

# **Scientific Research in Information Systems: A Beginner's Guide (2<sup>nd</sup> edition)**

## **Teaching Materials**

*Created by Professor Jan Recker*

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# Overview

## Content

Part 1: Basic Principles of Research

Part 2: Conducting Research

**Part 3: Publishing Research**



# Chapter 6: **Writing IS Research Articles**

# Scientific Writing

- Why publishing is important for scientists
- How scientific publishing works
- Writing a scientific paper
- Reviews and revisions

**“As a scientist, you are a professional writer.”**

Joshua Schimel, “Writing Science”, Oxford University Press.

# Science is a tough competition

The screenshot shows the Nature journal website interface. At the top, the 'nature' logo is displayed with the tagline 'International weekly journal of science'. Below the logo is a navigation bar with links for Home, News & Comment, Research, Careers & Jobs, Current Issue, Archive, Audio & Video, and For Authors. A search bar is located in the top right corner. The main content area features the article title 'Many junior scientists need to take a hard look at their job prospects' and a sub-headline 'Permanent jobs in academia are scarce, and someone needs to let PhD students know.' The date '25 October 2017' is shown below the sub-headline. A large image of a building through a window frame is featured. Below the image, a caption reads 'Most PhD students will have to look beyond academia for a career.' To the right of the article, there are social media sharing options (E-alert, RSS, Facebook, Twitter) and a 'nature briefing' sign-up box with a 'Sign up' button. Below that is a 'FOCAL POINT KOBE' section with a 'ACCESS FREE ONLINE' button and a 'A seismic shift' headline. At the bottom right, there is a 'Listen' section with a headphones icon.

- Statistics say young researchers have a better chance of pursuing their chosen job than the young footballers. But not by much. Global figures are hard to come by, but **only three or four in every hundred PhD students in the United Kingdom will land a permanent staff position at a university.** It's only a little better in the United States.
- [...] Simply put, most PhD students need to make plans for a life outside academic science.
- [...] it has been evident for years that international science is training many more PhD students than the academic system can support. Most of the keen and talented young scientists who responded to our survey will probably never get a foot in the door. Of those who do, a sizeable number are likely to drift from short-term contract to short-term contract until they become disillusioned and look elsewhere."

# Publish or Perish



"Surely you were aware when you accepted the position, Professor, that it was publish or perish."



# Publish or Perish

The purpose of an academic is to produce  
*and*  
disseminate research results.

Publications advertise your

- **skills**
- **areas of interest**
- **expertise**

Publications allow your work output to be

- **evaluated**
- **compared**

# Publish or Perish

- What's in it for the university?
  - Publications advertise the strengths and areas of interest of the university
  - Publications generate direct income from the federal government from publications
  - Publications by research students are an indicator of research training success and help attract students
  - Publications are a key requirement for course accreditations such as EQUIS or AACSB.
- 'What helps you succeed helps us succeed!'

# Scientific publications –why do they matter?

- Papers are the format we choose to make our research outcomes persistent as additions to the body of knowledge.
- Papers are the main proof of valid research activity.
- Papers are the best way for you to market your skills and creativity.
- Papers are the best mechanism for getting feedback about your research from others.
- Papers helps you become a member of a research community and influence it.
- Writing helps clarify your ideas and fit them into the current state of your field.
- Writing keeps your teaching fresh.

# You are what you publish!

- Publications are the most important KPIs of an Academic. The number and quality of your publications will determine, at least to some degree, the level of success you will enjoy in your career.
  - **Number** of peer-reviewed publications
    - E.g., US Asst. Prof. minimum 8+ journal articles in 6 years to achieve tenure
    - E.g., Uni Hamburg expects around 4 or so A+ journal articles for a W2 professor; 6 or more for a W3 professor.
  - **Quality** of peer-reviewed publications
    - Citations to your paper: they track which papers reference your paper
      - Raw data
      - H-index
      - G-index
    - The type and quality of the outlet in which your paper is published
      - Journal Impact Factor
      - Journal ratings

# Publications matter to hiring and promotion/tenure



## Junior Professor (W1) for Digital Innovation and Entrepreneurship

**Institution:** Faculty of Business Administration (Hamburg Business School)

**Salary level:** W1

**Commencement of duties:** as soon as possible

**Application deadline:** 2021-10-14

### Responsibilities:

The successful candidate is expected to teach and conduct research in the field. The successful applicant is also expected to perform academic duties in the field of digital innovation and digital entrepreneurship. This includes the initiation, preparation, and implementation of research projects as well as relevant publications.

Applicants are expected to teach courses in the field of digital innovation and digital entrepreneurship in the bachelor's and master's degree programs offered by the Faculty of Business Administration (Hamburg Business School). Integration of teaching and transfer activities is desired.

The successful candidate is expected to actively expand research in the field of digital innovation and entrepreneurship in collaboration with the Professor for Information Systems and Digital Innovation.

# Academics are ranked, literally.

**AIS RESEARCH RANKINGS**

RANKINGS ARTICLE SEARCH INFORMATION MEMBERSHIP LOG OUT

## SCHOLAR RANKINGS

The rankings are based on the following selection:  
 Time Window: 2016-2020  
 Journals selected: EJIS, ISJ, ISR, JAIS, JMIS, MISQ, JSIS, JIT  
 Sorted by: Normal Count

Display: 50

Rank	Author Name	Normal Count	Adjusted Count	Weighted Count	Straight Count
1	Paul Lowry	22	6.7	9.2	5
2	Viswanath Venkatesh	21	6.21	8.7	12
3	Lars Mathiasen	17	5.92	8.5	0
3	Jason Thatcher	17	4.65	6.3	1
5	Liangfei Qiu	16	5.03	7.2	4
5	Yong Tan	16	5.08	7	0
7	Alan Dennis	15	5.53	7.9	2
8	Kalle Lyytinen	13	4.42	6.1	2
8	Sunil Mithas	13	4.42	6.5	3
8	Shan Pan	13	3.75	4.9	1
8	Paul Pavlou	13	4.5	6.5	0
8	Alain Pinsonneault	13	4.37	6.1	1
13	Yili Hong	12	3.65	5.2	4
13	Arun Rai	12	3.83	5.4	0
15	Izak Benbasat	11	3.92	5.7	0
15	Varun Grover	11	3.83	5.3	2
15	Mark Keil	11	3.5	4.9	1
15	Subodha Kumar	11	3.67	5.3	1
15	Vijay Mookerjee	11	3.25	4.5	0
15	Andrew Whinston	11	3.17	4.7	0
21	Alexander Benlian	10	3.92	5.1	3
21	Atok Gupta	10	2.83	3.8	1
23	Gordon Burch	9	3.08	4.3	3
23	Hsinchun Chen	9	2.45	3.5	0
23	Anindya Chose	9	3	4.3	2
23	Anandasivam Gopal	9	3.08	4.5	1
23	Gregory Moody	9	2.48	3.7	4
23	Jay Nunamaker	9	2.32	3.1	1
23	Wonseok Oh	9	2.37	3.1	1
23	Jan Recker	9	3.18	4.5	3
31	Gediminas Adomavicius	8	2.33	3.2	3
31	Jeffrey Jenkins	8	1.65	2.4	2

**VIEW RANKINGS BY:**

Display by:  University  Author

Journals: AIS 8

MISQ  ISR  
 JAIS  JMIS  
 EJIS  ISJ  
 JSIS  JIT

Years: 2016 to 2020  
 Last 3 Years | Last 5 Years

Region:  World Wide  
 Americas  
 Europe, Africa, Middle East  
 Asia, Pacific

Sort by:  Normal  
 Adjusted  
 Weighted  
 Straight

**Display Results**

<https://www.aisresearchrankings.org/>

## DIE JUNGEN WILDEN

Die forschungsstärksten Betriebswirte unter 40 Jahren<sup>2</sup> (2014 bis 2018)

Rang	Name	Hochschule (Hauptaffiliation)	Punkte	Anzahl Publikationen
1	Jan Recker	Universität Köln	12.63	145
2	Patrick Veite	Leuphana Universität Lüneburg	11.48	208
3	Christoph Glock	TU Darmstadt	9.42	104
4	Christoph Rosenkranz	Universität Köln	8.65	77
5	Nadine Gatzert	Universität Erlangen-Nürnberg	6.64	60
6	Sven Laumer	Universität Erlangen-Nürnberg	6.14	84
7	All Sunyaev	Karlsruhe Institute of Technology	6.04	89
8	Florian Jaehn	Helmut Schmidt-Universität Hamburg	5.97	33
9	Linus Dahländer	European School of Management and Technology	5.69	27
10	Jörn Block	Universität Trier	5.61	73
11	Simon Emde	TU Darmstadt	5.39	32
12	Benjamin Rainer Auer	BTU Cottbus	5.35	64
13	Andreas Engelen	TU Dortmund	5.22	50
14	Oliver Schilke	University of Arizona	5.04	37
15	Tobias Mettler	Universität Lausanne	5.02	46
16	Manuel Wiesche	TU München	4.98	59
17	Malte Fiedner	Universität Hamburg	4.98	38
18	Stefan Feuerriegel	ETH Zürich	4.97	53
19	Tom Stargardt	Universität Hamburg	4.92	47
20	Gregor Weiß	Universität Leipzig	4.91	44
21	Nils Urbach <sup>1</sup>	Universität Bayreuth	4.85	75
22	Dmitry Ivanov <sup>1</sup>	HWR Berlin/Universität Hamburg	4.81	50
23	Brinja Meiseberg	Universität Münster	4.78	30
24	Martin Jacob	WHU Koblenz/Vallendar	4.77	26
25	Marko Sarstedt	Universität Magdeburg	4.76	96

<sup>1</sup> doppelt affilliert, Zuordnung zu mehreren Hochschulen; <sup>2</sup> Stichtag 1.7.2018. Punktezahlen sind gerundet, bei gleicher Punktzahl entscheidet die dritte Nachkommastelle. **Quelle:** Forschungsmonitoring der KOF/ETH Zürich und des Dusseldorf Institute for Competition Economics. Das komplette Ranking bis Rang 100 gibt es unter [wiwo.de/bwl](http://wiwo.de/bwl).

<https://www.wiwo.de/erfolg/hochschule/bwl-ranking-jan-recker-wie-ticket-der-jungstar-der-bwl/23879002.html>

# A common misconception

- Publish or perish is not about **succeeding**. It is about **surviving**.
- Dissemination is not impact: You do not succeed as a scientist by getting papers published. You succeed by creating impact.
- What is **impact**?
  - Citations?
  - Rankings?
  - Tweets?
  - Changes in the world that go back to your ideas?

# Impact Metrics: Citation Data

- Harzing's Publish or Perish
  - Displays citation data for articles, authors and/or outlets
    - Raw data
    - Indices
- For example: H-index
  - A researcher with an index of  $h$  has published  $h$  papers with at least  $h$  citations each.



# Metrics Example: Citation Data

## - Harzing's Publish or Perish

<https://harzing.com/resources/publish-or-perish>

The screenshot displays the Harzing's Publish or Perish software interface. The main window is titled "Harzing's Publish or Perish" and shows the "Author impact analysis" results for the author "jan recker".

**Author's name:** jan recker

**Exclude these names:** (empty)

**Year of publication between:** 0 and 0

**Data source:** Google Scholar

**Results Summary:**

Papers:	214	Papers/authors:	101.71	h-index:	28	jan recker: all
Citations:	2819	Cites/year:	156.61	g-index:	47	Query date: 2013-12-16
Years:	18	Cites/auth/year:	66.72	hc-index:	24	Papers: 214
Cites/paper:	13.17	hi_annual:	0.94	hi_norm:	17	Citations: 2819
						Years: 18

**Main Results Table:**

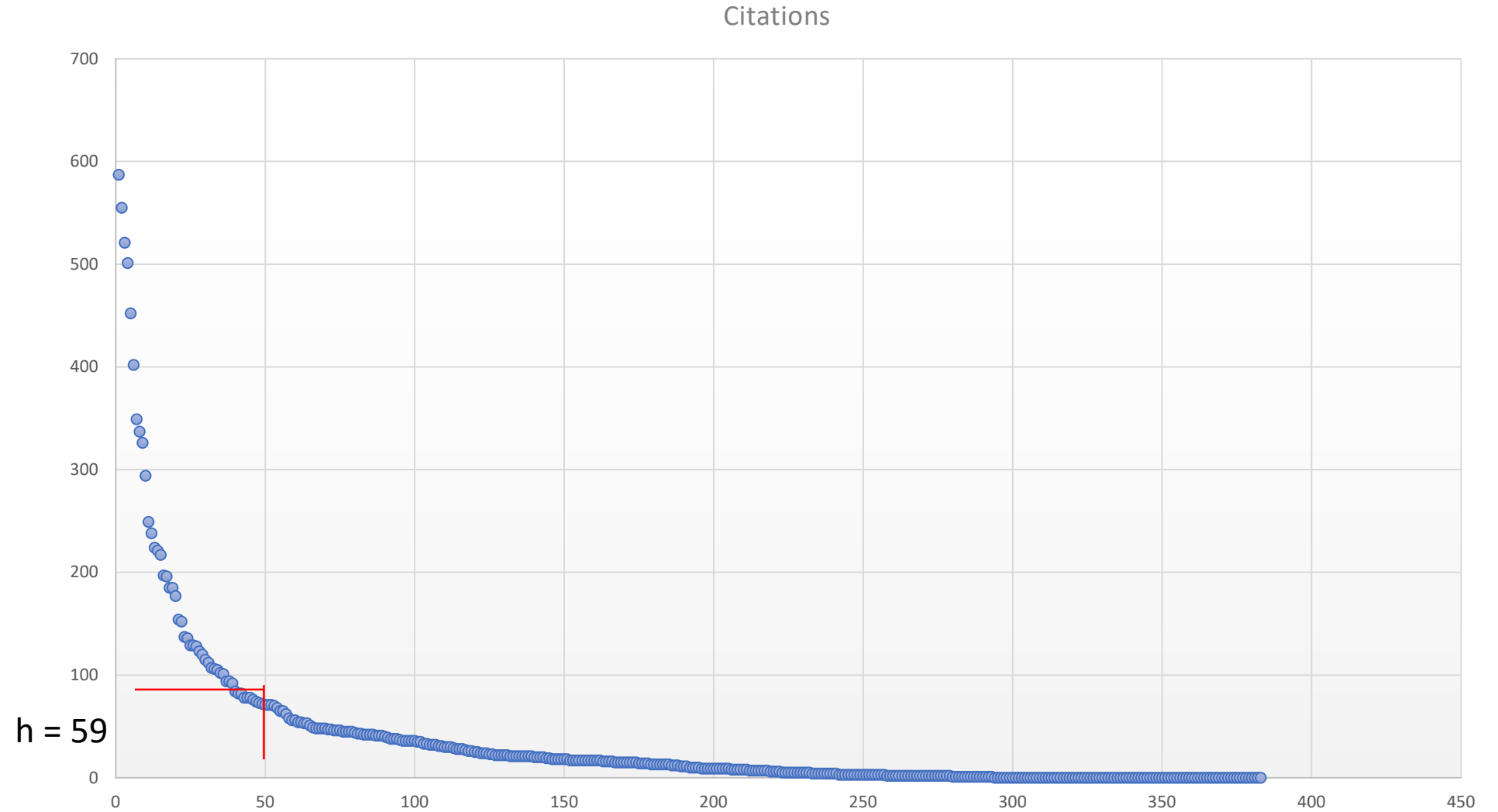
Cites	Per year	Rank	Authors	Title	Year	Publication	Publisher
2107	110.89	25	M Favus, E See...	Effect of oral alendronate on bone ...	1995	England Journal of ...	Mass Medical Soc
198	33.00	1	M Zur Muehlen, J R...	How much language is enough? The...	2008	Advanced information systems engineering	Springer
172	34.40	2	JC Recker, M Rose...	Business process modeling: a compa...	2009	Journal of the ...	eprints.qut.edu.au
145	17.75	3	JC Recker, J Mending	On the translation between BPMN a...	2006	The 18th International Conference on ...	eprints.qut.edu.au
115	14.38	4	JC Recker, M Induls...	How good is BPMN really? Insights fr...	2006		eprints.qut.edu.au
112	28.00	5	J Mending, HA Reij...	Activity labeling in process modeling:...	2010	Information Systems	Elsevier
112	28.00	6	J Recker	Opportunities and constraints: the c...	2010	Business Process Management Journal	emeraldinsight.com
109	21.80	7	M Indulska, J Recke...	Business process modeling: Current i...	2009	Advanced information ...	Springer
100	16.67	9	M Rosemann, J Rec...	Contextualisation of business proces...	2008	International Journal of Business ...	Inderscience
93	11.63	8	M Rosemann, J Rec...	A study of the evolution of the repr...	2006	Advanced Information ...	Springer
83	9.22	10	JC Recker, M Induls...	Do process modelling techniques get...	2005		eprints.qut.edu.au
78	15.60	75	RR Recker, F Marin...	Comparative effects of teriparatide ...	2009	Journal of Bone and ...	Wiley Online Library
70	8.75	11	M Rosemann, JC Re...	Context-aware process design: Expl...	2006	The 18th International Conference on ...	eprints.qut.edu.au
59	8.43	12	JC Recker, A Drelling	Does it matter which process modell...	2007		eprints.qut.edu.au
59	11.80	13	M Indulska, P Green...	Business process modeling: Perceive...	2009	Conceptual Modeling-ER ...	Springer
51	10.20	86	XG Liu, YF Pei, D...	Genome-wide association study of e...	2009	Medicine and science ...	ncbi.nlm.nih.gov
44	7.33	15	JC Recker	BPMN modeling—who, where, how a...	2008	BPTrends	eprints.qut.edu.au
43	10.75	14	J Recker	Continued use of process modeling g...	2010	European Journal of Information Systems	palgrave-journals.com
36	4.50	16	M Rosemann, JC Re...	Understanding context-awareness i...	2006		eprints.qut.edu.au
35	8.75	18	J vom Brocke, J Rec...	Value-oriented process modeling: int...	2010	Business Process ...	emeraldinsight.com
35	8.75	22	J Mending, J Recke...	On the usage of labels and icons in b...	2010	International Journal of ...	igi-global.com
34	5.67	17	J Recker	Understanding Process Modelling Gr...	2008		janrecker.com
33	4.71	21	J Recker, M Rosem...	Ontology-versus pattern-based eval...	2007	Communications of the ...	eprints.qut.edu.au
33	11.00	27	J Recker, M Rosem...	Do ontological deficiencies in modelin...	2011	MIS Quarterly	niisq.org
31	6.20	24	M Rosemann, J Rec...	Using ontology for the representatio...	2009	International Journal of ...	Inderscience
31	6.20	26	M Peleg, P Soffe...	Learning from context to improve bu...	2009	BPTrends	eprints.qut.edu.au
31	7.75	29	J Recker, M Induls...	The ontological deficiencies of proce...	2010	European Journal of ...	palgrave-journals.com
30	7.50	23	M Indulska, J Recker	13. Design science in IS research: a l...	2010	Information Systems Foundations	books.google.com
29	3.63	19	J Recker, J Mending...	Model-driven enterprise systems con...	2006	Advanced Information ...	Springer
29	3.63	20	J Recker, M Rosem...	On the syntax of reference model c...	2006	Business Process ...	Springer
28	4.00	28	JC Recker, M Indulska	An ontology-based evaluation of pro...	2007	IBIS-International Journal of ...	eprints.qut.edu.au
25	5.00	31	JC Recker, M zur M...	Measuring method complexity: UML ...	2009		eprints.qut.edu.au
23	7.67	32	JC Recker, A Drelling	The effects of content presentation ...	2011	Communications of the Association for ...	eprints.qut.edu.au
22	4.40	36	JC Recker, M Rose...	Teaching business process modelling...	2009	Communications of the Association for ...	eprints.qut.edu.au
21	3.50	30	J Mending, JC Recker	Towards systematic usage of labels ...	2008		eprints.qut.edu.au
21	2.63	33	JC Recker	Process modeling in the 21st century	2006	BPTrends	eprints.qut.edu.au
21	3.00	34	J Recker	A socio-pragmatic constructionist fra...	2007	Australasian Journal of Information Systems	Cambridge University Pr
20	5.00	37	S Seidel, JC Recker...	Enablers and barriers to the organiz...	2010	Proceeding of the 16th ...	eprints.qut.edu.au
20	6.67	38	R Brown, J Recker, ...	Using virtual worlds for collaborative...	2011	Business Process Management ...	emeraldinsight.com

**Status Bar:** 4.4.6.5000 0/6/10 rpm 11/10m 11/h 11/4h 468 total Done

# Fact about academic impact/citations: Few publications matter!

- 30% papers are never cited
- 20-30% papers are highly cited – they attract 80% of citations

# Citations and h-Index



# Official Ranking Lists for Scientific Publication Outlets (Conferences and Journals)



Return to: [\[ERA Access\]](#) : [\[Select FoR\]](#)

## 2010 finalised journals in a Field of Research

### 0806: Information Systems

ERA Journal ID	Ranking	Title	ISSN
36114	A*	ACM Transactions on Computer - Human Interaction	1073-0516 1557-7325
17730	A*	ACM Transactions on Computer Systems	0734-2071 1557-7333
17732	A*	ACM Transactions on Database Systems	0362-5915 1557-4644
17734	A*	ACM Transactions on Graphics	0730-0301 1557-7368
2	A*	ACM Transactions on Mathematical Software	0098-3500 1557-7295
17741	A*	ACM Transactions on Programming Languages and Systems	0164-0925 1558-4593 1057-4514
17743	A*	ACM Transactions on Software Engineering and Methodology	1049-331X 1557-7392
17849	A*	European Journal of Information Systems	0960-085X 1476-9344
17880	A*	IEEE Transactions on Pattern Analysis and Machine Intelligence	0162-8828
17882	A*	IEEE Transactions on Software Engineering	0098-5589 1939-3520
17900	A*	Information and Management	0378-7206 1872-7530
39628	A*	Information Systems	0306-4379 1873-6076
17913	A*	Information Systems Journal: an international journal promoting the study and practice of information systems	1350-1917 1365-2575 0959-2954
17914	A*	Information Systems Research	1047-7047 1526-5536
18011	A*	Journal of Information Technology	0268-3962 1466-4437
18030	A*	Journal of Management Information Systems	0742-1222 1557-928X
18072	A*	Management Science	0025-1909 1526-5501
18070	A*	MIS Quarterly	0276-7783
17735	A	ACM Transactions on Information and System Security	1094-9224 1557-7406
36115	A	ACM Transactions on Information Systems	1046-8188 1558-2868
32003	A	ACM Transactions on Internet Technology	1533-5399 1557-6051
39965	A	Communications of the Association for Information Systems	1529-3181
19287	A	Electronic Commerce Research	1389-5753 1572-9362
17046	A	Electronic Markets	1439-6701 1499-8990



Return to: [\[ERA Access\]](#) : [\[ERA conf\]](#) : [\[Select FoR\]](#)

## Conferences in 2010 updated list for the Field of Research

### 0806: Information Systems

Ranking	Title	ERA Conference ID
A	ACM Conference on Computer Supported Cooperative Work [CSCW]	42278
A	ACM International Conference on Information and Knowledge Management [CIKM]	42291
A	ACM International Conference on Research and Development in Information Retrieval [SIGIR]	42295
A	ACM Symposium on User Interface Software and Technology [UIST]	42336
A	Americas Conference on Information Systems [AMCIS]	42387
A	AoM Organizational Communication and Information Systems [OCIS]	42412
A	Australasian Conference on Information Systems [ACIS]	42485
A	British Computer Society Conference on Human-Computer Interaction [HCI]	42575
A	Computer Supported Collaborative Learning [CSCL]	42617
A	Conference on Innovative Data Systems Research [CIDR]	42651
A	European Conference on Information Systems [ECIS]	42778
A	Hawaii International Conference on System Sciences [HICSS]	42869
A	IEEE International Conference on Services Computing [SCC]	42968
A	IEEE International Conference on Web Services [ICWS]	42972
A	IEEE International Symposium on Wearable Computing [ISWC]	43005
A	IEEE Symposium on Visual Languages and Human-Centric Computing (was VL) [VL/HCC]	43053
A	IFIP TC13 Conference on Human-Computer Interaction [Interact]	43607
A	International Conference in Business Process Management [BPM]	43192
A	International Conference on Advanced Information Systems Engineering [CaISE]	43207
A	International Conference on Cooperative Information Systems [CoopIS]	43300
A	International Conference on Design Science Research in Information Systems and Technology [DESRIST]	43314
A	International Conference on Formal Ontology in Information Systems [FOIS]	43357
A	International Conference on Human Factors in Computing Systems [CHI]	43377

# German variant: VHB Jourqual




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Nachwuchs
Wissenschaftsförderung
Veranstaltungen
WK / Fachgruppen
VHB informiert
Mitgliederbereich

Sie sind hier: [VHB4you](#) / [VHB-JOURQUAL](#) / [VHB-JOURQUAL 3](#) / [Teilrating WI](#) Montag, 01. April 2019

**VHB4you**

- Stellenbörse
- Business Research
- VHB-JOURQUAL
- Leitung und Beirat
- VHB-JOURQUAL 3
- Begleitdokumente
- Gesamtliste
- Teilrating ABWL
- Teilrating BA-FI
- Teilrating STEU
- Teilrating HSM
- Teilrating INT
- Teilrating LOG
- Teilrating MARK
- Teilrating NAMA
- Teilrating OBWL
- Teilrating OR
- Teilrating ORG / PERS
- Teilrating PROD
- Teilrating RECH
- Teilrating SM
- Teilrating TIE
- Teilrating WEW
- Teilrating WI**
- Teilrating DL-Handel
- Teilrating Entrepreneurship
- Teilrating Gesundheitswesen
- Teilrating KAU
- Teilrating Medien Kultur Freizeit
- Teilrating Versicherungswirtschaft
- Tabellen zum Download
- VHB-JOURQUAL: Archiv
- Ethik
- KFA - Frauen in Aufsichtsräte Events & more
- Facharbeit in der BWL
- Klassiker der BWL
- Vakanzenstudie
- Dissertation: Schicksale betriebswirtschaftlicher

## Teilrating Wirtschaftsinformatik

Für die korrekte Ansicht der nachfolgenden Tabelle benötigen Sie Javascript. Bitte aktivieren Sie JavaScript in Ihrem Browser. Wie Sie JavaScript in Ihrem Browser aktivieren, können Sie [hier](#) nachlesen. [Hier](#) haben die Möglichkeit, sich die komplette Tabelle als Excel- oder PDF-Datei herunterzuladen. Erläuterungen zur Tabelle finden Sie [hier](#).

A+ = Herausragende, weltweit führende wissenschaftliche Zeitschrift auf dem Gebiet der BWL oder ihrer Teildisziplinen											
Zeitschrift	JQ3	JQ2	Anzahl Voten	Anteil Rating o. besser	Verteilung der Voten					Nicht Wiss.	Nicht BWL
					A+	A	B	C	D		
Information Systems Research (ISR)	A+	A+	163	78,5%	78,5%	16,0%	3,7%	1,8%	0,0%	0,0%	0,0%
Management Information Systems Quarterly (MISQ)	A+	A	201	65,2%	65,2%	27,4%	4,0%	3,0%	0,5%	0,0%	0,5%

A = Führende wissenschaftliche Zeitschrift auf dem Gebiet der BWL oder ihrer Teildisziplinen											
Zeitschrift	JQ3	JQ2	Anzahl Voten	Anteil Rating o. besser	Verteilung der Voten					Nicht Wiss.	Nicht BWL
					A+	A	B	C	D		
Journal of Management Information Systems	A	A	111	85,6%	22,5%	63,1%	9,0%	4,5%	0,9%	0,0%	0,0%
Mathematical Programming	A	A	35	80,0%	25,7%	54,3%	17,1%	2,9%	0,0%	0,0%	7,9%
Journal of the Association for Information Systems (JAIS)	A	B	107	73,8%	18,7%	55,1%	17,8%	8,4%	0,0%	0,0%	0,0%
Journal of Information Technology	A	B	84	67,9%	14,3%	53,6%	22,6%	9,5%	0,0%	0,0%	0,0%
Proceedings of the International Conference on Information Systems (ICIS)	A	A	161	62,7%	11,2%	51,6%	24,2%	9,9%	3,1%	6,9%	0,0%
Information Systems Journal (ISJ)	A	B	94	60,6%	12,8%	47,9%	30,9%	6,4%	2,1%	0,0%	0,0%
The Journal of Strategic Information	A	B	92	59,8%	6,5%	53,3%	32,6%	6,5%	1,1%	0,0%	0,0%

<https://vhbonline.org/vhb4you/jourqual/vhb-jourqual-3/teilrating-wi/>

# AIS Variant: The Senior Scholar's Basket

+Share |    

## Senior Scholars' Basket of Journals

The College of Senior Scholars encourages colleagues, as well as deans and department chairs, to treat a "basket" of eight journals as top journals in our field. Such a list is intended to provide more consistency and meaningfulness to tenure and promotion cases. This list was adopted from a formal statement by the "College of Senior Scholars" as of April 23, 2007, and revised on December 6, 2011.

The College of Senior Scholars consists of senior information systems academics who have served as editors-in-chief of the journals listed in the College of Senior Scholars basket of eight journals, current and former ICIS chairs and program chairs, current and former presidents of AIS, as well as all Leo Awards winners and AIS Fellows.

The journal list is limited to those in the "IS field," and omits both multidisciplinary outlets and specialty areas. Nevertheless, the list recognizes topical, methodological, and geographical diversity. In addition, the review processes are stringent, editorial board members are widely-respected and recognized, and there is international readership and contribution.

It is important to note that a short journal list such as this is most appropriate for PhD-granting, research-oriented universities, and most likely not at all appropriate in cases where there are few research resources and high teaching loads. In those cases, this short journal list should be augmented liberally by careful deliberation of departments and/or department chairs. For instance, at the teaching-intensive end of the spectrum, many schools (perhaps appropriately) count all refereed outlets. Publishing in this small set of journals is exceedingly difficult already, and nearly impossible without abundant resources for careful research.

The College of Senior Scholars emphasizes that this list should not be construed as a replacement for assessments based on objective measures such as citation indices or author affiliation indices. It should also not be seen as a substitute for assessments based on large-sample opinion surveys currently summarized on AISWorld. It is meant to provide an alternative, based on the opinions of the members of the College of Senior Scholars. All departments and/or department chairs should consider those other resources before making their final decisions.

Augmenting the list can also be important in some research schools. For example, in schools with a highly technical focus, the adopted journal list should obviously include highly-rated and/or highly-cited technical journals. Other programs draw from and contribute to a multidisciplinary base, and should include journals from other fields such as computer science, economics, psychology, biometrics, and human-computer interaction. The College of Senior Scholars focused on behavioral, business-oriented IS research, which might reflect a majority, but is not a universal model that fits (or even should fit) all schools. It strengthens our discipline to integrate our knowledge with other fields, and provides more choices for students, so interdisciplinary work should be encouraged.

The eight journals in the list are, in alphabetical order:

- *European Journal of Information Systems*
- *Information Systems Journal*
- *Information Systems Research*
- *Journal of AIS*
- *Journal of Information Technology*
- *Journal of MIS*
- *Journal of Strategic Information Systems*
- *MIS Quarterly*

<https://aisnet.org/general/custom.asp?page=SeniorScholarBasket>

# US Variant: FT50 Ranking

<https://www.ft.com/content/3405a512-5cbb-11e1-8f1f-00144feabdc0>

University of Chicago [+ Add to myFT](#)

## 50 Journals used in FT Research Rank

Laurent Ormans SEPTEMBER 12 2016



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The Financial Times conducted a review in May 2016 of the journals that count towards its research rank. As a result, the number of journals considered went up to 50 compared to 45 previously.

The 200 odd business schools that take part in either the FT Global MBA, Executive MBA or Online MBA [rankings](#) were invited to submit up to five new journals to include and five journals to exclude from the previous list. A total of 140 schools submitted their votes, a response rate of 67 per cent.

Out of the 10 selected journals up for review, we decided to drop the four journals that each received 60 per cent or more of the votes: Academy of Management Perspectives, California Management Review, Journal of the American Statistical Association and RAND Journal of Economics.

Out of the 150 new journals suggested, the nine journals (\*) with the most votes were added to the list.

The list below details the 50 journals used by the Financial Times in compiling the FT Research rank, included in the [Global MBA](#), [EMBA](#) and [Online MBA](#) rankings.

1. Academy of Management Journal
2. Academy of Management Review
3. Accounting, Organizations and Society
4. Administrative Science Quarterly
5. American Economic Review
6. Contemporary Accounting Research

# Metrics: Journal Impact Factor

- The journal impact factor (IF) is a measure of the frequency with which the "average article" in a journal has been cited in a particular year.

*A = the number of times articles published in 2019 and 2020 were cited during 2021*

*B = the total number of 'citable items' published by that journal in 2019 and 2020*

2021 impact factor =  $A / B$



# How scientific publishing works

# Writing Scientific Papers: What do we write about?

- Research!
  - What does that mean?
    - The process and, importantly, the outcomes of a scientific activity.
      - This typically means that we write about research that has been completed.
      - Leads to publication bias: We typically only see “successful research” being published.
    - Very often it is also one of the main ways in which we can paint a picture of ourselves as scholars.

▪

# Myth: You can publish anything anywhere

- Publication outlets differ WIDELY in quality
  - Good outlets will only accept good papers describing good research.
  - Publish high-impact papers in high-quality outlets.
- Open publishing process
  - Once you publish, your ideas are out there!
  - Can be good or bad for reputation
- One shot option:
  - Once you published a result, you can't publish it again!

# Publication Outlets

- What different publication **formats** exist?
  - books
  - book chapters
  - journal articles
  - conference papers
  - workshop papers
  - technical reports
  - ...
  
- What are the **differences**?

# The most important lessons from this session

- Good paper
  - Purposive
  - Goals clearly defined.
  - Reporting of procedures (including flaws) complete and honest.
  - Objectivity clearly evident.
  - Describe the use of appropriate analytical techniques.
  - Conclusions limited to those clearly justified by the data / facts.
- Good research
  - Purposive
  - Goals clearly defined.
  - Procedure replicable.
  - Objectivity clearly evident.
  - Use appropriate analytical techniques.
  - Conclusions limited to those clearly justified by the data / facts.

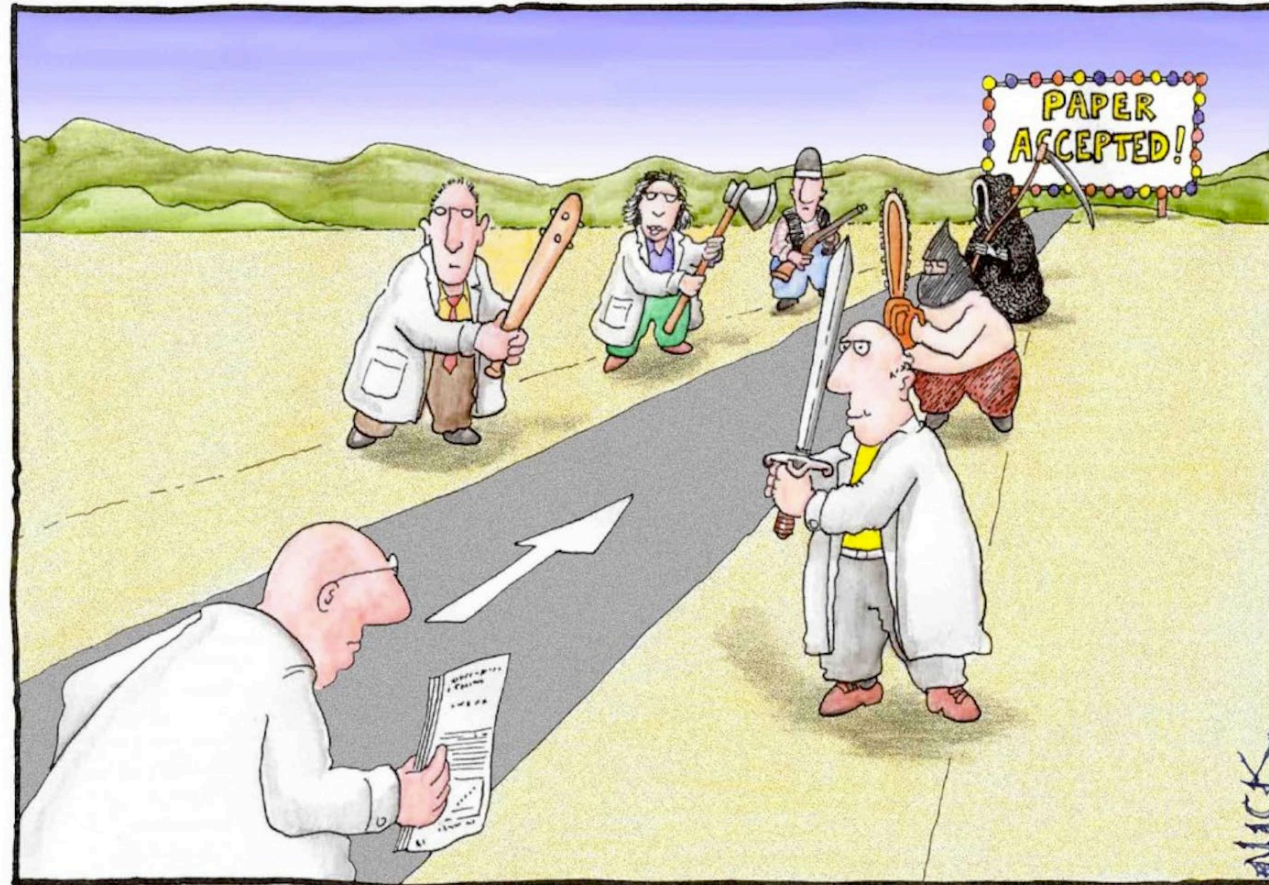
# Two golden rules of publishing

1. You can write good papers only when you do good research.
2. You can waste good research by not writing about it well enough.

# What is different in scientific publications from others?

- Scientific publications are peer-reviewed.
  - means writings are subjected to the scrutiny of experts in the same field before a paper will be published.
  - requires a community of experts in a narrowly defined field who are qualified to perform impartial review.
  - Most often double-blind review: authors and reviewers do not know each others' identity.
- The review process is managed by editors.
  - typically a successful senior scientist familiar with the field of the manuscript.
  - Makes decisions about the publication of the manuscript.

# Peer review



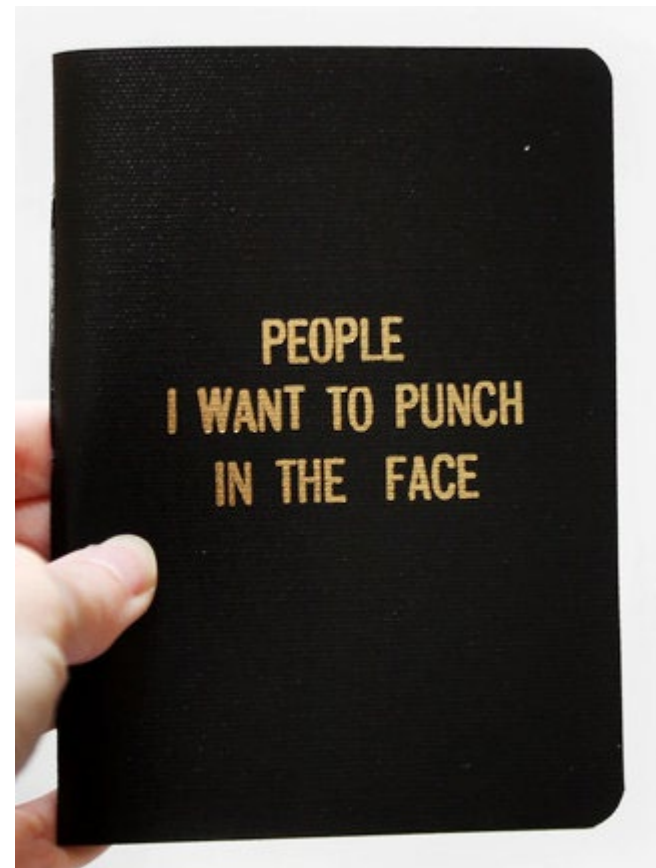
Most scientists regarded the new streamlined peer-review process as "quite an improvement."



# Confessions

*“It is natural to feel bad about rejections. Unfortunately, I get them all the time too. Academia is a pretty brutal profession in that regard and I wouldn’t want to convey otherwise.”*

# The review process depends on the editorial and review board structure



# Different Board Structures

MISQ, ISR, ISJ

EiC

SE

AE

JAIS, JITTA

EiC

SE

JMIS, EJIS, I&M, CAIS

EiC

AE

*Reviewers*

# Writing a Scientific Paper

# How do we write a paper?

- A scientific paper must contain enough information to enable peers (the scientific community) to:
  - Assess observations/analyses/data/interpretations/conclusions
  - Repeat the experiments/study if they want
  - Evaluate intellectual processes (i.e. are the authors' conclusions and interpretations valid?)

# Process for writing a scientific paper

1. Develop an outline with a structure.
2. Revise the structure.
3. Start populating the sections.
  - This typically is not sequential.
  - The first paragraph of the Introduction is the hardest part of a paper to write.
  - Methods is the easiest and can be started even when the research is unfinished.
4. Revise the sections.
5. Revise the paper/thesis.
6. Put it in a drawer, take it out, read again, revise again.
7. Submit.

# Why the structure of a paper matters

- Science is about **new ideas in old formats**.
- Reviewers and readers are accustomed to certain ways of reading an article
  - This is called a “script”
- If they encounter a different script, they get scared.
- Thus, in principle, we should follow established scripts and make only mindful variations.

# Macro-structure of many empirical papers

Section	Associated headings
Theoretical front end	<ul style="list-style-type: none"><li>• Background</li><li>• Conceptual development</li><li>• Hypotheses development</li><li>• Literature review</li><li>• Research hypotheses</li><li>• Research model</li><li>• Research questions</li><li>• Theory</li><li>• Theoretical background</li><li>• Theoretical development</li><li>• Theoretical model</li></ul>
Method	<ul style="list-style-type: none"><li>• Analysis</li><li>• Data collection</li><li>• Findings</li><li>• Methodology</li><li>• Methods</li><li>• Model testing</li><li>• Procedure</li><li>• Research methodology</li><li>• Results</li></ul>
Implications	<ul style="list-style-type: none"><li>• Contributions</li><li>• Discussion</li><li>• Future Research</li><li>• Implications</li><li>• Implications for future research</li><li>• Implications for practice</li><li>• Limitations</li><li>• Practical implications</li><li>• Recommendations</li><li>• Theoretical implications</li></ul>



# Structuring your Paper

- The Typical Structure of a Research Paper:
  1. Introduction
  2. Theoretical Background/Literature Review
  3. Research Model/Hypotheses/Propositions
  4. Procedure/Approach/Methodology/Research Design
  5. Results
  6. Discussion of Results
  7. Implications – for Research and Practice
  8. Conclusion

# Examples

Generic Paper Structure	Example I (Recker et al., 2011) quantitative study published in <i>MIS Quarterly</i>	Example II (Seidel et al., 2013) qualitative study published in <i>MIS Quarterly</i>
• Introduction	• Introduction	• Introduction
• Theoretical Background/ Literature Review	• Theory	• Theoretical Background
• Research Model/Hypothesis or Theory Development (where appropriate)	• Proposition Development	
• Procedure/Approach/ Methodology/Research Design	• Research Method	• Research Method
• Results/Findings/Outcomes	• Scale Validation • Results	• Interpretation and Analysis of the Case • An Integrated Model of Functional Affordances in the Sustainability Transformation Process • Two Vignettes of Sensemaking and Sustainable Practicing
• Discussion	• Discussion (includes subsections for Limitations and Implications)	• Discussion and Implications
• Limitations and Implications for Research and Practice		• Limitations
• Conclusion	• Conclusion	• Conclusion

# Filling the sections: What goes where?



1. Introduction
2. Background
3. Theory/Research Model
4. Method/Procedures/Approach/Methodology
5. Results
6. Discussion
7. Implications – for Research and Practice
8. Conclusion

# Section: Introduction

- **Contains three parts, and three parts only:**
  - **Motivation:** What is your problem, and why is it a problem?
  - **Specification:** what is your specific research question/research outcome? What is your research approach (in very general terms)?
  - **Outline:** how will the paper tell us about what you did?

# Section: Introduction

- Tips

- Good introductions are SHORT. The rule of thumb is not more than 1.5 pages with 2.0 line spacing
- Place the study in the context of previous research but tell only what the reader needs to know to understand the present work.
- Either avoid jargon or explain it very clearly.

# Example

## Introduction

The deterioration of the natural environment is a preeminent issue for our society (World Commission on Environment and Development 1987), and business organizations are a main contributor to this challenge (Melville 2010). In responding to increased social, cultural, and also legislative pressures that expand the responsibility of firms to increase attention to environmental concerns (Mintzberg et al. 2002), chief executives have increasingly—in some countries reportedly up to 60 percent (Gadatsch 2011)—committed to “Green IT” initiatives and similar sustainability transformation efforts (Elliot 2011). These initiatives build on information systems as a key resource to assist organizations in transforming to more sustainable entities (Thibodeau 2007), notably because information systems have been argued to be the greatest force for productivity improvement in the last half century (Watson et al. 2010).

Notwithstanding their evident relevance, it remains unclear how exactly information systems can contribute to the sustainability transformation of organizations. Much of the literature has explored specific types of systems and issues related to these systems, including, for example, the role of virtual collaboration systems for green initiatives (Bose and Luo 2011), information systems for managing environmental compliance issues (Butler 2011), or the environmentally conscious design of information systems (Zhang et al. 2011), without examining in detail how information systems can lead to the establishment of environmentally sustainable work practices in an organization.

In this paper, we aim to identify the functional affordances information systems can provide to assist organizations in establishing environmentally sustainable work practices. Functional affordances are potential uses originating in material properties of information systems that identify what individuals might be able to use the system for, given the user’s capabilities and goals (Markus and Silver 2008). Identifying functional affordances of information systems that relate to the goal of establishing environmentally sustainable work practices thus assists in understanding how green information systems (Dedrick 2010; Melville 2010; Watson et al. 2010) can be designed that aid tackling sustainability challenges such as energy consumption, waste reduction, resource utilization, or emission management. This knowledge is also important for organizations that need an understanding of how to leverage existing and new information systems in an attempt to better their own environmental footprint. The core guiding research question of our paper is

*How do information systems contribute to the implementation of sustainable work practices?*

Therefore, the objectives of this paper are (1) to provide an empirical description of the process of developing sustainable work practices on the basis of information systems, and (2) to integrate the empirical findings into a theoretical model grounded in the case data. To achieve these objectives, we conducted a revelatory qualitative case study (Dubé and Paré 2003) with a global software solutions provider that has successfully undergone a sustainability transformation. Based on this case, we develop a theoretical framework that conceptualizes and integrates four key functional affordances that are relevant to implementing environmentally sustainable work practices, namely *reflective disclosure*, *information democratization*, *output management*, and *delocalization*.

Three central contributions are provided. First, we present an empirically developed understanding of the factors pertinent to the implementation of sustainable work practices in an organization, specifically those that relate to functional affordances created through information systems. In the process, we contribute substantively to an understanding of functional affordances created by information systems and how these affordances allow organizations to identify and implement environmentally more sustainable work practices. Second, the paper provides an empirically grounded basis for further theorizing around the transformative power of information systems in creating an environmentally sustainable society. Our argument is that information systems can provide action possibilities that are characterized as environmentally sensible practices. Acting upon these possibilities allows organizations and individuals alike to lower environmental costs and to promote environmentally conscious ways of working. Third, our work generates design advice about the material properties of information systems that are required to provide functional affordances allowing environmentally sustainable work practices.

On the basis of our research, we argue that the primary role of information systems in sustainability transformation is to create action possibilities for sensemaking and sustainable practicing. The creation of these affordances is a key transformative power that information systems provide to organizations in becoming environmentally sustainable.

We proceed as follows. The next section presents a discussion of relevant literature analyzed according to the characteristics of organizational sustainability transformations and the role of information systems within such transformations, and details the role of two theoretical lenses—*functional affordances* and *information systems*—as two theoretical lenses relevant to building an understanding of the role of information systems in sustainability transformations. The section that follows details our research method. The next section presents the case interpretation and findings, and the following section

# Motivating a Paper: The Gap vs the Hook

- The Gap is usually the argument that something **hasn't been done** yet.
  - This is weak because some things shouldn't be done.
- The Hook is a strategy to find a **problem** that **someone** cares about
  - Can be academic, theoretical, practical...

# Good Gap versus Bad Gap

- Bad Gap:
  - “nobody has studied...”
  - “the literature is silent on...”
- Good Gap = Problem:
  - Resolve a contradiction in the literature
  - Extending the literature to account for specific, important phenomena / understandings / contexts (and why)
  - Solve a puzzle for practice that is important but not addressed by the literature
  - Show how existing literature may mislead our thinking



# The Hook Formula for a Clear Introduction

- Paragraph 1 – Hook                      Motivation, need, ‘hook’
- Paragraph 2 – Gap                      Situate in research – identify opportunity
- Paragraph 3 – Study                      How investigate? Process, context & why?
- Paragraph 4 – Conclusion              Findings, framework, contribution
- Paragraph 5 – Outline  
with...                                      Outline the paper: first ..., second..., then... and , we conclude

# The Formula in 9 Sentences

Hook

1. Sentence stating what the domain is and why it is important.

Gap

2. What is the overall problem or situation in that domain

3. What are the conclusions of existing literature for that problem / situation in this domain?

Study

4. What is the problem or issue with that existing literature?

5. Indicate that this study addresses that problem or issue and state how.

Conclusion

6. Describe the study, sample, and method for addressing that problem or issue.

7. Describe what you found.

Outline

8. State explicitly how these findings extend and contribute to existing knowledge.

9. Describe the overall outline of the paper.

# Section: Background

- Provides what is required to facilitate an understanding of your research processes and findings
- Not more. Not less.
  - Relevant theories
  - Relevant concepts/terms that you need
  - Relevant previous methods/algorithms/findings/arguments on which your work is based

# Section: Background

- What is it not?
  - A recap or listing of all other works in the area,
  - Every paper that you have read about the area,
  - Criticism of all other works in the area, or
  - A collection of term definitions.

# Writing the Background Section

- Tips

- Organise the section according to topics, not as a list of studies.
  - Discuss related work, rather than just listing it.
  - Explain how your work complements others' work.
  - Explain how your work contradicts previous work.
  - Highlight areas in which your work builds on others' work.
  - Keep it concise.'
- 
- My rule of thumb: you want to get to your own contributions no later than page 15!

# The Background Section

## - Example (1)

**Our research mainly relates** to semantic and pragmatic aspects of process models. We complement works that establish a connection between structural metrics and both understanding and error-probability [CGP+05, MRC07, MVD+08, GPP08] by investigating whether the verb-object labeling style might be superior to other styles. **In contrast to previous works like [Mil61, SM01, MCH03]** that recommend verb-object labels, we provide a sound empirical justification for this guideline.

# The Background Section

## - Example (2)

Recent research has started to examine process model understandability, for instance, the impact of process model structure, model user competency, and activity node labeling. While the impact of structural properties is clearly identified [4], it is also reported that model readers systematically overestimate their ability to draw correct conclusions from a model [3]. Furthermore, shorter activity labels have been found to be positively correlated with understanding [5]. **This raises the question in how far** a better representation of domain semantics in process models beyond the use of text labels only would improve understanding.

**In our work we continue along this line of work towards more understandable process models.** Current practice indicates that the labeling of activities is a rather arbitrary task in modeling initiatives and one that is sometimes done without a great deal of thought [8]. This can undermine the understandability of the resulting models in cases where the meaning of the labels is unclear, not readily understandable or simply counter-intuitive to the reader.

# The Research Model/Theory/Hypotheses Development Section

- This is where the magic happens but it's not part of every paper.
- This is NOT where you discuss an existing theory but where you develop NEW theory.
- Introduces, arranges and argues an overview of the factors being studied in an empirical setting
  - The independent and dependent factors in an experiment,
  - The important theoretical constructs and their relationships in a field study, or
  - The set of hypotheses or propositions to be tested/explored/falsified



# Section: Research Model

How do we organize the research model section?

- Start with an overview of conceptual or research model being developed
- Discuss components of the model in paragraphs with relevant subheadings that reflect the model
- follow a disciplined structure that moves from concepts to associations to laws to boundaries
- Each hypothesis/proposition must be preceded by a strong argument as to why it should hold.

# Tips for Theory/Model Development

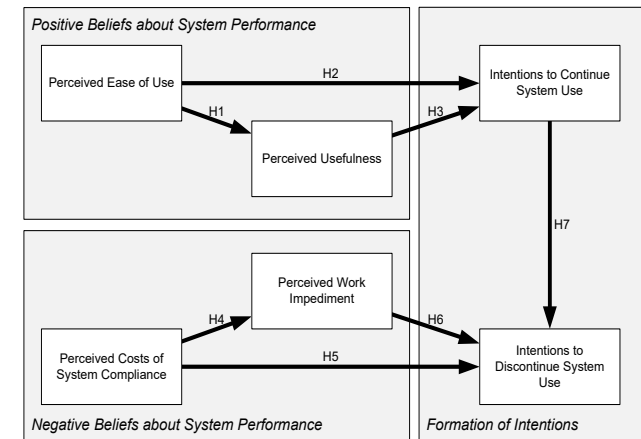
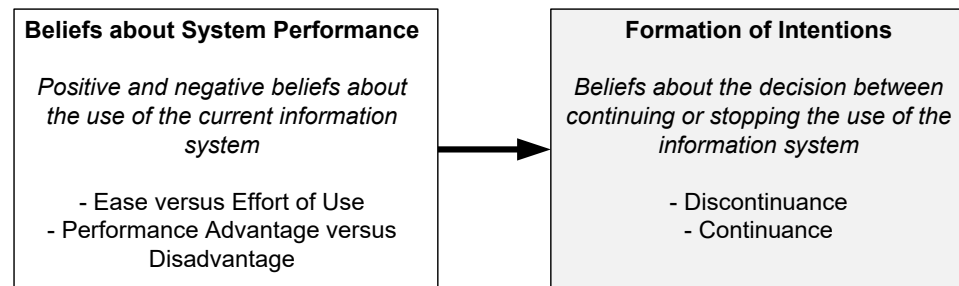
- Explain concepts or constructs in **tables**

Table 1: Conceptualization of *Green IS practices*.

Second-order construct	First-order constructs	Definition	Description
<i>Green IS practices</i>	<i>Process re-engineering</i>	IS-enabled reengineering of business and production processes	Green IS practices that enhance the resource efficiency of business and production processes through IS-enabled process re-engineering and business transformation.
	<i>Environmental management systems</i>	Use of IS-based environmental management systems to control resource flows, waste, and emissions	Use of IS-based environmental management systems that track resource flows, waste, and emissions (to provide information for environmental control and sustainability-oriented decision-making); enhance transparency; and provide aggregated information for external stakeholders through environmental reports.
	<i>Environmental technologies</i>	IS-enabled environmental technologies that reduce the footprints of products and services	Improvement of the environmental characteristics of end products and services with the help of Green IS, such as smart buildings, traffic management systems, smart grids, engine control units, and dematerialization through digital services.

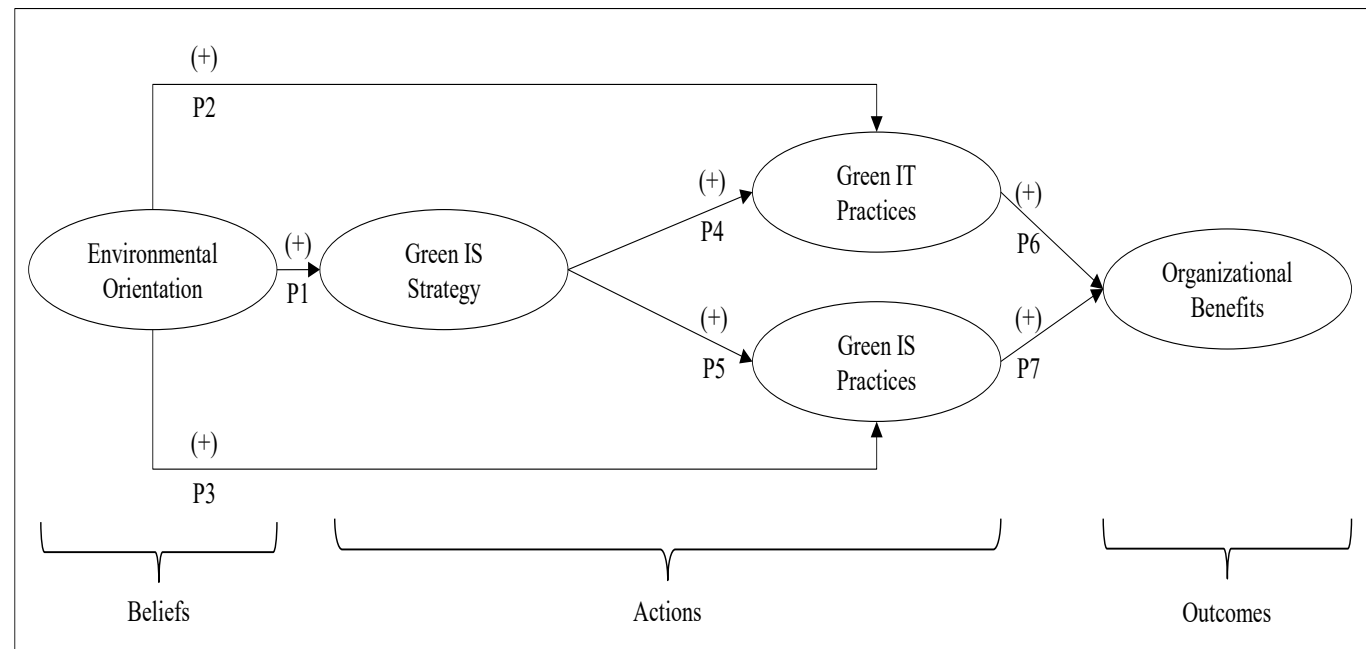
# Tips for Theory/Model Development

- Differentiate between conceptual level and empirical level



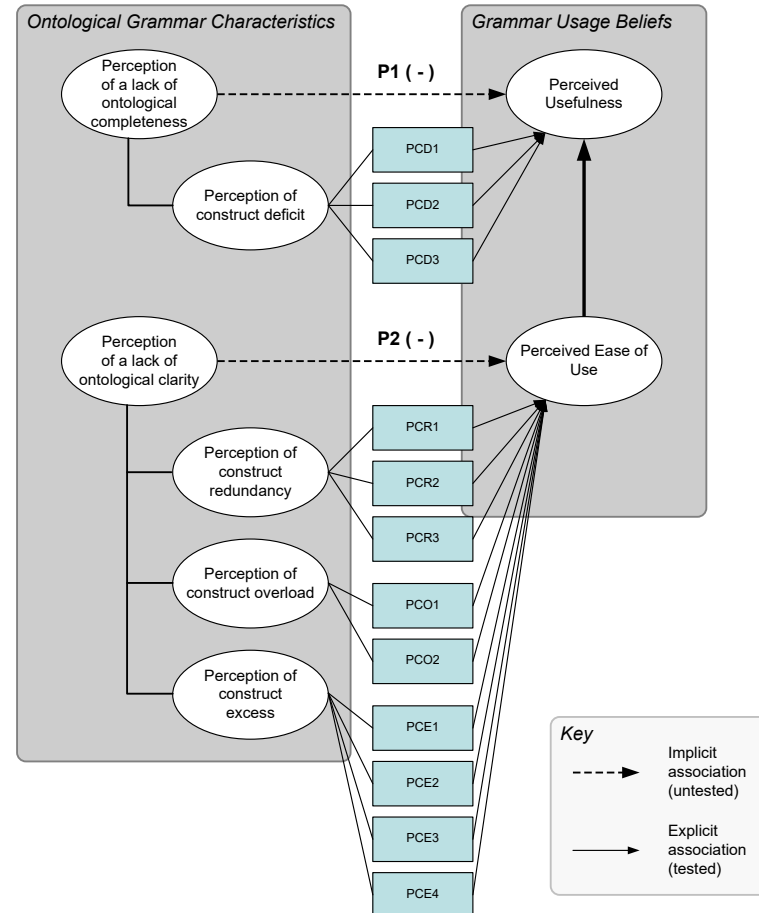
Recker, J. "Reasoning about Discontinuance of Information System Use," *Journal of Information Technology Theory and Application* (17:2) 2016, pp 101-126.

# Differentiate between conceptual level and empirical level



Loeser, F., Recker, J., vom Brocke, J., Molla, A., & Zarnekow, R. (2017). How IT Executives Create Organizational Benefits by Translating Environmental Strategies into Green IS Initiatives. *Information Systems Journal*, 27(4), 503-553.

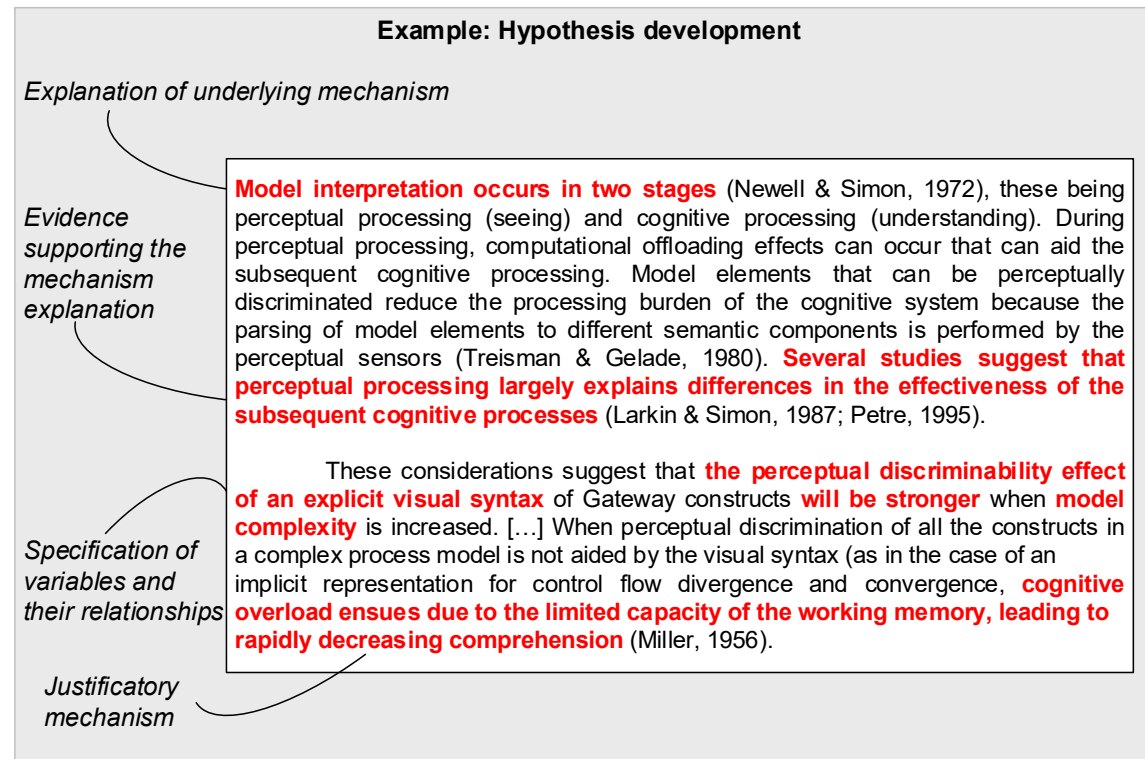
# Differentiate between conceptual level and empirical level



# Developing Hypotheses

- A hypothesis must contain a justified theoretical argument for why you expect a certain phenomenon to occur (or not)
  - No such thing as a self-evident hypothesis
- Connect your hypotheses to existing research
  - Include references to key literature in building your argument -- this literature should have been discussed in your background section
- Keep your hypotheses simple but precise
  - They should specify two (or more) key constructs and the relationship between them.

# Example: Developing a hypothesis



# Developing Hypotheses: Tips

- Do not use words like "prove". Instead use words like "suggest" or "support".
  - Hypotheses are never proven; only supported.
- Explain your expectations clearly.
  - Identify dependent and independent variables and the direction of expected relationships.
- Make sure the **relationships between the variables** are testable.

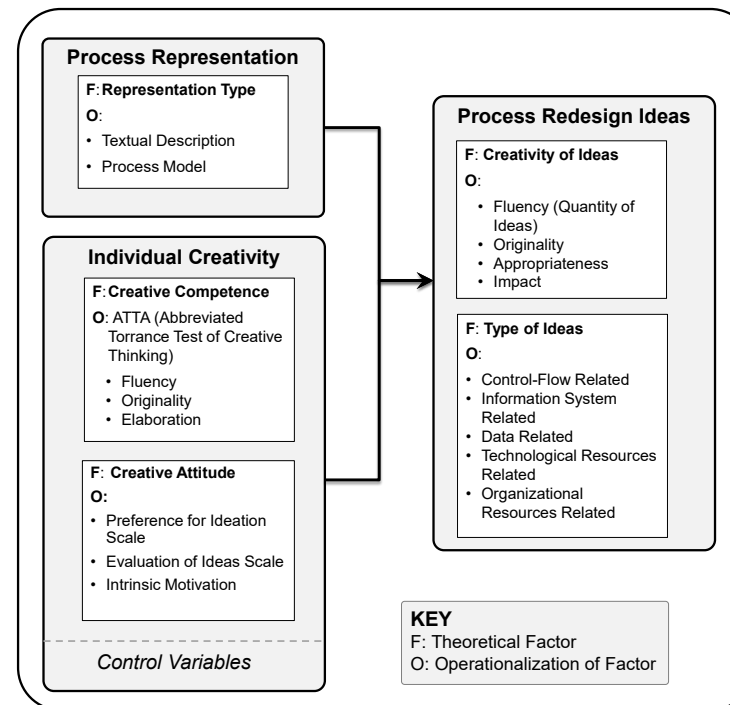


# Example: Presenting a research framework

The model shown in Figure 1 frames our primary research interest: the influence of the type of process representation on the *creativity* and *type* of the process-redesign solutions. Based on findings in the literature on how individual characteristics relate to creative problem-solving processes, the model acknowledges the relevance of the individual as a creative person by using creative competence [16] and creative attitude [4] as control variables.

...

Based on our model, we present two sets of hypotheses that describe our expectations about the effects of a type of representation in a process-redesign task on the solutions conceived in this task. First, we explore whether the quantity and quality of process-redesign solutions varies.



# Section: Method/Approach/Research Design

- In this section, you describe how your research was carried out.
- Describe it in such a way that another research can repeat your work based on your description (to meet the requirement of replicability).
- This section should follow a well-established script and is relatively easy to write.
  - Experiment paper: experimental design, variables and measures, materials, tasks, procedures, and participants.
  - Survey paper: design, measures, sampling strategy, procedures, and validation of measures.
  - Qualitative paper: empirical setting, modes of data collection, and processes and techniques employed in data analysis.
  - Design science papers: overview, meta-requirements or design principles, artefact description, and evaluation.

# Section: Method/Approach/Research Design

- Typical key elements
  - Research strategy
  - Research materials
  - Case sites
  - Scope of data collection
  - Sampling strategy
  - Participant selection
  - Measurement strategy
  - Analysis strategy

# Section: Results/Findings

- **Only contains a description of findings.**
- Should contain just factual result reporting (in the past tense) including statistical (or other) tests, but no discussion.
- Writing, statistics and graphs should be presented as simply as possible.
  - Try to make figure legends self-contained so that reference to the text is unnecessary.
- Do not present irrelevant data to which the Discussion will not refer and vice versa.

This section is easy to write, and quite methodical – check published papers that use a method similar to yours.

# Section: Discussion

- When most people read a paper, they read the Abstract first, then the Introduction, some graphs or tables and then the Discussion.
- Therefore, the Discussion should begin by summarising the main findings.
- Then: we interpret the findings
  - This is about **sensemaking** of the findings or results: What do they actually mean? Why did you get the results that you obtained?
    - **Explaining** the results: why did you find what you found?
    - **Abstracting** the results to concepts: what does it mean in a larger view?
    - **Theorizing** the results: what do the results tell us about the existing/new theory?
- Keep the discussion to the results, i.e., **do not go beyond the data**.
- Use present tense.

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# Examples – Summarizing the key findings

This study provides empirical results on the associations that two types of characteristics of the BPMN modeling grammar, *i.e.*, perceptions of a lack of ontological completeness and ontological clarity, have with user beliefs about the usefulness and ease of use of the modeling grammar.

## **Discussion**

The objective of this study was to examine the utility of an extended model of continued process modeling grammar usage behavior. Data collected from an online survey of 529 current BPMN process modeling grammar users were used to test the model. The theoretical model demonstrated adequate fit with the data. Most causal relationships in the model were found to be significant as hypothesized. We identify a number of interesting results.

# Examples – Interpreting the key findings

While we found that users who did not use constructs that are classified as excess had higher perceptions of the ease of use of the grammar, **the differences in PEOU ratings between the groups were not always significant.**

**One possible interpretation of these results** is that some of the excess constructs in BPMN (e.g., Association Flows or Text Annotations) are used by modelers to mitigate or mask other deficiencies (e.g., construct deficit or overload). These workarounds may distort the theoretically hypothesized results, in that users may have positive usage perceptions about some of the excess constructs. For example, a modeler may find the excess construct Text Annotation useful because it allows them to handle other deficiencies of the grammar (for instance, those relating to the deficit for articulating business rules).

Overall, these findings attest to the importance of adequate training in process modeling. Training serves to reduce uncertainty about a grammar by providing information about the features, nature and characteristics of the grammar. Greater learning thereby can amplify perceptions about the usage of a grammar in a positive direction. Also, greater learning can establish self-efficacy beliefs in the users, which also helps rectifying potential problems in the use of the grammar (as shown by the moderating effect of grammar familiarity). Our study suggests that it could be possible for organizations and individuals alike to increase user abilities in process modeling with the view to establishing positive usage beliefs.

**We further found that, when model complexity is increased, syntactic effects related to the perceptual discriminability of the Gateway constructs have a positive effect on model interpretability, over and above the effects of the constructs' ontological deficiencies on a semantic level.** Given that 'typical' process models found in industry practice are quite complex and may involve up to thousands of activities and related objects such as data and applications (Mendling, Reijers, & van der Aalst, 2010), this finding is significant in that it underlines the importance of perceptual, syntactic considerations in the design of process models that are readily and intuitively perceptible by the intended audiences. **Our results suggest that potential semantic deficiencies of these models (in terms of the precision of the clarity of their specification) can be positively mitigated through appropriate visual means, e.g., by selecting easily distinguishable shapes for better perceptual discrimination.**



# Section: Implications

- This section is absolutely important. It should be explicit in the structure.
- Good journals demand specific implications for ongoing research and practice.
- Implications for Practice
  - Detail how the study findings **change/impact** the way that important **stakeholders** work in **actual practice**.
- Implications for Research:
  - What have we found that can guide future research
    - E.g., a new measurement instrument
    - E.g., a new theory
    - Potential extensions of the study
  - What are future research opportunities that continue from the study described
    - New questions that arise from the way the research question was answered in the paper.

# Example

## Example: Implications for Research: Future Research Opportunities

*Different independent variables*

We chose one semantic characteristic, construct excess as a manifestation of ontological non-clarity, and one syntactic characteristic, perceptual discriminability. **Thus, opportunities exist for fellow scholars to examine different semantic and syntactic characteristics of process models**, and the impact these characteristics may have on the ability of individuals to understand the models.

*Different measurements*

**Other research could extend our approach to measuring process model interpretability.** [...] We focused on individuals' understanding of grammatical elements and their meaning in a process model (surface understanding), which is fundamental to being able to faithfully and efficiently interpret a process model. **Future work could now extend this work and examine the problem solving performance** (which is indicative of deep understanding, see Burton-Jones & Meso, 2008; Gemino & Wand, 2005) of individuals [...].

## Example: Implications for Research: Changing the Conduct of Research

*New methods*

First, our framework suggests **a reinvigorated focus on CM design research**. The framework centers on the mediating role of CM scripts to facilitate transitions between states of reality. [...] Traditional CM grammars were designed with a focus on representing the transition from physical reality to digital reality alone. To extend the mediating role of CM scripts (e.g., from digital to digital), researchers may need to develop new grammars and methods, such as new grammars with new constructs to present states in digital reality, and methods for tracking changes in the states between realities.

*New outcomes*

A second broad implication of our framework for CM scholarship research concerns its **call for research on dependent variables that are new to CM**. The key dependent variables of quality and understandability were traditionally evaluated based on the scripts' underlying grammars. Future research should evaluate new dependent variables like the quality, consistency, traceability, and understandability of newly developed scripts and grammars.

## Example: Implications for Practice

*Target audience*

*What they should change*

Furthermore, **providers of training** and **analysts in charge of conventions** can be informed through our study about the role of gateway constructs in process modeling. Our results suggest that gateway constructs are helpful in aiding process model interpretation in cases where the depicted processes are quite complex but not in cases where the processes are straight-forward. **Modeling conventions could leverage these insights by developing a staged approach for process modeling grammar usage dependent on process complexity.** For instance, managers in charge of modeling conventions can use the findings of our study to define a restricted set of process modeling grammar constructs to be used for complex processes, so as to improve the level of understanding of the final process models.

# Section: Conclusion

- Provides the closing frame to a paper.
- Is often little more than one abstract statement.
- Recaps very briefly the key contributions of the paper, without going into detail.
- Reflects about the research presented in the paper.
- Never introduces new material or findings.
- Rule of thumb: don't cite anything!

# Example

## Example: Conclusions

*Brief summary of contributions*

**In this study, we contribute** to process modelling research by providing a theoretical and empirical analysis of the ontological deficiencies of the BPMN grammar. **Our study provides theoretical and empirical evidence** on the strengths and weaknesses of using BPMN, and it also discusses a range of contextual factors that impact the use of BPMN.

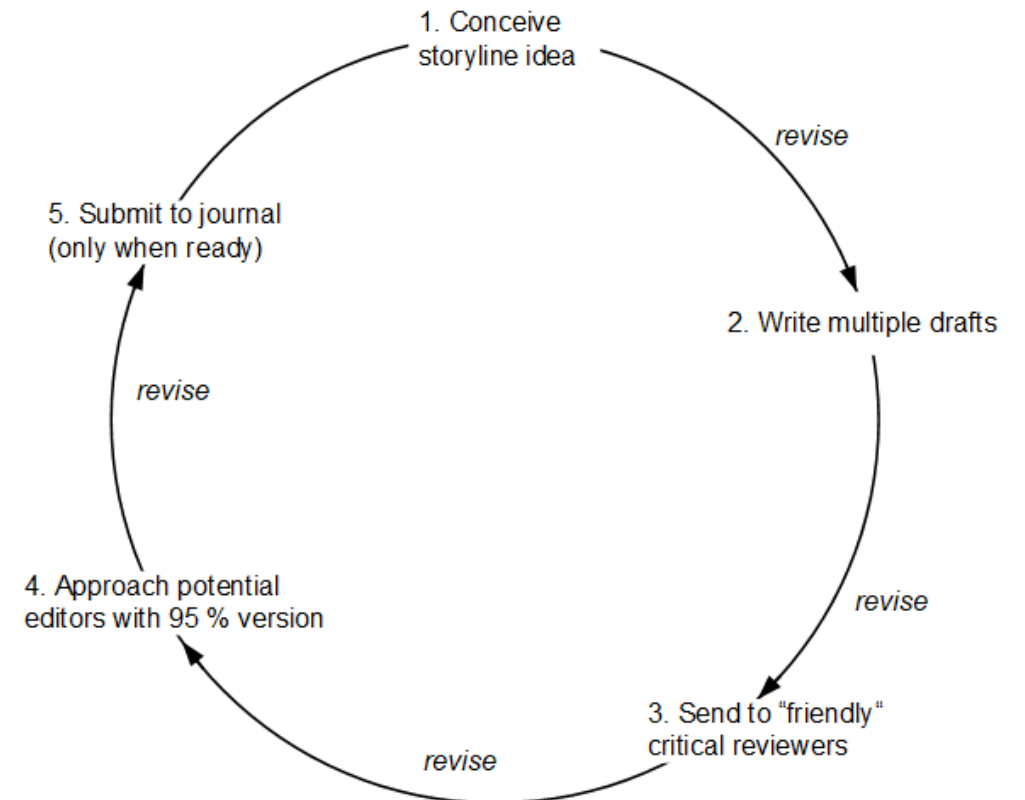
*Recap of findings*

These **findings assist in understanding** the capabilities and issues in the use of BPMN and can guide executive decision makers in their investment decisions when they implement a process modelling initiative. In summation, our study presents a rich and contextualised explanation of the usage behaviour that is associated with process modelling grammars and provides further evidence of the utility of the ontological theory of grammar expressiveness in aiding our understanding of process modelling practice.

*Reflection*

# Wrap-Up: The Article Writing Life-Cycle

- Conceive idea
  - Revise
- Write multiple drafts
  - revise
- Send to “friendly” critical reviewers
  - revise
- Approach potential editors with 95% draft
  - revise
- Submit
  - only when ready



# Handling Reviews and Revisions

# What happens when you submit your manuscript?

- Submission is commonly by electronic upload. Most journals use ManuscriptCentral; or EES or something similar.
- A journal editor will determine if your manuscript content is potentially suitable for publication in the journal.
- If it is, the manuscript will generally be sent to senior/associate editors and/or two or more reviewers.

# Why Editors Desk-Reject Papers

- Lack of fit to the journal
  - Doesn't cite ANY papers in the journal
  - If substantive journal: paper is about a different domain
  - If general-level: paper is not general enough
  
- Important: lack of fit is not an evaluation of quality!



# Why Editors Desk-Reject Papers

- Lack of Likelihood
  - Will the paper have a good chance of successfully traversing the review process?
  - What are the odds that the paper will receive only rejects?
  - Protection of scarce resources: the reviewers!

# Why Editors Desk-Reject Papers

- Lack of Formalities
  - Do papers adhere to the submission requirements?
  - Depends on journals: some are VERY strict.
  - Is the language good enough?
  - Don't take this lightly.

# If not: wait... for the editor's decision

- **1. Rejection** – the paper is not accepted by the journal – the editor will tell you why. This decision is final.
- **2. Request to revise and resubmit** - The manuscript is denied publication in its current state, but the editors and reviewers feel that a reworked manuscript *may possibly* be accepted if submitted to the journal again for new evaluation, typically by the same editor and reviewers.
  - - often distinguishes between *major or minor revisions*
- **3. Acceptance or conditional acceptance** - the editor has decided that the paper can be published as is, or with changes so minor that it does not require further review.
  - - Usually only about 5-10% of submissions get accepted by (good) journals.

# Understanding Reviews

## MIS Quarterly Evaluation Form

Reviewer: [insert your name here (voluntary)]  
 Manuscript Name: [insert title of paper here]

### Part I

Using the "Standards for Reviewing" on page 2, please express your level of agreement with each of the following statements, indicating your choices with an "X".

Criterion	Strongly agree	Agree	Slightly agree	Unsure	Slightly disagree	Disagree	Strongly disagree
1. The paper is conceptually significant.	X						
2. The paper is practically significant.	X						
3. The paper is well designed.	X						
4. The design is well executed.	X						
5. The presentation of ideas is effective.	X						
6. Overall, the paper presently makes a major contribution.	X						
7. Overall, the paper has the potential to make a major contribution.	X						

### Overall Recommendation

Please make a recommendation about the disposition of the manuscript ranging from (1) "reject," (2) "reject but invite new submission" (i.e., very risky revisions), (3) "major revisions," (4) "minor revisions," (5) "accept conditionally" (i.e., very minor revisions), and (6) "accept."

Overall evaluation	Reject	Reject and resubmit	Major revisions	Minor revisions	Accept conditionally	Accept
	X					

### Standards for Reviewing

- Conceptual Significance:** The work represents an important contribution to knowledge. It extends or challenges IS theory; empirical literature; methods; IS professional issues; or IS body of knowledge. Ties to relevant literature are clear as is the thrust of the central argument. The work explicates underlying assumptions well and provides direction for extending or improving on the present work.
- Practical Significance:** The work contributes to our understanding of current technological and organizational problems or challenges faced by IS or other practitioners.
- Design and Execution:** Methods, subjects, logic, and techniques (where relevant) are well designed for the investigation of the questions posed. The work is well executed, including provision of pertinent evidence and interpretation of results. Where appropriate, operationalizations of theoretical constructs, validity, and the choice of statistical and/or mathematical analysis are well done. The work adheres to AIS and generally accepted codes of scientific ethics.
- Presentation:** The work adopts a professional style and tone and is concise. It is grammatically correct and clear in its use of figures and tables. The flow of ideas in the paper is logical and there is a clear tie between its use of prior literature and a clear link between the method it adopts and its conclusions. The work is presented at a level of sophistication and length appropriate to the readership of the journal.

# Revising a paper based on reviews.

- Don't be precious – get published.
- If the paper is **rejected** – determine why.
- If there are legitimate flaws – fix them.
- Do not resubmit the same flawed manuscript somewhere else.
- If you are asked to **revise and resubmit** – do it.
- Take all editorial and reviewer comments seriously.

# Revision Management

## 1. Put the reviews aside for a while.

- All initial reviews are critical  
(you will very rarely be accepted straightaway – it only happened to me once)
- You will probably have some strong negative reactions to a review.
- After several days/week, they will look more manageable.

## 2. Read the reviews.

- You need to truly and fully understand each and every comment.
- Read the reviews several times.
- Develop a strategy

## 3. Tabulate reviews.

- Create a table for the editors and reviewers and copy and paste each “block” of review comments into a separate row.
- Have three columns, one for the comment, one for the response, and one for notes and discussion within the research team.
- Mark them as “quick fixes” (easy to handle) and “major pieces of work”.
- Indicate the type of revision required: (a) change the research, (b) change the presentation of research, or (c) a suggestion that cannot be handled given the research conducted.

# Revision Management

## 4. Revise the paper.

- Changes will have to be made to the document.
- Changes will be more, or less, ranging from changing/inserting/deleting paragraphs/figures/tables of some sections, to writing a completely new manuscript.
- Don't be afraid to make big changes to a manuscript. A major revision should always look like one.
- Some suggest completely re-writing a paper from scratch for major revisions – and in my experience this can often be necessary.

## 5. Write a response letter.

- Write point-by-point responses to all comments made.
- Write the response letter by perusing the revision table.
- Include a pre-amble that expresses your gratitude towards the editor and reviewers for considering your manuscript and investing their time to give you and assisting you to improve your work.
- Outline the strategy your pursued in your revision.
- Summarize the main changes made.

# Examples for Response Letters

## 1) Expansive

	to the emergence of this affordance. Please see the revised discussion on pages 29-32.]
<i>Conceptualization of Delocalization Affordances is unnecessarily constrained.</i> Delocalization affordances are those that “enable work practices to become location independent”. This is more bounded than the other three types. Why? For example, it is argued that delocalization affordances allow employees to rethink work practices. What is special about location-related	The argument here is essentially one of how much our concepts abstract from the evidence collected. We concur that delocalization on a broader level could be viewed as a form of expansion or enablement. In such case, we agree, such affordances might also relate to work changes that reduce resource consumption in terms of staff or other resources. ¶ We thus followed this reviewer’s recommendation in that we explain why location-relatedness, indeed, is critical in the context of sustainability transformations. This information is now found on page 32. Still, we would argue against a more abstract conceptualization on two counts: ¶ First, our evidence strongly suggests the prevalence of technology-enabled changes that

- Interprets review comment
- Outlines revision alternatives
- Justifies chosen revision
- Describes revision.



# Examples for Response Strategies

## 2) Concise

- Is direct and blunt.
- Only states what has been/not been done.
- Doesn't go into detail.
- Offers brief justification.

### **Comment:**

Do program chairs adjust for the tracks that accept too few or too many papers?

### **Response:**

We **do not have concrete data** to answer this issue. We believe based on our own experiences in conference chairing and reviewing that this is often the case. However, we do not have data on this **and therefore we have made no changes** to the paper based on this comment.

# Example: Revision Cover Letter

Response to the Comments by the Editors  
Submission to the [JOURNAL], [SubmissionID]

*[Paper Title]*

Dear Editorial Team

**Many thanks for providing us with constructive and comprehensive feedback** about our submission. We found the responses very valuable in further improving our theoretical model and data analysis, as well as in revising the way we describe our research in the manuscript. **We detail our responses in the tables below. In summary, our main changes** are as follows:

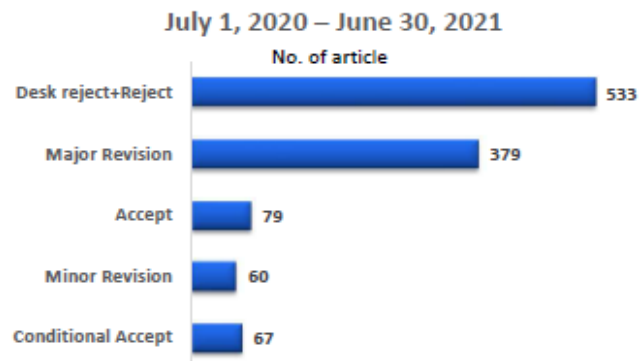
1. We expand on the conceptual foundation for our work and provide more precise and explicit construct definitions.
2. We expanded on the discussion of findings, with a particular view on improving on managerial implications and design advice that follows from our work.
3. We tested alternative conceptualizations and measurement models to examine the suggestions by the reviewer and to attest to the validity of our proposed model.
4. We revised the structure and content of our manuscript and streamlined the flow of the paper by moving details about our analyses to a separate appendix.

We are confident that these changes significantly improved the paper and **we hope that our efforts become evident** from the responses below as well as the revised manuscript itself.

We look forward to receiving your feedback.

Best regards,  
[the authors]

# Some statistics about the review/revision process in IS journals



Average cycle time for decision	66 days (SD: 50 days)
• Average cycle time for the 1 <sup>st</sup> round decision	• 62 days (SD: 50 days)
• Average cycle time for the 1 <sup>st</sup> round of rejecting an article	• 48 days (SD: 44 days)
Average total cycle time for accepting an article	967 days (SD: 543 days) ~2.65 Y (SD: ~1.49Y)
Average total cycle time for rejecting an article	75 days (SD: 120 days)

51

## (Re)Submissions July 1, 2020 – June 30, 2021

Round	No. of Article(s)	Percentage (%)
1	448	80%
2	31	6%
3	11	2%
4	24	4%
5	26	5%
6	13	2%
7	4	1%
8	1	0.18%

Average No. of round(s) for final decision 1.58

# End of Chapter 6

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