

# INFO5992 Understanding IT Innovations

## Essay – Research Report

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# UoS Outline

Week	Lecture Topics	Activity
1. 6 Mar	UoS Introduction; Definition of Innovation; Innovation System; Innovation in Australia	N/A
2. 13 Mar	Introduction to Technological / IT innovation	<b>Tute 1</b> – Massive Open Online Courses – Enabling technologies and Peer-review
3. 20 Mar	Dynamics of Technological / IT Innovation; Source of Innovation; Adoption of Technology; Dominant Design	<b>Tute 2</b> – Design Dominance in the Smartphone market
4. 27 Mar	Disruptive Innovation; Industry Value Chain; Value Network analysis	<b>Tute 3</b> – Innovative Tech Practice – Cognitive services Group Presentation Introduction – Topics Released
5. 3 Apr	Distributed innovation I: Open / Closed innovation; Platform innovation; Web APIs; Crowdsourcing / crowdfunding	Mid-semester Quiz Group Presentation – Topic Selection Individual Assignment Introduction
6. 10 Apr	Distributed innovation II: User innovation; Free and Open source software; Open Data	<b>Tute 4</b> – Innovative Tech Practice – Open source Geolocation and Maps
<b>Easter (Break)</b>		
7. 24 Apr	Innovation ecosystem; Sydney's innovation ecosystem	Group Presentations I – IT Innovation Case Studies Peer-review of Group Presentations
8. 1 May	Group Presentations II – IT Innovation Case Studies	Peer-review of Group Presentations
9. 8 May	Group Presentations III – IT Innovation Case Studies	Peer-review of Group Presentations
10. 15 May	Innovation in Industry sectors ( <b>Lawrence – Microsoft*</b> <b>Dr Ashnil Kuamr</b> )	<b>Tute 5</b> – Judging IT Innovation (Example in the Healthcare sector)
11. 22 May	Organisational Culture; Structure supporting innovation ( <b>Bill Simpson – Data61</b> )	<b>Tute 6</b> – Sharing Economy Individual Assignment Submission
12. 29 May	Innovation by Start-up companies and Opportunities	<b>Tute 7</b> – Business Model Canvas
13. 5 Jun	UoS Review	UoS comments / questions


# Recap Week1: Assessment

- Quiz 5% (Week 5)
  - Mid-semester Quiz
- Participation 5% (Week 8-10)
  - Attendance and participation in group presentations
- Presentation - IT Innovation Case Studies 10% (Week 8-10)
  - Presentation of a Case Study to the class (Group Work)
- **Essay (Innovation Review) 20% (Week 12)**
  - **Critical Essay on a topic with IT innovation (Individual Work)**
- Final Exam 60% (Exam Period)
  - Final exam covering all material covered in lectures, guest lectures, assigned reading and class discussion

# Individual Report – Learning Objectives

- Research into **Distributed Innovation**
- Learning to do critical analysis into innovative concept and understanding its application with real-world IT examples
- To further develop the research being **conducted** for the Presentation
  - You may keep the same Industry / Case studies
  - You may keep the same Technology
  - But applied to a different innovation concept!

# Report instructions

- Choose a topic related to IT innovation topic (next slide)
- Write a report on your chosen topic 
  - A summary of key points from the innovation **literature** (or other **credible** sources) on the topic.
  - Detailed discussion of 2 real-world IT-related examples.
  - The discussion should clearly pick out points from the literature (e.g. models, frameworks, theories) and show how the examples illustrate these (or say why they don't).
  - The discussion should also compare and **contrast** the 2 IT-related examples in relation to the topic.

# IT innovation Topic



1. The use of **Crowdsourcing** by technology companies in their technology or product innovation
2. The use of **Crowdfunding** for the funding of technological innovation
3. The use of **Web APIs** supporting innovation by others
4. The importance of **Open source software** in enabling technological innovation; Releasing open source software as part of a business strategy
5. The application of **Open Innovation** by companies / governments
6. The strategy of ~~Releasing data source~~ for innovation
7. A comparison of the use of **User innovation** and producer innovation in the development of new technology or products
8. Innovation through **Platform eco-systems**
9. Other (check with the Lecturer)

# Notes for the Report

- You should use the innovation literature such as that on
  - crowdsourcing (e.g. Brabham),
  - user innovation (e.g. von Hippel),
  - open innovation (e.g. Chesbrough),
  - modularity (e.g. Baldwin),
  - platforms (e.g. Cusumano),
  - platform economics (e.g. Choudry),
  - etc.



# Notes for the Report

- Choosing examples:
  - If possible, choose examples that are current or from the last two years.
  - You may choose to use examples from your own company (if you have permission to use any material needed).
  - If in doubt about whether your topic or examples are appropriate, check with the Teaching team
- Do not necessarily accept all that you read at face-value and exercising judgement about what is important and what is not).
- Do not rely on a single paper which introduces two examples!
- New examples – innovation is a fast moving topic!

# Notes for the Report

- Sources:
  - Read widely; read journal articles (eg online through the library), online magazines and high quality blogs.
  - Wikipedia is highly variable in quality, derivative and typically not a good source for your essay (except perhaps for gaining a general understanding before reading more deeply from the literature or high-quality blogs)
  - Company websites are rarely unbiased descriptions of examples (though may provide some useful information that should be understood in its context)
  - There are tips on library use (and referencing) at <http://www.library.usyd.edu.au/skills/>

# Report Structure

- The word limit is **1500 words** (not including references, appendices, figures and tables). It is OK for the text to be **either single-spaced or double-spaced**.
- Figures (images or diagrams), tables and quotes are typically very effective in an essay. Please use them, but only if it adds useful information to your report. If you do, you must reference the source of the information.
- You are encouraged to create your own figures and tables. If you do, show that you created them (eg “created by Firstname Surname for INFO5992”)
- When referring to a figures / tables, make sure appropriate description is given so that they are understandable – figures / tables contain a lot of information!
- There is no template – please use a template of your own choice.

# Report Marking Rubrics

- [30%] Clear **description of concepts on the chosen topic** from the innovation literature (or other credible sources) demonstrating knowledge and understanding of these concepts.\*
- [50%] Clear description of the **two real-world examples** demonstrating detailed research and an understanding of the examples.\*
  - Effective **application of the innovation concepts** in the discussion of the examples.
  - Demonstration of **critical analysis in the description of the innovation** concepts and/or the discussion of the real-world examples, e.g., comparative analysis
- [10%] Use of **suitable charts, diagrams and/or tables** to aid in conveying innovation concepts or the analysis of the real-world examples.
- [10%] Effective **structure, flow and clarity** of the report.
- \* Use of suitable **high-quality sources** and appropriate quoting and referencing of these.

# Report Submission

- **Submit your Topic by the end of this Week (Week 5) for feedback**
- Report due on 22<sup>nd</sup> May 23:59 (end of Week 11)
- The essay must be submitted electronically through eLearning and must be submitted in PDF format. The electronic submission must be accompanied by a signed individual assessment coversheet (either in the same file or in a separate file) available from:
- [http://sydney.edu.au/engineering/it/current\\_students/postgrad\\_coursework/guidelines/assessment-guidelines.shtml](http://sydney.edu.au/engineering/it/current_students/postgrad_coursework/guidelines/assessment-guidelines.shtml)

# Sample

Refer to the Word Doc

# Finding the right References



THE UNIVERSITY OF  
SYDNEY

# References

- Find journal articles or high-quality online sources on the topic
- News / Magazine / **Editorial** articles can be used to support your topic, e.g., used as an example
- Consultancy reports e.g., HBR, McKinsey are OK, especially as they introduce newer topics / examples
- If in doubt about quality of reading, please check with your teaching team
- Note: Be careful in how you treat information from companies (such as press releases, product websites, whitepapers) as they may be biased!)



# References

- University Library
  - <https://library.sydney.edu.au/>
- Google Scholar
  - <https://scholar.google.com.au/>
- Google
  - Be careful of identifying reliable sources
- ! Wikipedia – perhaps only for you to read and understand

# Reference Management Software

- Make maintaining references and creating bibliographies easy
  - EndNote:
    - Free for Uni of Sydney staff and students
    - For Windows, Mac
    - Plug-in for MS Word
    - <http://libguides.library.usyd.edu.au/endnote>
  - Zotero:
    - Free, open source
    - For Windows, Mac, Linux, ...
    - Plug-in for Firefox, MS Word, Open Office
    - <http://www.zotero.org>
  - Many others:
    - [http://en.wikipedia.org/wiki/Comparison\\_of\\_reference\\_management\\_software](http://en.wikipedia.org/wiki/Comparison_of_reference_management_software)

# Other resources

- <https://library.sydney.edu.au/help/online-training/elearning/>

## iResearch: information skills for life

### iResearch Learning Objects Printable versions

- How to reference [English](#) | [Chinese](#) (PDF)
- [Search smarter, search faster](#) (PDF)
- [Find that book!](#) (PDF)
- Plagiarism and academic honesty [English](#) (html – All your own work – University site on plagiarism) | [Chinese](#) (PDF)
- [Finding items on your reading list](#) (PDF)
- [Finding journal articles using databases](#) (PDF)
- [Scholarly versus non-scholarly resources](#) (PDF)
- What is Endnote? [English](#) | [Chinese](#) (PDF)
- [What is a literature review?](#) (PDF)
- [Finding music using the library catalogue](#) (PDF)
- [Finding Australian Government Reports](#) (PDF)
- [Analysing visual resources](#) (PDF)
- [Citation chaining](#) (PDF)

# Academic dishonesty and plagiarism

# AHEM1001

- Complete self-education AHEM1001 (required to pass INFO5992)

# Academic dishonesty and plagiarism

- Please read the University policy on Academic Honesty carefully:  
[http://sydney.edu.au/elearning/student/EI/academic\\_honesty.shtml](http://sydney.edu.au/elearning/student/EI/academic_honesty.shtml)
- All cases of academic dishonesty and plagiarism will be investigated
- There is a new process and a centralized University system and database
- Three types of offenses:
  - **Plagiarism** – when you copy from another student, website or other source. This includes copying the whole assignment or only a part of it.
  - **Academic dishonesty** – when you make your work available to another student to copy (the whole assignment or a part of it). There are other examples of academic dishonesty.
  - **Misconduct** - when you engage another person to complete your assignment (or a part of it), for payment or not. This is a **very serious** matter and the Policy requires that your case is forwarded to the University Registrar for investigation.

# Penalties

- The penalties are **severe** and include:
  - 1) a permanent record of academic dishonesty, plagiarism and misconduct in the University database and on your student file
  - 2) mark deduction, ranging from 0 for the assignment to Fail for the course
  - 3) expulsion from the University and cancelling of your student visa
- **Do not confuse legitimate co-operation and cheating!** You can discuss the assignment with another student, this is a legitimate collaboration, but you cannot complete the assignment together – everyone must write their own code or report, unless the assignment is group work.
- When there is copying between students, note that **both students are penalised** – the student who copies and the student who makes his/her work available for copying

# Detection

- We will use the similarity detection software TurnItIn and MOSS to compare your assignments with these of other students (current and previous) and the Internet
  - Turnitin is for text documents: [http://www.turnitin.com/en\\_us/higher-education](http://www.turnitin.com/en_us/higher-education)
  - MOSS is for programming code: <https://theory.stanford.edu/~aiken/moss/>
- These tools are **extremely good!**
  - e.g. MOSS cannot be fooled by changing the names of the variables or changing the order of the conditions in `if-else` statements
- Examples of plagiarism in programming code:
  - [http://www.upenn.edu/academicintegrity/ai\\_computercode.html](http://www.upenn.edu/academicintegrity/ai_computercode.html)



# Student excuses

- All these are cases of plagiarism and academic dishonesty we have seen in our school
- The student excuses are not acceptable:
  - *I sat the test and then posted the questions and solutions to my friends whose test was later in the week. I only wanted to help them understand the concepts that are examinable.*
  - *I posted parts of my code on my web page (or the group discussion forum) because my solution was cool (or I wanted to help them). I didn't expect them to copy it.*
  - *I tried to do the assignment on my own but I had problems with the extension part that I couldn't fix, so I submitted my core part and his extension part. I didn't cheat.*
  - *I finished my assignment but my friend had family problems. I felt sorry for her, so I gave her my assignment as an example. She said she only wanted to have a look and promised not to copy it.*

## Students excuses (2)

- *The test has finished but the tutor hasn't collected the papers yet. I showed my answer to my friend. I didn't expect him to copy it.*
- *He is my best friend. I had no choice but to let him copy my assignment.*
- *I couldn't find a partner to work in pairs, so I joined their pair as they are my friends* (when only groups of maximum of 2 students are allowed – illegitimate collaboration).

# Key message

- Plagiarism and any form of academic dishonesty will be dealt with, and the penalties are severe
- We use plagiarism detection systems such as MOSS that are extremely good. If you cheat, the chances you will be caught are very high.
- If someone asks you to see or copy your assignment, or to complete the assignment instead of them, just say: *I can't do this - we can both be thrown out of the University. I will not risk my future by doing this.*

**Be smart and don't risk your future by engaging in plagiarism and academic dishonesty!**