

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2010 Proceedings

Americas Conference on Information Systems
(AMCIS)

8-2010

B2B Electronic Marketplaces in Supply Chain Management: Analyzing Recent Research Activities

Christoph Pflügler

University of Augsburg, christoph.pfluegler@wiwi.uni-augsburg.de

Klaus Turowski

University of Augsburg, klaus.turowski@wiwi.uni-augsburg.de

Follow this and additional works at: <http://aisel.aisnet.org/amcis2010>

Recommended Citation

Pflügler, Christoph and Turowski, Klaus, "B2B Electronic Marketplaces in Supply Chain Management: Analyzing Recent Research Activities" (2010). *AMCIS 2010 Proceedings*. 161.

<http://aisel.aisnet.org/amcis2010/161>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2010 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

B2B Electronic Marketplaces in Supply Chain Management: Analyzing Recent Research Activities

Christoph Pflügler

Inter-organizational Systems Group
University of Augsburg
christoph.pfluegler@wiwi.uni-augsburg.de

Klaus Turowski

Inter-organizational Systems Group
University of Augsburg
klaus.turowski@wiwi.uni-augsburg.de

ABSTRACT

Since their rise during the 1990s, business-to-business (B2B) electronic marketplaces have been subject to numerous scientific articles. Especially during the dot-com era, these research efforts have been accompanied by several start-ups such as *CommerceOne*, with mixed market success. For researchers looking for promising areas of IS research, these facts raise the question whether B2B electronic marketplaces still constitute a viable option which is worth focusing on. The work at hand strives to answer that question by conducting a literature analysis covering the period from 2005 to 2009. We examined 11 major IS-journals as well as three major IS conferences in search of articles dealing with or relating to B2B electronic marketplaces. The analysis of the data gathered throughout that process provides an overview of the B2B electronic marketplace research of the past five years from multiple perspectives. Our analysis identifies several research opportunities for researchers, e.g., by identifying research methods that have not been applied to examine certain topics, or by identifying geographical regions that have been under-researched regarding the application of B2B electronic marketplaces. Further, our work will help practitioners seeking reliable information regarding B2B electronic marketplaces to identify publication outlets relevant for this field of research.

Keywords

B2B electronic marketplaces, electronic markets, e-procurement, negotiation, auctions, agents, adoption, reputation, trust, flexibility, semantic web, literature analysis

INTRODUCTION

After an initial set of publications during the late 1980s (e.g., Malone, Yates and Benjamin (1987), Malone, Yates and Benjamin (1989)), B2B electronic marketplaces attracted a large amount of interest in the IS research community during the 1990s. This development was also reflected by numerous start-ups related to the topic during the dot-com era. However, these commercial initiatives, e.g. *CommerceOne*, a producer of marketplace software, succeeded only partially in the market. Although *CommerceOne* participated, e.g., in the implementation of the well-known B2B marketplace *Covisint*, it was acquired by *PerfectCommerce* in 2006. In turn, *Covisint*'s sourcing and services business was sold to *FreeMarkets*, which subsequently was acquired by *Ariba* (Forbes, 2004). *Covisint*'s more promising data messaging business was sold to *Compuware* (Forbes, 2004). In general, a key feature of commercial B2B electronic marketplaces has been the high failure rate (Klueber, Leser and Kaltenmorgen, 2001).

The area of B2B electronic marketplaces is under research for quite a long time now and its commercial exploitation is not always a success story. However, despite the high failure rate, B2B electronic marketplaces have become an indispensable component of various supply chains, especially in the car, metal and chemical industry (Computerworld, 2004; Economist, 2004). From a scientific point of view, this raises the question whether B2B electronic marketplaces still constitute a viable area of research, worth focusing on for researchers. The work at hand strives to answer that question by conducting a literature analysis covering the period from 2005 to 2009. We examined 11 major IS-journals as well as three major IS conferences in search of articles dealing with or relating to B2B electronic marketplaces.

After this introduction, section "B2B Electronic Marketplaces" depicts current definitions of the term B2B electronic marketplace and presents a classification scheme based on our literature review. The literature selection process is detailed in section "Research Methodology". Section "Analyzing Recent Research Activities" reveals the results of our multi-

perspective literature analysis, section “Limitations” outlines its limitations. Future research endeavors in the field of B2B electronic marketplaces are briefly described in section “Conclusion and Future Work”.

B2B ELECTRONIC MARKETPLACES

There are various terms used almost synonymously for a B2B electronic marketplace: electronic market, EMP, e-hub, B2B exchange, or (B2B) e-market are some of them. Although the definitions for each term may slightly differ, the core concept is mostly the same. A selection of definitions based on our literature analysis is depicted in table 1.

Author(s)	B2B electronic marketplace definition
Ash (2005)	“...define a B2B e-marketplace (or e-Marketplace) as a virtual marketplace where multiple buyers and sellers can interact with information and transactions supported by additional value-add facilities.”
Soh et al. (2006)	“Electronic marketplaces (EMPs) are independently owned, IT-enabled intermediaries that connect many buying organizations with many selling organizations.”
Rossignoli et al.(2006)	“...consider e-marketplaces as an ICT based organizational form that mixes markets coordination mechanisms (prices) and network coordination mechanisms (trust and common values).”
Guo and Xu (2006)	“Internet-based B2B e-marketplaces are a kind of inter-organizational information system in the online-environment, in which multiple buyers and sellers come together to gather information and exchange goods or services. They serve as electronic intermediaries to facilitate the exchange of information about products and/or support business transactions between participating buyers and sellers”
Finnegan and O’Reilly (2008)	“...an organisational intermediary that electronically provides value added communication, brokerage and integration services to buyers and sellers of direct and/or indirect products and/or services in specific horizontal or vertical markets by supporting basic market functions, meeting management needs for information and process support, and/or operating the required IS/IT infrastructure.”
Dolpanya et al. (2009)	“...can be considered as an inter-organisational information system with which participating buyers and sellers utilize electronic markets for a dynamic price-making mechanism (such as electronic auctions), as well as for the exchange of information related to price, product specification, and terms of trade.”
Dominguez (2009)	“...EMPs can be seen as intermediaries between buyers and suppliers devoted to answering purchasing and supply chain needs. They can also be defined as inter-organizational information systems (IOIS) that interact to create, store, transform, and communicate data between buyers and suppliers”

Table 1: Selected definitions for B2B electronic marketplaces

Numerous classifications of B2B electronic marketplaces have been proposed (Grieger, 2003). Our approach is to depict how the articles analyzed throughout our study classify B2B electronic marketplaces. An overview of the resulting classification scheme is provided in table 2.

First of all, it is worth mentioning that only two of the 77 analyzed articles conduct a classification. Son and Benbasat (2007) as well as Dominguez (2009) distinguish *vertical* and *horizontal* B2B electronic marketplaces. Horizontal marketplaces serve more than one industry (e.g., Worldbid.com, Global Trade Village), whereas vertical ones are industry specific (e.g., Covisint, ChemConnect). Further, Son and Benbasat (2007) distinguish *private* and *non-private* marketplaces. Private marketplaces are owned and operated by a single firm (e.g., SupplyPower by General Motors) (Howard, Vidgen and Powell, 2006). Non-private marketplaces such as Alibaba, ChemConnect or WorldWide Retail Exchange are owned and operated by either an independent third-party intermediary (also referred to as *public marketplace*) or by a consortium of competing firms (*consortium-based marketplace*) (Son and Benbasat, 2007). Dominguez (2009) further distinguishes B2B electronic marketplaces by the *type of good* they exchange (MRO goods or goods directly linked to the manufacturing process), as well as by their *value proposition*. Regarding the value proposition, she differentiates between *transactional* electronic

marketplaces aiming at executing exchanges, and *collaborative* electronic marketplaces which encourage collaboration of the market participants.

Attribute	Possible Values		
Ownership	<i>Private</i>	<i>Consortium-based</i>	<i>Public</i>
Industry Focus	<i>Vertical</i>		<i>Horizontal</i>
Goods Traded	<i>MRO goods</i>		<i>Primary Materials</i>
Value Proposition	<i>Collaborative</i>		<i>Transactional</i>

Table 2: Classification scheme for B2B electronic marketplaces based on our literature analysis

RESEARCH METHODOLOGY

In our work, we adopted the framework for literature search proposed by vom Brocke, Simons, Niehovens, Riemer, Plattfaut and Cleven (2009). This research methodology consists of five phases which are depicted in figure 1. Each phase is explained in full detail in the following paragraphs.

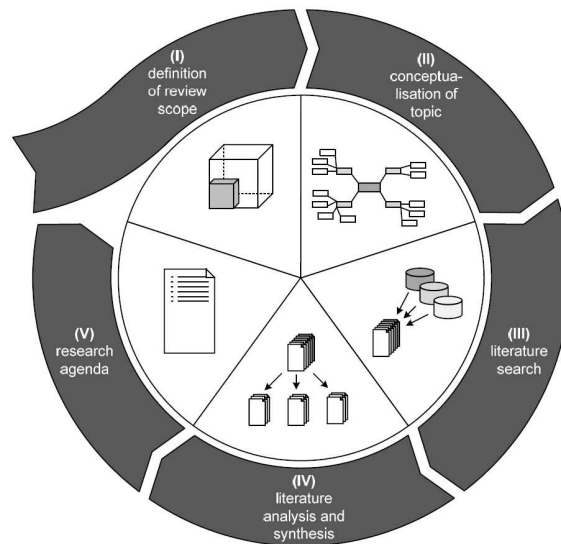


Figure 1: The research methodology (vom Brocke et al., 2009)

Pfeffers and Ya (2003) identified 326 journals that publish IS research, the Index of Information Systems Journals¹ lists 649 IS journals today. Thus, a comprehensive literature analysis is illusive. To identify a set of high-quality journals, rankings are frequently used (e.g., Ho, Jin and Dwivedi (2009), vom Brocke et al. (2009)). To achieve a reasonable degree of internationality, we employ both the German Academic Association for Business Research’s JOURQUAL2² and the official AIS ranking³. In the first step, we selected the 15 highest ranking journals of the JOURQUAL2 *IS and Information Management* and *Electronic Commerce* rankings. Then we intersected this set of journals with all AIS-listed journals that have 20 average rank points or less. The resulting set of journals includes *ISR*, *MISQ*, *SIAM Journal on Computing*, *JMIS*, *ISJ*, *JAIS*, *INFORMS Journal on Computing*, *IEEE Transactions on Engineering Management*, *ACMTDS*, *IJEC* and

¹ <http://lamp.infosys.deakin.edu.au/journals/>

² <http://vhbonline.org/en/service/vhb-jourqual/jq2/>

³ <http://ais.affiniscape.com/displaycommon.cfm?an=1&subarticlenbr=432>

DATABASE. We also evaluated an intersection with AIS-listed journals that have 15 average rank points or less, however, the resulting set of journals was considered too small. As the AIS does not include conferences into its ranking, we directly included the three highest ranking conferences of the JOURQUAL2 *IS and Information Management* and *Electronic Commerce* rankings, which are the *ICIS*, *ECIS* and the *ER* conference.

After selecting relevant journals and conferences, we conceptualized the topic B2B electronic marketplaces by means of a respective seminar consisting of two graduate business students and four graduate computer science students. The seminar was held by one of the authors of the work at hand. The objective of that seminar was the formulation of a textbooks dealing with B2B electronic marketplaces in the context of electronic commerce.

The actual literature search was conducted in the next phase. Thereby, the archives of each journal and conference selected in phase I were searched manually, issue by issue, year by year. During this initial search, we decided upon relevance by title and abstract. As title and abstract do not always allow for an inference on the actual content of an article (Palvia and Pinjani, 2007), we included every article potentially covering our topic, resulting in a very broad literature index covering most aspects of electronic commerce and inter-organizational systems. We reduced that rather broad index for the first time by eliminating all articles with explicit B2C or C2C focus that was detectable by considering the abstract only. After this initial reduction step, we tried to get a full-text version of each remaining article by using various internet sources or soliciting the respective authors for a copy. After having received full-text versions of most of the articles (see table 3 for the articles not available full-text und thus not considered any longer in the analysis), we removed the remaining ones that focus B2C or C2C exchanges. An article was considered B2C or C2C related, if respective datasets were analyzed (e.g., eBay or Amazon datasets), or if the articles frequently referred to consumers. All remaining papers were included into the final literature index, if they explicitly referred to electronic marketplaces, resulting in a final set of 77 papers.

The final selection of articles was analyzed in phase IV. Therefore, we first of all collected author names, organization of each author, location of each organization, research method applied, and year of publication of each article. To identify the research method of each analyzed article, we incorporated the classification scheme of Palvia and Pinjani (2007). In the next step, we iteratively clustered the locations of the organizations as well as the topics the analyzed articles are centered around. The resulting data model is depicted in figure 2.

Throughout the entire literature search process, we developed a specific research agenda which we describe in section “Conclusion and Future Work”.



Figure 2: Data model for the literature analysis

ANALYZING RECENT RESEARCH ACTIVITIES

Two journals and one conference of the 11 journals and 3 conferences selected for our literature analysis did not publish articles on B2B electronic marketplaces. These are the *SIAM Journal on Computing*, the *ACMTDS* and the *ER* conference.

The distribution of the 77 articles considered for our analysis on the remaining publication outlets is shown in figure 3. Most of the articles were published in the *JMIS*, followed by the *ECIS* and the *ICIS*. Considering journals only, the top three publication outlets are the *JMIS*, the *ISR* and the *IEEE Transactions on Engineering Management* with 16, 8 and seven published articles, respectively. From our point of view, the low number of publications on B2B electronic marketplaces in the *IJEC* was surprising as the journal's name let us suggest a higher amount of respective articles in it. However, the *IJEC* seems to have its focus on B2C exchanges. Another interesting point is the research method dominating in each outlet: Especially the *ECIS* did provide a lot of case or field studies, whereas in the journals mathematical models or experiments are dominating.

The rest of this section provides a multi-perspective analysis of the research activities regarding B2B electronic marketplaces in the period from 2005 to 2009. We add explanatory notes for and try to derive possible research opportunities from each perspective.

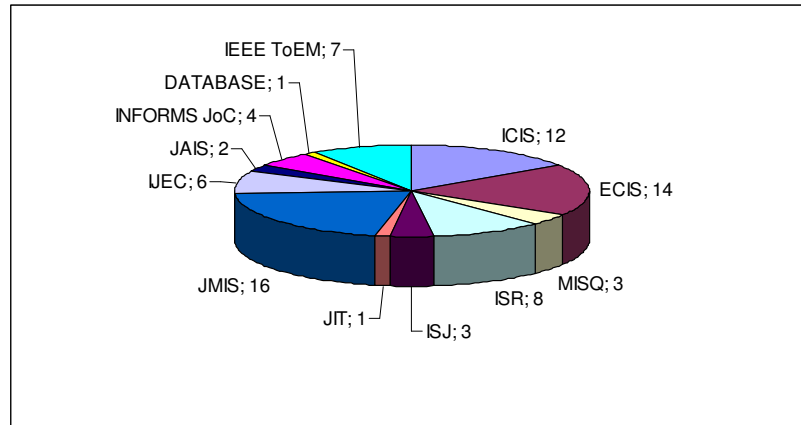


Figure 3: Distribution of the analyzed articles on publication outlets

Year of publication vs. type of publication outlet

One of the objectives of our literature analysis is to reveal the chronological development of the number of publications on B2B electronic marketplaces in supply chain management. First of all, we discovered that the overall amount of articles on the topic remained constant from 2005 to 2007, and is increasing since 2007. The amount of conference publications constantly increased since 2007, whereas the amount of journal publications remained relatively constant. As conference publications often report on ongoing research projects which frequently result in journal publications, we estimate an increasing amount of journal publications on B2B electronic marketplace-related topics in the course of the next years. Figure 4 depicts the chronological distribution of the analyzed articles.

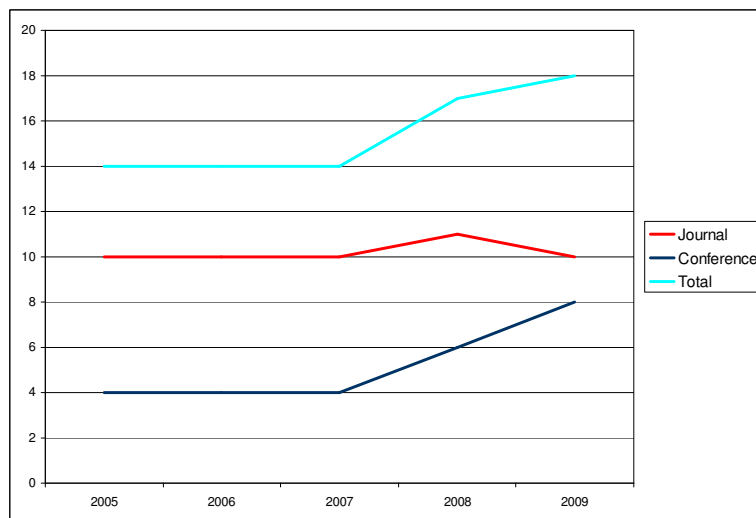


Figure 4: Chronological distribution of the analyzed articles

Region of authors' organization vs. type of publication outlet

In order to get an impression of the research effort regarding B2B electronic marketplaces in different regions of the world, we iteratively clustered the geographical location of each author into the four clusters *European Union, Canada & USA, China, Korea, Singapur & Taiwan*, and *Others (Australia, Costa Rica, India, Iran)*. We further distinguished the type of publication outlet (i.e., conference or journal). The results are shown in figure 5.

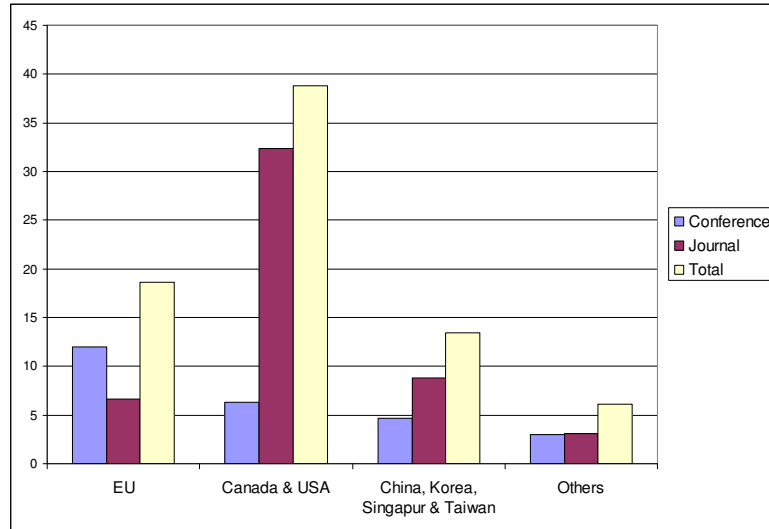


Figure 5: Distribution of the analyzed articles by geographical cluster and type of publication outlet

Several articles are written by authors whose organizations belong to different geographical clusters; in order to appropriately represent this fact, we assigned a weight of one to each article and divided that weight by the number of authors of the respective article. The proportion of each author was subsequently added to her organization's geographical region. It is worth mentioning that the North American IS-community provided the most contributions to journals, whereas the European one seems to prefer conferences as publication outlet. By far the most research was done in North America.

Year of publication vs. region of authors' organization

Further, we analyzed the amount of publications of each geographical cluster in its chronological sequence. Surprisingly, the European publication behaviour seems to be directly opposed to the North American one. In the period from 2005 to 2006, the dramatic decrease in publications on B2B electronic marketplaces from North America was cushioned by publications from Europe and Asia. Please see figure 6 for an overview of this perspective.

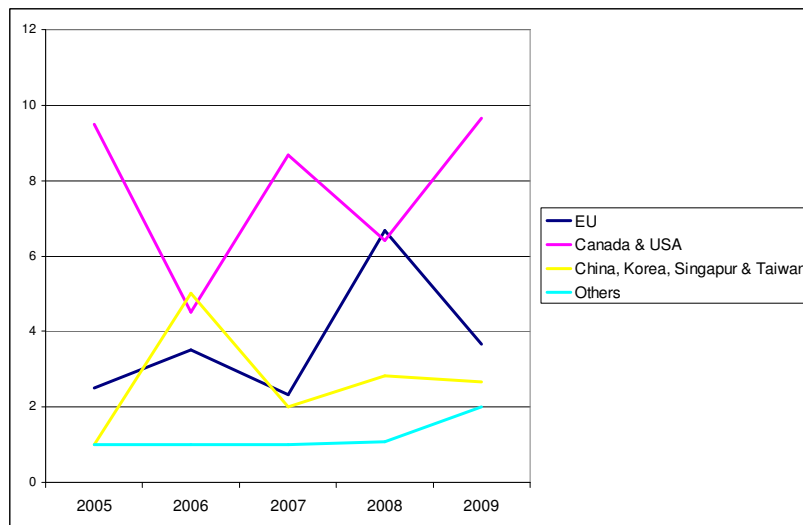


Figure 6: Amount of publications per geographical region in chronological sequence

From our point of view, the huge gap between the number of publications from Europe and North America in the year 2009 is of particular interest, as it may allow for an inference on potential regional research opportunities in the field of B2B electronic marketplaces in Europe.

Focus of analyzed articles

As already described in section “Research Methodology”, we iteratively clustered the topics the analyzed articles are centered around. The analysis of the resulting data reveals that most of the research on B2B electronic marketplaces concentrates on the clusters *Success Factors and Value Propositions*, as well as *Auctions, Negotiations and Agents*. As shown in figure 7, these topics are examined in more than half of the analyzed articles.

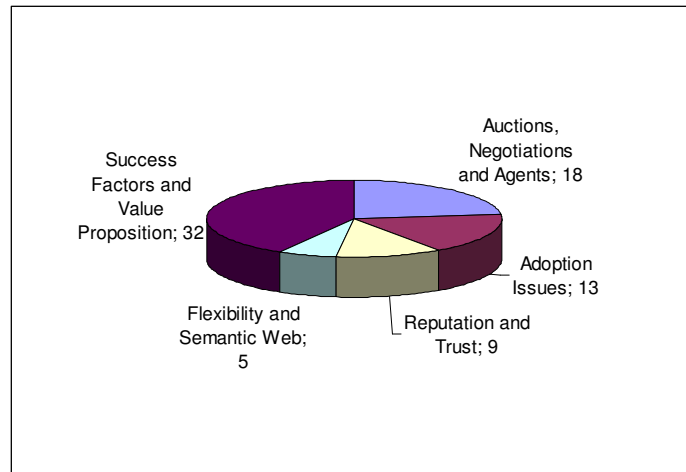


Figure 7: Distribution of analyzed articles on research topics

Focus of article vs. region of authors’ organization

To identify possible research opportunities within the geographical clusters, we analyzed the focus of the articles in conjunction with the geographical clusters. The results are depicted in figure 8. The relative small percentage of research on *Adoption Issues* in Europe may indicate further research opportunities in this field and geographical region. *Trust and Reputation* seem to play a more important role in research on B2B electronic marketplaces in Europe than in the rest of the world. The more technology-oriented cluster *Flexibility and Semantic Web* is subject to intense research in Asia. This may indicate technology-oriented research opportunities in this field in the western world.

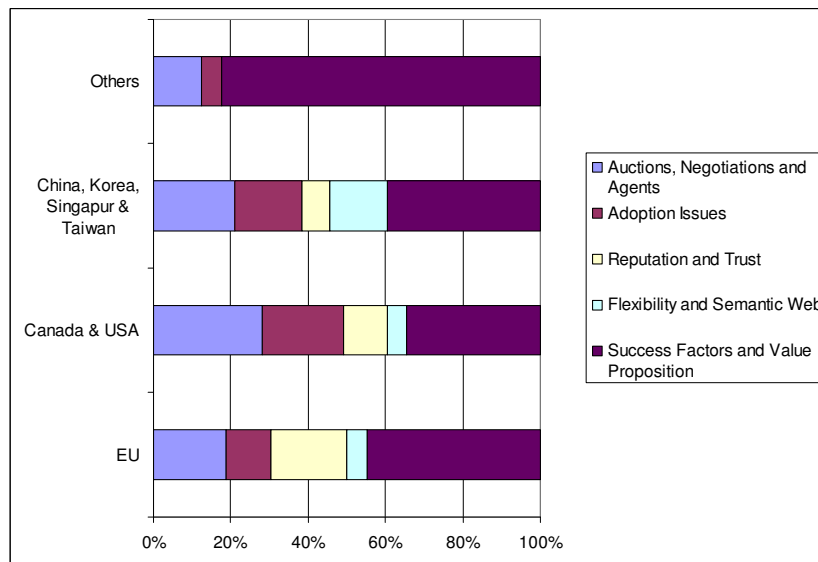


Figure 8: Focus of the articles in conjunction with the geographical clusters

Focus of article vs. year of publication

As depicted in figure 8, there is a strong increase of publications on *Success Factors and Value Propositions*, as well as *Auctions, Negotiations and Agents* in the period from 2007 to 2009, whereas there is not a single publication on *Reputation and Trust* or *Flexibility and Semantic Web* in 2009. The overall increase of publications related to B2B electronic marketplaces in the period from 2007 to 2009 can thus be attributed to the increase in publications dealing with *Success Factors and Value Propositions*, as well as *Auctions, Negotiations and Agents* in B2B electronic marketplaces.

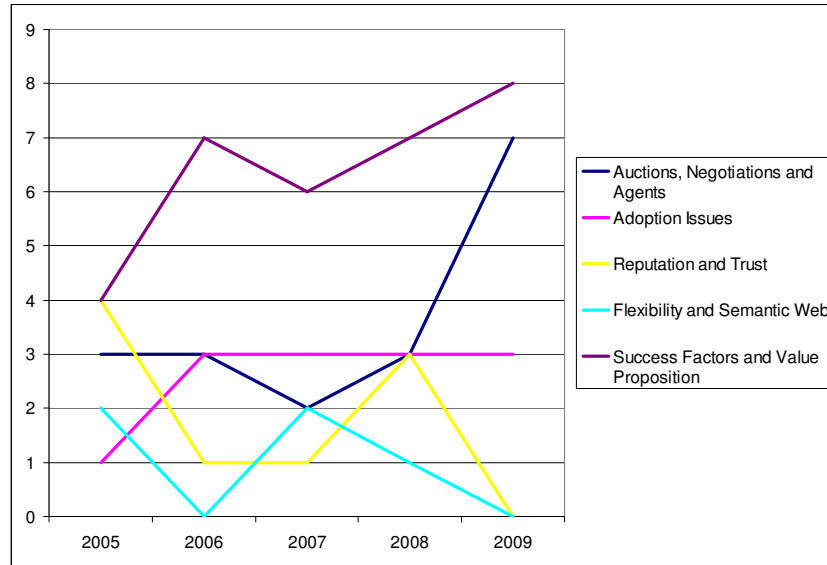


Figure 9: Focus of the articles in chronological sequence

Research Methodologies

The dominating research methodology in B2B electronic marketplace research is the *Experiment*, followed by *Survey*, *Secondary Data*, *Field Study* and *Case Study*. An overview of all research methodologies applied in the analyzed articles is provided in figure 10.

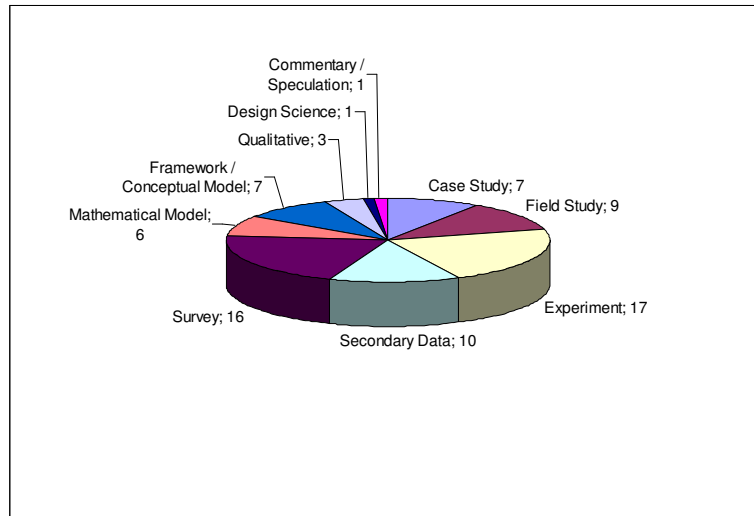


Figure 10: Overview of applied research methodologies

Region of authors' organization vs. research methodology

This perspective on the B2B electronic marketplace research activities of the last five years reveals a very small number of *Case* or *Field Studies* in North America. In contrary, Europe's IS research community conducted only few *Surveys*. North American IS researchers, in turn, are the only ones publishing *Mathematical Models*. However, it must be noted that many

Mathematical Models result in *Experiments*. Thus, it might be a possible explanation that researchers of the other geographical clusters do not publish a *Mathematical Model* without a corresponding *Experiment*. We assigned the research methodology *Experiment* to articles that contain a *Mathematical Model* as well as a corresponding *Experiment*. Figure 11 depicts this perspective in detail.

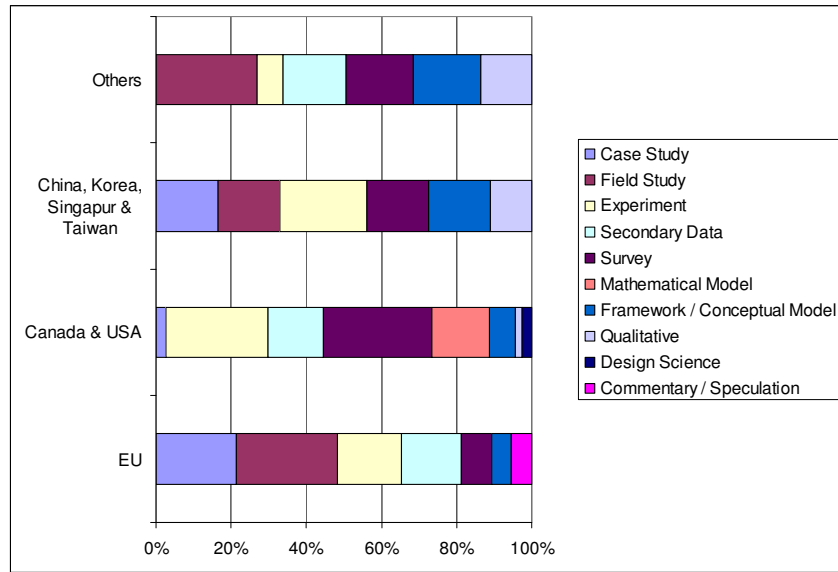


Figure 10: Research Methodologies in the different geographical regions

Focus of article vs. research methodology

A possibility to gain new insights into a field of research is to apply research methodologies that have not applied to that field before. As also depicted in figure 11, our analysis reveals such possibilities for the field of B2B electronic marketplace research. Surprisingly, adoption issues were hardly researched using *Case* or *Field Studies*. Further, not a single *Field Study* focused on *Auctions, Negotiations or Agents*. To study issues related to *Reputation and Trust*, *Secondary Data* was not used in the articles we analyzed. Finally, *Adoption Issues* as well as *Success Factors and Value Propositions* have not been examined by conducting *Experiments*.

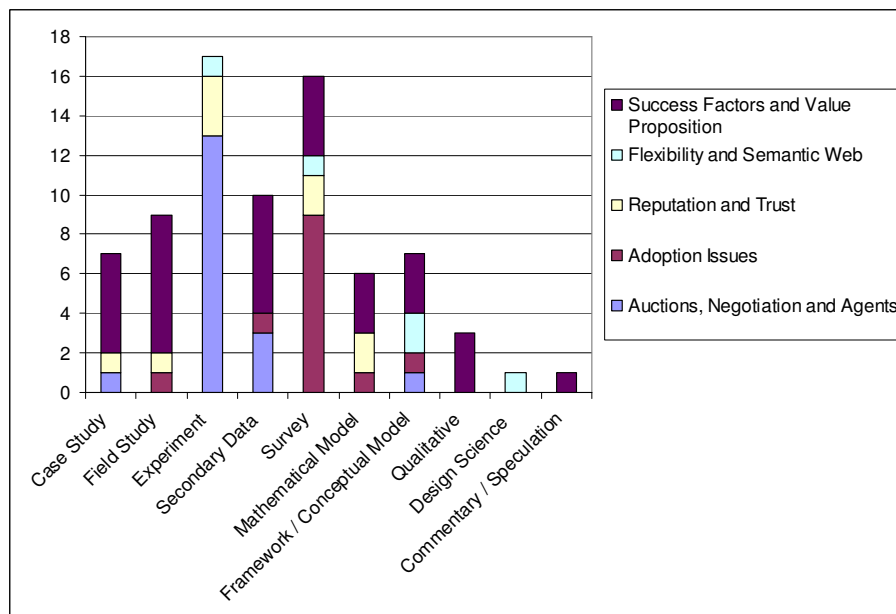


Figure 11: Focus of article vs. research methodology

LIMITATIONS

The short time period covered by our literature analysis and the number of examined publication outlets are two major limitations of the work at hand. The resulting small number of analyzed articles implies a limited validity of our findings and conclusions. Further, we took the German JOURQUAL2 ranking and intersected it with the AIS ranking. As the German JOURQUAL2 is highly business-oriented, technical issues are disregarded to a certain extent. Thus, we may have created a bias regarding the topics the analyzed articles are centered around. Finally, the AIS ranking contains by far more US-originated journals than journals originated from other countries, which may create a bias regarding our analysis of research efforts on B2B electronic marketplaces in different geographical regions of the world.

CONCLUSION AND FUTURE WORK

Although B2B electronic marketplaces have been subject to extensive research for more than two decades now, the increase of publications on the topic throughout the last three years led us to the conclusion that there is still a demand for further research. Moreover, several case or field studies report on successful B2B electronic marketplaces, which may indicate a successful incorporation of experience gathered by the analysis of past failures and successes. Summarizing our results, we believe that B2B electronic marketplaces still are a viable area of research which we consider worth focusing on.

A synthesis of literature is expected to result into a research agenda comprised of promising questions for future research. We briefly describe the research agenda we developed during our literature analysis in the next paragraphs.

Most B2B electronic marketplace research has focused on the value and role of B2B electronic marketplaces in industrial marketing. We are convinced that examining B2B electronic marketplaces from another point of view may offer new insights. For example, conducting a field study covering entrepreneurial ventures may help to answer the question “Do B2B electronic marketplaces help entrepreneurs to identify markets niches?”. A challenge that will need to be addressed in order to be able to answer that question is the identification of corresponding start-ups within the different industries.

Further, we consider studies on the use of standards in B2B electronic marketplaces as interesting. As standards allow for a high degree of inter-operability, a high degree of standardization within B2B electronic marketplaces would allow business processes that cross marketplace boundaries. Such interoperable B2B electronic marketplaces could open opportunities for marketplace federation concepts by private or public organizations, thus fostering the vision of a single global electronic market. In order to measure the degree of standardization, first of all a standard framework for B2B electronic marketplaces needs to be developed, using a design science approach. On the basis of this framework, a field study or survey comprised of major B2B electronic marketplaces of each industry could be conducted in order to measure the actual degree of standardization.

REFERENCES

1. Ash C. G. (2005) Managing E-Business Change within a Global E-Marketplace: A Buyer's Perspective, in Dieter Bartmann, Federico Rajola, Jannis Kallinikos, David Avison, Robert Winter, Philipp Ein-Dor, Jörg Becker, Freimut Bodendorf, and Christof Weinhardt (Eds.) *Proceedings of the Thirteenth European Conference on Information Systems*, May 26-28, Regensburg, Germany, <http://is2.lse.ac.uk/asp/aspecisl/>, 1139-1150.
2. vom Brocke M., Simons A., Niehavens B., Riemer K., Plattfaut R., Cleven A. (2009) Reconstructing the Giant: On the Importance of Rigour in Documenting the Literature Search Process, in Susan Newell, Edgar Whitley, Nancy Pouloudi, Jonathan Wareham, and Lars Mathiassen (Eds.) *Proceedings of the Seventeenth European Conference on Information Systems*, June 8-10, Verona, Italy, <http://is2.lse.ac.uk/asp/aspecisl/>, 2206-2217.
3. Computerworld (2004) B2B Exchange Survivors, *Computerworld*, February 2.
4. Dolpanya K., Land L., Dick G. (2009) Understanding suppliers' participation in business-to-government (B2G) electronic auction markets in the thai context, in Susan Newell, Edgar Whitley, Nancy Pouloudi, Jonathan Wareham, and Lars Mathiassen (Eds.) *Proceedings of the Seventeenth European Conference on Information Systems*, June 8-10, Verona, Italy, <http://is2.lse.ac.uk/asp/aspecisl/>, 871-882.
5. Dominguez C. (2009) Competitive Advantages of Electronic Marketplaces in the Retail Automotive and Maintenance, Repair and Order (MRO) Industries, in Susan Newell, Edgar Whitley, Nancy Pouloudi, Jonathan Wareham, and Lars Mathiassen (Eds.) *Proceedings of the Seventeenth European Conference on Information Systems*, June 8-10, Verona, Italy, <http://is2.lse.ac.uk/asp/aspecisl/>, 2399-2419.
6. Economist (2004) A market too far, *Economist*, May 15.

7. Forbes (2004) Automotive, <http://www.forbes.com/bow/b2b/industry.jhtml?id=3> (Accessed February 17, 2010).
8. Grieger M. (2003) Electronic marketplaces: A literature review and a call for supply chain management research, *European Journal of Operational Research*, 144, 2, 280–294.
9. Guo R., Xu Y. (2006) The adoption of internet-based business-to-business e-marketplaces among small and medium-sized enterprises in their international marketing practices, in Jan Ljungberg and Magnus Andersson (Eds.) *Proceedings of the Fourteenth European Conference on Information Systems*, June 12-14, Göteborg, Sweden, <http://is2.lse.ac.uk/asp/aspecis/>, 494-505.
10. Ho D. T. Y., Jin Y., Dwivedi R. (2009) Business Process Management: A Research Overview and Analysis, in *Proceedings of the Fifteenth Americas Conference on Information Systems*, August 6-9, San Francisco, CA, USA, AIS Electronic Library, Paper 785.
11. Howard M., Vidgen R., Powell P. (2006) Automotive e-hubs: Exploring motivations and barriers to collaboration and interaction, *Journal of Strategic Information Systems*, 15, 1, 51–75.
12. Klueber R., Leser F., Kaltenmorgen N. (2001) Concept and Procedure for evaluating E-Markets, in Diane Strong, Detmar Straub, and Janine DeGross (Eds.) *Proceedings of the Seventh Americas Conference on Information Systems*, August 3-5, Boston, MA, USA, AIS Electronic Library, Paper 135.
13. Malone T. W., Yates J., Benjamin R. I. (1989) The logic of electronic markets, *Harvard Business Review*, 67, 3, 166–172.
14. Malone T. W., Yates J., Benjamin R. I. (1987) Electronic markets and electronic hierarchies, *Communications of the ACM*, 30, 6, 484-497.
15. O'Reilly P., Finnegan P. (2008) Exploring Electronic Marketplace Performance: The 3 Pillars, in *Proceedings of the Twenty Ninth International Conference on Information System*, December 14-17, Paris, France, AIS Electronic Library, Paper 9.
16. Palvia P., Pinjani P. (2007) A profile of information systems research published in Information & Management, *Information & Management*, 44, 1, 1–11.
17. Peffer K., Ya T. (2003) Identifying and evaluating the universe of outlets for information systems research: Ranking the journals, *Journal of Information Technology Theory and Application*, 5, 1, 63–84.
18. Rossignoli C., Cordella A., Mola L. (2006) E-marketplace and transaction cost theory: a possible set of new ideas, in Jan Ljungberg and Magnus Andersson (Eds.) *Proceedings of the Fourteenth European Conference on Information Systems*, June 12-14, Göteborg, Sweden, <http://is2.lse.ac.uk/asp/aspecis/>, 2039-2053.
19. Soh C., Markus M. L., Goh K. H. (2006) Electronic Marketplaces and Price Transparency: Strategy, Information Technology, and Success, *MIS Quarterly*, 30, 3, 705-723.
20. Son J. Y., Benbasat I. (2007) Organizational Buyers' Adoption and Use of B2B Electronic Marketplaces: Efficiency-and Legitimacy-Oriented Perspectives, *Journal of Management Information Systems*, 24, 1, 55–99.

APPENDIX

Year	Author(s)	Outlet	full-text
2009	Hsiao, Ou, Chen	ICIS	x
	Overby, Forman	ICIS	x
	Raventos, Zolezzi	ICIS	x
	Tan, Pan, Lu, Huang	ICIS	x
	Yang, Singhal, Xu	ICIS	x
	Gsell, Gomber	ECIS	x
	Dominguez	ECIS	x
	Dolpanya, Land, Dick	ECIS	x
	Bapna, Chang, Goes, Gupta	MISQ	x

	Adomavicius, Gupta, Zhdanov	ISR	x
	Ray, Wu, Konana	ISR	x
	Bichler, Shabalin, Pikovsky	ISR	x
	Rai, Brown, Xinlin	JMIS	x
	Xia, Xia	JMIS	x
	Bapna, Goes, Gupta	JMIS	x
	Karimi, Somers, Bhattacharjee	IJEC	x
	Johnson, Piccolotto, Filippini	IEEE ToEM	x
	Pardoe, Stone, Saar-Tsechansky, Keskin, Tomak	INFORMS JoC	x
2008	Guvence-Rodoper, Benbasat, Cenfetelli	ICIS	x
	O'Reilly, Finnegan	ICIS	x
	Adomavicius, Gupta, Sanyal	ICIS	x
	Benbasat, Dellarocas, Krishnan, Pavlou	ICIS	
	O'Reilly, Finnegan	ECIS	x
	Mola, Rossignoli, Carugati	ECIS	x
	Adam, Hagenau, Neumann, Weinhardt	ECIS	x
	Martinsons	ISJ	x
	Chang, Wang, Chiu	ISJ	x
	Dedrick, Xu, Zhu	JMIS	x
	Bolton, Loebbecke, Ockenfels	JMIS	x
	Bakos, Katsamakos	JMIS	x
	Lau, Wong, Li, Ma	JMIS	x
	Montazemi, Siam, Esfahanipour	JMIS	x
	Charki, Josserand	JMIS	x
	Iyer, D` Aubeterre, Singh	JAIS	x
	Soares-Aguiar, Palma-dos-Reis	IEEE ToEM	x
	Bapna, Goes, Gupta, Karuga	INFORMS JoC	x
2007	Adomavicius, Sanyal, Gupta, Curley	ICIS	x
	Zhu, Zhou	ICIS	x
	Christ, Schroth, Janner	ECIS	x
	O`Reilly, Finnegan	ECIS	x
	Mishra, Konana, Barua	ISR	x
	Malhotra, Gosain, Sawy	ISR	
	Kim, Ahn	JIT	x
	Son, Benbasat	JMIS	x
	Grover, Saeed	JMIS	x
	Chi, Holsapple, Srinivasan	IJEC	x
	Standing, Lin	IJEC	x
	Lee, Chun, Shim, Lee	IJEC	x
	Ravichandran, Pant, Chatterjee	IEEE ToEM	x
	Wu, Zsidisin, Ross	IEEE ToEM	x
	Chari, Agrawal	INFORMS JoC	x
2006	Radkevitch, van Heck, Koppius	ICIS	x
	Rossignoli, Cordella, Mola	ECIS	x
	Guo, Xu	ECIS	x
	Nagle, Finnegan, Hayes	ECIS	x
	Soh, Markus, Goh	MISQ	x
	Nissen, Sengupta	MISQ	x

	Oh, Lucas	MISQ	
	Dellarocas	ISR	x
	Lee, Kwon	JMIS	x
	Kim, Umanath, Kim	JMIS	x
	Patnayakuni, Rai, Seth	JMIS	
	Jones, Easley, Koehler	JMIS	
	Huang, Lin, Yuan	IJEC	x
	Granados, Gupta, Kauffman	JAIS	x
	Khalifa, Davison	IEEE ToEM	x
	Teo, Ranganathan, Dhaliwal	IEEE ToEM	x
	Standing, Love, Stockdale, Gengatharen	IEEE ToEM	x
2005	Montano, Porter, Malaga, Ord	ICIS	x
	Fairchild, Finnegan, O'Reilly, Ribbers	ECIS	x
	Chiu, Poon, Lam, Tse, Sui, Poon	ECIS	x
	Ash	ECIS	x
	Adomavicius, Gupta	ISR	x
	Dellarocas	ISR	x
	Bandyopadhyay, Barron, Chaturvedi	ISR	x
	Bunduchi	ISJ	x
	Galbreth, March, Scudder, Shor	JMIS	x
	Son, Narasimhan, Riggins	JMIS	x
	Gosain, Malhotra, ElSawy	JMIS	x
	Molla, Licker	IJEC	x
	Al-Naeem, Rabhi, Benatallah, Ray	IJEC	
	Fearon, Philip	JIT	
	Jones, Koehler	INFORMS JoC	x
	Travica	DATABASE	x

Table 3: Overview of Articles (only articles available full-text where included in the analysis)