



Date: 12/03/2024

Acceptance Letter

Dear

Jorge Luis García Alcaraz
José Roberto Díaz Reza
Arturo Realyvásquez Vargas

I am pleased to inform you that the chapter “*Just in Time (JIT)*” has been **ACCEPTED** for publication in the book “*Lean Manufacturing in Latin America - Concepts, Methodologies, and Applications.*” Please make a final review of your chapter regarding structure, format, and citation style.

We thank you for your effort and trust in this initiative to document the impact of Lean Manufacturing in Latin America. Please emphasize the technical approach in your chapter. We strongly recommend the use of original graphic content. Otherwise, it is necessary to obtain permission for non-original material (text, tables, or illustrations that you have incorporated in your manuscript from other sources or previous publications).

Sincerely,

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Arturo Realyvásquez Vargas *Editors*

Lean Manufacturing in Latin America

Concepts, Methodologies and
Applications

Lean Manufacturing in Latin America


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Guillermo Cortés Robles ·
Arturo Realyvásquez Vargas
Editors

Lean Manufacturing in Latin America


Concepts, Methodologies and Applications

 Springer

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ISBN 978-3-031-70983-8 ISBN 978-3-031-70984-5 (eBook)
<https://doi.org/10.1007/978-3-031-70984-5>

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Chapter 6

Just in Time (JIT)



**Jorge Luis García Alcaraz, José Roberto Díaz Reza,
and Arturo Realyvásquez Vargas**

Abstract This chapter discusses the Just in Time (JIT) manufacturing tool, analyzing its concept and evolution, its importance, and the benefits it offers when implemented correctly, as well as the barriers that are faced when putting it into practice. Similarly, some basic activities that must be considered at the time of implementation are indicated. In addition, a bibliometric review of the JIT concept in the industry is conducted, identifying the authors, institutions, and countries that generate the most scientific papers or are most cited. Finally, a structural equation model was presented to quantify the relationship between JIT and social and environmental sustainability. The results were validated with information from 411 responses to a survey applied to the Mexican maquiladora industry, and the direct effects were estimated to validate the three established hypotheses. Finally, a sensitivity analysis of the model is reported, in which the probabilities of the analyzed variables occurring in isolation, jointly, and conditionally are reported.

6.1 Concept of JIT

Just-in-time (JIT) originated in the manufacturing industry as a way to support supply chain management (Wang et al. 2016) and is fundamentally based on not stocking excess inventory and instead making it available “just-in-time” when it is needed

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