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A Comparative Analysis of Financial Expenses in Supply Chain Management: Case Studies of Amazon, Swiggy, and BlueDART

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Abstract

This research provides a comparative overview of the financial costs associated with supply chain management (SCM) among three industry frontrunners—Amazon, Swiggy, and Blue Dart. These organizations operate across different sectors, with Amazon and Blue Dart positioned within the FMCG and logistics sectors, and Swiggy in the food delivery market. The study analyzes their financial documents from 2020 to 2022, concentrating on major expense categories such as transportation, warehousing, technology infrastructure, and human resources. Employing a mix of qualitative and quantitative methods, including financial data analysis and correlation assessments, the research illuminates the variances in the financial strategies these companies utilize to control SCM expenditures. The results emphasize the distinct operational frameworks and cost management tactics tailored to each company's market conditions and business goals. This study provides useful insights for other entities looking to enhance their financial management in the supply chain and boost operational efficiency, while acknowledging contextual and structural limitations arising from sectoral differences and pandemic-related disruptions.

Keywords: Supply Chain Management, Financial Costs, Logistics, Transportation, Warehousing, Technology Infrastructure, Human Resources, Comparative Study, Financial Documents, Operating Expenses.

Introduction:

In the ever-changing landscape of supply chain management, effective financial management is essential for ensuring operational efficiency and fostering business growth. Firms such as Amazon, Swiggy, and Blue Dart operate in different market sectors but face similar logistical hurdles that necessitate smart financial resource allocation. The supply chain costs incurred by these companies have a direct impact on their capacity to satisfy customer demands, uphold profit margins, and promote innovation.

This research intends to perform a comparative analysis of the financial expenditures of Amazon, Swiggy, and Blue Dart, concentrating on the critical areas where these companies direct their resources, including transportation, warehousing, technological infrastructure, and human resources. By examining the financial interactions of these organizations, the study aims to reveal how each company effectively controls costs amidst the competitive environment of supply chain management.

The findings offer significant insights into the financial outcomes and expense distribution strategies used by prominent firms in the industry, which can act as benchmarks for other enterprises seeking to enhance their supply chain management operations.

Literature Review

The SCM process encompasses various stages, including procurement, production, transportation, warehousing, and delivery. Financial costs associated with SCM generally include transportation, warehousing, technology infrastructure, and human resources. As noted by Christopher [1], logistics and distribution represent significant portions of the overall supply chain expenses, particularly within the e-commerce and FMCG sectors. Moreover, companies frequently allocate resources towards technology and personnel to retain a competitive edge. Supply chain expenses differ across industries such as logistics, retail, and food delivery, influenced by their complexity and operational needs [2]. Amazon's SCM strategy relies on an extensive global network of suppliers, fulfilment centers, and distribution channels. According to a KPMG report (2020), Amazon's supply chain heavily depends on technological investments, with considerable spending on infrastructure, fulfillment operations, and delivery systems. In Amazon’s financial disclosures, costs linked to fulfillment, technology infrastructure, and fulfillment center operations have been consistently increasing over the years (Amazon Annual Report, 2022). Researchers have observed that Amazon’s focus on automation and AI has enhanced inventory management efficiency, though this comes alongside significant technological expenditures [3]. For example, Amazon’s operating costs for fulfillment and technology surged from $58 billion in 2020 to $84 billion in 2022, underscoring the company's continuous investment in its supply chain infrastructure. Blue Dart, a prominent player in the logistics field, operates in a market where supply chain management expenses are primarily associated with transportation and warehousing. As indicated by Trivedi and Bajaj [4], the main cost drivers for Blue Dart include

fuel, fleet maintenance, and delivery network management. While Amazon operates an expansive fulfillment infrastructure, Blue Dart concentrates on enhancing transportation efficiency and optimizing warehousing. Based on their financial data (Blue Dart Annual Report, 2022), it is evident that Blue Dart's logistics-related costs, encompassing depreciation and finance charges, constitute a significant part of their overall expenses. Their strategy of reducing transportation costs through optimized routing and effective fleet management has been crucial in sustaining a competitive advantage in the logistics sector. Swiggy, functioning within the food delivery domain, encounters distinctive supply chain management challenges compared to Amazon and Blue Dart. As discussed by Sharma and Agarwal (2020, food delivery services are heavily dependent on delivery personnel and real-time technology for tracking orders. Swiggy's investment in human resources and technology infrastructure is substantial, alongside significant costs related to packaging and delivery. Data from Swiggy's financial reports (Swiggy Annual Report, 2022) reveal that labour costs and employee benefits have risen markedly as the company expands its network of delivery personnel. Additionally, Swiggy is dedicated to enhancing its technology platform to improve delivery times and customer experience. Research conducted by Ravi et al. (2020) points out that Swiggy's notable expenditures on "other expenses," which include marketing, technology, and customer acquisition, signify its efforts to scale quickly in a fiercely competitive food delivery landscape. The comparative examination of Amazon, Swiggy, and Blue Dart highlights significant disparities in their SCM strategies and the distribution of financial resources. Amazon, given its extensive global presence, emphasizes investments in fulfillment infrastructure and technology. Conversely, Swiggy prioritizes human resources and technological investments focused on optimizing delivery networks, while Blue Dart allocates the majority of its financial resources to transportation and logistics. According to Mentzer [5], efficient management of supply chain costs hinges on aligning financial strategies with fundamental operational functions, and each of these companies has customized its financial priorities accordingly.

Additionally, the increasing expenses in technology and human resources for all three companies highlight a trend in the supply chain management (SCM) industry, where embracing digital transformation and optimizing labour has become crucial for minimizing operational inefficiencies. Specifically, the food delivery industry, represented by Swiggy, encounters cost challenges related to labour and logistics technology—issues that Amazon and Blue Dart are less affected by [6]. The heightened dependence on technology to enhance supply chains is clear in all three firms. Amazon utilizes automation and AI within its warehouses, Blue Dart emphasizes route optimization technology, and Swiggy employs a real-time tracking system, showcasing the vital role technology has in controlling financial costs. As noted by Hopp and Spearman [7] investing in technology may lead to substantial long-term savings, despite the initial financial outlay being significant.

Research Methodology

To fulfil the goals of this study, a detailed qualitative and quantitative approach has been utilized. The research relies on secondary information obtained from publicly accessible financial statements, annual reports, and industry literature related to Amazon, Swiggy, and Blue Dart.

The methodology is organized as follows:

1. **Data Gathering:** Financial information for Amazon, Swiggy, and Blue Dart over the past three years was collected from their respective annual reports, investor presentations, and audited financial documents. Additional insights into the industry were obtained from market research publications and financial analysis tools.

2. **Analysis of Expense Categories:** Critical expense categories within the supply chain, including logistics expenses, technology infrastructure, warehousing, and human resources, were identified and evaluated. Emphasis was placed on cost trends, variations, and any significant changes in expense distribution over time.

3. **Comparative Evaluation:** The financial data from each company was compared concerning their operational costs, concentrating on common operating expenses. Metrics such as operating margin, asset turnover, and return on investment (ROI) were also computed to evaluate the financial effectiveness of supply chain spending. These comparisons are interpreted strategically rather than as exact operational benchmarks, given the differences in business models and sectoral contexts.

4. **Interpretation and Insights:** The results were analyzed within the framework of each company's business model and supply chain strategies. This comparative method aids in grasping the financial priorities of these firms and how they align their expenditures to further operational goals.

This paper focuses on the operating expense segment of the income statement for Amazon, Blue Dart, and Swiggy for the years 2020, 2021, and 2022.

Limitations of the Study

This study relies exclusively on secondary data obtained from publicly available annual reports, audited financial statements, and investor disclosures. While these sources ensure reliability and transparency, they often aggregate cost items into broad accounting categories. As a result, some supply chain cost components such as last-mile delivery expenses, reverse logistics, and micro-level warehousing efficiencies cannot be fully isolated.

The analysis also focuses primarily on financial cost metrics and does not incorporate non-financial operational performance indicators such as delivery lead times, inventory turnover, order accuracy, or service quality levels. Although these indicators are critical for evaluating supply chain effectiveness, consistent and comparable disclosures were not publicly available for all three firms.

The study period (2020–2022) coincides with the COVID-19 pandemic, which caused abnormal operational disruptions, demand fluctuations, and regulatory

constraints. Therefore, certain cost variations may reflect short-term crisis responses rather than stable long-term strategic patterns.

Furthermore, the three firms operate under fundamentally different business models — Amazon's infrastructure-intensive global e-commerce operations, Swiggy's hyper-local on-demand delivery network, and Blue Dart's premium logistics services. Hence, the comparative analysis emphasizes strategic cost allocation patterns rather than strict numerical equivalence across companies.

Table 1: Amazon — Operating Expenses (2020–2022)

Amazon			
	2020	2021	2022
Operating Expenses:			
Cost of sales	$233,307	$272,344	$288,831
Fulfillment	58,517	75,111	84,299
Technology and Content	42,704	56,052	73,213
Marketing	22,008	32,551	42,238
General and Administrative	6668	8,823	11,891
other operating expenses, net	75	62	1,263
Total operating expenses	$363,165	$444,943	$501,735

Source: based on Amazon Annual Reports (2020–2022).

Table 2: Blue Dart — Financial Summary (2020–2022)

Blue Dart			
Particulars	Mar-20	Mar-21	Mar-22
Income from Operations	3,16,639	3,27,970	5,17,222
Other Income	1401	1266	5054
Total Income	318040	329236	522276
Total Expenditure	297855	290307	453996
Profit before Exceptional Items, Depreciation, Interest and Tax	20185	38929	68280
Depreciation	15280	20067	16664
Finance Cost	3214	3172	1742
Profit Before Exceptional Items and Tax	1691	15690	49874
Exceptional Items	6411	2585	0
Profit/(Loss) Before Tax	4720	13105	49,874
Income Tax expenses	891	3474	13230

Source: based on Blue Dart Annual Reports (2020–2022).

Table 3: Swiggy — Income and Expenses (2020–2022)

Swiggy			Rs in millions
	year ended March 31, 2020	year ended March 31, 2021	year ended March 31, 2022
Income			
Revenue from operations	32,875	20,080	35,571
other income	2,610	1,370	4,891
Total income	35,485	21,450	40,462
Expenses			
Cost of operations	26,176	2,812	
Cost of material consumed	1,489	379	511
purchases of stock-in-trade	224	82	6
Changes in inventories of stock-in-trade	128	114	14
Employee benefits expense	11,565	9,353	14,706
Finance costs	758	714	411
Depreciation and amortisation expense	1,951	2,029	1,214
other expenses	30,112	17,622	50,547
Total Expenses	72,147	33,105	67,409

Source: based on Swiggy Annual Reports (2020–2022).

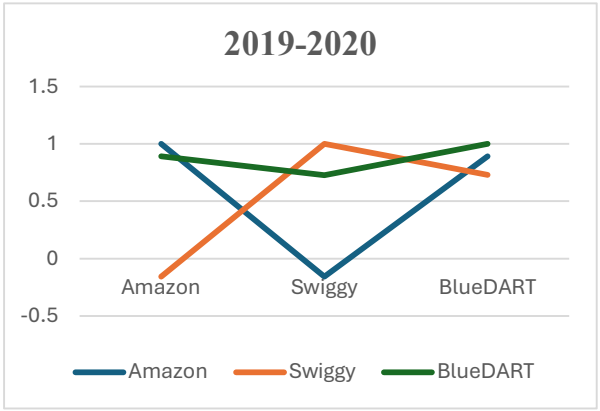

Figure. 1 Correlation curve for 2019–2020

Source: Authors' own analysis based on Amazon, Swiggy, and Blue Dart annual reports (2020).

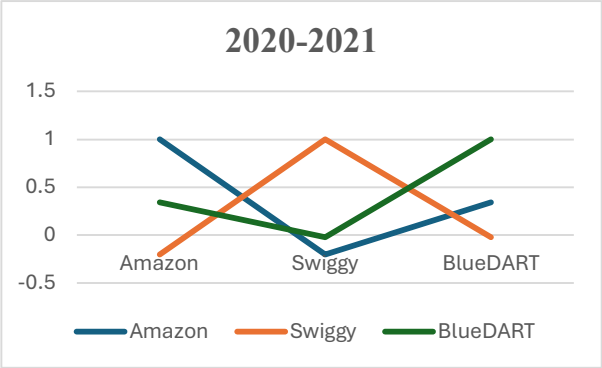

Figure 2. Correlation curve for 2020–2021

Source: Authors' own analysis based on Amazon, Swiggy, and Blue Dart annual reports (2021).

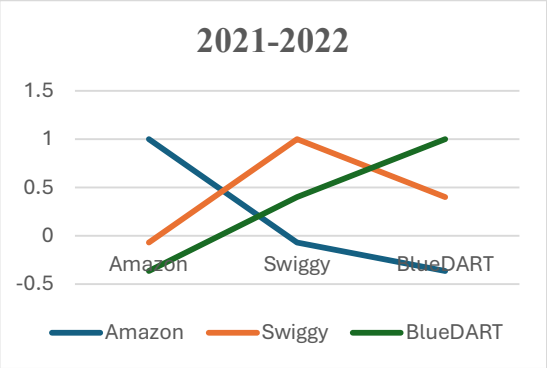

Figure 3 Correlation curve for 2021–2022

Source: Authors' own analysis based on Amazon, Swiggy, and Blue Dart annual reports (2022).

Key Findings:

From the three curves, it is evident that Swiggy has a similar trend from 2019-2022 whereas Amazon and BlueDART show a different trend during the 2019-2022. This is due to the fact that the three companies operate in different sectors in operation and logistics industry. Amazon and BlueDART are FMCG sector whereas Swiggy come in food sector companies.

The shift or trend is shifted during the COVID-19 situation.

Conclusion

Based on the correlation data spanning three years, it is evident that Amazon, Swiggy, and BlueDart exhibit varying relationships that mirror their different methodologies in handling supply chain costs and expenditures. Initially, Amazon and BlueDart demonstrated a strong alignment, but this connection has diminished in recent years. The correlation of Swiggy with both Amazon and BlueDart has varied, indicating possible changes in business strategies, such as Swiggy's heightened emphasis on technological innovations or collaborations. Essentially, the correlation analysis highlights the distinct strategies these companies implement within the larger supply chain management framework, with their financial tactics and operational models adapting to both internal dynamics and external influences. The instances of weak or negative correlations further emphasize the unique business models and market environments in which each company operates, illustrating that each organization's expense management is distinctly customized to meet its individual business requirements and competitive challenges. The findings should therefore be interpreted as strategic financial insights rather than precise operational benchmarks. Nonetheless, the analysis offers meaningful guidance on how different supply chain-dependent firms align financial investments with their

competitive priorities under dynamic conditions.

Conflict of Interest: There is no conflict to declare.

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