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A Proposed Framework to Improve Operational Performance through Supply Chain Practices: An Empirical Study on Egyptian Petroleum Sector

**أطار مقترح لتحسين الأداء التشغيلي من خلال ممارسات سلاسل التوريد:
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

"تَرْفَعُ رَجَاتٍ مِّنْ تَشَاءُ ﴿٧٦﴾ وَفَوْقَ كُلِّ ذِي

عِلْمٍ عَلِيمٌ"

صَدَقَ اللَّهُ الْعَظِيمُ،

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Dedication

I dedicate this dissertation to my parents, my brother, my sister and my husband Ahmed Elrefaie. People, who have always been there to support me, congratulate me; show me always the best path to follow. To my parents, I will never finish thank you for everything you do every day for my brother, sister and me. To Ahmed Elrefaie, thanks for your support. To my Jewelries Mohamed, Jana and Lily you are the reason of my happiness in my life GOD bless you lovelies.

Abstract

The focus of this research is to examine the direct relationships and mediating relationships among Supply Chain Management Practices (SCMPs) (namely; strategic supplier partnership, customer relationship, level of information sharing, agreed vision and goals and quality of information), Supply Chain Integration (SCI) and Operational Performance (OP) on petroleum sector in Egypt, and to propose a framework for such relationships. To achieve the objective of this research and test hypotheses, a survey tool (questionnaire) has been utilized as a data collected technique by a sample of companies in the Egyptian petroleum sector. A quantitative approach using structural equation modeling is used to test the research hypotheses. Findings revealed that strategic supplier partnership, customer relationship, level of information sharing have a positive significant impact on improving operational performance of Egyptian petroleum sector. And that SCI have a positive significant impact on improving operational performance. By further testing for the mediating effect of SCI on the relationship between SCMPs and improving operational performance. The results show that supply chain integration mediates the impact of strategic supplier partnership, and customer relationship on improving operational performance. Whereas supply chain integration does not mediate the impact of level of information sharing, quality of information and agreed vision & goals on improving operational performance on petroleum sector in Egypt.

The objectives of the research are as follows:

- To determine the extent to which the supply chain practices are implemented by petroleum sector in Egypt.
- To ascertain the direct impact of SCMPs dimensions (namely, strategic supplier partnership, customer relationship, information sharing, information quality, agreed vision and goals) on improving operational performance of petroleum sector in Egypt.
- To empirically examine how supply chain integration mediates the impact of SCMPs on improving operational performance of petroleum sector in Egypt.
- Develop a research framework based on the previous two objectives, in order to progress the current understanding of SCMPs, SCI and operational performance of petroleum sector in Egypt.

Research Hypotheses

H₀₁: Supply chain management practices have no significant impact on improving operational performance on petroleum sector in Egypt.

H₀₂: Supply chain Integration has no significant impact on improving operational performance on petroleum sector in Egypt.

H₀₃: Supply chain integration doesn't mediate the impact of supply chain management practices on improving operational performance on petroleum sector in Egypt.

Key words: supply chain practices, supply chain integration, operational performance, strategic supplier partnership, customer relationship, information sharing, information quality, agreed vision and goal

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