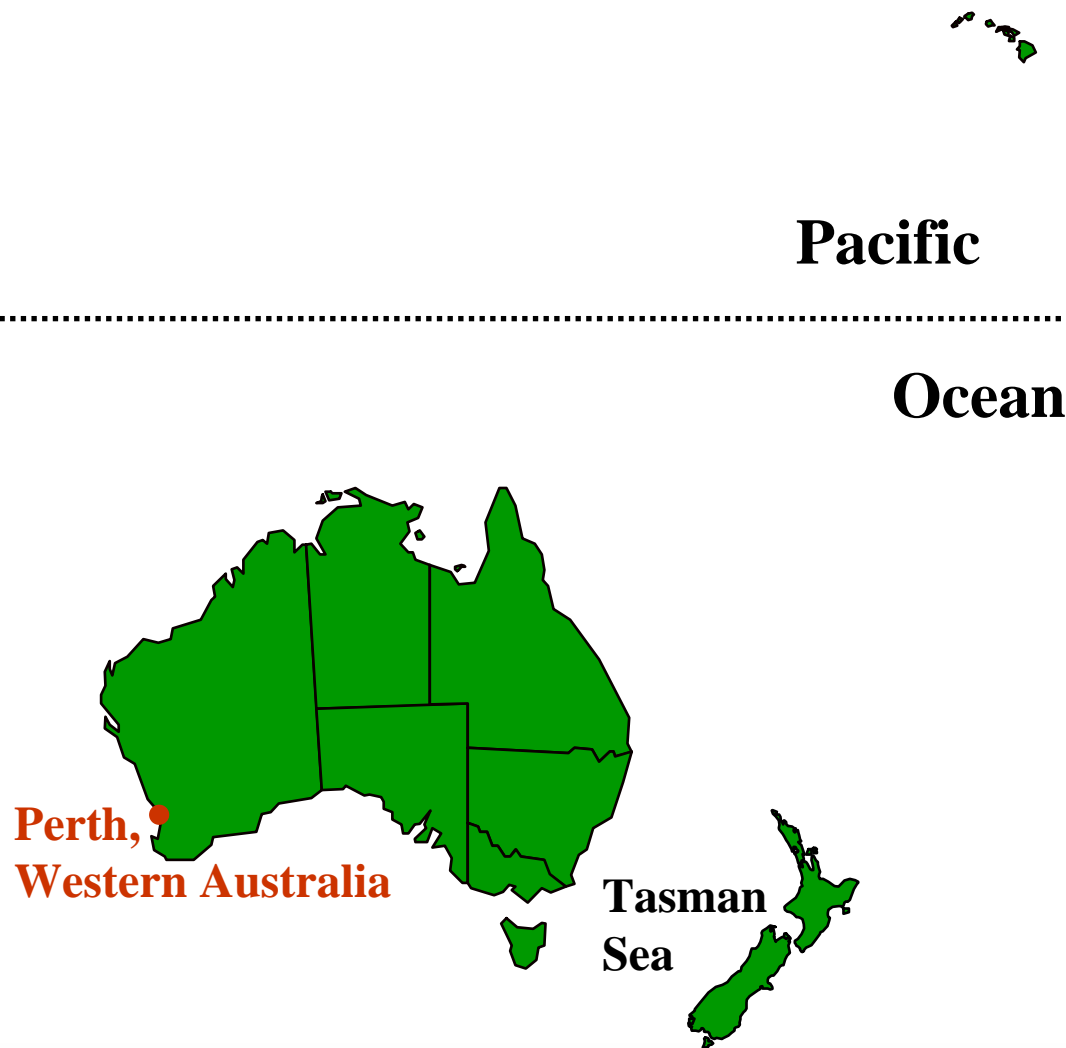




Publishing in IT Journals: Thoughts on Quality and Strategy

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Where is Curtin?



Equator

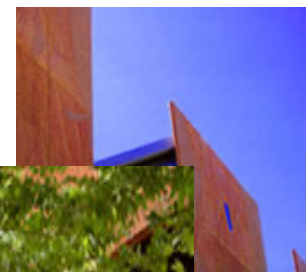
John Curtin (1885-1945)



- Prime Minister of Australia 1941-1945
- Native of Western Australia
- Namesake of Curtin University

“The great university ... should *look ever forward*; for it the past should be but a preparation for the greater days to be.” (1932)

Curtin University



Why do we try to publish our work?

- To improve our CV
 - Better job & promotion prospects
 - Greater credibility when applying for grants
 - To score research ‘points’ which generate block funding (in some countries)
- To get feedback
 - Reviewers provide an independent, objective assessment of our work (usually)
 - Better conferences provide better feedback
 - Journals provide better feedback than conferences
 - Better journals provide better feedback

Why do we try to publish our work?

- To advance knowledge
 - Fundamental reason for being a researcher
- To disseminate knowledge
 - The knowledge you develop serves little purpose if no-one knows about it!
 - Helps to develop a network of like-minded researchers which may lead to more ideas and publications
- To influence practice
 - IS is an applied discipline
 - Relevance as well as rigour

Know the publication outlets

- Which outlets do you utilise as the foundation for your research?
 - Generalist IS/IT Journals
 - MIS Quarterly, Information Systems Research, Journal of Management Information Systems, Information & Management, Journal of the Association for Information Systems, Journal of Information Technology, European Journal of Information Systems, etc.
 - Higher impact but may not accept many papers in your specialisation
 - Specialist IS/IT Journals
 - Decision Support Systems, Group Decision and Negotiation, Electronic Markets, Journal of Electronic Commerce Research. etc.
 - More focused on your specialisation but lower impact
 - Practitioner Journals

Which ones do you utilise as the foundation for your research?

Recommendations on outlets

- Information Systems: AIS World
<http://www.isworld.org/>
- In general: Major Journal Indexes
e.g., Thomson ISI Master Journal List
website:
<http://scientific.thomson.com/mjl/>

Get to know your journals

- Read extensively on your topic and its background – i.e. widely and deeply
 - A weak literature review will not be accepted by any Tier 1 or 2 journal
- Read review papers in your field
 - they provide an overview research from of a number of journals, and
 - suggest and generate ideas for new research

Get to know your journals

- Do a review of your own
 - Provides a better understanding of the research literature
 - Helps to give structure and organization to the literature review section of the paper
 - Identifies trends and gaps and can support the significance of your research
 - May lead to publications of itself
 - Most journals welcome review papers
 - MISQ Review specializes in them

Some review examples for literature in the IS field:

- Arnott & Pervan (2005) – DSS
- Chen & Hirschheim (2004) – IS
- Alavi & Leidner (2001) – KM
- Fjermestad & Hiltz (1999; 2001) – GSS
- Alavi & Carlson (1992) - IS

A review example – The Journal of Information Technology

- Analysis of the last decade (1996 – 2005)
- 219 papers
- Similar to analysis of DSS research by Arnott & Pervan (2005)

Variables identified:

- Year
- Author(s)
- Country(ies)
- Research topic
- Research stage
- Research type
- Research method
- Research paradigm
- Data type
- Time scale
- Level of analysis
- Grant support
- Practical relevance
- Clarity of:
 - question
 - paradigm
 - method
 - design

JIT Authors 1996 – 2005

- Finnegan (4)
- Angelides (3)
- Breu (3)
- Brooke (3)
- Drummond (3)
- Francalanci (3)
- Galliers (3)
- Markus (3)
- McAuley (3)
- Pervan (3)
- Powell (3)

JIT Author Countries 1996 – 2005

Overall:

1. UK (182)
2. USA (88)
3. Australia (44)
4. Netherlands (26)
5. Ireland (19)
6. Canada (14)
7. Hong Kong (12)
8. New Zealand (10)

Asia:

1. Hong Kong (12)
2. Singapore (6)
3. South Korea (4)
4. Japan (3)
5. Taiwan (1)

IS research topic:

1. IS/IT implementation (27 papers)
2. DSS/GSS/CSCW (22)
3. Electronic commerce (21)
4. IS design & development (18)
5. IS/IT management & strategy (18)
6. IS/IT outsourcing (15)
7. IS/IT adoption (14)
8. IS/IT research methods (14)
9. IS/IT evaluation (11)
10. IS/IT policy & society (10)

Research types (% of total sample)

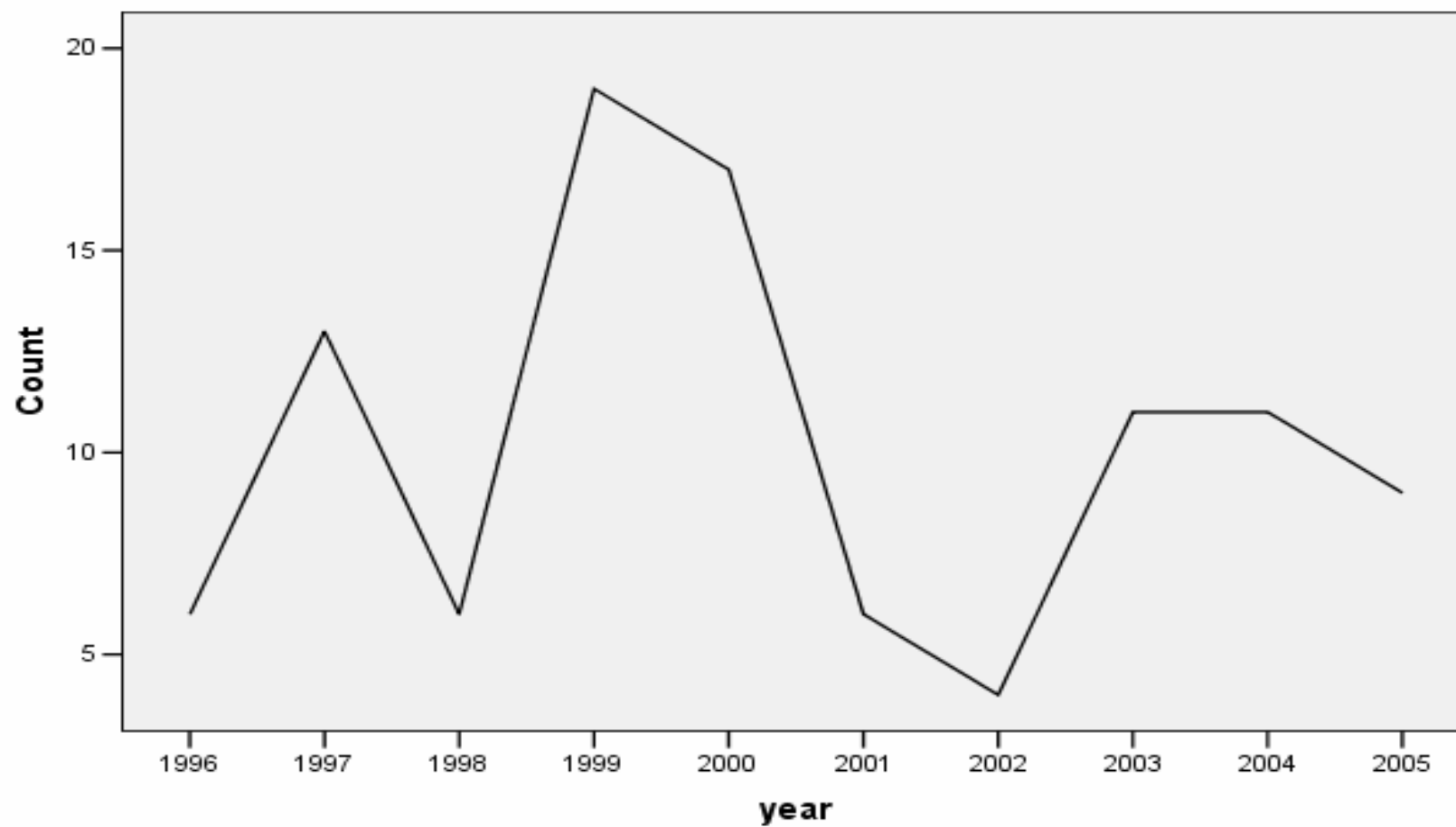
Empirical/not:

- Empirical 75%
 - Objects 1%
 - Events/processes 74%
- Non-empirical 25%
 - Conceptual 16%
 - Illustrative 9%

Empirical methods:

- Case study 28%
- Survey 20%
- Field study 10%
- Teaching case 9%
-
- Action research 2%
- Lab experiment 2%
- Design science 1%

Case/field studies



A note on quality Design Science Research

- It must be shown to be relevant
 - To practitioners who build the Design Science artifacts
 - To users of the artifacts
- It must be demonstrated that they work, by
 - Choice of the right evaluation method
 - Quality execution of that method
- It must make a contribution
 - To Design Science foundations
 - To Design Science methodologies
- It must be communicated effectively to
 - Technology-oriented audiences
 - Management-oriented audiences

Other research issues:

Data type

- Qual. 63%
- Quant. 24%
- Both 13%

Research grant?

- Yes 12%
- No 88%

Grant type

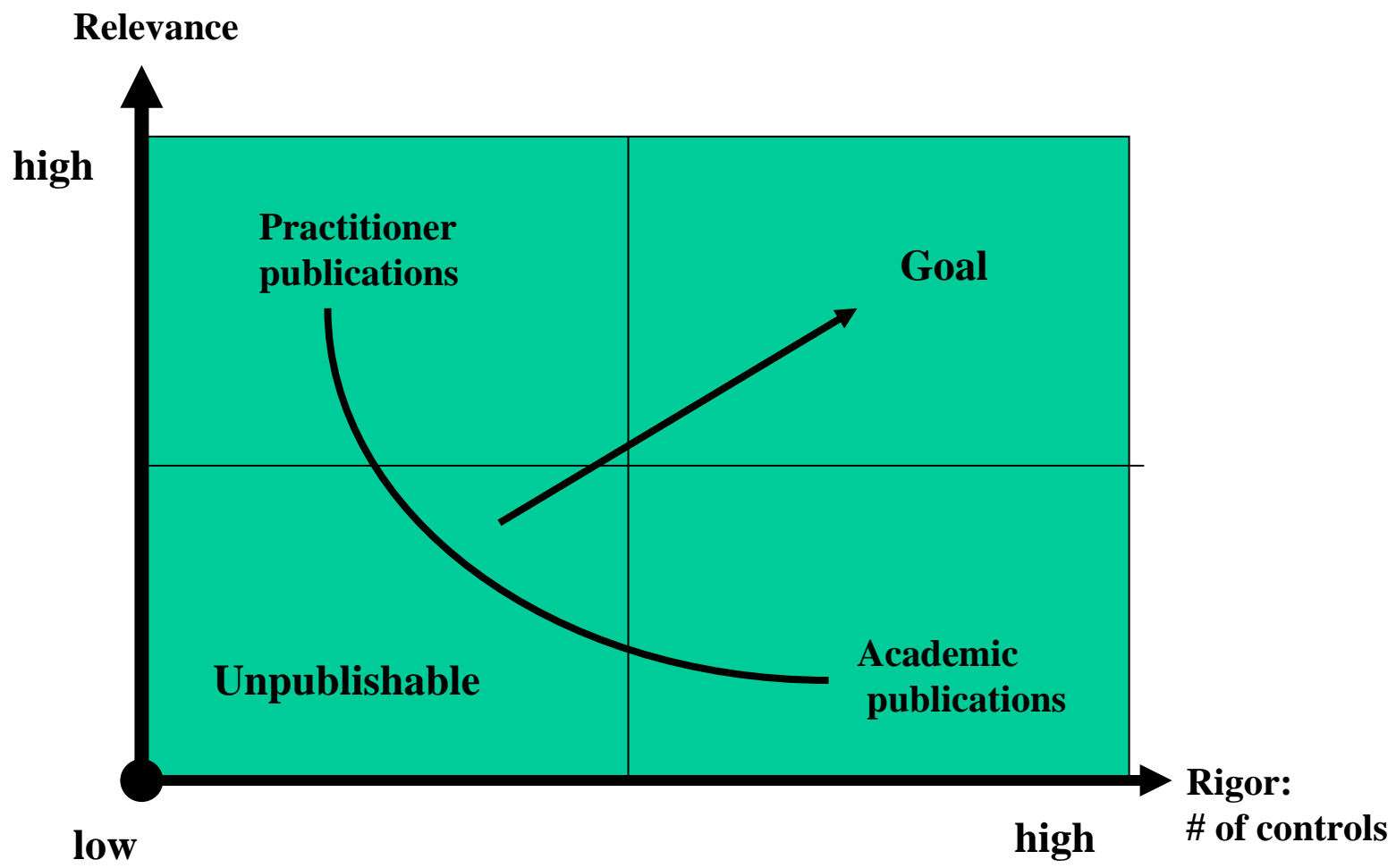
- Competitive 7%
- Industry 2%
- University 2%
- Mixed 1%

Relevance

- High 38%
- Medium 37%
- Low 25%

So, for IS research in the JIT:

- Majority of European authors, few from Asia, none from China – implies an opportunity exists for Chinese IS researchers
- A lot of IS/IT development, implementation and management research
- Little Design Science in the JIT to date, but this may present an opportunity
- Research mostly empirical, particularly in the field, leads to greater relevance
- NB. IS research needs to be relevant first, but then conducted and presented rigorously



Example IS Journal Ranking

Rank	<i>Information Systems</i>	<i>Computer Science</i>
A	MISQ, ISR	CACM *(<93), IEEE Transactions, ACM Transactions, Computing Surveys, Journal of ACM
A-	JMIS, AMIT, EJIS, ISJ, JSIS, DSS, Info. & Mgt., Database(>94) J. Org. Computing & Elec. Comm. J. of IT (>95), JAIS (e), IS Frontiers	Information Systems, CACM* (>93), IEEE Computer, Int. J. of Man Machine Studies, Human Comp. Inter., The Computer J., Aus. Computer J.
B+	Info. T. & People, Scan. J. of IS, Aus. J. of IS, Database (< 94), J. of IT (<95), Beh. Info. Tech., CAIS (e), Found. of IS (e)	

Where to start:

Laying the Foundations – conferences and minor journals

Good for:

- Practicing – students and new researchers
- Testing out ideas and getting feedback
- Laying a claim to an idea
- Raising profile/networking
- Might score a special-issue journal paper
- Ensures at least some research points/\$s each year

Minuses:

- Takes time away from better things
- Unlikely to be widely read
- May spoil chance of good journal publication
- Quality of reviewing highly variable

Then to achieve:

Rewards – Good journals (Tier 2)

- Satisfying
- Top journals in a specialist field very worthwhile
- Maybe more likely to be appreciated and built upon
- Your local data/view may be more acceptable
- Can still be very difficult – often reviewing just as hard as better journals

Higher achievement:

Badges of honour – Tier 1 journals

- Tier 1 journals – mainstream top 2 - 4 in your discipline
- Order of magnitude harder than others
- Perceptions of North American bias
- Need very good quality work and good data and a real contribution and very good writing – remember, these journals are published in English so the English expression must be high quality
- They will take a significant time to get published in (2+ years)
- Reviews and analytical work a possibility (with maturity/depth in the area)

Writing and reviewing

- How the reviewer system works
 - different roles and system of checks and balances, e.g. JIT with Editors-in-Chief, Associate/Regional editors, Editorial Board, other reviewers
- The importance of becoming a reviewer
 - learn the ropes, keep current, build peer network, sharpen understanding of good/bad research
- Learn to submit papers long lead time
- 3 possible outcomes: accept, reject, r&r = revise & resubmit

Writing and reviewing (cont'd)

- The etiquette of resubmission and revision
 - Don't submit the same piece to multiple referred outlets **simultaneously**: “the 40% rule”
 - Learn from each review cycle and **RESUBMIT!!**
 - **The importance of the letter to the editor in r&r**
(Note this is not r&r = recreation and relaxation!!!)
 - Paper resubmissions as virtual contracts
 - The issue of inadequacies and errors in review
 - It can be a ‘lottery’, particularly for conferences – small number of reviewers – AE thoroughness and diligence is critical
 - The author's communication burden

In Conclusion - Key Strategies

- Work with others ... but agree coauthoring rules
- Start early... takes a long time to publish
- Keep up a pipeline of work
- Have multiple research areas but focus on becoming a true leader in one area
- Stay visible ... give talks, be a reviewer, write papers, be on program committees
- Learn the value system of your institution
- Remember – you have to be in it to win it!

References

- Alavi, M. and Carlson, P. (1992) A review of MIS research and disciplinary development. *Journal of Management Information Systems*, **8** (4), 45-62.
- Alavi, M. and Leidner, D.E. (2001) Review: Knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Quarterly*, **25** (1), 107-136.
- Arnott, D., & Pervan, G. (2005). A critical analysis of decision support systems research. *Journal of Information Technology*, **20** (2), 67-87.
- Chen, W.S. and Hirschheim, R. (2004) A paradigmatic and methodological examination of information systems research from 1991 to 2001. *Information Systems Journal*, **14**, 197-235.
- Fjermestad, J. & Hiltz, S.R. (1999) An assessment of group support systems experimental research: Methodology and results. *Journal of Management Information Systems*, **15** (3), 7-149.
- Fjermestad, J. & Hiltz, S.R. (2001) Group support systems: A descriptive evaluation of case and field studies. *Journal of Management Information Systems*, **17** (3), 115-159.