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Strategic Information Systems Research: 
An Archival Analysis

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Abstract
The Journal of Strategic Information Systems (JSIS) has been an international outlet for Information Systems research that focuses on strategic issues since 1991. This paper reports on an analysis of the research published in JSIS to date. The paper presents a preliminary classification system for research topics related to Strategic Information Systems into which all 316 JSIS research papers as at end 2009 are classified. Discussion on changing emphases in topics over time is provided, in the context of the editorial philosophy of the journal. The paper seeks to stimulate discussion on future directions for research in Strategic Information Systems.

Keywords

Motivation for the Study
The Journal of Strategic Information Systems (JSIS) was first published in December 1991. From its inception through end 2009, some 316 research papers have been published in the journal. An analysis of research published in JSIS over its life to date offers potentially useful insights both to editors and to contributors to the journal and to research in the area generally. For JSIS editors, an analysis of the types of papers published and the origins of these papers can provide useful information for assessing how well editorial practice has reflected the editorial objectives of the journal. Evidence of deviation from earlier goals may prompt a more stringent enforcement of editorial policy. Alternatively, goals may be amended to reflect important changes in aspects of the Strategic Information Systems research landscape. With these goals in mind, since December 1995 there have been regular brief analyses in JSIS editorials, examining the topics that had been treated in the journal to that time. This archival analysis represents a relatively more formal process of topic review, with a more detailed and holistic analysis of the topics covered in JSIS research papers to date.

For contributors and potential contributors to JSIS, analysis of research published in the journal can provide useful indicators of the likely fit of their research with JSIS; they can note topics that have been favoured by the editorial team over time, and observe other topic areas that are consistent with the stated objectives of the journal.

1 This number excludes editorials and book reviews
but lightly represented. Classification of past work too can aid authors with accounting for relevant ideas in the area of their research interest.

There have been several such archival analyses of IS research publications (Claver et al., 2000; Vessey et al., 2002; Glass et al., 2004; Palvia et al., 2004; Avison et al., 2008; Gable et al., 2008). For the IS academic and researcher, an analysis of JSIS research papers, in conjunction with similar analyses of other archives of IS research, may reveal important information about the state and direction of the IS discipline.

Thus, aims of this study include:

- To present a preliminary structure for interrelating and discussing research topics in the area of Strategic Information Systems
- To present results of an evaluation of JSIS research articles from the journal’s inception in 1991 through to the end of 2009
- To stimulate further discussion on the conception of and directions for research in Strategic Information Systems
- To publish a comprehensive bibliography of all 316 JSIS full research publications to date.

**Classifying the JSIS Papers**

Details of all JSIS articles from 1991 (Volume 1\(^2\), Issue 1) to December 2009 (Volume 18, Issue 4), were imported to EndNote, and then exported to an Excel spreadsheet (Author, Year, Title, Formal Citation, Abstract, and Keywords). Drawing upon the Title, Abstract and Keywords, the procedure for developing the classification involved iterative bottom-up analysis of these data, supported by top-down more deductive considerations.

A top-down starting point for devising a classification system is a literature search in relation to topic classification systems previously developed by IS researchers. One such scheme is the Barki, Rivard, & Talbot (1993) (BRT) keyword classification scheme; a hierarchical classification system that provides nearly 1300 separate keywords at its lowest level and is the first such scheme to have gained any broad acceptance in the IS research community. BRT however, proved unsuitable for classifying topics from the JSIS research papers. The BRT topic classification system, because of its age (it not having been recently and comprehensively updated), does not provide keyword classification for many contemporary Strategic Information Systems topics (e.g. e-Commerce does not appear in the BRT classification scheme). Furthermore, because BRT was developed to support “all” IS research; it lacks the fine granularity desirable to classify research topics in the narrower field of Strategic Information Systems.

Several more recent attempts at developing systems for classifying and analysing IS research topics have moved away from the hierarchical approach characteristic of BRT. Each of these more recent IS classification systems (Farhoomand and Drury, 1999; Claver et al., 2000; Vessey et al., 2002; Glass et al., 2004; Palvia et al., 2004; Gable et al., 2008; Dwivedi et al., 2009; Banker and Kauffman, 2004) uses a single-

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\(^2\) The five articles in 1991 were not considered sufficient for a separate volume; thus those five articles are combined with articles published in 1992 as Volume 1.
level classification of topics. Regardless, each of these classifications has been developed to examine other aspects of IS research, and thus, like BRT, lacks the precision required for analysis of Strategic Information Systems.

The classification system adopted by the Editor of *JSIS* in 1998, and used in evolving form annually since then to overview the cumulative spread of research topics covered in the journal, favours a broad categorisation to facilitate ready yet meaningful analysis of research topics relevant to *JSIS*. The initial ten categories increased to 12 in 2003 and to 13 in 2004. In the interests of parsimony, several sub-categories were concatenated. Of the 13 categories in the 2007 editorial analysis of *JSIS* topics, the category “Other” provides the third highest count, indicative of difficulty with assigning papers to the more specific categories. It is believed that the retrospective, purpose-built classification system, developed for this archival analysis of *JSIS* research, will enable ongoing comparative analysis, while also providing improved information for contributors to the journal.

**The Proposed Classification**

The draft classification of Strategic Information Systems research is shown in Table 1. At the highest level, papers are classified into three main topic-areas:

1. *IS for Strategic Decision Making*,
2. *Strategic Use of IS*, and

The existing framework has a maximum of three levels. For clarity of discussion the highest level is referred to as ‘topic-areas’ (e.g. 2. Strategic Use of IS). The next level down is referred to as ‘categories’ (e.g. 2.6. IS for Internal Strategic Efficiency). Finally, the third level down is referred to as ‘sub-categories’ (e.g. 2.6.1. BPR).

The first two topic-areas, *IS for Strategic Decision Making* and *Strategic Use of IS*, are suggested in an early *JSIS* paper by Cavaye and Cragg (1993). In attempting to define Strategic Information Systems, Cavaye and Cragg differentiate between IS which ‘may be used to support strategic decision making’ and IS which ‘may be used to support or shape an organization’s competitive strategy’ (p.126). The third topic-area, *Strategies for IS Issues*, arises from recognition that a substantial portion of *JSIS* papers reflect an alternative slant on Strategic Information Systems; this group of papers examines strategies to deal with a diverse range of IS issues, particularly those relating to emerging technologies.

The lower levels reflected in the proposed classification, as shown in Table 1; result primarily from bottom-up analysis of the data from all *JSIS* articles. This involved reviewing the keywords and abstracts of each of the *JSIS* articles and looking heuristically for meaningful groupings within the three topic areas already specified.

Having derived the classification scheme, each of the research papers in *JSIS* between 1991 and 2009 was coded according to the category most applicable to it. A single item coding system was used. This is but one of a variety of coding approaches that might have been adopted (Chua, 2003). While a given paper might conceivably be allocated to more than one category, for simplicity of analysis and interpretation, a single category was assigned to each paper. Finally, a count was made of the number
of JSIS papers in each classification category, to yield an overview of the relative emphasis on topic categories by JSIS authors over time (Tables 2 and 3). A decision was made, after trial coding, to permit coding at the highest level (e.g. 2 Strategic Use of IS), where a research paper topic was deemed to belong to that topic area but did not well fit any of the defined categories within the topic area. The justification is that such occurrences were infrequent and that this approach has advantages over the alternatives.

Table 1 - A Classification Scheme for Strategic Information Systems Research

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<th>3 Strategies for IS Issues</th>
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<td>1.2 Information Planning</td>
<td>3.2 IS Planning</td>
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<td>1.3 Decision Support (DSS, EIS, GDSS)</td>
<td>3.3 IS Organization (incl Outsourcing)</td>
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<td>2 Strategic Use of IS</td>
<td>3.4 IS Development Methods</td>
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<td>2.1 Alignment of IT &amp; Business</td>
<td>3.5 Application Service Provision</td>
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<td>2.2 Lifecycle of an IS for Strategic Use</td>
<td>3.6 IS Implementation</td>
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<td>2.3 IS and Globalization</td>
<td>3.7 IS Evaluation</td>
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<td>2.7 Knowledge Management Use</td>
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</table>

JSIS Papers by Classification Category

Table 2 presents counts of JSIS papers by Volume/Year, as classified within the framework. Table 3 presents summary findings from Table 2.

IS for Strategic Decision Making

The first main topic-area, IS Used to Support Strategic Decision Making, accounts for 12% of the papers coded (39 of 316). This percentage has ranged over the journal’s life, mostly between 5%-25% but jumped to 53% in 2000 and dropped to 0% in 1997 as well as in the two volumes, 2007-2008. The most highly represented category in this topic-area is Information Planning (16 papers, 5% of total), which includes establishing information infrastructure to support strategic decision making. Not surprisingly, few papers (only 9 in total) deal primarily with Decision Support topics. It is thus not surprising that this topic-area has fewest papers over the life of JSIS (compared to the other two main topic-areas); there having come into existence during the life of JSIS other more specialised outlets for research on Decision Support and much of the emphasis in the Decision Support area not having strategic emphasis.

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3 The first alternative is to categorise such papers into a global “Other” category but this would lose the usefulness of being able to associate these papers with a broad topic area; to have an “Other” category for each topic area would retain the association of the topic area but at the expense of three new categories to cater for just a few papers; a third option would be to generate new categories to accommodate these miscellaneous papers but such an approach would threaten the basis of the classification, in allowing multiple diverse categories for just a few “unusual” papers.
Strategic Use of IS

It can be seen from Table 2 that well over half (57%) of the JSIS papers analysed (180 of 316) relate to the second topic-area Strategic Use of IS. This percentage dropped below 50% in only 3 years – 40%, 29% and 27% in 1993, 1997 and 2000; more recently, this topic area has been above the trend average, with 57% in 2006, 56% in 2007, 63% in 2008 and 57% again in 2009. This topic area peaked in 1994, accounting for a full 83% of papers published that year, the next most prominent year for this area of work being 2002 (77%).

Within this main topic-area, the largest number of papers (45) relate more specifically to aspects of the alignment between IT and Business. Matching this category is IS for Internal Strategic Efficiency, also with a total of 45 papers (the sum of the sub-categories). Though an editorial in 1993 (Volume. 2, No.4) suggests a degree of disenchantment with the concept of IS for competitive advantage at the time (with papers such as Cavaye and Cragg (1993) and Peppard and Ward (1999) also suggesting that competitive advantage from IS is frequently transitory), IS for Competitive Advantage is the prime focus of 31 papers in the second topic-area. The overall dominance of papers in this topic-area across the history of JSIS is consistent with the journal’s fundamental philosophy and offers a counterpoint to the view of IS as no more than a commodity (Carr, 2003)4.

Strategies for IS Issues

The third main topic-area, Strategies for IS Issues – a less intuitive interpretation of Strategic Information Systems – accounts for just less than one third (31%) of the total archive of JSIS papers (97 of 316). The relative prominence of this topic area can be seen to reflect early editorial philosophy of JSIS (as discussed later in this paper), which embraced a willingness to publish papers dealing with emerging technologies likely to have strategic impact.

Not surprisingly, this category includes a more disparate range of research topics. Of these, Strategies for IS Management (22) has the highest count, followed closely by Strategies for IS Planning (22). 1997 was an unusual year, in which this topic-area accounted for 71% of articles published; a year in which nothing was published on IS for Strategic Decision Making, and Strategic Use of IS experienced a life-cycle low of 29%. Papers in this topic-area have gone as low as 6% and 8% in 1994 and 2002 respectively, settling back around its lifecycle average (31%) over the past couple of years.

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4 The commoditization of IT packages being seen as a potential source of competitive disadvantage were a distinctive strategy not in place (cf., Porter, 2001).
Table 2 - IS Papers by Topic Category and Volume/Year - DETAILS

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<td>97</td>
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Total: 30 20 18 20 16 14 16 23 15 16 13 18 17 18 14 18 16 14 3 16 10 0.0%
Table 3 summary findings are further depicted in Figure 1 below (a stacked bar chart). The changing relative representation of topic-areas may indicate trends over time; for example, the very high relative representation of topic-area 2 Strategic Use of IS in Volumes 3 to 5. Certainly, the early emphasis in the journal was on key strategic issues of the time such as IS alignment. In other instances, for example the relatively large topic-area 1, IS for Strategic Decision Making in Volume 9, is in part explained by a special edition devoted to knowledge management issues. We also note a particularly marked emphasis on Strategies for IS Issues in Volumes 6 and 14, attributable primarily to Special Issues of JSIS (discussed in the next section).

Table 3 - JSIS Papers by Topic Area & Volume/Year - SUMMARY

<table>
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</table>

The broad category, ‘Strategies for IS Issues’, characterises approximately one-third of the papers, higher than might have been anticipated (given a general interpretation of Strategic Information Systems). There are Volumes, more so individual issues, which are strongly at odds with the broad pattern. For example, 10 of the 14 papers in Volume 6 address various strategies to deal with diverse IS Issues/Challenges, as do 12 papers of 18 in Volume 14. In Volume 9, by contrast, 8 of 15 papers deal with using IS to support strategic decision making. It is acknowledged that the introduction of special issues in Volumes 13, 14, 16 and 17 will have influenced numbers in tables 2 and 3. The relatively high frequency of papers in this category, dealing with aspects of IS and the technology, is in keeping with JSIS editorial policy to embrace research papers dealing with developments in IS and its technology.
Special Issues

As indicated in the above discussion of trends in JSIS research topics, the practice of periodically publishing Special Editions of JSIS has had an impact on the frequency and distribution over time of specific research topics.

As early as 1992 the idea of Special Issues of JSIS was broached. In the December editorial, Galliers suggested giving “further consideration to the possibility of Special Editions in the future, dealing with particularly pertinent aspects of Strategic Information Systems” (p.242).

The first special issue of JSIS was announced in September 1997. There was no call for papers in JSIS for this first special issue; but rather it took advantage of a strong set of papers presented at the then highly topical Information Systems in Global Business track of the Hawaii International Conference on System Sciences. This inaugural special issue was:


In December 1998 the first call for papers for a special issue was announced. This second special issue was:


In 2002, there was another call for papers resulting in the special issue in:


A special issue of another kind was produced in 2003. November 2001 saw the 50th birthday of business computing. The first use of a computer for business purposes
occurred in November 1951 when J. Lyons & Co, a large London catering company, first ran their Bakery Valuations job, on a computer they had built for themselves – the Lyons Electronic Office (LEO). To mark this anniversary, a celebratory event, in the form of a two-day conference, was held in London. The final issue of JSIS for 2003 was a record of that event. This special issue was:


Other more recent special issues include:


Some special issue themes have recurred. Mobile and Wireless Technologies was first the subject of a special issue in:


The purpose of the special issue was to stimulate theoretical and empirical research on the mobile and wireless technologies. The special issue was initiated following the 2004 Austin Mobile Roundtable. Subsequent Mobile Roundtables have resulted in other issues of JSIS being devoted in part to mobile technologies. In 2007 part of Volume 16, Issue 4 was devoted to mobile technologies and that part of the issue was edited by M. Rossi, V. K. Tuunainen and S. Jarvenpaa.

**Philosophy of JSIS**

In understanding the type of research published in JSIS over its life, it is useful to examine changes in the journal’s editorial philosophy over that time. Galliers in his (1991) introduction to the first issue of JSIS stated:

“Information Technology (IT) needs to be taken seriously, its management needs to be integrated into the mainstream activities of executives and we need to do much more in ensuring that IT ‘delivers the goods’ by providing the business and social benefits that we seek from it.” The aims of the journal were to “present papers from both the academic and business worlds” and to provide “an international, balanced and integrated perspective”. (Galliers, 1991, p.3)

The second year of the journal was marked by a new format for the journal and the incorporation of the journal *International Information Systems* under the JSIS banner.
The focus of *IIS* was on “the similarities and differences in the treatment and use of information systems (IS) in different parts of the world and on global IS issues” (Galliers, 1993). The incorporation of *International Information Systems* into *JSIS* reinforced the international orientation of the journal, now a hallmark of the journal, and broadened its coverage.

In 1996, the focus of the journal again seemed to be expanding when Galliers reported a suggestion from Kit Dampney that “There are emerging technologies that need to be understood in order to gauge their potential strategic impact on size and effectiveness” (p.4) and called for comments and submissions.

*JSIS*’s willingness to accept papers that considered the strategic impact of emerging technologies is exemplified by many of the special issues, such as the 1998 special issue on eCommerce. Again, in his editorial of June 1999, Galliers described his 1991 information systems strategy model and reported:

> “I shall endeavour to incorporate in my next editorial aspects of electronic commerce/networking strategy and knowledge management strategy into this earlier model as a basis for a call for papers which aim to integrate these new technologies into an inclusive framework for information systems strategy. I do so, given my concern that there is a tendency to consider them as relatively isolated phenomena in the literature currently.” (Galliers, 1999a, p.123)

The result was the September 1999 Galliers editorial paper “Towards the integration of e-business, knowledge management and policy considerations within an information systems strategy framework” (Galliers, 1999b).

Policy issues continued to be a focus of *JSIS*. In January 2002, Galliers and Jarvenpaa reiterated that *JSIS* welcomed papers dealing with information system policy issues as well as those dealing with strategy. They said

> “Traditionally, information systems strategists have looked both inside the firm for distinctive competencies as well as outside the firm, including within the market and technology environments in which the firm operates. Increasingly, however, firms are finding that their strategies must also take into account policy concerns. There is a growing global concern for such policy issues as consumer privacy, taxation, fraud, conflicts of international law, and intellectual property protection. The ability of today’s organizations to manage and increasingly to shape these policy frontiers is often proving crucial to their business success throughout the world. We would like to see more of these issues and opportunities being shaped in the pages of *JSIS*.” (Galliers and Jarvenpaa, 2002, pp.2-3)

A further broadening of topic coverage occurred in 2004. In the first editorial of the year a brief analysis of the subject matter of articles published in *JSIS* showed that they covered traditional topics such as IS strategy, alignment, inter-organizational systems, competitive advantage and the organization and management of IS services, and more recently knowledge management and issues associated with trust (e.g. in virtual teams). The editors then stated:

> “We would like to encourage more papers on such topics, as well as on the evaluation of enterprise systems, further studies that investigate cultural nuances and considerations in the age of globalization (e.g. in global software development), and on ethical considerations.” (p.1)
JSIS is particularly proud of its international nature. A Galliers and Meadows (2003) research paper in the Communications of the AIS, showed the distinct parochialism along national or regional lines of four of the top IS journals. The first JSIS editorial of 2003 reported this Galliers and Meadows paper and stated: “The Journal of Strategic Information Systems has attempted to break the mould by encouraging publication of research from many parts of our world since its launch in December 1991.” (p.3). Data on authorship up until 2003 showed that JSIS was practising what it preached: the Americas region (the Association for Information Systems Region 1) was represented by 31% of the lead authors; Europe, the Middle East and Africa (AIS Region 2) was represented by 47% and the Asia Pacific (AIS Region 3) by 22%.” The most recent analysis of nationality of lead authors, reported in 2008, shows that these percentages have held steady in recent years with the figures then at 34% for the Americas region; 44% for Europe, the Middle East and Africa; and 21% for the Asia Pacific region. JSIS has the oft-stated aim of attracting more articles from around the world, particularly from non-English speaking countries.

Analysis of Topics and Authorship

In December 1995, Galliers included the first broad analysis of the topics and authorship of the research papers in JSIS. At that time, there were nine topic headings and ‘Other’ for papers that did not fit into one of these. This type of analysis became a regular feature of Galliers’ editorials. In 2003, the number of topics increased to eleven with the inclusion of ‘Knowledge management/organizational learning’ and ‘Trust’. In 2004 the number of topics increased to twelve with the inclusion of ‘Historical perspectives/future trends’ to account for the material that was devoted to the 50th anniversary of business computing.

Under-researched Topics

An earlier version of table 2 was compiled by the author and Bob Smyth in 2003, then inclusive of volumes 1 through part of 12. The occasion was a 11 July 2003 gathering of those JSIS Editorial Board members present at PACIS 2003 and several invitees, to discuss strategic IS and to brainstorm the future direction of research on Strategic Information Systems. While the variant of table 2 above presented at the PACIS’03 gathering (and tables 2 and 3 above) reflected research that has been completed and published, discussion at that event focused on possible gaps or a lack of research. Key areas of lack identified at the time were:

- the ‘Value of IS’, ‘IT payoffs’ or ‘IT impacts’.

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5 The event followed from related discussions of the JSIS Board at ICIS in Barcelona 2002. The session was chaired by Gable with Kristine Dery serving as meeting Secretary (now Lecturing at University of Sydney). The table below lists those in attendance.

<table>
<thead>
<tr>
<th>Who</th>
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<th>Who</th>
<th>From</th>
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<tbody>
<tr>
<td>Arnott, David</td>
<td>Monash U., Australia</td>
<td>Liang, TP</td>
<td>Nat Sun Yat Sen U, Taiwan</td>
</tr>
<tr>
<td>Burn, Janice</td>
<td>Edith Cowan U., Australia</td>
<td>Markus, Lynne</td>
<td>Bentley College (JSIS Ed Board), USA</td>
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<tr>
<td>Chau, Patrick</td>
<td>The U. of Hong Kong, Hong Kong</td>
<td>Marshall, Peter</td>
<td>Mt Eliza Business School, Australia</td>
</tr>
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<td>Gabke, Guy</td>
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<td>Kokuryo, Jiro</td>
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<td>Lee, Byungtae</td>
<td>KAIST, Korea</td>
<td>Tols, Chris</td>
<td>Stockholm School of Economics, Sweden</td>
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<tr>
<td>Lee, Jae Kyu</td>
<td>KAIST, Korea</td>
<td>Wei, KK</td>
<td>City U of Hong Kong, Hong Kong</td>
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</table>
- ‘IT in product technology’.  
- Enterprise Systems (ERP).  
- Supply Chain Management.  
- Customer Relationship Management.  
- Effects of IT at an industry level.

As regards the last listed point, it was acknowledged that the notion of strategy suggests firm-level analysis – yet industry level analysis is required. As an example, SME’s have little relationship to each other unless you look at industry groups. Industry level strategy is changing. It was suggested there is need to look at strategies of different groups of firms within an industry over time (e.g. noting that individual companies once threatened by the internet are now embracing the technology as an industry group). It was further noted that this is not research that can be done alone; it requires a team.

Enterprise Systems have since the 2003 gathering been extensively addressed through special issues of *JSIS* in volumes 13, 14, 16 and 17 (see above). Though not a comprehensive reflection of the ideas surfaced at the meeting, possible special issues suggested at that time included:

- Joint special issues with other disciplines (e.g. Marketing on Customer Relationship Management, Operations Management on Supply Chain Management).  
- Value of IS.  
- IT Benefits Management.  
- Strategy in the Informatized Economy.  
- Business Intelligence.  
- Strategic Implications of Outsourcing.  
- Strategic Implications of Looming New Technologies about which we have little idea how these might ultimately affect industries/firms (e.g. RFID).

A number of the topics in the list above have featured in *JSIS* editions since that meeting, although special issues have not yet appeared on these topic areas; nor has the idea of a joint special issue with another discipline been achieved. These proposals warrant revisiting.

**Conclusion**

Key outcomes of this study include: (1) a preliminary framework for classifying research on Strategic Information Systems; (2) insights into areas of research emphasis and possible lack or neglect, either in the field or in the journal (note that these are likely topic areas of interest to the journal), and (3) a comprehensive bibliography and EndNote database of *JSIS* research articles from the journal’s inception in 1991 through end 2009, publicly accessible on the internet.  

The study has several limitations. The framework has been derived largely inductively from research published in *JSIS*. The derivative framework is likely deficient due to the non-representation of important topics, either because such topics have not been

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6 Glaringly missing was IT embedded in products. Some queried whether this is the realm of IT, or perhaps Engineering.  
7 [http://home.aisnet.org/displaycommon.cfm?an=1&subarticlenbr=395](http://home.aisnet.org/displaycommon.cfm?an=1&subarticlenbr=395)
submitted to JSIS, such topics when submitted did not pass the review process, or such topics are not being researched. The expert panel discussion in Adelaide surfaced several such topics. The choice of a single item coding system has also exposed inevitable arbitrariness in coding some papers, where such papers deal with aspects of two or more topics.

The study suggests several valuable directions for future research in Strategic Information Systems. Beyond the specific topic areas suggested above, the codification of topics admittedly could have been done more rigorously, involving multiple-coders and a more formal role for the panel of experts. Again, some weighted scores approach involving coding of up to two topics for each paper, as indicated above, may have given a more accurate picture. It is believed that such a more formal analysis is worthy of pursuit, possibly extending the archive of interest beyond JSIS, a primary objective being to derive a formal classification of Strategic Information Systems research to guide the research agenda. Such a more formal framework would, too, be highly valuable as a keyword structure for coding and classifying published research in the area of Strategic Information Systems.

**Acknowledgements**

Acknowledgements – Sincere thanks to Karen Stark and Bob Smyth, Research Associates, whose input to the development of this article has been substantial.

**References**


**Bibliography: All JSIS Full Research Papers 1991-2009**


Angell, I. O., & Straub, B. H. (1993). 'Though this be madness, yet there is method in'y'. *2*(1), 5-14.


Cendon, B. V., & Jarvenpaa, S. L. (2001). The development and exercise of power by leaders of support units in implementing information technology-based services. 10(2), 121-158.


Clarke, R., & Jenkins, M. (1993). The strategic intent of on-line trading systems: a case study in national livestock marketing. 2(1), 57-76.


Fowler, A. (2000). The role of AI-based technology in support of the knowledge management value activity cycle. 9(2-3), 107-128.


Spinardi, G., Graham, I., & Williams, R. (1997). EDI in the Scottish Health Service: inter-organisational systems and inter-organisational change. 6(3), 251-263.


Teo, T. S. H., & Ranganathan, C. (2003). Leveraging IT resources and capabilities at the housing and development board. 12(3), 229-249.


