

A Study On Cost Analysis of Tractor Dealer with Special Reference to Shivaraj

Tractor

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Abstract

This study focuses on the cost analysis of tractor dealerships with special reference to Shivaraj Tractor. The research examines various cost components involved in the dealership business such as purchasing cost, transportation, employee salaries, maintenance, marketing, inventory management, and operational expenses. The study also analyzes sales performance, profit margins, customer demand, and financial efficiency of the dealership. The objective of the study is to understand the factors affecting dealership profitability and to identify methods for improving operational efficiency and reducing unnecessary expenses. The research is based on both primary and secondary data collected through interviews, observations, and company records. The findings reveal that effective inventory management, customer service, and cost control play a significant role in improving dealer profitability and business sustainability.

Keywords: Cost Analysis, Tractor Dealership, Shivaraj Tractor, Cost Management, Operating Costs, Cost Control, Profitability Analysis, Sales Analysis, Dealer Management, Agricultural Machinery.

I. INTRODUCTION

Agriculture is considered the backbone of the Indian economy, and mechanization has become an essential factor in improving agricultural productivity. Tractors play a vital role in modern farming activities by reducing manual labor and increasing efficiency. As the demand for agricultural machinery increases, tractor dealerships have become an important part of the agricultural supply chain. Tractor dealers act as intermediaries between manufacturers and farmers by providing sales, servicing, spare parts, and financial assistance. However, maintaining a successful dealership requires effective cost management and financial planning. The profitability of a tractor dealership depends on several factors such as operating expenses, transportation charges, inventory costs, employee wages, marketing expenses, and customer satisfaction. Shivaraj Tractor

is one such dealership involved in the sale and servicing of tractors and agricultural equipment. This study aims to analyze the various costs associated with the dealership and evaluate the financial performance of the organization. The study also helps in understanding the challenges faced by tractor dealers and identifies strategies to improve profitability, operational efficiency, and customer relationship management in a competitive agricultural machinery market.

Research Objective:

- To identify the major components of operational costs such as employee salaries, transportation charges, maintenance expenses, electricity, marketing, and administrative costs involved in the dealership business.
- To analyze the relationship between dealership expenses and profitability in order to understand how cost

management affects overall business performance.

- To study the sales performance of tractors and agricultural equipment during different seasons and examine the impact of market demand on dealership revenue.
- To evaluate inventory management practices followed by Shivaraj Tractor and determine their effectiveness in reducing stock holding costs and improving operational efficiency.
- To examine customer satisfaction levels regarding tractor sales, servicing facilities, spare parts availability, and after-sales support provided by the dealership.
- To study the role of marketing strategies and promotional activities in increasing customer awareness and improving sales performance.
- To identify the financial challenges and risks faced by the dealership in managing operational expenses and maintaining profitability.
- To assess the effectiveness of employee management and workforce productivity in dealership operations.
- To suggest suitable measures and strategies for reducing unnecessary expenses, improving cost efficiency, and increasing profit margins.
- To understand the importance of effective financial planning and resource utilization in achieving long-term sustainability and growth of the dealership business.

Research Methodology:

- The study is based on a descriptive research design to analyze the cost structure and operational performance of Shivaraj Tractor dealership.
- The research is analytical and empirical in nature as it involves collection and interpretation of financial and operational data.
- Both primary and secondary data were used for conducting the study.
- Primary data was collected through personal interviews with employees,

management staff, and customers of the dealership.

- Customer opinions and feedback regarding sales and servicing activities were also collected during the research.
- Direct observation method was used to understand the day-to-day operational activities of the dealership.
- Secondary data was collected from company records, financial statements, books, journals, websites, and industry reports.
- Convenience sampling method was adopted for selecting respondents for the study.
- A total sample size of 50 respondents was selected, including customers, employees, and management staff.
- The area of study was limited to Shivaraj Tractor dealership and its business operations.
- The duration of the study was three months during which all necessary data was collected and analyzed.
- The collected data was organized systematically using tables and classification methods.
- Statistical tools such as percentage analysis, bar graphs, pie charts, and comparative analysis were used for data interpretation.
- The methodology helped in identifying operational costs, profitability, customer satisfaction, and sales performance of the dealership.
- The study also focused on understanding the relationship between dealership expenses and financial efficiency.
- Certain limitations were faced during the study due to limited time, restricted financial information, and possible respondent bias.

II. REVIEW OF LITERATURE

Several researchers and scholars have studied the importance of cost management, operational efficiency, and customer satisfaction in dealership businesses. Previous studies indicate that effective cost control plays a major role in improving the

profitability and long-term sustainability of automobile and tractor dealerships. Researchers have observed that operational expenses such as employee salaries, transportation charges, maintenance costs, inventory holding costs, and marketing expenses significantly influence overall financial performance. Studies also highlight that proper inventory management helps dealerships reduce unnecessary stock costs and improve working capital utilization.

Many authors have emphasized that customer satisfaction and after-sales service are important factors that affect customer loyalty and sales growth in tractor dealerships. Efficient servicing facilities, spare parts availability, and quick customer support help dealerships maintain a competitive advantage in the market. Research studies related to agricultural machinery businesses also reveal that seasonal demand and agricultural conditions directly impact tractor sales and dealership revenue.

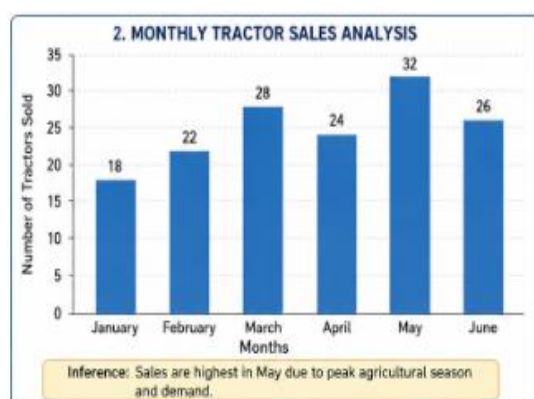
According to earlier literature, technological advancements, digital marketing, and financial planning have helped dealerships improve operational efficiency and increase profitability. Researchers further state that employee productivity and effective management practices contribute to better business performance. The existing literature provides valuable information regarding dealership cost analysis and forms a strong foundation for studying the financial and operational performance of Shivaraj Tractor dealership.

III. DATA ANALYSIS & INFERENCES



Interpretation

The above pie chart represents the distribution of operating expenses of Shivaraj Tractor dealership. It is observed that employee salaries account for the highest share of expenses at 30%, followed by inventory management costs at 25%. Transportation expenses contribute 18% of the total operational cost, while marketing and maintenance expenses account for 12% and 10% respectively. Miscellaneous expenses form the smallest portion with 5%. The analysis indicates that human resource management and inventory handling are the major cost-consuming areas of the dealership. Therefore, effective cost control and efficient inventory management can help improve the profitability and operational efficiency of the dealership.



Interpretation

The above bar graph represents the monthly tractor sales performance of Shivaraj Tractor dealership from January to June. The analysis shows that tractor sales

gradually increased from 18 units in January to 28 units in March. A slight decrease in sales was observed in April with 24 tractors sold. The highest sales were recorded in May with 32 tractors due to increased agricultural activities and seasonal farming demand. In June, sales slightly decreased to 26 units. Overall, the graph indicates that tractor sales are strongly influenced by seasonal agricultural requirements and market demand. Effective sales strategies during peak seasons can help the dealership increase revenue and profitability.



Interpretation

The above pie chart represents the customer satisfaction levels of Shivaraj Tractor dealership. The analysis shows that 40% of customers are highly satisfied and 35% are satisfied with the dealership's products and services. Around 15% of customers expressed a neutral opinion, while only 7% and 3% of customers were dissatisfied and highly dissatisfied respectively. The findings indicate that the dealership has maintained a good relationship with customers through effective sales support, servicing facilities, and after-sales service. High customer satisfaction reflects the dealership's strong service quality and contributes positively to customer loyalty, business reputation, and future sales growth.



Interpretation

The above bar graph represents the profitability analysis of Shivaraj Tractor dealership. The graph shows that the total sales revenue is considered as 100%, out of which 70% is spent on operational expenses such as employee salaries, inventory management, transportation, maintenance, and marketing activities. After deducting these expenses, the dealership earns a net profit of 30%. The analysis indicates that operational costs consume a major portion of the revenue, affecting overall profitability. Proper cost control measures, efficient resource utilization, and better financial management can help the dealership reduce expenses and improve profit margins in the future.

IV. FINDINGS

- Employee salaries constitute the highest operational expense of the dealership.
- Inventory management costs occupy a significant share of total business expenditure.
- Transportation and maintenance expenses directly affect dealership profitability.
- Tractor sales increase during peak agricultural seasons due to higher farming activities.
- The highest sales performance was observed during the month of May.
- Customer satisfaction levels are high because of effective after-sales service and customer support.

- Most customers are satisfied with the quality of tractors and servicing facilities provided by the dealership.
- Marketing and promotional activities help in increasing customer awareness and sales performance.
- Operational expenses consume a major portion of the dealership revenue.
- The dealership maintains a moderate net profit margin after meeting operational costs.
- Proper inventory control helps in reducing unnecessary storage and stock maintenance costs.
- Efficient employee management contributes to better operational performance.
- Seasonal demand has a strong influence on tractor sales and dealership income.
- Effective financial planning and cost control can improve profitability and long-term business sustainability.
- Customer relationship management plays an important role in retaining existing customers and attracting new customers.
- Adoption of better cost management strategies can help the dealership improve overall efficiency and financial performance.

V. CONCLUSION

The study on cost analysis of Shivaraj Tractor dealership reveals that effective cost management plays a significant role in improving the profitability and operational efficiency of the business. The dealership incurs major expenses in areas such as employee salaries, inventory management, transportation, and maintenance. The analysis also indicates that tractor sales are highly influenced by seasonal agricultural demand. Customer satisfaction levels are comparatively high due to quality products, efficient servicing, and strong after-sales support provided by the dealership. Although the dealership maintains a reasonable profit margin, operational expenses consume a large portion of revenue. Therefore, adopting proper financial planning, inventory control, and

cost reduction strategies can help improve profitability and ensure long-term business sustainability. Overall, the study highlights the importance of efficient resource utilization and customer relationship management in achieving business growth and competitive advantage in the tractor dealership industry.

- Cost analysis is essential for improving dealership profitability and operational performance.
- Employee salaries and inventory management are the major operational expenses.
- Seasonal agricultural demand strongly affects tractor sales performance.
- Customer satisfaction is high due to effective sales and after-sales services.
- Operational expenses consume a significant portion of dealership revenue.
- Proper inventory management helps reduce unnecessary costs and improve efficiency.
- Marketing activities contribute positively to customer awareness and sales growth.
- Effective financial planning can increase profit margins and business sustainability.
- Better cost control measures can improve the overall financial performance of the dealership.
- Customer relationship management is important for maintaining customer loyalty and business reputation.

VI. FUTURE SCOPE

The future scope of studying cost analysis of a tractor dealer with special reference to Shivaraj Tractor is significant because tractor dealerships operate in a competitive market where pricing, operating expenses, inventory costs, financing, and after-sales services directly influence profitability. Future studies can examine the changes in fixed costs, variable costs, administrative expenses, selling expenses, and service-related costs to identify areas where better

cost control can improve the dealer's financial performance.

The growing adoption of digital technologies and data analytics provides opportunities for improving cost management in tractor dealerships. Shivaraj Tractor can use digital accounting systems, inventory management software, and analytical tools to monitor expenses, stock levels, sales performance, and customer service costs in real time. Future research can evaluate how technology-based cost monitoring can reduce unnecessary expenditure and improve operational efficiency.

Another important area for future research is inventory and spare-parts cost management. Tractor dealerships need to maintain adequate stocks of tractors, spare parts, and accessories while avoiding excessive inventory holding costs. Future studies can analyze inventory turnover, storage expenses, transportation costs, and demand forecasting practices. Improved inventory planning can help reduce working capital requirements while ensuring timely availability of products and spare parts.

Future studies can also examine the impact of changing customer preferences, government policies, agricultural conditions, financing schemes, and tractor demand on dealership costs and profitability. Seasonal variations in agricultural activities can significantly influence tractor sales. Analyzing sales patterns and cost behaviour across different seasons can help the dealership develop better pricing, promotional, and resource-allocation strategies.

Finally, future research can conduct a comparative cost and profitability analysis of Shivaraj Tractor with other tractor dealerships. Factors such as purchase costs, dealership margins, operating expenses, after-sales service costs, employee expenses, financing arrangements, and sales volume can be compared to identify areas of competitive advantage. Such studies can

help the dealership improve cost efficiency, strengthen profitability, enhance customer service, and achieve sustainable growth in the agricultural machinery market.

VII. REFERENCES

- [1] F. B. Singh, G. Kakkar, and B. Mishra, "Identifying key causal factors for low profitability of Indian automobile dealerships," *International Journal of Innovative Research in Science, Engineering and Technology*, vol. 10, no. 3, pp. 1501–1507, 2021, doi: 10.15680/IJRSET.2021.1003006.
- [2] F. B. Singh, G. Kakkar, and B. Mishra, "Applying business process innovation in after-sales services for improved profitability of Indian automobile dealerships," *International Journal of Innovative Research in Science, Engineering and Technology*, vol. 10, no. 2, pp. 1122–1129, 2021, doi: 10.15680/IJRSET.2021.1002074.
- [3] S. Golar, K. J. Dooley, and N. Mousavi, "Are dealers still relevant? How dealer service quality impacts manufacturer success," *Production and Operations Management*, vol. 30, no. 10, pp. 3560–3578, 2021, doi: 10.1111/poms.13450.
- [4] S. A. Bhalchandra and N. D. Shinde, "Impact of dealer profitability on dealer satisfaction: A context of Indian automobile industry," *International Journal of Science and Research Archive*, vol. 12, no. 1, pp. 286–292, 2024, doi: 10.30574/ijrsra.2024.12.1.0772.
- [5] A. Yadav and S. Ghosh, "Forecasting monthly farm tractor demand for India using MSARIMA and ARMAX models," *Indian Journal of Agricultural Research*, vol. 53, no. 3, pp. 315–320, 2019, doi: 10.18805/IJARE.A-5185.
- [6] V. Baregal and D. Grover, "A quantitative analysis of demand for tractors in India," *Agriculture Update*, vol. 12, Special Issue 3, pp. 764–769, 2017, doi: 10.15740/HAS/AU/12.TECHSEAR(3)2017/764-769.
- [7] V. Baregal and D. K. Grover, "Tractorisation and its determinants in the midst of farmers' distress in Punjab," *Indian*

- Journal of Economics and Development, vol. 12, no. 1a, pp. 187–192, 2016, doi: 10.5958/2322-0430.2016.00061.5.
- [8] P. Parashunath, G. M. Hiremath, A. T. Joshi, H. Loksha, and M. Anantachar, “Comparative cost and returns of tractor owned and hired farms in Tungabhadra project (TBP) area of Karnataka, India,” *Journal of Applied and Natural Science*, vol. 8, no. 2, pp. 579–583, 2017, doi: 10.31018/jans.v8i2.840.
- [9] S. Barman and N. Deka, “Impact of farm mechanization on income of farmers in Assam, India,” *Asian Journal of Agricultural Extension, Economics & Sociology*, vol. 30, no. 1, pp. 1–17, 2019, doi: 10.9734/AJAEES/2019/v30i130100.
- [10] P. Rajkhowa and Z. Kubik, “Revisiting the relationship between farm mechanization and labour requirement in India,” *Indian Economic Review*, vol. 56, pp. 487–513, 2021, doi: 10.1007/s41775-021-00120-x.
- [11] P. R. Jena and P. C. Tanti, “Effect of farm machinery adoption on household income and food security: Evidence from a nationwide household survey in India,” *Frontiers in Sustainable Food Systems*, vol. 7, 2023, Art. no. 922038, doi: 10.3389/fsufs.2023.922038.
- [12] A. Sarkar, “Agricultural mechanization in India: A study on the ownership and investment in farm machinery by cultivator households across agro-ecological regions,” *Journal of Emerging Market Finance*, vol. 11, no. 2, 2020, doi: 10.1177/0976399620925440.
- [13] R. A. Parray, I. Mani, A. Kumar, T. K. Khura, and S. D. Lande, “Pilot study of farm power-machinery status and custom-hiring opportunities in rice-wheat cropping system,” *Indian Journal of Agricultural Sciences*, vol. 86, no. 2, 2016, doi: 10.56093/ijas.v86i2.55874.
- [14] A. Gulati and R. Juneja, “Farm mechanization in Indian agriculture with focus on tractors,” *ZEF Discussion Papers on Development Policy*, no. 297, 2020, doi: 10.2139/ssrn.3689250.
- [15] S. K. Srivastava, R. Chand, and J. Singh, “Changing crop production cost in India: Input prices, substitution and technological effects,” *Agricultural Economics Research Review*, vol. 30, pp. 171–182, 2017, doi: 10.5958/0974-0279.2017.00032.5.
- [16] V. Pagare, S. Nandi, and D. K. Khare, “Appraisal of optimum economic life for farm tractor: A case study,” *Economic Affairs*, vol. 64, no. 1, pp. 117–124, 2019, doi: 10.30954/0424-2513.1.2019.15.
- [17] R. Makkar, B. E. Aalam, M. Jain, and Ashwani, “A review of cost analysis study of farm tractor,” *International Journal of Current Microbiology and Applied Sciences*, vol. 9, no. 3, pp. 2914–2921, 2020, doi: 10.20546/ijemas.2020.903.335.
- [18] A. Kandpal, A. Kar, K. Immanuelraj, A. Singh, G. K. Jha, and P. Singh, “Insights on ownership pattern and demand for machinery in Indian agriculture,” *Indian Journal of Agricultural Sciences*, vol. 92, no. 1, pp. 18–21, 2022, doi: 10.56093/ijas.v92i1.120880.
- [19] A. Choudhary et al., “Investment on farm mechanization intensifies cropping and enhance farmer’s income: A meso analysis from semi-arid tropics of India,” *Annals of Arid Zone*, 2025, doi: 10.56093/aaz.vi.169296.
- [20] A. Ahmad et al., “Mechanisation of small-scale farms in South Asia: Empirical evidence derived from farm households survey,” *Technology in Society*, 2021, doi: 10.1016/j.techsoc.2021.101661.