Communications of the Association for Information Systems

Volume 45 Article 12

8-2019

Closing Thoughts on "Information Systems Research: Thinking Outside the Basket and Beyond the Journal"

Brian Fitzgerald Lero, brian.fitzgerald@lero.ie

Alan R. Dennis *Indiana University*

Follow this and additional works at: https://aisel.aisnet.org/cais

Recommended Citation

Fitzgerald, B., & Dennis, A. R. (2019). Closing Thoughts on "Information Systems Research: Thinking Outside the Basket and Beyond the Journal". Communications of the Association for Information Systems, 45, pp-pp. https://doi.org/10.17705/1CAIS.04512

This material is brought to you by the AIS Journals at AIS Electronic Library (AISeL). It has been accepted for inclusion in Communications of the Association for Information Systems by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.



ommunications of the

A ssociation for I information Systems

Debate DOI: 10.17705/1CAIS.04512 ISSN: 1529-3181

Closing Thoughts on "Information Systems Research: Thinking Outside the Basket and Beyond the Journal"

Brian Fitzgerald

Lero University of Limerick Ireland brian.fitzgerald@lero.ie Alan R. Dennis

Kelley School of Business Indiana University USA

1 Introduction

We thank Liz Davidson, Joey George, Varun Grover, Chris Sauer, and Leslie Willcocks for taking time to comment on our paper. Understanding papers' and journals' quality is complex, so we were pleased to see a variety of thoughts and insights from our colleagues, some of which align well with our opinions and some of which diverge. In this short response, we reflect on three themes that we see running through their commentaries.

First, we agree that our primary focus, citations, is an imperfect measure. Any single dimension and subsequent metrics built on a single dimension (e.g., journal impact factor) are imperfect because they miss the phenomenon as a whole. For example, as Sauer and Willcocks (2019) point out, our data include teaching cases, which rarely receive citations due to their nature. We also agree that one can manipulate citations (and other metrics such as downloads, social media mentions, etc.). In any case, one can manipulate the journal review process, too—one can manipulate any human process.

Second, we disagree with some of our colleagues who argue that top journals have better papers than those in other journals because top journals have a better peer-review process. This argument rests on three assumptions: 1) that top journals have valid and reliable review processes, 2) that other journals have invalid and/or unreliable review processes, and 3) that a good process ensures good outcomes. Much empirical evidence from other disciplines shows that the review process at top journals is *not* valid and reliable (Bornmann, 2011; Bornmann & Daniel, 2009; Ernst, Saradeth, & Resch, 1993). Unless one believes that we in the information systems (IS) discipline materially differ from our peers, these empirical findings remove the first and most important assumption that this conclusion requires to be true.

One a deeper, more theoretical level, why should the opinions of three to five reviewers and editors about a paper quality's have greater validity and reliability than a larger market of expert consumers? Is a small set of experts better than a market of experts? Perhaps another fundamental question concerns whether those involved in the review process are actually experts. We like to think that journal reviewers are experts, but, in truth, having served in editorial roles at top journals, we have to confess that most reviewers are not experts at assessing others' research. The "reviewer three" meme confirms that many researchers regard the traditional review process as flawed across many disciplines. Furthermore, for all kinds of other reasons (e.g., demands on one's time), reviews even for the same reviewer will lack consistent quality.

Third, we agree with our colleagues that journal lists are simple and straightforward and play important pragmatic and political roles both in the academy (e.g., for promotion and tenure) and for those that support it (e.g., librarians buying journals). But simple does not equal good. The h-index, for example, represents a simple measure that that promotion and tenure committees use to assess researchers. However, Donna Strickland, the 2018 Nobel Laureate in Physics, has a h-index of 20. In fact, Kreiner (2016) found a relatively low h-index among Nobel Laureates generally, which indicates that this simple measure conveys a great deal less than the whole story.

Some of our colleagues have argued that we should not throw the baby out with the bathwater—but the baby is drowning. As Davidson (2019) points out, non-basket journals struggle to secure reviewing resources and receive fewer submissions from IS scholars. Also, junior scholars who have their research rejected by basket journals have a difficult path to tenure.

In conclusion, we agree that using journal rankings and journals to measure paper quality will not go away anytime soon. And, for now, we do not want them to. Rather, we suggest that, as a discipline, we should step back and collectively think of a better way to assess research's quality. We believe that one better way involves focusing on the quality of papers (as the primary research product) rather than journals. At this point, we do not have a solution to offer. Instead, we call on our colleagues across the discipline to do more research to develop and test better measures, especially measures that one cannot easily manipulate.

If one thinks about it, one will realize that change comes slowly to the academy. Many classes still use paper textbooks and an instructor who lectures. The only thing that has changed from a century ago is that we use PowerPoint rather than a chalkboard; we have automated, not informated (Zuboff, 1988). We have only recently begun to informate teaching as we adopt new technologies such as interactive e-textbooks, video games, virtual reality, and flipped classrooms. We believe we need similar changes in the way we think about research, and, like change in teaching, change in research will be slow.

The debate about paper-level quality measures is taking place in other disciplines (e.g., Moher et al., 2018). We in the IS discipline have a choice: should we lead, follow, or get out of the way? We argue that, as IS researchers, we should be key players leading this change for our colleagues across the academy. Who else better understands information technology, users' needs, business processes, and new technology adoption? After all, information technology innovation is our core strength as a discipline. We believe we need to start thinking about how we move outside the basket and beyond the journal.

References

- Bornmann, L. (2011). Scientific peer review. Annual Review of Information Science and Technology, 45, 197-245.
- Bornmann, L., & Daniel, H. D. (2009). The luck of the referee draw: The effect of exchanging reviews. *Learned Publishing*, 22(2), 117-125.
- Davidson, E. (2019). A reflection on "information systems research: Thinking outside the basket and beyond the journal". *Communications of the Association for Information Systems*, *45*, 152-159.
- Ernst, E., Saradeth, T., & Resch, K. L. (1993). Drawbacks of peer review. Nature, 363(6427), 296
- Kreiner, G. (2016). The slavery of the h-index—measuring the unmeasurable. *Frontiers in Human Neuroscience*, 10.
- Moher, D., Naudet, F., Cristea, I., Miedema, F., Ioannidis, J., & Goodman, S. (2018). Assessing scientists for hiring, promotion, and tenure. *PLoS Biology*, *16*(3), e2004089.
- Sauer, C., & Willcocks, L. (2019) Commentary on "information systems research: Thinking outside the basket and beyond the journal". *Communications of the Association for Information Systems*, *45*, 146-151.
- Zuboff, S. (1988). In the age of the smart machine: The future of work and power. New York, NY: Basic Books.

About the Authors

Brian Fitzgerald is Director of Lero—the Irish Software Research Centre, where he previously held the role of Chief Scientist. Prior to that, he served as Vice-President Research at the University of Limerick. He also holds an endowed professorship, the Krehbiel Chair in Innovation in Business & Technology, at the University of Limerick. He holds a PhD from the University of London. His research interests lie primarily in software development, encompassing open source and inner source, crowdsourcing software development, agile and lean software development, and global software development. His publications include 15 books and over 150 peer-reviewed papers in leading international journals and conferences in both the information systems and software engineering fields, such as MIS Quarterly, Information Systems Research, IEEE Transactions on Software Engineering, and ACM Transactions on Software Engineering Methodology. Prior to taking up an academic position, he worked in the software industry for about 12 years in various sectors (including finance, telecommunications, manufacturing, bespoke software development) and countries (Ireland, Belgium, Germany).

Alan R. Dennis is Professor of Information Systems and holds the John T. Chambers Chair of Internet Systems in the Kelley School of Business at Indiana University. He was named a Fellow of the Association for Information Systems in 2012. Professor Dennis has written four books and more than 150 research articles in journals and conferences. His research focuses on three main themes: team collaboration; fake news on social media; and information security. His research has been reported in the popular press over 500 times, including the *Wall Street Journal, USA Today, The Atlantic*, CBS, PBS, Canada's CBC and CTV, UK's *Daily Mail* and the *Telegraph*, Australia's ABC, France's *Le Figaro*, South Africa's *Sowetan Live*, Chile's *El Mercurio*, *China Daily*, India's *Hindustan Times*, and Indonesia's *Tribune News*. He is the co-Editor-in-Chief of *AlS Transactions on Replication Research* and the President of the Association for Information Systems.

Copyright © 2019 by the Association for Information Systems. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and full citation on the first page. Copyright for components of this work owned by others than the Association for Information Systems must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers, or to redistribute to lists requires prior specific permission and/or fee. Request permission to publish from: AIS Administrative Office, P.O. Box 2712 Atlanta, GA, 30301-2712 Attn: Reprints or via e-mail from publications@aisnet.org.