

# GESTÃO DA INFORMAÇÃO

# HOW TO GET PAPERS PUBLISHED IN LEADING IS JOURNALS?

COMO PUBLICAR ARTIGOS NOS PERIÓDICOS LÍDERES EM SI?

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#### **ABSTRACT**

Journals are the most important vehicles for sharing research results. Some countries (such as Brazil, Chile and Portugal) are underrepresented in terms of originating papers published in top Information Systems journals. This theoretical paper aims to provide a roadmap signposting the key elements for a paper to meet the criteria for publication in the top Information Systems journals. Ten dimensions for critically reviewing Information Systems papers were identified in the literature. Considering the importance of having a paper published in a top journal, for both the author and for the institution to which he is affiliated, this paper might be used by researchers wishing to submit papers to top journals, as well as by editors and reviewers who might benefit by reflecting on the standards adopted in peer review systems.

#### **KEYWORDS**

Information Systems. Leading Journals. IS Journals. Papers. Roadmap.

#### **RESUMO**

Os periódicos são os veículos mais importantes para compartilhar os resultados de uma pesquisa. Alguns países (como Brasil, Chile e Portugal) são sub-representados em termos de origem de artigos publicados em periódicos líderes de Sistemas de Informação. Este trabalho teórico tem como objetivo fornecer um roteiro sinalizando os elementos-chave para um artigo cumprir os critérios para publicação nas principais revistas de Sistemas de Informação. Dez dimensões para revisão de artigos de Sistemas de Informação foram identificadas na literatura. Considerando a importância de ter um artigo publicado em um periódico líder, tanto para o autor quanto para a instituição à qual ele está filiado, este artigo pode ser usado por pesquisadores que desejam apresentar trabalhos para periódicos líderes, bem como pelos editores e revisores que podem se beneficiar com uma reflexão sobre os padrões adotados em sistemas de revisão de artigos por pares.

#### PALAVRAS-CHAVE:

Sistemas de Informação. Periódicos Líderes. Periódicos de SI. Artigos. Roteiro.

#### INTRODUCTION

Journals are the main means by which the results of research are shared in academic environments, and as such constitute an important stimulus for the growth of knowledge in a particular area. Currently, due to the facilities offered by Information Technology (IT) academics have access to journals from various countries. Moreover, the top Information Systems journals publish papers in English, which allows wider dissemination of content.

Papers published in journals are essential for the conduct of further investigations and for the advancement of knowledge. Moreover, there are personal and professional motivations for researchers to pursue the publication of the results of their research in journals relevant to their area of expertise. These motivations may include: raising funds for new research, which may be national or international; career advancement; peer recognition; meeting accreditation requirements and; personal satisfaction, among others.

Most of the papers published in top Information Systems journals are from North America (USA and Canada), Western Europe and Asia. For example (GRANT, 2010):

- a) Information Systems Research 70% of papers are from the USA, 11% from Canada, 3% from China, 16% from other countries:
- b) Management Information Systems Quarterly – 69% of papers are from the USA, 10% from Canada, 3% from the UK. 18% from other countries:
- c) Journal of the Association for Information Systems – 58% of papers from the USA, 9% from Canada, 5% from Australia, 4% from Finland, 3% from the

- UK, 3% from Singapore, and 3% from China, 15% from other countries:
- d) Information Systems Journal 29% of papers from the USA, 26% from the UK, 6% from Australia, 5% from Canada, 4% from Denmark, 3% from Netherlands, 3% from China, 24% from other countries:
- e) European Journal of Information Systems – 26% of papers are from USA, 26% from the UK. 6% from Australia. 4% from Netherlands, 3% from Denmark, 3% from Singapore, and 3% from Canada, 29% from other countries.

The main contribution of this theoretical paper is that in attempting to answer the research question - How can new researchers meet the assessment criteria of the top Information Systems journals? - it provides a roadmap signposting the key elements for a paper to meet the criteria for publication in the top Information Systems journals. Considering the importance of having a paper published in a top journal, for both the author and for the institution to which he is affiliated, this paper might be used by researchers wishing to submit papers to international journals, as well as by editors and reviewers who might benefit by reflecting on the standards adopted in peer review systems. We suggest a practical guide to improve the chances of having a paper published in a top Information Systems journal.

This paper is organized as follows. In section 2 we introduce the concepts of the 'peer review system' and 'paper evaluation criteria'. In section 3 we describe the proposed roadmap towards improving the understanding of how to get papers accepted for publication in top Information Systems journals. Finally, in section 4, we present the conclusion of our research and some ideas for future research.

#### **THEORY**

This section begins by presenting the major characteristics of the peer review system (2.1). Subsequently, the recommendations for writing a paper are addressed in the light of the criteria for evaluating papers (2.2).

# **Peer Review System**

Peer review is "a critical assessment by knowledgeable scholars of the quality of a scholarly paper submitted for publication to a scholarly journal" (DAVISON; VREEDE; BRIGGS, 2005, p. 969). The peer review system is important as it ensures the quality of the papers published in journals (WILSON, 2002). Lee (1995, p. 87) points out that the reviewing process is a "manifestation of the values that we hold as members of the community of scholars".

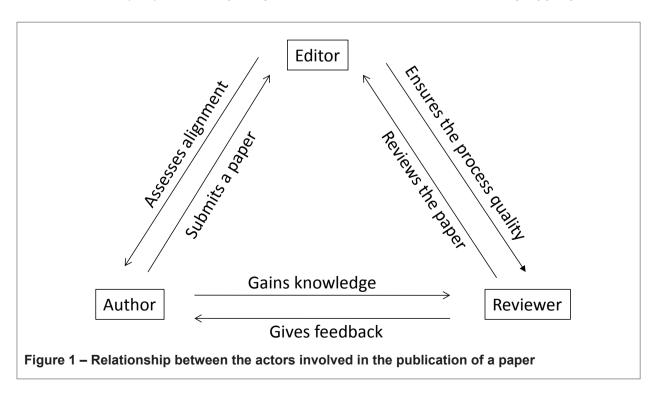
The publication of a paper in a journal involves three sets of actors (as shown in Figure 1): the **authors**, who should know beforehand what the reviewers assess in a paper (DAVISON; VREEDE; BRIGGS, 2005), and contribute to the journal by submitting the results of their research; the reviewers, who should help the authors by contributing to improving the quality of current and future papers, and who themselves gain knowledge and experience by practicing the review process (WILSON, 2002; DAVISON; VREEDE; BRIGGS, 2005), as well as meeting the needs of the editor by reviewing the paper; and the editors, who must ensure that reviewers fulfill their role (WIL-SON, 2002; DAVISON; VREEDE; BRIGGS, 2005), and make a preliminary assessment as to whether the paper submitted by the authors is contributing towards the mission of the journal. According to Davison, Vreede and Briggs (2005), the quality of the research published in journals depends on the authors and peer reviewers.

The papers generally receive opinions from at least two reviewers. Two aspects should be considered by the editor related to the reviews: reliability and validity. One way to verify the reliability of the review process is by the agreement between the reviewers (WOOD; ROBERTS; HOWELL, 2004). According to Wood, Roberts and Howell (2004), validity problems can also occur as, for example, when both reviewers make the same mistake.

# Criteria for paper evaluation

The recommendations in the journals' websites focus, in general, on issues relating to structure, and few address issues of content. For example, the top Information Systems journals such as Information Systems Research (ISR) and European Journal of Information Systems (EIIS) as well as the Brazilian journal BAR provide more guidelines on their websites. All journals provide guidelines on how to structure a paper; in most cases in relation to the length of the paper but some also refer to the content in relation to the abstract and title. The guidelines on the content of the paper, though directed toward the reviewers, are of use to potential authors. For example, the EIIS states:

> Areas to consider when reviewing the paper are (not exclusively): Is the paper of interest to a reasonable segment of the IS community? Is the paper logically and technically correct? Is the research methodology rigorous and sound? Are the title and abstract appropriate? Does the paper make a sufficient contribution to research so as to warrant publication in EIIS? Are the references appropriate and complete? Is the use of theory appropriate and



complete? Is the English satisfactory? Is the paper of interest to practitioners? (EJIS, 2011).

Among the challenges involved in getting a paper published in an international journal are: "finding a topic that has international appeal, understanding the audience, making a contribution, extending the existing knowledge" (GRANT, 2010). According to Whetten (1989) and Webster and Watson (2002), in order for a paper to be publishable, the following questions need to asked and answered: "contribution (what's new?), impact (so what?), logic (why so?), thoroughness (well done?), contemporaneity (why now?), and target (who cares?)".

One way to increase the likelihood of having a paper accepted is to carefully analyze the elements considered by the reviewers when evaluating papers. Several authors (ROBERTS et al., 2004; DAVISON; VREEDE; BRIGGS, 2005; HIRSCHHEIM, 2008) have presented lists of elements to be considered when evaluating a paper.

The guidelines offered by Roberts et al. (2004), Davison, Vreede and Briggs (2005), and Hirschheim (2008), can be organized into ten elements: alignment with the journal; structure; title, abstract, introduction, theoretical foundation, research method, analysis of the results; discussion of results; and conclusions.

The alignment of the objective of the paper and its size to the mission of the journal is only mentioned by Davison, Vreede and Briggs (2005). For a journal, this element is the starting point when evaluating a paper. Normally, the editor only allocates reviewers for the manuscript when it is aligned with the mission of the journal. For example, the website of the Information Systems Journal includes the mission of the journal, where details referring to the subject and the research method are set out. This allows the author to check what the editor will consider when assessing the alignment of the paper with the aims of the journal.

Roberts et al. (2004), Davison, Vreede and Briggs (2005), and Hirschheim (2008) highlight the relevance of aspects related to the structure of a paper: well organized, grammatically correct text, with arguments presented in a logical sequence. Some journals recommend that "Authors for whom English is a second language must have their manuscript professionally edited by an English-speaking person before submission to make sure the English is of high quality" (ISI, 2011).

Aspects relating to the title are dealt with by Roberts et al. (2004) and Davison, Vreede and Briggs (2005). According to Davison, Vreede and Briggs (2005), the title should be consistent with the text. The title must introduce the subject matter and attract the reader's attention (BEECHER, 1997). The key words of the paper must be used in the title (ZIMMERMAN; CLARK, 1987; BEECHER, 1997). Generic words such as, for example, "a proposed study of" should be avoided because they lengthen the title without adding information (DA-VIS, 1997).

The abstract, which should be consistent with the text of the paper, is one of the criteria used in the evaluation of papers (ROBERTS et al., 2004; DAVISON; VREEDE; BRIGGS, 2005). The abstract introduces the nature of the subject matter, the research problem, the method, the results obtained and their implications (AMERICAN PSYCHOLOGICAL ASSO-CIATION, 1994). The abstract should contain three basic aspects: the purpose and justification for the research, the method, and the main results (ZIMMERMAN: CLARK, 1987; BEECHER, 1997). In Brazil, guidelines for the contents of an abstract are provided by NBR 6028 (2003), which holds that the brief summary should include objectives, method and results.

The introduction should show why the paper should be read, state its purpose, what is new in the paper, i.e. demonstrate its potential contribution as well as introduce the concept behind the key variables and finally show the structure of the paper (WEBSTER; WATSON, 2002; HIRSCHHEIM, 2008).

The literature review is essential for expanding the knowledge base, identifying areas where there has been enough research, pointing out the areas with different perspectives as well as those where further research is needed (WEBSTER; WATSON, 2002; BOLDERSTON, 2008). The literature review occurs throughout the development of research (LEVY; ELLIS, 2006). A thorough review of the literature considers papers on the topic that use different methodologies, as well as papers from various journals.

One must consider that the choice of the material cited in the paper is made by the author; therefore a poorly planned or conducted study does not need to be addressed in the review of the literature (WEBSTER; WATSON, 2002). Singh, Hadda and Chow (2007) criticize the emphasis placed on the journal in determining the quality of a paper. They argue that the quality of a paper should not be measured in terms of the journal where it is published, but based on the content of the paper.

The approach to identify the material to be used in the literature review should include: consultation of databases (for example, Proquest), "go backward by reviewing the citations for the papers identified [...]; go forward using Web of Science [...] to identify key papers citing the papers identified in the previous steps" (WEBSTER; WATSON, 2002, p. xvi). The keywords have a role in the search for material previously published on the research subject (LEVY; ELLIS, 2006). Next, when reading a paper the researcher must reflected on how that paper could be related to his research (LEVY; ELLIS, 2006).

The literature review should be organized according to the concepts discussed (WEB-STER; WATSON, 2002). Levy and Ellis (2006, p. 182) point out that the literature review should "a) methodologically analyze and synthesize quality literature, b) provide a firm foundation to a research topic, c) provide a firm foundation to the selection of research methodology, and d) demonstrate that the proposed research contributes something new to the overall body of knowledge or advances the research field's knowledge-base".

"It is observed in the literature that theory is often noted as the foundation of the research or theoretical background indicating the fundamental building block for any research" (LEVY; ELLIS, 2006, p. 195). Theories are "abstract entities that aim to describe, explain and enhance our understanding of the world and, in some cases, to provide predictions of what will happen in the future and to give a basis for intervention and action" (GREGOR, 2006, p. 616). The theory could guide a research (MARKUS; ROBEY, 1988). According to Dubin (1978 as cited in MOODY; IACOB; AMRIT, 2010), theory is necessary for conducting research.

Roberts et al. (2004), Davison, Vreede

and Briggs (2005), and Hirschheim (2008) consider the research method to be one of the elements for evaluation of a paper. Different aspects are mentioned by the authors: presenting the method, having a suitable research design, describing how the data are collected, and reporting how the data are analyzed and interpreted.

The results of a paper need to be related to the existing literature and consistent with the research design as well as the inferences derived from the results (WEB-STER; WATSON, 2002; ROBERTS et al., 2004; DAVISON; VREEDE; BRIGGS, 2005).

The discussion of the results is intended to relate those results back to the research question and the previously presented relevant theory, as well as highlighting their implications for current research and practical application (so what?) (WEBSTER; WATSON, 2002). Hirschheim (2008) and Roberts et al. (2004) present the discussion of results and the conclusions in the same section.

The conclusions must summarize what was done and show the contribution of the paper, what has been added to the discussion of the issue by the paper, and finally point out what gaps could be filled by further research (BOLDERSTON, 2008). Within the conclusions, the limitations and suggestions for future research are also considered (ROBERTS et al., 2004).

# Practical roadmap

This paper suggests a practical roadmap for the enhancement of publications in top Information Systems journals by underrepresented countries, such as Brazil, Chile and Portugal. Prospective authors should analyze their papers according to the aspects shown in Table 1 before submitting them to a journal and also identify if the journal has guidelines for the editor and reviewers who will judge the paper. Analyzing the structure of papers previously published in the Journal of interest is also a good way to increase likelihood of achieving publication.

TABLE 1 - Roadmap intended to enhance the likelihood of papers from underrepresented countries getting published in top IS journals

Elements	Aspects	Authors
Alignment to the journal	Paper's objective in line with the mission of the journal – check that the content of the paper clearly meets the mission contained in the website of the journal Length appropriate for the journal - check formatting rules on the website of the journal	Davison, Vreede e Briggs (2005)
Structure	Well organized text – Check papers previously published in the journal to see if they follow the same sequence of sections Grammatically correct text – have the text checked by a native speaker of the language of the journal Arguments presented in logical sequence – have the text checked by another person before submitting it to the journal	Davison, Vreede e Briggs (2005); Hirschheim (2008); Roberts <i>et al.</i> (2004)
Title	Is consistent with the text – compare with the objective or research question to confirm the scope is the same Introduces the subject – specify the topic of the paper Uses keywords – use at least 50% of the keywords Does not use generic words – avoid words that do not add information. For example, "a proposed study of"	Beecher (1997); Davis (1997); Davison, Vreede e Briggs (2005); Roberts <i>et al.</i> (2004); Zimmerman e Clark (1987)
Abstract	Is consistent with the text – Check that the objective, method and results are compatible with the details in body of the paper Includes the objective, justification, method and results – check to confirm these items are present	Beecher (1997); Davison, Vreede e Briggs (2005); NBR6028 (2003); Roberts et al. (2004); Zimmerman e Clark (1987)

Introduction	Includes the justification, research question and objective – check to confirm these items are present  Contains a problem statement – check to confirm that the problem to be dealt with by the research is explicitly stated  Highlights the potential contribution of the paper – check to confirm that the potential contribution of the paper is explicitly stated  Includes an outline of the key variables – presents the main concepts related	Davison, Vreede e Briggs (2005); Hirschheim (2008); Roberts <i>et al.</i> (2004); Webster e Watson (2002)
	to the paper Shows the structure of the paper – describes the order and content of the sections in the paper	
Theoretical foundation	Refers to the theory, framework or concepts that guide the research – check to confirm the theoretical base is cited  The author is responsible for choosing the cited material - be careful in the choice of references used in the theoretical review  Shows the different perspectives existing in the literature – compare the different perspectives on the theme  Analyzes and synthesize the literature – analyze what exists in the literature, and what gaps exist  Literature review is up-to-date – use classical references, together with what has been produced in recent years  Contains an appropriate number of references –a paper often has at least 30 references	Bolderston (2008); Davison, Vreede e Briggs (2005); Hirschheim (2008); Levy e Ellis (2006); Roberts <i>et al.</i> (2004); Webster e Watson (2002)
Research method	Presents the method - identify the type of method used in the research Appropriate research design - justify the methodological choices  Describes how the data are collected - report and explain the options adopted in relation to data collection  Describes how the data are analyzed and interpreted - report and justify the choices in relation to the analysis and interpretation of the data	Davison, Vreede e Briggs (2005); Hirschheim (2008); Roberts <i>et al.</i> (2004); Webster e Watson (2002)
Analysis of the results	Results suitably related with the existing literature - relate the results with the literature presented in the theoretical foundation Results consistent with the research design - make sure the results are in accordance with the adopted methodological procedures	Davison, Vreede e Briggs (2005); Roberts <i>et al.</i> (2004); Webster e Watson (2002)
Discussion of results	States the academic and practical implications (so what?) – clearly state the academic and practical implications Relates back to research question and previously presented relevant theory	Davison, Vreede e Briggs (2005); Hirschheim (2008); Roberts et al. (2004); Webster e Watson (2002)
Conclusions	Summary – summarizes what was done Contribution of the paper (what's new?) - clearly state what is new or novel about the paper Describes the research limitations – list the research limitations Contains Suggestions for future research - make suggestions for future research, which may be related to the stated limitations	Bolderston (2008); Davison, Vreede e Briggs (2005); Hirschheim (2008); Roberts et al. (2004); Webster e Watson (2002)

#### CONCLUSION

The evidence presented in this investigation suggests the following conclusions. First, there is a group of criteria that characterize a paper published in a top IS journal, which involves the alignment of the paper to the journal, the structure and the content of a paper. Second, based on the literature review, a roadmap is proposed that can be used as a guide for the enhancement of publications to be submitted to top Information Systems journals by researchers in underrepresented countries, such as Brazil, Chile and Portugal.

Getting published in leading IS journals is, arguably, not only dependent on the quality of the paper submitted. It is dependent as well on the ability of authors to get access to high quality research opportunities in the first place. They also need the time, incentives, and support structures to support the effort to get published. Some institutions are better than others at providing this type of support. Given the intense focus of many institutions in underrepresented countries to have their researchers publish in internationally recognized journals it means that they will have to match this desire with the commensurate support and incentives. That being said, authors must ensure their papers meet and exceed the basic criteria for successful papers published in leading IS journals.

It is important to highlight that this roadmap is intended to be helpful as guideline for those interested in publishing their academic papers in leading IS journals, but should not inhibit the creativity or innovatory spirit of the academy community. Future research could include a survey with researchers of underrepresented countries and the journals to identify the number of submissions and the acceptance rate of papers.

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