


14-17 April
Gold Coast, Australia



The 20th Australian Software Engineering Conference

Panel: the future of ASWEC

Introductions

- ✕ Chair: David Carrington
- ✕ Matt Ashford
- ✕ Daniel Berinson
- ✕ Doug Grant
- ✕ [*Jennifer Murray*]
- ✕ Ewan Tempero

Motivation for this panel

- ✖ It is important to reflect regularly on what we are doing and the way we are doing it.
- ✖ In SE, these reflective activities are often called project post-mortems, lessons learned or retrospectives.
- ✖ What gaps exist between our current reality and our intended (ideal) outcome?
- ✖ Are we performing actions to close the gaps?

Notes

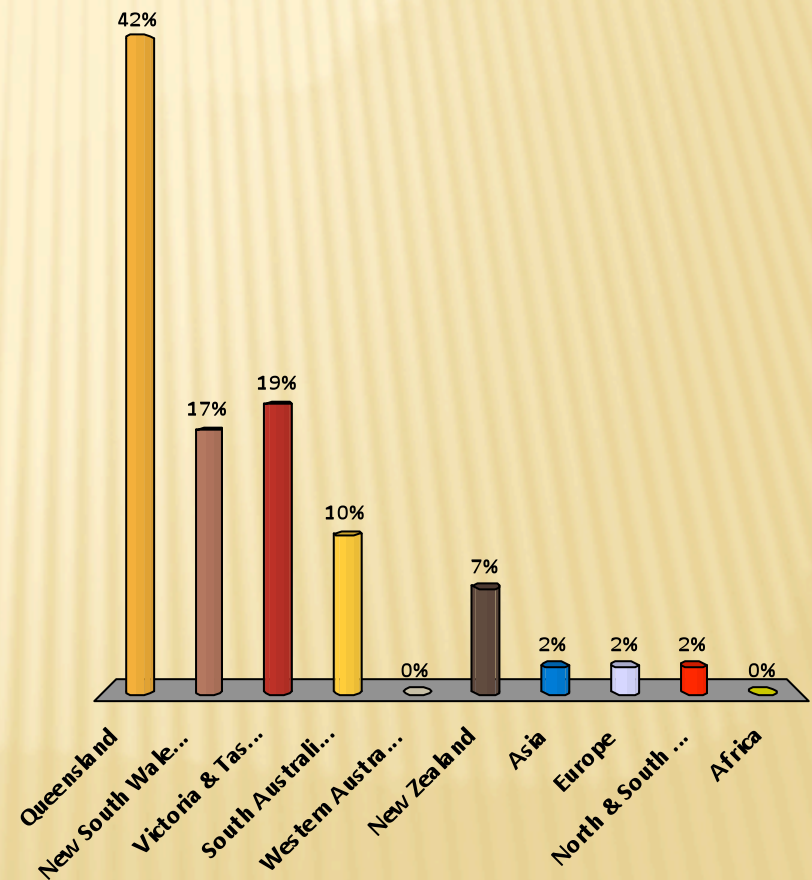
- ✘ We are not expecting to reach consensus or make decisions today.
- ✘ The goal is to share ideas and to be aware of the range of views within the ASWEC community.
- ✘ **Strategy weakness:** we are only engaging current attendees, not those people who chose not to attend this session, for whatever reason.

TurningPoint Technology

- ✖ Enable audience participation via interactive response “clickers”.
- ✖ Aggregate results are immediately available for presentation and feedback.

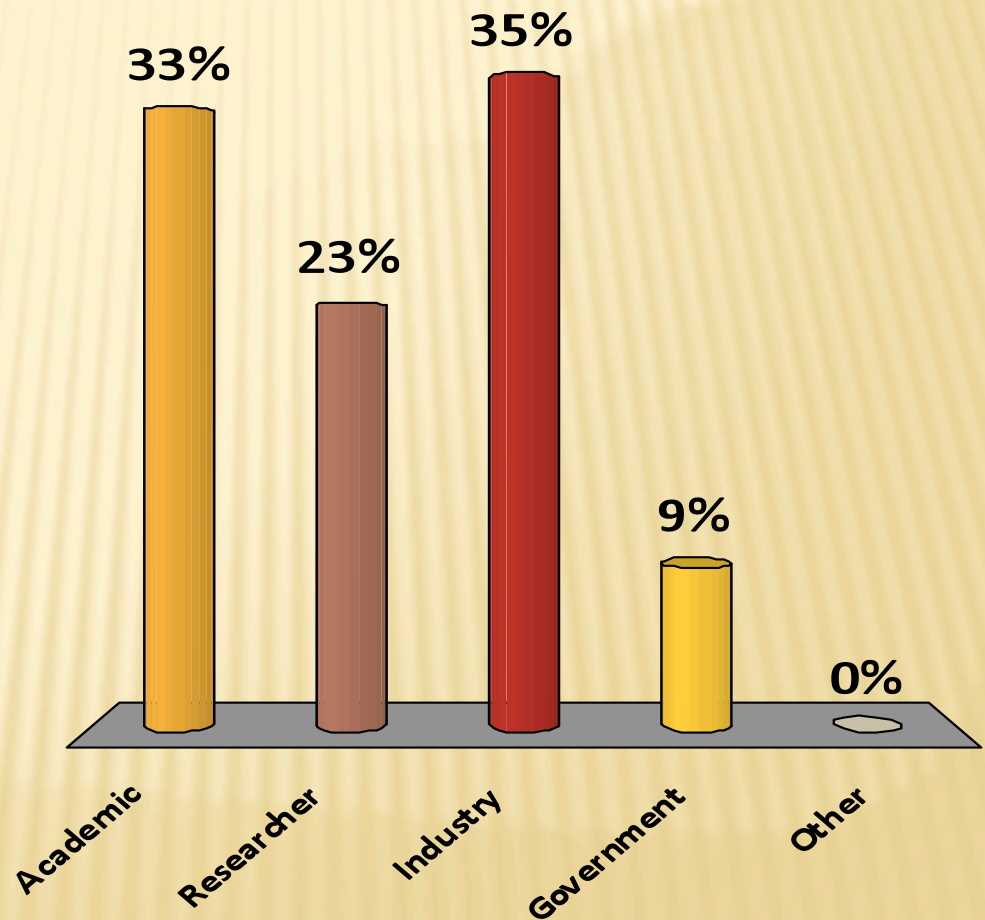
Audience Demographics: home

1. Queensland
2. New South Wales & ACT
3. Victoria & Tasmania
4. South Australia & NT
5. Western Australia
6. New Zealand
7. Asia
8. Europe
9. North & South America
10. Africa



Audience Demographics: Employment

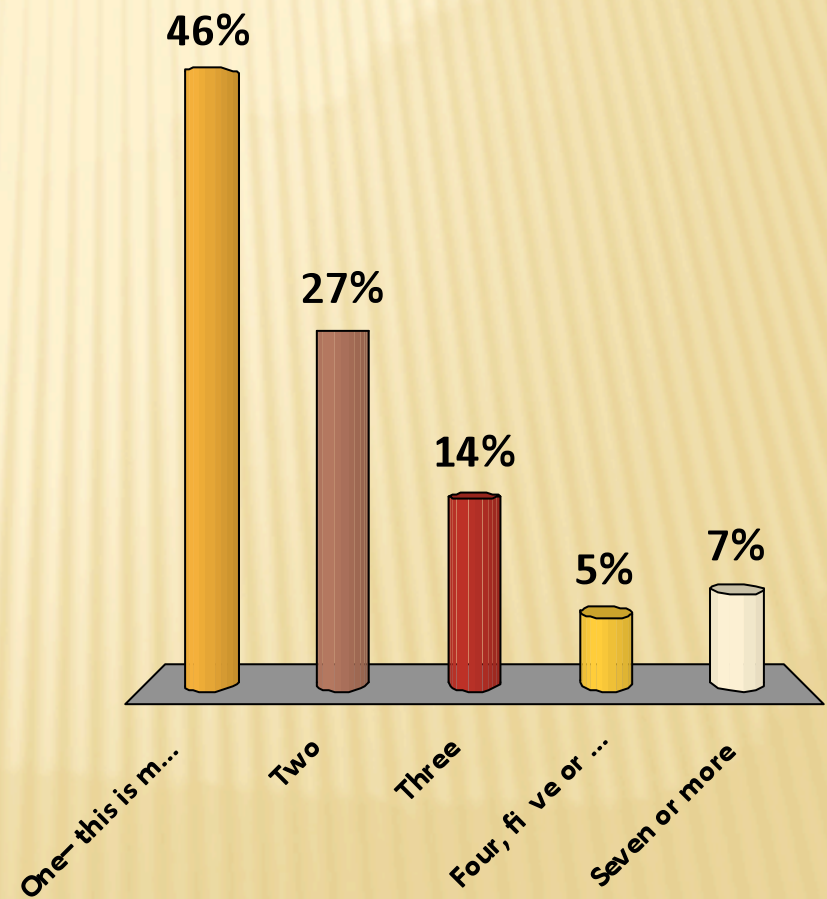
1. Academic
2. Researcher
3. Industry
4. Government
5. Other



ASWEC Attendance (Jennifer)

How many ASWEC conferences have you attended? (including this one)

1. One– this is my first
2. Two
3. Three
4. Four, five or six
5. Seven or more



What is ASWEC?

- ✖ ASWEC is a leading technical forum for the exchange of peer-reviewed research outcomes and industry best-practice in software engineering.
- ✖ It attracts a wide range of participants.
- ✖ It provides opportunities for academics and industry participants to interact with and learn from each other.

Matt Ashford

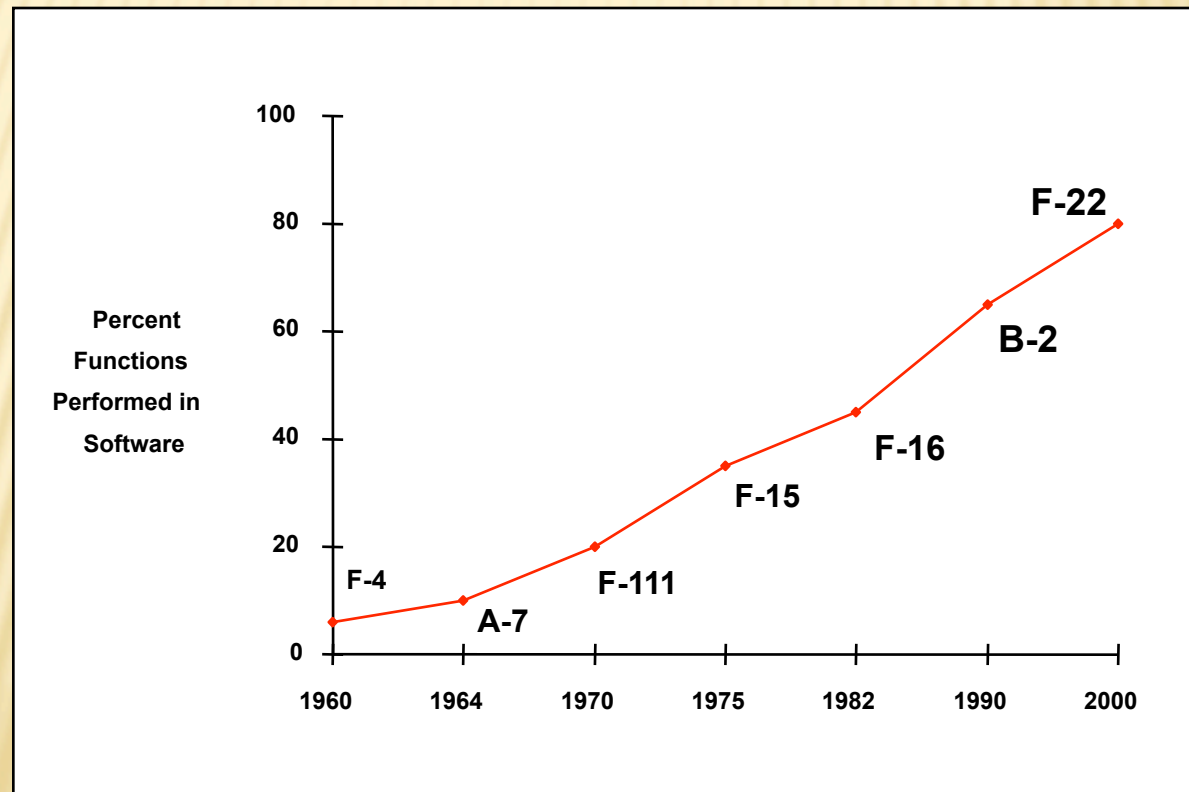
Director Software Engineering
Electronic Systems Division (ESD)
Defence Materiel Organisation (DMO)

DMO Overview

- ✘ DMO Purpose
 - + Equip and sustain equipment for the Australian Defence Force (ADF)
- ✘ DMO's 2 goals
 1. To deliver projects on time, on budget and to the required levels of capability, quality and safety (effectiveness goal);
 2. To become more business-like, accountable and outcome-driven (efficiency goal)
- ✘ DMO Vision
 - + To become the leading program management and engineering services organisation in Australia.

Software Impacts on DoD Systems

Software-Intensive System: Any system where software contributes essential influences to the design, construction, deployment and evolution of the system as a whole [IEEE Std 1471-2000]



Source: Defense Acquisition University (DAU)

DMO Engineering Environment

- ✖ Acquire & Sustain ADF Capability
 - + Focus is on Systems and Systems of Systems (SoS)
 - + Large, complex & software-intensive, but rarely software only
- ✖ Integrated lifecycles
 - + Software needs to be developed as part of the broader system/capability
- ✖ Interdisciplinary teams
 - + Specialist depth, with cross-discipline breadth
- ✖ Professionalisation agenda
 - + Key theme to achieve our vision
- ✖ Resource constrained
 - + \$\$\$
 - + Time
 - + People

DMO Needs for Engineering Conferences

- ✘ DMO has been a long time supporter of professional conferences through sponsorship and delegate attendance
- ✘ Acknowledge need for both academic and industry aspects
 - + DMO supports and encourages ASWEC's initiative to increase industry involvement
- ✘ DMO operates in a multi-disciplinary environment, with significant integration challenges
- ✘ Current economic environment and fiscal constraints impacting ability for DMO staff to attend multiple conferences in different locations

DMO Proposal

- ✘ DMO believes it would get more value (as both sponsor and delegate) if there was an event where multiple engineering disciplines were addressed at the same location at the same time
- ✘ More reflective of our environment
- ✘ Maintain discipline specialities, but allow cross-discipline pollination

Concept of Co-location

- ✗ Number of specialist conferences already exist
- ✗ DMO believes consolidation through co-location will result in:
 - + Reduced attendance costs
 - ✗ Registration
 - ✗ Travel
 - ✗ Time
 - + More delegates
 - ✗ Economies of Scale: Speakers, venue etc
 - ✗ Diversity: people and content
 - ✗ Greater networking
 - + Increased sponsorship value
 - + Promote integration of disciplines
- ✗ Potential disadvantages need to be identified & addressed
 - + Co-location does not mean loss of identity/brand!

Daniel Berinson

Challenges of Complex IT Projects

- ✗ The report *Challenges of Complex IT Projects*[†] by the British Computer Society and the Royal Society of Engineering:
 - + “Complex IT projects have many similarities with major engineering projects and would benefit from greater application of well-established engineering and project management procedures.”
 - + “The importance of risk management is poorly understood and the significance of systems architecture is not appreciated.”

[†] www.bcs.org/server.php?show=conWebDoc.1167

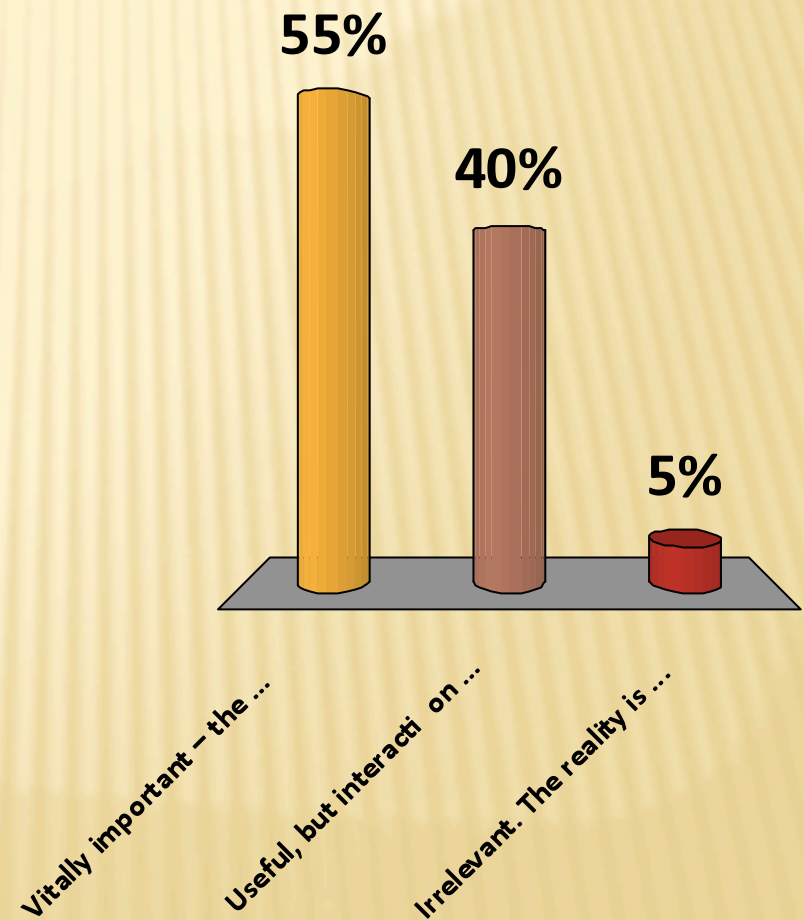


Doug Grant

The Future of ASWEC

How important is the Industry/Academia interaction at ASWEC?

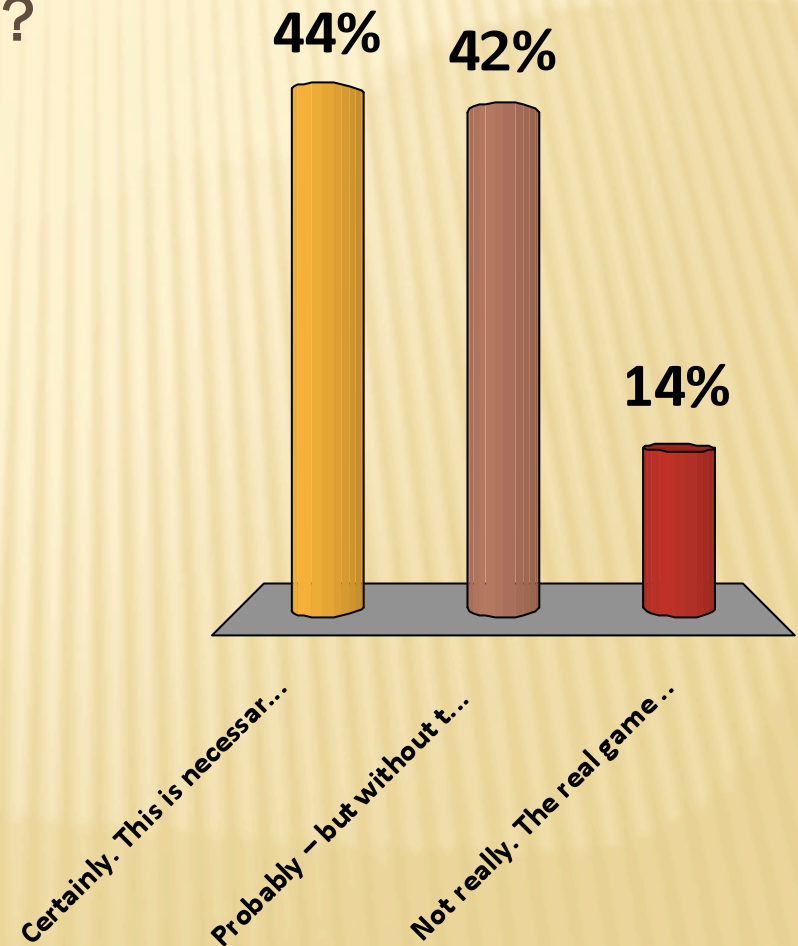
1. Vitally important – the most essential feature of ASWEC.
2. Useful, but interaction happens best on a day-to-day basis.
3. Irrelevant. The reality is that industry prefers industry-focused conferences while academics prefer research conferences of high ranking.



The Future of ASWEC

Do we need an annual research-oriented SE conference in Australia?

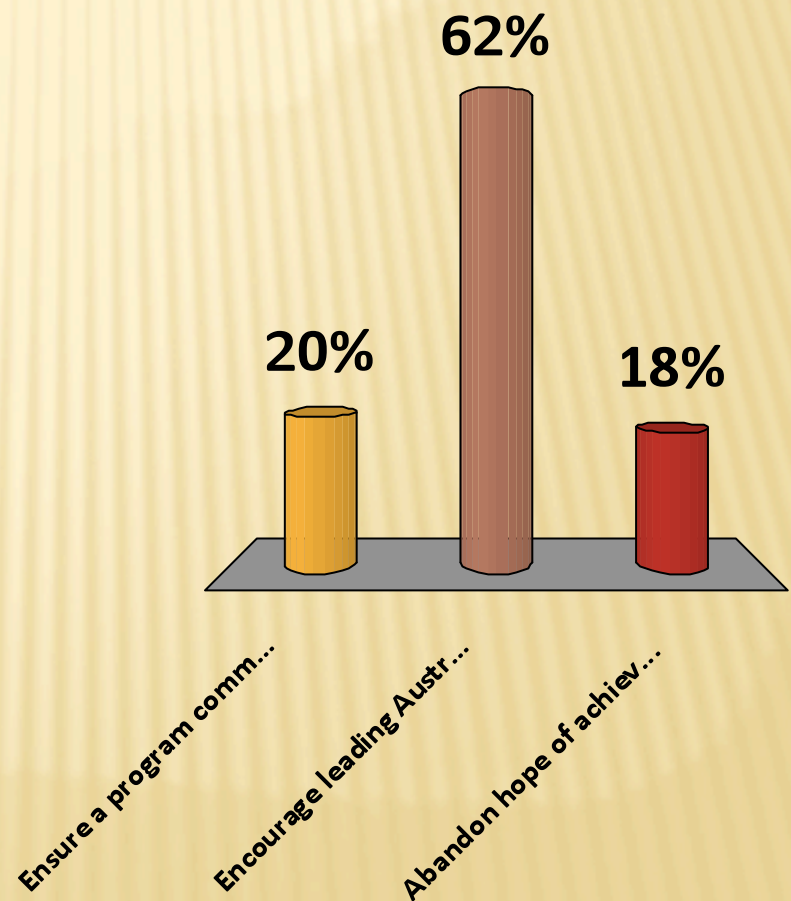
1. Certainly. This is necessary for the sustenance of the discipline in our universities.
2. Probably – but without this, we could engage thoroughly with APSEC and submit SE research papers to ACSW.
3. Not really. The real game is international conferences, and we should encourage all submissions there.



The Future of ASWEC

How can we raise the standard, and hence the rating, of ASWEC as a research conference?

1. Ensure a program committee that is truly international and exclusively uses top scholars.
2. Encourage leading Australian SE researchers to submit their best work to ASWEC.
3. Abandon hope of achieving this, and aim instead at accepting more papers from emerging researchers, quantity not quality.



Jennifer Murray

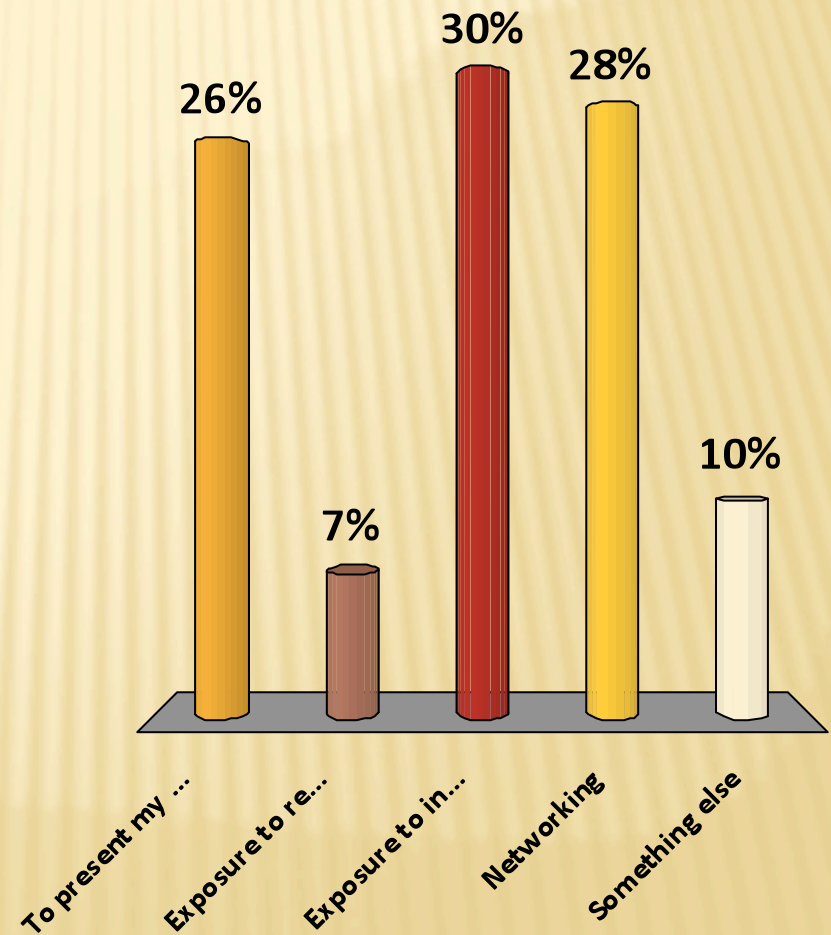
Jennifer's Comments

- ✖ I am there in spirit if not in body.
- ✖ ASWEC mentors/stimulates/encourages an important community of interest that puts love, passion and time into organising the conference every year.
- ✖ Take care with any change(s)
 - + Know why you are changing
 - + Understand the consequences of any change(s)
 - + Don't throw the baby out with the bathwater

Motivation for attending ASWEC

What was the most important reason for you to attend ASWEC this year?

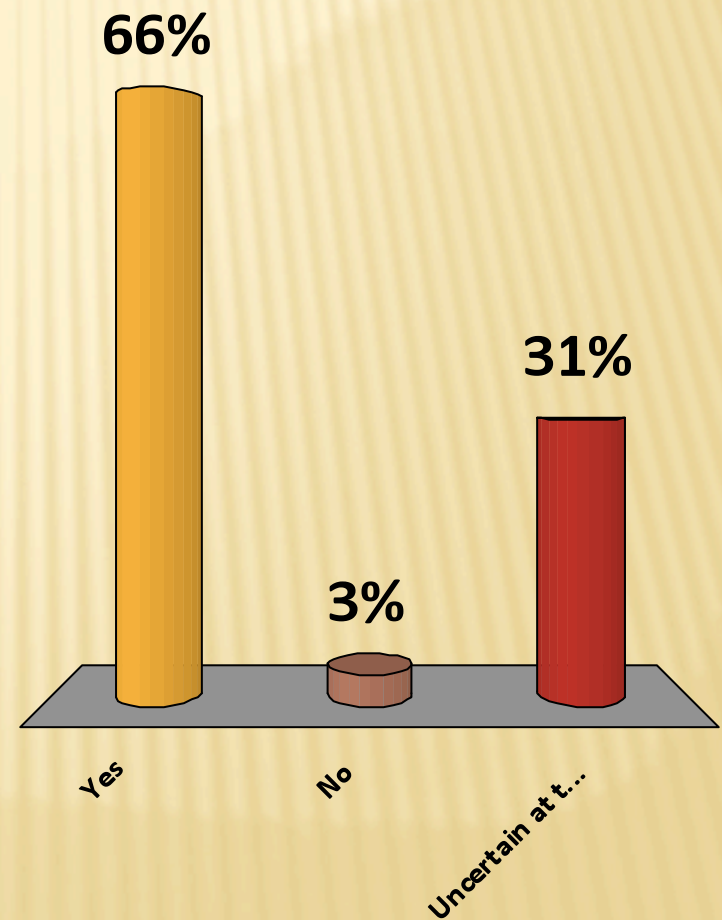
1. To present my paper
2. Exposure to research reports
3. Exposure to industry reports
4. Networking
5. Something else



Future ASWEC attendance

Ignoring financial considerations, do you plan to attend ASWEC in the future?

1. Yes
2. No
3. Uncertain at this stage





Ewan Tempero

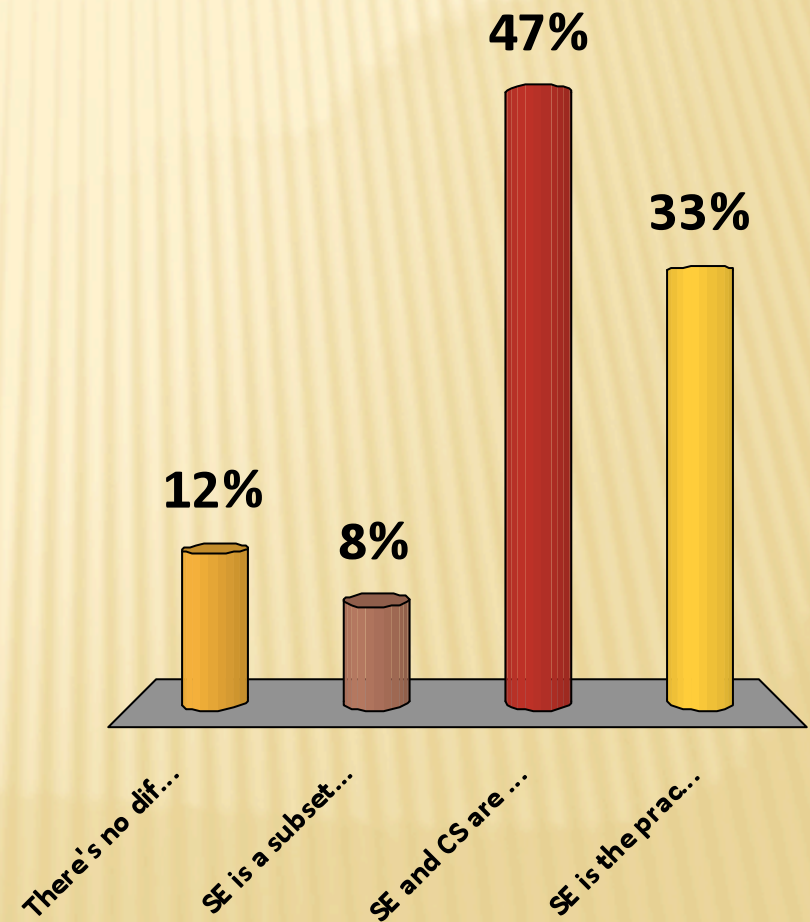
In a World Without ASWEC

- ✗ Where is the community of SE scholars?
- ✗ How does communication between SE academics and SE practitioners take place?
- ✗ What is the nursery for SE researchers?

Software Engineering vs. Computer Science

Which of the following best characterises the relationship between SE and CS?

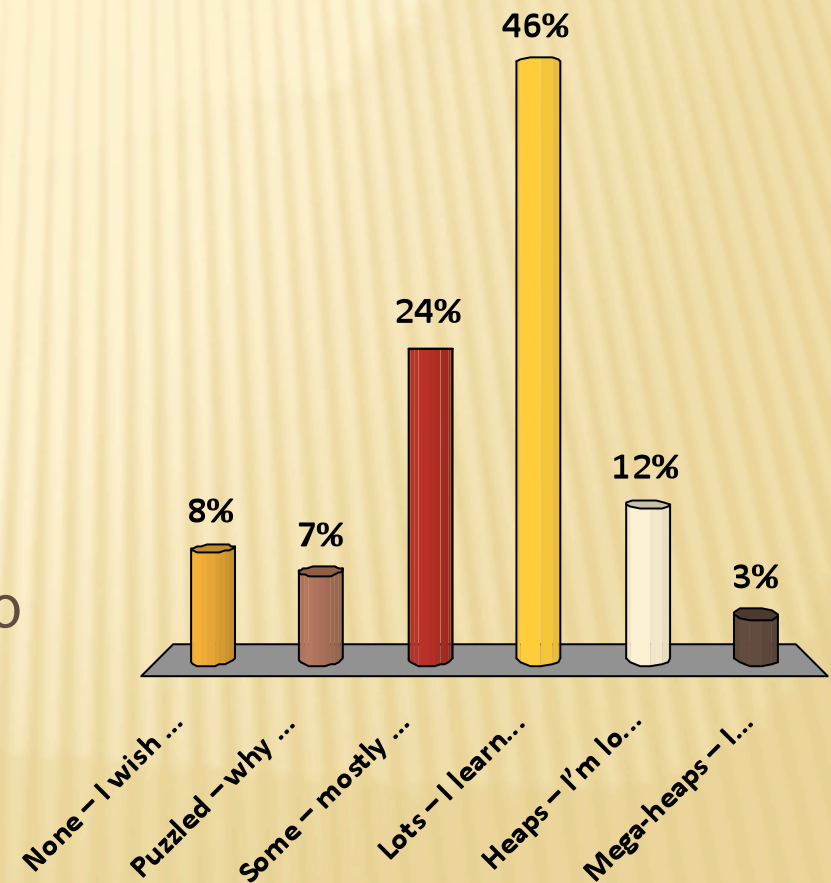
1. There's no difference between SE and CS
2. SE is a subset of CS
3. SE and CS are different but overlap
4. SE is the practical side of CS



Additional Questions

What value did this session provide for you?

1. None – I wish I went for a walk
2. Puzzled – why ask me about the future of ASWEC?
3. Some – mostly I did other work
4. Lots – I learned more about ASWEC and made a contribution
5. Heaps – I'm looking forward to participating in the future
6. Mega-heaps – I'm interested in volunteering



Thank you for your participation!
