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No Free Lunch: Suggestions for Improving the Quality of the Review Process

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Abstract:
The review process has issues, reviews take too long and many are not sufficient for authors to improve their submissions. In this paper, I present the root causes for these problems and stipulate that any proposed solutions will need to address these issues to create sustainable improvement. Additionally, I list five basic activities that need to form the basic actions for proposed solutions. Finally, I make six potentially controversial proposals for improving the review process. The key proposals include performing a faculty task analysis that adds in and includes time for performing reviewing and changing the tenure and promotion process to give credit for performing reviews.

Keywords: Scholarly Reviews, Peer Reviews, Developmental Reviewing, Feedback to Reviewers, Rewarding Reviewing, Reviewer Accountability, Academic Job Task Analysis, Tenure and Promotion.

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1 Introduction

In 2015, we have seen much discussion on the AISWorld listserv on review times and the review process. Authors are complaining about review times and the quality of the reviews being done. Iivari (2016) agrees there are problems and discusses how to improve the peer review process by proposing three changes. I also agree there are problems; however, I don’t agree with Iivari (2016) on his proposed approaches to solving these issues. In this paper, I propose alternate solutions. I base my proposals on my experience as an author, reviewer, journal editor-in-chief, and conference track and minitrack chair. Additionally, these proposals are influenced by my pre-academic career as a U.S. Navy officer and a nuclear engineer.

2 The Issues

Some perceive that the publishing process is too long. I haven’t seen any hard data on how long the average publishing process is, but I agree with the perception. I agree because technology and open access journals have shown us that journals can publish papers in a matter of days; and, if publishing can be done in days, then the only reason it takes longer for our research to be published has to be the review process. Okay, the review process takes time, but why? The review process validates a paper’s research approach and endorses that the author(s) have done their job as researchers. Our peers, those who are trained to be researchers like we are, perform this reviewing role. A good peer review can be done in a few hours; as such, it should only take a few weeks at most for our research to be ready for publishing. But it takes longer, sometimes much longer, which is frustrating.

So why does publishing take so long? Time and work load. To be done well, peer reviewing requires peers. How many top-level researchers are there in our discipline? Perhaps a few thousand, which makes the pool of potential reviewers relatively small and the pool who actually peer review even smaller. To understand this issue, we have to understand our jobs and work load. Many, if not most of us, are teachers and researchers. Our positions require a certain amount of teaching, a certain amount of research, and a certain amount of service. Where does reviewing fit in? Many perceive reviewing to be a service, a service we perform because it is expected, not because it is rewarded. Promotion and tenure are based primarily on research and teaching and only little on service. Jennex (2001), which appeared in the CAIS debate on research relevance (2001, Volume 6), states that we get what we reward. We are rewarded for publishing research and teaching; little reward comes from reviewing. Additionally, as humans, we are limited in how much we can work, which means we have a discrete period of time we can work and a discrete amount of work (or workload) that we can perform. As a result reviewers review papers when time permits; sometimes it takes several months before a reviewer gets those few hours needed to perform a review. We can argue prioritization should make reviewing higher on the list of things to do but, given the nonexistent to little reward reaped for performing reviews, making reviewing a higher priority will not happen.

Ultimately, our promotion and tenure committees determine reviewing’s importance, but they prioritize research and teaching when making promotion and tenure decisions. Universities establish teaching loads based on how importantly they judge the importance of teaching to the university: some have 2/2 loads (i.e., two courses per semester for a two-semester academic year), some 3/3 (i.e., three courses per semester for a two-semester academic year), and some have even more or less. Teaching takes time: depending on how good one wants to be at it, it can take large amounts of time for preparing, conducting class, and assessing students’ performance. Universities stress that meaningfully assessing students takes time. Moreover, conducting research, authoring papers, and submitting them takes time, and the number of submissions is directly related to the number of reviews that need to be performed. Jennex (2015) discusses reviewers’ increasing workload. Academics are producing more research: there are over 500 IS journals and hundreds of conferences. All require submissions and, with the expectation that a submission gets three peer reviews, the amount of review time needed to meet research production demands is increasing dramatically. I observe that we shouldn’t complain about the review process but instead wonder why it even works at all.

We can summarize this discussion through the following issues:

1. Tenure committees do not perceive reviewing as an important aspect of promotion and tenure, which makes it a low-priority activity
2. Reviewing takes time away from the discrete amount of time available for all academic duties
3. Lots of reviewing needs to be done, and
4. There is a limited pool of reviewers.

Any suggestions on how to improve the review process needs to recognize and address these issues. Current calls for improving reviews’ quality and timeliness are fine but need to include direction about how to accomplish it by addressing these four issues.

3 Proposals for Improving the Review Process

Any proposal for improving the review process needs to include suggestions as to how to do one, some, or all of the following:

1. Increase the pool of reviewers
2. Decrease the time needed to perform reviews
3. Increase the reward/incentive for reviewing
4. Increase the time available for reviewing, and
5. Reduce the number of reviews that need to be done.

The above list reflects basic approaches to managing reviewer/academic workload. Why do we need to manage academic workload? I mention above that I was a former U.S. Navy officer: while serving, I was promised a meal and an hour of sleep a day. That meant we worked till we were done. But how effective is that? Crews can only work at over capacity for so long before fatigue and burnout set in and result in decreased combat effectiveness. It is a hero approach to work management: we succeed for short periods of time because we are willing to make a herculean effort to achieve a short-term goal. However, in my experience, the Navy’s process improvements were not permanent: the improvements did not retain personnel as well as they could have because burnout and stress led personnel to depart the organization. Review process proposals that do not incorporate any of the above five items are essentially managing in this manner and will not succeed over the long term. I also mention above that I was a nuclear engineer in the civilian nuclear industry. This industry requires success every day and knows it can only achieve such success by ensuring critical personnel are not over stressed or fatigued by routine work (USNRC, 2014). Essentially, ensuring personal are not stressed or fatigued involves managing their workloads, and I was impressed that any addition in critical personnel tasks also required a reduction or elimination of some other task before the change could be implemented. I suggest that this is what we need to do to improve the review process, and any suggestion that adds requirements such as being timelier or of higher quality also needs to reduce some other task to compensate reviewer work load. This approach leads to sustained performance because personnel are not overworked or overstressed. It also better retains personnel in the long term because personnel are not as driven to leave the organization to achieve a measure of work-life balance.

As such, I make the following suggestions to improve the review process:

1. Require all authors who submit to journals to participate in reviewing (at the same or other journals). Increase the number of reviewers by requiring that all authors who make a submission perform at least, for example, three reviews and that this ratio be maintained on a yearly basis. Ensure that new faculty understand that reviewing is part of scholarship and that they do not get a free pass so that they can solely focus on authoring. To aid it, tracking reviews a system such as Publons could be used.

2. Reduce the number of reviews by linking conference and journal reviewing. Many journal papers start as conference papers and, while we expect journal papers to be more rigorous than conference papers, we can still apply a certain level of a paper’s conference review to its journal submission. Essentially, reduce the time for reviews by performing differential reviews on previous conference submissions. Reduce the number of reviews by recognizing that a high-quality conference paper does not need three peer reviews as a journal submission. Editors should be encouraged to fast track good conference papers to journal papers via reduced-scope reviews and fewer reviewers.

3. Make reviewing a meaningful part of tenure and promotion. Many universities have standards for the number and quality of papers one needs for promotion and/or tenure. Add standards for reviewing: committees could consider 10 reviews as equivalent to a journal paper and have tenure/promotion packets include examples of actual reviews performed. Such an approach would
increase the reward and priority for reviewing and provide a mechanism for academics to obtain feedback on their reviewing.

4. Reduce the time for reviews by having authors prepare better paper submissions, and focus reviews on the results, not the writing, the literature review, or the methodology. Jennex (2015) suggests a method for documenting how the literature review was performed, which require authors to document how they performed the literature review so reviewers can judge the process used. Allow reviewers to make literature suggestions, but do not require them to do the literature review. Also require authors to clearly document how they performed and analyzed the research and, if this is not done, do not send the submission out for review, which reduces the number of reviews required by eliminating reviews on not properly prepared submissions. Also, do not expect or encourage reviewers to perform grammar reviews: if grammar is an issue, require that authors fix it before sending the submission out for review.

5. Support faculty in attending conferences if they review for them and not just because they have a paper in them. This practice rewards performing reviews and, as I mention above, since many journal papers start as conference papers, it reduces review times by allowing potential reviewers to hear the paper presentation and discussion and, thus, be familiar with the paper if they are asked to review it.

6. Analyze faculty’s tasks and allocate time for reviewing. Manage faculty’s workload by requiring that, as new requirements are added, such as reviewing papers, other activities are reduced. Do not expect only “heroes” to review: make it part of the job and make the job doable with a reasonable workload. If analyzing faculty’s tasks shows that they have insufficient time to do all the tasks, consider reducing their workload or, for those universities that compensate faculty on a ten-month contract, expand the compensation and contract to twelve months. Prioritize all faculty work and ensure the highest priority tasks are performed first. As an interesting side note, I recently completed an administrative form for my university that called for a job description; unfortunately, my university does not have a job description for faculty. We post job solicitations that include expected duties and applicants’ qualifications, but, as a university, we have no documents that describe faculty’s jobs (and yes, I confirmed this with my dean’s office).

4 Discussion on Proposals for Improving the Review Process

Many readers may regard the above proposals with skepticism, but they all address the root issues of workload and priority that are needed if we are to make any sustainable, meaningful improvement to the review process. Perhaps the most controversial will be analyzing faculty’s tasks and generating job descriptions for faculty positions because it will require formalizing the tenure and promotion process and setting specific standards. I’ve asked about this many times at my university, and I have always gotten the answer that we don’t want to set standards—that review committees need to be free to evaluate packets as they see fit. I find the idea that we know quality when we see it and don’t need to be constrained by standards that convey the impression that someone should be promoted or receive tenure just because they meet the standard to be surprising. Quite simply, we need to get over it. Faculty positions can and should be defined so that we know what to expect and how to perform. The review process will not improve until we value those who review, and we will not value reviewers until we formally make it a part of our job and a requirement for tenure and promotion. Additionally, the proposals of supporting conference attendance based on reviewing for conferences and increasing faculty’s compensation/contracts to fit their workload will probably be met with skepticism because of their cost. However, there is no free lunch. We have relied on faculty doing reviewing for no reward for too long. If we want a quicker, higher-quality review process, it will cost, which other disciplines are recognizing. Van Noorden (2014) discusses the use of Publons, a review recognition system. Publons tracks reviews and reviewers and rewards those who review frequently and well. It is based on the premise that scientists are not recognized for one of their most important contributions. I don’t know that we need this system, but the premise fits us. Finally, supporting conference attendance actually benefits the development and productivity of faculty by enabling them to meet and collaborate with others in their area of study, so I consider sending only faculty with accepted submissions to conferences a short-sighted position that will hurt universities and our discipline in the long run.

The proposals dealing with improving submissions, linking conference and journal submission reviews, and requiring all authors who submit papers to journals to participate in the review process are less controversial and I find it somewhat surprising they haven’t yet been implemented. The only impediments I
see are accepting that reviewing is a responsibility and determining who is supposed to mentor new faculty. Reviewing can be tedious, but it is something we must do to improve our research. Iivari (2016) reiterates this point by stating that we should include reviewers’ names in published papers, an idea Weber (1999) previously proposed. I like the idea but, for that to happen and work to improve the review process, we have to accept the role of reviewing as an integral part of publishing research and that collaboration makes our research stronger. I can honestly say I have never made a submission that did not need some modification before acceptance and publication. I can also say that, in all cases, the modifications made the papers better. Research is a collaborative process, yet we do not value those who add to the idea but only those who had the idea in the first place. This also needs to change, and one way to do so is to list authors and reviewers’ names on papers. We also need to decide who should be mentoring new authors. What I take from the complaints on review quality is that authors do not feel reviewers are doing enough to help them. Until we reward reviewers and accept that publishing reviewers’ names with authors, requiring that reviewers “do more” is not their job. I should not need to develop the junior faculty from other academics’ university—they should. One way to get better submissions is for colleagues of new authors to read and comment on submissions before they are submitted. I do grant that, as a journal editor, I do have some responsibility in developing my discipline, but I only have so much capacity to do so: I need the help of the authors’ colleagues to make them better. I understand this will add to colleagues’ workloads and so needs to be considered in faculty workloads. We all need to have skin in the review process: we all are stakeholders in the review process and all need to do our part. If we don’t want this responsibility, then we need to recognize the importance of reviewing and reward those that will develop our colleagues.

5 Conclusions

The review process has issues. Reviews are taking longer than they should and reviews are sometimes of lower than desired quality. That said, we cannot expect to improve the review process unless we understand the root issues that cause the problems in the review process. In this paper, I present what I perceive to be the root issues:

1. Tenure committees do not perceive reviewing as an important aspect of promotion and tenure, which makes it a low-priority activity
2. Reviewing takes time away from the discrete amount of time available for all academic duties
3. Lots of reviewing needs to be done, and
4. There is a limited pool of reviewers.

Additionally, I present activities that any proposal for improving the review process must address:

1. Increase the pool of reviewers
2. Decrease the time needed to perform reviews
3. Increase the reward/incentive for reviewing
4. Increase the time available for reviewing, and
5. Reduce the number of reviews that need to be done.

This results in the six proposals that I present in this paper:

1. Require all authors who submit to journals to participate in reviewing.
2. Reduce the number of reviews by linking conference and journal reviewing
3. Make reviewing a meaningful part of tenure and promotion.
4. Reduce the time for reviews by making better paper submissions and focus reviews on the results, not the writing, the literature review, or the methodology.
5. Support faculty in attending conferences if they review for them and not just because they have a paper in them.
6. Analyze faculty’s tasks and allocate time for reviewing.

These proposals are difficult to do and require organizational and cultural transformation but are necessary to implementing meaningful and sustainable improvement to the review process.
References


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Murray E. Jennex is a Professor of Information Systems at San Diego State University, Editor-in-Chief of the International Journal of Knowledge Management, co-Editor-in-Chief of the International Journal of Information Systems for Crisis Response and Management, and president of the Foundation for Knowledge Management (LLC). He specializes in knowledge management, crisis response, system analysis and design, IS security, e-commerce, and organizational effectiveness. He serves as the Knowledge Systems Track co-chair at the Hawaii International Conference on System Sciences. He is the author of over 150 journal papers, book chapters, and conference proceedings on knowledge management, crisis response, end user computing, international information systems, organizational memory systems, ecommerce, cyber security, and software outsourcing. He is a former U.S. Navy Nuclear Power Propulsion officer and a nuclear engineer in the civilian nuclear industry. He holds a BA in chemistry and physics from William Jewell College, an MBA and an MS in software engineering from National University, an MS in telecommunications management and a PhD in information systems from the Claremont Graduate University. He is also a registered professional mechanical engineer in the state of California and a Certified Information Systems Security Professional (CISSP), a Certified Secure Software Lifecycle Professional (CSSLP), and a Project Management Professional (PMP).