

EDITOR'S COMMENTS

Creating Blue Oceans of Thought Via Highly Citable Articles

In my previous editorial (September 2009), I argued that one major reason papers are accepted at top journals is that they explore intellectual blue oceans. Blue oceans are described by Kim and Maubourgne in their 2007 book. In this book and their *Harvard Business Review* article, they focus on blue ocean product innovations, products like the extremely inexpensive automobile as instantiated by Henry Ford's Model T. Blue oceans are breakthrough ideas that essentially make competition (i.e., red oceans, as in bloody waters) irrelevant. By creating a product in an entirely new market space, the Model T was in a blue ocean, uncontested for a long time and rewarding for the Ford Motor Company and its stockholders.

Journals may seek to find and only publish papers that move into blue oceans of thought, but the fact of the matter is that most accepted papers are good, solid works that are incremental in nature. Because they are incremental they share some of the attributes of blue ocean ideas, but in general they are not swimming in purely blue oceans. It would perhaps be most accurate to say that they are in pink oceans where there is some idea competition, and where the waters are not overly crowded.

This is why the most common comment that one sees on reviews is that the authors need to enhance their "contribution," this term being the code word that reviewers and editors typically use when they are assessing the value-add of a paper. *Contribution* is a relative term in that it also implies that the work is adding to a body of literature or methodological development.

In the review process, authors are almost always asked to strengthen their contribution and what this means, in essence, is that they are being asked to show why the paper is at least on the fringes of blue ocean thinking. How would one know a blue ocean paper when one saw it? Does it have to be a revolution in thought worthy of an Einstein or can it be a less profound intellectual innovation and still be characterized a blue ocean? Let's explore this issue through some recent examples of what I perceive to be papers that, if not blue oceans, are certainly moving in that direction with respect to their contribution.

Exactly What Is a Contribution, Though?

It is fairly easy to generate sentences like those above that elaborate by layering concepts on concepts. What is "value-add," for example? How precisely does a paper "add" to a body of literature? These are the terms one most frequently sees when people try to explain why a paper is a contribution.

Let me try to be more explicit so that potential authors can better appreciate why at least I think certain articles cleared the hurdles at a top journal. I chose two articles from the most recent *MISQ* issue (September 2009) with which I had some involvement as senior editor. *Please note that these selections in no way implies that other papers in this issue or other issues were not also blue oceans.* It is serendipitous that these two papers represent two important and distinct threads of intellectual discussion in our field and I happened to serve as SE on them. One is a substantive contribution and the other a methodological contribution. They are¹

1. "Exploring Human Images in Website Design: A Multi-Method Approach" by Dianne Cyr, Milena Head, Hector Larios, and Bin Pan

¹I thank the authors of these papers for *ex ante* permission to discuss them in this editorial. They gave this permission without stipulations such as requiring that they see the editorial before it was published. So anything I am saying here has not been subject to any outside strictures. The editorial opinions remain those of the author alone.

2. "Estimating the Effect of Common Method Variance: The Method–Method Pair Technique with an Illustration from TAM Research" by Rajeev Sharma, Philip Yetton, and Jeff Crawford

A short discussion of each of these papers may illuminate how some papers are able to move into waters that bring fascinating new perspectives to the field.

Blue Ocean Ideas in Cyr et al.

Rather than paraphrasing the essence of this paper, it is easiest to just cite the abstract. The paper argues that

effective visual design of e-commerce websites enhances website aesthetics and emotional appeal for the user. To gain insight into how Internet users perceive human images as one element of website design, a controlled experiment was conducted using a questionnaire, interviews, and eye-tracking methodology. Three conditions of human images were created including human images with facial features, human images without facial features, and a control condition with no human images. It was expected that human images with facial features would induce a user to perceive the website as more appealing, having warmth or social presence, and as more trustworthy. In turn, higher levels of image appeal and perceived social presence were predicted to result in trust. All expected relationships in the model were supported except no direct relationship was found between the human image conditions and trust. Additional analyses revealed subtle differences in the perception of human images across cultures (Canada, Germany, and Japan). While the general impact of human images seems universal across country groups, based on interview data four concepts emerged— aesthetics, symbolism, affective property, and functional property—with participants from each culture focusing on different concepts as applied to website design. Implications for research and practice are discussed.

Why did the review team accept this paper? In looking over the comments of the review team from the very beginning of the process, we were impressed with several elements in the paper. First, it dealt solidly with the IT artifact by asking the research question about how one should design the "visual rhetoric" of a website. Rather than simply reiterating usability elements found in the IS literature, the authors argued that there were significant hedonic factors involved, a point which is also being made in the contemporary marketing literature. Therefore, they included in their modeling emotional reactions such as image appeal, social presence, and trust. Trust clearly also has a rational side to it, but in this work the authors wanted to tease out its affective dimensions.

I sense in the review team comments that we were all responding positively to the way the authors had recast the usability literature to incorporate this constellation of constructs. For this reason, I would conclude that we interpreted the paper as pushing into bluer oceans than we had seen before in this domain.

The paper likewise went in new directions in its choice of multi-methods. The repeated measures experimental design of the paper would have ordinarily been gathered by means of a single experimental instrument (i.e., a questionnaire). The authors supplemented this methodological treatment, however, by using interviews for data collection as well as an eye-tracking device. Multi-methods alone seldom carry a paper to acceptance, unless, perhaps, there is something extremely unusual in the choice of methods that adds to our understanding of the interactions between methods. But the combination of the varying perspectives that these methods offered plus the substantive research modeling effort conveyed to the review team a sense of novelty and new ground being broken.

Another interesting feature of the paper that qualified it for this "blue ocean" desideratum was that it incorporated culture into the mix. Samples were gathered from three different cultures: Canadians, Germans, and Japanese. Since, in the paper, the authors did not pose hypotheses about differing effects from culture, their overall finding that reactions to human images (social presence stimulus) did not vary between cultures justified pooling the cultural data. Cultures also did not differ with respect to trust. There were cultural differences, however, especially as revealed in the interview data. As the authors note in their conclusion, "a different emphasis for the various categories emerged by county. For example, Canadians mention aesthetics, affective properties, and functional properties. In contrast, Germans predominantly are concerned with functional characteristics of the website, and Japanese are most concerned with emotional aspects of the sites."

Clearly more can be done with the cultural implications of website design. In this particular case, though, the review team was sufficiently impressed with the new ideas set forth by the research that these suggestions only had to be stated in the agenda of future research.

Blue Ocean Ideas in Sharma et al.

Once again, rather than paraphrasing the essence of this paper, it is easiest to just cite the abstract. The paper argues that

a meta-analysis-based technique [can] estimate the effect of common method variance on the validity of individual theories. The technique explains between-study variance in observed correlations as a function of the susceptibility to common method variance of the methods employed in individual studies. The technique extends to mono-method studies the concept of method variability underpinning the classic multitrait–multimethod technique. The application of the technique is demonstrated by analyzing the effect of common method variance on the observed correlations between perceived usefulness and usage in the technology acceptance model literature. Implications of the technique and the findings for future research are discussed.

Methodological essays can also be blue oceans. Sharma et al. is swimming in bluer oceans for a number of reasons, some of which, *mirabile dictum*, are to be found in the illustration of the new technique being proposed. In this case, the authors strike out for new territory by examining the problem of common methods bias or variance (CMV) in causal models and then offering a powerful test for it. Clearly, there are seminal works in this area, one of the primary ones being Podsakoff et al. (2003). The authors, though, move beyond such seminal works by offering a new method for proving the relative presence of CMV. Podsakoff et al. are insightful in this arena and do propose a bevy of tests for CMV, but the tests they proffer are tests on a given study's data set. In the one area where they mention a test that involves an examination of the entire literature, the marker variable test, Podsakoff et al. (2003) raise serious questions about its validity.

Sharma et al. present a technique known as the method–method pair (MMP) technique for assessing CMV. The technique involves an examination of an entire literature using standard meta-analytical tools, but what is unique about Sharma et al.'s approach is that they categorize prior studies by method pairings. Their major argument in this regard is that some pairings are less subject to CMV than others. One simple example would be a study that utilizes self-report measures for the IVs and archival data for the DVs. This independence of sources almost ensures that the CMV will be low or nonexistent. Studies that use self-report measures for both the IVs and DVS, on the other hand, are likely riddled with CMV (i.e., they have “weak” method pairing). Using the nature of the pairings as a meta-analytical factor, the authors argue that one can tease out the amount of CMV in an entire literature base.

Why is this an innovation? I believe that the review team recognized that the technique gives researchers an important new tool for discovering the methodological artifacts in a stream of work. When this surgical tool is applied to TAM, for example, Sharma et al. discover that the between-studies variance attributable to CMV is about 56 percent! A rough-and-ready interpretation of this would be to cut in half the explained variance of TAM studies that used weak method pairings, which is to say *most* of the prior work on TAM. This finding is so significant, in my view, that it may be necessary to return to nearly the beginning in TAM studies to determine which flavor of TAM really offers strong theoretical models for future testing and which do not. The seriousness of CMV in prior work simply cannot be further ignored.

Do Blue Oceans Have to be Entirely New?

Blue oceans do not have to be entirely new. The Model T was by no means the first automobile. But it was the first automobile that ordinary people could afford. One of Henry Ford's strategies, in fact, was to pay his employees enough so that they could afford to buy a Model T and this, in part, ensured economies of scale for the Ford factory (Kreipke 2003).

Cyr and her colleagues do not head into territory that has not been explored before, at least with respect to the general research domain. The IS literature has a rich tradition of work on usability of websites, a tradition that developed alongside computer

science's interest in HCI, as it happens. But what the paper offers is a unique combination of factors that show convincingly that the visual rhetoric of websites has a considerable effect on how users respond. The evidence the authors assemble is nicely balanced between device-generated data from the eye-tracking machine and the softer interview data, with an added panache of the more standard experimental instrument data.

Sharma et al., likewise, are not creating a whole new space where there are no earlier explorers. The difficulty that readers typically have with seeing blue oceans in methodological essays such as Sharma et al. has to do, I believe, with the *genre* of methodological essays. What is extremely difficult about creating value in methodological essays is that the authors must engage in a massive "setting-out the groundwork" first in their papers.² This goes well beyond the literature review of a more ordinary positivist-quantitative or a qualitative study in that the authors must explain in some detail the methodological Gestalt in order to show why their work is a leap forward. Unfortunately, many reviewers interpret this as a tutorial exercise and are inclined to reject the paper out of hand. Insightful reviewers, such as those who served on this paper, demonstrate a greater sensitivity to the contribution and see beyond the elaborated background to the final product.

How Can You Seek Out Blue Oceans in Your Work?

I have a deep and abiding sense that we have deep reservoirs of talent and innovation in our field and those who are able to unleash this creativity will be able to identify blue oceans in their domain. One reason we do not see blue oceans more often in print is that the unrelenting pressure of the academic reward structure places a higher value on mere publication than superlative publication. Promotion and tenure committees most often tend to "count" the number of publications in each tier of journal rather than assessing the quality of the individual articles, for example.³ Generally speaking, blue oceans take more time and are riskier projects, and this works against them.

How do you know a blue ocean when you see one? Sad to say, it is probably not that easy to identify one in the making. Searching for gaps in the literature is a time-honored technique for doing this, but it can be extremely disheartening when a reviewer responds, as one did recently to one of my own papers under review, that I had assuredly identified a gap in the literature, but the problem was that it was an unimportant gap!

Being well versed in the academic literature, even across the subdisciplines of information systems or across the management disciplines, may equally not be the answer. Some people feel that seeing gaps in the published literature may already be too late because of the long lead time in review cycles and the backlog in print publication. Moreover, work that is finally accepted and published may already be five or more years old.

Conferences may be a fairly good way of looking for and recognizing blue oceans. But what may be more effective than paper sessions and reading the proceedings could be face-to-face social networking. This may seem old fashioned in the Facebook era, but intimations of immortality may be easier to sense in low-keyed and off-handed remarks people make at social gatherings more so than in the public expression of research ideas over the Net.

Recognizing blue oceans is much easier over the long term. Through citation analysis, studies like Lowry et al. (2007) show that papers like DeLone and McLean (1992) achieved their well-deserved status as papers that created macro-level frameworks of great value and inspired researchers to invest in explaining why systems were successful or not. The evidence here was accumulated

²In many cases, this effort must take into account the need to educate or reeducate the general reader on methodological issues for the article to make any sense and have any value-add.

³In this, citation analysis, one might argue, is not very useful, particularly for tenure cases. The time-line for citations is fairly short for even the Thompson-Reuters journal impact factor two-year window, the effect of which is that a junior faculty member who publishes a lot late in her/his career will not see the results of this work in citations until well after tenure time. The situation for promotion to full professor status is better, but still subject to many limitations. One major drawback to using citations alone as a measuring tool is that they do not take into account the relative size of a subcommunity or the size of those working in particular research paradigms. Citations counts for those working in niche areas like international issues in IT, for instance, will necessarily be lower because there are far fewer researchers specializing in this domain and far fewer opportunities, therefore, for citation. The same can be said for many other subcommunities in our field.

citations over a long period of time, but the basis of the argument is still the scholarly citation itself. For this reason, authors, editors, and journals themselves value citations as a reasonable approximation of scholarly influence.

But none of this gainsays the opportunities for researchers who have a “fire in the mind”⁴ to seek out blue oceans. Creating abiding papers that challenge assumptions and break new ground may not be the most sensible strategy for winning tenure, but in the broader community this is the most exciting work that we have and it is this work that garners the highest laurels.

Detmar W. Straub
Editor-in-Chief
dstraub@cis.gsu.edu

References

- Delone, W. H., and McLean, E. R. 1992. “Information Systems Success: The Quest for the Dependent Variable,” *Information Systems Research* (3:1), pp. 60-95.
- Kim, W. C., and Maubourgne, R. 2007. *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*, Cambridge, MA: Harvard Business School Press.
- Kreipke, R. C. 2003. *Ford Motor Company: The First 100 Years*, Evansville, IN: M. T. Publishing Company, Inc.
- Larsen, S., and Larsen, R. 1991. *A Fire in the Mind: The Life of Joseph Campbell*, New York: Doubleday.
- Lowry, P. B., Karuga, G. G., and Richardson, V. J. 2007. “Assessing Leading Institutions, Faculty, and Articles in Premier Information Systems Research Journals,” *Communications of the Association for Information Systems* (20:Article 16), pp. 142-203.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P. 2003. “Common Method Bias in Behavioral Research: A Critical Review of the Literature and Recommended Remedies,” *Journal of Applied Psychology* (88:5), pp. 879-903.

⁴I borrow this term from the title of Larsen and Larsen’s (1991) biography of Joseph Campbell, the famous mythologist.

