



THE UNIVERSITY OF
MELBOURNE

SWEN90016

Software Processes & Project Management

Ethics, Outsourcing, and
Procurement

2020 – Semester 1
Tutorial 9



	Australian Computer Society (ACS) Code of Professional Conduct	IEEE: Software Engineering Code of Ethics, Professional Practice
1	Priorities: place the interests of the community above personal or sectional interests. Preserve the integrity and security of the other's information.	Public: Software engineers shall act consistently with the public interest .
2	Competency: work competently and diligently for my clients and employers . Advise when I believe a proposed project is not in their best interests	Client and Employer: act in the best interests of their client & employer , consistent with the public interest.
		Product: Software engineers shall ensure that their products meet the highest professional standards possible.
3	Honesty: be honest about my skills, knowledge, services and products. Not knowingly mislead a client as to the suitability of a product or service	Judgment: Software engineers shall maintain integrity and independence in their professional judgment.
4	Social Implications: I must strive to enhance the quality of life of those affected by my work. Respect people's privacy.	Management: promote an ethical approach to the management of software development .
		Profession: advance the integrity and reputation of the profession, consistent with the public interest.
		Colleagues: be fair to and supportive of their colleagues.
5	Professional Development: enhance the professional development of myself, colleagues, employees, students and be aware of community issues affecting the IT profession.	Self: participate in lifelong professional learning and promote an ethical practice of the profession.
6	Information Technology Profession: enhance the integrity of the IT profession and respect each other. Take appropriate action if I discover a colleague has unethical behavior.	



Class Activity

In your breakout groups:

- Examine the ACS Code of Professional Conduct and compare with IEEE Software Engineering Code of Ethics.
- How are the two codes similar/different?

Questions to ask & consider before making a decision:



1. Would I be happy for this action to be prominent in tomorrow's news?
2. Is there a universal rule that applies here?
3. Will the proposed action result in a good outcome?
4. What would happen if everybody did this?
5. How will this action impact on the character of myself/ my organisation?
6. Is the action consistent with my values and principles?

Lecture 5, Slide 10

Ethics Case Study 1 – Tax Software Package

In your breakout groups, evaluate the IT ethical dilemma.



- As the president, what would you have done?
- How could the ACS code of ethics have guided you?
- What is the relationship between the ethical and the legal?

Outsourcing

The practice of engaging an external party (under contract) to perform services or create goods that are traditionally performed in house by the company's own employees.

Types of Outsourcing:

1. Onshoring:

- Relocating activities inside national borders to access targeted benefits.

2. Nearshoring:

- Activities relocated to another country with close proximity e.g. New Zealand, Indonesia.

3. Offshoring:

- Activities relocated to another country irrelevant of geographical location and time zones.



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Lecture 9, Slide 18



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A criticism of Outsourcing is that:

- a) Employees feel threatened
- b) Loss of Relationship building opportunity with key stakeholders
- c) Loss of control
- d) Difficult to change
- e) All of the above



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‘Developing Countries’ can benefit from organizations that outsource to them in terms of:

- a) Increased wages
- b) Job prestige and education
- c) Increased quality of life
- d) All of the above

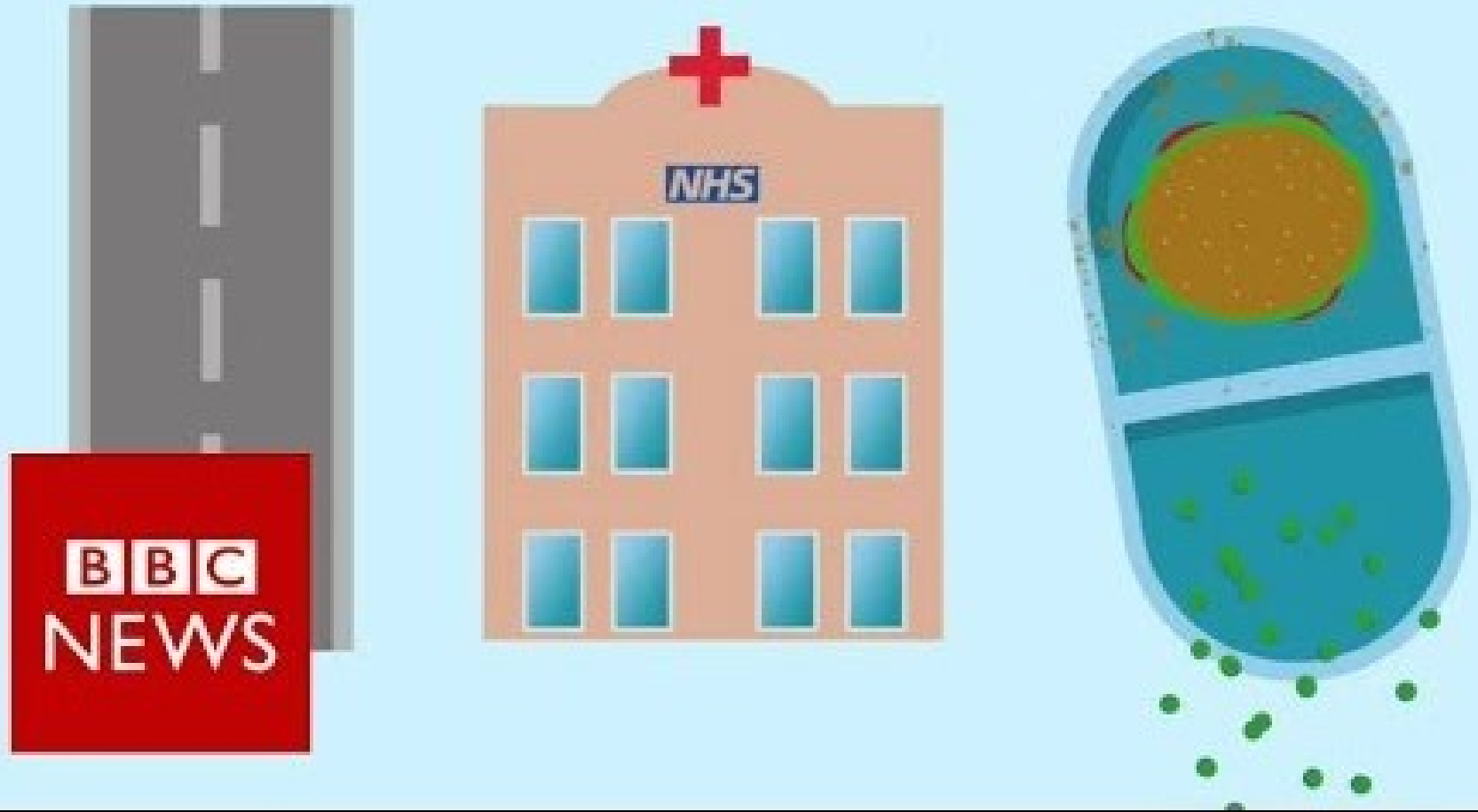


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Which of the following is a type of outsourcing?

- a) Nearshoring
- b) Offshoring
- c) Onshoring
- d) All of the above

Outsourcing



https://www.youtube.com/watch?v=TTAr_J53x70

Outsourcing: Pros and Cons

Pros

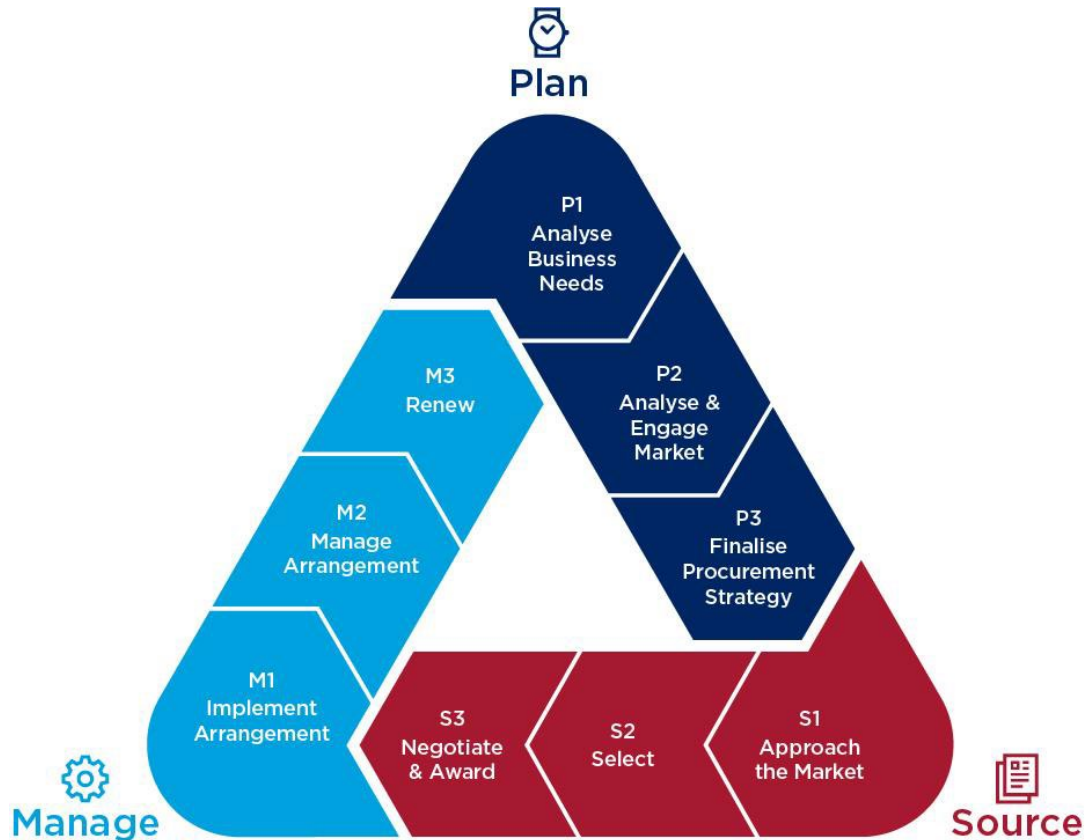
- Reduces costs
- Access to difficult to find capabilities & skills
- Time savings –24/7 based activities
- Freeing scarce internal resources to focus on core business activities
- Leverage best practice
- Access to better Technology
- Lower training costs in high turn over jobs
- Flexibility –Ramp up and down
- Increased Accountability -Contracts
- Risk mitigation –Access established and proven approaches e.g. Agile, Project Management etc

Cons

- Loss of control
- Process / supply chain fragmentation
- Security issues
- Employees feel threatened
- Additional effort and cost to engage and manage
- Lower quality work / work to contract
- Time zone, cultural & language challenges
- Location stability -Political, Economic, Religious
- Ethical standards -environment, slave / child labour
- Difficult to change
- Damages to the local job markets
- Loss of Relationship building opportunity with key stakeholders

Lecture 9, Slide 20

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- Traditional waterfall

- Agile

www.procurepoint.nsw.gov.au/policy-and-reform/nsw-government-procurement-information/nsw-procurements-approach

What is the principal objective of the 'Source' Procurement Management Process?

- a) Identify and engage suppliers who will provide the best value for money outcome
- b) Consult with key stakeholders to define the 'real' need, and ultimately defining the best Procurement Strategy to meet the organisations requirements.
- c) Articulate the rights and responsibilities of the parties
- d) Signing an arrangement and starting a relationship with the supplier

Formal PMBOK: Plan and document fixed scope

Find answers to high level 5W's

What
Where
Who
When
Why

- The buyer prepares a detailed Statement of Work (SoW)
- The buyer prepares a Request for Proposal (RFP) or Quote (RFQ)
- The seller/buyer sign a contract, include the SoW
- Contract types vary: “fixed price” (seller risk), “time & materials” (buyer risk)
- The quality metrics are based on a Service Level Agreement (SLA) contract



Does Change Control have a place in Agile?

What
Where
Who
When
Why

- Build small piece of software **quickly** with minimal features.
- Showcase the product chunk to the stakeholders **early**
- Fail **fast** and as cheaply as possible, & get timely feedback
- Capture the fix of the failed expectations as a new User Story in the Product Backlog.
- The Product Owner sets the **priority** of the fix

Thank You!