

## SCM Gamification

No.	Title	Author	Year	Journal	Abstract	Keywords	Link	DB	APA citation	PW
0	<b>Gamification in transport interventions: Another way to improve travel behavioural change</b>	B.T.H. Yen, C. Muller, M. I. Burke	2019	Cities	Gamification is dramatically transforming how behaviour change interventions are delivered in fields as diverse as health, physical activity, education, information studies and marketing. Most studies see gamification as a way of introducing gameful design (e.g., competition and social activity) into behavioural interventions. Gamification is often tied to using new digital technologies, especially smartphone apps and, although these might be enabling, there is no theoretical underpinning for making this a necessary condition. In comparison to other sectors, the design of gameful interventions in transport is under developed. Interventions that have or are introducing gamified designs include road safety and travel demand management initiatives and these have been shown to be more ongoingly successful than strategies which do not employ gameful designs. This paper explores gamification in the context of transport with the aim of proposing a framework for the design and implementation of gameful designs, providing a synthesis and critical appraisal of current practice. The proposed framework is underpinned by theoretical discussion and illustrated by case studies that have implemented some elements of gameful design. The framework is designed to lay the groundwork for greater implementation of gamified design in transport and mobility contexts to take advantage of the potential greater success in achieving travel behaviour change as well as highlighting how existing schemes could be improved and providing guidance for future research into gamification.	Supply Chain Management, Environmental management, Sustainability, Covid-19	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0264275118300039">https://www.sciencedirect.com/science/article/abs/pii/S0264275118300039</a>	Google Scholar	Yen, B.T.H., Mulley, C., Burke, M. (2019). Gamification in transport interventions: Another way to improve travel behavioural change, <i>Cities</i> 2019, 140-149.	
1	<b>IMPACT OF POS DATA SHARING ON SUPPLY CHAIN MANAGEMENT: AN EXPERIMENTAL STUDY</b>	RACHEL CROSON, KAREN DONOHUE	2009	Production and Operations Management Society	We examine the impact of point of sale (POS) data sharing on ordering decisions in a multi-echelon supply chain. In particular, we focus on how exposure to POS data may help reduce the "bullwhip effect," the tendency of orders to increase in variability as one moves up a supply chain. Theoretical studies have shown that exposure to POS data can lead to a reduction in the bullwhip effect when suppliers have no prior knowledge of the demand distribution. The benefit of sharing POS data in stable industries, where the demand distribution is commonly known, is less clear. We study this phenomenon from a behavioral perspective in the context of a simple, serial, supply chain subject to information lags and stochastic demand. We find, using a controlled simulation experiment, that sharing POS information does help reduce some components of the bullwhip effect in a stable demand setting, namely the order oscillation of upstream members. We offer one possible explanation for this improvement by examining the relationship between order decisions and demand line information.	Supply Chain Management, Experimental Analysis	<a href="https://online.library.wiley.com/doi/abs/10.1111/j.1937-5956.2003.tb00194.x">https://online.library.wiley.com/doi/abs/10.1111/j.1937-5956.2003.tb00194.x</a>	Google Scholar	CROSON, R. and DONOHUE, K. (2003), IMPACT OF POS DATA SHARING ON SUPPLY CHAIN MANAGEMENT: AN EXPERIMENTAL STUDY, <i>Production and Operations Management</i> , 12: 1-11. <a href="https://doi.org/10.1111/j.1937-5956.2003.tb00194.x">https://doi.org/10.1111/j.1937-5956.2003.tb00194.x</a>	No
2	<b>Social Preferences and Supply Chain Performance: An Experimental Study</b>	Christoph H. Loch, Yaozhong Wu	2008	Management Science	Supply chain contracting literature has traditionally focused on aligning incentives for economically rational players. Recent work has hypothesized that social preferences, as distinct from economic incentives, may influence behavior in supply chain transactions. Social preferences refer to intrinsic concerns for the other party's welfare, reciprocating a history of a positive relationship, and intrinsic desires for a higher relative payoff compared with the other party's when status is salient. This article provides experimental evidence that social preferences systematically affect economic decision making in supply chain transactions. Specifically, supply chain parties deviate from the predictions provided by self-interested profit-maximization models, such that relationship preference promotes cooperation, individual performance, and high system efficiency, sustainable over time; whereas status preference induces tough actions and reduces both system efficiency and individual performance.	Supply Chain Management, Experimental study	<a href="https://pubsonline.informs.org/doi/abs/10.1287/mnsc.1080.0910">https://pubsonline.informs.org/doi/abs/10.1287/mnsc.1080.0910</a>	Google Scholar	Christoph H. Loch, Yaozhong Wu Social Preferences and Supply Chain Performance: An Experimental Study. <i>Management Science</i> 54 (11) 1835-1849 <a href="https://doi.org/10.1287/mnsc.1080.0910">https://doi.org/10.1287/mnsc.1080.0910</a>	Yes

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3	<b>Supply Chain Management : A Teaching Experiment</b>	Rachel Croson, Karen Donohue, Elena Katok, John Sterman	2005	Experimental Business Research	How firms choose and manage their inventory is a question of interest for academics and practitioners in many fields, including Operations Management, Marketing, and Information Technology. Much recent attention has focused on the possibilities of information-sharing systems to aid in this setting, including sharing inventory information among firms (SAP) and sharing point-of-sale data (EDI). This classroom exercise illustrates the existence and implications of bounded rationality on the part of inventory managers, and shows how systems like these can help in inventory decision-making.	Supply Chain Management, Teaching Experiment, Board Game	<a href="https://link.springer.com/chapter/10.1007/0-387-24244-9_13">https://link.springer.com/chapter/10.1007/0-387-24244-9_13</a>	Google Scholar	Croson R., Donohue K., Katok E., Sterman J. (2005) Supply Chain Management: A Teaching Experiment. In: Zwick R., Rapoport A. (eds) Experimental Business Research. Springer, Boston, MA. <a href="https://doi.org/10.1007/0-387-24244-9_13">https://doi.org/10.1007/0-387-24244-9_13</a>	Yes
4	<b>Playing an apparel distribution game in the fashion supply chain management class: an active learning process</b>	Bin Shen	2016	International Journal of Fashion Design, Technology and Education	This paper introduces an apparel distribution game (non-computerised classroom experiment) in the class of fashion supply chain management (FSCM). The apparel distribution game creates a lot of excitement, and helps subjects better understand how the fashion supply chain works. Playing this interactive game provides students an environment of active learning. This paper first introduces how the game was played in the FSCM class and what knowledge students can learn. This game not only provides the important insights of fashion supply chains and helps students understand the complex dynamic systems within the fashion supply chain, but also is fun to play. After playing the apparel distribution game, participants can identify the bullwhip effects and where the bullwhip effects come from. Moreover, participants learn several ways to effectively cope with the bullwhip effects in the fashion supply chains.	Supply Chain, Distribution game, active learning	<a href="https://www.tandfonline.com/doi/full/10.1080/17543266.2016.1167257?scroll=top&amp;needAccess=true">https://www.tandfonline.com/doi/full/10.1080/17543266.2016.1167257?scroll=top&amp;needAccess=true</a>	Google Scholar	Shen, B. (2016). Playing an apparel distribution game in the fashion supply chain management class: an active learning process. International Journal of Fashion Design, Technology and Education, 10(1), 2–7. <a href="https://doi.org/10.1080/17543266.2016.1167257">https://doi.org/10.1080/17543266.2016.1167257</a>	Yes
5	<b>A Circular Economy Handbook for Business and Supply Chains: Repair, remake, redesign, rethink</b>	Catherine Weetman	2017	Kogan Page, London	A Circular Economy Handbook for Business and Supply Chains is an easily digestible and comprehensive handbook that provides a clear guide to the circular economy. Real examples across a range of market sectors help businesses, students and policymakers understand the theory and fast-developing practice of the circular economy. A holistic framework for the design and supply chain, business models and enablers helps generate ideas, and the book includes tools to help you get started. Whilst growing global consumption presents fantastic business opportunities, our current linear systems - take some materials, make a product, use it and then throw it away - are not fit for purpose. The circular economy unlocks this problem by decoupling resources from consumption. Switched-on businesses are re-thinking product design, material choices, business models and supply chains.	Supply Chain Management, Business Logistics, Managerial economics	<a href="https://books.google.de/books?hl=de&amp;lr=&amp;id=DU2IDQAAQBAJ&amp;oi=fnd&amp;pg=PR9&amp;dq=Weetman+supply+chain+&amp;ots=JeMz8gMu3l&amp;sig=D7zOmSNUScR9Vh-YI2uh8yXu6Sg#v=onepage&amp;q=Weetman%20supply%20chain&amp;f=false">https://books.google.de/books?hl=de&amp;lr=&amp;id=DU2IDQAAQBAJ&amp;oi=fnd&amp;pg=PR9&amp;dq=Weetman+supply+chain+&amp;ots=JeMz8gMu3l&amp;sig=D7zOmSNUScR9Vh-YI2uh8yXu6Sg#v=onepage&amp;q=Weetman%20supply%20chain&amp;f=false</a>	Google	Weetman, C (2017). A Circular Economy Handbook for Business and Supply Chains: Repair, remake, redesign, rethink, Kogan Page. London. <a href="https://www.koganpage.com/bookdetails.php?ISBN=9780749476762">https://www.koganpage.com/bookdetails.php?ISBN=9780749476762</a>	Yes

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6	<b>Supply Chain Management for Dummies</b>	Daniel Stanton	2017	John Wiley & Sons, Hoboken, NJ	Everyone can impact the supply chain Supply Chain Management For Dummies helps you connect the dots between things like purchasing, logistics, and operations to see how the big picture is affected by seemingly isolated inefficiencies. Your business is a system, made of many moving parts that must synchronize to most efficiently meet the needs of your customers--and your shareholders. Interruptions in one area ripple throughout the entire operation, disrupting the careful coordination that makes businesses successful; that's where supply chain management (SCM) comes in. SCM means different things to different people, and many different models exist to meet the needs of different industries. This book focuses on the broadly-applicable Supply Chain Operations Reference (SCOR) Model: Plan, Source, Make, Deliver, Return, and Enable, to describe the basic techniques and key concepts that keep businesses running smoothly. Whether you're in sales, HR, or product development, the decisions you make every day can impact the supply chain. This book shows you how to factor broader impact into your decision making process based on your place in the system. * Improve processes by determining your metrics * Choose the right software and implement appropriate automation * Evaluate and mitigate risks at all steps in the supply chain * Help your business function as a system to more effectively meet customer needs We tend to think of the supply chain as suppliers, logistics, and warehousing--but it's so much more than that. Every single person in your organization, from the mailroom to the C-suite, can work to enhance or hinder the flow. Supply Chain Management For Dummies shows you what you need to know to make sure your impact leads to positive outcomes.	Supply Chain Management, Supply Chain Operation Reference	<a href="https://books.google.de/books?hl=de&amp;lr=&amp;id=DU2IDQAAQBAJ&amp;oi=fnd&amp;pg=PR9&amp;dq=Weetman+supply+chain+&amp;ots=JeMz8gMu3l&amp;sig=D7zOmSNUSCR9Vh-Yl2uh8vXu6Sg#v=onepage&amp;q=Weetman%20supply%20chain&amp;f=false">https://books.google.de/books?hl=de&amp;lr=&amp;id=DU2IDQAAQBAJ&amp;oi=fnd&amp;pg=PR9&amp;dq=Weetman+supply+chain+&amp;ots=JeMz8gMu3l&amp;sig=D7zOmSNUSCR9Vh-Yl2uh8vXu6Sg#v=onepage&amp;q=Weetman%20supply%20chain&amp;f=false</a>	Google	Stanton, D (2017). Supply Chain Management for Dummies. John Wiley & Sons. Hoboken, NJ. <a href="https://www.buecher.de/shop/fachbuecher/supply-chain-management-for-dummies-ebook-pdf/stanton-daniel/products_products/detail/prod_id/52578000/">https://www.buecher.de/shop/fachbuecher/supply-chain-management-for-dummies-ebook-pdf/stanton-daniel/products_products/detail/prod_id/52578000/</a>	Yes
7	<b>Educating Supply Chain Professionals to Work in Global Virtual Teams</b>	Phadnis Shardul	2013	CSCMP Educators Conference Annual Educators Meeting, Denver, CO	What factors influence the performance of global virtual teams? We test the answer this question using a supply chain simulation game played online by 20 teams of graduate students in the MIT SCALE network. Each team consisted of four to five students located each on four continents (North America, South America, Europe, and Asia), who had not met each other before. We examine how nine characteristics of teamwork, eleven demographic and personality attributes of individual team members, and various methods of communication influence the performance of such global virtual teams. Our results show that this performance is a function of individual ability (analytical reasoning, overall intellectual competence) as well as trust among the team members. Surprisingly, several characteristics of individuals (e.g. work experience, age, gender) and teams (clear direction, learning behavior, etc.) do not explain variation in the teams' performance. All nine teamwork characteristics also exhibit a strikingly similar pattern of change over the duration of the study.	Supply Chain Management, Active Learning, Supply Chain Simulation, Gamification	<a href="https://sheffi.mit.edu/sites/sheffi.mit.edu/files/2017-06/Phadnis-PerezFranco-Caplice-Sheffi_CSCMP-educators-conf-2013_Revised_0.pdf">https://sheffi.mit.edu/sites/sheffi.mit.edu/files/2017-06/Phadnis-PerezFranco-Caplice-Sheffi_CSCMP-educators-conf-2013_Revised_0.pdf</a>	Google Scholar	Phadnis, S et al (2013). Educating Supply Chain Professionals to Work in Global Virtual Teams, Working paper. MIT, first published at CSCMP Educators Conference Annual Educators Meeting, Denver. <a href="https://sheffi.mit.edu/sites/sheffi.mit.edu/files/2017-06/Phadnis-PerezFranco-Caplice-Sheffi_CSCMP-educators-conf-2013_Revised_0.pdf">https://sheffi.mit.edu/sites/sheffi.mit.edu/files/2017-06/Phadnis-PerezFranco-Caplice-Sheffi_CSCMP-educators-conf-2013_Revised_0.pdf</a> .	No
8	<b>Parameterised Business Simulation Game Development for Education in Supply Chain Management and Logistics</b>	Luiz Antonio Titton	2013	Frontiers in Gaming Simulation	This paper examines the development of a business simulation game for training and education in the area of supply chain management. The paper begins by identifying the need for an apparatus that could be used in many disciplines, minimising the learning time with regard to the simulator with reasonable parameterisation, followed by a brief conclusion about the available games. Fidelity and embodied experiences are needs that are effectively detected in the design process, demonstrating the relevance of these aspects. One topic of interest is that the effects of the main functions of management (marketing, finance, and production) were minimised in this game to make decisions on logistics with higher relevance. This paper describes the process that was used to design the simulator and draws the first conclusions about interface, usability, technical functionality and potential adoption in an educational context.	Supply Chain Management Simulation Game, Gamification, Business Simulation Game, Education based on Simulation, Logistic Simulation Game	<a href="https://link.springer.com/chapter/10.1007/978-3-319-04954-0_27#citeas">https://link.springer.com/chapter/10.1007/978-3-319-04954-0_27#citeas</a>	Google	Titton L.A. (2014). Parameterised Business Simulation Game Development for Education in Supply Chain Management and Logistics. In: Meijer S.A., Smeds R. (eds) Frontiers in Gaming Simulation. ISAGA 2013. Lecture Notes in Computer Science, vol 8264. Springer, Cham. <a href="https://doi.org/10.1007/978-3-319-04954-0">https://doi.org/10.1007/978-3-319-04954-0</a>	No

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9	<b>Experimental Tool for the Teaching of Logistics Based on the Virtual Supply Chain</b>	Xiaofeng Lv, Jing Li	2009	2009 First International Workshop on Education Technology and Computer Science	In many schools, the current teaching methods for students majoring in logistics can't bridge the gap between logistical theories and real worlds. The teaching methods and tools are not sufficient to the need of the society. Except for optimizing the structure of teaching faculties and restructuring the teaching schedule, the universities should reinforce the building of logistics experimental platform to combine the theory and real world. Based on Virtual Enterprise (enterprise practice) model with JAVA, this paper proposes a virtual supply chain platform for the experiments of students. In the virtual supply chain, many experiments can be conducted. These experiments consist of the cooperation and competition between firms. The experiment platform is beneficial to the studying and teaching efficiencies for the major of logistics.	Supply Chain, Logistics, Experimental Teaching	<a href="https://ieeexplore.ieee.org/abstract/document/4958726">https://ieeexplore.ieee.org/abstract/document/4958726</a>	Google Scholar	Lv, X., & Li, J. (2009). Experimental Tool for the Teaching of Logistics Based on the Virtual Supply Chain. 2009 First International Workshop on Education Technology and Computer Science. Published. <a href="https://doi.org/10.1109/etcs.2009.23">https://doi.org/10.1109/etcs.2009.23</a>	No
10	<b>Dynamic Supply Chains: How to design, build and manage people-centric value networks</b>	John Gattorna	2015	FT Publishing	Dynamic supply chains are at the heart of your business. You need to get them right.  Are your supply chains equipped to compete for a faster, more flexible future? Supply chains are not just part of your business: in many ways they are your business. They are made up of living, active people, and to really get supply chains right you need to capture the dynamism that people can bring to the flow of goods and services, both inside and outside your business. In this third edition of Dynamic Supply Chains, renowned international expert John Gattorna gives you a practical and effective new model for supply chains that will help you get closer to your customers and suppliers, and set your business on a new path to growth. John's 'outside-in' philosophy is based on 'Design Thinking' principles, underpinned by business analytics, visualization, and the passion to get things done. This is indeed, supply chains by design.	Supply Chains, People-Centric	<a href="https://www.pearson.com/store/p/dynamic-supply-chains-how-to-design-build-and-manage-people-centric-value-networks/P100001628830/9781292016818?tab=overview">https://www.pearson.com/store/p/dynamic-supply-chains-how-to-design-build-and-manage-people-centric-value-networks/P100001628830/9781292016818?tab=overview</a>	Google Scholar	Gattorna, J. (2015). Dynamic Supply Chains: How to Design, Build and Manage People-Centric Value Networks (3 ed). Pearson.	Yes
11	<b>Gamification in Logistics and Supply Chain Education: Extending Active Learning</b>	Lincoln C. Wood, Torsten Reiners	2012	IADIS Internet Technologies and Society	Engagement with users involved in an activity has become increasingly important, particularly in Higher Education. We review the concept of gamification and outline several existing applications. These incorporate game elements into existing systems and tasks in a way that increases user engagement in the process. Current approaches in logistics and supply chain education are discussed in relation to active learning. We develop a framework that combines several gamification elements that can be relatively easily incorporated into existing approaches and learning management systems (LMSs) in ways that aim to increase engagement and extend active learning. This framework and the relationship between the elements provide fertile ground for further research.	Gamification, Active Learning, Authentic Learning, L&SCM Education, Process Improvement	<a href="https://www.researchgate.net/publication/234400181_Gamification_in_logistics_and_supply_chain_education_Extending_active_learning">https://www.researchgate.net/publication/234400181_Gamification_in_logistics_and_supply_chain_education_Extending_active_learning</a>	Google	Wood, L. C. & Reiners T. (2012). Gamification in logistics and supply chain education: Extending active learning. IADIS Internet Technologies and Society, 101-108. Perth. <a href="https://www.researchgate.net/publication/234400181_Gamification_in_logistics_and_supply_chain_education_Extending_active_learning">https://www.researchgate.net/publication/234400181_Gamification_in_logistics_and_supply_chain_education_Extending_active_learning</a> .	No

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12	<b>Supply Chain Strategy and Financial Metrics</b>	Bram DeSmet	2018	Kogan Page	Supply Chain Strategy and Financial Metrics is a step-by-step guide to balancing the triangle of service, cost and cash which is the essence of supply chain management. Supply chains have become increasingly strategy-driven, and this Supply Chain Triangle approach puts the supply chain at the heart of the strategy discussion instead of seeing it as a result. Supply Chain Strategy and Financial Metrics fully reflects the 'inventory' or 'working capital' angle and examines the optimisation of the supply chain and Return on Capital Employed. Including case studies of Barco, Casio and a selection of food retail companies, this book covers building a strategy-driven KPI dashboard, target setting and financial benchmarking. Regular examples and diagrams illustrate how different types of strategies lead to different trade-offs in the Supply Chain Triangle. This ground-breaking text links supply chain, strategy and finance through financial metrics, therefore creating value for the shareholder. Online supporting resources include worksheets covering basic financial concepts such as cash flow and working capital, with example data sets and guidelines/ exercises to make it interactive.	Supply Chain, Retail Industry, Strategy and Financial Metrics	<a href="https://www.perlego.com/book/1015359/supply-chain-strategy-and-financial-metrics-the-supply-chain-triangle-of-service-cost-and-cash-pdf">https://www.perlego.com/book/1015359/supply-chain-strategy-and-financial-metrics-the-supply-chain-triangle-of-service-cost-and-cash-pdf</a>	Perlego	DeSmet, B. (2018). <i>Supply Chain Strategy and Financial Metrics: The Supply Chain Triangle Of Service, Cost And Cash (English Edition) (1st ed.)</i> . Kogan Page.	Yes
13	<b>Research on the Teaching Reform of Supply Chain Management Course in Network Environment</b>	Yuran Jin, Yuping Chu, Jianwei Dong	2011	International Conference on Computer Science, Environment, Ecoinformatics, and Education	In order to improve the teaching quality of supply chain management course, the teaching reforms were researched from four aspects including teaching method, course system, assessment method, and practice and experiment. Eight reform schemes on the teaching method and a set of corresponding course system were put forward. Building some teaching bases to achieve a combination of industry, education, and research was thought of one of the three ways to carry out the practice and experiment reform. In view of the above reforms, a new assessment method was also given. Survey results show that the reform package is very successful though there are still a few defects.	Supply Chain Management, Teaching Reform	<a href="https://link.springer.com/chapter/10.1007/978-3-642-23357-9_41">https://link.springer.com/chapter/10.1007/978-3-642-23357-9_41</a>	Google Scholar	Jin Y., Chu Y., Dong J. (2011) Research on the Teaching Reform of Supply Chain Management Course in Network Environment. In: Lin S., Huang X. (eds) Advances in Computer Science, Environment, Ecoinformatics, and Education. CSEE 2011. Communications in Computer and Information Science, vol 218. Springer,	Yes
14	<b>Combining hands-on, spreadsheet and discrete event simulation to teach supply chain management</b>	J. Adams; J. Flatto; L. Gardner	2005	Proceedings of the Winter Simulation Conference	This paper describes the effect of combining hands-on simulation with spreadsheets and discrete event simulations. These tools enhance the student learning process of supply chain management principles. Active, hands-on learning is one of the most effective types of learning but is very time consuming. Supplementing it with computer simulation enhances the hands-on learning to cover more material in less time making an efficient and effective learning experience	Supply Chain Management, Simulation	<a href="https://ieeexplore.ieee.org/abstract/document/1574523">https://ieeexplore.ieee.org/abstract/document/1574523</a>	Google Scholar	Adams, J., Flatto, J., & Gardner, L. (2005). Combining Hands-On, Spreadsheet and Discrete Event Simulation to Teach Supply Chain Management. Proceedings of the Winter Simulation Conference, 2005. Published. <a href="https://doi.org/10.1109/wsc.2005.1574523">https://doi.org/10.1109/wsc.2005.1574523</a>	No

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15	<b>Learning and practising supply chain management strategies from a business simulation game: A comprehensive supply chain simulation</b>	Li Zhou; Ying Xie; Nigel Wild; Charles Hunt	2008	Winter Simulation Conference	An Internet based supply chain simulation game (ISCS) is introduced and demonstrated in this paper. Different from other games and extended from the Beer game, a comprehensive set of supply chain (SC) management strategies can be tested in the game, and these strategies can be evaluated and appraised based on the built-in management information system (MIS). The key functionalities of ISCS are designed to increase players' SC awareness, facilitate understanding on various SC strategies and challenges, foster collaboration between partners, and improve problem solving skills. It is concluded that an ISCS can be used as an efficient and effective teaching tool as well as a research tool in operations research and management science. Problems and obstacles have been observed while engaging in the SC business scenario game. The actions proposed and implemented to solve these problems have resulted in improved SC performance.	Supply Chain Management, Simulation Game	<a href="https://ieeexplore.ieee.org/abstract/document/4736364">https://ieeexplore.ieee.org/abstract/document/4736364</a>	Google Scholar	Zhou, L., Xie, Y., Wild, N., & Hunt, C. (2008). Learning and practising supply chain management strategies from a business simulation game: A comprehensive supply chain simulation. 2008 Winter Simulation Conference. Published. <a href="https://doi.org/10.1109/wsc.2008.4736364">https://doi.org/10.1109/wsc.2008.4736364</a>	No
16	<b>EXPERIENCES WITH THE USE OF SUPPLY CHAIN MANAGEMENT SOFTWARE IN EDUCATION</b>	Ann Campbell, Jarrod Goentzel, Martin Savelsbergh	2009	Production and Operations Management Society	This paper discusses four experiments and experiences with the use of supply chain management software, in this case the CAPS Logistics software, at different levels of undergraduate and graduate education at the School of Industrial and Systems Engineering at the Georgia Institute of Technology. We hope that the readers will get an idea of the commitment and resources necessary to integrate supply chain software into the classroom as well as the potential rewards.	Supply Chain Management, Education	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1937-5956.2009.tb00324.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1937-5956.2009.tb00324.x</a>	Google Scholar	Campbell, A., Goentzel, J. and Savelsbergh, M. (2009), EXPERIENCES WITH THE USE OF SUPPLY CHAIN MANAGEMENT SOFTWARE IN EDUCATION. Production and Operations Management, 9: 66-80. <a href="https://doi.org/10.1111/j.1937-5956.2009.tb00324.x">https://doi.org/10.1111/j.1937-5956.2009.tb00324.x</a>	No
17	<b>Supply chain simulator: A scenario-based educational tool to enhance student learning</b>	Atiq Siddiqui, Mehmood Khan, Sohail Akhtar	2008	ScienceDirect	Simulation-based educational products are excellent set of illustrative tools that offer features like visualization of the dynamic behavior of a real system, etc. Such products have great efficacy in education and are known to be one of the first-rate student centered learning methodologies. These products allow students to practice skills such as critical thinking and decision-making. In this paper, a case is presented where a scenario-based e-learning product namely 'supply chain simulator' is developed at KFUPM for an introductory technology course. The product simulates a supply chain – a network of facilities and distribution systems that carries out the task of procurement and transformation of materials from manufacturer to customer. The product was put to test during four semesters and results of the survey conducted by the instructors and the students are presented. The results clearly suggest the benefits of using such a tool in enhancing student learning.	Scenario-based e-learning, Teaching/learning strategies, Interactive learning environments, Active learning, Supply chain	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0360131507000528">https://www.sciencedirect.com/science/article/abs/pii/S0360131507000528</a>	Google Scholar	Siddiqui, A., Khan, M., & Akhtar, S. (2008). Supply chain simulator: A scenario-based educational tool to enhance student learning. Computers & Education, 51(1), 252–261. <a href="https://doi.org/10.1016/j.compedu.2007.05.008">https://doi.org/10.1016/j.compedu.2007.05.008</a>	No
18	<b>Measuring learning motivation of students in supply chain management games setting: a case study of Innov8.0 game</b>	Touhid Bhuiyan, Wong Wai Peng, Imran Mahmud	2015	Problems and Perspectives in Management	Information systems play a massive role in measuring, analyzing, improving and controlling educational environment. In this paper researchers evaluated impact of Innov8.0, 3D online game on supply chain management education environment. This study evaluated the effects of game based education rather than traditional classroom on motivation of tertiary level students. To measure the efficiency of educators' reliance on this game to lift students' motivation in learning from games to boost students' motivation in learning, the authors conducted an experimental study and used the Keller's ARCS instruments as motivation measurement inventory. The results indicate significant improvement to motivation of the experimental versus control group. This paper scientifically addresses impact of Innov8.0 as a tool for teaching supply chain management education, discusses data of field tests and finally describes the results.	ARCS model, experimental design, computer games, Innov8.0, supply chain management education	<a href="http://www.irbis-nbu.gov.ua/cgi-bin/irbis_nbu/cgiirbis_64.exe?C21COM=2&amp;I21DBN=UJRN&amp;P21DBN=UJRN&amp;IMAGE_FILE_DOWNLOAD=1&amp;image_file_name=PDF/prperman_2015_13_4_13.pdf">http://www.irbis-nbu.gov.ua/cgi-bin/irbis_nbu/cgiirbis_64.exe?C21COM=2&amp;I21DBN=UJRN&amp;P21DBN=UJRN&amp;IMAGE_FILE_DOWNLOAD=1&amp;image_file_name=PDF/prperman_2015_13_4_13.pdf</a>	Google Scholar	Bhuiyan, T., Peng, W. W., & Mahmud, I. (2015). Measuring learning motivation of students in supply chain management games setting: a case study of Innov8.0 game. Problems and Perspectives in Management, 13(4), 92–101.	No

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19	<b>Effectiveness of Case Study in Enhancing Student Learning in Operations and Supply Chain Management</b>	Mahour Mellat-Parast	2014	OPERATIONS AND SUPPLY CHAIN MANAGEMENT	The purpose of this study is to investigate the effectiveness of case study on student learning using Laboratory for Innovative Technology and Engineering Education (LITEE) case study. It has been proposed that student learning outcomes will be improved after using the case analysis. Seven constructs have been developed to measure different aspects related to student learning. Pre-assessment and post-assessment of student learning outcomes has been conducted to determine the effectiveness of case study approach in enhancing student learning. The results show that using case analysis significantly improves students' higher-order cognitive domain of learning (HC) and self-efficacy (SE). The paper makes contribution to our understanding of the effectiveness of case study on improving learning outcomes of undergraduate students in operations management. Implications for educators and future research have been outlined.	Supply Chain Management, Case study, Learning, Operations management	<a href="http://www.irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis_64.exe?C21CQM=2&amp;I21DBN=UJRN&amp;P21DBN=UJRN&amp;IMAGE_FILE_DOWNLOAD=1&amp;image_file_name=PDF/prperman_2015_134_13.pdf">http://www.irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis_64.exe?C21CQM=2&amp;I21DBN=UJRN&amp;P21DBN=UJRN&amp;IMAGE_FILE_DOWNLOAD=1&amp;image_file_name=PDF/prperman_2015_134_13.pdf</a>	Google Scholar	Mellat-Parast, M. (2014). Effectiveness of Case Study in Enhancing Student Learning in Operations and Supply Chain Management. Operations and Supply Chain Management: An International Journal, 49–58. <a href="https://doi.org/10.31387/oscm060037">https://doi.org/10.31387/oscm060037</a>	No
20	<b>Supply Chain Integrated Experiment Teaching System and Development</b>	Xiang-Jun He	2009	Second International Conference on Future Information Technology and Management Engineering	We investigated the current curriculum and the laboratory teaching of The Capital University of Economics and Business with a focus on those of the industrial engineering department. Concerning the existing difficulties of fewer laboratory teachings for students in non science/engineering majors and inefficient sharing of the resources within the science/engineering departments, we propose to construct an experiment center of supply chain integration to serve the entire University. This proposal will play a leading role in innovating our current college laboratory teaching program.	Supply Chain Management, Experiment teaching	<a href="https://ieeexplore.ieee.org/abstract/document/5381048">https://ieeexplore.ieee.org/abstract/document/5381048</a>	Google Scholar	He, X. J. (2009). Supply Chain Integrated Experiment Teaching System and Development. 2009 Second International Conference on Future Information Technology and Management Engineering. Published. <a href="https://doi.org/10.1109/fitme.2009.142">https://doi.org/10.1109/fitme.2009.142</a>	No
21	<b>Teaching Lean Six Sigma within A Supply Chain Context: The Airplane Supply Chain Simulation</b>	Scott C. Ellis, Thomas J. Goldsby, Ana M. Bailey, Jae-Young Oh	2014	Decision Sciences Journal of Innovation Education	Lean six sigma is a management methodology that firms can employ to achieve substantial improvement in supply chain performance. However, few pedagogical exercises facilitate students' use of a comprehensive set of lean six sigma principles within a supply chain context. We describe the Airplane Supply Chain Simulation that helps students understand how lean six sigma concepts may be leveraged to improve supply chain performance. The basis of this simulation is a four-tier supply chain, consisting of suppliers (two tiers), a manufacturer, and a customer, that produces three models of paper airplanes to meet randomly distributed customer demand. In the first of three successive runs, a highly structured simulation is executed in which supply chain roles are well defined, material flows are convoluted, and a "push" production strategy is followed. The first simulation as the "current state" and, for the second and third simulation runs, challenge competing student teams to leverage lean six sigma concepts to develop a "future state" that enables the fulfillment of all customer orders at the lowest cost. Results based on statistical analyses of survey response data from 194 MBA students show that the Airplane Supply Chain Simulation is an effective participative, team-based learning tool.	Supply Chain, Teaching, Simulation	<a href="https://onlinelibrary.wiley.com/doi/full/10.1111/dsji.12043">https://onlinelibrary.wiley.com/doi/full/10.1111/dsji.12043</a>	Google Scholar	Ellis, S.C., Goldsby, T.J., Bailey, A.M. and Oh, J.-Y. (2014), Teaching Lean Six Sigma within A Supply Chain Context: The Airplane Supply Chain Simulation. Decision Sciences Journal of Innovative Education, 12: 287-319. <a href="https://doi.org/10.1111/dsji.12043">https://doi.org/10.1111/dsji.12043</a>	No

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22	<b>Supply chain simulation with discrete-continuous combined modeling</b>	Young HaeLee, Min KwanCho, Seo JinKim, Yun BaeKim	2002	ScienceDirect	Many simulation models have been built to facilitate the use of simulation in designing, evaluating, and optimizing supply chains. Simulation is preferred to deal with stochastic natures existing in the supply chain. Moreover, simulation has a capability to find a local optimum value within each component through the entire supply chain. Most supply chain simulation models have been developed on the basis of discrete-event simulation. Since supply chain systems are neither completely discrete nor continuous, the need for constructing a model with aspects of both discrete-event and continuous simulation is provoked, resulting in a combined discrete-continuous simulation. In this paper, architecture of combined modeling for supply chain simulation is proposed, which includes the equation of continuous portion in the supply chain and how these equations can be used in the supply chain simulation models. The simple example of a supply chain model dealing with the strategic level of the supply chain presented in this paper shows the possibility and the prospect of this approach.	Supply chain, Simulation, Discrete-continuous combined modeling	<a href="https://www.sciencedirect.com/science/article/pii/S0360835202000803">https://www.sciencedirect.com/science/article/pii/S0360835202000803</a>	Google Scholar	Lee, Y. H., Cho, M. K., Kim, S. J., & Kim, Y. B. (2002). Supply chain simulation with discrete-continuous combined modeling. Computers & Industrial Engineering, 43(1-2), 375-392. <a href="https://doi.org/10.1016/S0360-8352(02)00080-3">https://doi.org/10.1016/S0360-8352(02)00080-3</a>	No
23	<b>New Landscapes and New Eyes: The Role of Virtual World Design for Supply Chain Education</b>	Bastiaens, T. Wood, L. Reiners, Torsten	2014	Ubiquitous Learning: An International Journal	With the common availability of advanced educational technology, we are able to increase the emphasis on the design of learning experiences and benefit from the given flexibility and variety of opportunities to create learning spaces. As instructional design models become more commonplace we examine their role vis-à-vis with the fidelity of the experience while learning. High-fidelity experiences are known to be valuable in learning as they provide authenticity in learning and motivation; yet, high fidelity comes at the cost of greater investment. In this paper, we outline our experiments with two setups of differing levels of fidelity: using Second Life and the consumer-focused Oculus Rift Head-Mounted Display (HMD). We show qualitatively interpreted comments and user responses to demonstrate importance of the level of fidelity, uncover important elements, and relate back the fidelity to the learning experience. High-fidelity experiences can be supported by software and hardware that are now readily available but present the seductive opportunity to greatly improve participant engagement in the virtual environments presented.	Supply Chain, Education, Instructional Design, Immersion, Virtual Reality	<a href="https://online.library.wiley.com/doi/full/10.1111/dsji.12043">https://online.library.wiley.com/doi/full/10.1111/dsji.12043</a>	Google Scholar	Reiners, T., Wood, L. C., & Bastiaens, T. (2014). New Landscapes and New Eyes: The Role of Virtual World Design for Supply Chain Education. Ubiquitous Learning: An International Journal, 6, 37-49.	No
24	<b>Teaching Plan-Do-Study-Act (PDSA) in a Supply Chain Context: A Paper Football In-Class Activity</b>	Rebekah Inez Brau, John W. Gardner, G. Scott Webb, Jason K. McDonald	2019	Decision Sciences Journal of Innovation Education	We develop a single-class period learning game for the Plan-Do-Study-Act (PDSA) improvement cycle. The experiential activity walks teams through the PDSA problem-solving process as they create paper American footballs and improve their performance using each step of the cycle. The game is one of the first to focus on PDSA. Key benefits include increased student attention, engagement, and learning. Empirical tests show that participant pre- and post-test scores regarding their understanding of each phase of PDSA improved 21.2% after completing the game. Additionally, the treatment group performed 16.6% higher than the control group. In participant perception questions, 85% of participants felt the game was more effective than lecture or reading, 93% felt the game was fun, 95% felt the game improved their understanding of PDSA, and 98% felt the game was engaging.	Supply Chain, Learning Game, Experiential class-activity	<a href="https://www.sciencedirect.com/science/article/pii/S0360835202000803">https://www.sciencedirect.com/science/article/pii/S0360835202000803</a>	Google Scholar	Brau, R. I., Gardner, J. W., Webb, G. S., & McDonald, J. K. (2019). Teaching Plan-Do-Study-Act (PDSA) in a Supply Chain Context: A Paper Football In-Class Activity. Decision Sciences Journal of Innovative Education, 17(1), 6-32. <a href="https://doi.org/10.1111/dsji.12171">https://doi.org/10.1111/dsji.12171</a>	No



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25	<b>The Real- Time Global Supply Chain Game: New Educational Tool for Developing Supply Chain Management Professionals</b>	THOMAS M. CORSI, SANDOR BOYSON, ALEXANDER VERBRAECK, STIJN-PIETER VAN HOUTEN, CHAODONG HAN and JOHN R. MACDONALD	2006	Transportation Journal	Researchers at Delft University and the Robert H. Smith School of Business at the University of Maryland have developed the "Global Supply Chain Game" (GSCG). A specific instance of the game is called the "Distributor Game," centered on globalization and the real-time supply chain. The GSCG differs from many existing business learning games in that, as opposed to being turn-based and locked in on demonstrating a single phenomenon (i.e., the bullwhip effect), it simulates a real-world experience by operating on a continuous clock with ongoing events and responses to individual decisions. The decision-making processes of the distributors in the game are controlled by human players. To confront the human players with a complex and dynamic environment, suppliers, markets, and competing distribution centers are represented by computer-controlled actors. The Distributor Game has been tested at the Robert H. Smith School of Business in seven courses since January 2005. The beta-tests include four MBA classes, two Executive MBA classes, and a single undergraduate class. Each class has been consistent in its approval of the game as a tool in simulating the complexities of a global supply chain and facilitating	Supply Chain Management, EducationTool, Education game	<a href="https://www.ijstor.org/stable/20713644">https://www.ijstor.org/stable/20713644</a>	Google Scholar	CORSI, T., BOYSON, S., VERBRAECK, A., VAN HOUTEN, S., HAN, C., & MACDONALD, J. (2006). The Real- Time Global Supply Chain Game: New Educational Tool for Developing Supply Chain Management Professionals. Transportation Journal, 45(3), 61-73. Retrieved May 20, 2021, from <a href="http://www.ijstor.org/stable/20713644">http://www.ijstor.org/stable/20713644</a>	No
26	<b>Experiential Learning for Logistics and Supply Chain Management Using an SAP ERP Software Simulation</b>	Mark G. Angolia, Leslie R. Pagliari	2018	Decision Sciences Journal of Innovation Education	This teaching brief describes a three-echelon supply chain simulation that involves complex decision making in a dynamic environment. Using a team-based logistics simulation operating on a live commercial-software application (SAP ERP) as a foundation, a supplemental exercise is proposed for deeper learning of transportation and logistics aspects of supply chain management. Sales and operations planning is used during four simulated months to develop detailed procurement strategies and logistics plans to enhance the baseline supply chain management (SCM) concepts of inventory control and forecasting in a distribution network. Transportation planning and scheduling complexity is introduced as students manage freight to conform to motor carrier weight regulations. The combination of commercial software and extensive real-world planning allows students to assimilate numerous SCM concepts in a realistic environment. Student opinion survey data shows that students are highly engaged by the detailed nature of the simulation, which they concluded aided their conceptual learning. Additionally, the inclusion of the SAP ERP commercial software becomes a competitive advantage during collegiate recruiting by potential employers.	Supply Chain Management, Experiential Learning, SAP, ERP, Simulation	<a href="https://onlinelibrary.wiley.com/doi/full/10.1111/dsji.12146">https://onlinelibrary.wiley.com/doi/full/10.1111/dsji.12146</a>	Google Scholar	Angolia, M.G. and Pagliari, L.R. (2018), Experiential Learning for Logistics and Supply Chain Management Using an SAP ERP Software Simulation. Decision Sciences Journal of Innovative Education, 16: 104-125. <a href="https://doi.org/10.1111/dsji.12146">https://doi.org/10.1111/dsji.12146</a>	No
27	<b>Open-Source ERP: Is It Ripe for Use in Teaching Supply Chain Management?</b>	Minh Q Huynh, Hung W Chu	2011	Journal of Information Technology Education: Volume 10, 2011 Innovation in Practice	The field of supply chain management has changed greatly and rapidly. With the advent of enterprise systems, supply chains are now operating with up-to-the-minute information. The value of the information flow is marked by speed, accessibility, accuracy, and most of all relevancy. As it continually evolves, the supply chain management curriculum needs to stay current and relevant. This paper advocates the use of technology such as Enterprise Resource Planning (ERP) to teach business process integration. The literature review indicates a number of significant benefits when firms use ERP. For instance, an ERP system can help firms manage their assets and operate their internal business processes more effectively and efficiently. It has the ability to coordinate a complex network of sub-processes to achieve the goals of the organization. This paper describes the needs for teaching business process integration and stresses the roles of ERP in a supply chain process. It then presents two approaches: the SAP University Alliances program and the open-source ERP option. To illustrate the potential of open-source ERP, the discussion focuses on one particular application called xTuple-PostBooks. What is xTuple-PostBooks? How can one obtain it? What is involved in its installation and setup? How is it used in teaching and illustrating business process integration? What was the students' feedback?	Supply Chain Management, Teaching, Open-Source ERP, Teach business process integration	<a href="https://www.ijstor.org/stable/20713644">https://www.ijstor.org/stable/20713644</a>	Google Scholar	Q. Huynh, M., & W Chu, H. (2011). Open-Source ERP: Is It Ripe for Use in Teaching Supply Chain Management? Journal of Information Technology Education: Innovations in Practice, 10, 181-194. <a href="https://doi.org/10.28945/1508">https://doi.org/10.28945/1508</a>	No

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28	<b>A FRAMEWORK FOR TEACHING SUPPLY CHAIN MANAGEMENT</b>	M. Eric Johnson, David F. Pyke	2009	Production and Operations Management Society	The rise of global markets and increasingly virtual companies has focused management attention on competition between supply chains. Many schools of management and engineering are adopting integrated curricula that prepare students to design and manage the resulting complex global web of material and information flows. In this paper, we examine the curricula used by many top engineering and graduate business schools for courses in supply chain management. We present a framework for supply chain management and highlight supporting material and pedagogy. We also classify popular supply chain case studies within our framework and provide useful References to recent business press treatment of these issues.	Supply Chain Management, Education	<a href="https://onlinelibrary.wiley.com/doi/full/10.1111/dsji.12146">https://onlinelibrary.wiley.com/doi/full/10.1111/dsji.12146</a>	Google Scholar	Johnson, M.E. and Pyke, D.F. (2009), A FRAMEWORK FOR TEACHING SUPPLY CHAIN MANAGEMENT*. Production and Operations Management, 9: 2-18. <a href="https://doi.org/10.1111/j.1937-5956.2009.tb00319.x">https://doi.org/10.1111/j.1937-5956.2009.tb00319.x</a>	No
29	<b>A SIMULATION GAME FOR TEACHING SERVICE-ORIENTED SUPPLY CHAIN MANAGEMENT: DOES INFORMATION SHARING HELP MANAGERS WITH</b>	Edward G. Anderson Jr., Douglas J. Morrice	2009	Production and Operations Management Society	For decades, the Beer Game has taught complex principles of supply chain management in a finished good inventory supply chain. However, services typically cannot hold inventory and can only manage backlogs through capacity adjustments. We propose a simulation game designed to teach service-oriented supply chain management principles and to test whether managers use them effectively. For example, using a sample of typical student results, we determine that student managers can effectively use end-user demand information to reduce backlog and capacity adjustment costs. The game can also demonstrate the impact of demand variability and reduced capacity adjustment time and lead times.	Supply Chain Management, Education, Simulation game	<a href="http://ite.informingscience.org/documents/Vol10/JITEv10IIIPp181-194Huynh957.pdf">http://ite.informingscience.org/documents/Vol10/JITEv10IIIPp181-194Huynh957.pdf</a>	Google Scholar	Anderson, E.G., Jr. and Morrice, D.J. (2009), A SIMULATION GAME FOR TEACHING SERVICE-ORIENTED SUPPLY CHAIN MANAGEMENT: DOES INFORMATION SHARING HELP MANAGERS WITH SERVICE CAPACITY DECISIONS?*. Production and Operations Management, 9: 40-55. <a href="https://doi.org/">https://doi.org/</a>	No
30	<b>"Cola-Game": An Innovative Approach to Teaching Inventory Management in a Supply Chain</b>	Parag Dhumal, P. S. Sundararaghavan, Udayan Nandkeolyar	2008	Decision Sciences Journal of Innovation Education	In this article we present a game that can be used as a tool to educate students and managers on the issues in supply chain (SC), inventory management. The game has a bilevel demand with one level during regular times and another during sale times. The game could be played in two modes (independence and cooperation) and has been field tested in engineering and business classes. Players developed an appreciation for fluctuating demand and its impact on the costs and performance of a SC. They also learned the benefits and a monetary evaluation approach for cooperation. Our statistical analysis revealed that, as the game progressed, the performance of the teams improved. We present an integer linear programming (ILP) model to evaluate the performance of the teams. Because it is a post facto analysis, while the game is played without knowing the materialized retailer demand for the period, the ILP solution is not a tight lower bound on the total cost of the SC. However, it could be used to compare performance across teams. As an alternative, we also present a possible distribution of total SC costs that could be used as another reference without actually solving an ILP.	Cooperation and Learning, Educational Games, Inventory Management, Supply Chain Management	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1937-5956.2008.tb00319.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1937-5956.2008.tb00319.x</a>	Wiley Online Library	Dhumal, P., Sundararaghavan, P.S. and Nandkeolyar, U. (2008), "Cola-Game": An Innovative Approach to Teaching Inventory Management in a Supply Chain. Decision Sciences Journal of Innovative Education, 6: 265-285. <a href="https://doi.org/10.1111/j.1540-4609.2008.00173.x">https://doi.org/10.1111/j.1540-4609.2008.00173.x</a>	No

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31	<b>EXPERIENCES WITH THE USE OF SUPPLY CHAIN MANAGEMENT SOFTWARE IN EDUCATION</b>	Ann Campbell, Jarrod Goentzel, Martin Savelsbergh	2009	Production and Operations Management Society	This paper discusses four experiments and experiences with the use of supply chain management software, in this case the CAPS Logistics software, at different levels of undergraduate and graduate education at the School of Industrial and Systems Engineering at the Georgia Institute of Technology. We hope that the readers will get an idea of the commitment and resources necessary to integrate supply chain software into the classrooms as well as the potential rewards.	Supply Chain Management, Logistics Game, Education game	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1937-5956.2000.tb00322.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1937-5956.2000.tb00322.x</a>	Wiley Online Library	Campbell, A., Goentzel, J. and Savelsbergh, M. (2000), EXPERIENCES WITH THE USE OF SUPPLY CHAIN MANAGEMENT SOFTWARE IN EDUCATION. Production and Operations Management, 9: 66-80. <a href="https://doi.org/10.1111/j.1937-5956.2000.tb00324.x">https://doi.org/10.1111/j.1937-5956.2000.tb00324.x</a>	No
32	<b>TEACHING SUPPLY CHAIN MANAGEMENT THROUGH GLOBAL PROJECTS WITH GLOBAL PROJECT TEAMS</b>	Laura Rock Kopczak, Jan C. Fransoo	2009	Production and Operations Management Society	In this article, we describe the Global Project Coordination Course, a course in which project teams composed of three students from each of two overseas universities execute company-sponsored projects dealing with global supply chain management issues. The \$75,000 to \$100,00 contributed in total by the three to four sponsoring companies funds all course expenses. We assess the benefits and challenges of the use of cross-cultural project teams with diverse educational backgrounds. We conclude that the course provides a unique and effective vehicle for furthering students' knowledge of Supply Chain Management and Information Systems, improving understanding of "soft" issues, and training students to work in diverse, global, cross-cultural project teams.	Supply Chain Management, Education	<a href="https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2008.00173.x">https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2008.00173.x</a>	Wiley Online Library	Kopczak, L.R. and Fransoo, J.C. (2000), TEACHING SUPPLY CHAIN MANAGEMENT THROUGH GLOBAL PROJECTS WITH GLOBAL PROJECT TEAMS. Production and Operations Management, 9: 91-104. <a href="https://doi.org/10.1111/j.1937-5956.2000.tb00326.x">https://doi.org/10.1111/j.1937-5956.2000.tb00326.x</a>	No
33	<b>Education supply chain in the era of Industry 4.0</b>	Ling Li	2020	Systems Research and Behavioral Science	To date, there is a very limited literature on the use of systems ideas and methodologies as a basis for developing curriculum or courses. To fill the gap, this study has made several contributions by employing systems theory and thinking in analysing issues related to higher education. Industry 4.0 is reshaping the future of education, which opens up our vision and makes us to consider what knowledge and skills students should possess after they have graduated from college, when to accelerate workforce reskilling and what is the building blocks and connections of education supply chain. In this study, it is the first time the concept of 'education supply chain' is proposed and coined. Furthermore, our research has led us to view educational systems and configurations, such as international mobility and transnationalization, as outcomes of enduring power related to industrial revolutions. Finally, a curriculum structure based on system thinking is proposed. We engage our inquiry with transformations that are happening around higher education and position our research on the benefits of sharing of global intellectual resource and top talents through transnational mobility and education joint ventures in the context of Industry 4.0.	Supply Chain Management, Education	<a href="https://onlinelibrary.wiley.com/doi/10.1111/j.1937-5956.2000.tb00324.x">https://onlinelibrary.wiley.com/doi/10.1111/j.1937-5956.2000.tb00324.x</a>	Wiley Online Library	Li, L. (2020), Education supply chain in the era of Industry 4.0. Systems Research and Behavioral Science, 37(4), 579-592. <a href="https://doi.org/10.1002/sres.2702">https://doi.org/10.1002/sres.2702</a>	Yes

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34	<b>Teaching SupplyChain Management Complexities: A SCOR Model Based Classroom Simulation</b>	G. Scott Webb, Stephanie P. Thomas, Sara Liao-Troth	2014	Decision Sciences Journal of Innovation Education	The SCOR (Supply Chain Operations Reference) Model Supply Chain Classroom Simulation is an in-class experiential learning activity that helps students develop a holistic understanding of the processes and challenges of supply chain management. The simulation has broader learning objectives than other supply chain related activities such as the Beer Game. Competing supply chains work to produce and sell two products, each experiencing differential demand. Seasonal demand, time delays, quality defects, and disruptions offer complexities that are part of actual supply chain management. The behavioral dynamics of collaboration between various functional nodes is illustrated through students' interactions as they try to achieve their role's objectives. Through their decisions and actions, students develop a practical understanding of the processes and complexities of supply chain management. The classroom simulation actively engages students, and has been used successfully in multiple courses at the undergraduate and graduate levels at multiple universities and by a major corporation during a manager training session. Assessments indicate that the simulation is an effective experiential learning activity. While it offers learning outcome flexibility, common debrief themes are SCOR model processes, supply chain relationships, information flow, seasonal demand, quality defects, reverse logistics, and supply chain disruptions.	Experiential Learning, Games and Simulations, Operations Management, Supply Chain Management	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12038">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12038</a>	Wiley Online Library	Webb, G.S., Thomas, S.P. and Liao-Troth, S. (2014), Teaching Supply Chain Management Complexities: ASCOR Model Based Classroom Simulation. Decision Sciences Journal of Innovative Education, 12: 181-198. <a href="https://doi.org/10.1111/dsji.12038">https://doi.org/10.1111/dsji.12038</a>	No
35	<b>Chantey Castings: A Hands-On Simulation to Teach Constraint Management and Demand-Driven Supply Chain Approaches</b>	Christian J. Grandzol, John R. Grandzol	2018	Decision Sciences Journal of Innovation Education	Supply chain design and constraint management are widely-adopted techniques in industry, necessitating that operations and supply chain educators teach these topics in ways that enhance student learning and retention, optimize resource utilization (especially time), and maximize student interest. The Chantey Castings Simulation provides a platform to accomplish all three criteria. In a fun, collaborative environment, students learn important concepts related to these techniques by identifying obstacles to matching customer demand with sourcing, production, and logistics for a variety of products made from Play-Doh. Assessment data indicate the simulation is a highly-effective experiential learning activity.	Supply Chain Management, Simulation, Teaching	<a href="https://onlinelibrary.wiley.com/doi/10.1002/sres.2702">https://onlinelibrary.wiley.com/doi/10.1002/sres.2702</a>	Wiley Online Library	Grandzol, C.J. and Grandzol, J.R. (2018), Chantey Castings: A Hands-On Simulation to Teach Constraint Management and Demand-Driven Supply Chain Approaches. Decision Sciences Journal of Innovative Education, 16: 6-22. <a href="https://doi.org/10.1111/dsji.12142">https://doi.org/10.1111/dsji.12142</a>	No
36	<b>INFORMATION GAMING IN DEMAND COLLABORATION AND SUPPLY CHAIN PERFORMANCE</b>	Kefeng Xu, Yan Dong	2011	Journal of Business Logistics	Demand collaboration has recently been promoted by industry leaders as an important tool for supply chain management. Its greatest significance beyond the sharing of point-of-sale and forecast information stems from its potential to allow supply chain partners to extract private market information from each other for more effective planning and better supply chain performance. A simulation framework based on actual business processes is developed to investigate the underlying drivers of demand collaboration and the inherent risks and benefits of such collaboration.	Supply Chain, Simulation, Gaming	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12038">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12038</a>	Wiley Online Library	Xu, K. and Dong, Y. (2004), INFORMATION GAMING IN DEMAND COLLABORATION AND SUPPLY CHAIN PERFORMANCE. Journal of Business Logistics, 25: 121-144. <a href="https://doi.org/10.1002/j.2158-1592.2004.tb00172.x">https://doi.org/10.1002/j.2158-1592.2004.tb00172.x</a>	No

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37	<b>Developing Students' Understanding of Co-opetition and Multilevel Inventory Management Strategies in Supply Chains: An In-Class Spreadsheet Simulation Exercise</b>	Gary Fetter, Jeff Shockley	2014	Decision Sciences Journal of Innovation Education	Instructors look for ways to explain to students how supply chains can be constructed so that competing suppliers can work together to improve inventory management performance (i.e., a phenomenon known as co-opetition). An Excel spreadsheet-driven simulation is presented that models a complete multilevel supply chain system—customer, retailer, wholesaler, distributor, and manufacturer—for up to six competing products. Students are provided the opportunity to compare the inventory cost and other key performance metrics of the alternative multilevel supply chain structures. This article explains the simulation model, describes the instructional approach, and presents assessment results from students in an introductory operations management course. Students find that the simulation is easy to use and helps them understand the performance impact of strategic supplier collaborations on supply chain operating performance.	Active Learning, Operations Management, Simulation, Spreadsheet Modeling, Supply Chain Management	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12142">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12142</a>	Wiley Online Library	Fetter, G. and Shockley, J. (2014), Developing Students' Understanding of Co-opetition and Multilevel Inventory Management Strategies in Supply Chains: An In-Class Spreadsheet Simulation Exercise. Decision Sciences Journal of Innovative Education, 12: 79-89. <a href="https://doi.org/10.1111/dsji.12028">https://doi.org/10.1111/dsji.12028</a>	No
38	<b>From Farm to Cup: A Coffee Supply Chain Negotiation Role-Play</b>	Todd M. Inouye, James A. Kling	2020	Decision Sciences Journal of Innovation Education	This paper introduces a novel supply chain role-play activity designed to improve ethical awareness and pricing negotiation decisions in business capstone courses. Participants negotiate prices between five levels of an international coffee supply chain: Farmers, Processors, Importers, Roasters, and Retailers/Cafés. Using results from 141 participants, data analysis supports the conclusion that this role-play significantly increases self-reported mastery of supply chain management, business ethics, and negotiations. In this manuscript, we also introduce the concept of bounded ethicality and how it is incorporated into the role-play scenario debrief phase. Self-reported scores reflecting ethical awareness significantly increase after participation in the role-play activity. While statistically significant results are discussed, we also generalize about the advantages of this type of experiential education. Methodology and details of the role-play itself are shared.	Supply Chain Management, Role-play Game, Experiential education	<a href="https://onlinelibrary.wiley.com/doi/10.1002/j.2158-1592.2004.tb00172.x">https://onlinelibrary.wiley.com/doi/10.1002/j.2158-1592.2004.tb00172.x</a>	Wiley Online Library	Inouye, T.M. and Kling, J.A. (2020), From Farm to Cup: A Coffee Supply Chain Negotiation Role-Play*. Decision Sciences Journal of Innovative Education, 18: 344-373. <a href="https://doi.org/10.1111/dsji.12215">https://doi.org/10.1111/dsji.12215</a>	Yes
39	<b>Sink or Swim: Learning by Doing in a Supply Chain Integration Activity</b>	Akhadian S. Harnowo, Mikelle A. Calhoun, Heather L. Monteiro	2016	Decision Sciences Journal of Innovation Education	Studies show that supply chain integration (SCI) is important to organizations. This article describes an activity that places students in the middle of an SCI scenario. The highly interactive hands-on simulation requires only 50 to 60 minutes of classroom time, may be used with 18 to about 36 students, and involves minimal instructor preparation. Through the activity, students learn the basics of SCI and then analyze an SCI event to better appreciate the need for collaboration and information sharing. In courses that address supply chain management, instructors can use the activity early in the semester to introduce students to the complexities of supply chain networks. Alternatively, instructors may use the simulation later to provoke a more nuanced discussion.	Supply Chain Management, Learning activity, Integration activity	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12028">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12028</a>	Wiley Online Library	Harnowo, A.S., Calhoun, M.A. and Monteiro, H.L. (2016), Sink or Swim: Learning by Doing in a Supply Chain Integration Activity*. Decision Sciences Journal of Innovative Education, 14: 7-23. <a href="https://doi.org/10.1111/dsji.12087">https://doi.org/10.1111/dsji.12087</a>	No
40	<b>Supply Chain Sourcing Game: A Negotiation Exercise</b>	Mehmet Gumus, Ernie C. Love	2012	Decision Sciences Journal of Innovation Education	This article introduces an exercise that simulates the negotiation process in a dynamic supply chain. The retailer and wholesaler roles are assigned to student groups who negotiate supply contracts in a number of rounds during a class period. Each group makes pricing, inventory, and ordering decision concurrently, and competes with others to achieve the highest profit. The exercise is easy to implement using pen and paper, and lends itself to a wide variety of negotiation environments.	Operations Management, Simulation and Gaming, Supply Chain Management, Teaching using Games	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12215">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12215</a>	Wiley Online Library	Gumus, M. and Love, E.C. (2013), Supply Chain Sourcing Game: A Negotiation Exercise. Decision Sciences Journal of Innovative Education, 11: 3-12. <a href="https://doi.org/10.1111/j.1540-4609.2012.00368.x">https://doi.org/10.1111/j.1540-4609.2012.00368.x</a>	No

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41	<p><b>Parallel Interaction Supply Chain Game: An Extension of the Beer Game</b></p>	<p>Pedro M. Reyes</p>	<p>2007</p>	<p>Decision Sciences Journal of Innovation Education</p>	<p>As the subject of supply chain management (SCM) continues to grow, so too the challenges of teaching its concepts. While the Beer Game has become one of the most popular simulations used in the classroom to help students understand the obstacles to effective SCM, it is possible to extend its original purpose to teach various topics in SCM. In my courses over the past few years, the basic Beer Game has evolved from a simple linear supply chain to a more complex parallel interaction supply chain. This extension was initially designed to illustrate the rationing and gaming as a cause of the bullwhip effect, but has recently evolved to also serve as a means to introduce the students to various SCM topics. These topics (such as speculation/postponement, risk-pooling, control systems, and technology in supply chain integration) result from the students final debriefing session (Phase 5) where the students are brainstorming ideas for solving the operational issues discovered. Instead of a 1-day overview of the SCM course, I provide the students with a hands-on introduction to SCM. The strategy that I use is a five-phase approach and spans five 80-minute classroom time slots. This multiphase approach is designed to first introduce the students to operational issues in SCM and then leads them to an overview of the tactical and strategic concepts that will be explained throughout the semester. Phase 1 serves as an introduction to the operational issues in SCM. In Phase 2, a version of the basic Beer Game is simulated. Phase 3 then focuses on a conceptual discussion the operational efficiencies observed and the bullwhip effect and concludes with a brief introduction to the extended simulation. In Phase 4, a parallel interaction supply chain game is simulated to introduce the students to the rationing and gaming effects that are not explicitly seen in the basic Beer Game. Finally, in Phase 5, by debriefing, we discuss the possible tactical and strategic solution to those operational issues. This hands-on multiphase approach to introduce the students to the SCM curriculum has served to be beneficial for reinforced learning throughout the semester. INSTRUCTOR</p>	<p>Supply Chain Management, Interaction game</p>	<p><a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12087">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12087</a></p>	<p>Wiley Online Library</p>	<p>Reyes, P.M. (2007), Parallel Interaction Supply Chain Game: An Extension of the Beer Game. Decision Sciences Journal of Innovative Education, 5: 413-421. <a href="https://doi.org/10.1111/j.1540-4609.2007.00151.x">https://doi.org/10.1111/j.1540-4609.2007.00151.x</a></p>	<p>No</p>
42	<p><b>The Supply Chain Puzzle Game: Highlighting Behavioral Issues in SCM</b></p>	<p>Stanley E. Fawcett, Matthew W. McCarter</p>	<p>2006</p>	<p>Decision Sciences Journal of Innovation Education</p>	<p>Managing the 21st-century supply chain (SC) requires unique skills. Participative learning can help teach them. For example, the Beer Distribution Game is used to show the cost created when information is not shared. Unfortunately, after playing the Beer Game, students often believe technology is the answer to SC coordination. They fail to see how behavioral issues complicate collaboration. A need exists for an interactive exercise to demonstrate the effects of human behavior on SC collaboration. We present the "SC Puzzle Game" as a tool to give students firsthand experience with the behavioral challenges that can hinder SC collaboration.</p>	<p>Supply Chain Management, Experiment teaching</p>	<p><a href="https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2012.00368.x">https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2012.00368.x</a></p>	<p>Wiley Online Library</p>	<p>Fawcett, S.E. and McCarter, M.W. (2006), The Supply Chain Puzzle Game: Highlighting Behavioral Issues in SCM. Decision Sciences Journal of Innovative Education, 4: 337-342. <a href="https://doi.org/10.1111/j.1540-4609.2006.00124.x">https://doi.org/10.1111/j.1540-4609.2006.00124.x</a></p>	<p>No</p>

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43	<b>“Supply Chain—Marketing Shark Tank” Experiential Lab Game in Interdisciplinary Business Education: Qualitative and Quantitative Analyses</b>	A. Arora, A. Saxena Arora	2015	Decision Sciences Journal of Innovation Education	This article provides educators in business schools with a new interdisciplinary experiential lab game called Supply Chain—Marketing (SC-Mark) Shark Tank game, which can be implemented in both Supply Chain Management (SCM) and Marketing courses. The SC- Mark experiential lab game is a real-life business environment simulation that explores complexities in advertising industry service supply chains. One hundred sixty-one undergraduate students participated in the game at two business schools over two semesters. The effectiveness of the game was measured and analyzed, qualitatively and quantitatively, based on text analysis of the feedback received from participating students. The results revealed five themes that helped student teams understand how advertising companies integrate and improve their service supply chains—buyer-supplier relationships, supply chain functions and operations, consumer focus and orientation, community focus, and overall risk management.	Supply Chain, Experiential Game, Education	<a href="https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2007.00151.x">https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2007.00151.x</a>	Wiley Online Library	Arora, A. and Saxena Arora, A. (2015), “Supply Chain— Marketing Shark Tank” Experiential Lab Game in Interdisciplinary Business Education: Qualitative and Quantitative Analyses. Decision Sciences Journal of Innovative Education, 13: 21-43. <a href="https://doi.org/10.1111/dsji.12053">https://doi.org/10.1111/dsji.12053</a>	No
44	<b>Chantey Castings: A Hands-On Simulation to Teach Constraint Management and Demand-Driven Supply Chain Approaches</b>	Christian J. Grandzol, John R. Grandzol	2018	Decision Sciences Journal of Innovation Education	Supply chain design and constraint management are widely-adopted techniques in industry, necessitating that operations and supply chain educators teach these topics in ways that enhance student learning and retention, optimize resource utilization (especially time), and maximize student interest. The Chantey Castings Simulation provides a platform to accomplish all three criteria. In a fun, collaborative environment, students learn important concepts related to these techniques by identifying obstacles to matching customer demand with sourcing, production, and logistics for a variety of products made from Play-Doh. Assessment data indicate the simulation is a highly-effective experiential learning activity.	Supply Chain, Simulation Teaching	<a href="https://onlinelibrary.wiley.com/doi/full/10.1111/j.1540-4609.2006.00124.x">https://onlinelibrary.wiley.com/doi/full/10.1111/j.1540-4609.2006.00124.x</a>	Wiley Online Library	Grandzol, C.J. and Grandzol, J.R. (2018), Chantey Castings: A Hands-On Simulation to Teach Constraint Management and Demand-Driven Supply Chain Approaches. Decision Sciences Journal of Innovative Education, 16: 6-22. <a href="https://doi.org/10.1111/dsji.121422">https://doi.org/10.1111/dsji.121422</a>	No
45	<b>Service-Learning in Supply Chain Management: Benefits, Challenges and Best Practices</b>	Tobias Schoenherr	2015	Decision Sciences Journal of Innovation Education	Service-learning (SL) is a pedagogical approach in which students are assigned a course-related project in a not-for-profit organization, and are tasked to apply course content to execute the project. While the benefits are multifarious, only recently have supply chain management (SCM) courses adapted this innovative teaching methodology. The present article aims to popularize this pedagogical concept by providing a detailed overview of the background, development, implementation, and success of an SL project in an undergraduate SCM course; this serves as a “how to” guide for instructors interested in implementing the approach. Compelling evidence for the value of SL is provided by data assessing the students’ learning experiences, and benefits for participating organizations are demonstrated. Caveats and challenges are noted, and ensuing best practices for SL are presented.	Experiential Learning, Supply Chain Management, Service-Learning	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12053">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12053</a>	Wiley Online Library	Schoenherr, T. (2015), Service-Learning in Supply Chain Management: Benefits, Challenges and Best Practices. Decision Sciences Journal of Innovative Education, 13: 45-70. <a href="https://doi.org/10.1111/dsji.12052">https://doi.org/10.1111/dsji.12052</a>	No

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46	<b>Teaching supplychain risk management in the COVID-19 Age: A review and classroom exercise</b>	Mark E. Ferguson, Matthew J. Drake	2021	Decision Sciences Journal of Innovation Education	The COVID-19 pandemic has undoubtedly affected every corner of the world in 2020. It has also emphasized the importance of managing supply chain risk and developing an agile supply chain. Supply chain management instructors will likely want to introduce risk management concepts and strategies into their courses to raise their students' sensitivity to the impact of supply chain disruptions. Unfortunately there is currently a dearth of coverage of supply chain disruptions and risk management in the major supply chain management text books as well as in the broader library of supply chain management pedagogical research publications. To help to close this gap in the literature for instructors, we have developed a reading and set of related discussion questions and exercises that detail the causes of the shortage in toilet paper during the pandemic and short- and long-term strategies to make the supply chain more resilient in the future. By focusing on a disruption students likely experienced first-hand, they can develop a more nuanced understanding of the complexity and interconnectedness of supply chain functions in providing products and services to customers.	Supply Chain, Teaching, Covid-19, Risk management, Experiential learning	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.121422">https://onlinelibrary.wiley.com/doi/10.1111/dsji.121422</a>	Wiley Online Library	Ferguson, M. E., & Drake, M. J. (2021). Teaching supplychain risk management in the COVID-19 Age: A review and classroom exercise. Decision Sciences Journal ofInnovative Education, 19(1), 5–14. <a href="https://doi.org/10.1111/dsji.12230">https://doi.org/10.1111/dsji.12230</a>	No
47	<b>Demonstrating the Effect of Supply Chain Disruptions through an Online Beer Distribution Game</b>	Sourish Sarkar, Sanjay Kumar	2016	Decision Sciences Journal of Innovation Education	This article describes a classroom tool to teach the impact of supply chain disruptions and mitigation strategies based on information sharing and collaboration. The tool is an adaptation of the Beer Distribution Game, is easy to play, and can be hosted online or on local servers. The game considers several scenarios based on the location of the disruptions(i.e., upstream or downstream) and the information available to supply chain partners. Students play the roles of managers who make ordering decisions in a serial supply chainand experience decision-making under disruptions.	Action Learning, Supply Chain Management, SupplyChain Disruptions	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12052">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12052</a>	Wiley Online Library	Sarkar, S. and Kumar, S. (2016), Demonstrating the Effect of Supply Chain Disruptions through an Online Beer Distribution Game. Decision Sciences Journal of Innovative Education, 14: 25-35. <a href="https://doi.org/10.1111/dsji.12091">https://doi.org/10.1111/dsji.12091</a>	No
48	<b>Developing Students' Understanding of Co-opetitionand Multilevel Inventory Management Strategies in Supply Chains: An In-Class Spreadsheet Simulation Exercise</b>	Gary Fetter, JeffShockley	2014	Decision Sciences Journal of Innovation Education	Instructors look for ways to explain to students how supply chains can be constructed so that competing suppliers can work together to improve inventory management performance(i.e., a phenomenon known as co-opetition). An Excel spreadsheet-driven simulation is presented that models a complete multilevel supply chain system—customer, retailer, wholesaler, distributor, and manufacturer—for up to six competing products. Students are provided the opportunity to compare the inventory cost and other key performance metrics of the alternative multilevel supply chain structures. This article explains the simulation model, describes the instructional approach, and presents assessment results from students in an introductory operations management course. Students find that the simulation is easy to use and helps them understand the performance impact of strategic supplier collaborations on supply chain operating performance.	Active Learning, Operations Management, Simulation, Spreadsheet Modeling, Supply ChainManagement	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12230">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12230</a>	Wiley Online Library	Fetter, G. and Shockley, J. (2014), Developing Students' Understanding of Co- opetition and Multilevel Inventory Management Strategies in Supply Chains: An In-Class Spreadsheet Simulation Exercise. Decision Sciences Journal ofInnovative Education, 12: 79-89. <a href="https://doi.org/10.1111/dsji.12028">https://doi.org/10.1111/dsji.12028</a>	No



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49	<b>Bringing Lean Six Sigma to the Supply Chain Classroom: A Problem-Based Learning Case</b>	Keith E. Miller, Craig Hill, Antoinette R. Miller	2016	Decision Sciences Journal of Innovation Education	The article describes a project that employs problem-based learning (PBL) to teach the Lean Six Sigma (LSS) methodology as part of an undergraduate or graduate business course. It is scalable to a variety of course delivery and schedule formats, and uses data sets that can create distinct problem-solving scenarios for up to 16 student teams. It exploits available internet resources for supplemental information, thus requiring no physical setup or experimentation, and eliminating material costs. The project provides a complex business problem in a familiar setting, allowing students to focus their learning efforts on technical mastery of concepts and tools rather than underlying business descriptions. It emphasizes critical thinking, teamwork, and project management, in addition to the fundamental concepts and supporting tools of the process improvement method.	Problem Based Learning Pedagogy, Lean Six Sigma, Supply Chain Management Pedagogy, Process Improvement Case Study	<a href="https://onlineibrary.wiley.com/doi/10.1111/dsji.12091">https://onlineibrary.wiley.com/doi/10.1111/dsji.12091</a>	Wiley Online Library	Miller, K.E., Hill, C. and Miller, A.R. (2016), Bringing Lean Six Sigma to the Supply Chain Classroom: A Problem-Based Learning Case. Decision Sciences Journal of Innovative Education, 14: 382-411. <a href="https://doi.org/10.1111/dsji.12107">https://doi.org/10.1111/dsji.12107</a>	No
50	<b>Using a Supply Chain Game to Effect Problem-Based Learning in an Undergraduate Operations Management Program</b>	John J. Kanet, Martin Stößlein	2008	Decision Sciences Journal of Innovation Education	The Supply Chain Game is a Web-based simulation provided by Responsive Learning Technologies. It was developed with faculty members at the Kellogg School of Management at Northwestern University. Through the adjustments of more than 25 game parameters, we created several of our own scenarios. In doing so it is crucial to test parameters in order to generate realistic and sensible solutions.	Supply Chain, Gaming, Problem-Based Learning	<a href="https://onlineibrary.wiley.com/doi/10.1111/dsji.120288">https://onlineibrary.wiley.com/doi/10.1111/dsji.120288</a>	Wiley Online Library	Kanet, J.J. and Stößlein, M. (2008), Using a Supply Chain Game to Effect Problem-Based Learning in an Undergraduate Operations Management Program. Decision Sciences Journal of Innovative Education, 6: 287-295. <a href="https://doi.org/10.1111/j.1540-4609.2008.00174.x">https://doi.org/10.1111/j.1540-4609.2008.00174.x</a>	No
51	<b>A PRACTICAL SETTING FOR EXPERIENTIAL LEARNING ABOUT SUPPLY CHAINS: SIEMENS BRIEF CASE GAME SUPPLY CHAIN SIMULATOR</b>	Joyce S. Mehring	2009	Production and Operations Management Society	Siemens Brief Case Game Supply Chain Simulator provides a practical setting for experiential learning exercises about supply chains. The game, drawing upon an actual situation, models the jobs of nine supply chain activities required to transform an order placed by the customer into a delivered product. Using the detail and complexity of the game, instructors can develop learning exercises that focus on a wide range of supply chain management issues. This paper describes two learning exercises with different objectives and for different audiences that we successfully delivered using the Brief Case Game. One exercise provides a concrete example of typical activities in a supply chain and their interactions. The other exercise leads students to discover what creates a need for coordination, what activities in a supply chain require coordination, and what methods work well. These exercises are suited for small upper level undergraduate and graduate courses in logistics and supply chain management. While significant resources were used to develop exercises and deliver the game, students were enthusiastic about the approach and demonstrated that they learned about the complexity inherent in managing supply chains.	Supply Chain, Experiential learning	<a href="https://onlineibrary.wiley.com/doi/10.1111/dsji.12107">https://onlineibrary.wiley.com/doi/10.1111/dsji.12107</a>	Wiley Online Library	Mehring, J.S. (2009), A PRACTICAL SETTING FOR EXPERIENTIAL LEARNING ABOUT SUPPLY CHAINS: SIEMENS BRIEF CASE GAME SUPPLY CHAIN SIMULATOR. Production and Operations Management, 9: 56-65. <a href="https://doi.org/10.1111/i.1937-5956.2009.tb00323.x">https://doi.org/10.1111/i.1937-5956.2009.tb00323.x</a>	No

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52	<b>Using a Corporate Partnership to Enhance Learning in a Sourcing Negotiation Role-Play</b>	Janet L. Hartley, Karen Eboch, Jonathan Gilberg	2017	Decision Sciences Journal of Innovation Education	Although role-plays can be effective teaching tools for buyer-supplier negotiation, learning can be somewhat limited because typically novices are negotiating with each other. We describe how we collaborated with a corporate partner, CACI International, to develop and implement a repeatable sourcing and negotiation role-play that helps to address this limitation. The role play, used in a dual listed undergraduate/MBA strategic sourcing course, covers the sourcing process from strategy development, solicitation, bidding, negotiation, and supplier selection for security services. The unique aspect of the role play is that CACI supply managers assume the role of suppliers throughout the activity including during phone negotiations with student teams. Content analysis of student reflections and a student survey show that the highest degree of perceived learning from the role-play was in the negotiation. Ways to modify the role-play approach when you do not have strong corporate partnerships are discussed.	Experiential Learning, Pedagogical Approaches, Supply Chain Management, Undergraduate Education	<a href="https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2008.00174.x">https://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2008.00174.x</a>	Wiley Online Library	Hartley, J.L., Eboch, K. and Gilberg, J. (2017), Using a Corporate Partnership to Enhance Learning in a Sourcing Negotiation Role-Play. Decision Sciences Journal of Innovative Education, 15: 124-137. <a href="https://doi.org/10.1111/dsj.12123">https://doi.org/10.1111/dsj.12123</a>	No
53	<b>Introducing B2B Service Level Measures via a Poker-Card Activity</b>	Chun-Miin (Jimmy) Chen, Matthew D. Bailey	2016	Decision Sciences Journal of Innovation Education	To determine the appropriate level of product availability, most operations management textbooks introduce and define service level measures in a Business-to-Customer context. In other words, a retailer that wants to measure product availability in their store calculates the fill rate (FR) or cycle service level over an infinite review horizon. However, in a Business-to-Business (B2B) context, a retailer almost always calculates the FR or compliance level over a finite review horizon. The goal of this article is to highlight calculations of service level measures in a B2B context. Pedagogically, it presents in-class activities that use standard playing cards and/or a spreadsheet simulation that allow students to experientially learn about service level measures in a B2B context.	Operations Management, Supply chain management, Game and Simulation, Experiential Learning	<a href="https://onlinelibrary.wiley.com/doi/10.1111/j.1937-5956.2000.tb00323.x">https://onlinelibrary.wiley.com/doi/10.1111/j.1937-5956.2000.tb00323.x</a>	Wiley Online Library	Chen, C.-M. ( and Bailey, M.D. (2016), Introducing B2B Service Level Measures via a Poker-Card Activity. Decision Sciences Journal of Innovative Education, 14: 37-50. <a href="https://doi.org/10.1111/dsj.12090">https://doi.org/10.1111/dsj.12090</a>	No
54	<b>Developing a distinctive consulting capstone course in a supply chain curriculum</b>	Christopher J. Roethlein, Teresa M. McCarthy Byrne, John K. Visich, Suhong Li, Michael J. Gravier	2021	Decision Sciences Journal of Innovation Education	This article describes a required capstone course for students in the Global Supply Chain Management (GSCM) Program at Bryant University, designed to prepare students for a career in supply chain management. Student teams work on semester-long projects for locally and regionally based companies. The projects are supported by all GSCM faculty who teach in the Information Systems and Analytics, Management, and Marketing departments. Since the inception of this capstone course in the fall of 2010, a total of 83 projects for 42 companies have been completed. Hence this article discusses an extensive number of projects over an extended period of time, and our insights should be of interest to supply chain faculty who currently have, or plan to include, empirical projects as a key component of their course or supply chain program. We present a brief literature review on teaching supply chain management, and then describe the practicum capstone course, Empirical Applications in Global Supply Chain Management. We provide company and project descriptions and discuss project outcomes. Students have estimated savings/earnings impact of \$109.5 million from 35 projects completed over a 4-year period. Although not without challenges, the practicum capstone course provides students with an integrative, multidisciplinary experience that better prepares them for their careers.	Curriculum Development, Experiential Learning, Integrative Curriculum, Multidisciplinary, Pedagogical Approaches, Pedagogy, Practicum Courses, Problem-Based Learning, Supply Chain Management	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsj.12123">https://onlinelibrary.wiley.com/doi/10.1111/dsj.12123</a>	Wiley Online Library	Roethlein, C. J., McCarthy Byrne, T. M., Visich, J. K., Li, S., & Gravier, M. J. (2021). Developing a distinctive consulting capstone course in a supply chain curriculum. Decision Sciences Journal of Innovative Education, 19(2), 117–128. <a href="https://doi.org/10.1111/dsj.12235">https://doi.org/10.1111/dsj.12235</a>	Yes

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55	<b>A Simulation for Managing Complexity in Sales and Operations Planning Decisions</b>	Scott DuHadway, David Dreyfus	2017	Decision Sciences Journal of Innovation Education	Within the classroom it is often difficult to convey the complexities and intricacies that go into making sales and operations planning decisions. This article describes an in-class simulation that allows students to gain hands-on experience with the complexities in making forecasting, inventory, and supplier selection decisions as part of the sales and operations planning process. The activity may be run during one class period and is flexible enough to accommodate almost any class size. During the simulation, students may apply forecasting techniques, inventory management concepts, and supplier selection processes, while experiencing the effects of supply chain disruptions. This simulation is recommended to be used after forecasting, inventory management, and supplier selection topics have been discussed. An overview of the exercise and evidence of its effectiveness is provided.	Experiential Learning, Games and Simulations, Pedagogical Approaches, Operations Management, Supply Chain Management	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12090">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12090</a>	Wiley Online Library	DuHadway, S. and Dreyfus, D. (2017), A Simulation for Managing Complexity in Sales and Operations Planning Decisions. Decision Sciences Journal of Innovative Education, 15: 330-348. <a href="https://doi.org/10.1111/dsji.12134">https://doi.org/10.1111/dsji.12134</a>	No
56	<b>Simulating a Global Dynamic Supply Chain as a Market of Agents with Adaptive Bidding Strategies</b>	Gerben Bas, Telli Van der Lei	2015	Chemie Ingenieur Technik	The use of modular plants in the chemical industry is expected to make the structure of supply chains more dynamic. The models currently used to get insight in supply chains assume a predefined supply chain structure, as orders are exogenously defined. Consequently, those models cannot grasp the dynamic nature of supply chains with modular plants. In this paper a market conceptualization based on agent-based computational economics is presented that includes transport costs in the negotiations and enables the modeling of supply chains as structures that emerge from market dynamics. It is shown that this conceptualization can capture the market dynamics that are needed to simulate a dynamic supply chain.	Supply Chain, Simulation	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12235">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12235</a>	Wiley Online Library	Bas, G. and Van der Lei, T. (2015), Simulating a Global Dynamic Supply Chain as a Market of Agents with Adaptive Bidding Strategies. Chemie Ingenieur Technik, 87: 1230-1239. <a href="https://doi.org/10.1002/cite.201500008">https://doi.org/10.1002/cite.201500008</a>	No
57	<b>B2C Mass Customization in the Classroom</b>	John K. Visich, Qiannong Gu, Basheer M. Khumawala	2012	Decision Sciences Journal of Innovation Education	The purpose of this article is to describe an internet-based mass customization assignment in Operations Management/Supply Chain Management classes where students utilize the Web site of a company that offers a customized product. Students evaluate the user interface, judge the value proposition of the product they demonstrate, and discuss issues of product design, process design and scheduling, inventory management, Supply Chain Management, marketing, and competitors. The students learn about mass customization from both the producer's perspective and the consumer's perspective. Through their own research and the class presentations students are able to develop a better understanding of the implementation requirements and challenges of mass customization. The assignment is highly interactive and has been successfully used in Operations Management and Supply Chain Management courses at under-graduate and graduate levels and at multiple universities. In addition, practitioners interested in implementing a mass customization process can use the assignment as a brainstorming or benchmarking exercise.	Mass Customization, Experiential Learning, Innovative Education, Operations Management, Supply Chain Management, Electronic Commerce	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12134">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12134</a>	Wiley Online Library	Visich, J.K., Gu, Q. and Khumawala, B.M. (2012), B2C Mass Customization in the Classroom. Decision Sciences Journal of Innovative Education, 10: 521-545. <a href="https://doi.org/10.1111/j.1540-4609.2012.00352.x">https://doi.org/10.1111/j.1540-4609.2012.00352.x</a>	No

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58	<b>EXPLORING PROCESSES FOR CUSTOMER VALUE INSIGHTS, SUPPLY CHAIN LEARNING AND INNOVATION: AN INTERNATIONAL STUDY</b>	Daniel J. Flint Ph.D., Everth Larsson Ph.D., Britta Gammelgaard Ph.D.	2011	Journal of Business Logistics	This paper reports results from a study designed to assess the extent to which firms across industries and several countries lay the groundwork for and use customer value insight, supply chain learning, and innovation processes. The cross-sectional study serves as an exploration of the theoretical relationships among these activities and their impact on perceptions of organizational performance. Through an international survey study drawing on samples from the U.S., Sweden and Denmark, the authors find support for the notions that supply chain learning and innovation processes are driven by processes aimed at studying changes in customer value and contribute to perceptions of superior organizational performance. These findings have significant implications for logistics and supply chain management.	Supply Chain, Learning	<a href="https://onlinelibrary.wiley.com/doi/10.1002/jcite.201500008">https://onlinelibrary.wiley.com/doi/10.1002/jcite.201500008</a>	Wiley Online Library	Flint, D.J., Larsson, E. and Gammelgaard, B. (2008), EXPLORING PROCESSES FOR CUSTOMER VALUE INSIGHTS, SUPPLY CHAIN LEARNING AND INNOVATION: AN INTERNATIONAL STUDY. Journal of Business Logistics, 29: 257-281. <a href="https://doi.org/10.1002/j.2158-1592.2008.tb00078.x">https://doi.org/10.1002/j.2158-1592.2008.tb00078.x</a>	No
59	<b>Collaborative Teaching and Learning through Multi-Institutional Integrated Group Projects</b>	Suzanna K. Long, Héctor J. Carlo	2013	Decision Sciences Journal of Innovation Education	This teaching brief describes an innovative multi-institutional initiative through which integrated student groups from different courses collaborate on a common course project. In this integrated group project, students are asked to design a decentralized manufacturing organization for a company that will manufacture industrial Proton-Exchange Membrane fuel cells. The groups include students from supply chain management, production planning and scheduling, and facility layout and design courses. Empirical results from the implementation suggest that students responded positively to the integrated experience. Lastly, the article presents implementation strategies for multi-institutional group projects based on the experiences gained through the collaborative experience.	Integrated Group Projects, Project-Based Virtual Learning, Supply Chain Management, Virtual Collaborative Teaching	<a href="https://onlinelibrary.wiley.com/doi/10.1111/1540-4609.2012.00352.x">https://onlinelibrary.wiley.com/doi/10.1111/1540-4609.2012.00352.x</a>	Wiley Online Library	Long, S.K. and Carlo, H.J. (2013), Collaborative Teaching and Learning through Multi-Institutional Integrated Group Projects. Decision Sciences Journal of Innovative Education, 11: 233-241. <a href="https://doi.org/10.1111/dsji.12011">https://doi.org/10.1111/dsji.12011</a>	No
60	<b>Impacts of Gamification on Logistics and Supply Chain Education: Chip Supply Case Study</b>	Gamze Arabelen	2016	Pazarlama Kongresi	Gamification can be defined as a concept refers to the use of game elements into non-game contexts with the aim of increasing user experience and engagement. While gamification is progressing in many areas also; its applications in education is still becoming important since it creates an alternative atmosphere to engage and motivate students during the learning process. Especially in recent years, because of the changing patterns, teaching logistics and supply chain management needs much more learner's attractiveness and engagement regarding the complexity and multiple dimensions in supply chains. Although supply chain and logistics become complicated, the basis of most logistics and supply chain education remains the use of the lecturing. At this point, gamification can be seen as concept that meets those needs. The purpose of this study is to present which impacts concept of gamification reveals on logistics and supply chain management. To better understand its impacts, a review of existing literature is presented on the subject as well as a case study on an application of gamification in the higher education setting. Case study is conducted by a group of students to a hands-on implementation through physical applications of game elements in the classroom environment. To support the findings and get the feedbacks, surveys are conducted.	Gamification, Gamification in Education, Logistics and Supply Chain Management, Game Elements, Motivation and Engagement	<a href="https://onlinelibrary.wiley.com/doi/10.1002/j.2158-1592.2008.tb00078.x">https://onlinelibrary.wiley.com/doi/10.1002/j.2158-1592.2008.tb00078.x</a>	ResearchGate	Arabelen, Gamze (2016), Impacts of Gamification on Logistics and Supply Chain Education: Chip Supply Case Study. Pazarlama Kongresi; 21. Conference <a href="https://www.researchgate.net/publication/312611468">https://www.researchgate.net/publication/312611468</a> <a href="https://www.researchgate.net/publication/312611468">IMPACTS OF GAMIFICATION ON LOGISTICS AND SUPPLY CHAIN EDUCATION CHIP SUPPLY CASE STUDY</a>	No

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61	<b>A Gamification Approach for Experiential Education of Inventory Control</b>	Gokhan Egilmez, Ridvan Gedik	2018	ASEE Annual Conference & Exposition, Salt Lake City	In this educational research project, game-based in-class and after-class learning activities are developed to teach selected inventory control strategies to undergraduate and graduate students. Students from Supply Chain Management and System Simulation courses are targeted, who are taught by different instructors. The activities include teaching the inventory control policies to students in a regular class setting, then providing an overview on a game developed on MS Excel. In the game, the lead time and customer demand variables are defined uncertain, and not given to students, which make the assignment an ill-structured problem. A 12-month planning and execution period is given to students with qualitative and quantitative information about 3 products. The students are given a 1-week period to play the game. The game simulates selected inventory control strategies with reorder point and order quantity parameters for 12 months. The learning outcomes of the course related to inventory control, and students' experience with the game are surveyed. Survey results are statistically and visually analyzed. Overall results indicated that the proposed gamification approach is found to have positive impact in learning effectiveness in the majority of evaluation categories. In addition, the contribution of the proposed gamification approach was found to be effectively supporting the learning outcomes of the course.	Experimental Education, Supply Chain Management, System Simulation	<a href="https://onlinelibrary.wiley.com/doi/10.1111/dsji.12011">https://onlinelibrary.wiley.com/doi/10.1111/dsji.12011</a>	Google	Egilmez G., Gedik R. (2018) A Gamification Approach for Experiential Education of Inventory Control, Paper presented at ASEE Annual Conference & Exposition, Salt Lake City, Ut. © 2018 American Society for Engineering Education. <a href="https://peer.asee.org/29684">https://peer.asee.org/29684</a> Publication date: 6/23/18	No
62	<b>The Dark Side of Narrow Gamification: Negative Impact of Assessment Gamification on Student Perceptions and Content Knowledge</b>	Hee Yoon Kwon, Koray Özpolat	2020	INFORMS Transaction on Education	We explored the effects of assessment gamification on students' content knowledge and perceptions of satisfaction, course experience, learning, and impact of teaching techniques. The course preparation, attendance, quizzes, classroom activities, and team projects of an undergraduate operations and supply chain management course had game elements that accumulate to team advantages in the collaborative midterm and final exam. Interestingly, we found that gamifying assessment activities resulted in significantly lower content knowledge, satisfaction, and course experience. Difference in perceived learning was not significant. Also, team exam scores were significantly lower in the gamified group, whereas individual exam scores were not significantly different. This study contributes to the literature by providing empirical evidence that gamification in classroom may produce unintended consequences and implementing gamification restrictively to assessment is ineffective at best. Directions for further research are discussed.	Pedagogical research, Teaching supply chain management, Assessment, Gamification	<a href="https://www.researchgate.net/publication/312611468_IMPACTS_OF_GAMIFICATION_ON_LOGISTICS_AND_SUPPLY_CHAIN_EDUCATION_CHIP_SUPPLY_CASE_STUDY">https://www.researchgate.net/publication/312611468_IMPACTS_OF_GAMIFICATION_ON_LOGISTICS_AND_SUPPLY_CHAIN_EDUCATION_CHIP_SUPPLY_CASE_STUDY</a>	Google Scholar	Kwon, H. Y., & Özpolat, K. (2021). The Dark Side of Narrow Gamification: Negative Impact of Assessment Gamification on Student Perceptions and Content Knowledge. INFORMS Transactions on Education, 21(2), 67–81. <a href="https://doi.org/10.1287/ited.2019.0227">https://doi.org/10.1287/ited.2019.0227</a>	No
63	<b>Teaching Tip BPIsim: A Hands-On Simulation to Teach Cash-to-Cash Manufacturing Operating Cycle Processes in a Purchasing, Operations, and Supply Chain Management Context.</b>	Whitelock Vincent G.	2020	Journal of Information Systems Education	This paper presents a hands-on simulation that is conducted in an introductory integrated supply chain management course using enterprise resource planning concepts associated with the Cash-to-Cash Manufacturing Operating Cycle. More specifically, this activity simulates the activities in the procure-to-pay, plan-to-produce, and order-to-cash business processes to provide participants the opportunity to learn integration of key business processes in a purchasing, operations, and supply chain management context. The hands-on simulation is called Business Process Integration Simulation, or BPIsim. Participants collaborate on a five-member supply chain team comprised of an end-user, a distributor/dealer, a manufacturer (OEM), and two suppliers. While partaking in the simulation, participants actively experience the exchange of tangible resources (e.g., preprinted documents; prop cash money; packaging; and component, raw, semi-finished, finished, and trading goods inventories, etc.) and construct tangible products for the benefit of the customer. When the simulation is complete, the participants will have learned major ERP concepts and the five major activities associated with plan, source, make, deliver, and return management processes that are prominently highlighted in the seminal Supply Chain Operations Reference (SCOR) Model. Quantitative and qualitative data indicate that the hands-on simulation is not only intuitive, engaging, and fun, but also a highly-effective experiential learning activity to improve understanding of key business processes that span across five key supply chain members.	Enterprise resource planning (ERP), Experiential learning & education, Pedagogy, Roleplay, Simulation, Supply Chain	<a href="https://core.ac.uk/download/pdf/214330428.pdf">https://core.ac.uk/download/pdf/214330428.pdf</a>	EBSCOhost	Whitelock, V. G. (2020). Teaching Tip BPIsim: A Hands-On Simulation to Teach Cash-to-Cash Manufacturing Operating Cycle Processes in a Purchasing, Operations, and Supply Chain Management Context. Journal of Information Systems Education, 31(1), 12–39.	No

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64	<b>Teaching supplychain and logistics management through commercial software</b>	Sweeney Donald, Campbell James, Mundy Ray	2010	International Journal of Logistics Management	<p>Purpose - The purpose of this paper is to describe the development and teaching of graduatecourses providing in-depth experiential learning employing commercial supply chain management software. The benefits of teaching such courses are described, the challenges in offering such courses are identified, and some solutions to overcome the challenges are offered. Design/methodology/approach - The experiences of the authors in developing and teaching supply chain management courses utilizing commercial software provided a basis for discussing the benefits and challenges associated with teaching students the management of modern supply chains using commercial decision-support software.</p> <p>Findings - Incorporating commercial software in university programs presents a myriad of challenges and therefore is rarely done. However, providing students with in-depth knowledge of commercial logistics and supply chain management software improves their understanding of supply chain issues and provides a key differentiator in the marketplace. Modeling real-world supply chains using commercial software enhances student's educationby providing relevant experiential exposure to real-world problems and decision-support tools.</p> <p>Originality/value - The observations of the authors in developing and teaching courses in supply chain management utilizing commercial software afford a unique viewpoint and roadmap for others regarding teaching supply chain management in academic environments.</p>	Production management (Manufacturing), Supply chain management Experiential learning, Active learning, Learning ability, Activity programs in education	<a href="https://doi.org/10.1108/09574091011071960">https://doi.org/10.1108/09574091011071960</a>	EBSC Ohost	Sweeney, D., Campbell, J., &Mundy, R. (2010). Teaching supply chain and logistics management through commercial software. International Journal of Logistics Management, 21(2), 293–308. <a href="https://doi.org/10.1108/09574091011071960">https://doi.org/10.1108/09574091011071960</a>	No
65	<b>Advancing the skill set of SCM graduates – an active learning approach</b>	Scholten Kirstin, Dubois Anna	2017	International Journal of Operations & Production Management	<p>Purpose Drawing on a novel approach to active learning in supply chain management, the purpose of this paper is to describe and analyze how the students' learning process as well as their learning outcomes are influenced by the learning and teaching contexts.Design/ methodology/approach A case study of a master's level purchasing course carried out at twouniversities in which students work in projects resulting in jointly authored books.Findings The findings show how the teaching context influenced the learning process and the learning outcomes. Active involvement, self-directed learning, collaborative learning and learning from practice enabled by the set-up of the course are identified as key mechanisms for the learning outcomes in relation to skills and content.Originality/value Increasingly, supply chain management graduates have to develop professional, practical, research as well as metacognitive and life-long learning skills during their university education. This paper identifies mechanisms and illustrates how educators can use the set-up of a course to enable students to engage in a learning process resulting in a variety of skills as well as specific content-based aspects of knowledge.</p>	Supply chain management, Purchasing, Metacognition, Activelearning, Teaching methods	<a href="http://web.b.ebscohost.com/ehost/detail/detail?vid=0&amp;sid=818dcbc9-5069-4d4f-9ccf-71742074b38f%40pdcc-v-sessmgr01&amp;bdata=JnNpdGU9ZWhvc3QtGjI2ZQ%3d%3d#AN=142056412&amp;db=bsu">http://web.b.ebscohost.com/ehost/detail/detail?vid=0&amp;sid=818dcbc9-5069-4d4f-9ccf-71742074b38f%40pdcc-v-sessmgr01&amp;bdata=JnNpdGU9ZWhvc3QtGjI2ZQ%3d%3d#AN=142056412&amp;db=bsu</a>	EBSC Ohost	Scholten, Kirstin, and Anna Dubois. 2017. "Advancing the Skill Set of SCM Graduates – an Active Learning Approach." International Journal of Operations & Production Management 37 (11): 1683–99. doi:10.1108/IJOPM-11-2015-0724.	No
66	<b>The Hunger Chain: A competitive simulation for teaching supplychain management</b>	Song Ju Myung, Park Arim, ZhaoYao	2021	Decision Sciences Journal of Innovative Education	<p>Shortage gaming, supply chain competition, and supply rationing are important and timely topics in operations management and supply chain management curricula. We introduce anonline instructional game, the Hunger Chain, that provides an action-based, competitive simulation for engagement of students in experiential learning of these topics. We discuss how instructors can use the game to stimulate students' learning about panic orders and hoarding (shortage gaming), decision dependencies (supply chain competition), and efficient and/or fair allocation of limited supplies (supply rationing). A comparison of testresults from students who played the game to those from a control group showed significantly improved learning outcomes. In addition, sentiment analysis of student feedback was overwhelmingly positive.</p>	Active Learning, SupplyChain Competition, Instructional Simulation, Online Games, Rationing, Shortage Gaming	<a href="https://doi.org/10.1111/dsji.12239">https://doi.org/10.1111/dsji.12239</a>	EBSC Ohost	Song, J. M., Park, A., & Zhao, Y. (2021). The HungerChain: A competitive simulation for teaching supply chain management. Decision Sciences Journal of Innovative Education, 1. <a href="https://doi.org/10.1111/dsji.12239">https://doi.org/10.1111/dsji.12239</a>	No

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67	<b>Active Learning in Supply Chain Management Course.</b>	Nezami Farnaz Ghazi, Yildirim Mehmet Bayram	2015	Proceedings of the ASEE Annual Conference & Exposition	This paper presents an active learning approach implemented in the Supply Chain Management (SCM) course. In this course, the fundamentals of supply chain and logistics, drivers of supply chain performance and analytical tools necessary to develop solutions for a variety of supply chain design problems are covered through class lectures and case study discussions. In the past few years, due to the growth in the needs of organizations for "Lean" principles, the course was modified to satisfy this requirement more efficiently. For this purpose a hands on experience workshop, TimeWise simulation game, was utilized where the students could physically simulate the implementation of lean principles in a supply chain network. Through this simulation, students explored the impact of various lean tools such as Kanban, pull and just-in-time production systems, and flow management in a dynamic supply chain. In addition, this game empowers the learners with a better understanding of the fundamental concepts of a collaborative supply chain such as demand management, inventory management, role of information system and coordination, transportation, finance and accounting. The implemented simulation game could enhance material retention and foster critical thinking among the students by increasing visibility and illustrating the concerns of any supply chain. Moreover, several directed presentations by speakers invited from diverse industries and ISM (Institute of Supply Chain Management) were arranged to expose the students to some real case studies. To assess the effectiveness of the course modules and applied pedagogical methods, and measure learning satisfaction, a survey is conducted to evaluate the effectiveness of each instructional tool, students' perception of knowledge and satisfaction in this course and the results are analyzed.	Active learning, Supply chain management, Logistics management, Simulation games in education	<a href="http://web.b.ebscohost.com/ehost/detail/detail?vid=0&amp;sid=b4834852-d334-4fa0-bff9-df41a38fa979%40pd-c-v- sessmgr03&amp;bdata=JnNpdGU9ZWhvc3QtGj2ZQ%3d%3d#AN=126336299&amp;db=bsu">http://web.b.ebscohost.com/ehost/detail/detail?vid=0&amp;sid=b4834852-d334-4fa0-bff9-df41a38fa979%40pd-c-v- sessmgr03&amp;bdata=JnNpdGU9ZWhvc3QtGj2ZQ%3d%3d#AN=126336299&amp;db=bsu</a>	EBSCOhost	Nezami, F. G., & Yildirim, M. B. (2015). Active Learning in Supply Chain Management Course. Proceedings of the ASEE Annual Conference & Exposition, 1–19.	Yes
68	<b>Simulations and supply chains: strategies for teaching supply chain management</b>	David Sparling	2002	Supply Chain Management	The Beer Game is one of the most popular simulations used to introduce students to the challenges of managing supply chains. While the basic simulation serves as a useful introduction to the problems, it does not take the next step of helping students or managers plan to surmount those problems and manage an efficient supply chain. This paper suggests a strategy for taking that next step, helping students move toward solutions of supply chain problems. The strategy builds supply chain teaching modules or an executive development program around modified Beer Game simulations. This paper also provides the tools for accomplishing both an introductory and a more advanced simulation. These simulation-based programs have proved highly effective and popular in undergraduate, graduate and executive development programs.	Supply Chain Management, Simulation, Training	<a href="https://www.emerald.com/insight/content/doi/10.1108/13598540210447782/full/html?casa_token=Oxpu1_DUFxQAAAAA:arNdGFYCAhnoB0V3rzOudr60S57KHuPkca3TBcR6n40qvGwgeXG01HnpEWEI3bVLOQcO2X1Z6tAvYk4HtflhK7796fi9VWGN3VsE7Sd04tMgyuplPybP">https://www.emerald.com/insight/content/doi/10.1108/13598540210447782/full/html?casa_token=Oxpu1_DUFxQAAAAA:arNdGFYCAhnoB0V3rzOudr60S57KHuPkca3TBcR6n40qvGwgeXG01HnpEWEI3bVLOQcO2X1Z6tAvYk4HtflhK7796fi9VWGN3VsE7Sd04tMgyuplPybP</a>	Google Scholar	Sparling, D. (2002). Simulations and supply chains: strategies for teaching supply chain management. Supply Chain Management, 7(5), 334-342. <a href="https://doi.org/10.1108/13598540210447782">https://doi.org/10.1108/13598540210447782</a>	Yes

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69	<b>Supply chain simulation – a tool for education, enhancement and endeavour</b>	Matthias Holweg, John Bicheno	2002	International Journal of Production Economics	<p>This paper describes how a participative simulation model is used to demonstrate supply chain dynamics and to model possible improvements to an entire supply chain. A three-year research project in the automotive steel supply chain found that lack of understanding of the core processes throughout the supply chain caused distortion and amplification of both demand and supply patterns. In consequence, this deficit of information is often replaced with inventory — resulting in increased lead times and pipeline cost. At the start of the project there was relatively little collaboration in the supply network. The 'Lean Leap Logistics Game' was developed primarily to foster collaboration. To achieve this, the game had to model reality, and was built on a series of mapping activities. Unexpectedly, it turned out that developing and running the game led to insights into scheduler behaviour, scheduling decision making, prioritising improvement activities and into supply chain dynamics, especially the 'Forrester' or 'Bullwhip' effect. By presenting the experiences of using supply chain simulations, this paper aims at encouraging both academics and practitioners to use this tool to demonstrate and discuss supply chain improvements by simulating their individual characteristics in order to deploy holistic improvements, rather than partial or 'island' solutions.</p>	Supply Chain, System Dynamics, Simulation	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0925527300001717">https://www.sciencedirect.com/science/article/abs/pii/S0925527300001717</a>	Google Scholar	<p>Matthias Holweg, John Bicheno (2002). Supply chain simulation – a tool for education, enhancement and endeavour. International Journal of Production Economics, 78 (2), 163-175, ISSN 0925-5273. <a href="https://doi.org/10.1016/S0925-5273(00)00171-7">https://doi.org/10.1016/S0925-5273(00)00171-7</a>.</p>	Yes
70	<b>Business Simulation Game Development for Education and Training in Supply Chain Management</b>	Yuri Merkuryev, Jana Bikovska	2012	2012 Sixth Asia Modelling Symposium	<p>This paper presents a simulation-based business game for training and education in the area of supply chain management. It starts with a short review of existing simulation games used for training and education in supply chain management, which is followed by a brief description of the ECLIPS game that has been developed for providing an insight into various aspects of supply chain management, with opportunity to analyze different supply chain structures and control mechanisms. In particular, the application of the ECLIPS game to comparison of different supply chain inventory management policies, including non-cyclic and cyclic ones, is provided. Also, the paper presents a special computer-aided tool that allows testing and evaluating various scenarios of the ECLIPS game. The method of scenario evaluation is described as well.</p>	Games, Supply Chains, Supply Chain Management, Production Facilities, Training, Protocols	<a href="https://ieeexplore.ieee.org/abstract/document/6243943/keywords">https://ieeexplore.ieee.org/abstract/document/6243943/keywords</a>	Google Scholar	<p>Y. Merkuryev and J. Bikovska, "Business Simulation Game Development for Education and Training in Supply Chain Management," 2012 Sixth Asia Modelling Symposium, 2012, pp. 179-184, doi: 10.1109/AMS.2012.12.</p>	Yes



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71	<b>Supply chain simulation tools and techniques: a survey</b>	Jack P.C. Kleijnen	2005	International Journal of Simulation and Process Modelling	<p>The main contribution of this paper is twofold: it surveys different types of simulation for supply chain management; it discusses several methodological issues. These different types of simulation are spreadsheet simulation, system dynamics, discrete-event simulation and business games. Which simulation type should be applied, depends on the type of managerial question to be answered by the model. The methodological issues concern validation and verification, sensitivity, optimisation, and robustness analyses. This sensitivity analysis yields a shortlist of the truly important factors in large simulation models with (say) a hundred factors. The robustness analysis optimises the important factors controllable by management, while accounting for the noise created by the important non-controllable, environmental factors. The various methodological issues are illustrated by a case study involving the simulation of a supply chain in the mobile communications industry in Sweden. In general, simulation is important because it may support the quantification of the benefits resulting from supply chain management.</p>	<p>Taguchi methods, risk analysis, uncertainty analysis, screening, sequential bifurcation, supply chain management, SCM simulation, spreadsheet simulation, system dynamics, discrete event simulation, business games, sensitivity analysis, robustness analysis, Sweden, mobile communications, logistics, performance measurement</p>	<p><a href="https://www.inderscienceonline.com/doi/abs/10.1504/IJSPM.2005.007116">https://www.inderscienceonline.com/doi/abs/10.1504/IJSPM.2005.007116</a></p>	Google Scholar	<p>Kleijnen Jack P.C. (2005). Supply Chain Simulation Tools and Techniques: A Survey. International Journal of Simulation and Process Modelling, 1 (1-2). <a href="https://doi.org/10.1504/IJSPM.2005.007116">https://doi.org/10.1504/IJSPM.2005.007116</a></p>	Yes
72	<b>Performance metrics in supply chain management</b>	J. P. C. Kleijnen, M. T. Smits	2003	Journal of the Operational Research Society	<p>This survey paper starts with a critical analysis of various performance metrics for supply chain management (SCM), used by a specific manufacturing company. Then it summarizes how economic theory treats multiple performance metrics. Actually, the paper proposes to deal with multiple metrics in SCM via the balanced scorecard — which measures customers, internal processes, innovations, and finance. To forecast how the values of these metrics will change — once a supply chain is redesigned — simulation may be used. This paper distinguishes four simulation types for SCM: (i) spreadsheet simulation, (ii) system dynamics, (iii) discrete-event simulation, and (iv) business games. These simulation types may explain the bullwhip effect, predict fill rate values, and educate and train users. Validation of simulation models requires sensitivity analysis; a statistical methodology is proposed. The paper concludes with suggestions for a possible research agenda in SCM. A list with 50 references for further study is included.</p>	<p>Supply Chain, Logistics, Performance Measurement, Balanced Scorecard, Simulation, System Dynamics</p>	<p><a href="https://link.springer.com/article/10.1057/palgrave.jors.2601539">https://link.springer.com/article/10.1057/palgrave.jors.2601539</a></p>	Google Scholar	<p>Kleijnen, J., Smits, M. (2003). Performance metrics in supply chain management. Journal of Operational Research Society, 54, 507–514. <a href="https://doi.org/10.1057/palgrave.jors.2601539">https://doi.org/10.1057/palgrave.jors.2601539</a></p>	Yes

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73	<b>Empirical game-theoretic analysis of the TAC Supply Chain game</b>	Patrick R. Jordan, Christopher Kiekintveld, Michael P. Wellman	2007	AAMAS' 07: Proceeding of the 6th international joint conference on Autonomous agents and multiagent systems	The TAC Supply Chain Management (TAC/SCM) game presents a challenging dynamic environment for autonomous decision-making in a salient application domain. Strategic interactions complicate the analysis of games such as TAC/SCM. since the effectiveness of a given strategy depends on the strategies played by other agents on the supply chain. The TAC tournament generates results from one particular path of combinations, and success in the tournament is rightly regarded as evidence for agent quality. Such results along with post-competition controlled experiments provide useful evaluations of novel techniques employed in the game. We argue that a broader game-theoretic analysis framework can provide a firmer foundation for choice of experimental contexts. Exploiting a repository of agents from the 2005 and 2006 TAC/SCM tournaments, we demonstrate an empirical game-theoretic methodology based on extensive simulation and careful measurement. Our analysis of agents from TAC-05 reveals interesting interactions not seen in the tournament. Extending the analysis to TAC-06 enables us to measure progress from year-to-year, and generates a candidate empirical equilibrium among the best known strategies. We use this equilibrium as a stable background population for comparing relative performance of the 2006 agents, yielding insights complementing the tournament results.	Electronic Markets, Trading Agent Competition, Multiagent Systems, Supply Chain Management, Empirical Game Theory	<a href="https://dl.acm.org/doi/abs/10.1145/1329125.1329359?casa_token=NhCv0L-ER4YAAAAA%3ADPeNrTVZOS_Bc2NZi4UAZWujvU_39LKfdeAH7a4rlxQ_MlzTVwV0O_Dm0UDMjXl1KrChr3PWW-Y3Kw">https://dl.acm.org/doi/abs/10.1145/1329125.1329359?casa_token=NhCv0L-ER4YAAAAA%3ADPeNrTVZOS_Bc2NZi4UAZWujvU_39LKfdeAH7a4rlxQ_MlzTVwV0O_Dm0UDMjXl1KrChr3PWW-Y3Kw</a>	Google Scholar	Patrick R. Jordan, Christopher Kiekintveld, and Michael P. Wellman. (2007). Empirical game-theoretic analysis of the TAC Supply Chain game. In Proceedings of the 6th international joint conference on Autonomous agents and multiagent systems (AAMAS '07). Association for Computing Machinery, New York, NY, USA, Article 193, 1–8. DOI: <a href="https://doi.org/10.1145/1329125.1329359">https://doi.org/10.1145/1329125.1329359</a>	Yes
74	<b>Mesosopic supply chain simulation</b>	Til Hennes, Tobias Reggelin, Juri Tolujew, Pierre-Alain Piccut	2014	Journal of Computational Science	This paper reviews and compares existing approaches for supply chain modeling and simulation and applies the mesoscopic modeling and simulation approach using the simulation software MesoSim, an own development. A simplified real-world supply chain example is modeled with discrete event, mesoscopic and system dynamics simulation. The objective of the study is to compare the process of model creation and its validity using each approach. The study examines advantages of the mesoscopic approach for the simulation. Major benefits of the mesoscopic approach are that modeling efforts are balanced with the necessary level of detail and facilitate quick and simple model creation and simulation.	Supply Chain Management, Supply Chain Simulation, Mesoscopic Simulation	<a href="https://www.sciencedirect.com/science/article/abs/pii/S1877750313001002">https://www.sciencedirect.com/science/article/abs/pii/S1877750313001002</a>	Google Scholar	Til Hennes, Tobias Reggelin, Juri Tolujew, Pierre-Alain Piccut (2014). Mesoscopic supply chain simulation. Journal of Computational Science, 5 (3), 463-470. ISSN 1877-7503. <a href="https://doi.org/10.1016/j.jocs.2013.08.004">https://doi.org/10.1016/j.jocs.2013.08.004</a> .	Yes

## SCM Gamification

75	<b>A Flexible Supply Chain Management Game</b>	Patra Shovityakool, Piyachat Jittam, Namkang Sriwattanothai, Parames Laosinchai	2019	Simulation & Gaming	<p>Background. Educational games are widely used in business classes in general, and supplychain management (SCM) classes in particular. These games are designed to familiarize students with the real business world. Most SCM games are ready-made, with pre-set learning objectives focusing on a certain module in a supply chain. Intervention. This article presents the new spreadsheet-based Flexible Supply Chain Management Game (FSCMG) and the findings of its pilot study. FSCMG's features are transparent to instructors and students alike. It is easily modifiable to suit an instructor's learning objectives. Method. Six groups of undergraduate students took turns playing three modules, namely a wholesaler, manufacturer, and supplier. There were two groups per module to represent two supply chains. The students' spreadsheets are analyzed and presented. Results. Students' spreadsheets revealed that they were able to employ SCM conceptual understanding in FSCMG, particularly pricing strategy, inventory management, forecasting, and the relationships within a supply chain. Conclusion. FSCMG helped the students apply their in-class knowledge in a real-world situation and be well prepared for their future careers where an extensive understanding is required.</p>	educational game, flexible game, multiplesupply chains, spreadsheet-based game, supply chain management, transparent game	<a href="https://journals.sagepub.com/doi/full/10.1177/1046878119857119?casa_token=8xEBV25vKiQAAAAA%3AILV-05pJnMJePJom0oXvWcsJDxqkMfsvHbQ7Kv8zn4RxUscwhpO9j_vzBmcVvctVSRhw5yh6Uskq">https://journals.sagepub.com/doi/full/10.1177/1046878119857119?casa_token=8xEBV25vKiQAAAAA%3AILV-05pJnMJePJom0oXvWcsJDxqkMfsvHbQ7Kv8zn4RxUscwhpO9j_vzBmcVvctVSRhw5yh6Uskq</a>	Google Scholar	Shovityakool, P., Jittam, P., Sriwattanothai, N., & Laosinchai, P. (2019). A Flexible Supply Chain Management Game. Simulation & Gaming, 50(4), 461–482. <a href="https://doi.org/10.1177/1046878119857119">https://doi.org/10.1177/1046878119857119</a>	Yes
76	<b>A strategic supply chain simulation model</b>	J. Ritchie-Dunham, D.J. Morrice, J. Scott, E.G. Anderson	2000	2000 Winter S	<p>The authors describe a simulation game designed to quantify the benefits of an enterprise resource planning system coupled with the balanced scorecard framework in an extended enterprise. We present three scenarios of the same enterprise: a base case scenario with a non-integrated legacy system, a scenario with an integrated, enterprise resource planning system, and a scenario with an enterprise resource planning system using the balanced scorecard framework. Results from this game support our research and teaching activities on the benefits of systems integration, data and process standardization, visibility across the business enterprise, improved decision support functionality, and operationalizing strategy.</p>	Supply chains , Enterprise resource planning , Standardization , Gametheory , Education , Communication industry , Toy industry , Organizational aspects , Decision making , Logic	<a href="https://ieeexplore.ieee.org/abstract/document/899094/keywords#keywords">https://ieeexplore.ieee.org/abstract/document/899094/keywords#keywords</a>	Google Scholar	J. Ritchie-Dunham, D. J. Morrice, J. Scott and E. G. Anderson (2000). A strategic supply chain simulation model. 2000 Winter Simulation Conference Proceedings (Cat. No. 00CH37165), 2, 1260-1264. doi: 10.1109/WSC.2000.899094.	Yes
77	<b>Business simulation game for teaching multi-echelon supply chain management</b>	Yuri Merkuryev, Jana Bikovska, Galina Merkuryeva, Jonas Hatem, Bram Desmet	2010	International Journal of Simulation and Process Modelling	<p>This paper presents a new business game which helps to understand concepts developed in the ECLIPS project of the European Commission. The game provides an insight into different aspects of supply chain management, i.e., general supply chain mechanisms, non-cyclic and cyclic inventory replenishment policies. This allows for people who have no deep notion in this area to better understand project concepts and evaluate their efficiency in practice. Demonstrating concepts in a playful way is considered as more powerful and effective than purely explaining the underlying theory. The paper describes game rules, playing process and provides results of game test sessions.</p>	multi-echelon supply chains, supply chain management, SCM, simulation, business games, education, inventory policies, replenishment policies	<a href="https://www.inderscienceonline.com/doi/abs/10.1504/IJSPM.2009.032592">https://www.inderscienceonline.com/doi/abs/10.1504/IJSPM.2009.032592</a>	Google Scholar	Yuri Merkuryev, Jana Bikovska, Galina Merkuryeva, Jonas Hatem, Bram Desmet. (2010). Business simulation game for teaching multi-echelon supply chain management. International Journal of Simulation and Process Modelling, 5 (4). <a href="https://doi.org/10.1504/IJSPM.2009.032592">https://doi.org/10.1504/IJSPM.2009.032592</a>	Yes

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78	<p><b>The Real- Time Global Supply Chain Game: New Educational Tool for Developing Supply Chain Management Professionals</b></p>	<p>THOMAS M. CORSI, SANDOR BOYSON, ALEXANDER VERBRAECK, STIJN-PIETER VAN HOUTEN, CHAODONG HAN and JOHN R. MACDONALD</p>	2006	<p>Transportation Journal</p>	<p>Researchers at Delft University and the Robert H. Smith School of Business at the University of Maryland have developed the "Global Supply Chain Game" (GSCG). A specific instance of the game is called the "Distributor Game," centered on globalization and the real-time supply chain. The GSCG differs from many existing business learning games in that, as opposed to being turn-based and locked in on demonstrating a single phenomenon (i.e., the bullwhip effect), it simulates a real-world experience by operating on a continuous clock with ongoing events and responses to individual decisions. The decision-making processes of the distributors in the game are controlled by human players. To confront the human players with a complex and dynamic environment, suppliers, markets, and competing distribution centers are represented by computer-controlled actors. The Distributor Game has been tested at the Robert H. Smith School of Business in seven courses since January 2005. The beta-tests include four MBA classes, two Executive MBA classes, and a single undergraduate class. Each class has been consistent in its approval of the game as a tool in simulating the complexities of a global supply chain and facilitating learning about how to successfully manage this environment.</p>	<p>Supply Chain Management, Gamification, Game, Learning Games</p>	<p><a href="https://www.jstor.org/stable/20713644?seq=1">https://www.jstor.org/stable/20713644?seq=1</a></p>	<p>Google Scholar</p>	<p>CORSI, T., BOYSON, S., VERBRAECK, A., VAN HOUTEN, S., HAN, C., &amp; MACDONALD, J. (2006). The Real- Time Global Supply Chain Game: New Educational Tool for Developing Supply Chain Management Professionals. <i>Transportation Journal</i>, 45(3), 61-73. Retrieved June 1, 2021, from <a href="http://www.jstor.org/stable/20713644">http://www.jstor.org/stable/20713644</a></p>	<p>Yes</p>
79	<p><b>Learning Supply Chain Management with Fun: An Online Simulation Game Approach</b></p>	<p>Keli Feng, Guohua Ma</p>	2008	<p>California Journal of Operations Management</p>	<p>In this paper we review an innovative web-based simulation game for teaching supply chain management concepts. Different from many existing turn-based simulation games, this game simulates a real-world 24/7 environment where students can make supply chain decisions and apply knowledge learned in class. We also discuss how to integrate this educational game into an undergraduate supply chain management class. The game was evaluated in an undergraduate supply chain management class at an AACSB school. The student evaluations indicate that most of the students enjoyed playing the game and preferred this simulation game approach to traditional teaching methods.</p>	<p>Supply Chain Management, Web-based Simulation Game, Experimental Learning</p>	<p><a href="https://www.researchgate.net/publication/267544941_Learning_Supply_Chain_Management_with_Fun_An_Online_Simulation_Game_Approach">https://www.researchgate.net/publication/267544941_Learning_Supply_Chain_Management_with_Fun_An_Online_Simulation_Game_Approach</a></p>	<p>Google Scholar</p>	<p>Feng, Keli &amp; Ma, Guohua. (2008). Learning Supply Chain Management with Fun: An Online Simulation Game Approach. <i>California Journal of Operations Management</i>. 6(1). <a href="https://www.researchgate.net/publication/267544941_Learning_Supply_Chain_Management_with_Fun_An_Online_Simulation_Game_Approach">https://www.researchgate.net/publication/267544941_Learning_Supply_Chain_Management_with_Fun_An_Online_Simulation_Game_Approach</a></p>	<p>No</p>

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80	<b>Simulation of a supply chain game with multiple fuzzy goals</b>	Chen Yuh-Wen, Moussa Larbani, Liu Chen-Hao	2010	Fuzzy Sets and Systems	<p>Supply chain management (SCM) issues have been popularly discussed in recent years. However, few papers in past literature have been dedicated to the use of fuzzy multi-objective-game framework for analyzing how the strategic partnership influences individual and global performance in a supply chain. This study formulates a game framework for the investigation of strategic behavior of supply chain partners based on fuzzy multi-objective programming, the alliance matrix and achievement level/aspiration degree. This work assumes the partners having multiple objectives and the supply chain is multi-product and multi-material. To validate our model we simulate the micro- and macro-performance of a supply chain by the achievement level under various partner alliances. In addition, a sensitivity analysis is conducted. Finally, some useful lessons are summarized.</p>	Supply chain management (SCM), Game Fuzzy Multi-objective	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0165011409004412">https://www.sciencedirect.com/science/article/abs/pii/S0165011409004412</a>	Google Scholar	<p>Chen Yuh-Wen, Moussa Larbani, Liu Chen-Hao (2010). Simulation of a supply chain game with multiple fuzzy goals. Fuzzy Sets and Systems, 161, (11), 1489-1510, ISSN 0165-0114. <a href="https://doi.org/10.1016/j.fss.2009.10.015">https://doi.org/10.1016/j.fss.2009.10.015</a>.</p>	Yes
81	<b>Designing a Serious Simulation Game as a Learning Media of Sustainable Supply Chain Management for Biofuel Production</b>	Akhmad Hidayatno, Zulkarnain, Rachel Giovani Hasibuan, Girindra Chaska Wardana Nimpuno, Arry Rahmawan Destyanto	2019	Energy Procedia	<p>The increasing community awareness of environmental and social issues has ushered in demands for biofuel production companies to focus on sustainability, where they are expected to not only focus on economic benefits, but also to be environmentally friendly and socially responsible. These companies rely on supply chains that now must pay attention to economic, environmental, and social aspects to operate sustainable supply chains. Making the right calls in any situation is a necessary capability to generate a cleaner and aware supply chain management system within the company, with less increased risk or reduced profits. To develop these capabilities, practitioners need to understand the complexities of the sustainable supply chain and conceptualize the entirety of the supply chain. The objective of this study is to provide a learning medium that could increase corporate awareness in utilizing more eco-friendly regulations. The result of this study is the design of a Serious Simulation Game (SSG) that focuses on the purchasing, production, sales, and finance functions, using case studies of companies that run crude palm oil mills, which was proven effective in helping players understand the concepts and complexities that influence sustainable supply chain management.</p>	Serious Simulation Game Sustainable Supply Chain Management Alternative Energy Environmental Awareness Crude Palm Oil	<a href="https://www.sciencedirect.com/science/article/pii/S1876610218310427">https://www.sciencedirect.com/science/article/pii/S1876610218310427</a>	Google Scholar	<p>Akhmad Hidayatno, Zulkarnain, Rachel Giovani Hasibuan, Girindra Chaska Wardana Nimpuno, Arry Rahmawan Destyanto. (2019). Designing a Serious Simulation Game as a Learning Media of Sustainable Supply Chain Management for Biofuel Production. Energy Procedia, 156, 43-47, ISSN 1876-6102. <a href="https://doi.org/10.1016/j.egypro.2018.11.083">https://doi.org/10.1016/j.egypro.2018.11.083</a>.</p>	Yes

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82	<b>Demonstrating supply chain parameter optimization through beer game simulation</b>	Kumar Sameer, Chandra Charu, Seppanen Marvin S.	2007	Information Knowledge Systems Management	<p>The single player Beer Game supply chain simulation developed using Arena, Visio, Excel, VBA, OptQuest, and Crystal Reports software tools provides a virtual laboratory to analyze various scenarios for optimal design. The model uses animation, directed arrows to show flow of information and flow of material – work in process or finished goods at different stages of transformation, and icons to show an entity such as plant/factory, consumer, warehouse, etc. The model can be scaled up to a larger network of suppliers, OEMs, etc. with multiple products and other features that replica complexities in an industry supply chain. The detailed analytical presentation of the Beer Game simulation example provides a useful framework for learning about challenges in production logistics systems. The contribution of this paper is to complement and enhance the existing body of knowledge where Beer Game or a similar approach has been utilized in understanding the complexity of managing decision-making in supply chain. In addition, the concept of templates (that is, Excel Workbooks) introduced can be used to build a generic framework for supply chain design of any business operation. The distinguishing feature of this paper is the emphasis given to the integrated system development environment utilizing a simulation software to study, understand, and learn about supply chain management problems. The Bullwhip Effect is an important demand and supply coordination problem that affects numerous organizations (for example, in spite of the efficient Cisco e-hub, still the Bullwhip effect is limiting their performance) which is a major phenomenon incorporated in the Beer Game model.</p>	Beer Game, supply chain management, Bullwhip effect, supply chain design, system integration, supply chain learning model, supply chain optimization, discrete event simulation	<a href="https://content.iospress.com/articles/information-knowledge-systems-management/iks00104">https://content.iospress.com/articles/information-knowledge-systems-management/iks00104</a>	Google Scholar	<p>Kumar, Sameer, Chandra, Charu, and Seppanen, Marvin S. (2007). Demonstrating Supply Chain Parameter Optimization through Beer Game Simulation. Information Knowledge Systems. 6 (4), 291 – 322.  <a href="https://content.iospress.com/articles/information-knowledge-systems-management/iks00104">https://content.iospress.com/articles/information-knowledge-systems-management/iks00104</a></p>	Yes
83	<b>STRATEGIC INTERACTIONS IN A SUPPLY CHAIN GAME</b>	Michael P. Wellman, Joshua Estelle, Satinder Singh, Yevgeniy Vorobeychik, Christopher Kiekintveld, Vishal Soni	2005	Computational Intelligence	<p>The TAC 2003 supply-chain game presented automated trading agents with a challenging strategic problem. Embedded within a high-dimensional stochastic environment was a pivotal strategic decision about initial procurement of components. Early evidence suggested that the entrant field was headed toward a self-destructive, mutually unprofitable equilibrium. Our agent, Deep Maize, introduced a preemptive strategy designed to neutralize aggressive procurement, perturbing the field to a more profitable equilibrium; it worked. Not only did preemption improve Deep Maize's profitability, it improved profitability for the whole field. Whereas it is perhaps counterintuitive that action designed to prevent others from achieving their goals actually helps them, strategic analysis employing an empirical game-theoretic methodology verifies and provides insight about this outcome.</p>	Trading Agents, Supply Chain Management, Strategic Reasoning, Empirical Game Theory	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.0824-7935.2005.00263.x?casa_token=n8BMecNniG0AAAAA:cqwvnn2OWGoSJuTBWzjN_OHBdf9L-X7EQi-4gF2HPBffDcMS6mvYSZo-RH_GAKchb9qgFV6jXCK-Cgw">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.0824-7935.2005.00263.x?casa_token=n8BMecNniG0AAAAA:cqwvnn2OWGoSJuTBWzjN_OHBdf9L-X7EQi-4gF2HPBffDcMS6mvYSZo-RH_GAKchb9qgFV6jXCK-Cgw</a>	Google Scholar	<p>Wellman, M.P., Estelle, J., Singh, S., Vorobeychik, Y., Kiekintveld, C., and Soni, V. (2005). STRATEGIC INTERACTIONS IN A SUPPLY CHAIN GAME. Computational Intelligence, 21: 1-26.  <a href="https://doi.org/10.1111/j.0824-7935.2005.00263.x">https://doi.org/10.1111/j.0824-7935.2005.00263.x</a></p>	Yes
84	<b>Dynamic simulation of the supply chain for a short life cycle product—Lessons from the Tamagotchi case</b>	Toru Higuchi, Marvin D. Troutt	2004	Computers & Operations Research	<p>Supply chain phenomena such as the bullwhip effect and boom and bust have been widely studied. However, their interaction with other factors has not been elaborated. We use scenario-based dynamic simulations to study the short product life cycle case, exemplified by Tamagotchi™, which was the first of the virtual pet toys. Our model has three components, market, retail and factory. To simulate the supply chain dynamics, all parts consist of scenarios based on the Tamagotchi™ case and are integrated into a dynamic model. Our model should be helpful to decision makers and planners faced with similar short life cycle product introductions.</p>	Phantom demand Product life cycle Simulation Supply chain management Tamagotchi TM Logistics System dynamics	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0305054803000674">https://www.sciencedirect.com/science/article/abs/pii/S0305054803000674</a>	Google Scholar	<p>Toru Higuchi, Marvin D. Troutt (2004). Dynamic simulation of the supply chain for a short life cycle product—Lessons from the Tamagotchi case. Computers &amp; Operations Research, 31 (7), 1097-1114, ISSN 0305-0548.  <a href="https://doi.org/10.1016/S0305-0548(03)00067-4">https://doi.org/10.1016/S0305-0548(03)00067-4</a>.</p>	Yes

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85	<b>Learning by gaming: Supply chain application</b>	Ayman Tobail, John Crowe, Amr Arisha	2011	Proceedings of the 2011 Winter Simulation Conference	<p>Today's third level students are of a virtual generation, where online interactive multi-player games, virtual reality and simulations are a part of everyday life, making gaming and simulation a very important catalyst in the learning process. Teaching methods have to be more innovative to help students understand the complexity of decisions within dynamic supply chain environment. Interactive simulation games have the potential to be an efficient and enjoyable means of learning. A serious interactive business game, Automobile Supply Chain Management Game (AUSUM), has been introduced in this paper. Using theories learnt in class as a knowledge base, participants have to develop effective supply chain partnership strategy to enhance their supply chain networks. Deploying the game over the web encourages student interaction and group work. Most importantly the game will enable students to fundamentally grasp the impact of strategic decisions on other parts and players of the supply chain network.</p>	Games, Supply Chains, Education, Decision Making, Graphical User Interfaces, Software	<a href="https://ieeexplore.ieee.org/abstract/document/6148084/keywords">https://ieeexplore.ieee.org/abstract/document/6148084/keywords</a>	Google Scholar	A. Tobail, J. Crowe and A. Arisha, "Learning by gaming: Supply chain application," Proceedings of the 2011 Winter Simulation Conference (WSC), 2011, pp. 3935-3946, doi: 10.1109/WSC.2011.6148084.	Yes
86	<b>Steel supply chain management by simulation modelling</b>	Maqsood Ahmad Sandhu, Petri Helo, Yohanes Kristianto	2013	Benchmarking: An International Journal	<p>Purpose: The aim of this paper is to propose a simulation study of the "steel supply chain" to demonstrate the effect of inventory management and demand variety on the bullwhip effect mitigation. Design/methodology/approach: The relevant literature is reviewed, and then the simulation model proposed. Findings: This study identifies reasons for sharing information under varying levels of demand and some variants, and demonstrates the benefits of mitigating the bullwhip effect by applying a design of experiment. It is shown that the information sharing is able to mitigate the bullwhip effect in the steel supply chain by extending the order interval and minimising the order batch size. Research Limitations/implications: This study explores the factors associated with the bullwhip effect. This research is focused on built-to-order simulation, so the results are only oriented on the basis of orders; hence a simultaneous order- and forecast-based steel supply chain should be carried out in the future. Practical implications: This framework is expected to provide a convenient way to measure the optimum inventory level against a limited level of demand uncertainty, and thus enterprises can promote the supply chain coordination. Originality/ Value: An innovative simulation model of the "steel supply chain" is proposed, which includes information sharing in the simulation model. Furthermore, dynamic scheduling is shown by applying a continuous ordering and order prioritization rule to replace traditional scheduling methods.</p>	Simulation, Modelling, Steel Supply Simulation, Supply Chain Management	<a href="https://www.emerald.com/insight/content/doi/10.1108/14635771311299489/full/html?casa_token=Ni2vUc3v8oEAAAAA:TcXNVIE15NS3p5UB-trB8N4vi9BGsJq6fHAnyQrxPWgheftYTBn8Gf4iOnCvK_w7MCFtqJRatmz2B92H-t7y9ZJlhA2StqeA25OfWDFDW_9NxBgTkU">https://www.emerald.com/insight/content/doi/10.1108/14635771311299489/full/html?casa_token=Ni2vUc3v8oEAAAAA:TcXNVIE15NS3p5UB-trB8N4vi9BGsJq6fHAnyQrxPWgheftYTBn8Gf4iOnCvK_w7MCFtqJRatmz2B92H-t7y9ZJlhA2StqeA25OfWDFDW_9NxBgTkU</a>	Google Scholar	Sandhu, M.A., Helo, P. and Kristianto, Y. (2013), "Steel supply chain management by simulation modelling", Benchmarking: An International Journal, Vol. 20 No. 1, pp. 45-61. <a href="https://doi.org/10.1108/14635771311299489">https:// doi.org/ 10.1108/14635771311299489</a>	Yes

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87	<p><b>A system dynamics model based on evolutionary game theory for green supply chain management diffusion among Chinese manufacturers</b></p>	<p>Yihui Tian, Kannan Govindan, Qinghua Zhu</p>	<p>2014</p>	<p>Journal of Cleaner Production</p>	<p>In this study, a system dynamics (SD) model is developed to guide the subsidy policies to promote the diffusion of green supply chain management (GSCM) in China. The relationships of stakeholders such as government, enterprises and consumers are analyzed through evolutionary game theory. Finally, the GSCM diffusion process is simulated by the model with a case study on Chinese automotive manufacturing industry. The results show that the subsidies for manufacturers are better than that for consumers to promote GSCM diffusion, and the environmental awareness is another influential key factor.</p>	<p>Green Supply Chain Management Diffusion, System Dynamics, Evolutionary Game Theory, Automobile Manufactures, Simulation</p>	<p><a href="https://www.sciencedirect.com/science/article/abs/pii/S0959652614005551">https://www.sciencedirect.com/science/article/abs/pii/S0959652614005551</a></p>	<p>Google Scholar</p>	<p>Yihui Tian, Kannan Govindan, Qinghua Zhu (2014). A system dynamics model based on evolutionary game theory for green supply chain management diffusion among Chinese manufacturers. Journal of Cleaner Production, 80, 96-105, ISSN 0959-6526. <a href="https://doi.org/10.1016/j.jclepro.2014.05.076">https://doi.org/10.1016/j.jclepro.2014.05.076</a>.</p>	<p>Yes</p>
88	<p><b>Gamification in freight transportation: extant corpus and future agenda</b></p>	<p>Ana Carolina Tomé Klock, Eetu Wallius, Juho Hamari</p>	<p>2021</p>	<p>International Journal of Physical Distribution &amp; Logistics Management</p>	<p>Purpose: Several freight operations rely on human cognition and behavior. Tackling these aspects, gamification transforms activities to resemble game-like experiences. Since the freight transportation sector is rapidly adopting gamification, the purpose of this study is to provide an overview that synthesizes the state-of-the-art and plot future directions for research and the practice of gamifying this area. Design: A systematic review of the gamification of freight transportation was conducted. After screening 691 studies, 40 relevant studies were analyzed. Findings: Most studies found positive psychological and behavioral outcomes from gamification. Literature mainly focused on tackling the operational-level issues of road and maritime transportation modes by implementing simulation games. Research limitations/implications: Besides elaborating how gamification can improve freight transportation, the authors describe directions still uncovered by the current corpus, such as research design and temporality and the variety of modes and tasks. Practical implications: Practical implications emerged from the studies, primarily focusing on understanding users, tasks and contexts, targeting different audiences and transportation modalities, and balancing motivational affordances, while considering the demands of the freight transportation domain, including dynamic, spatially dispersed environments and cooperation between multiple stakeholders. Social implications: The transportation of goods dominates much of the global economy and ecology. Therefore, gamifying this domain has a huge societal impact potential, especially related to issues of sharing economy, safety, environmental sustainability and social media. Originality/value: Beyond providing an original overview of gamified freight transportation, this study maps current research gaps and describes practical recommendations.</p>	<p>Gamification, Serious Games, Simulation, Freight Transportation, Systematic Literature Review</p>	<p><a href="https://www.emerald.com/insight/content/doi/10.1108/IJPDLM-04-2020-0103/full/html">https://www.emerald.com/insight/content/doi/10.1108/IJPDLM-04-2020-0103/full/html</a></p>	<p>Google Scholar</p>	<p>Tomé Klock, A.C., Wallius, E. and Hamari, J. (2021), "Gamification in freight transportation: extant corpus and future agenda", International Journal of Physical Distribution &amp; Logistics Management, Vol. ahead-of-print No. ahead-of-print. <a href="https://doi.org/10.1108/IJPDLM-04-2020-0103">https://doi.org/10.1108/IJPDLM-04-2020-0103</a></p>	<p>yes</p>



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89	<p><b>The "organization" as an interdisciplinary learning zone: Using a strategic game to integrate learning about supply chain management and advertising</b></p>	<p>Anshu Saxena Arora</p>	<p>2012</p>	<p>The Learning Organization</p>	<p>Purpose: The research study seeks to explore the relationship among strategic gaming, the learning organization model and approach, and transfer of learning as key success strategies for improved individual and organizational performance and sustainable competitive advantage. This research aims to identify and elaborate on the strategic integration of interdisciplinary organizational areas leading to the development of a learning organization.          Design/methodology/approach: The research uses a cross-sectoral case study approach to learning by focusing on the newly designed Advertising-SCM (Ad-SCM) simulation consisting of a strategic organizational game where experiential learning in organizational practice was emphasized and, subsequently, student learning outcome assessment results were analyzed.          Findings: The Ad-SCM simulation game project strengthened the interdisciplinary business education for the learners by preparing them to connect to the corporate world effectively through the use of strategic gaming that modeled learning organization practice and transfer of knowledge, skills, attitudes and job relevant qualities to excel in the workplace. Interdisciplinary strategic games are valuable tools for learning and knowledge management within and across organizations, and need to be further investigated.          Research limitations/implications: The research is useful for educators to try interdisciplinary, innovative projects to reinforce learning across all organizational disciplines in an inter-organizational setting, and improve organizational performance for a sustainable competitive advantage. The research is of great value to industry professionals as it motivates critical thinking through the use of the "learning organization" as an interdisciplinary learning zone and investigates the key issues in cross-sectoral business management areas.          Practical implications: Interdisciplinary strategic gaming enables industry involvement to build up cross-disciplinary management exchanges between employees and provides real-life case scenarios for interdisciplinary research projects. This research explores the possibility of transfer of learning during the individual's academic pursuits leading to the reduction in training costs and improved return on investment for organization in the future.          Originality/value: The paper utilizes an innovative research stream highlighting the relationship among the use of strategic gaming, becoming a learning organization and transfer of learning for effective learning and knowledge management.</p>	<p>Strategic Game, Learning Organizations, Management Games, Simulation, Ad-SCM Experimental Lab Organization Game, Supply Chain Management, Advertising</p>	<p><a href="https://www.emerald.com/insight/content/doi/10.1108/09696471211201489/full/html">https://www.emerald.com/insight/content/doi/10.1108/09696471211201489/full/html</a></p>	<p>Google Scholar</p>	<p>Saxena Arora, A. (2012), "The "organization" as an interdisciplinary learning zone: Using a strategic game to integrate learning about supply chain management and advertising", The Learning Organization, Vol. 19 No. 2, pp. 121-133. <a href="https://doi.org/10.1108/09696471211201489">https://doi.org/10.1108/09696471211201489</a></p>	<p>yes</p>
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90	<b>The Supply Chain Game</b>	Peter Horscroft	1993	Logistic Information Management	<p>Describes the development of a computer-based game, "The Supply Chain Game", designed to allow teams of managers to experience the management of a multi-level supply chain. The game provides a practical and realistic learning experience based on actual data and can be used as both a competitive team exercise and as a stand-alone training aid. It is beneficial in enhancing team building, training and promoting the understanding of logistics.</p>	Computer-Based Training, Logistics, Management Games, Supply Chain Management, Team Building	<a href="https://www.emerald.com/insight/content/doi/10.1108/09576059310026223/full/html">https://www.emerald.com/insight/content/doi/10.1108/09576059310026223/full/html</a>	Google Scholar	<p>Horscroft, P. (1993), "The Supply Chain Game", Logistics Information Management, Vol. 6 No. 1, pp. 46-48. <a href="https://doi.org/10.1108/09576059310026223">https://doi.org/10.1108/09576059310026223</a></p>	yes
91	<b>Impact of bargaining power on supply chain profit allocation: a game-theoretic study</b>	Sanjay Prasad, Ravi Shankar, Sreejit Roy	2019	Journal of Advances in Management Research	<p>Purpose: The purpose of this paper is to study the impact of bargaining powers of firms in supply chain coordination. It studies selected aspects of bargaining powers, namely, impatience, breakdown probability and outside options, and uses a bargaining-theoretic approach to analyze surplus allocation in a coordinated supply chain. Design/methodology/approach: This paper proposes one-supplier-one-buyer infinite horizon supply chain coordination game, where suppliers and buyers negotiate for the allocation of supply chain surplus arising out of supply chain coordination. Various aspects of the bargaining power of the negotiating parties are modeled and the paper studies impact of power levels on the results of the bargaining game. Findings: A significance of impatience on the bargaining process and the surplus split has been established. This paper also demonstrates a rather counter-intuitive aspect of bargaining that the impatience (as perceived by the other party) can improve the bargaining position and therefore share of profits. Research limitations/implications: This paper has limited its analysis to three key components of bargaining power. Future works can study other aspects of bargaining power, namely information asymmetry, learning curve, inside options, etc. Further, the paper has considered an infinite horizon model – this assumption can be relaxed in future research. Practical implications: Equations to derive optimal split of the surplus have been derived and can be leveraged to design an autonomous bargaining agent to discover equilibrium profit splits in a cloud or e-commerce setting. Further, insights from this paper can be leveraged by managers to understand their relative bargaining power and drive to obtain the best profit split. Originality/value: This paper establishes that impatience (in terms of counter-offer probability) has a significant impact on the bargaining position and on the split of the surplus that the firm can get for themselves. It establishes the advantage of higher levels of impatience, provided the other party recognizes the impatience and factors it in their decision-making process.</p>	Negotiation, Supply Chain Management, Game Theory, Channel Coordination	<a href="https://www.emerald.com/insight/content/doi/10.1108/JAMR-10-2018-0096/full/html">https://www.emerald.com/insight/content/doi/10.1108/JAMR-10-2018-0096/full/html</a>	Google Scholar	<p>Prasad, S., Shankar, R. and Roy, S. (2019), "Impact of bargaining power on supply chain profit allocation: a game-theoretic study", Journal of Advances in Management Research, Vol. 16 No. 3, pp. 398-416. <a href="https://doi.org/10.1108/JAMR-10-2018-0096">https://doi.org/10.1108/JAMR-10-2018-0096</a></p>	Yes

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92	<b>Controlling Simulation Games Through Rule-Based Scenarios</b>	Stijn-pieter VanHouten, Alexander Verbraeck	2006	Proceedings of the 2006 Winter Simulation Conference	<p>In this paper we present a framework for scenarios in simulation games. It is used to support developing, using, and managing complex and dynamic simulation games, and it supports the achievement of the game's learning goal. Especially game facilitation is increasingly challenging due to the nature of these simulation games. The framework consists of a number of conditions, rules and actions, based on the concept of production systems from artificial intelligence, and it is presented as a component of Zeigler's experimental frame. This has been successfully used in the distributor game, which is the first of a series of management games developed for today's supply chain management challenges. Further research will focus on the extension of the set of conditions, rules and actions, and on visualizing and managing the interdependencies between the simulation game, its scenario, and the players</p>	<p>Game theory , Computational modeling , Supply chain management , Computer simulation , Management training , Supply chains , Systems engineering and theory , Learning , Production systems , Artificial intelligence</p>	<p><a href="https://ieeexplore.ieee.org/abstract/document/4117878/authors#authors">https://ieeexplore.ieee.org/abstract/document/4117878/authors#authors</a></p>	<p>Google Scholar</p>	<p>S. Van Houten and A. Verbraeck, "Controlling Simulation Games Through Rule-Based Scenarios," Proceedings of the 2006 Winter Simulation Conference, 2006, pp. 2261-2269, doi: 10.1109/WSC.2006.323051.</p>	<p>Yes</p>
93	<b>Sustainable supply chain management with pricing, greening and governmental tariffs determining strategies: A game-theoretic approach</b>	Seyed Reza Madani, Morteza Rasti-Barzoki	2017	Computers & Industrial Engineering	<p>Despite the considerable influence of the governmental regulations on the green supply chain, in the most of the studies in the literature of green supply chain, almost the role of the government and interactions between the government and supply chains members' decisions are disregarded. In this study, a competitive mathematical model of government as the leader and two competitive green and non-green supply chains as the followers is developed and for the first time in this paper, pricing policies, greening strategies and governance tariffs determining in supply chains competition under government financial intervals are discussed. In the presented framework, the government seeks social benefits and determines subsidy and tax rates for green and non-green products respectively. The sale prices of products and the green degree of the green product are supply chains' decision variables. In centralized and decentralized models, the optimal values of decision variables are gained and some important sensitivity analyses of governance decisions are done. In the governmental decisions area, it is observed that the impact of raising subsidy rate is significantly more than tax rate and it leads to increase in profits of government and supply chains and sustainability of products. Also among the competition of supply chains, cooperating between members makes more profit for them and leads to produce more eco-friendly products. Previous article in issue</p>	<p>Pricing Green, supply chain management, Competitive supply chains, Sustainable governance policies, Subsidy and tax rate, Game theory</p>	<p><a href="https://www.sciencedirect.com/science/article/abs/pii/S0360835217300360">https://www.sciencedirect.com/science/article/abs/pii/S0360835217300360</a></p>	<p>Google Scholar</p>	<p>Seyed Reza Madani, Morteza Rasti-Barzoki (2017). Sustainable supply chain management with pricing, greening and governmental tariffs determining strategies: A game-theoretic approach. Computers &amp; Industrial Engineering, 105, 287-298, ISSN 0360-8352, https://doi.org/10.1016/j.cie.2017.01.017.</p>	<p>yes</p>

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94	<b>Distributional yrobust games with an application to supply chain</b>	Qu, Shaojian; Meng, Dehua; Zhou, Yongyi; Dai, Yeming	2017	Journal of Intelligent & Fuzzy Systems	<p>In this paper, we propose a distributionally robust optimization approach for N-player, nonzero sum finite state/action games with incomplete information where the payoff matrix is stochastic with an imprecise distribution which is assumed to be attached to an a-prior known set. Our model is different from the robust game theory which presents a robust optimization approach to game theory with the uncertain payoff matrix in a compact convex set without probabilistic information which can lead to overly conservative solutions. A distributionally robust approach is used to cope with our setting in the games by combining the stochastic optimization approach and the robust optimization approach which can be called the distributionally robust games. We show that the existence of the equilibria for the distributionally robust games. The computation method for equilibrium point, with the first- and second information about the uncertain payoff matrix, can be reformulated as semidefinite programming problems which can be tractably realized. A two-echelon supply chain competition with demand uncertainty is analyzed by applying the distributionally robust game theory.</p>	Game theory, distributionally robust optimization, semidefinite programming, equilibrium point, supply chain	<a href="https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs169324">https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs169324</a>	Google Scholar	<p>Qu Shaojian, Meng Dehua, Zhou Yongyi, Dai Yeming (2017). Distributionally Robust Games with an Application to Supply Chain. Journal of Intelligent &amp; Fuzzy Systems, 33 (5), 2749-2762. <a href="https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs169324">https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs169324</a>.</p>	yes
95	<b>A SURVEY OF STACKELBERG DIFFERENTIAL GAME MODELS IN SUPPLY AND MARKETING CHANNELS</b>	Xiuli He, Ashutosh Prasad, Suresh P. Sethi, Genaro J. Gutierrez	2007	Journal of Systems Science and Systems Engineering	<p>Stackelberg differential game models have been used to study sequential decision making in noncooperative games in diverse fields. In this paper, we survey recent applications of Stackelberg differential game models to the supply chain management and marketing channels literatures. A common feature of these applications is the specification of the game structure: a decentralized channel composed of a manufacturer and independent retailers, and a sequential decision procedure with demand and supply dynamics and coordination issues. In supply chain management, Stackelberg differential games have been used to investigate inventory issues, wholesale and retail pricing strategies, and outsourcing in dynamic environments. The underlying demand typically has growth dynamics or seasonal variation. In marketing, Stackelberg differential games have been used to model cooperative advertising programs, store brand and national brand advertising strategies, shelf space allocation, and pricing and advertising decisions. The demand dynamics are usually extensions of the classical advertising capital models or sales-advertising response models. We begin by explaining the Stackelberg differential game solution methodology and then provide a description of the models and results reported in the literature.</p>	Stackelberg differential games, supply chain management, marketing channels, open-loop equilibria, feedback policies, channel coordination, optimal control	<a href="https://link.springer.com/content/pdf/10.1007/s11518-007-5058-2.pdf">https://link.springer.com/content/pdf/10.1007/s11518-007-5058-2.pdf</a>	Google Scholar	<p>Xiuli He, Ashutosh Prasad, Suresh P. Sethi, Genaro J. Gutierrez (2007). A Survey of Stackelberg Differential Game Models in Supply and Marketing Channels. Journal of Systems Science and Systems Engineering, 16 (4), 385-413. <a href="https://link.springer.com/content/pdf/10.1007/s11518-007-5058-2.pdf">https://link.springer.com/content/pdf/10.1007/s11518-007-5058-2.pdf</a>.</p>	No

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96	<b>Computing core allocations in cooperative games with an application to cooperative procurement</b>	J. Drechsel, A. Kimms	2010	International Journal of Production Economics	Cooperative game theory defines several concepts for distributing outcome shares in a cooperative game with transferable utilities. One of the most famous solution concepts is the core which defines a set of outcome allocations that are stable such that no coalition has an incentive to leave the grand coalition. In this paper we propose a general procedure to compute a core element (or to detect that no core allocation exists) which is based on mathematical programming techniques. The procedure proposed in this paper can be applied to a wide class of cooperative games where the characteristic function is given by the optimum objective function value of a complex optimization problem. For cooperative procurement, which is an example from the field of supply chain management where some literature on the core concept already exists, we prove the applicability and provide computational results to demonstrate that games with 150 players can be handled.	Cooperative game theory Core Mathematical programming Procurement Lot sizing Inventory games Supply chain management	<a href="https://www.sciencedirect.com/science/article/abs/pii/S0925527310002689">https://www.sciencedirect.com/science/article/abs/pii/S0925527310002689</a>	Google Scholar	J. Drechsel, A. Kimms (2010). Computing core allocations in cooperative games with an application to cooperative procurement. International Journal of Production Economics, 128 (1), 310-321, ISSN 0925-5273. <a href="https://doi.org/10.1016/j.ijpe.2010.07.027">https://doi.org/10.1016/j.ijpe.2010.07.027</a> .	Yes
97	<b>Using the Case Study Method to Enhance the Learning Skills of Supply Chain Management Students</b>	M. Naude, E. Derera	2014	SAGE Journals	Higher education institutions need to align themselves more closely with the needs of businesses and equip students with the skills and experience necessary to make them more successful and value-adding employees. This paper explores undergraduate student perceptions of the effectiveness of the case study teaching and learning method in the discipline of supply chain management. This exploratory study collected data using a questionnaire that was administered to 168 third-year registered students at the University of KwaZulu-Natal, South Africa. The findings reveal that the students perceive the case study teaching and learning method to be beneficial to their learning skills and hence that it increases their chances of securing employment.	Supply Chain Management, Teaching and Learning, Case study method, Academic development	<a href="https://journals.sagepub.com/doi/pdf/10.5367/ihe.2014.0218">https://journals.sagepub.com/doi/pdf/10.5367/ihe.2014.0218</a>	SAGE Pub	Naude, M., & Derera, E. (2014). Using the Case Study Method to Enhance the Learning Skills of Supply Chain Management Students. Industry and Higher Education, 28(5), 351–359. <a href="https://doi.org/10.5367/ihe.2014.0218">https://doi.org/10.5367/ihe.2014.0218</a>	Yes
98	<b>A Supply-Chain Management Perspective of Online Education</b>	Albert H. Huang	2000	SAGE Journals	For-profit online education is a quickly emerging industry. In recent years, many education providers have established Web sites where they offer courses on a large selection of subjects. Businesses from every corner of the commercial world have expressed serious interest in these potentially lucrative opportunities. Due to the relatively short history of online education, many components along the process are not well developed or well connected. This paper describes and discusses the supply chain of online education, its components, and the technology applications each component uses. It also reviews the weaknesses of current technology applications on the supply chain and proposes development opportunities to better integrate the online education industry.	Supply Chain Management, Online Education	<a href="https://journals.sagepub.com/doi/pdf/10.2190/15JQ-6JCX-QE6B-RTAV">https://journals.sagepub.com/doi/pdf/10.2190/15JQ-6JCX-QE6B-RTAV</a>	SAGE Pub	Huang, A. H. (2000). A Supply-Chain Management Perspective of Online Education. Journal of Educational Technology Systems, 29(2), 93–106. <a href="https://doi.org/10.2190/15JQ-6JCX-QE6B-RTAV">https://doi.org/10.2190/15JQ-6JCX-QE6B-RTAV</a>	Yes

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99	<b>The Supply Chain Management Applied Learning Center: A university–industry collaboration</b>	Gregory E. Benson, Ngan N. Chau	2019	SAGE Journals	In today's changing and intensely competitive global environment, postsecondary educational programs must find ways to adapt their method of delivery to meet the educational expectations of students and talent needs of "real-world" employers. This is especially true in the evolving field of supply chain management (SCM). The purpose of this qualitative study was to assess the effectiveness of the SCM Applied Learning Center (referred to as the "Center") at a Midwestern university in the United States by understanding its perceived value through its stakeholders—that is, participating companies and students. This understanding was achieved by interviewing stakeholders who used the Center during its initial 18-month rollout period. The data analysis from this study resulted in the emergence of the following themes: (1) developing transferable skills, (2) accelerating applied learning, (3) cultivating personal relationships, and (4) supporting business improvement. The establishment of the Center and the corresponding results from this study contribute to the literature associated with university–industry collaboration, SCM education, and the evolving role of higher education. This work provides a template to programs interested in improving their working relationship with business partners through the implementation of comparable industry collaboration activities, while at the same time providing skill improvement opportunities for their students.	Supply Chain Management, Applied learning, Learning innovation	<a href="https://journals.sagepub.com/doi/full/10.1177/0950422219827188">https://journals.sagepub.com/doi/full/10.1177/0950422219827188</a>	SAGE Pub	Benson, G. E., & Chau, N. (2019). The Supply Chain Management Applied Learning Center: A university–industry collaboration. <i>Industry and Higher Education</i> , 33(2), 135–146. <a href="https://doi.org/10.1177/0950422219827188">https://doi.org/10.1177/0950422219827188</a>	Yes
100	<b>A Web-Based Simulation Game for Teaching Supply Chain Management</b>	Ming-Ling Chuang	2020	SAGE Journals	Supply chain management (SCM) is a complex business discipline because it combines the concepts of forecasting, inventory management, logistics and distribution, vertical and horizontal integration, and global issues. This complexity creates a challenge when teaching the concepts to both undergraduate and graduate students. A web-based computer simulation can be very useful in helping students to grasp the difficult concepts. It helps students to think systematically and logically as they progress through scenarios with uncertainties and complexity. This article provides detailed implementation protocols for using a web-based SCM game including game descriptions, classroom pedagogy, and simulation assessment. Recommendations are also provided based on the instructor's experience.	Supply chain management, game based learning, experiential learning, teaching method	<a href="https://journals.sagepub.com/doi/full/10.1177/2379298119871469">https://journals.sagepub.com/doi/full/10.1177/2379298119871469</a>	SAGE Pub	Chuang, M.-L. (2020). A Web-Based Simulation Game for Teaching Supply Chain Management. <i>Management Teaching Review</i> , 5(3), 265–274. <a href="https://doi.org/10.1177/2379298119871469">https://doi.org/10.1177/2379298119871469</a>	Yes
101	<b>Minimizing the bullwhip effect in a supply chain: a simulation approach using the beer game</b>	Abdullah A Alabdulkarim	2020	SAGE Journals	In this research, the aim is to find the most appropriate inventory management logic and set of rules along with the optimal decision values that will minimize the bullwhip effect in a supply chain, taking the beer game supply chain as a reference model. In order to achieve this, a simulation model of the beer game supply chain is developed along with an ordering strategy based on the Economic Order Quantity with additional rules, such as no backorder policy, vendor-managed inventory, and taking into consideration route deliveries, all of which are implemented in the ordering algorithm. In the literature, there is extensive research conducted on the causes of the bullwhip effect and in the presence of certain inventory management policies. However, these terms are rarely combined with simulation modeling to provide satisfactory proven results. In this article, our proposed ordering algorithm avoids the bullwhip effect to a very large extent. The results show that approximately half the cost is incurred compared to recent studies with the same settings.	Supply Chain Management, Simulation, Beer game	<a href="https://journals.sagepub.com/doi/full/10.1177/0037549720930284">https://journals.sagepub.com/doi/full/10.1177/0037549720930284</a>	SAGE Pub	Alabdulkarim, A. A. (2020). Minimizing the bullwhip effect in a supply chain: a simulation approach using the beer game. <i>SIMULATION</i> , 96(9), 737–752. <a href="https://doi.org/10.1177/0037549720930284">https://doi.org/10.1177/0037549720930284</a>	Yes

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102	<b>Distributed Supply Chain Simulation as a Decision Support Tool for the Semiconductor Industry</b>	Peter Lendermann, Nirupam Julka, Boon Ping Gan, Dan Chen, Leon F. McGinnis, Joel P. McGinnis	2003	SAGE Journals	The need for better understanding, control, and optimization of supply chains is being recognized more than ever in the new economy. Simulation holds a great potential in portraying the dynamic evolution of supply chains and providing appropriate decision support to address challenges arising from high variability and stochastic uncertainty. Realizing high-fidelity supply chain simulation will require integration of individual supply chain component simulation models and planning systems, shielding to prevent sensitive data from being shared indiscriminately, and even the geographical distribution of the supply chain component models. The authors discuss various conceptual and technical issues that have been successfully addressed to realize a prototype of distributed semiconductor supply chain simulation as well as implementation approaches that can be pursued. The prototype emulates a semiconductor supply chain consisting of two wafer fabs, an assembly and test facility, a distribution center, a warehouse, a supply chain planning module, a logistics provider, and customers.	Supply chain, Simulation, Supply chain planning module	<a href="https://journals.sagepub.com/doi/pdf/10.1177/0037549703255635">https://journals.sagepub.com/doi/pdf/10.1177/0037549703255635</a>	SAGE Pub	Lendermann, P., Julka, N., Gan, B. P., Chen, D., McGinnis, L. F., & McGinnis, J. P. (2003). Distributed Supply Chain Simulation as a Decision Support Tool for the Semiconductor Industry. SIMULATION, 79(3), 126–138. <a href="https://doi.org/10.1177/0037549703255635">https://doi.org/10.1177/0037549703255635</a>	Yes
103	<b>Design and Implementation of a Supply Chain Learning Platform</b>	E. W. T. Ngai, Karen Ka-Leung Moon, J. K. L. Poon	2012	SAGE Journals	This study describes the design and implementation of a simulation role-playing game (RPG), the web-based Supply Chain Management Game (WSCMG), which provides an opportunity for business and management students to experience the business environment in a virtual context. In the design and development stage, generic supply chain (SC) activities were analyzed, and a web-based SC management (SCM) system developed to support the RPG. In the implementation stage, the game was tested on a group of undergraduate students specializing in the study of SCM. As part of the learning assessment, the student players were required to report their SC performance and sales figures using an inbuilt online evaluation system which also facilitated peer and tutor reviews. An evaluation was then conducted to collect students' and tutors' views on the game's effectiveness. Positive feedback was received, supporting the proposition that the WSCMG can be an effective tool in facilitating self-, peer-, and tutor-directed teaching and learning.	Supply Chain Management, Simulation game, Web-based supply chain management game	<a href="https://journals.sagepub.com/doi/pdf/10.2190/EC.47.3.d">https://journals.sagepub.com/doi/pdf/10.2190/EC.47.3.d</a>	SAGE Pub	Ngai, E. W. T., Moon, K. K.-L., & Poon, J. K. L. (2012). Design and Implementation of a Supply Chain Learning Platform. Journal of Educational Computing Research, 47(3), 293–327. <a href="https://doi.org/10.2190/EC.47.3.d">https://doi.org/10.2190/EC.47.3.d</a>	Yes
104	<b>Simulation-based planning and optimization in multi-echelon supply chains</b>	Galina Merkurjeva, Yuri Merkurjev, Hendrik Vanmaele	2011	SAGE Journals	In this paper we present a methodology and simulation environment for solving multi-echelon supply chain planning and optimization problems for industries with batch and semi-batch processes. The introduced methodology is aimed to analyze efficiency of a specific planning policy over the product life cycle within the entire supply chain for automated switching from a non-cyclic to cyclic and to optimize the cyclic planning policy for products at the maturity phase. For optimization of a multi-echelon cyclic schedule, the simulation optimization algorithm developed is based on integration of the multi-objective genetic algorithm (GA) and response surface-based local search to improve GA solutions. The comparative analysis of planning policies is based on estimation of the difference between mean values of their total costs by using the Paired-t confidence interval method and evaluation of an additional cost of the cyclic schedule. The simulation environment allows one to describe input data to build the supply chain network and store it in an external file, computing effective planning policies, automatically generating and running a network simulation model, generating production rules for switching from one planning policy to another and optimizing parameters of a multi-echelon cyclic schedule. Finally, a business case is described that illustrates the practical application of the presented methodology.	Supply chain, Simulation-based planning, Simulation environment	<a href="https://journals.sagepub.com/doi/pdf/10.1177/0037549710366265">https://journals.sagepub.com/doi/pdf/10.1177/0037549710366265</a>	SAGE Pub	Merkurjeva, G., Merkurjev, Y., & Vanmaele, H. (2011). Simulation-based planning and optimization in multi-echelon supply chains. SIMULATION, 87(8), 680–695. <a href="https://doi.org/10.1177/0037549710366265">https://doi.org/10.1177/0037549710366265</a>	Yes

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105	<b>Active Learning Approach in Teaching Logistics and Supply Chain Management</b>	Andrejs Romanovs, Yuri Merkuryev	2019	Ukraine Conference on Electrical and Computer Engineering (UKRCON)	Recent developments in the field of Information Technology call for a specific reconsideration of the traditional educational methods and facilitate development of new teaching and learning methods and tools, opening it for a wider scope of concerned persons. Active teaching and learning methods as part of educational methodology are widely used at the universities across the European community, putting the larger responsibility of learning at the hands of the learners themselves. One of the major challenges is effective addressing the learning needs of the new generation of students. Postgraduate education in the field of logistics and supply chain management (LSCM) must keep it in mind in order to promote a suitable answer to the LSCM labor market needs. This is accomplished well by a master programme in LSCM with a European dimension emerged from the synergy of international cooperation between Academia and the professional bodies. This paper shares the empirical study on implementation of Master study programme of Logistics and Supply Chain Management in the Riga Technical University and extensive use of active and innovative learning approach.	Supply Chain Management, Active Learning, Teaching methods	<a href="https://ieeexplore.ieee.org/document/8880019">https://ieeexplore.ieee.org/document/8880019</a>	IEEE Explore	Romanovs, A., & Merkuryev, Y. (2019). Active Learning Approach in Teaching Logistics and Supply Chain Management. 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering (UKRCON). Published. <a href="https://doi.org/10.1109/ukrcon.2019.8880019">https://doi.org/10.1109/ukrcon.2019.8880019</a>	No
106	<b>An integrated framework for research and education supply chain for the universities</b>	Md. Mamun Habib; Chamnong Jungthirapanich	2008	International Conference on Management of Innovation and Technology	The exploratory study addresses the education supply chain, the research supply chain as major constituents in integrated educational supply chain management for the universities. As different parties are involved in the universities, this paper depicts the single-level, multi-tier, bi-directional supply chain for producing graduates with desirable quality and significant research outcomes for the end customer, i.e. the society. This framework provides two main contributions to the society, including human resource contribution and research contribution. The proposed conceptual framework for the universities provides a novel approach for decision makers of each supply chain components to review and appraise their performance toward fulfillment of ultimate goals, i.e. producing high-caliber graduates and high-impact research outcomes for the betterment of the society.	Supply Chain Management, Integrated framework, Education	<a href="https://ieeexplore.ieee.org/document/4654509">https://ieeexplore.ieee.org/document/4654509</a>	IEEE Explore	Habib, M. M., & Jungthirapanich, C. (2008). An integrated framework for research and education supply chain for the universities. 2008 4th IEEE International Conference on Management of Innovation and Technology. Published. <a href="https://doi.org/10.1109/icmit.2008.4654509">https://doi.org/10.1109/icmit.2008.4654509</a>	No
107	<b>A descriptive study on supply chain management model for the academia</b>	B. B. Pathik; M. T. Chowdhury; Md. M. Habib	2012	International Conference on Management of Innovation & Technology (ICMIT)	This descriptive study illustrates the first practical analysis of ITESCM (Integrated Tertiary Educational Supply Chain Management) model which was developed by Habib [10] for the academia, especially for tertiary educational institutions. ITESCM model addresses the integrated form of supplied inputs, supplied outputs, education supply chain, research supply chain and educational management for the Universities. The model delivers two contributions to the consumer, i.e. the society, including human resource contribution and research contribution in terms of high caliber graduates and high impact research outcomes respectively. As a case study approach, the researchers applied the model on a leading University in Bangladesh through MLR equations. 307 respondents, representing University administrators, faculty and staff, graduates, employers etc. were participated in the survey to justify quality outcomes towards the end customer of the educational supply chain.	Supply Chain Management, Integrated Education	<a href="https://ieeexplore.ieee.org/document/6225803">https://ieeexplore.ieee.org/document/6225803</a>	IEEE Explore	Pathik, B. B., Chowdhury, M.T., & Habib, M. M. (2012). A descriptive study on supply chain management model for the academia. 2012 IEEE International Conference on Management of Innovation & Technology (ICMIT). Published. <a href="https://doi.org/10.1109/icmit.2012.6225803">https://doi.org/10.1109/icmit.2012.6225803</a>	No



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108	<b>Supply chain dynamic simulation with information coordination</b>	Jianfeng Li, Jun Zhai, Yan Chen, Yuhong Jiang	2010	International Conference on Education Technology and Computer	In current supply chain simulation research, one of critical questions is how to determine the value of the information coordination. This paper contributes to the existing literature by solving that problem. At first, a two level supply chain simulation model through system dynamics (SD) approach is established, and then, the Simulink tool is adopted for that model. Through the simulation, it can be seen that the information coordination has great influence on the operation of the whole supply chain. Some little improvement for the information coordination can bring out large profit indirectly. That change may be calculated exactly in a special simulation condition. Thus, the value of the information coordination can be gained. What's more, the investment project can be evaluated in the view of supply chain systematically and entirely.	Supply chain management, Supply chain simulation, System dynamics, Investment evaluation, Project management	<a href="https://ieeexplore.ieee.org/document/5529250/">https://ieeexplore.ieee.org/document/5529250/</a>	IEEE Explore	Jianfeng Li, Jun Zhai, Yan Chen, & Yuhong Jiang. (2010). Supply chain dynamic simulation with information coordination. 2010 2nd International Conference on Education Technology and Computer. Published. <a href="https://doi.org/10.1109/icetc.2010.5529250">https://doi.org/10.1109/icetc.2010.5529250</a>	No
109	<b>A Study of the Web-based Learning System for Supply Chain Management Course Teaching</b>	I-Fan Liu, Meng Chang Chen, Yeali Sun	2006	International Conference on Advanced Learning Technologies (ICALT'06)	This research mainly investigates how to utilize Internet technology to assist the teaching of "supply chain management". It uses the related Web-based learning theories as the foundation to develop a Web-based learning system. Researchers use observations, questionnaires, and learner portfolio records to collect data for quantitative and qualitative analyses. The major findings of this research are as follows: 1.) through the use of this Web-based learning system, students show obvious improvement in learning, and it also serves as a supplement for the insufficiency of traditional classroom learning. 2.) Among peer students, there shows a high rate of interaction. 3.) From verification, the design of this Web-based learning system meets the related learning theories	Web-based learning system, Supply chain management course, Teaching, Learning improvement	<a href="https://ieeexplore.ieee.org/document/1652377/">https://ieeexplore.ieee.org/document/1652377/</a>	IEEE Explore	I-Fan Liu, Meng Chang Chen, & Yeali Sun. (2006). A Study of the Web-based Learning System for Supply Chain Management Course Teaching. Sixth IEEE International Conference on Advanced Learning Technologies (ICALT'06). Published. <a href="https://doi.org/10.1109/icalt.2006.1652377">https://doi.org/10.1109/icalt.2006.1652377</a>	No
110	<b>Simulation model establishment and analysis for dynamic supply chain network equilibrium</b>	Xian-Wu Hu, Chun-Xian Teng	2009	International Conference on Computer Science & Education	Dynamic supply chain network equilibrium is one of hot topics in supply chain management study. This article uses multi-intelligent multi-agent systems to establish simulation model for dynamic supply chain network equilibrium and analysis, through analysis of the example of the use of genetic algorithms to verify the validity of the model; and put forward the direction of future research.	Supply Chain Management, Simulation model, Analytical models,	<a href="https://ieeexplore.ieee.org/document/5228391/">https://ieeexplore.ieee.org/document/5228391/</a>	IEEE Explore	Hu, X. W., & Teng, C. X. (2009). Simulation model establishment and analysis for dynamic supply chain network equilibrium. 2009 4th International Conference on Computer Science & Education. Published. <a href="https://doi.org/10.1109/iccse.2009.5228391">https://doi.org/10.1109/iccse.2009.5228391</a>	No
111	<b>A Case for Teaching: Descriptive Modeling for Supply Chain Information</b>	Martha. H. Carrillo, Victoria Labajo	2018	World Engineering Education Conference (EDUNINE)	Descriptive models pretend to give a representation of the reality of any system that allows to study its real operation in an easy and flexible way to finally propose solutions and possible scenarios. The contributions of this paper include the following: 1. The design of a case study of a descriptive modeling for order supply chains; 2. An analysis of supply chains according to graph theory; 3. A simulation of one small business practical case to validate the model. Findings are related with using a case study with graph theory to analyze supply chain models in classroom in order to teach to the students the application in the companies of the theories seen in class.	Supply Chain Management, Simulation, Teaching method	<a href="https://ieeexplore.ieee.org/document/8450963">https://ieeexplore.ieee.org/document/8450963</a>	IEEE Explore	Carrillo, M. H., & Labajo, V. (2018). A Case for Teaching: Descriptive Modeling for Supply Chain Information. 2018 IEEE World Engineering Education Conference (EDUNINE). Published. <a href="https://doi.org/10.1109/edunine.2018.8450963">https://doi.org/10.1109/edunine.2018.8450963</a>	No

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112	<b>Supply Chain Management Implementation in Perspective of Knowledge Transfer</b>	Chun-Yu Chen; Ching-Yi Chen; Wei-Shuo Lo	2006	International Conference on Systems, Man and Cybernetics	In this paper we will propose an integrated application framework and implementation processes for solving problems of supply chain management in knowledge transfer aspect. The supply chain management not only is important in controlling business by itself, but also provides a new solution and opportunity for business in building e-Business competitive strategy. The SCM implementation often entails transferring the business knowledge incorporated in adopting organizations. The knowledge-based view of the firms suggests that knowledge is the firm's key resource for creating and sustaining economic rent. In this paper, we try to find out and discuss a framework that could solve the knowledge crash and knowledge conflicts problems of SCM integration. We propose enterprises suggestions to put efforts on solving conflicts in integration process, and to implement e-Business technology concerning organization's adaptive capability and knowledge transfer.	Supply Chain Management, Educational technology, Business knowledge, Integrated application framework	<a href="https://ieeexplore.ieee.org/document/4274185">https://ieeexplore.ieee.org/document/4274185</a>	IEEExplore	Chen, C. Y., Chen, C. Y., & Lo, W. S. (2006). Supply Chain Management Implementation in Perspective of Knowledge Transfer. 2006 IEEE International Conference on Systems, Man and Cybernetics. Published. <a href="https://doi.org/10.1109/icsmc.2006.385179">https://doi.org/10.1109/icsmc.2006.385179</a>	No
113	<b>ThinkLog: Interactive learning for supply chain management</b>	Lindawati; Eko Nugroho; Rio Fredericco; Za'aba Bin Abdul Rahim; Robert de Souza	2017	International Conference on Teaching, Assessment, and Learning for Engineering (TALE)	Serious games have been used to facilitate learning and training processes with examples of implementation in healthcare and military training. The learning objectives of these games are to help the players understand specific and complex concepts. This paper focuses on developing a board game, named ThinkLog, to facilitate learning on Supply Chain Management (SCM). It serves as a face-to-face interactive learning tool that can be expended to cover variations of scenarios. Using two interactive sessions with government officials, we are able to validate that ThinkLog was effective in deepening the players' understanding of SCM concepts.	Educational Games, Supply chains, Supply chain management, Tools	<a href="https://ieeexplore.ieee.org/document/8252302/">https://ieeexplore.ieee.org/document/8252302/</a>	IEEExplore	Lindawati, Nugroho, E., Fredericco, R., Rahim, Z. B.A., & de Souza, R. (2017). ThinkLog: Interactive learning for supply chain management. 2017 IEEE 6th International Conference on Teaching, Assessment, and Learning for Engineering (TALE). Published. <a href="https://doi.org/10.1109/tale.2017.8252302">https://doi.org/10.1109/tale.2017.8252302</a>	No
114	<b>An integrated use of spreadsheets software in logistics education</b>	Changbing Jiang	2009	International Conference on Computer Science & Education	This article reviews the advantages and disadvantages of computer programming and spreadsheets modelling in logistics education, and describes using Microsoft Excel and other general purpose packages in the classroom. One of these approaches, an integrated spreadsheets software, has been used in recent years in a logistics systems management course with a large enrolment at a major university. The article illustrates how, under the integrated paradigm, various computer software packages are integrated in the course to form a unique learning environment. At the last of the article, we give an illustration of the use of Microsoft Excel in inventory control.	Logistics, Supply Chain Management, Integrated education	<a href="https://ieeexplore.ieee.org/document/5228302">https://ieeexplore.ieee.org/document/5228302</a>	IEEExplore	Changbing Jiang. (2009). An integrated use of spreadsheets software in logistics education. 2009 4th International Conference on Computer Science & Education. Published. <a href="https://doi.org/10.1109/iccse.2009.5228302">https://doi.org/10.1109/iccse.2009.5228302</a>	No

## SCM Gamification

115	<b>Effectiveness of analogue business game for learning elementary corporate management : An experimental approach</b>	Tomomi Kaneko; Ryoju Hamada; Masahiro Hiji	2016	International Conference on Knowledge, Information and Creativity Support Systems (KICSS)	For future success in business, students study diligently and acquire significant amounts of specialized knowledge at the university. In the real business world, specialized knowledge alone is insufficient to produce or find business solutions. Therefore, they must learn corporate management. Nevertheless, it is hard to teach corporate management to students during a short time at the university level using conventional teaching methods alone. As one of the methods to solve the problem, the authors attempt to apply BASE business games, participation-type education technique, to the teaching of elementary corporate management as experimental. In this paper, the authors introduce a concept of SCC and SCC2 games, which is one of BASE business games. As one trial case, the authors apply them to the lecture of SIIT Thammasat University and conduct the questionnaire research for checking the effectiveness of this teaching method. These results show that students learned elementary corporate management and acquired a holistic view of directorate as experimental. Therefore, this teaching method is suitable for grasping elementary corporate management.	Educational game, Business game, Supply chains, Supply chain management, Teaching method	<a href="https://ieeexplore.ieee.org/document/7951417/">https://ieeexplore.ieee.org/document/7951417/</a>	IEEE Xplore	Kaneko, T., Hamada, R., & Hiji, M. (2016). Effectiveness of analogue business game for learning elementary corporate management : An experimental approach. 2016 11th International Conference on Knowledge, Information and Creativity Support Systems (KICSS). Published. <a href="https://doi.org/10.1109/kicss.2016.7951417">https://doi.org/10.1109/kicss.2016.7951417</a>	No
116	<b>The blood supply game</b>	Navonil Mustafee ; Korina Katsaliaki	2010	Winter Simulation Conference	Product and service supply chains are usually complex and difficult to manage. Making students of supply chain management (SCM) courses realise these complex principles of real life problems is not as easy. Business games played in the class or in computer labs is a pedagogical way which assists the understanding of theories, put ideas into action and educates in an interactive and enjoyable way. In this paper, we present a business game which mimics the supply chain of blood units from donors to patients. The game models the material and information flows in a production-distribution channel serving patients in hospitals which need blood transfusions according to doctors' requests in different periods and with independent distributions. The game is played by individuals on a PC with Microsoft Excel exploiting a VBA environment. The game can be an effective teaching tool.	Supply Chain Management, Business Logistics, Education, Teaching method	<a href="https://ieeexplore.ieee.org/document/5679151">https://ieeexplore.ieee.org/document/5679151</a>	IEEE Xplore	Mustafee, N., & Katsaliaki, K. (2010). The blood supply game. Proceedings of the 2010 Winter Simulation Conference. Published. <a href="https://doi.org/10.1109/wsc.2010.5679151">https://doi.org/10.1109/wsc.2010.5679151</a>	No
117	<b>Design of a simulation package to enhance student learning in managing warehouse resources</b>	Y. S. Yiu Eddy; L. H. Choy Edmond; K. L. Choy	2010	International Conference on Supply Chain Management and Information	This project aims at developing an simulation-based educational software for enhancing performance in teaching and learning purpose. Simulation software has been widely used as a teaching tool in recent years due to the positive effects it brings to students. Pen-and-paper teaching method has been pulled out from learning culture. Students are encouraged to learn in an integrative environment and to motivate by themselves. This project comprises of all the management issues starting from the beginning till the evaluation of this project. It would bring readers to walk through the critical milestones in the construction of the proposed simulation package, SimWarehouse™.	Simulation game, Learning, Supply Chain Management, Warehouse management	<a href="https://ieeexplore.ieee.org/document/5681737">https://ieeexplore.ieee.org/document/5681737</a>	IEEE Xplore	Eddy, Y. S. Y., Edmond, L. H. C., & Choy, K. L. (2010). Design of a simulation package to enhance student learning in managing warehouse resources. International Conference on Supply Chain Management and Information. Published.	No

SCM Gamification

118	<b>Embedding Mixed Reality in Humanitarian Logistics Gaming</b>	Linda William; Za'Aba Bin Abdul Rahim; Ivan Boo; Robert de Souza	2018	International Conference on Teaching, Assessment, and Learning for Engineering (TALE)	This paper presents an early work on designing a serious game for humanitarian logistics using Mixed Reality (MR). MR is used to enhance engagement and immersion for a more effective learning. This is an MR extension to the existing Disaster Relief game which serves as a role-based simulation game for humanitarian logistics strategies. The main objective of the game is to improve knowledge on the importance and complexity of supply chain management planning and execution in humanitarian crises. The MR extension is motivated by the real need to improve the game visualization and simplicity to enable the players to absorb the learning objectives faster. We discuss the motivation, benefits and implementation of embedding MR in this game.	Logistics, Supply Chain Management, Integrated education, Effective learning, Education	<a href="https://ieeexplore.ieee.org/document/8615265">https://ieeexplore.ieee.org/document/8615265</a>	IEEE Explore	William, L., Bin Abdul Rahim, Z., Boo, I., & de Souza, R. (2018). Embedding Mixed Reality in Humanitarian Logistics Gaming. 2018 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE). Published. <a href="https://doi.org/10.1109/tale.2018.8615265">https://doi.org/10.1109/tale.2018.8615265</a>	No
119	<b>Engineering students game to green the automobile supply chain</b>	Jacqueline A. Isaacs; Jay T. Laird; Thomas P. Seager	2008	International Symposium on Electronics and the Environment	Solutions to environmental problems associated with human endeavor are generally interconnected with many factors, including technological and economic constraints - often requiring a systems engineering approach. To create a culture for change in industry, students must begin to understand how to assess the tradeoffs among economic, technical, and environmental factors if they are to become socially, as well as fiscally, responsible designers and leaders. Because of their unique learning style and technology expertise, the millennial generation will bring significant learning and teaching challenges to the classroom. This project brings the growing concerns of environmental awareness and diverse learning styles together in an innovative learning model to educate future engineering leaders. This research will explore the extent to which students increase their understanding of complex tradeoffs among environmental, economic, and technological issues in the auto industry through repeated play of a collaborative cross disciplinary computer game.	Educational game, Teaching method, Supply Chains	<a href="https://ieeexplore.ieee.org/document/4562898">https://ieeexplore.ieee.org/document/4562898</a>	IEEE Explore	Isaacs, J. A., Laird, J. T., & Seager, T. P. (2008). Engineering students game to green the automobile supply chain. 2008 IEEE International Symposium on Electronics and the Environment. Published. <a href="https://doi.org/10.1109/isee.2008.4562898">https://doi.org/10.1109/isee.2008.4562898</a>	No