How to Improve Data Quality in Supply Chain? A Literature Survey

Jay Daniel
Program Leader, MSc Global Operations and Supply Chain Management
Derby Business School, University of Derby
Kedleston Rd, Derby DE22 1GB, UK
j.daniel@derby.ac.uk

Drew Stapleton
Professor of Supply Chain Management
Mechanical and Industrial Engineering Department, University of Wisconsin La Crosse
1725 State Street La Crosse, WI 54601, USA
astapleton@uwlax.edu

Abstract

Data quality in supply chains is getting greater attention from both industries and researchers. As poor data quality could cost a fortune for supply chain partners, the quality of the data is becoming an important research topic within the supply chain management literature. There are many benefits in having good data quality in supply chains such as cutting costs and improving responsibility and accuracy along the chain. Increasingly customers are demanding details for transactional data and the source of the manufactured products, including raw materials, suppliers, etc. Having good data quality helps create efficient supply chains with greater accuracy and transparency. As there exists limited literature surveys in the supply chains and data quality contexts, this study explores data quality in supply chains through literature survey and bibliometric review. The bibliometric analysis for data quality has been proceeded employing a visualization software to elucidate the prominent keywords, publication trends, authors and their cooperation and active countries in this field. The study reveals some interesting findings about the direction and trends of data quality in supply chains and emerging research themes, leading countries, key authors and emerging research topics in this field.

Keywords
Data quality, Supply Chain Management, Literature Review

Biographies

Jay Daniel
Dr Jay Daniel is a Program Leader for MSc Global Operations and Supply Chain Management and Senior Lecturer in the Derby Business School at University of Derby. Before joining the Derby Business School, he was a Lecturer (Assistant Professor) in Supply Chain and Information Systems at University of Technology Sydney (UTS), Australia. Previously with DB Schenker, Australia, and Alliance International Registrar, Asia Pacific, he held positions of Senior Management Consultant, Supply Chain Solution Analyst, Project Manager, Industry Trainer and Lead Auditor. He has made contributions to multiple research areas in the context of logistics and supply chain management with demonstrated practical applications across a wide range of industries. His primary areas of research focus are: Business Analytics and Supply Chain Management, Information Systems and Sustainable Supply Chain, Decision Making in Logistics and Supply Chain and Healthcare Supply Chain Management. He has been invited as a keynote speaker/invited speaker at international industry and academic workshops and conferences such as Keynote Speaker in Oracle Modern Business Experience Conference, etc. around the globe. An expert in applied and problem-driven
research, he has used analytical tools and innovative optimization approaches to help managers create efficient, resilient, and sustainable supply chains. He has been engaged in consulting to wide range of industries and organization structures, from small and medium size Australian companies to Fortune 500 corporations.

**Drew Stapleton**
Drew Stapleton, Ph.D., is Professor of Supply Chain Management at University of Wisconsin La Crosse. He has published manuscripts in journals such as American Business Review, Strategic Management Journal, International Journal of Logistics Management; Journal of Transportation, Journal of Transportation Law, Logistics, & Policy, Quality Management Journal, and Supply Chain Management: an International Journal, amongst others. Before his quarter-century academic career he spent time as a senior Supply Chain Manager at General Motors Corp. His current research interests are Blockchain/AI in Supply Chain Management, Diversity/Equity issues in investing, and Transportation/Logistics modeling.