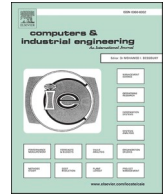




Contents lists available at ScienceDirect

Computers & Industrial Engineering

journal homepage: www.elsevier.com/locate/caie

Effects of information sharing, decision synchronization and goal congruence on SC performance

Jorge Luis García-Alcaraz^{a,b,*}, José Roberto Díaz-Reza^b, Francisco Javier Flor Montalvo^c, Emilio Jiménez-Macías^d, Julio Blanco-Fernández^e, Carlos Francisco Javierre Lardies^f

^a Department of Industrial and Manufacturing Engineering, Autonomous University of Ciudad Juárez, Av. del Charro 450 Norte, Ciudad Juárez, Chihuahua, Mexico

^b Division of Research and Postgraduate Studies, Tecnológico Nacional de México/Instituto Tecnológico de Ciudad Juárez, Av. Tecnológico No. 1340 Fraccionamiento El Crucero, Ciudad Juárez 32500, Chihuahua, Mexico

^c Higher School of Engineering and Technology, International University of La Rioja (UNIR), Avda. de la Paz, 137, Logroño, La Rioja, Spain

^d Department of Electrical Engineering, University of La Rioja, Luis de Ulloa 20, 26004 Logroño, La Rioja, Spain

^e Department of Mechanical Engineering, University of La Rioja, Luis de Ulloa 20, Logroño 26004, La Rioja, Spain

^f Department of Mechanical Engineering, University of Zaragoza. Edif. Agustín de Betancourt, María de Luna, s/n, 50018, Zaragoza, Spain

ARTICLE INFO

Keywords:

Supply chain management
SC financial performance
Information sharing
Goal congruence

ABSTRACT

Nowadays, supply chain performance is measured since it is essential in globalized companies as maquiladoras. They import all raw material and import and export all final products, with high information, material, and money flow, having complex networks. This article reports findings from a structural equation model integrating four latent variables: Decision synchronization, Goal congruence, and Information sharing as independent variables, and Supply chain performance as the dependent variable related through six hypotheses to know their relationship. Hypotheses were tested using information from 143 responses to a questionnaire applied to the maquiladora industry in northern Mexico. The structural equation model is evaluated using the partial least squares (PLS) method integrated into WarpPLS 6.0 software. Findings indicate that five hypotheses are statistically significant, and it is concluded that Goal congruence, Information sharing, and Decision synchronization directly affect supply chain performance. The most critical variable to guarantee it is Goal congruence among partners.



* Corresponding author at: Department of Industrial and Manufacturing Engineering, Autonomous University of Ciudad Juarez, Av. del Charro 450 Norte, Ciudad Juárez, Chihuahua, Mexico.

E-mail addresses: jorge.garcia@uacj.mx, jorge.ga01@itcj.edu.mx (J.L. García-Alcaraz), jose.dr01@itcj.edu.mx (J.R. Díaz-Reza), franciscojavier.flor@unir.net (F.J. Flor Montalvo), emilio.jimenez@unirioja.es (E. Jiménez-Macías), julio.blanco@unirioja.es (J. Blanco-Fernández), sabijcl@unizar.es (C.F. Javierre Lardies).

<https://doi.org/10.1016/j.cie.2021.107744>

Received 27 February 2020; Received in revised form 23 June 2021; Accepted 10 October 2021

Available online 19 October 2021

0360-8352/© 2021 Elsevier Ltd. All rights reserved.