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Relevance in Information Systems Research: An Empirical Analysis

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Abstract

The importance of instilling relevance for IT executives in IS research has been stressed by a number of scholars for the long term survival and growth of the IS discipline. Though there have been extended deliberations on the subject, to our knowledge, there has been no empirical analysis to examine the relevance of current IS research. In this study, we analyze the relevance of the 388 published academic articles in the three top IS journals: MIS Quarterly, Information Systems Research and Journal of Management Information Systems, for a five year period from 2000-2004, by examining their 'fit' with the 'key issues for IT executives' identified by the latest survey conducted by Society for Information Management (SIM) in the year 2003. Results from the empirical analysis reveal that the issue of relevance for IT executives is not being adequately addressed by the current IS research. Based on the results of analysis, we make recommendations for increasing the relevance of IS research. As a future research direction, we identify four top concerns of the IT executives, which have not been adequately researched. The four identified topics are IT and business alignment, IT strategic planning, security and privacy, and attracting, developing, and retaining IT professionals.

Keywords: Relevance, Information Systems, Journal, Empirical

1. Introduction

The role of IS (information systems) research for business community has been critically questioned umpteen number of times. IS research has often been criticized for its failure to address the issues relevant for business practitioners (Galliers, 1994; Saunders, 1998; Zmud, 1996a, 1996b). In the past decade, substantial deliberation on the issue of relevance in IS research has taken place among academics. Researchers have been exhorted to incorporate greater relevance in their research (Benbasat and Zmud, 1999; Davenport and Markus, 1999). Though IS researchers are being continuously encouraged through various forums to make their research more relevant and useful for practitioners, there have been very few studies that have specifically assessed how relevant is our current research.

In this study, we address this vital issue of IS research. The aim of this paper is to take stock of the practical relevance of the current IS research and provide specific recommendations for addressing the concerns of practitioners. The credibility gap of IS research within the business community needs to be better understood and bridged for the long term survival and growth of the discipline. Through an empirical analysis of articles published in the last five years in the top three IS journals, namely, MIS Quarterly, Information Systems Research and Journal of Management Information Systems, we investigate 'how relevant for practitioners is the current IS research?'

2. Theoretical Development: Relevant Research in Information Systems

The importance of relevance of IS research has been highlighted by a number of scholars. Useful research should not be 'in the ivory tower, fuzzy, irrelevant and pretentious' (Business

Week, 1990). Recently there has been a growing debate about the crisis in the IS discipline. Scholars have identified various ways of resolving this crisis (Markus, 1999; Lucas, 1999; Hirschheim and Klein, 2003). A need for greater socio-political and cognitive legitimacy for IS discipline has emerged as the major requirement for resolving this crisis (Aldrich, 1999). Benbasat and Zmud (2003) have mentioned in unassuming terms that currently IS research has made substantial progress in terms of socio-political legitimacy by addressing the needs of the external non-IS stakeholders (deans of business schools, academics from other disciplines, non-IS professionals) but it lacks cognitive legitimacy. They suggested that a directed effort should be put in to enhance the cognitive legitimacy of the IS discipline. Taking umbrage in the argument about enhancing the cognitive legitimacy of the discipline we posit that for attaining this objective it is important to adequately address the needs of all internal IS stakeholders (IS academics and researchers, and IS professionals).

Descriptive stakeholder theory also reiterates the importance of addressing the needs of all discipline stakeholders in the current stage of lifecycle of IS discipline. Using the resource dependency theory (Pfeffer and Salanick, 1978), prospect theory (Kahneman and Tversky, 1979) and organizational lifecycle models (Chandler, 1962), Jawahar and McLaughlin (2001) developed a 'descriptive stakeholder theory' to explain, at what point in the organizational lifecycle, which of the primary stakeholders are critical for the organizational survival and growth. The critical stakeholders for the different stages (start-up stage, emerging growth stage, mature stage and decline/transition stage) are different. For its survival and growth, organizations need to address the needs of the different stakeholders at different points in time.

IS is a relatively young discipline compared to other established disciplines in the business schools, like marketing, finance, strategy, management science and organizational behavior. Since its emergence in the 1970s, the IS discipline has seen a lot of evolutionary changes and some scholars now even consider it to be mature enough to serve as a reference discipline (Baskerville and Myers, 2002). But certainly the discipline as well as its body of knowledge (BoK) (Hirschheim and Klein, 2003) is still evolving and can be considered to be in the 'emerging growth stage' of the 'descriptive stakeholder model'. In organizations, for the *start-up stage,* the external stakeholders like 'creditors and customers' are of utmost importance and their needs should be addressed to, whereas in the *emerging growth stage* the organizations should follow a 'risk averse strategy of addressing the needs of all stakeholders in a proactive and accommodative manner' (Jawahar and McLaughlin, 2001). The theory further spells out that for the *mature stage*, the risk averse strategy of the emerging growth stage, should continue and the 'needs of all stakeholders should be addressed proactively except for creditors who will be accommodated'. This implies that for IS discipline, which can be considered to be in the emerging growth, the needs of all stakeholders have to be addressed in a proactive way to facilitate its growth and survival. IS professionals are an important stakeholder group whose needs have to be adequately addressed to impart required cognitive legitimacy to the discipline. Neglecting the requirements of this vital segment of discipline stakeholders may sound the death knoll for the discipline.

Davenport and Markus (1999) also see the goal of research relevance critical to the long term survival and success of the field. They urge the IS researchers to emulate colleagues from medicine and law rather than other fields in business. According to them ''IS academics experience the same institutional pressures towards irrelevance as other business faculty e.g. promotion and tenure evaluations based on publications in referred academic journals (but not in practitioner journals)''.

Benbasat and Zmud (1999) mentioned that much of IS research lacks relevance because *of an emphasis of rigor over relevance, lack of a cumulative tradition, the dynamism of information technology, limited exposure to relevant contexts, and institutional and political*

factors. They also suggested ways of making the IS research more relevant for IS practitioners. Their major stress was on the choice of *relevant topics* by the authors. Three of the four dimensions of relevance identified by Benbasat and Zmud (1999) dealt with the content of articles (interesting, applicable and current) as shown in Table 1. Over half a decade after the deliberations of senior IS researchers on the issue of instilling greater relevance to IS research, it is an opportune time to take stock of the subsequent research to analyze whether current IS research is relevant for the practitioners or not. For this we analyze the topical relevance of the published IS research which encompasses the dimensions of article's content (interesting, applicable and current).

Table 1: Dimensions of Relevance

Category	Dimensions of Relevance	Description
Article's Content	*Interesting*	*Does IS research address the problems or challenges that are of concern to IS professionals?*
	Applicable	*Does IS research produce the knowledge and offer prescriptions that can be utilized by practitioners?*
	Current	*Does IS research focus on the current technologies and business issues?*
Article's Style	Accessible	Are IS research articles able to be understood (in terms of tone, style, structure and semantics) by IS professionals?

Source: Benbasat and Zmud (1999)

3. Methodology

For seeking an answer to our research question about the relevance of current IS research we see the *fit* of the 'relevant topics' identified by the IS professionals with the topics of research in the top three IS journals, *MIS Quarterly (MISQ), Information Systems Research (ISR) and Journal of Management Information Systems (JMIS)* for the last five years from *2000-2004.*
The "key issues for IT executives" identified by the sixth[1] formal survey by the Society of Information Management (SIM) have been used as 'current concerns of the IT professionals' for conducting our analysis in this study (Luftman and McLean, 2004). This formal survey was authorized by the SIM executive board, nine years after the last formal survey was conducted in 1994, published in 1996 (Brancheau, Janz and Wetherbe,1996). Table 2 shows the top twenty management concerns of IT executives identified as a result of this survey.

Table 2: IT Management Concern – Ranking of Importance

Rank	IT Management Concern
1	IT and business alignment
2	IT strategic planning
3	Security and privacy
4	Attracting, developing and retaining IT professionals
5	Measuring the value of IT investments
6	Measuring the performance of the IT organization

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[1] Ball and Harris (1982) conducted the first survey and produced a list of 18 issues. Subsequently surveys were held to identify the top IT management concerns by Dickerson and Nechis (1984), Brancheau and Wetherbe (1987), Niederman, Brancheau and Wetherbe (1991), and Brancheau, Janz and Wetherbe (1996).

7	Creating an information infrastructure
8	Complexity reduction
9	Speed and agility
10	IT governance
11	Business process reengineering
12	Introducing rapid business solutions
13	Evolving CIO leadership role
14	IT asset management
15	Managing outsourcing relationships
16	Leveraging the legacy investment
17	Sarbanes-Oxley Act of 2002
18	Globalization
19	Offshore outsourcing impacts on IT careers
20	Societal implications of IT

Source: Luftman and McLean (2004)

In our study, we analyzed 388 articles published during last five years (2000-2004) in the top three IS journals, 104 in MISQ, 111 in ISR and 173 in JMIS. Based on the *topics and the abstracts* of the articles we identified the dominant concern being addressed in the article. If the content matched with one of the top twenty concerns identified in the latest SIM survey (Luftman and McLean, 2004) it was grouped there otherwise was grouped into a 21st category: *others*. The 'others' category indicates that the dominant theme of the article does not address any of the concerns mentioned in the top twenty concerns of Table 2. The topic wise and year wise summary for the three journals is presented in Tables 3 to 5.

Table 3: MISQ – Articles addressing IT management concerns over the years

Rank	Issues	2004	2003	2002	2001	2000	Total	Percent
1	IT and business alignment	0	0	0	0	3	3	2.88
2	IT strategic planning	1	1	0	0	0	2	1.92
3	Security and privacy	0	0	0	0	0	0	0.00
4	Attracting, developing, and retaining IT professionals	2	0	1	1	1	5	4.81
5	Measuring the value of IT investments	4	2	0	0	1	7	6.73
6	Measuring the performance of the IT organization	1	1	1	0	0	3	2.88
7	Creating an information architecture	2	3	1	1	0	7	6.73
8	Complexity reduction	1	0	0	0	1	2	1.92
9	Speed and agility	1	0	0	1	1	3	2.88
10	IT governance	3	3	2	3	5	16	15.38
11	Business process reengineering	0	1	0	0	1	2	1.92
12	Introducing rapid business solutions	1	4	2	2	2	11	10.58
13	Evolving CIO leadership role	0	0	0	1	0	1	0.96
14	IT asset management	0	0	0	0	1	1	0.96

15	Managing outsourcing relationships	0	1	0	0	0	**1**	**0.96**
16	Leveraging the legacy investment	0	0	0	0	1	**1**	**0.96**
17	Sabarnes-Oxley Act of 2002	0	0	0	0	0	**0**	**0.00**
18	Globalization	0	0	0	0	0	**0**	**0.00**
19	Offshore outsourcing impact on IT careers	0	0	1	0	0	**1**	**0.96**
20	Societal implications of IT	1	1	0	1	2	**5**	**4.81**
21	Others	8	6	8	7	4	**33**	**31.73**
	Total	**25**	**23**	**16**	**17**	**23**	**104**	**100**

Table 4: ISR – Articles addressing IT management concerns over the years

Rank	Issues	2004	2003	2002	2001	2000	Total	Percent
1	IT and business alignment	0	0	0	1	1	**2**	**1.80**
2	IT strategic planning	0	1	0	2	0	**3**	**2.70**
3	Security and privacy	3	1	3	0	0	**7**	**6.31**
4	Attracting, developing, and retaining IT professionals	0	2	0	1	3	**6**	**5.41**
5	Measuring the value of IT investments	4	3	6	3	2	**18**	**16.22**
6	Measuring the performance of the IT organization	1	1	8	1	0	**11**	**9.91**
7	Creating an information architecture	3	4	1	2	3	**13**	**11.71**
8	Complexity reduction	0	0	0	1	4	**5**	**4.50**
9	Speed and agility	0	0	1	3	0	**4**	**3.60**
10	IT governance	3	0	0	3	6	**12**	**10.81**
11	Business process reengineering	0	0	0	0	1	**1**	**0.90**
12	Introducing rapid business solutions	0	1	2	0	1	**4**	**3.60**
13	Evolving CIO leadership role	0	1	0	0	0	**1**	**0.90**
14	IT asset management	1	0	1	0	0	**2**	**1.80**
15	Managing outsourcing relationships	2	2	0	0	0	**4**	**3.60**
16	Leveraging the legacy investment	0	0	0	0	1	**1**	**0.90**
17	Sabarnes-Oxley Act of 2002	0	0	0	0	0	**0**	**0.00**
18	Globalization	0	0	0	0	0	**0**	**0.00**
19	Offshore outsourcing impact on IT careers	0	0	0	0	0	**0**	**0.00**
20	Societal implications of IT	3	1	1	1	0	**6**	**5.41**
21	Others	0	1	4	5	1	**11**	**9.91**
	Total	**20**	**18**	**27**	**23**	**23**	**111**	**100**

Table 5: JMIS – Articles addressing IT management concerns over the years

Rank	Issues	2004	2003	2002	2001	2000	Total	Percent
1	IT and business alignment	0	1	0	0	0	1	0.58
2	IT strategic planning	0	4	0	1	3	8	4.62
3	Security and privacy	1	3	1	0	4	9	5.20
4	Attracting, developing, and retaining IT professionals	1	2	3	1	0	7	4.05
5	Measuring the value of IT investments	7	1	6	1	9	24	13.87
6	Measuring the performance of the IT organization	1	3	2	1	3	10	5.78
7	Creating an information architecture	3	3	1	2	0	9	5.20
8	Complexity reduction	1	0	3	0	1	5	2.89
9	Speed and agility	3	1	0	0	1	5	2.89
10	IT governance	7	5	2	7	3	24	13.87
11	Business process reengineering	1	0	0	0	3	4	2.31
12	Introducing rapid business solutions	3	4	8	2	1	18	10.40
13	Evolving CIO leadership role	0	1	0	2	0	3	1.73
14	IT asset management	0	1	1	4	2	8	4.62
15	Managing outsourcing relationships	1	0	0	0	0	1	0.58
16	Leveraging the legacy investment	0	0	0	0	0	0	0.00
17	Sabarnes-Oxley Act of 2002	0	0	0	0	0	0	0.00
18	Globalization	0	1	0	0	0	1	0.58
19	Offshore outsourcing impact on IT careers	0	0	0	0	0	0	0.00
20	Societal implications of IT	3	1	2	2	0	8	4.62
21	Others	3	3	7	12	3	28	16.18
	Total	**35**	**34**	**36**	**35**	**33**	**173**	**100**

4. Data Analysis and Discussion

To our knowledge there are no known measures for analyzing the relevance of academic journals. For this study, to understand the relevance of journals, we followed a two pronged approach. *First,* we developed a measure called *journal relevance coefficient (JRC)* to analyze the aggregate relevance trends of journals across the years. *Second,* we analyzed the raw data presented in tables 3 to 5 to understand the trends in terms of topics in IS research. Our recommendations from this study to the IS research community is based on these two sets of analysis.

Journal relevance coefficient – To compare the relevance of journals across the years and also with each other it is imperative to develop a common measure for this study. The aim of the journal relevance coefficient (JRC) is to understand the relevance aspect of the published articles in the three journals, in an aggregate way. For calculating JRC in this study we use the following methodology. First, we assign a weight to each of the twenty one issues (including 'others': articles which do not fall into one of the twenty categories) identified in the IT executive survey (Table 3 to 5). For simplicity we assign equal interval weights in the

reverse direction of ranks e.g. the top ranked topic "IT and business alignment" is assigned a weight of 21 whereas the last ranked item "others" is assigned a weight of 1. Next, we multiply these weights to the corresponding values (or frequencies of articles) in the Tables 3 to 5. This gives us a rank weighted table across the years for each of the journals. Next we sum up the weighted value for each year for each journal. To calculate the journal relevance coefficient (JCR) we divide this value for each year for each journal by the maximum possible value that can be attained (i.e. assuming all the articles in that year addresses the top concern for IT professionals, a weight of 21). This value gives the JCR for that journal, for that particular year. This measure expresses in a uniform way the extent of relevance being addressed by the journals in a particular year.

In notational terms this can be expressed as follows

$$(JRC)_{j,y} = \frac{\sum_{i=1}^{n} x_i w_i}{N \sum_{i=1}^{n} x_i} \ , \text{ where } (JRC)_{j,y} \text{ is the journal relevance coefficient for journal } j$$

(MISQ, ISR or JMIS) for year y (2000 to 2004), n is the rank of topics identified as relevant for practitioners x_i is the number of articles for the ith rank and w_i is the weight assigned for i^{th} rank article and N is the total number of articles analyzed. As an example we show the calculation of JRC for year 2004 for MISQ below.

Table 6: Ex. Calculation of journal relevance coefficient (JRC) for MISQ in 2004

n	Issues	x_i	w_i	$x_i w_i$
1	IT and business alignment	0	21	0
2	IT strategic planning	1	20	20
3	Security and privacy	0	19	0
4	Attracting, developing, and retaining IT professionals	2	18	36
5	Measuring the value of IT investments	4	17	68
6	Measuring the performance of the IT organization	1	16	16
7	Creating an information architecture	2	15	30
8	Complexity reduction	1	14	14
9	Speed and agility	1	13	13
10	IT governance	3	12	36
11	Business process reengineering	0	11	0
12	Introducing rapid business solutions	1	10	10
13	Evolving CIO leadership role	0	9	0
14	IT asset management	0	8	0
15	Managing outsourcing relationships	0	7	0
16	Leveraging the legacy investment	0	6	0
17	Sabarnes-Oxley Act of 2002	0	5	0
18	Globalization	0	4	0
19	Offshore outsourcing impact on IT careers	0	3	0

20	Societal implications of IT	1	2	2
21	Others	8	1	8
		25	$\sum_{i=1}^{n} x_i w_i =$	253
			$N \sum_{i=1}^{n} x_i =$	525
		$(JRC)_{MISQ,2004} =$	$\dfrac{\sum_{i=1}^{n} x_i w_i}{N \sum_{i=1}^{n} x_i} =$	0.481905

The JCR is a fair indicator of the relevance of published research in the journals and can be used to compare the 'relevance' of the IS journals in this study across the years from 2000-2004.

Figure 1 shows the movement of relevance factors across the years for the <u>three</u> journals in this study: MISQ, ISR and JMIS.

Relevance across the years
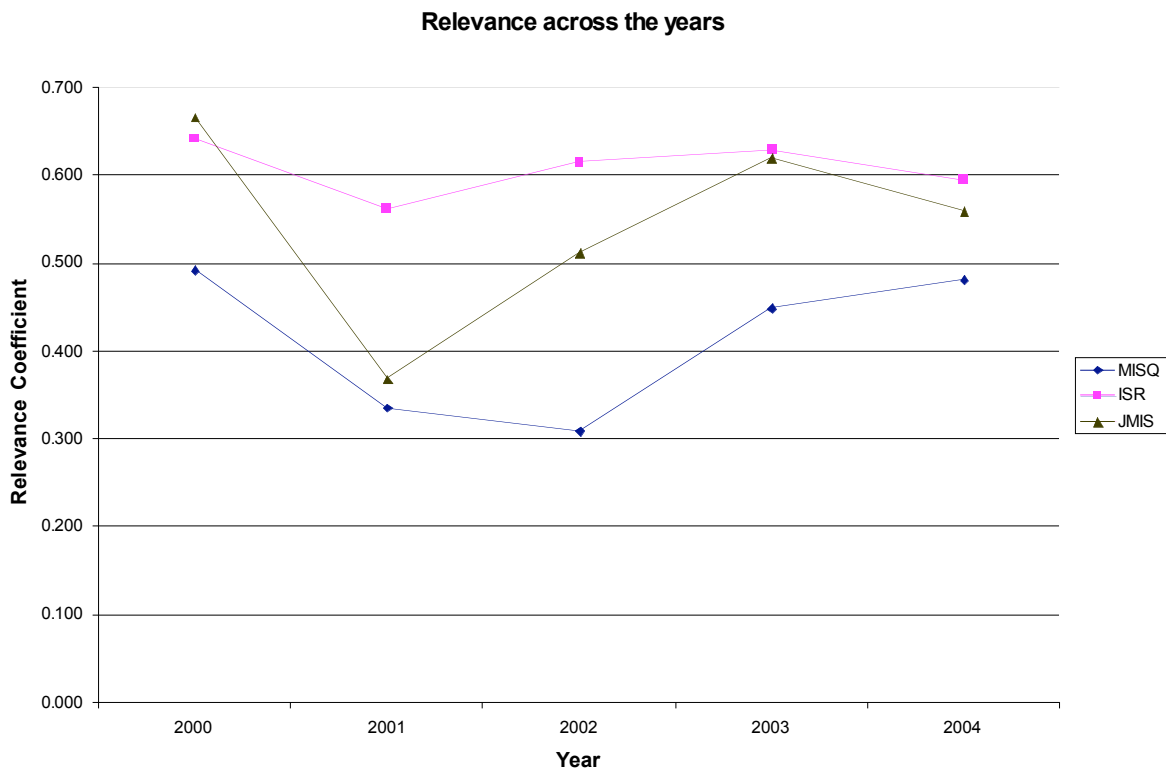
From the chart in Figure 1 we observe that ISR is currently the *most* relevant journal for IT executives in terms of topics studied and MISQ is the *least*. The interpretation of these results comes with some caveats (1) the analysis takes into consideration only the 'topical relevance', it is possible that the writing style is more practitioners friendly in MISQ; (2) MISQ also publishes another journal especially for practitioners namely, MISQ Executive, where the issues discussed tend to be more relevant for practitioners; and (3) we have assumed that the relevant topics identified in the survey of 2003 do not change remarkably in

the period from 2000-2004, but the dynamism of IT may inhibit this stability of relevant topics.

Even with these limitations, the point to be observed is that the current trend (2003-2004) for ISR and JMIS is a falling one in terms of relevance whereas for MISQ it is an increasing trend, which is encouraging. The study also shows that the debate on 'rigor and relevance' in 1999 did affect the choice of topics studied by IS researchers. Considering a phase lag of approximately two years for published works, we observe an increase in relevance of the articles after 2001-2002 for all the three journals, which is an encouraging trend. This indicates a realization by the IS academic community (researchers, reviewers and journal editors) to address the needs of the IS practitioners which are a very important part of the IS discipline users.

Though there is an increasing trend in the relevance of IS articles in the top three journals, the absolute values of the journal relevance coefficient (JRC) still ranges from 0.48 to 0.60 for the three journals in the year 2004 as shown in Table 7. This broadly signifies that we are addressing a maximum of 60% of the needs of the IT executives in our research (in the year 2004). There is a greater need and scope for addressing the needs of IS practitioners more closely in terms of topics selection.

Table 7: Journal relevance coefficient (JCR) across the years for the three journals

	2000	2001	2002	2003	2004	Total
MISQ	0.493	0.336	0.310	0.449	0.482	0.427
ISR	0.642	0.563	0.616	0.630	0.595	0.609
JMIS	0.667	0.369	0.512	0.620	0.559	0.543

From the detailed account of topical analysis of journals in Tables 3 to 5, we observe a perceptible gap in the requirements of the IT executives and the actual research by IS academics. Combined topic wise academic research in the twenty fields is indicated in Table 8.

Table 8: Aggregate topic wise published research in the three journals (2000-2004)

Rank	Issues	MISQ	ISR	JMIS	Total	Percent
1	IT and business alignment	3	2	1	6	1.55
2	IT strategic planning	2	3	8	13	3.35
3	Security and privacy	0	7	9	16	4.12
4	Attracting, developing, and retaining IT professionals	5	6	7	18	4.64
5	Measuring the value of IT investments	7	18	24	49	12.63
6	Measuring the performance of the IT organization	3	11	10	24	6.19
7	Creating an information architecture	7	13	9	29	7.47
8	Complexity reduction	2	5	5	12	3.09
9	Speed and agility	3	4	5	12	3.09
10	IT governance	16	12	24	52	13.40
11	Business process reengineering	2	1	4	7	1.80
12	Introducing rapid business solutions	11	4	18	33	8.51

13	Evolving CIO leadership role	1	1	3	**5**	**1.29**
14	IT asset management	1	2	8	**11**	**2.84**
15	Managing outsourcing relationships	1	4	1	**6**	**1.55**
16	Leveraging the legacy investment	1	1	0	**2**	**0.52**
17	Sabarnes-Oxley Act of 2002	0	0	0	**0**	**0.00**
18	Globalization	0	0	1	**1**	**0.26**
19	Offshore outsourcing impact on IT careers	1	0	0	**1**	**0.26**
20	Societal implications of IT	5	6	8	**19**	**4.90**
21	Others	33	11	28	**72**	**18.56**
	Total	**104**	**111**	**173**	**388**	**100**

We observe that comparatively very little research (< 14%) has been done on the top <u>four</u> issues identified by the SIM survey of 2003 (Luftman and McLean, 2004). Hence this study identifies four areas where research should be taken up by academics, namely: *IT and business alignment, IT strategic planning, security and privacy and attracting, developing, and retaining IT professionals.*

Apart from the under researched areas, we observe from Table 8 that there are some areas which have been the topic for most of the research in the IS field. For example, *measuring value of IT investment and measuring the performance of IT organization* form about 19 % of the total IS research, similarly *IT governance* is also an area which has been paid a lot of attention by IS researchers and forms over 13 % of the total IS research.

5. Recommendations

Based on this study we offer a set of recommendations for IS researchers and academics.

Recommendation#1: Researchers, while choosing research topics should consider, not only the theoretical significance of the topics, but also their relevance for practitioners - As highlighted by earlier researchers (Benbasat and Zmud, 1999; Davenport and Markus, 1999), business is an applied field and the needs of the IT executives should be addressed more closely. This does not imply that theoretical development of the field should not be considered, but there should be a balance between theory and practice. In fact, research topics which explain the practical significance of theories can serve to bridge the gap between theory and practice. This can be done by choosing research topics that have theoretical as well as practical relevance. Descriptive stakeholder theory (Jawahar and McLaughlin, 2001) also guides us to proactively address the needs of all stakeholders for the long term survival and growth of the discipline. Since IT executives are important stakeholders for IS discipline, it is imperative to address their requirements in our research to increase the cognitive legitimacy of the discipline. Our study indicates that only about 48%-60% of the concerns of the IT executives are being addressed by the current research. Hence there is a need to increase the relevance of IS research by choosing topics which are of relevance for IS practitioners.

Recommendation#2: Regular surveys to feel the pulse of IT executives should be conducted to provide guidelines for practical research to academics - For conducting research on topics relevant for IT executives, it is important to know the topics which are *interesting, applicable and current* for them. This can be known only if we have regular surveys like the one conducted by SIM in 2003. This particular survey was conducted by SIM after a gap of nine years (the last one was in 1994). The conduct of surveys should be institutionalized on a regular basis and the results should be proactively propagated to the IS academics.

Recommendation#3: ***Professional bodies and conferences should proactively assist in disseminating information and details about conducting relevant research -*** Professional bodies like Association of Information Systems (AIS), IS conferences (like ICIS, IFIP, AMCIS etc.) can be used as a platform for disseminating information about *relevant* topics. This will increase the awareness of the IS academics about these topics; also the institutional endorsement of these topics will add to the value of doing research on the identified topics by the IS researchers.

Apart from these general broad recommendations, we offer <u>two</u> specific recommendations emerging out of this study.

Recommendation#4: ***Greater need to study the topics of: IT and business alignment, IT strategic planning, security and privacy, and attracting, developing, and retaining IT professionals -*** This research indicates that the above mentioned top <u>four</u> key issues for IT executives are highly under researched in terms of published research in the top three IS journals. There appears to be an imperative need to incorporate these as important topics of research by IS academics.

Recommendation#5: ***Need to make the article's style amenable for the IT practitioners -*** In this study, we have analyzed only the topical relevance of the articles but it is also important that the articles have a tone and language which is simple and easily understandable by the IT executives. This has been pointed as the *fourth dimension* of relevance by Benbasat and Zmud (1999) and is recognized as a very important concern to be addressed by the IS researchers to make their articles relevant.

6. Contributions and Conclusions

This paper revisits the often debated question about the relevance of the current IS research. Though there has been a lot of discussion and deliberation on the issue, to our knowledge, there has been no empirical investigation about the extent of relevance of present IS research. In this study, we develop a theoretical foundation explaining the importance of instilling '*relevance for IT executives*' in IS research for the long term survival and growth of the IS discipline.

The empirical study which investigates the extent of relevance of published research for the last five years (2000-2004) in the <u>three</u> top journals in the field of IS: MISQ, ISR and JMIS provides a broad overview of the entire discipline and its focus on the requirements of IS practitioners. In this study, we develop a measure for estimating the relevance of IS journals (journal relevance coefficient, JRC), which can be used by future studies for estimating the extent of relevance exhibited by various journals. A periodical evaluation of the JRC, can help us assess, if we are adequately addressing the needs of the IS practitioners through our research

The results in this study indicates that the current level of relevance of top three IS journals is grossly inadequate (the maximum value of JRC is 0.60, for the year 2004). This indicates that for ensuring long term survival and growth of the IS discipline, the topics *relevant for IT executives* have to be studied in a more organized fashion, so that this important stakeholder group understands the value added by IS research for them. For doing this, we propose a set of *general* and *specific* recommendations for IS researchers. The general recommendations include: ***(1) researchers, while choosing research topics should consider, not only the theoretical significance of the topics, but also their relevance for practitioner; (2) regular surveys to feel the pulse of the IT executives should be conducted to provide guidelines for practical research to academics;*** and ***(3) professional bodies and conferences (like AIS, ICIS, IFIP, AMCIS etc.) should proactively assist in disseminating information and details about conducting relevant research.***

In this study, we also identified that there is a need to study certain under-researched relevant topics the topics. Four such topics are: ***IT and business alignment, IT strategic planning, security and privacy and attracting, developing, and retaining IT professionals.*** Though there had been substantial research on IT planning and alignment in the last decade, research in this area has slowed down. In the current context, IT strategic planning in the e-business scenario has not been explored by researchers and emerges as a relevant gap for future IS research. The importance of security and privacy is even more relevant in the era of e-business and inter-organizational extended enterprises and is again an area which requires attention of IS researchers. In addition, in this era of globalization, the issue of attracting, developing and retaining IT professionals becomes a critical issue as organizations struggle with key decisions of whether to outsource, how much to outsource, and how to manage outsourcing/offshoring. Apart from the under researched areas, there are some areas which have been explored by a substantial number of researchers. The most popular relevant topics being researched in the IS field as per our analysis in this study are *measuring IT impact* and *IT governance*. We also reiterate, that apart from addressing the topical dimensions of relevance of IS research, it is also important ***to make the article's style amenable for the IT practitioners***, which implies that the tone and language should be direct, simple and easily comprehensible by practitioners.

Finally, the results show that after the focused deliberation on the subject of relevance in IS research, in the year 1999, (Benbasat and Zmud, 1999; Davenport and Markus, 1999) there has been a marked improvement in the JRC of all the three journals as observed by the chart in Figure 1. However, the JRC is still relatively low and there is a need to focus on current issues affecting IT executives. Through this paper we seek to encourage IS academic community to undertake a more organized stance to address the needs of the IT executives.

7. References

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