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THE INFLUENCE OF SUPPLY CHAIN MANAGEMENT STRATEGY ON SME'S BUSINESS PERFORMANCE

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ABSTRACT

The goal of this study was to see how supply chain management (SCM) affected SMEs' operational performance, with an emphasis on organizational skills. A research was conducted on 300 manufacturing SMEs that adopted SCM methodologies. The relationships between the variables were investigated using structural equation modeling. According to the findings, using SCM procedures improves firm performance and is connected to competencies such as research and development, technology commercialization, manufacturing capacity, and marketing capabilities. As a consequence, a mix of SCM methodologies and organizational skills may be able to assist SMEs in achieving long-term overall success. The findings of this study show that SCM techniques and organizational abilities have a significant influence on overall company success. SCM strategies have a significant influence on the organizational capacities of SMEs. The influence of SCM strategy on total business performance was assessed using organizational skills.

Keywords: Supply chain management; Business performance; Supply; Strategy

I. INTRODUCTION

Enterprises must not only reconstruct themselves to create higher-quality products and services, reduce waste, and adapt to the market, but also to manage their supply chains effectively as a result of the increasing number of competing companies developing both locally and worldwide. In order to compete in today's competitive global marketplaces, businesses must overcome a variety of obstacles. Organizations must understand the relevance of supply chain practices that increase not only their own organizational performance but also collaborate with their supply chain partners to improve their joint performance in order to remain competitive. Despite major breakthroughs in study and practice, many companies continue to struggle to comprehend the complex difficulties connected with coordinated planning and supply operations across supply network participants.

As global rivalry intensifies, manufacturing organizations should get more involved in the operations of their suppliers and consumers. Manufacturing organizations must be able to efficiently integrate internal processes and link them to the exterior operations of suppliers and supply chain members in order to compete successfully in today's competitive business climate. They must concentrate on supply chain management strategies that improve SCM operations and, as a result, performance. Making and distributing products and services to consumers is becoming the most effective and efficient method for businesses to be profitable, and it is at the heart of SCM.

II. SUPPLY CHAIN MANAGEMENT AND BUSINESS PERFORMANCE

With numerous academics reporting flaws with traditional financial performance systems, the company's success currently is assessed by not only financial but also non-financial performance indicators. Supply chain management assists in independent measurements of financial and non-financial operations. Including asset profitability, yearly sales return, average market share, profit margin and profitable growth, financial performance in the supply chain, compared with key non-financial performance including customer satisfaction overall, customer retention, product satisfaction and customer service satisfaction. SICM's performance is divided into the financial and non-financial performance of Venkatraman & Ramanujam, which emphasizes its greater importance. In the decision-making process in traditional management accounting systems, Johnson and Kaplan & Norton claim that financial information is inadequate as information and that using non-financial measures promoting assessment and control helps to tackle this problem. Enterprises that stress strategic management and core competencies have, in general, focused their efforts to secure quality and customer responsiveness, using non-financial measures to verify whether their performance in this area has improved.

The Supply Chain Management (SCM) concept is aimed to regulate the whole flow from suppliers to end-users of the distribution channel. It is a management method that integrates various commercial operations amongst companies. This applies to the approach to manage all operations in the whole supply chain process, and includes goods flows related to material and completed products transformation and logistics, information flows supporting those processes, and the capital flow which contributes totally to the recording of business/company performance. SCM is a customer support system to harmonize product and service processes, generate information and personalize client values and provide creative solutions. It is a company concept that leads corporations and their partner firms to the appropriate path between interacting distribution chains and internal resources and production capacity describes SCM as an organizational joint strategy to reconstruct organizations by reorganizing new ITs and enhancing businesses' business efficiency via the creation of strategic partners to assure their goods and services a competitive advantage. SCM is the basis for effective integration of suppliers, producers, warehouses and shops in order for goods to be manufactured and supplied in the correct amounts, at the right place at the right time, with the aim of minimizing system costs while fulfilling service levels. This ultimately refers to an integrated procedure for the value they seek from end users. SCM aims at achieving thorough product flow optimization, as well as 142 products to final sales information that better addresses real customer needs and enhances corporate efficiency.

III. METHODOLOGY

3.1 Research design

The current study used a cross-sectional survey research strategy to look at many study variables at the same time. For data gathering and analysis, the study used a quantitative methodological approach. The cross-sectional research methodology allows the researcher to concentrate on distinct and compelling situations, allowing them to gain a thorough grasp of the study subject.

3.2 Sample Size

Morgan and Krejcie's sampling procedures were used to determine the sample size. A total of 384 people were included in the study.

3.3 Sampling techniques

Sampling is defined as the act of acquiring the necessary number of people to undertake a certain study in a way that reflects a larger population or group of people. The research participants were chosen using targeted sampling procedures.

3.4 Data collection

According to a recent survey of SCM-focused SMEs. The study used a combination of e-mail and real site visits to reach out to hands-on staff, with each organization receiving only one questionnaire. After eliminating false testimony and missing data, 384 structured self-administered questionnaires were sent, with 300 being included in the final analysis. The most prevalent industries represented among the respondents were automobile components, marine engine parts, aviation parts, and heavy equipment parts. SMEs' employees and managers were requested to take part in the poll. Each idea and its indications are rated on a five-point Likert scale.

3.5 Reliability and validity of the study

In any research investigation, Cronbach's alpha was employed to examine the reliability of various multi-item measures. The Content Validity Coefficient was used to determine content validity for this investigation (CVC).

3.6 Data analysis

Based on prior research, the goal of this study was to determine the empirical effects of supply chain management strategy on the operational and financial performance of SMEs. VMI, ERP, CPFR, WMS, and outsourcing are independent variables; R&D, technology commercialization, production, and marketing capabilities are mediating effect variables, all of which are components of supply chain management and organizational competence; and operational and financial performance are dependent variables. The AMOS application was used to examine these variables using a structural equation model.

IV. RESULTS

4.1 Demographic characteristics

In the industrial sector, heavy equipment makers had the highest frequency in the sample. The most common responses were chief executive officers (with the highest response rate), followed by company executives, deputies, section leaders, deputy department heads/department heads, or workers. In terms of length of service, 33.7 percent of those surveyed had been with the company for five to eight years. In terms of employee count, 36.0 percent of respondents had 50 to 100 employees.

4.2. Path Analysis

Table 1presents the fitness findings of the route analysis.

Table 1. Fitness of Research Model.

Classification GFI	**RMR**	**RMSEA**	**NFI**	**CFI**	**TLI**	**AGFI**
Analysis Result 0.942	0.031	0.002	0.836	0.931	0.945	0.941
Fitness Reference Value ≥0.7	≤0.05	≤0.05	≥0.7	≥0.7	≥0.7	≥0.7

Note: GFI stands for "goodness of fit index," RMR stands for "root mean square residual," RMSEA stands for "root mean square error of approximation," NFI stands for "normed fit index," CFI stands for "comparative fit index," TLI stands for "Tucker–Lewis index," and AGIF stands for "adjusted goodness of fit index.

The chi-square value was 316.105, according to the model's fitness index, and additional values were GFI = 0.942, RMR = 0.031, RMSEA = 0.002, NFI = 0.836, CFI = 0.931, TLI = 0.941, and AGFI = 0.987.

GFI, NFI, AGFI, CFI, and TLI all had values of 0.7 or higher, whereas RMR and RMSEA had values of 0.05 or below. This shows that the route analysis' fitness for this model has been confirmed.

The completed route model is shown in Table 2. The influence of SCM techniques and organizational skills on the firm's operational and financial success was demonstrated. Furthermore, SCM strategies were demonstrated to have a significant influence on organizational capacities.

Table 2. Final Path Analysis

S.N.	Path			B	B	SE	CR	p	Supported/ Rejected
1	SCM Strategy	→	Business Performance	−0.004	−0.007	0.055	−0.079	0.037	Supported
2	SCM Strategy	→	Financial Performance	0.015	0.022	0.060	0.248	0.004	Supported
3	Organizational Competence	→	Operational Performance	0.075	0.117	0.058	1.281	***	Supported
4	Organizational Competence	→	Financial Performance	0.156	0.219	0.064	2.435	0.015	Supported
5	SCM Strategy	→	Organizational Competence	0.574	0.595	0.061	9.456	***	Supported

Note: B stands for Regression Weights, SE stands for Standardized Regression Weight, CR is for Critical Ratio, and p stands for Probability *** $p < 0.001$.

1 and 2 are based on path coefficients of –0.007 (CR = 0.079, p = 0.037) for operational performance and 0.015 (CR = 0.248, p = 0.004) for financial performance, respectively. This was a clear indicator that various SCM techniques have an influence on a company's success.

For operational success, path coefficients were 0.117 (CR = 1.281, p = 0.001) and for financial performance, they were 0.219 (CR = 2.435, p = 0.015). This was obvious evidence that organizational competency has a considerable beneficial impact on overall business success.

5 (CR = 9.456, p 0.001), based on a path coefficient of 0.574. As a result, SCM strategy has a favorable impact on organizational competency.

V. CONCLUSIONS

These studies show that SCM techniques such as VMI, ERP, CPFR, WMS, and outsourcing have a direct impact on the operational and financial performance of SMEs. Furthermore, expanding an organization's capabilities, such as research and development, technology commercialization, production, and marketing, enhances both operational and financial performance. As a consequence, combining SCM approaches with organizational skills will improve the operational and financial performance of these industrial firms. The supply chain is a network of producers and assembly makers that collaborate to generate, distribute, and sell various components and raw materials. As a consequence, SMEs can improve their financial performance by improving their organizational competency as a way to aid SCM. SMEs may strengthen their core competencies to improve the supply chain's performance and, as a result, their competitiveness, in an environment where supply chain competition is gaining pace. Firms may also discover new opportunities by improving existing supplier networks in the short term and exploring and developing new supply chains in the long term.

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