Home / Archives / Vol. 15 No. 2 (2019): Jurnal Sistem Informasi (Journal of Information System) / Articles

E-Supply Chain Management Value Concept for The Palm Oil Industry

Muhamad Akbar

Universitas Bina Darma http://orcid.org/0000-0002-5312-2314

Antoni Darius

Universitas Bina Darma https://orcid.org/0000-0003-1485-7964

DOI: https://doi.org/10.21609/jsi.v15i2.859

Keywords: e-supply chain management, resource-based view, IT infrastructure, IT human resources

Abstract

The Harmony of IT and Business is an asset and the foundation of the organizations to improve and build business competitive strategies. There is a need to integrate and coordinate all business partners of the organization, particularly those associated with Information Technology and suppliers, raw materials or resources needed in the supply chain management. The effectiveness of an E-SCM in Palm Oil industry will be the crucial factor to provide the organization with business opportunities and improve competitive position in the marketplace. Aim of this study is to investigates critical factors E-Supply Chain Management in Oil Palm Industry through Theory Resource Based View (RBV). With RBV theory, this study develops a concept that can be utilized for identifying the critical success factors of E-SCM value in Palm Oil industry. The quantitative research method is used for collecting data in four Palm Oil organizations in South Sumatera. This research reveals that IT human resources and IT infrastructure are the critical factors and capability in to operate E-SCM effectively and

Downloads

Download data is not yet available.

References

Adela, J. W. C., Marie-Claude, B., and Richard, T. W. 2008. "Information Systems and Ecological Sustainability," Journal of Systems and Information Technology (10:3), pp. 186-201.

Antoni, D., Antoni, D., and Fatoni, F. 2016. "Faktor-Faktor Infrastruktur Teknologi Informasi Corporate Di Kota Palembang," Jurnal SISFOKOM (Sistem Informasi dan Komputer) ATMA LUHUR (5:1), pp. 38-45.

Antoni, D., Fikari, D., Akbar, M., and Jie, F. 2018. "The Readiness of Palm Oil Industry in Enterprise Resource Planning," Telkomnika (16:6).

Antoni, D., and Jie, F. 2012. "The Relationship between It Capability and Organizational Environment Performance: A Conceptual Framework," in: 3rd Annual international Conference on Infocomm Technologies in Competitives strategies (ICT 2012). Bali: p. 47.

Antoni, D., and Jie, F. 2013. "Investigating the Critical Capabilities of Information Technology for Developing Ecological Competencies of Organizations," 11th ANZAM Operations, Supply Chain and Services Management Symposium, Brisbane, Australia.

Arslan, B., and Ozturan, M. 2011. "The Path to Information Technology Business Value: Case of Turkey," Technology and Investment (2:01), p. 52.

Asmani, N., and Si, M. 2014. "Kelapa Sawit Komoditas Unggulan Sumatera Selatan Yang Ramah Lingkungan,").

Azmiyati, S., and Hidayat, S. 2017. "Pengukuran Kinerja Rantai Pasok Pada Pt. Louserindo Megah Permai Menggunakan Model Scor Dan Fahp," JURNAL Al-AZHAR INDONESIA SERI SAINS DAN TEKNOLOGI (3:4), pp. 163-170.

Barney, J. 1991. "Firm Resources and Sustained Competitive Advantage," Journal of Management (17:1), pp. 99-120.

Becher, R., Dillinger, M., Haardt, M., and Mohr, W. 2001. "Broadband Wireless Access and Future Communication Networks," Proceedings of the IEEE (89:1), pp. 58-75.

Benitez-Amado, J., Perez-Arostegui, M. N., and Tamayo-Torres, J. 2010. "Information Technology Enabled Innovativeness and Green Capabilities," The Journal of Computer Information Systems (51:2), pp. 87-96.

Benitez-Amado, J., and Walczuch, R. M. 2012. "Information Technology, the Organizational Capability of Proactive Corporate Environmental Strategy and Firm Performance: A Resource-Based Analysis," European Journal of Information Systems (21:6), pp. 664-679.

Berkhout, F., and Hertin, J. 2004. "De-Materialising and Re-Materialising: Digital Technologies and the Environment," Futures (36:8), pp. 903-920.

Bharadwaj, A. S. 2000. "A Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation," MIS Quarterly (24:1), pp. 169-196.

Blanchard, D. 2010. Supply Chain Management: Best Practices, (2nd ed.). Hoboken: John Wiley & Sons, Inc., 2010.

Chaffey, D. 2009. E-Business and E-Commerce Management, Strategy, Implementation & Practice, Prentice Hall, 2009: E-Business and E-Commerce Management, Strategy, Implementation & Practice. Bukupedia.

Dao, V., Langella, I., and Carbo, J. 2011. "From Green to Sustainability: Information Technology and an Integrated Sustainability Framework," The Journal of Strategic Information Systems (20:1), pp. 63-79.

DeLone, W. H., and McLean, E. R. 1992. "Information Systems Success: The Quest for the Dependent Variable," INFORMATION SYSTEMS RESEARCH (3:1), pp. 60-95.

Duncan, N. B. 1995. "Capturing Flexibility of Information Technology Infrastructure: A Study of Resource Characteristics and Their Measure," Journal of Management Information Systems (12:2), pp. 37-37.

Farrell, A. M. 2010. "Insufficient Discriminant Validity: A Comment on Bove, Pervan, Beatty, and Shiu (2009)," Journal of Business Research (63:3), pp. 324-327.

Gabčanová, I. 2012. "Human Resources Key Performance Indicators," Journal of competitiveness).

Gómez-Cedeño, M., Castán-Farrero, J. M., Guitart-Tarrés, L., and Matute-Vallejo, J. 2015. "Impact of Human Resources on Supply Chain Management and Performance," Industrial Management & Data Systems (115:1), pp. 129-157.

Guiyi, W., and Hanxiao, S. 2008. "Design of Information Sharing in a Supply Chain Using Sm Technology," Wireless Communications, Networking and Mobile Computing, 2008. WiCOM '08. 4th International Conference on, pp. 1-4.

Hafeez, K., Zhang, Y., and Malak, N. 2002. "Determining Key Capabilities of a Firm Using Analytic Hierarchy Process," International Journal of Production Economics (76:1), pp. 39-51.

Hair, J. F. 2010. Multivariate Data Analysis, (7th ed. ed.). Upper Saddle River, NJ: Prentice Hall.

Hair, J. F., Tatham, R. L., Anderson, R. E., and Black, W. 2010. Multivariate Data Analysis. Pearson Prentice Hall Upper Saddle River, NJ.

Hu, A. H., and Hsu, C.-W. 2010. "Critical Factors for Implementing Green Supply Chain Management Practice: An Empirical Study of Electrical and Electronics Industries in Taiwan," Management research review (33:6), pp. 586-608.

Indrajit, R. E., and Djokopranoto, R. 2002. "Konsep Manajemen Supply Chain: Cara Baru Memandang Mata Rantai Penyediaan Barang," Jakarta: Grasindo).

Jakkhupan, W., Arch-int, S., and Li, Y. 2011. "Business Process Analysis and Simulation for the Rfid and Epcglobal Network Enabled Supply Chain: A Proof-of-Concept Approach," Journal of Network and Computer Applications (34:3), pp. 949-957. Jogiyanto, H. M. 2003. "Sistem Teknologi Informasi: Pendekatan Terintegrasi: Konsep Dasar, Teknologi, Aplikasi, Pengembangan Dan Pengelolaan," Andi Offset, Yogyakarta).

Karimi, J., Somers, T. M., and Gupta, Y. P. 2004. "Impact of Environmental Uncertainty and Task Characteristics on User Satisfaction with Data," INFORMATION SYSTEMS RESEARCH (15:2), pp. 175-193.

Kasemsap, K. 2015. "The Role of Cloud Computing in Global Supply Chain," in Enterprise Management Strategies in the Era of Cloud Computing. IGI Global, pp. 192-219.

Kettinger, W. J., Grover, V., Guha, S., and Segars, A. H. 1994. "Strategic Information Systems Revisited: A Study in Sustainability and Performance," MIS Quarterly (18:1), pp. 31-58.

Lancioni, R. A., Smith, M. F., and Oliva, T. A. 2000. "The Role of the Internet in Supply Chain Management," Industrial Marketing Management (29:1), pp. 45-56.

Lee, D. M. S., Trauth, E. M., and Farwell, D. 1995. "Critical Skills and Knowledge Requirements of Is Professionals: A Joint Academic/Industry Investigation," MIS Quarterly (19:3), pp. 313-340.

Liu, S. 2002. "A Practical Framework for Discussing It Infrastructure," IT Professional (4:4), pp. 14-21.

Molla, A., Cooper, V. A., and Pittayachawan, S. 2009. "It and Eco-Sustainability: Developing and Validating a Green It Readiness Model," ICIS 2009 Proceedings), p. 141.

Mukharromah, I. N., Deoranto, P., Mustamiroh, S. A., and Sita, K. 2017. "Analysis of Company Performance Measurement Using Green Supply Chain Management Method on Bussiness Unit of Black Tea," Jurnal Penelitian Teh dan Kina (20:1), pp. 48-58.

Ngai, E., Peng, S., Alexander, P., and Moon, K. K. 2014. "Decision Support and Intelligent Systems in the Textile and Apparel Supply Chain: An Academic Review of Research Articles," Expert Systems with Applications (41:1), pp. 81-91.

Ninlawan, C., Seksan, P., Tossapol, K., and Pilada, W. 2010. "The Implementation of Green Supply Chain Management Practices in Electronics Industry," Proceedings of the international multiconference of engineers and computer scientists: Citeseer, pp. 17-19.

Powell, T. C., and Dent-Micallef, A. 1997. "Information Technology as Competitive Advantage: The Role of Human, Business, and Technology Resources," Strategic Management Journal (18:5), pp. 375-405.

Ravichandran, T., Lertwongsatien, C., and Lertwongsatien, C. 2005. "Effect of Information Systems Resources and Capabilities on Firm Performance: A Resource-Based Perspective," Journal of management information systems (21:4), pp. 237-276.

Ray, G., Barney, J. B., and Muhanna, W. A. 2004. "Capabilities, Business Processes, and Competitive Advantage: Choosing the Dependent Variable in Empirical Tests of the Resource-Based View," Strategic Management Journal (25:1), pp. 23-37. Saunders, M. 1995. "Chains, Pipelines, Networks and Value Stream: The Role, Nature and Value of Such Metaphors in Forming Perceptions of the Task of Purchasing and Supply Management," pp. 476-485.

Sharma, S., and Vredenburg, H. 1998. "Proactive Corporate Environmental Strategy and the Development of Competitively Valuable Organizational Capabilities," Strategic management journal (19:8), pp. 729-753.

Simchi-Levi, D., Kaminsky, P., Simchi-Levi, E., and Shankar, R. 2008. Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies. Tata McGraw-Hill Education.

Soo Wook, K. 2006. "Effects of Supply Chain Management Practices, Integration and Competition Capability on Performance," Supply Chain Management: An International Journal (11:3), pp. 241-248.

Stephan, V., and Robert, D. K. 2006. "Extending Green Practices across the Supply Chain: The Impact of Upstream and Downstream Integration," International Journal of Operations & Production Management (26:7), pp. 795-821.

Tanaka, D., and Nurcaya, I. N. 2012. "Analisis Kinerja Supply Chain Management Berbasis Balanced Scorecard Pada Pt. Alove Bali Ind," E-Jurnal Manajemen Universitas Udayana (7:7).

Tippins, M. J., and Sohi, R. S. 2003. "It Competency and Firm Performance: Is Organizational Learning a Missing Link?," Strategic Management Journal (24:8), pp. 745-761.

Wahyuniardi, R., Syarwani, M., and Anggani, R. 2017. "Pengukuran Kinerja Supply Chain Dengan Pendekatan Supply Chain Operation References (Scor)," Jurnal Ilmiah Teknik Industri (16:2), pp. 123-132.

Wernerfelt, B. 1984. "A Resource-Based View of the Firm," Strategic Management Journal (5:2), pp. 171-180.

Worley, C. G., Feyerherm, A. E., and Knudsen, D. 2010. "Building a Collaboration Capability for Sustainability: How Gap Inc. Is Creating and Leveraging a Strategic Asset," Organizational Dynamics (39:4), pp. 325-325-334.

Zinaida, F. 2005. "Development of the Assessment Framework for Sustainability Networking," Journal of Cleaner Production (13:2), pp. 191-205.

Volume 15 Issue 2 October 2019 ISSN 2088-7043

Jurnal Sistem Informasi

Journal of Information Systems

How to Cite

Akbar, M., & Darius, A. (2019). E-Supply Chain Management Value Concept for The Palm Oil Industry. *Jurnal Sistem Informasi (Journal of Information System)*, 15(2), 15-29. https://doi.org/10.21609/jsi.v15i2.859

More Citation Formats

~

Issue

Vol. 15 No. 2 (2019): Jurnal Sistem Informasi (Journal of Information System)

Section

Articles

Copyright (c) 2019 Jurnal Sistem Informasi



This work is licensed under a <u>Creative Commons Attribution-ShareAlike 4.0 International License</u>.

Authors who publish with this journal agree to the following terms:

- Authors retain copyright and grant the journal right of first publication with the work simultaneously licensed under a <u>Creative Commons Attribution License</u> that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal.
- Authors are able to enter into separate, additional contractual arrangements for the non-exclusive distribution of the journal's published version of the work (e.g., post it to an institutional repository or publish it in a book), with an acknowledgement of its initial publication in this journal.
- Authors are permitted and encouraged to post their work online (e.g., in institutional repositories or on their website) prior to and during the submission process, as it can lead to productive exchanges, as well as earlier and greater citation of published work (See The Effect of Open Access).

Most read articles by the same author(s)

Darius Antoni, Muhamad Akbar, Fatoni Fatoni, <u>Electronic Government Rukun Tetangga Model</u>, <u>Jurnal Sistem Informasi (Journal of Information System)</u>: Vol. 14 No. 2 (2018): <u>Jurnal Sistem Informasi (Journal of Information System)</u>

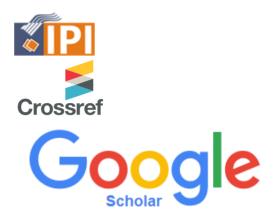
Make a Submission

Our journal is implementing **Double Blind Review** for each manuscript submitted in English. There are no charges for submitted or published articles in our journal. The submitted manuscript in this journal is screened for plagiarism using iThenticate.



JSI is indexed in:





In association with:



To order the journal, please send your quotation to <code>jsi@cs.ui.ac.id</code>, the payment can be done through wired transfer.



Platform & workflow by OJS / PKP