
 - “The process by which individuals stimulate meaning in the mind of other individuals, by means of verbal and non-verbal messages in the context of a formal organisation”

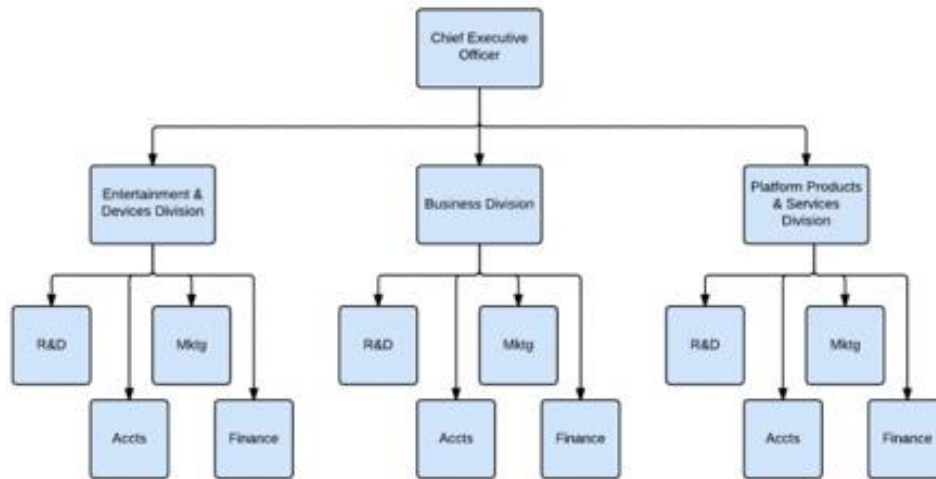
9.1.3 – Organisation Structures

- The structure of an organisation will depend on a number of factors
- How an organisation communicates with its staff and those external to the organisation will be influenced by its structure
 - The structure is related to the way that work is allocated among employees/members =
 - Choice of structure facilitates achieving goals most effectively
 - Groups, managers and staff can be organised into:
 - Long term groupings

- Dynamic groupings
- Organisation supports job specialisation
 - Tasks undertaken by people in sections are narrowed
 - Concentrates experience
 - Can increase competence and efficiency
- There are three common organisational structures:
 - Functional structure
 - Divisional structure
 - Matrix structure
- **Functional/Hierarchical Structure**
 - There are different levels of management depending on the hierarchy. Features include:
 - Groupings based on functions performed: people, resources, activities and tasks
 - Managers responsible for departments of specialists
 - This structure is suitable when:
 - In-depth knowledge is needed about functions
 - There is low reliance on coordination between departments
 - There are a few well defined products



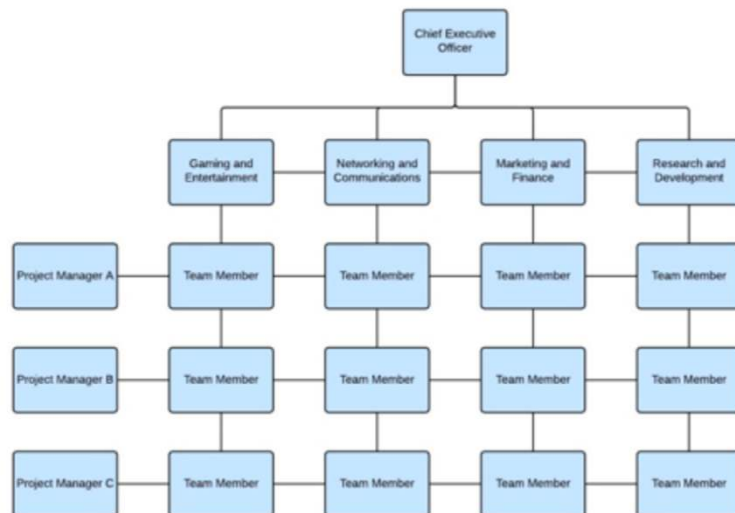
- **Benefits**
 - Continues to build expertise in personnel
- **Drawbacks**
 - Response to change or opportunity can be slow
 - Departments have narrow view of goals and objectives
 - Decisions pushed up management hierarchy making for heavy loads
- **Communication Channels**
 - Defined and rigid, clear and precise
 - Upward channel – via manager
 - Downward channel – direct information to staff you manage
 - Horizontal channel – some communication with staff reporting to the same supervisor
- **Divisional Structure**
 - Divisional structure by contrast is organised around the function of the organisation
 - Monash University is organised around faculties and schools/department responsible for the development of courses and teaching within specific areas knowledge. Features of a divisional structure are:
 - Organisation is divided based on products, services, major projects or geographical location
 - Product or project divisions include a range of functional expertise
 - Decision making centred in divisions



- **Benefits**
 - Flexible, able to respond to change and opportunity
 - Groups are smaller, functions coordinated in groups
 - Divisions have broader view of goals and objectives
- **Drawbacks**
 - If there is poor communication, conflicts and incompatibility of products may arise. Duplication and under-use of expertise and resources possible
- **Communications**
 - Hierarchical communications can cause problems

➤ **Matrix Structure**

- Groupings report horizontally and vertically. Suitable for:
 - Rapidly changing business environment
 - Multiple products needing complex servicing

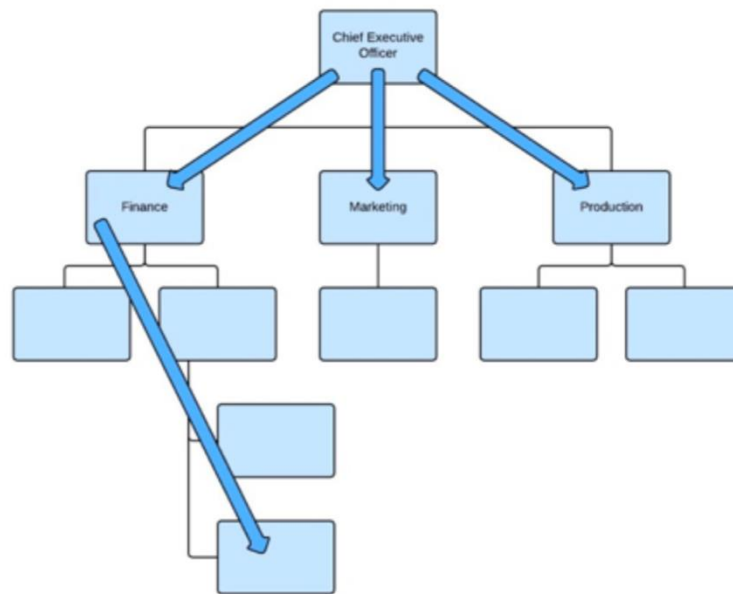


- **Communications**
 - Can cause issues when teams or individual staff members have to report to more than one manager/conflict of orders

9.1.3.1 – Formal and Informal Communication

- Communications that occurs within an organisation may be define as formal and informal
- **Formal Communication**
 - The process of exchanging information between two or more people by following the prescribed or official rules, procedure, systems, formalities and chain of command in the organisational structure
- **Downward Communication**
 - Communication flows down through the organisation
 - Typically concerns what to do and how to do it

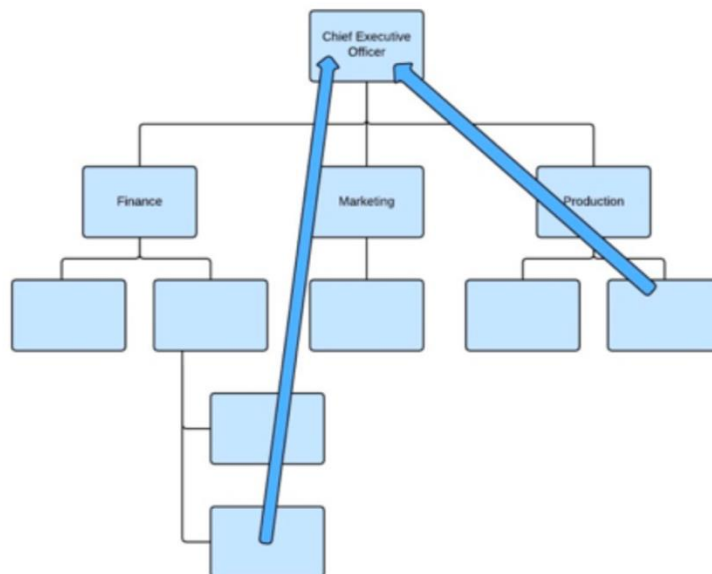
- Important that there is feedback to confirm that the message has been received and more importantly has been understood



➤ Upward

Communication

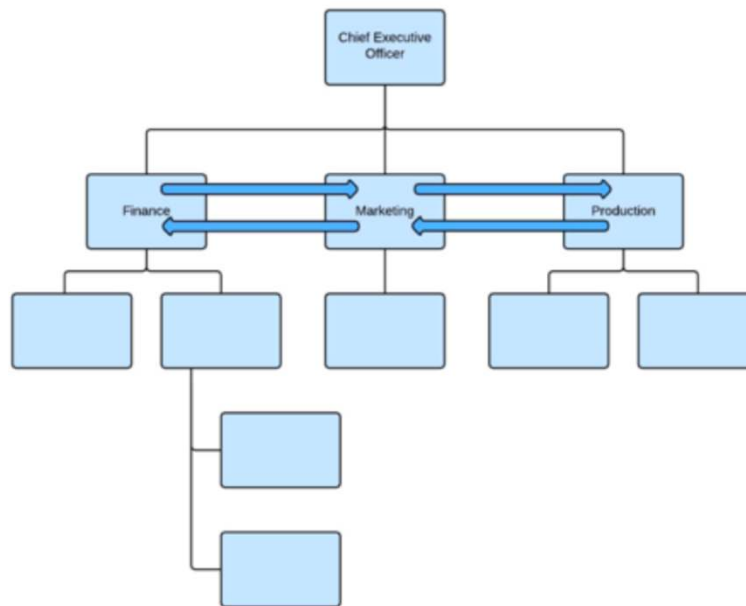
- Communication/information moves up to a person at a higher level
- Methods:
 - Meetings
 - Suggestion boxes
 - Reports



➤ Horizontal

Communication

- Communication flows between people at the same level of an organisation
- Difficulties:
 - People 'speak different languages' (technical person communicating with someone in sales)
 - Can sometimes be threatening as a superior may not be involved
- Advantages:
 - Fosters a cooperative environment, and a communication culture



➤ Informal Communication

- Occurs outside the established channels of an organisation. It frequently occurs across different areas of the organisation separate from work
- Interpersonal communication is between members of the organisation
- Content includes:
 - Personal information
 - Organisation information

9.2 – Writing as a Means of Communication

➤ Written Communication

- It is usually one-way communication with limited feedback
- It is static. Once sent, the content will not change
- Writing is both record of communication and evidence of that communication
- Whether you are the sender or received, written communication has both positive and negative aspects

➤ As a sender

- Positive:
 - You send off the message, and if there was no feedback, you can claim that the message was sent
 - It is a record of, for example, a decision which you may later need as a evidence
 - Email in particular can be useful for recording the outcome of a discussion and sharing with another person, who may add to or edit the outcome
- Negative
 - Communicating in writing can be dangerous
 - It is like a 'contract'

➤ You as the Receiver

- Positive:
 - It is a good record keeping/sharing device
 - You can assume the content is correct
- Negative:
 - You must request corrections
 - People tend to assume that you accepted the document if you didn't give any feedback

➤ Messages vs Documents

- Messages:
 - Come with or without attached documents
 - Are open-ended, and usually have incentive
- Documents:
 - They have self-sufficiency
 - Formalised, not because of their styles, but because of their purpose
 - They are sent off or delivered with an accompanying message or cover letter

9.2.1 – Five-Step Approach to Communication

- **Step 1: Identify the Objectives**
 - Assess the situation carefully
 - Identify both long term and short-term objectives
 - Separate your personal agenda from the organisational benefits
- **Step 2: Conduct Research**
 - Know the context well
 - You may not use all the information you have available to you
 - Provide alternative options of communication
- **Step 3: Create a Background**
 - You frame all the participants before you initiate communication
 - Understand the roles of each participant in the situation
- **Step 4: Compose a Message**
 - Choose appropriate means of communication
 - Expect their negative intentions when you initiate communication, and assume their positive intention
 - Handle the situation, not the people
- **Step 5: Follow Up**
 - Make sure that communication achieved what you wanted
 - Assess the consequences and their implications

Objective: communicate to managers new supplier management process	Expectation managers will implement the change Short/long term objective: change to start soon, rest will happen over the next 3 months Organisational benefits: better record keeping and communication with suppliers
Conduct research	Context: propagation facility most affected, older staff maybe resistant Alternative communication: speak directly with some
Create background	Frame participants: changes for store managers different from propagation manager. Understand roles: spell out changes specific to roles
Compose message	Appropriate means: email/ telephone Intentions: purpose of change, highlight value of change.
Follow up	Communication: everyone understood? Consequences: who is not on board? Follow up: who should be spoken to personally?

9.2.2 – Internal and External Communication

- **Internal Correspondence**
 - Internal can be informal and concise
 - Your manager has to read in their tight schedule
- **External Correspondence**
 - Corresponding externally from your organisation will require a different approach
 - It can vary from a brief email message to a substantial document

9.2.3 – Types of Documents

- **Facsimilie/fax**
- **Memorandum (“Memo”)**
 - Often half-way between a message and a document
 - Contains information that is important, and worth being kept as written record
- **Letters**
 - Cover letter of a document
 - Business letter
 - Reference letter
- **Document Templates**

Week 10

10.1 – Email Communication

➤ **Email Communication**

- To get attention:
 - Think about what you want to say before you start
 - Make the subject line informative
 - If the message is urgent, say so in the subject line
 - Make your email clear and brief
 - Have a structure to your email
 - Be polite and respectful
 - Proofread before sending
 - Ask yourself: is this the best method for communicating my message?
 - Include an email signature
 - Consider carefully the number of emails you send

➤ **Managing email**

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