

# Identification of Key Component of E-marketplace to Enhance Service Quality in the Market



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**Abstract:** Business began with a physical store, which is the place for customer and seller in doing the product transaction. In this era, e-marketplace is proliferating to collect various tenants with various products to join in one same company to give the best service for customers, but every company must strategically compete with each other to survive in the market. The purpose of this study is to find the key components in e-marketplace to enhance service quality in the market, so businesses in this field can focus to develop the services based on the identified components. This study uses systematic literature review to collect all data from various databases; derived from keywords search, search string, inclusion and exclusion criteria, and data extraction. Thirty-eight selected studies that have been identified from data extraction will be evaluated further in this research by mapping them into demographic in trends. Based on the analysis, this research discovers six key components in e-marketplace which are Buyer, Partner, Infrastructure, Content, Online Chat, and Product Prices that can improve quality of service in the market.

**Keywords :** Key Components, E-marketplace, Systematic Literature Review.

## I. INTRODUCTION

Online transaction is one of the business payment methods that have been evolving rapidly in this era. Some people find ease in doing online shopping since their time is limited – and that is why delivery time is as important as price [1]. According to this fact, companies must continue to compete in developing their business. They must focus on advancing the ability to attract consumers by providing various items and services. However, companies often think that this is not sufficient for making their company survives in

the long term, and ultimately, for market expansion. E-marketplace is originated from E-commerce concept that attempts to expand company's market coverage with their suppliers to increase sales. E-commerce companies must also consider their services to the community. Organizations must understand customers' requirements from the very small aspects, that is, the website, its features, and product image on that website. This is essential for organizations in improving their services to compete with any competitors and maintain the number of its customers [2]. There are companies which assume that the transactional integrity and data private activity in doing the purchasing are the priorities to be kept as a form of service quality to communities that come from the infrastructure on e-marketplace [3]. Current research situation, some of business development is only based on technological strength alone, regardless of finding out which components that most influence in their business technology. One of the innovation that must to get is to design the technology from the bottom, that is component forming. Therefore, based on the reasons above, there is a need to assist companies to find the key components of e-marketplace, to enable them in enhancing their service quality in the market. The purposes of this research are twofold. First, it aims to find and describe the detailed description of all key components of e-marketplace. Second, this study intends to provide information regarding the critical components. Based on the above objectives, this research would answer the research question about what are the key components of e-marketplace that can improve the service quality ?

The contribution of this research is to find the most component that influence to enhance service quality from a various sources, and this is very important to know because can support the company to improve their business and develop their system with that components.

## II. THEORETICAL BACKGROUND

E-Commerce was started from a physical store that aimed to expand at the right time to become an online store. This is due to the fact that income from the physical store is relatively small. Thus, they must change the ways of selling products through online store to gain additional income sources. E-Commerce companies have been growing through times, in which average online purchases have shown considerable increases annually. In principle, the companies have already spent significant costs to build competitively advantageous online stores to serve the communities compared to its competitors [1].

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E-commerce principally provides the products from their shop to be offered to its customers. Therefore, we can infer that e-commerce applies the concept of Business-to-Customer (B2C) as their “trademark”.

E-marketplace is a subset of E-commerce. Based on the concept of Business-to-Customer (B2C), E-Marketplace adds another concept in their organizations, that is, a Business-to-Business (B2B) and become a strategy for E-Commerce companies to success in B2B [4].

Different with E-Commerce, E-Marketplace possesses unlimited potential income with applied B2B concept because it comes from many suppliers that aim to cooperate with them. Based on this fact, E-Marketplace has been built with some components that will be the key success factor for competitive advantage in their companies.

## III. RESEARCH METHOD

This study aims to explore the key components of e-marketplace to enhance service quality in the market. To achieve the above objective, this research uses a systematic literature review which consists of various steps [5]:

### A. Search Process

Sources, consist of the various databases that will be used in this research, which are ACM Digital Library, AIS Electronic Library, Elsevier, Emerald, IEEE Digital Library, Springer, Taylor and Francis, Wiley Online. The Keywords used are component of e-marketplace, e-marketplace component to enhance service quality, component or element of electronic marketplace to enhance service quality. Search String used are e-Marketplace AND Component, Electronic Marketplace AND Component, Electronic Marketplace OR E-Marketplace AND Component.

### B. Data Extraction

Good quality plagiarism software/ tool (Turnitin / iThenticate) will be used to check similarity that would not be more than 20% including reference section. In the case of exclusion of references, it should be less than 5%.

**Table I: Data Extraction**

Sources	Studies Found	Candidate Studies	Selected Studies
ACM ( <a href="http://dl.acm.org/">http://dl.acm.org/</a> )	14	10	5
AISEL ( <a href="http://aisel.aisnet.org/">http://aisel.aisnet.org/</a> )	4	2	1
Elsevier ( <a href="http://www.elsevier.com/">http://www.elsevier.com/</a> )	20	17	11
Emerald ( <a href="http://www.emeraldinsight.com/">http://www.emeraldinsight.com/</a> )	15	10	8
IEEE ( <a href="http://ieeexplore.ieee.org">http://ieeexplore.ieee.org</a> )	18	12	7
Springer ( <a href="http://link.springer.com/">http://link.springer.com/</a> )	5	3	1
Taylor and Francis ( <a href="http://www.tandfonline.com">http://www.tandfonline.com</a> )	7	5	4
Wiley ( <a href="http://onlinelibrary.wiley.com/">http://onlinelibrary.wiley.com/</a> )	3	2	1
Total	86	61	38

## C. Inclusion and Exclusion Criteria

In this part, will explained about the criteria that be used in literature selection.

**Table II: Inclusion and Exclusion Criteria**

Inclusion Criteria	Exclusion Criteria
Studies must be in the main topic area	Studies are not in the main topic area
Studies must be relevant to the research objectives	Studies are not relevant to the research objectives
Describes the components of electronic marketplace	Studies that describe procedures of e-marketplace systems
Describes the implementation of e-marketplace components to enhance service quality	Papers which focus on discussing the technical aspects of e-marketplace framework
Academic journal or conference proceeding or journal	Sources are not came from an academic journal
Papers that are based on meta-analysis (MA)	Papers based on opinion, editorial, panel discussions.
Descriptive analysis, literature review, and qualitative or quantitative analysis	Papers which are duplicated report of the same research or those that have redundant meanings
Papers are mentions the authors' names, institutions, and their countries	Papers aren't mentions the authors' names, institutions, and their countries

## IV. RESULT AND DISCUSSION

In this phase, after the data has been collected from selected studies on data extraction, the data will be mapped on demographics in trends based on steps in the systematic literature review.

### A. Publication Outlets

Based on Table III, 38 studies have been identified related to this topic. These consist of 17 journals and 21 proceedings. The title on the list of studies is not written in full because the title is long, so it can be seen directly on the reference only based on the number of sources that have been written on title column. Also, in the list of studies don't have sources from the books, all of them is taken from journals and proceedings.

**Table III: List of Studies**

Id	Title	Type	Sources	#	%
L1	Technical ...[6]	Proceeding	ACM	4	10%
L2	A Knowledge ...[7]				
L3	A Study ...[8]				
L4	A Goal ...[9]	Journal		1	3%
L5	A Framework ...[10]	Proceeding		1	3%
L6	Transition ... [11]	Proceeding	AISEL	1	
L7	An E-Marketplace ...[12]	Journal	Elsevier	1	3%
L8	Marketplace ...[13]	Proceeding		1	3%
L9	Adoption ...[14]	Proceeding		3	8%
L10	A Topic ...[15]				
L11	The Role ...[16]				
L12	Determinants ...[17]	Journal		2	5%
L13	The Relationship ...[18]				
L14	On The Critical ...[19]	Proceeding		1	3%
L15	An Incentive ...[20]	Journal		3	8%
L16	Negotiation ...[21]				
L17	The Sustainability ...[22]				

L18	Multi-Criteria ...[23]	Proceeding	Emerald	2	5%			
L19	Distributed ...[24]			1	3%			
L20	Building ...[25]	Journal		2	5%			
L21	A Review ...[26]			1	3%			
L22	Design ...[27]	Proceeding		2	5%			
L23	E-Service ...[28]	Journal	IEEE	2	5%			
L24	A Classification ...[29]			2	5%			
L25	Benefits ...[30]	Proceeding		1	3%			
L26	Study ...[31]			4	10%			
L27	Agent ...[32]	Journal		Springer	1	3%		
L28	The Meaningful ...[33]	Proceeding	Taylor and Francis		4	10%		
L29	An Integrated ...[34]				1	3%		
L30	The Game ...[35]				Journal	Wiley	4	10%
L31	An Empirical ...[36]						1	3%
L32	Modeling ...[37]			1			3%	
L33	A Substrate ...[38]	4	10%					
L34	Evaluating ...[39]	1	3%					
L35	A Success ...[40]	Journal	Taylor and Francis	4	10%			
L36	Impacts ...[41]			1	3%			
L37	Electronic ...[42]			1	3%			
L38	Business ...[43]	Journal	Wiley	1	3%			

**B. Most Productive Institutions**

The most productive institution came from Universiti Kebangsaan Malaysia, University of Macau, and Edith Cowan University.

**Table IV: Most Productive Institutions**

Institution	Country	#Authors	%
University of Macau	China	4	5%
North Maharashtra University	India	1	1%
University of New Brunswick	Canada	1	1%
National Research Council	Canada	1	1%
Seoul University	Korea	1	1%
Hoseo University	Korea	1	1%
Maharishi University	United State	1	1%
IBM Global Services National	United State	1	1%
The Hong Kong Polytechnic University	China	2	2%
Purdue University	United State	2	2%
Carleton University	Canada	3	3%
Concordia University	Canada	3	3%
University of Ottawa	Canada	1	1%
Brigham Young University	United State	3	3%
National Cheng Kung University	Taiwan	2	2%
National Technical University of Athens	Greece	2	2%
Aston University	United Kingdom	1	1%
KAIST College of Business	Korea	2	2%
Instituto de Artes Visuais	Portugal	1	1%
Universidade Nova de Lisboa	Portugal	1	1%
Xi'an Jiaotong University	China	2	2%
Nanyang Technological University	Singapore	2	2%
University of Basilicata	Italy	1	1%
University of North Carolina	United State	2	2%
University of Illinois	United State	2	2%
Galatasaray University	Turkey	1	1%
Technological Educational Institute of Athens	Greece	1	1%

Institution	Country	#Authors	%
University of the Aegean	Greece	1	1%
Athens University	Greece	1	1%
La Salle University	United State	2	2%
Universiti Kebangsaan Malaysia	Malaysia	8	9%
Kingston University	United Kingdom	2	2%
NFO World Group	United Kingdom	1	1%
The University of Liverpool	United Kingdom	3	3%
Edith Cowan University	Australia	4	5%
Capital University	China	1	1%
Xiamen University	China	2	2%
Nankai University	China	3	3%
Nanjing University	China	2	2%
Tilburg University	Netherlan	2	2%
Hong Kong University	China	2	2%
Embry- Riddle Aeronautical University	United State	1	1%
University of Toledo	United State	2	2%
HEC Montreal	Canada	1	1%
Universidad Carlos III de Madrid	Spain	1	1%
University of Crete	Greece	1	1%
Total		85	

**C. University Affiliation According to Country**

The most productive affiliation of this topic research came from China which consists of 9 papers and 18 authors.

**Table V: University Affiliation According to Country**

Country	#Papers	%	#Authors	%
United States	6	13%	16	18%
Canada	5	11%	9	10%
Italy	1	2%	1	1%
Australia	2	4%	4	4%
Netherland	1	2%	2	2%
Korea	2	4%	4	4%
Portugal	1	2%	2	2%
Malaysia	3	6%	8	9%
China	9	20%	18	21%
Greece	3	6%	6	7%
India	1	2%	1	1%
Taiwan	1	2%	2	2%
United Kingdom	4	9%	7	8%
Singapore	1	2%	2	2%
Turkey	2	4%	1	1%
Spain	1	2%	1	1%
Total:	43		85	

**D. Authors' Academic Background**

The academic background of the authors came from Information Systems, Computer science, and Business Management. In this part the academic background of authors is identified based on information in the part of author section in the paper to know the most research comes from which background.

**Table VI: Academic Background of Authors**

Academic Background of Author	#	%
Information System	18	21%
Computer Science	19	22%
Engineering	15	17%
Business Management	25	29%
Mathematical Science	2	2%



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Economics and Finance	6	7%
Total	85	

## E. Findings and Final Result

All selected studies identify 13 key components of e-marketplace to enhance service quality in the market, along with detailed descriptions of each key components (Table VIII) and the identified components will be mapped to specific Literature ID's from the selected studies (Table VII). These 13 components are identified by the steps of systematic literature review method and the most important

the sources ready by carefully and selected based on inclusion criteria, two of the criteria are describe the components or elements of electronic marketplace and have the influence to enhance the service quality.

**Table VII: Components Addressing in Selected Studies**

Component	#Papers	Literature ID
Buyer	31	L1; L3; L4; L5; L6; L7; L8; L9; L10; L11; L12; L13; L14; L15; L16; L18; L19; L21; L22; L23; L24; L25; L26; L27; L31; L32; L33; L34; L35; L36; L37
Partner	31	L1; L3; L4; L5; L6; L7; L8; L9; L10; L11; L12; L13; L14; L15; L16; L18; L19; L21; L22; L23; L24; L25; L26; L27; L31; L32; L33; L34; L35; L36; L37
User Interface	8	L2; L4; L9; L10; L25; L27; L30; L32
Content	22	L1; L3; L7; L10; L11; L12; L14; L16; L17; L19; L21; L22; L25; L27; L30; L31; L32; L33; L34; L35; L37; L38
Online Chat	17	L1; L4; L7; L8; L9; L11; L12; L17; L18; L19; L24; L26; L31; L32; L33; L35; L38
Payment	9	L3; L4; L13; L19; L20; L21; L32; L37; L38
Infrastructure	23	L3; L4; L6; L7; L8; L12; L15; L16; L17; L18; L19; L20; L25; L26; L28; L29; L31; L33; L34; L35; L36; L37; L38
Agreement Rules	6	L2; L3; L7; L8; L30; L38
Advertising	6	L3; L8; L12; L34; L35; L37
Product Prices	11	L6; L11; L13; L14; L15; L20; L21; L30; L35; L37; L38
Security	7	L19; L29; L31; L32; L34; L37; L38
Shipping Service	8	L6; L8; L17; L27; L30; L31; L32; L38
Tracking	5	L12; L19; L30; L32; L38

**Table VIII: Key Components of E-marketplace**

Components	Detailed Description
Buyer	Each buyer comes from a different country, and the e-marketplace company will be said to be growing if it has a large number of active customers with many purchase transactions every day.
Partner	Every tenant who owns the product makes a deal with the e-marketplace company to collaborate as a supplier or seller. Then the e-marketplace companies cooperate with tenants with various products to offer the products on their platform. Many tenants attempt to the customers attracted to stay to buy some products in their marketplace, and then they will share this information with other people. Partners do not only come from sellers but banks that agree to support the transaction.
User Interface	Customer will be presented with an attractive display and convenience to access the features inside. Color selection, font size, and user friendliness, all of which are very critical elements in user interface. E-marketplace companies must prepare this aspect in the system better and consider enhancing it with fascinating designs as added values.
Content	E-Marketplace system has a catalogue to show the entire products and reviews from buyers also partners that have developed agreements with their companies. People can be interested in seeing the various products with detailed information and experience from any customers after their usages. The other customers will think that the e-marketplace are very detailed in explaining the product.
Online Chat	This is a crucial part because customers need online chat platform for inquiring some questions related with the product

Components	Detailed Description
	details, payment methods, and guidelines for purchasing some products after they have their accounts on e-marketplace company systems. Every marketplace must provide an admin to stay 24 hours for customers if they need help in the buying process. Admin acts as a helpdesk on online chat as a supporting service.
Payment	Payment method will be one of the added values if e-marketplace company chooses to work together with banks for e-payment systems. Customers will be benefited if they can choose to pay the products with various cards from different banks. In addition, e-marketplace companies can give extra promotions if customers use specific cards in making the payment for specific products.
Infrastructure	Infrastructure that will be the technological basis to build e-marketplace system to integrate all data, architecture, and procedures in one complete process. For example, infrastructure to connect each partner to do some transaction in payment method. Marketplace needs this infrastructure to integrate customers' data for running the transaction with the bank.
Agreement Rules	Clear agreement between e-marketplace companies, partners, and customers should be made correctly. Any mistakes that could potentially occur would result in sanctions, depending on the severity of the case. Thus, this is the reason as to why agreement rules are vital and are one of the essential parts to be implemented in e-marketplace process.
Advertising	E-marketplace companies need this component because if more ads are installed on every websites or billboard, many people will know that e-marketplaces are trending and being popularized. The design of advertisings is also one of the most important aspects. Many customers know if they find some differences in ads, and that is why design must be crafted effectively when shown in public.
Product Prices	Every tenant who works with e-marketplace companies will have different prices to sell on e-marketplace system. According to this condition, every e-marketplace must calculate the profit they will get in selling the products from partners and the profits that must be shared with the partners. If the price is too high, then the product will be difficult to gain sales, but if it is sold with low price, the customers will purchase it more often. E-marketplace must consider in giving discounts for each product in, for example, every particular holiday because customer would be very interested in products that are discounted.
Security	Data transaction and Data customer are very important data that must be kept by e-marketplace companies because personal data, especially card number that is used in payment method, should not be exposed to the public. If customer data is maintained, customers will feel safe in doing the transaction.
Shipping Service	Goods that are packaged in good condition will satisfy the customers, thus generating trusts to e-marketplace companies. Every product must be packaged with durable materials so that if it is delivered, the products are not broken, and customer will be satisfied.
Tracking	Every e-marketplace company has a tracking record on the one website that has a function of a traffic website for all categories. If the marketplace company has a good record track in the market, customers' trust will be increased. Reviews from other customers will be one added value on the track.

## V. CONCLUSION

Based on the first goals in this research, the key components of e-marketplace consists of 13 components, which are buyer, partner, user interface, content, online chat, payment, infrastructure, agreement rules, advertising, product prices, security, shipping service and tracking (Table VIII). Based on the largest number of paper on table VII, it is also discovered that the key components that can enhance service quality in the market are Buyer, Partner, Infrastructure, Content, Online Chat, and Product Prices. This 6 components was selected because they have the most influence to enhance service quality.



The limitations of this research are twofold. First, this study only identifies the general components in the e-marketplace to improve the service quality of e-marketplace companies. Second, there are several other methods for discovering the components in e-marketplace other than systematic literature review. That is to say, other techniques could also be used in advancing our understandings to this specific area. Every component has not been validated to make it feasible or not to be an e-marketplace component to enhance service quality. These components need to be studied further to get the accuracy of every component of e-marketplace. All literature is limited, only find the literature that only match with topic area without disclosure of newer publications. Future research can gather more recently published academic literature to support as well as extend our understanding regarding the essential components in e-marketplace. The components of e-marketplace need to be tested using quantitative approaches to find any other possible components of e-marketplace, specifically for social care in Indonesia. Then, all components will be the main base for further research on the identification of features on e-marketplace to develop a model on e-marketplace for social care in Indonesia.

## REFERENCES

1. K. C. Laudon and C.G. Traver, "E-commerce," Pearson, 2013.
2. S. J. Barnes and R. T. Vidgen, "An integrative approach to the assessment of e-commerce quality," *J. Electron. Commerce Res*, vol. 3 no.3, pp. 114-127, 2002.
3. J. E. Oxley and B. Yeung, "E-commerce readiness: Institutional environment and international competitiveness," *Journal of International Business Studies*, vol. 32, no. 4, pp. 705-723, 2001.
4. W. Raisch and Gideon Foreword By-Gartner, "The eMarketplace: Strategies for success in B2B e-Commerce," McGraw-Hill Professional, 2000.
5. B. Kitchenham, "Procedures for performing systematic reviews," *Keele, UK, Keele University*, vol. 33, pp. 1-26, 2004.
6. J. Guo, H. Zhuo and Z. Gong, "Technical construction methods for e-marketplace," *Proceedings of the 11th International Conference on Electronic Commerce*, ACM, 2009.
7. M. Joshi, V. Bhavsar, and H. Boley, "A knowledge representation model for matchmaking systems in e-marketplaces," *Proceedings of the 11th International Conference on Electronic Commerce*. ACM, 2009.
8. M. Joshi, V. Bhavsar, and H. Boley, "A knowledge representation model for matchmaking systems in e-marketplaces," *Proceedings of the 11th International Conference on Electronic Commerce*. ACM, 2009.
9. K. Levi and A. Arsanjani, "A goal-driven approach to enterprise component identification and specification," *Communications of the ACM*, vol. 45, no. 10, pp. 45-52, 2002.
10. H. Li, et al., "A framework for developing a unified B2B e-trading construction marketplace," *Automation in construction*, vol. 12, no. 2, pp. 201-211. 2003.
11. K. Lavassani, B. Movahedi, and V. Kumar, "Transition to B2B e-Marketplace enabled supply chain: Readiness assessment and success factors," *CONF-IRM 2008 Proceedings*, 2008.
12. E. Chen, G. E. Kersten, and R. Vahidov, "An e-marketplace for agent-supported commerce negotiations," *5th World Congress on the Management of eBusiness*, 2004.
13. C. C. Albrecht, D. L. Dean, and J.V. Hansen, "Marketplace and technology standards for B2B e-commerce: progress, challenges, and the state of the art," *Information & Management*, vol. 42. No. 6, pp. 865-875, 2005.
14. H. H. Chang and K.H. Wong, "Adoption of e-procurement and participation of e-marketplace on firm performance: Trust as a moderator," *Information & Management* vol. 47, no. 5, pp. 262-270, 2010.
15. K. Christidis and G. Mentzas, "A topic-based recommender system for electronic marketplace platforms," *Expert Systems with Applications* vol. 40, no. 11, pp. 4370-4379, 2013.
16. T-Y. Eng, "The role of e-marketplaces in supply chain management," *Industrial Marketing Management*, vol. 33, no. 2, pp. 97-105, 2004.
17. Y-B. Joo and Y-G Kim, "Determinants of corporate adoption of e-Marketplace: an innovation theory perspective," *Journal of Purchasing and Supply Management*, vol. 10, no. 2, pp. 89-101, 2004.
18. A. Lancaster and L. F. Lages, "The relationship between buyer and a B2B e-marketplace: Cooperation determinants in an electronic market context," *Industrial Marketing Management*, vol. 35, no. 6, pp. 774-789, 2006.
19. J. Li and L. Li, "On the critical success factors for B2B e-marketplace," *Proceedings of the 7th international conference on Electronic commerce*. ACM, 2005.
20. J. Li and L. Li, "On the critical success factors for B2B e-marketplace," *Proceedings of the 7th international conference on Electronic commerce*. ACM, 2005.
21. Y. Liu and J. Zhang, "An incentive mechanism designed for e-marketplaces with limited inventory," *Electronic Commerce Research and Applications*, vol. 13, no. 2, pp. 110-127, 2014.
22. P. Renna. "Negotiation policies and coalition tools in e-marketplace environment," *Computers & Industrial Engineering*, vol. 59, no. 4, pp. 619-629, 2010.
23. K. Zhao, et al., "The sustainability of B2B e-marketplaces: Ownership structure, market competition, and prior buyer-seller connections," *Decision Support Systems*, vol. 47, no. 2, pp. 105-114, 2009.
24. G. Büyüközkan, "Multi-criteria decision making for e-marketplace selection," *Internet Research*, vol. 14, no. 2, pp. 139-154, 2004.
25. S. Gritzalis, J. Iliadis, and S. Oikonomopoulos, "Distributed component software security issues on deploying a secure electronic marketplace," *Information management & computer security*, vol. 8, no. 1, pp. 5-13, 2000.
26. P. Jiang and J. Talaga, "Building a customer base in the electronic marketplace: an empirical exploration of the e-tailing industry," *Journal of Services Marketing*, vol. 20, no. 7, pp. 429-438, 2006.
27. Patel, Ahmed, Wei Qi, and Christopher Wills, "A review and future research directions of secure and trustworthy mobile agent-based e-marketplace systems," *Information Management & Computer Security*, vol. 18, no. 3, pp. 144-161, 2010.
28. A. Patel, W. Qi, and M. Taghavi, "Design of secure and trustworthy mobile agent-based e-marketplace system," *Information Management & Computer Security*, vol. 19, no. 5, pp. 333-352, 2011.
29. J. Santos, "E-service quality: a model of virtual service quality dimensions," *Managing Service Quality: An International Journal*, vol. 13, no. 3, pp. 233-246, 2003.
30. H. Sharifi, D.F. Kehoe, and J. Hopkins. "A classification and selection model of e-marketplaces for better alignment of supply chains," *Journal of Enterprise Information Management*, vol. 19, no. 5, pp. 483-503, 2006.
31. R. Stockdale and C. Standing, "Benefits and barriers of electronic marketplace participation: an SME perspective," *Journal of Enterprise Information Management*, vol. 17, no. 4, pp. 301-311, 2004.
32. C. Zhai, "Study on environment factors affecting B2B e-marketplace adoption in China: From e-readiness perspective," *Computer Science and Service System (CSSS), 2011 International Conference on*. IEEE, 2011.
33. E. Chen, R. Vahidov, and G. E. Kersten, "Agent-supported negotiations in the e-marketplace," *International Journal of Electronic Business*, vol. 3, no. 1, pp. 28-49, 2005.
34. J. Guo and G. Xiao, "The meaningful e-marketplace," *Information Management and Engineering (ICIME), 2010 The 2nd IEEE International Conference on*. IEEE, 2010.
35. M. Mukhtar, et al., "An integrated e-marketplace framework: A case study of wood-based products industry in Malaysia," *Electrical Engineering and Informatics, 2009. ICEEI'09. International Conference on*. Vol. 2. IEEE, 2009.
36. L. Peng and L. Chen, "The Game Model of the Pricing Methodology of B2B e-Marketplace and Its Competitive Strategy on the Basis of Long Tail Theory," *Management of e-Commerce and e-Government (ICMeCG), 2010 Fourth International Conference on*. IEEE, 2010.
37. J. Yan, C. Zhai, and F. Zhao, "An empirical study on influence factors for organizations to adopt B2B e-marketplace in China," *Management and Service Science, 2009. MASS'09. International Conference on*. IEEE, 2009.

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38. W. Yang and L. Li, "Modeling feedback mechanism for e-marketplace," *Management of e-Commerce and e-Government (ICMeCG), 2010 Fourth International Conference on*. IEEE, 2010.
39. J. Yang and M. P. Papazoglou, "Web component: A substrate for web service reuse and composition," *International Conference on Advanced Information Systems Engineering*. Springer, Berlin, Heidelberg, 2002.
40. C. G. Ash and J. M. Burn, "Evaluating benefits of e-procurement in a B2B marketplace: A case study of Quadrem," *Journal of Information Technology Case and Application Research*, vol. 8, no. 2, pp. 5-23, 2006.
41. G. Büyüközkan, "A success index to evaluate e-marketplaces," *Production Planning & Control*, vol. 15, no. 7, pp. 761-774, 2004.
42. H. G. Lee and T. H. Clark, "Impacts of the electronic marketplace on transaction cost and market structure," *International journal of electronic commerce*, vol. 1, no.1, pp.127-149, 1996.
43. D. Truong, et al., "Electronic marketplace: a distinct platform for business-to-business (B-to-B) procurement," *Journal of Business-to-Business Marketing*, vol. 19, no. 3, pp. 216-247, 2012.
44. C. Milliou and E. Petrakis, "Business-to-business electronic marketplaces: Joining a public or creating a private," *International Journal of Finance & Economics*, vol. 9, no. 2, pp. 99-112, 2004.

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