

Supply Chain Management



Supply chain management (SCM) considers the flow of materials, information, and finances as they move in a process from supplier to manufacturer to wholesaler to retailer and finally to consumer. It involves coordinating this flow both within and among companies. This list of reading materials has articles published over the past 14 years and aims to give insight into various topics.

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Supply Chain Management

Books discussing the supply chain with administration as the focus.

[Chopra, S., & Meindl, Peter. \(2012\). *Supply chain management : Strategy, planning, and operation* \(5th Global ed.\). Upper Saddle River, N.J.: Pearson.](#)

Main Library General Lending (HF5415.13 CHO)

[Simchi-Levi, D., Kaminsky, Philip, & Simchi-Levi, E. \(2009\). *Designing and managing the supply chain : Concepts, strategies, and case studies* \(3rd international ed.\). Boston: McGraw-Hill/Irwin.](#)

Main Library Reference (HF5415.7 SIM)

[Sople, V. \(2012\). *Supply chain management*. New Delhi: Dorling Kindersley \(India\).](#)

[Talluri, K. & Van Ryzin, G. \(2004\). *The theory and practice of revenue management*. Boston, Mass.: Kluwer Academic Publishers.](#)

Main Library Reference (HD60.7 TAL)

[Webster, S. \(2009\). *Principles of supply chain management*. Belmont, MA: Dynamic Ideas.](#)

Main Library General Lending (HD38.5 WEB)

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Supply Chain Design

Discusses how to design supply chain in various contexts and what aspects need to be considered in the design process.

[Baghalian, Rezapour, & Farahani. \(2012\). Robust supply chain network design with service level against disruptions and demand uncertainties: A real-life case. *European Journal of Operational Research*, 227\(1\), 199-215.](#)

[Bottani, E. & Montanari, R. \(2010\). Supply chain design and cost analysis through simulation. *International Journal Of Production Research*, 48\(10\), 2859-2886.](#)

[Chen, W., Kucukyazici, B., Verter, V., & Jesús Sáenz, M. \(2015\). Supply chain design for unlocking the value of remanufacturing under uncertainty. *European Journal Of Operational Research*, 247\(3\), 804-819.](#)

[Correll, Suzuki, & Martens. \(2014\). Logistical supply chain design for bioeconomy applications. *Biomass and Bioenergy*, 66, 60-69.](#)

[Eskandarpour, M., Dejax, P., Miemczyk, J., & Péton, O. \(2015\). Sustainable supply chain network design: An optimization-oriented review. *Omega*, 54, 11-32.](#)

[Fallah, H., Eskandari, H., & Pishvae, M. \(2015\). Competitive closed-loop supply chain network design under uncertainty. *Journal Of Manufacturing Systems*, 37, 649-661.](#)

[Fang, X., Ru, J., & Wang, Y. \(2014\). Optimal procurement design of an assembly supply chain with information asymmetry. *Production And Operations Management*, 23\(12\), 2075-2088.](#)

[Garcia, D. \(2015\). Supply chain design and optimization: Challenges and opportunities. *Computers & Chemical Engineering*, 81, 153-170.](#)

[Nagurney, A. \(2010\). Optimal supply chain network design and redesign at minimal total cost and with demand satisfaction. *International Journal Of Production Economics*, 128\(1\), 200-208.](#)

[Pan, F. \(2010\). Robust supply chain design under uncertain demand in agile manufacturing. *Computers & Operations Research*, 37\(4\), 668-683.](#)

[Paydar, M. & Saidi-Mehrabad, M. \(2015\). Revised multi-choice goal programming for integrated supply chain design and dynamic virtual cell formation with fuzzy parameters. *International Journal Of Computer Integrated Manufacturing*, 28\(3\), 251-265.](#)

[Talaei, M., Farhang M.B., Pishvaei, M., Bozorgi-Amiri, A., & Gholamnejad, S. \(2016\). A robust fuzzy optimization model for carbon-efficient closed-loop supply chain network design problem: a numerical illustration in electronics industry. *Journal Of Cleaner Production*, 113, 662-673.](#)

[Yue, D. & You, F. \(2016\). Optimal supply chain design and operations under multi-scale uncertainties: Nested stochastic robust optimization modeling framework and solution algorithm. *AIChE Journal*, 62\(9\), 3041-3055.](#)

[Zhang, L. \(2016\). An integrated model for strategic supply chain design: Formulation and ABC-based solution approach. *Expert Systems with Applications*, 52, 39-49.](#)

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Supply Chain Process Analysis

Covers a step-by-step breakdown of the stages of the supply chain process and is used to illustrate the inputs, outputs, and operations occurring at each stage.

[Hashemi, S., Karimi, A., & Tavana, M. \(2015\). An integrated green supplier selection approach with analytic network process and improved Grey relational analysis. *International Journal Of Production Economics*, 159, 178-191.](#)

[Jakkhupan, W., Arch-int, S., & 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\(3\), 949-957.](#)

[Kumar, A., Mukherjee, K., & Adlakha, A. \(2015\). Dynamic performance assessment of a supply chain process. *Business Process Management Journal*, 21\(4\), 743-770.](#)

[Kumar, S., Tiffany, M., & Vaidya, S. \(2014\). Supply chain analysis of e-tailing versus retailing operation – a case study. *Enterprise Information Systems*, 10\(6\), 639-665.](#)

[Malik, M., Abdallah, S., & Hussain, M. \(2016\). Assessing supplier environmental performance: Applying Analytical Hierarchical Process in the United Arab Emirates healthcare chain. *Renewable And Sustainable Energy Reviews*, 55, 1313-1321.](#)

[Pan, N. \(2011\). Construction material supply chain process analysis and optimization. *Journal of Civil Engineering and Management*, 17\(3\), 357-370.](#)

[Ren, S., Hu, C., Ngai, E., & Zhou, M. \(2015\). An empirical analysis of inter-organisational value co-creation in a supply chain: a process perspective. *Production Planning & Control*, 26\(12\), 969-980.](#)

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Supply Chain Procurement

Discusses the operational aspects of a company's strategic sourcing of components and raw materials for the supply chain.

[Bolandifar, E., Kouvelis, P., & Zhang, F. \(2016\). Delegation vs. Control in Supply Chain Procurement under Competition. *Production And Operations Management*, 25\(9\), 1528-1541.](#)

[Chang, H. \(2013\). E-procurement and supply chain performance. *International Journal of Supply Chain Management*, 18\(1\), 34-51.](#)

[Chen, K. \(2012\). Procurement strategies and coordination mechanism of the supply chain with one manufacturer and multiple suppliers. *International Journal Of Production Economics*, 138\(1\), 125-135.](#)

[Jin, M. & Junfang Yu, A. \(2015\). Procurement auctions and supply chain performance. *International Journal Of Production Economics*, 162, 192-200.](#)

[Liu, W., Xie, D., Liu, Y., & Liu, X. \(2015\). Service capability procurement decision in logistics service supply chain: a research under demand updating and quality guarantee. *International Journal Of Production Research*, 53\(2\), 488-510.](#)

[Roberta P., C., Christopher, M., & Lago Da Silva, A. \(2014\). Achieving supply chain resilience: The role of procurement. *Supply Chain Management: An International Journal*, 19\(5/6\), 626-642.](#)

[Sanderson, J., Lonsdale, C., Mannion, R., & Matharu, T. \(2015\). Towards a framework for enhancing procurement and supply chain management practice in the NHS: lessons for managers and clinicians from a synthesis of the theoretical and empirical literature. *Health Services And Delivery Research*, 3\(18\), 1-134.](#)

[Turcic, D., Kouvelis, P., & Bolandifar, E. \(2015\). Hedging Commodity Procurement in a Bilateral Supply Chain. *Manufacturing & Service Operations Management*, 17\(2\), 221-235.](#)

[Yan, M., Chien, K., & Yang, T. \(2016\). Green Component Procurement Collaboration for Improving Supply Chain Management in the High Technology Industries: A Case Study from the Systems Perspective. *Sustainability*, 8\(2\), 105-1-16.](#)

[Yang, Y. \(2014\). Modeling and optimization of two-stage procurement in dual-channel supply chain. *Information Technology & Management*, 15\(2\), 109-118.](#)

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Supply Chain Risk Management

Implements strategies to deal with both daily and occasional risks along the supply chain.

[Aqlan, F. & Lam, S. \(2015\). A fuzzy-based integrated framework for supply chain risk assessment. *International Journal Of Production Economics*, 161, 54-63.](#)

[Bandaly, D., Satir, A., & Shanker, L. \(2016\). Impact of lead time variability in supply chain risk management. *International Journal Of Production Economics*, 180, 88-100.](#)

[Chen, J., Sohal, A. S., & Prajogo, D. I. \(2013\). Supply chain operational risk mitigation: a collaborative approach. *International Journal Of Production Research*, 51\(7\), 2186-2199.](#)

[Duhamel, F., Carbone, V., & Moatti, V. \(2016\). The impact of internal and external collaboration on the performance of supply chain risk management. *International Journal Of Logistics Systems And Management*, 23\(4\), 534.](#)

[Lavastre, O., Gunasekaran, A., & Spalanzani, A. \(2012\). Supply chain risk management in French companies. *Decision Support Systems*, 52\(4\), 828-838.](#)

[Li, G., Fan, H., Lee, P., & Cheng, T. \(2015\). Joint supply chain risk management: An agency and collaboration perspective. *International Journal Of Production Economics*, 164, 83-94.](#)

[Nyoman Pujawan, I., & Geraldin, L. H. \(2009\). House of risk: A model for proactive supply chain risk management. *Business Process Management Journal*, 15\(6\), 953-967.](#)

[O'Connor, D. \(2016\). Standard Principles for Installing a Social Media Control Framework for Supply Chain Risk Management. *EDPACS*, 54\(3\), 11-17.](#)

[Qazi, A., Quigley, J., Dickson, A., Ekici, S., & Gaudenzi, B. \(2016\). Detectability Based Prioritization of Interdependent Supply Chain Risks. In S. Liu, B. Delibasic & F. Oderanti, *Decision Support Systems VI - Addressing Sustainability and Societal Challenges Volume 250 of the series Lecture Notes in Business Information Processing* \(pp. 73-87\). Springer International Publishing.](#)

[Sodhi, M. S., Son, B., & Tang, C. S. \(2012\). Researchers' perspectives on supply chain risk management. *Production & Operations Management*, 21\(1\), 1-13.](#)

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Supply Chain Co-ordination

Enhancing the performance of the supply chain by bringing the plans and objectives of different companies together.

[Arshinder, K., A., & Deshmukh, S. \(2008\). Supply chain coordination: Perspectives, empirical studies and research directions. *International Journal Of Production Economics*, 115\(2\), 316-335.](#)

[Eltantawy, R., Paulraj, A., Giunipero, L., Naslund, D., & Thute, A. A. \(2015\). Towards supply chain coordination and productivity in a three echelon supply chain. *International Journal of Operations & Production Management*, 35\(6\), 895-924.](#)

[Huang, C., Yu, G., Wang, S., & Wang, X. \(2006\). Disruption management for supply chain coordination with exponential demand function. *Acta Mathematica Scientia*, 26\(4\), 655-669.](#)

[Lee, J., Cho, R., & Paik, S. \(2016\). Supply chain coordination in vendor-managed inventory systems with stockout-cost sharing under limited storage capacity. *European Journal Of Operational Research*, 248\(1\), 95-106.](#)

[Lei, Q., Chen, J., Wei, X., & Lu, S. \(2015\). Supply chain coordination under asymmetric production cost information and inventory inaccuracy. *International Journal Of Production Economics*, 170, 204-218.](#)

[Masten, K. & Kim, S. \(2015\). So many mechanisms, so little action: The case for 3rd party supply chain coordination. *International Journal Of Production Economics*, 168, 13-20.](#)

[Sarkar, B. \(2016\). Supply Chain Coordination with Variable Backorder, Inspections, and Discount Policy for Fixed Lifetime Products. *Mathematical Problems In Engineering*, 2016, 1-14.](#)

[Shin, H. & Benton, W. \(2007\). A quantity discount approach to supply chain coordination. *European Journal Of Operational Research*, 180\(2\), 601-616.](#)

[Zissis, D., Ioannou, G., & Burnetas, A. \(2015\). Supply chain coordination under discrete information asymmetries and quantity discounts. *Omega*, 53, 21-29.](#)

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Supply Chain Capacity Planning

Plans the amount of work that is to be accomplished by the supply chain within a specific time-frame.

[Dal-Mas, M. \(2011\). Strategic design and investment capacity planning of the ethanol supply chain under price uncertainty. *Biomass and Bioenergy*, 35\(5\), 2059-2071.](#)

[Fattahi, M., Mahootchi, M., Govindan, K., & Moattar Husseini, S. \(2015\). Dynamic supply chain network design with capacity planning and multi-period pricing. *Transportation Research Part E: Logistics And Transportation Review*, 81, 169-202.](#)

[Friemann, F. & Schönsleben, P. \(2016\). Reducing Global Supply Chain Risk Exposure of Pharmaceutical Companies by Further Incorporating Warehouse Capacity Planning into the Strategic Supply Chain Planning Process. *Journal Of Pharmaceutical Innovation*, 11\(2\), 162-176.](#)

[Georgiadis, P. \(2013\). Flexible long-term capacity planning in closed-loop supply chains with remanufacturing. *European Journal of Operational Research*, 225\(1\), 44-58.](#)

[Giarola, S. \(2012\). Environmentally conscious capacity planning and technology selection for bioethanol supply chains. *Renewable Energy*, 43, 61-72.](#)

[Ivanov, D., Hartl, R., Dolgui, A., Pavlov, A., & Sokolov, B. \(2014\). Integration of aggregate distribution and dynamic transportation planning in a supply chain with capacity disruptions and the ripple effect consideration. *International Journal Of Production Research*, 53\(23\), 6963-6979.](#)

[Liu, S. & Papageorgiou, L. \(2013\). Multiobjective optimisation of production, distribution and capacity planning of global supply chains in the process industry. *Omega*, 41\(2\), 369-382.](#)

[Mariel, K. & Minner, S. \(2015\). Strategic capacity planning in automotive production networks under duties and duty drawbacks. *International Journal Of Production Economics*, 170, 687-700.](#)

[Saif, Y. & Almansoori, A. \(2016\). A capacity expansion planning model for integrated water desalination and power supply chain problem. *Energy Conversion And Management*, 122, 462-476.](#)

[Sudarto, S., Takahashi, K., Morikawa, K., & Nagasawa, K. \(2016\). The impact of capacity planning on product lifecycle for performance on sustainability dimensions in Reverse Logistics Social Responsibility. *Journal Of Cleaner Production*, 133, 28-42.](#)

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Inventory Management

Controls the flow of goods from manufacturers to and from warehouses to point of sale.

[Loy, M., Traub, R., Zhang, L., Kotala, P., Roemmich, M., Breidenbach, J., & Nelson, R. \(2016\). Beyond the use of robotics: Operations and supply chain control for effective inventory management in a health system pharmacy. *Annals Of Information Systems*, 19, 145-155.](#)

[Sari, K. \(2015\). Investigating the value of reducing errors in inventory information from a supply chain perspective. *Kybernetes*, 44\(2\), 176-185.](#)

[Sarkar, S. & Kumar, S. \(2015\). A behavioral experiment on inventory management with supply chain disruption. *International Journal Of Production Economics*, 169, 169-178.](#)

[Tao, F., Fan, T., & Lai, K. \(2016\). Optimal inventory control policy and supply chain coordination problem with carbon footprint constraints. *International Transactions In Operational Research*, 1-18.](#)

[Towell, D., Disney, S., Smaros, J., & Holmstrom, J. \(2016\). Collaborative Supply Chain Configurations: The Implications for Supplier Performance in Production and Inventory Control. In K. Pawar, A. Potter, H. Rogers & M. Naim, *Developments in Logistics and Supply Chain Management Past, Present and Future* \(pp. 27-37\). Palgrave Macmillan UK.](#)

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Revenue Management

Uses pricing, this involves making decisions upon selling prices of goods, to raise profit generated from supply chain assets, that are resources owned or controlled by a company expected to have future benefits.

[Anderson, C. & Marcus, B. \(2015\). Tour operator revenue management – Competitive supply chain contracting. *Journal Of Revenue And Pricing Management*, 14\(4\), 245-261.](#)

[Guhlich, H., Fleischmann, M., & Stolletz, R. \(2015\). Revenue management approach to due date quoting and scheduling in an assemble-to-order production system. *OR Spectrum*, 37\(4\), 951-982.](#)

[Hu, Q. \(2010\). Revenue management for a supply chain with two streams of customers. *European Journal of Operational Research*, 200\(2\), 582-598.](#)

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Demand Estimation

Ensures that there will be sufficient supply of goods to meet user demands.

[Arampatzis, G., Kampragou, E., Scaloubakas, P., & Assimacopoulos, D. \(2015\). Using accurate demand forecasting to improve the efficiency of water supply-distribution chains. *Desalination And Water Treatment*, 57\(25\), 11494-11505.](#)

[Mersereau, A. \(2015\). Demand Estimation from Censored Observations with Inventory Record Inaccuracy. *Manufacturing & Service Operations Management*, 17\(3\), 335-349.](#)

[Mueller, L., Haidari, L., Wateska, A., Phillips, R., Schmitz, M., & Connor, D. et al. \(2016\). The impact of implementing a demand forecasting system into a low-income country's supply chain. *Vaccine*, 34\(32\), 3663-3669.](#)

[Murray, P., Agard, B., & Barajas, M. \(2015\). Forecasting Supply Chain Demand by Clustering Customers. *IFAC-Papersonline*, 48\(3\), 1834-1839.](#)

[Schwartz, J. \(2009\). Control-relevant demand forecasting for tactical decision-making in semiconductor manufacturing supply chain management. *IEEE Transactions on Semiconductor Manufacturing*, 22\(1\), 154-163.](#)

[Sepúlveda-Rojas, J., Rojas, F., Valdés-González, H., & Martín, M. \(2015\). Forecasting models selection mechanism for supply chain demand estimation. *Procedia Computer Science*, 55, 1060-1068.](#)

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