

Where to Publish

network and service management papers

AIMS – Bremen – July 2008

Aiko Pras

University of Twente

a.pras@utwente.nl

What is the message?

- 1) Focus more on journals
- 2) Focus more on journals
- 3) Focus more on journals
- 4) ...



Overview

- 1) Why should we / I bother?
- 2) What publications do exist?
- 3) How to rank a conference
- 4) How to rank a journal
- 5) How to measure your performance

Overview

- 1) Why should we / I bother?
- 2) What publications do exist?
- 3) How to rank a conference
- 4) How to rank a journal
- 5) How to measure your performance

Why should **we** bother?

Publishing at the right venue:

- allows automatic systems to find our publications
- increases the chance others will read our publications

If others read our paper:

- we may be cited
- automatic systems may count our citations

Publications and Citations:

- are used to measure our performance
- are used to allocate research money



Why should **we** bother?

Maybe we should not bother:

- different ways of counting yields different results
- strategic behaviour
- waste of time and energy

See also: David Lorge Parnas: *Stop the Numbers Game - Counting papers slows the rate of scientific progress*, in Communications of the ACM, Nov 2007 / Vol 50, No 11

Why should I bother?

If you are a PhD student:

- Your PhD committee members will look at it
- Your future employer (if you stay in research) will look at it

If you are a staff member:

- Your future employer (if you change jobs) will look at it
- The evaluation committee, which will report your group's performance to the university, will look at it

Don't fight if you know you will loose

Overview

- 1) Why should we / I bother?
- 2) What publications do exist?
- 3) How to rank a conference
- 4) How to rank a journal
- 5) How to measure your performance

What publications exist

- Journals
- Conference proceedings
- Workshops proceedings

Some lists can be found at:

- <http://www.simpleweb.org/contacts/events.html>
- <http://www.simpleweb.org/cfp.rss>
- <http://www.simpleweb.org/conferences.rss>

Journals

Specific for Network and Service management:

- IEEE Communications Magazine: Series on N&S Management
- IEEE Transactions on N&S Management
- Journal of Network and Systems Management
- International Journal of Network management

Networking in general:

- IEEE Network
- IEEE Journal on Selected Areas in Communications
- IEEE/ACM Transactions on Networking
- IEEE Surveys and Tutorials
- Elsevier Computer Networks
- Elsevier Computer Communications
-

Conferences

Specific for Network and Service management:

- IM / NOMS
- Manweek: DSOM, MMNS, IPOM
- AIMS
- APNOMS
- LANOMS

Networking in general:

- Infocom
- ICC
- Globecom
- ...

Workshops

- “Specific” for Network and Service management:
 - Policy
 - E2EMON
 - BDIM
 - BcN
 - FeBID
 - MUCS
 - ACNM
 - MACE
 - INM
 - ICIMP
 - EVGM
 - SVM
 - Eunice
 - CDGNSM
 - NGNM
 - NDA
 - WNS
 - PM2HW2N
 - CSET
 - NeSS
 - DANMS
 - IMM
 - ...

See: <http://www.simpleweb.org/contacts/events.html>

What is the general feeling?

Journals

- Highest quality
- Automatically indexed / ranked

Conference proceedings

- Medium quality
- Not indexed / ranked

Workshops proceedings

- Lowest quality

Overview

- 1) Why should we / I bother?
- 2) What publications do exist?
- 3) How to rank a conference
- 4) How to rank a journal
- 5) How to measure your performance

How to rank a conference

Acceptance rates

Lists of conference publications / citations

Lists of conference rankings

How to rank a conference

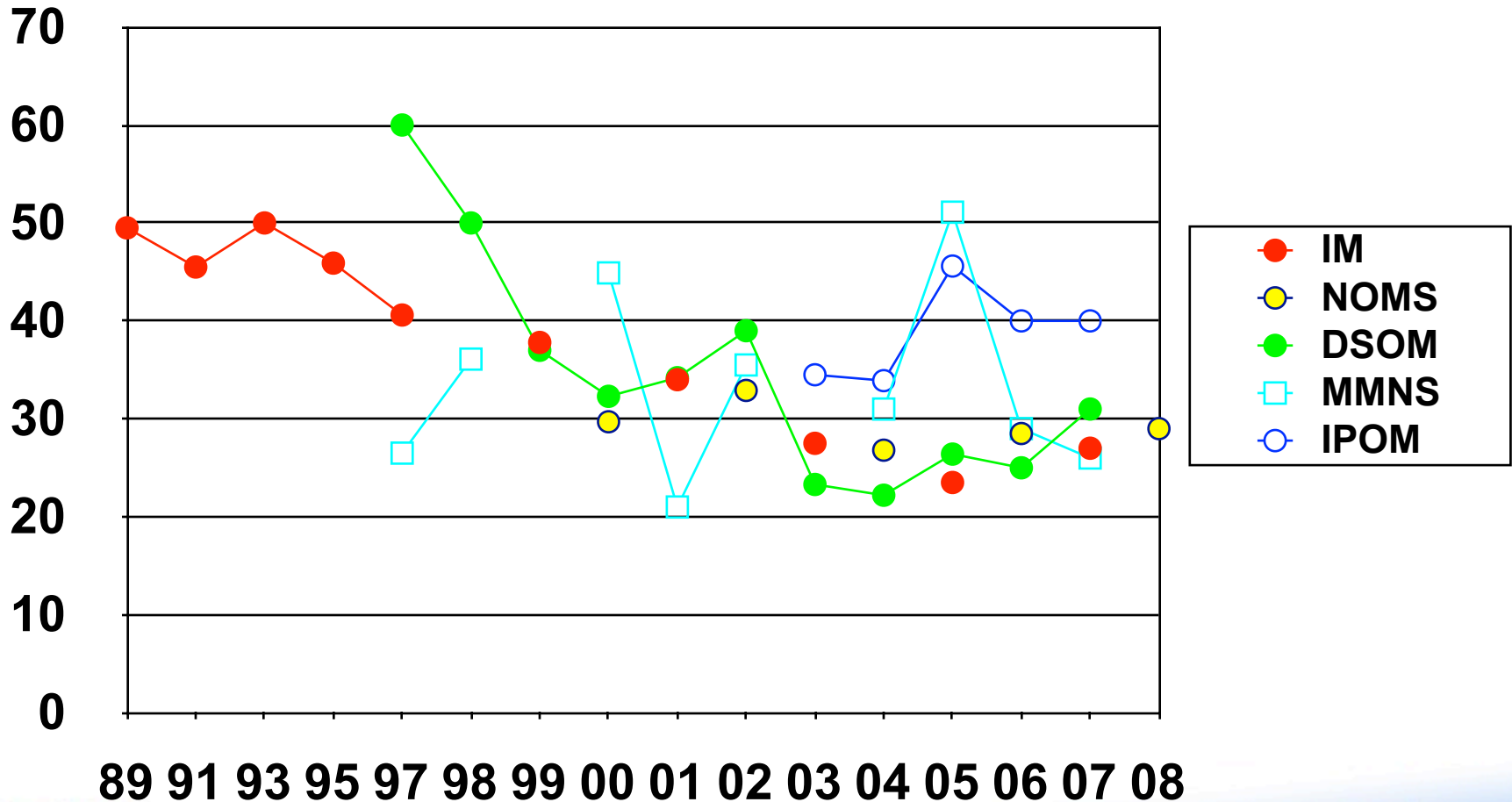
Acceptance rates

Lists of conference publications / citations

Lists of conference rankings

Acceptance rate conferences

source: <http://www.cs.ucsb.edu/~almeroth/conf/stats/>



How to rank a conference

Acceptance rates

Lists of conference publications / citations

Lists of conference rankings

Lists of conference publications / citations

Libra:

- Microsoft Research Asia
- http://libra.msra.cn/conf_category_24.htm
- Has similar list for Journals
- Has also author ranking

*Note added later: link changed into:
- <http://academic.research.microsoft.com/>*

LIBRA

	Publications	Citations	Citation / publication
INFOCOM	3907	32596	8,34
IM	455	645	1,42
DSOM	170	169	0,99
ICC	1393	1303	0,94
MMNS	226	72	0,32
APNOMS	76	0	0
IPOM	45	0	0
AIMS	40	0	0

How to rank a conference

Acceptance rates

Lists of conference publications / citations

Lists of conference rankings

Lists of conference rankings - I

Australian Ranking of ICT Conferences

- <http://www.core.edu.au/rankings/Conference%20Ranking%20Main.html>

Computer Science Conference Ranking

- www.cs-conference-ranking.org

Note added later: see also:

- <http://www.rankingexpose.com/>

- http://www.simpleweb.org/wiki/Conference_Ranking

Citeseer^x

- <http://citeseerx.ist.psu.edu/stats/venues>
- Results seem very “strange”:
 - Sigcomm on position 9 (0.31)
 - Infocom on position 93 (0.07)
 - IEEE Network on position 342 (0.02)
 - DSOM on position 345 (0.02)



Lists of conference rankings - II

Computer Science Department Conference Rankings

http://www.comp.nus.edu.sg/~harishk/mysoc_confs.htm

Computer Science Conference Rankings

http://www-static.cc.gatech.edu/~guofei/CS_ConfRank.htm

Conferencing-Ranking / CS Conference Ranking

<http://cs.conference-ranking.net/>

<http://www.conference-ranking.org/>

Computer Science Conference Rankings

<http://www.cs.ualberta.ca/~zaiane/htmldocs/ConfRanking.html>

Journal and conference ranking lists

<http://www.infotech.monash.edu.au/resources/staff/research/ranking-list/index.html>



Note added later: see also:

- <http://www.rankingexpose.com/>

- http://www.simpleweb.org/wiki/Conference_Ranking

Australian Ranking of ICT Conferences

A⁺: 6%, A: 27%, B: 31%, U: 29%, L: 6%

Specific for Network and Service management:

- IM: A
- NOMS: B
- DSOM: B
- MMNS:
- IPOM:
- APNOMS: B

Networking in general:

- INFOCOM: A⁺
- ICC: A
- Globecom: B



Computer Science Conference Ranking

Uses “Estimated Impact of Conference”

- CP: 30% - citation of papers
 - RR: 30% - quality of referees' reports
 - RS: 25% - availability of resources to students by the conference (funds for travel, fees, hotel)
 - JA: 10% - conference papers accepted/appeared in reputable journals after the conference
 - IN: 5% indexing
-
- SIGCOMM: Conf on Comm Architectures, Protocols & Apps (0.99)
 - INFOCOM: Annual Joint Conf IEEE Comp & Comm Soc (0.99)
 - ...
 - NOMS: IEEE Network Operations and Management Symp (0.62)
 - IM, DSOM, MMNS, IPOM, : not listed (<0.5)



How to rank a conference

Conclusion conference ranking lists:

- many different ranking sites exist
- ranking criteria are often unclear
- results are sometimes questionable
- gives only very rough idea

Overview

- 1) Why should we / I bother?
- 2) What publications do exist?
- 3) How to rank a conference
- 4) How to rank a journal
- 5) How to measure your performance

How to rank a journal

Acceptance rates

Citation index / Impact factors

- ISI - Thomson Scientific
- Scopus - Elsevier
- Citeseer^x

How to rank a journal

Acceptance rates

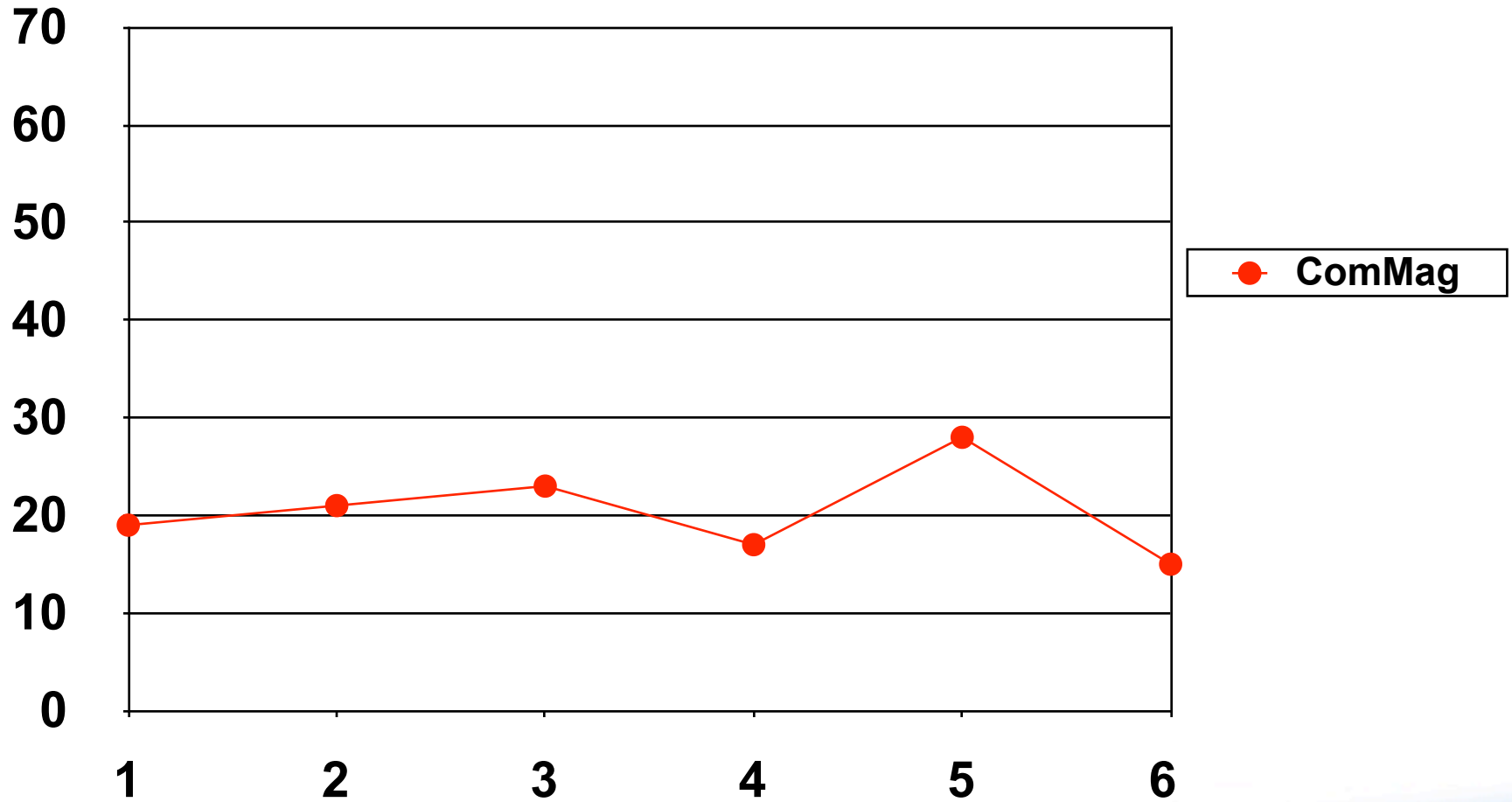
Citation index / Impact factors

- ISI - Thomson Scientific
- Scopus - Elsevier
- Citeseer^x

Acceptance rate journals

- IEEE Communications Magazine
- IEEE TNSM
- JNSM
- IJNM

Acceptance rate ComMag



Acceptance rate TNSM

Precise figures have not been made public

- Early issues likely between 23 and 35%
- Current issues likely between 15 and 20%

According to CNOM / IFIP report at NOMS08

- 141 submissions in 2007
- 16 accepted
- 90 rejected
- 11 conditionally accepted
- 24 in review



Acceptance rate JNSM

Precise figures have not been made public

Figures presented at NOMS 2008:

- First issues (1996) around 70%
- All years: <50% for general issues
- All years: <30% for special issues
- Currently: 30% for general issues
- Currently: 20% for special issues

Acceptance rate IJNM

Precise figures have not been made public

Current estimates:

- around 33% for open call
- less for special issues

How to rank a journal

Acceptance rates

Citation index / Impact factors

- ISI - Thomson Scientific
- Scopus - Elsevier
- Citeseer^x

ISI - Thomson Scientific

1960: Institute for Scientific Information (ISI)

1992: Acquired by Thomson Corp.

- Thomson Scientific Division
- ISI Web of Knowledge
 - Journal Citation Reports (JCR)
 - Web of Science
 - Science Citation Index (SCI)
 - Licensed to universities and research institutes
 - Access via your university

Journals included by Thomson

Master list can be queried online

- <http://scientific.thomsonreuters.com/mjl/>
- Before a journal gets an impact factor, it should at least 3 years by included in the SCI

Included:

- **IEEE Communications Magazine**
- **Journal on Network and Service Management**

Main IEEE Journals

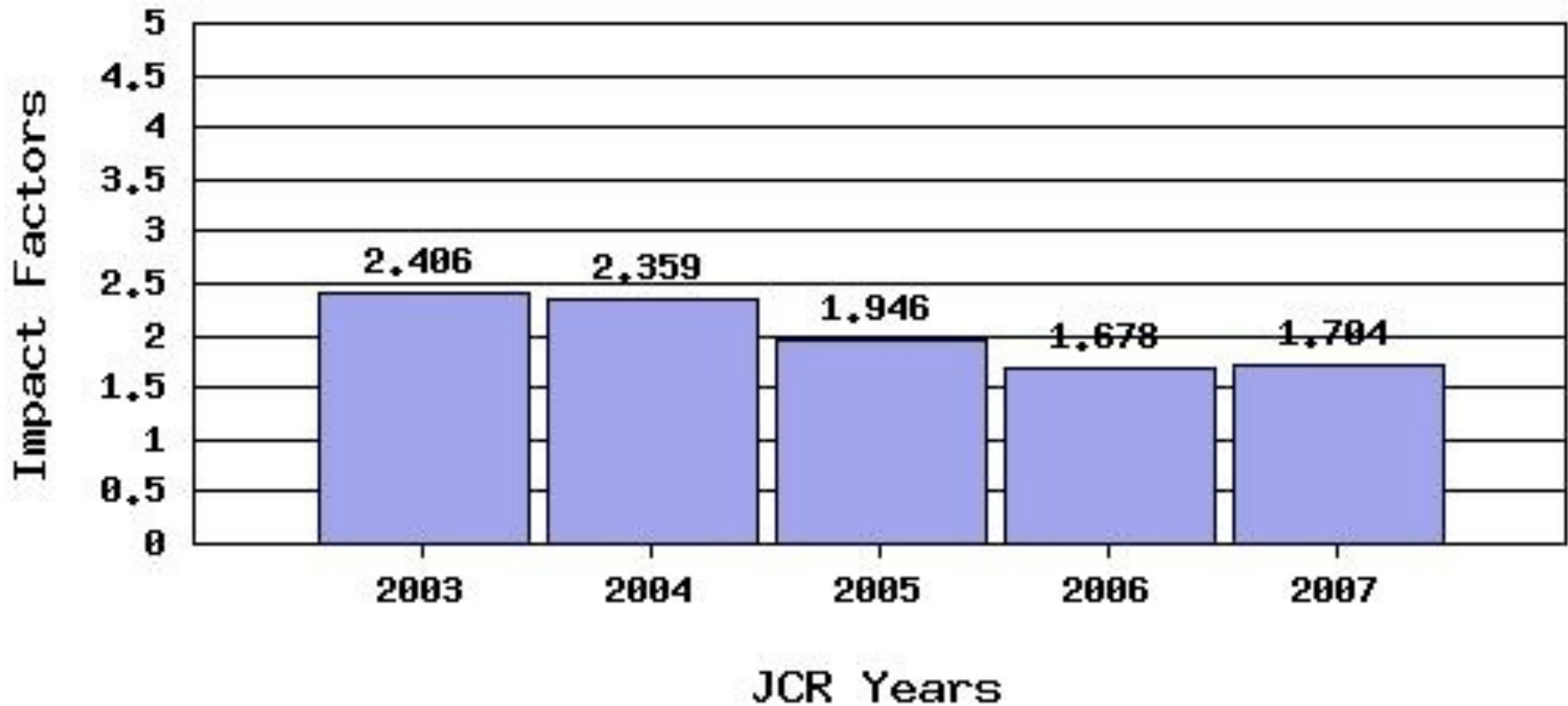
	ISSN	Cites 2007	Impact Factor	Immediacy Index	2007 articles	Cited half-live
JSAC	0733-8716	7411	1,799	0,171	175	7,4
Com. Mag.	0163-6804	3892	1,704	0,121	165	5,6
Network	0890-8044	1081	1,609	0,000	39	6,7
Internet Comp.	1089-7801	966	1,551	0,446	56	4,9
Trans. Comm.	0090-6778	9721	1,302	0,178	269	9,4
Comp. Netw.	1389-1286	1913	0,829	0,128	281	5,8
Comp. Comm.	0140-3664	930	0,391	0,060	299	5,1

© ISI Web of Knowledge



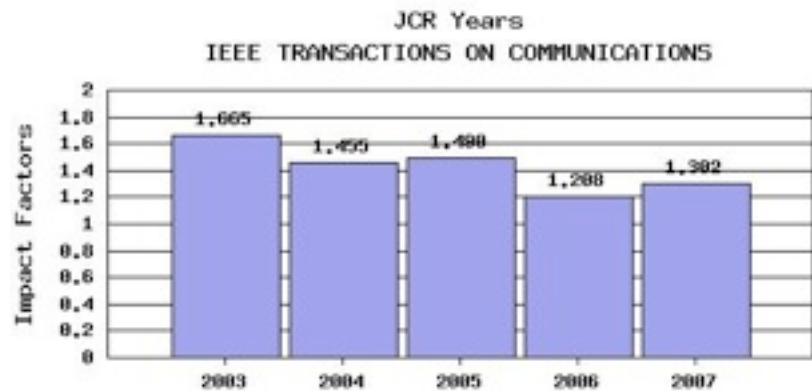
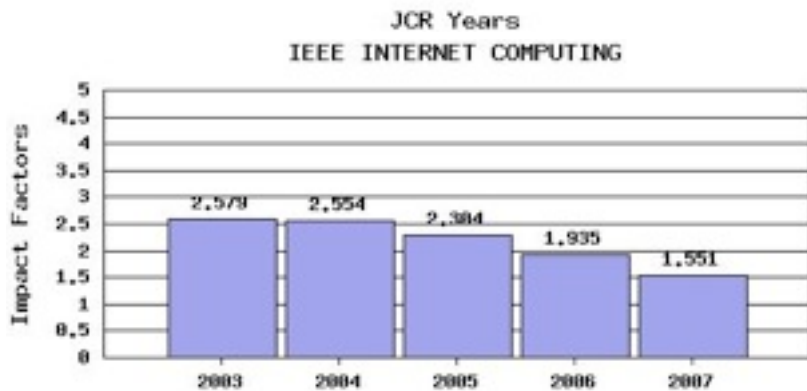
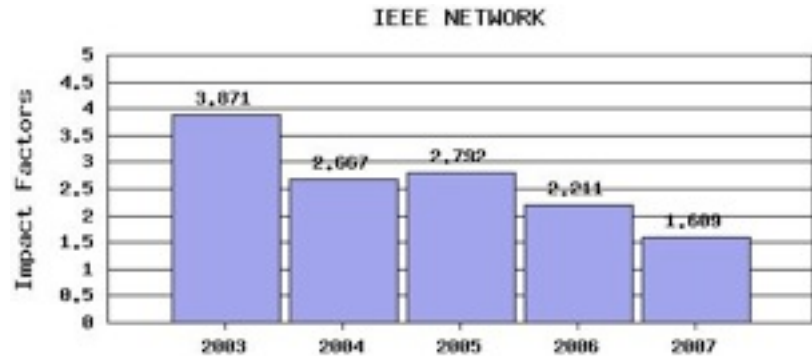
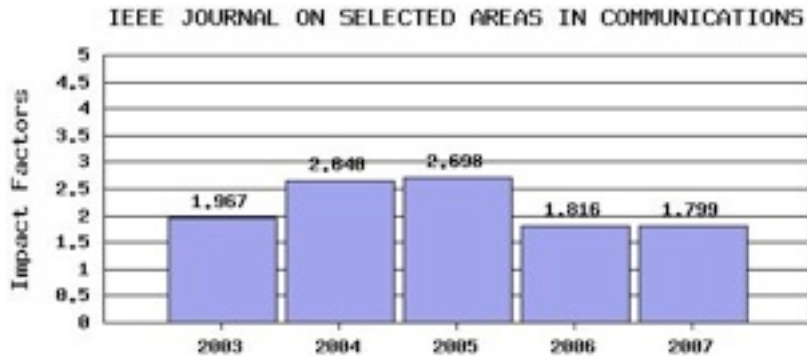
Impact factor ComMag

IEEE COMMUNICATIONS MAGAZINE



© ISI Web of Knowledge

Impact factor other IEEE Journals



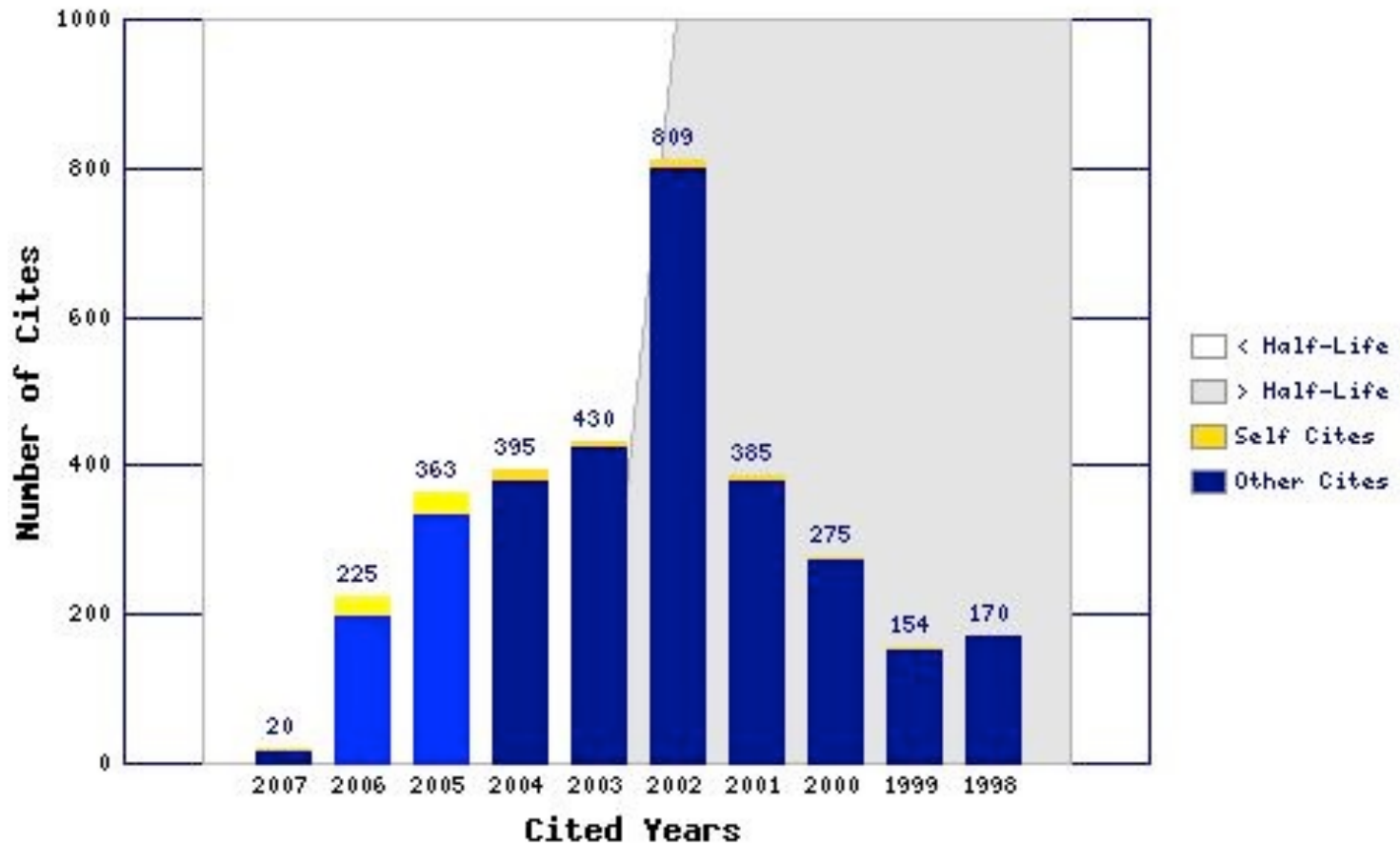
Is an impact factor useful?

The impact factor is calculated over a three-year period
It can be considered as the average number of times
published papers are cited
up to two years after publication

Example

- A = the number of times articles published in 2006-7 were cited in indexed journals during 2008
- B = the number of articles published in 2006-7
- impact factor 2008 = A/B

Citations to ComMag articles



© ISI Web of Knowledge

Scopus - Elsevier

See: <http://www.scopus.com/scopus/home.url>

Included:

- **IEEE Communications Magazine**
- **Journal on Network and Service Management**
- **International Journal on Network Management**
- **LNCS conferences (DSOM, MMNS, IPOM, ...)**
- **Several other conferences**

Thomson SCI versus Scopus

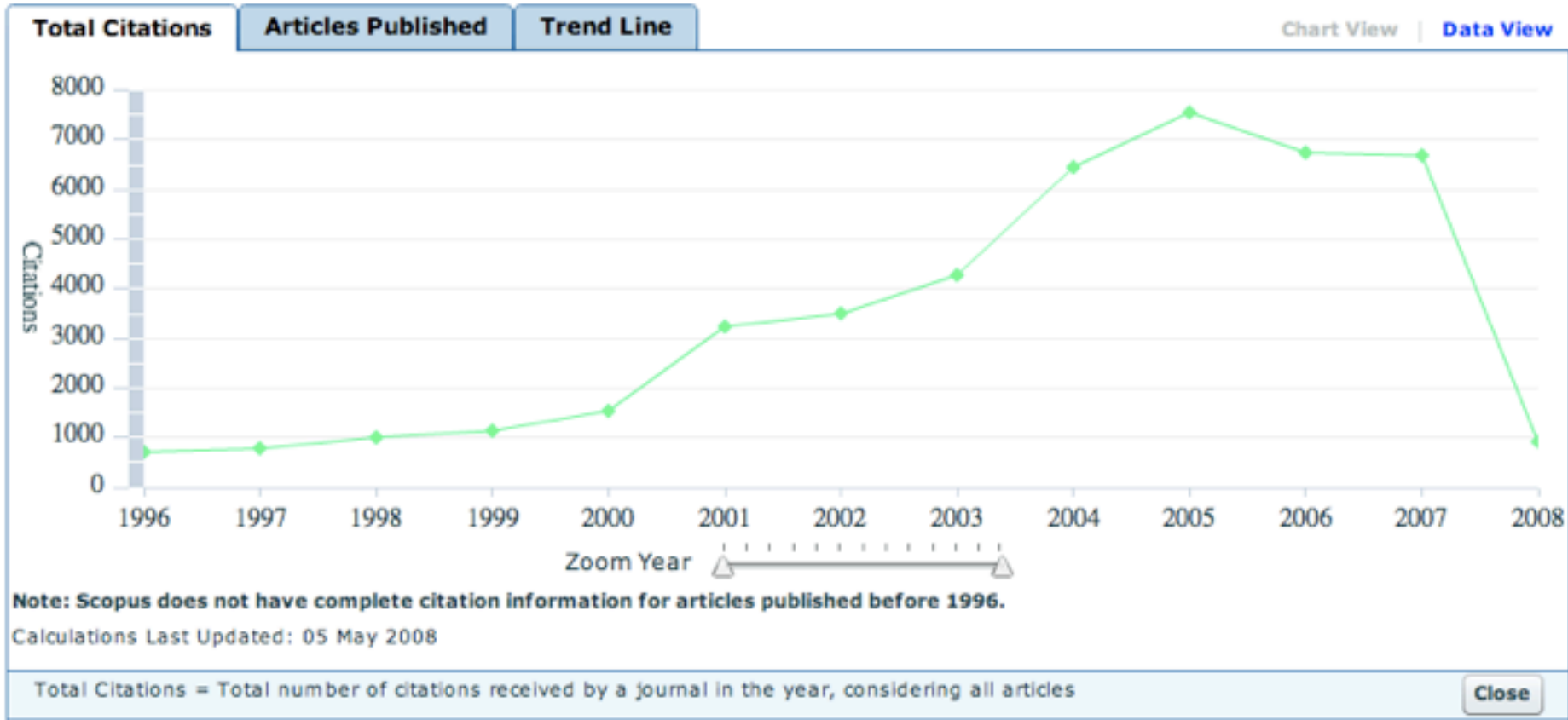
	Thomson SCI	Scopus
ComMag	✓	✓
TNSM		
JNSM	✓	✓
IJNM		✓
LNCS (DSOM, MMNS, ...)	until 2005	✓
IM		2005, 2007
NOMS		✓
E2EMon		✓
Comp. Netw.	✓	✓
Comp. Comm.	✓	✓



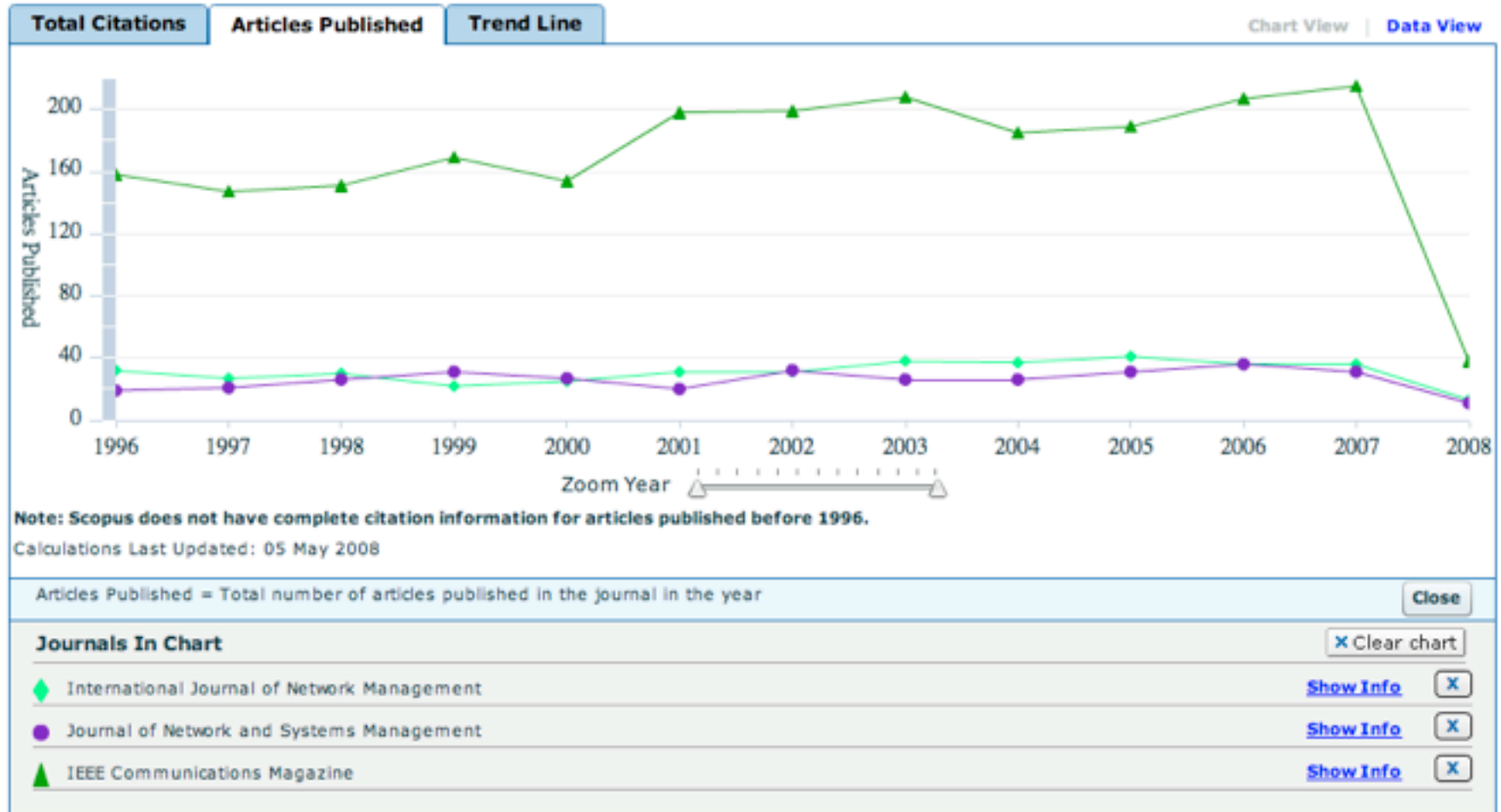
Example Scopus: IJNM and JNSM



Example Scopus: ComMag



Example Scopus: # of articles



Overview

- 1) Why should we / I bother?
- 2) What publications do exist?
- 3) How to rank a conference
- 4) How to rank a journal
- 5) How to measure your performance

How to measure your performance

1) H-index

2) Bibliometric data analysis

How to measure your performance

1) H-index

2) Bibliometric data analysis

H-index

See: http://en.wikipedia.org/wiki/Hirsch_number

An index value of x means:
you have at least x publications
that are each cited at least x times

To determine your H-index, you can use:

- Google scholar
 - Publish or Perish: <http://www.harzing.com/resources.htm#/pop.htm>
- Scopus

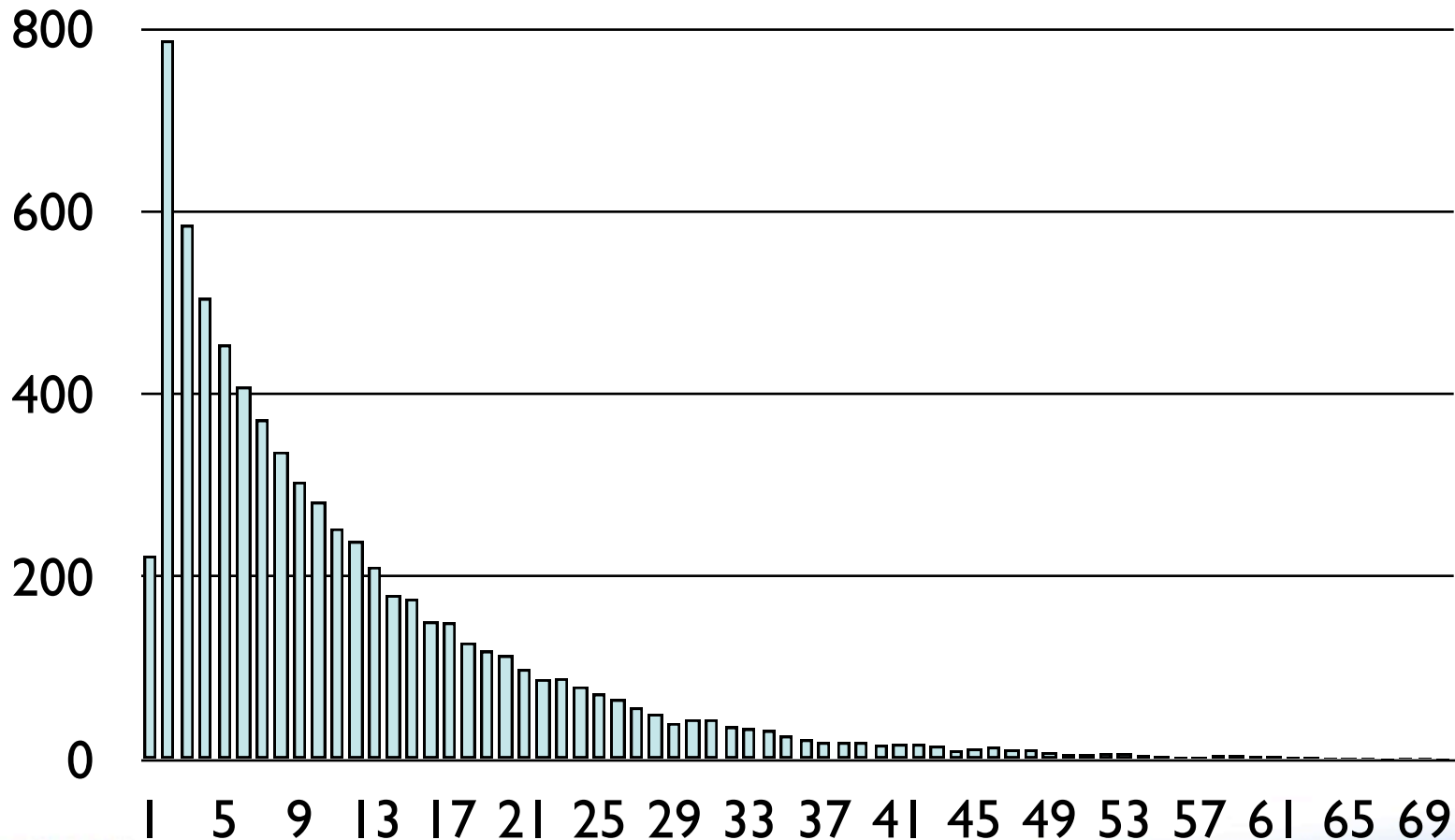


– Web of Science

H-index - some numbers*

H-index

for 35,599 unique people in
Engineering, Computer Science, and Mathematics



How to measure your performance

1) H-index

2) Bibliometric data analysis

Bibliometric data analysis

CWTS Leiden - Ton van Raan

- <http://www.socialsciences.leidenuniv.nl/cwts/>
- http://www.cwts.nl/cwts/NWO_Inf_Final_Report_V_210207.pdf

Uses following metrics:

- CPP: the average number of citations per publication (for a person or group). Self-citations are not included
- JCS: the average journal citation-score
- FCS_m : the average citation rate of all articles in the subfield m

Calculation of CPP, JCS and FCS (I)

Article	Citations CPP	JCS	FCS
1	7	5	14,8
2	4	7	3,6
3	5	2	3,6



Calculation of CPP, JCS and FCS (II)

$$\text{CPP} = (7 + 4 + 5) / 3 = 5,33$$

$$\text{JCS} = (5 + 7 + 2) / 3 = 4,66$$

$$\text{FCS} = (14,8 + 3,6 + 3,6) / 3 = 7,33$$

$$\text{CPP/FCS} = 5,33 / 7,33 = 0,73$$

– normalised citation impact indicator

Normalised citation impact indicator

$CPP/FCS_m < 0.80$

- performance significantly below internat. average

$0.80 < CPP/FCS_m < 1.20$

- performance about internat. average

$1.20 < CPP/FCS_m < 2.00$

- performance significantly above internat. average

$2.00 < CPP/FCS_m < 3.00$

- performance in internat. perspective is very good

$CPP/FCS_m > 3.00$

- performance in internat. perspective is excellent



Conclusions

Others care about your performance

So you better care too!

Publish more in Journals

Some References and URLs

1. David Lorge Parnas: Stop the Numbers Game - Counting papers slows the rate of scientific progress, in Communications of the ACM, Nov 2007 / Vol 50, No 11
2. Networking Conferences Statistics:
<http://www.cs.ucsb.edu/~almeroth/conf/stats/#mmns>
3. Final 2007 Australian Ranking of ICT Conferences:
<http://www.core.edu.au/rankings/Conference%20Ranking%20Main.html>
4. <http://www.socialsciences.leidenuniv.nl/cwts/>
5. http://www.cwts.nl/cwts/NWO_Inf_Final_Report_V_210207.pdf
6. http://www.utwente.nl/ffnt/Past_Activities/january2008_july2008/presentation_karl_luyben/publish_or_perish_no_citation.pdf