

# Editorial Preface

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The first issue of 2019 of the *International Journal of Applied Logistics* in 2018 contains five articles spanning traceability, the economic contribution of freight, smart tracking of containers, how big data can change continuous improvement projects, and a reflection on quality management models.

The first article focuses on firm perceptions of traceability in supply chain operations. While much previous research has focused on consumer perceptions of traceability technology like RFID (Kukard & Wood, 2017; Margulis, Boeck, Bendavid, & Durif, 2016; Wasieleski, Spangler, & Gal-Or, 2010), technology application of RFID to traceability (Yun Liu & Shao, 2012; Permala, Rantasila, & Pilli-Sihvola, 2012), less research has focused on what factors suggest a firm will be effective in implementing traceability initiatives. Therefore, a contingency theory approach is used to examine factors including top management support, non-conforming process management, traceability of lots, and both internal and external traceability processes.

The second article examines the economic contribution of freight in the U.S. State of Maryland. While freight when unsustainably planned in urban areas has been recognised to disturb residents and contribute to pollution (Cui, Dodson, & Hall, 2015; Wu & Haasis, 2013), contribute to congestion (Sankaran & Wood, 2007; Tsekeris & Geroliminis, 2013), it is generally regarded as being important to the economy (Crainic, Ricciardi, & Storchi, 2004). Using archival/secondary data, the study examines the components of freight in Maryland, and the relative contribution of each in terms of jobs, income, and GDP. Using such measures should enable further public discussion on the importance of the freight industry to society.

The third article addresses security in maritime logistics through examining sensor-based systems for container handling in ports. The research continues our stream of research on the use of data to improve effectiveness and security in ports and containers (Li & Shi, 2010; McCormack, Jensen, & Hovde, 2010; Toh & Chan, 2010). The focus of the research is particularly important given the increasing focus of automation over various logistics and supply chain activities including ports (Harris, Wang, & Wang, 2015; Yu & Qi, 2013). This research demonstrates practical applications that should be of interest to port operators as it supports analytics and improvements in efficiency and also enhancing capabilities to comply with and exceed international regulations.

The fourth article continues the focus on how big data changes approaches to continuous improvement. While most research on big data focuses on mining or analytic techniques (Cabanes, Bennani, & Fresneau, 2010; Ying Liu, Lin, Ram, & Su, 2010), the practical implementation of big data approaches can also alter existing business management practices. Here, the article examines how engineering managers can use big data approaches to improve their own work and enhance their outcomes, enhancing quality improvement processes. The integration of big data and analytic approaches has been suggested as a method to enhance supply chain and logistics management (Hazen, Boone, Ezell, & Jones-Farmer, 2014; Waller & Fawcett, 2013).

The fifth article continues the focus on continuous improvement to provide through providing guidance on which model might be appropriate in different situations. The management of stakeholders

and staff is of particular importance, highlighting the strong importance of HR within quality improvement (Galli, 2018; Wang, Chen, & Chen, 2012).

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