

The Role of the Supply Chain in Accounting and Finance. A Case of Agribusiness in Zimbabwe

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Abstract

The integration of supply chain management into the accounting and finance domain has become increasingly crucial in today's globalized and interconnected business environment. This abstract aims to explore the multifaceted role of supply chain in accounting and finance, shedding light on its impact on financial reporting, cost management, risk assessment, and strategic decision-making. By examining the interplay between supply chain activities and financial processes, this abstract seeks to uncover how the supply chain influences financial performance and shapes the overall economic health of Agribusiness in Zimbabwe. Through a comprehensive review of the literature and case studies, this abstract will present a holistic view of how supply chain practices intersect with accounting and finance, offering insights into the challenges, opportunities, and best practices associated with this dynamic relationship. Ultimately, this abstract endeavors to contribute to a deeper understanding of the pivotal role that the supply chain plays in driving financial success and sustainability in modern businesses.

Keywords: Supply chain management, Financial performance, Responsibility accounting, Agribusiness case study, Zimbabwe

Introduction

In today's dynamic, Agribusiness landscape, the role of supply chain management has transcended its traditional operational boundaries to become a pivotal factor in shaping the financial and accounting aspects of organizations. The supply chain, encompassing product development, marketing, operations, distribution networks, and customer service, now intertwines closely with finance and accounting functions, exerting a profound influence on financial reporting, cost management, risk assessment, and strategic decision-making.

As businesses grapple with complex decisions such as on-shoring supply chains and tax implications, the integration of supply chain considerations into financial strategies has become a critical concern for executives, including Chief Financial Officers (CFOs). The optimization of equipment and machinery usage, inventory management, and order processing within the supply chain directly impact financial performance and cost efficiencies.

Enterprise Resource Planning (ERP) systems, which integrate functions from finance to supply chain management, exemplify the interconnectedness of these domains, emphasizing the need for transparency and secure data management across the organization Charney (2011). Moreover, academic programs in business and management increasingly emphasize the practical applications of supply chain modeling,

financial accounting, and economics, highlighting the intertwined nature of these disciplines Charley, Faccio, and Parsley (2008).

In light of the growing significance of supply chain in accounting and finance, it is imperative to delve deeper into the intricate relationship between these domains to understand how supply chain practices drive financial success and sustainability in modern businesses. This exploration will shed light on the challenges, opportunities, and best practices associated with this dynamic intersection, ultimately contributing to a comprehensive understanding of the vital role that supply chain plays in shaping the financial health of organizations.

Literature Review

The Interplay of Supply Chain in Accounting and Finance

The intersection of supply chain management with accounting and finance has garnered significant attention in academic and professional circles. This review aims to synthesize key insights from recent literature and research, shedding light on the evolving role of supply chain in shaping financial strategies and accounting practices in Agribusiness.

Integration of Supply Chain in Financial Reporting and Decision-Making

Recent discussions in academic circles have highlighted the growing importance of integrating supply chain data into financial reporting and decision-making processes. The ability to capture and analyse supply chain costs, risks, and performance metrics has been identified as a critical factor in enhancing the accuracy and relevance of financial reports, enabling more informed strategic decision-making.

Special Issue on Supply Chain in Accounting and Finance Research

The British Accounting Review's call for papers on the role of supply chain in accounting and finance research underscores the increasing scholarly interest in this domain. This initiative reflects a recognition of the need to explore the intricate connections between supply chain dynamics and financial outcomes, signalling a growing emphasis on advancing knowledge in this area Chen Guo-hua (2011).

Blockchain Technology and Financial Services

The emergence of blockchain technology has also been noted as a significant development with implications for both supply chain management and financial services. The exploration of blockchain applications in financial services underscores the potential for technology-driven innovations to reshape the way supply chain data is captured, verified, and utilized in financial contexts Wu Juan Juan (2015).

Challenges and Solutions in Accounting

Furthermore, discussions surrounding the challenges and solutions in accounting have highlighted the need for organizations to address the complexities arising from supply chain dynamics. The sixteen biggest accounting challenges in 2024 include considerations related to managing supply chain costs, enhancing transparency, and leveraging technology to streamline financial processes. The literature reviewed underscores the multifaceted nature of the relationship between supply chain, accounting, and finance. From the integration of supply chain data in financial reporting to the potential impact of emerging technologies, the evolving role of supply chain in accounting and finance presents a rich landscape for exploration and research, offering valuable insights for practitioners and scholars alike.

Background

The Evolving Nexus of Supply Chain, Accounting, and Finance

The convergence of supply chain management with accounting and finance has emerged as a critical area

of interest in the contemporary business landscape. The traditional silos between these domains are giving way to a more integrated approach, recognizing the profound impact of supply chain dynamics on financial strategies and accounting practices.

Supply Chain Finance and Accounting Opportunities

The concept of 'Supply Chain Finance' has garnered attention as an intriguing aspect of supply chains, presenting potential opportunities for individuals with a background in accounting. This underscores the evolving nature of supply chain practices and their relevance to financial considerations.

CFO's Role in Supply Chain Management

The role of Chief Financial Officers (CFOs) has expanded to encompass oversight of the company's financial and supply chain health. This integration underscores the interconnectedness of financial decision-making and supply chain management, highlighting the need for CFOs to provide guidance on both fronts Charley Facio, and Parsley (2008).

Interdisciplinary Career Paths

The intersection of supply chain management and finance has implications for career paths, with suggestions for individuals with finance degrees to explore opportunities in supply chain management, such as starting as an Accounts Payable Clerk and progressing within the field. This reflects the evolving nature of career trajectories that bridge accounting, finance, and supply chain management Simatung TM Piboonrungrui Pand Williams (2017).

Integrated Business Functions

Supply chain management is intricately linked with essential business functions, including finance, as it encompasses operations, distribution networks, and customer service. This interconnectedness emphasizes the need for a holistic understanding of how supply chain activities impact financial performance and cost efficiencies Harmon P (2012).

Career Preparation and Skill Development

The evolving nature of the finance job demands a broader background, encompassing a deeper understanding of supply chain dynamics and their implications for financial decision-making. This underscores the need for professionals to equip themselves with a comprehensive skill set that transcends traditional disciplinary boundaries Ordero S B (2006). The evolving role of supply chain in accounting and finance signifies a paradigm shift in how organizations approach financial management and strategic decision-making. The interconnected nature of these domains presents a rich landscape of opportunities and challenges, underscoring the need for professionals to embrace an interdisciplinary approach to navigate the complexities of modern business environment Njau N N (2010).

Problem Statement

Navigating the Complexities of Supply Chain Integration in Accounting and Finance

The evolving landscape of modern business presents a pressing challenge: how to effectively integrate supply chain dynamics into accounting and finance practices. As organizations strive for operational efficiency and financial transparency, they are confronted with the complexities of managing supply chain costs, leveraging enterprise resource planning (ERP) systems, and addressing supply chain disruptions that impact financial stability.

The sixteen biggest accounting challenges in 2024 highlight the need for accounting professionals to navigate supply chain backlogs and economic disruptions, underscoring the intricate relationship between supply chain management and financial reporting Mitios L, Holm Christensen L, and McKinnon D (2018).

Furthermore, the imperative to streamline businesses' often siloed financial processes through cloud accounting software emphasizes the need for a cohesive approach that incorporates supply chain data into financial decision-making P Harmon (2022).

The restaurant industry's emphasis on supply chain management and customer service underscores the critical role of supply chain considerations in ensuring financial compliance and identifying potential issues within financial statements PK Charlie (2011). Moreover, the significance of ERP software in managing core business functions using a unified data set highlights the need for seamless integration of supply chain data into financial systems Njau N N (2010).

As organizations grapple with the challenge of optimizing equipment and machinery usage, managing inventory, and processing orders within the supply chain, the need to align these operational activities with financial objectives becomes increasingly pronounced Chen Hua-hua (2013). Additionally, the intensification of inflation concerns due to supply chain disruptions underscores the far-reaching impact of supply chain dynamics on financial stability K Syberg (2022).

In light of these challenges, the need to address supply chain disruptions and build resilience in supply chain management presents a critical problem for organizations. President Biden's announcement of new actions to enhance supply chain resilience underscores the urgency of addressing supply chain vulnerabilities that can have profound financial implications M R Johnson, TB Christensen TB Ramos, and K Syberg (2022). The problem statement revolves around the need to navigate the intricate interplay between supply chain management and accounting/finance, addressing challenges such as supply chain disruptions, financial compliance, and the seamless integration of supply chain data into financial decision-making processes. This necessitates a holistic approach that recognizes the pivotal role of supply chain dynamics in shaping financial strategies and ensuring organizational resilience L Mitios Holm , Christensen and D Mckinnon (2018).

Research Questions:

1. How does the integration of supply chain data into financial reporting enhance the accuracy and relevance of financial reports?
2. What are the key challenges and opportunities associated with aligning supply chain management with financial decision-making processes?
3. How can emerging technologies, such as blockchain, reshape the capture, verification, and utilization of supply chain data in financial contexts?
4. What are the implications of supply chain disruptions on financial stability and how can organizations build resilience in supply chain management to mitigate these impacts?
5. How does the seamless integration of supply chain data into financial systems, particularly ERP software, contribute to improved financial performance and cost efficiencies?

Objectives:

1. To investigate the impact of integrating supply chain data into financial reporting on the accuracy and relevance of financial reports, with a focus on cost management and risk assessment.
2. To identify and analyse the challenges and opportunities associated with aligning supply chain management with financial decision-making processes, emphasizing the implications for strategic financial planning.

3. To explore the potential of emerging technologies, particularly blockchain, in reshaping the capture, verification, and utilization of supply chain data in financial contexts, with a view to enhancing transparency and data security.
4. To assess the implications of supply chain disruptions on financial stability and develop strategies to build resilience in supply chain management, addressing the far-reaching impact of supply chain dynamics on financial performance.
5. To examine how the seamless integration of supply chain data into financial systems, particularly ERP software, contributes to improved financial performance and cost efficiencies, emphasizing the interconnectedness of supply chain activities and financial objectives.

Research Method

The research is conducted as a case study in the seed processing company, SEEDCO for the maize seed sector. Maize seed is considered the first strategic crop for the company followed by horticulture seeds and other small grains. The crop represents around 75% of the company turnover in 2021/2022 and around 80% of the yearly turnover in 2023/2024. The required data has been collected from primary sources and secondary sources, and this can be illustrated as follows: Primary data was collected via Surveys as a direct and structured questionnaire designed and distributed to the wide range of employees working in the field of the study including all hierarchy levels started from the managing director.

The questionnaire is a 5 Likert-scale and contains four parts, the first part includes 14 items about the existence of supply chain management which includes demand management, converting to automation, using technology, innovation, as well as inventory management. The second part is 8 items regarding the efficiency of agricultural operations which explains the lead time decrease, optimum use of labor, using new techniques as well as proper training and awareness execution. The third part consists of 8 items regarding the direct costs of agriculture operations which measure the effect of new technology, efficient use of labor, precious planning, and training on the direct cost of the agriculture operations. The fourth part includes 5 items for responsibility accounting which monitors the company performance against budget as well as controls the financial variances. Secondary data presented in income statements for the maize seed project of SEEDCO are provided through the financial department starting from financial year 2021/2022 up to 2023/2024.

From the income statements, the productivity per hectare over the given period, direct costs per hectare as well as profit per hectare for the same period. The number of distributed questionnaires was fifty. Total number of received questionnaires was forty-five; two of them were invalid, hence total valid questionnaires for analysis were forty three questionnaires. The forty three questionnaires were analyzed from the fifty distributed represents 86% response rate. This rate is considered to be acceptable to be used in the statistical data analysis. It is shown that all participants in the survey are directly related to the field of table grapes; starting from the new engineers newly hired and responsible for one piece of cultivated land up to the managing director of the company.

Results discussion

From the results of the research conducted, it was found that a company cannot be separated from the accounting system. One of the big Seed companies is big because of its accurate accounting information system. That way accounting is very important for that company. This company prepares its financial reports carefully and thoroughly so that financial data ranging from determining the cost of production

and determining the cost of goods sold to calculating profit and loss keeps this company moving forward and growing. Cost control in the value chain within a company is the goal of cost accounting. If the costs incurred can be controlled properly the company will get more profits.

The value chain concept was first explained by Harvard Business School professor Michael Porter in his book *Competitive Advantage: Creating and Sustaining Superior Performance*. The value chain framework assists organizations in grouping and identifying all business functions of the company into primary and secondary activities. Analyzing the value chain, sub-activities, and relationships among firms helps an organization understand them as the most interrelated systems of functions. Then, the organization can analyze each individual to assess whether the output of each activity and subactivity can be increased relative to the cost, time, and effort they require.

Conclusion

This study presents the impact of applying the supply chain management on financial performance and responsibility accounting. The main two research questions examined in this paper are: is there a significant impact of supply chain management on financial performance? and is there a significant relationship between supply chain management and financial performance as well as responsibility accounting? To answer the research questions, data was collected from financial statements of the Agribusiness case from Zimbabwe (Seedco) and a survey. The findings of the study indicated that applying supply chain management can increase the total productivity per hectare under the same technical treatments while all other variables are constant. Moreover, increasing productivity can be through increasing the export percentage which will gain better income due to the return with foreign currencies through enhancing the product quality and increasing the volumes with the higher class quality. As a result, applying the supply chain management improves the quality of the production to be sold to high-end retailers that can generate higher values, which will have a direct effect on the net profit.

Furthermore, increasing the total productivity per hectare leads to decreasing the cost and eliminating waste. All these results lead to increasing the profitability of the project. So we can conclude that there is a significant impact of supply chain management on productivity, on both for local and export markets, and decreasing the costs as well as increasing the total productivity. In addition, applying the supply chain management works on cutting down the direct cost associated with efficiency and effectiveness. Supply chain management can have a great effect on the financial performance of the company by improving revenues and rationalizing the direct costs which significantly will increase the net income as well as boost the company's return on investments. Applying efficient supply chain management can improve the use of responsibility accounting through the efficient usage of the budget for the crop. Precise planning can lead to avoiding any cash flow implications as well as cost variances.

There is a limitation to generalizing the study results due to we depend on one case study from Egypt, except for the other companies working under the same conditions and possibilities.

Recommendations

Finally, we can recommend spreading the application of supply chain management to other agri-business crops, which can work under the same conditions. In addition, the application of efficient supply chain management to all processes starting from the reception of raw materials until the shipping of the finished product. The study of the more complicated supply chain that includes the suppliers as well as the customer feedback can be studied in the future in addition to the study of the supply chain for other crops that can

suffer from different natural conditions, which will affect the entire supply chain. Moreover, future research can study the impact of Enterprise Resources Planning (ERP) systems on supply chain management to improve the agribusiness financial performance.

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