

FIT1049: IT professional practice

Week 12: Unit revision and conclusion



Things to cover today...

At the end of this lecture, you will broadly understand:

1. How to prepare for the examination, and
2. What the unit was all about.

1. Professional communications and practice

Assume that you have just finished your undergraduate degree at Monash University. Write an email to your current lecturer to ask if they would be your referee. [\[Week 2 lecture and tutorial\]](#)

To: Bob.Washingmachine@monash.edu
Subject: Request to be a referee
Attached: None

You don't need this in the 'real' exam...

Dear [Title and name of the lecturer],

Address your recipient fully...

State the key message...

I am writing to ask if I could nominate you as my professional referee for my forthcoming application for a graduate IT role at Monash Consulting. As you know, I was enrolled in your FITXXXX unit this semester. Based on many interactions I had with you in class during the semester, I would appreciate very much if you could act as my referee for the application.

Just to give you some additional background to this request, I might add that I have just completed my Bachelor of Computer Science (Honours), and performed consistently well in all the units I was enrolled in, including the unit you taught this semester. I have also been interested in a consulting role since early in my degree, and have participated in an internship as an IT consultant. With my strong interest in this field, the graduate role at Monash Consulting would offer me a great opportunity to join the industry.

Please let me know if you would be happy to be my referee, and also if you have any questions or require further information. I can be contacted either by email at <XXXXX> or by phone at <000000>. Thank you for your consideration.

Yours sincerely,

...yes – salutation is important.

[Your name]

And so is your name (and title if applicable)!

What do you want the recipient to do next?

Any additional information the recipient needs to know?

2. Information gathering, analysis and processing

2a. The intelligence cycle consists of: 1) Planning and Direction, 2) Collection, 3) Processing, 4) Analysis and Production, and 5) Dissemination. Imagine that you are developing a 10-minute oral presentation to the management of your organisation. Your presentation topic is the competitive positioning of the new product your team has been developing. In light of the intelligence cycle, list two of the tasks involved in the 'Planning and Direction' stage of your preparation.

[\[Week 3 lecture\]](#)

- Gauging the expectations of the audience (i.e. the management) in terms of the deliverable
- Identifying the breadth of research to be conducted within the set timeframe and resource constraints

Also think about...

- Do you understand what other stages entail in this scenario?
- What was the actual *narrative* to be delivered?

2. Information gathering, analysis and processing

2b. You are writing a progress report on the project your team has been working on. You need to refer to a source of information. The source is an online newspaper article written by a university academic on a specific system vulnerability found in a commonly used operating system (or OS). The article was published two months ago in response to a recent specific security incident. While the author is an authority in the relevant field, there are no citations made in the article, and the article was written based exclusively on the author's experience. The OS vulnerability described by the academic in the article still exists. Given this situation, describe the currency and authority of the article, and discuss in what circumstances you could use the article as a credible source for your report. [\[Week 3 tutorial\]](#)

Given the relative recency of the incident, and the persistence of the vulnerability discussed, the article still maintains its currency. As for the article's authority, it is primarily based on the authority of the author him/herself, gained from his/her experience and affiliation with an academic institution.

The article could potentially be used as a credible source when there are other sources that validate this information. However, if other sources do not validate the information in the article, it should be used with caution. In light of the lack of references, the article may well be skewed by the author's own bias.

Also think about...

- Do you understand what *currency*, *authority*, *accessibility*, and *stability* mean?
- How could the credibility of a source be influenced by its use of other sources?

3. Narrative construction and dissemination

You need to develop a slide for the following information using a hierarchical style of visual presentation (e.g. the Minto style). How would you do it? Develop a set of dot-points you would include in the slide, and describe the principle(s) behind the design you developed. [\[Week 4 lecture\]](#)

Some online communications are often inefficient. One needs to be aware of the nature of different modes and purposes of communication. The use of social media, for example, may be used very effectively to disseminate information to a potentially large number of people in a timely manner, but this may not be the best means of holding a complex discussion.


The main principle is to establish a clear hierarchy of information within the slides. The main message for this slide is to explain that one has to be purposeful when choosing online communications as a means of communication, and this is reflected in the main heading of the slide. The subheading clarifies that the information that follows is only an example of a purposeful use of online communications. The dot-points supplement this idea by having two contrasting pieces of information (i.e. pro and con of social media as a means of communication). The presenter may add an image to make it more visually appealing. However, the image should be relevant to the topic and not too cryptic.

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Purposeful use of online communications

An example: Social media as a form of online communication

- Potentially useful to disseminate information to a large audience
- Not suitable for complex discussion



Note that you need to provide a two-part response.

4. Situational management and intra/inter-personal communications

4a. You are applying for an internship position at a technology company. You have been given an interview and are preparing for the interview. List three transferrable skills that could be addressed at the interview, and provide one example behavioural question for each of the three skills. [\[Week 5 lecture and tutorial\]](#)

Leadership skills: “Tell us about a time when you encountered a teamwork challenge. What kind of role did you assume to address the challenge, and how did it go?”

Communication skills: “Tell us about a time you had to represent your group, team or organisation. How did you approach, develop and evaluate this communication?”

Skills to learn: “Tell us about a time you had to learn a new (programming) language, and how you went about it. What would you do the next time you need to learn a language you have never used before?”

Also think about...

- How would you respond to these behavioral questions?
- Does a ‘STAR’ approach ring a bell to you?

4. Situational management and intra/inter-personal communications

4b. You are acting as the minutes taker for an IT Department meeting in a company. During the meeting, under the item *5.3: IT Security Policy*, it was suggested that Jack Stone (the IT security manager) will reword the relevant section of the existing IT security policy to reflect the change in the authentication system used in the company. The motion was proposed by James White (the Chair) and seconded by Julie Grey (the Systems Analyst), and the proposal was voted on and unanimously approved. Write the minutes for the section of the meeting that correctly documents this item on the agenda. [[Week 5 lecture and tutorial](#)]

Agenda item number and
title should be here...

5.3: IT Security Policy

The motion that Mr Jack Stone, the IT security manager, will reword the relevant section of the existing IT security policy to reflect the change in the authentication system used in the company, was proposed.

Clearly state what the resolution was.

The proposal was moved by Mr James White, and seconded by Ms Julie Grey, the Systems Analyst. The proposal was subsequently voted on, and unanimously approved.

...and how it was decided by following the due process.

Also think about...

- How would you document discussions?
- How much details would you include?

5. Teamwork and professional behaviours

5a. You are working in a team of five (5) with low power concentration and weak leadership. Describe briefly what this means to the nature of the team, and also describe an effective strategy to lead this team while avoiding 'groupthink'. [\[Week 6 lecture\]](#)

This is a small group with low power concentration, meaning that the group does not necessarily have a clear structure within it (including leadership). Such a group can easily suffer from groupthink, where the decision-making process can be compromised by the lack of accountability from each of the participating members. In this situation, it would be useful to clearly articulate the role of each member, and make each of the members accountable for explicit tasks and due dates. It would also be useful to nominate a functional team leader whose responsibility includes coordination of the team members' progress.

Also think about...

- Do you understand the idea of 'power concentration', and how it interacts with the size of the team, as well as effective leadership style?
- Do you understand teamwork issues, such as 'groupthink' and 'social loafing'?

5. Teamwork and professional behaviours

5b. You have been working in a team of five (5) on a software development project for two weeks. With all the different professional expertise and background of the team members, there were some disagreements within the team about the general approach your team should take to software development. You all found it a little awkward to figure out how to conduct day-to-day work in a close proximity of each other. Based on this scenario, identify which of Tuckman's stages of team development is your team in, and explain why by these are the appropriate stages by referring to the characteristics of the stage you identified. [\[Week 6 lecture\]](#)

Based on the scenario, the team is likely to be in Storming stage, where the members are negotiating with each other with their dispositions and opinions. As in the scenario, this stage may result in some disagreements within the team, but it is a stage that could be beneficial, as it tends to offer a ground for the team to proceed to the next stage, where the Norming will take place.

Also think about...

- Do you know what other stages suggested by Tuckman (1965) are?
- Do you understand how all the stages defined by Tuckman (1965) would look like?

6. Professional ethics and legal frameworks for IT professionals 1

Alex is working as an IT systems analyst for a start-up information technology company. This company's main product is an IT system to enable mobile sales people to conduct credit card sales while they are selling door-to-door at people's homes. The sales system is new, and it is imperative that it continues to be rolled out. The company that Alex is working for is running out of money to pay its bills, and will go bankrupt if clients stop buying their sales system. The system works almost all the time, but there are times when the system charges the customers a random number of times. This problem only happens very occasionally, and there is no pattern to the problem. Alex's company has not disclosed this issue to its clients yet, since it fears the negative effects the issue may have on the company and its reputation.

Respond to the following questions based on the above scenario. The ASC Code of Ethics, consisting of six values, is provided below for your reference.

- 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.

6. Professional ethics and legal frameworks for IT professionals 1 (cont'd)

6a. List one of the actual and potential legal issues (i.e. one actual issue and one potential issue), for which Alex should seek legal advice. [\[Week 8 lecture and tutorial\]](#)

Actual: If Alex's company is knowingly misrepresenting and/or concealing the existing issue to the customers (i.e. Alex's company know the issue, but have not disclosed it to the clients in an honest manner), this could constitute fraud.

Potential: If the issue with the product resulted in significant damage to the client's business, Alex's company could also potentially be liable to this damage.

Know the difference!



The point is not so much about if it is indeed illegal; it is more about if it already happened.

6. Professional ethics and legal frameworks for IT professionals 1 (cont'd)

6b. List one of the actual and potential ethical issues (i.e. one actual issue and one potential issue) in reference to the values in the *ACS Code of Ethics*. [\[Week 8 lecture and tutorial\]](#)

Actual: Alex's company compromised its adherence to the value of *Competence*, since it knowingly released its product that is still incomplete.

Potential: Alex's and Alex's company both potentially acted against the value of *Professionalism*, since such an unprofessional behaviour would compromise the public's confidence in the IT profession in general.

Again, know the
difference!

You can also discuss in terms of *Primacy
of the Public Interest, Enhancement of
Quality of Life, or Honesty.*

6. Professional ethics and legal frameworks for IT professionals 1 (cont'd)

6c. What should Alex have done? Describe a possible alternative course of action Alex could have followed to deliver better, if not entirely positive and professional, outcomes, and justify in light of the values in the *ACS Code of Ethics*. [\[Week 8 lecture and tutorial\]](#)

Alex should have argued against the release of this product until the cause of the issue was identified and addressed. This action may go against the idea of *Enhancement of Quality of Life* (since this decision would not benefit the company short-term), but it will be consistent with the idea of the *Primacy of the Public Interest*, to which the *ACS Code of Ethics* gives the primacy over other values.

It is not about what
the organisation
should have done.
Focus on the
individual please.

...and know the
order of priority!

7. Professional ethics and legal frameworks for IT professionals 2

Jess worked for two years for a company, 'Games Experience'. Jess worked in the company as a Flash developer making Facebook app games. She had experience both in games development and graphics, having completed a qualification in graphic design. The company was well established in the market because it had developed a unique algorithm to ensure graphics in their games loaded fast. Jess's boss (Alex) liked what Jess was doing generally and the ideas Jess had. Alex suggested Jess could receive a share of the company's revenue if she created a game outside of work hours. Jess agreed to work on the game, which would be an educational game to be used in schools to teach an area of biology. The backend would be created and hosted by the company. This was a verbal agreement, and Jess had no reason not to trust Alex. They had always had a good working relationship, hence she agreed verbally to the plan. Jess undertook some research for the game, and presented that to Alex before beginning.

Jess developed the game and handed over all the work to Alex. Alex thought the work was good, but made no mention of the verbal agreement they had. The company, however, then decided it wanted something different and went elsewhere. The code Jess wrote was now useless to her. Some weeks later Jess discovered that much of her work, including the graphics, had been used to create another very similar game by another company. Jess decided to leave the company. However, there was a two-year non-compete clause in the contract that she signed.

7. Professional ethics and legal frameworks for IT professionals 2 (cont'd)

7a. Which of the following protections would Jess' work have: Copyright, patent, or trademark? Briefly explain why. [\[Week 8 lecture\]](#)

Copyright. Both patents and trademarks require registration, which Jess has not obtained. Copyright protection, however, is automatically given to any expressions of ideas.

Also think about...

- Can you explain the difference between these three concepts related to Intellectual Property (IP)?
- Can you also explain what each of these actually protect?

7. Professional ethics and legal frameworks for IT professionals 2 (cont'd)

7b. What is the implication of the non-compete clause in Jess' contract? Explain how this clause could limit or affect the actions Jess can take in this situation.

[Week 8 lecture]

The non-compete clause means that Jess cannot work for another company in the same industry for two years, and/or conduct similar work that may compete with the work did at the current company. This makes it very difficult for Jess to build her career based on the expertise she developed in the current company. This could potentially prevent Jess furthering her career, hence also potentially preventing her from leaving the company easily.

Also think about...

- Are you clear about other contractual obligations around IP, such as non-disclosure agreement and confidentiality, and what it means?

8. Professional ethics and legal frameworks for IT professionals 3

Mary has been working as a programmer at a small game development company for five years. While she has had a very positive experience with her team and the workplace, the recent deployment of a new colleague (Sam) changed the situation. For example, Sam repeatedly makes offensive remarks about women that are intended as 'jokes'. Although Mary professionally tells Sam that his remarks make her feel uncomfortable, he keeps making 'jokes' that offend her. Mary knows that these 'jokes' are not targeted towards her, but she still feels uncomfortable.

8a. Which of the following describes the situation best: Bullying, discrimination, or inappropriate behaviours? Briefly explain why. [\[Week 9 lecture\]](#)

Inappropriate behaviours. Bullying involves repeated unreasonable behaviours targeted towards a specific person, while discrimination results in an adverse effect, such as termination of employment or unfavourable deployment.

Also think about...

- Are you clear about the distinction between the three concepts above?
- We also covered some subtle (but important) differences between some of the closely related concepts applied in the workplace (e.g. equity and equality, privacy and confidentiality). Are you clear on them?

8. Professional ethics and legal frameworks for IT professionals 3 (cont'd)

8b. If Mary asked for your advice on what she should do next, what would you suggest to her? Explain the advice you could suggest to her, and provide justifications for your advice (assuming that you are not acting in any managerial capacity). [Mainly Week 9 lecture, but also in Week 6 lecture for inter-personal comm.]

Suggest Mary to speak to HR or the line manager. Since Mary has already taken a reasonable action to prevent the colleague from behaving unprofessionally (however with no effect), it is appropriate to escalate this by seeking advice from the manager or HR for further action.

Also think about...

- Are you clear about different levels of resolution of workplace issues, from local resolution all the way through to whistleblowing?
- Also be mindful of the fact that the organisations often respond quite counter-intuitively to some of the tricky situations.

9. Organisational governance and information management

As a business analyst, you joined an organisation that has branches in five different countries. As part of your induction into the organisation, you were told that each of these branches has its own governance structure within. Because of this organisational structure, your IT department will have to work closely with your counterparts in the other branches.

9a. Which of the following describes the likely structure of this organisation: Divisional, functional, or matrix? [\[Week 9 lecture\]](#)

It is likely that this organisation has a divisional structure of management.

Well, this is probably
not too difficult...

9. Organisational governance and information management (cont'd)

9b. Identify two potential communication challenges in this organisational structure. [\[Week 9 and 10 lectures, but mainly Week 9 lecture\]](#)

- Divisional structure may slow down the communication across the divisions, since messages will first need to move vertically upwards before they reach horizontally to other divisions.
- Similar work areas in different divisions (e.g. IT department in the respective branches) may develop their own organisational communication practices, which could lead to inconsistent and inefficient communication protocols.

Have a think about both the advantages and disadvantages of the three different management structures too.

9. Organisational governance and information management (cont'd)

9c. How do *procedures* differ from *guidelines*? Explain the difference between these concepts, and give an instance where *guidelines* could be used in the context of the organisational structure described above. [\[Week 9, 10 and 11 lectures, but mainly Week 9 lecture\]](#)

Procedures are designed to be enforceable within the organisation, while *guidelines* are not. In the organisational structure described above, one may use *guidelines* when consistent enforcement of a particular *procedure* is not viable (e.g. due to different regulations in different countries).

Also think about...

- Are you clear about different levels and functions of governance documents, from policies through to operational documents?
- And can you explain how different regulatory frameworks (e.g. privacy, equality, bullying and discrimination) get implemented through these different levels of governance documents?

10. Organisational communications and stakeholder engagement

You are working as an IT security analyst for a large banking organisation. You rarely interact with the bank's external clients in your security analyst role. However, you were recently asked to write a series of short articles to be posted on the bank's social media site. In these articles you are expected to comment on recent IT security breaches and explain how your organisation counters such threats. The bank's Communication Team thought these articles would reassure the organisation's clients, and further build their confidence in the organisation.

Identify one IT security risk and one organisational communication risk in this situation. [\[Week 10 and 11 lectures\]](#)

- IT security risk: By writing about what kind of strategies your company is taking to counter the threats, you may be revealing to outsiders the organisational knowledge of given threats as well as its counter-measures.
- Communication risks: The nature of social media as a means of communication demands a quick turn-around, which could be difficult when the communication deals with complex and/or sensitive organisational knowledge.

Also think about...

- It is the human unpredictability that makes both organisational communications and IT security challenging to maintain. The bigger the organisation, the more complex the challenges too!
- And remember that crisis management is not for exam...

Resources

1. Excerpts from the lecture slides (including the FLUX and other questions and their corresponding hints/sample answers)
2. The mock examination paper and their corresponding sample answers (i.e. found in Week 12 lecture slides)
3. The e-Folio tasks and the tutor's feedback to them
4. Tutor consultation hours (to be published shortly)

What you have achieved in this unit...

Gather information, critically evaluate the material and use correct citation techniques when writing the material into an appropriate format? [Week 3 and Assignments 1 & 2]

Effectively participate in a range of two way oral and written communication forms using appropriate intrapersonal and interpersonal communication skills and technologies?
[Weeks 2, 4, 5, 6, 9, 10, 11 and all the assessment tasks, including e-Folio tasks]

Use a variety of techniques to enhance working co-operatively and managing conflict as part of a team? [Weeks 2, 6, 7, 11 and Assignment 2]

And in so doing, you also did one way or another...

Describe a variety of roles for IT professional and the personal, social, ethical and legal impacts arising from their work. [Weeks 1, 7, 8, 9, 10, 11, 12 and Assignments 1 & 2]

Discuss what professional associations are available to IT professionals and why they are important; Analyse and describe how the *ACS Code of Ethics* applies to IT professionals in a variety of scenarios. [Weeks 7 and 8]

Discuss how IT professionals stand in the midst of the professional, organisational, legal and ethical frameworks, and how they could make positive contributions to the workplace, communities and societies at large? [All Weeks and assessment]

A final thought...