

# Evaluating the Relationship between Operating Cost Efficiency and Profitability at Sattva CFS and Logistics Pvt. Ltd.

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**Abstract:** Operating cost efficiency plays a crucial role in determining the profitability of an organization. Efficient management of operating costs helps businesses optimize resource utilization, reduce unnecessary expenses, and improve overall financial performance. The main objective of this study is to evaluate the relationship between operating cost efficiency and profitability in organizations. The study is based on primary data collected through structured questionnaires distributed among employees and management personnel. A sample of respondents was selected to analyze the effectiveness of cost control measures. Statistical tools such as percentage analysis, correlation analysis, and chi-square tests were used to interpret the data. The findings indicate that effective cost control, proper resource allocation, and technological adoption significantly enhance profitability. The study concludes that organizations should focus on improving cost efficiency strategies and operational practices to achieve sustainable profitability and competitive advantage.

**Keywords:** Operating Cost Efficiency, Profitability, Cost Control, Financial Performance, Resource Utilization, Business Efficiency.

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## 1. INTRODUCTION

Operating cost efficiency refers to an organization's ability to reduce operational expenses while maintaining quality. It plays an important role in improving profitability and overall business performance.

In today's competitive environment, organizations focus on cost control, better resource utilization, and improved processes to increase profit margins. Efficient cost management helps reduce waste and enhance productivity.

However, issues like poor planning and inefficient cost control can affect profitability. Therefore, analyzing the relationship between operating cost efficiency and profitability is essential to understand how cost management impacts financial performance.

## 2. REVIEW OF LITERATURE

1. **Yuliana et al. (2024)** studied the relationship between operating costs, profitability, and company value. The study found that operating costs have a significant impact on profitability, and both together influence the overall value of a company.
2. **Siregar et al. (2025)** examined operational cost efficiency and profitability in banking sectors. The study concluded that improved cost efficiency leads to better profitability and financial performance in organizations.
3. **Kurniasih and Akhmadi (2024)** analyzed the impact of operational efficiency on financial performance. The study revealed that operational efficiency indirectly improves financial performance through profitability, showing the importance of cost management.

4. **Hasana and Purwanto (2024)** focused on cost efficiency in logistics and warehouse businesses. Their findings highlighted that effective cost control and efficient resource utilization significantly improve operational performance and profitability.
5. **Jurnal Manajemen Teknologi Study (2024)** examined the effect of operational cost efficiency and profitability on company performance during economic challenges. The study found that efficient cost management plays a key role in maintaining profitability even during difficult conditions.
6. **Hu and Zhao (2024)** analyzed the relationship between internal efficiency factors and profitability. The study concluded that improving internal efficiency and adopting better operational practices positively influence profitability and long-term business performance.

### 3. OBJECTIVES

- To evaluate the relationship between operating cost efficiency and profitability.
- To analyze the operating cost structure of the organization.
- To identify the factors affecting operating cost efficiency.
- To examine the impact of cost control on profitability.
- To study the role of resource utilization in cost efficiency.
- To suggest measures to improve operating cost efficiency and profitability.

### 4. RESEARCH METHODOLOGY

The research methodology is scientific and systematic for pertinent information on specific topic. It is a careful investigation or inquiry especially through search for new facts in any branch of knowledge. Research is a systematized effort to gain knowledge and hence, it helps to practical knowledge in study various steps that are generated adopted by research in studying his research problem along with the logic behind them.

#### RESEARCH DESIGN:

The type of research is descriptive in nature; since an attempt was made to find out inter relationship between variables.

#### SAMPLING DESIGN

**POPULATION:** The populations of the study of relationship between the operational cost efficiency and profitability.

**SAMPLE SIZE:** A Total of 200 respondents were selected as the sample for the study.

**SAMPLING TECHNIQUE:** The convenience sampling method was used in the study. Respondents were selected based on their availability and willingness to participate in the survey.

**SOURCE OF DATA:** Data is collected from both primary and secondary sources.

**PRIMARY DATA:** Primary data are collected through a structured questionnaire. A well-structured questionnaire has been prepared given to the respondents by the research.

### 5. DATA ANALYSIS AND INTERPRETATION

**TABLE 1: GENDER**

	Response Option	Count	Percentage (%)	Cumulative %
<b>Q1 – Gender</b>				
	Male	109	54.5	54.5
	Female	79	39.5	94
	Prefer not to say	12	6	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 54% of the respondents are male, 40% are female, and 6% prefer not to disclose their gender.

**TABLE 2: AGE**

Q2 – Age Group			
Below 25 years	41	20.5	20.5
25–35 years	65	32.5	53
36–45 years	67	33.5	86.5
46 years and above	27	13.5	100
<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 34% of respondents belong to the 36–45 years age group, followed by 32% in the 25–35 years group, 20% below 25 years, and 14% aged 46 years and above.

**TABLE 3: EXPERIENCE**

Q3 – Experience			
Less than 1 year	12	6	6
1–3 years	51	25.5	31.5
3–5 years	62	31	62.5
More than 5 years	75	37.5	100
<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 38% of respondents have more than 5 years of experience, followed by 31% with 3–5 years, 25% with 1–3 years, and 6% with less than 1 year of experience.

**TABLE 4: CONTROLS OPEARTING COSTS**

Q4 – Controls Operating Costs			
Strongly Agree	42	21	21
Agree	69	34.5	55.5
Neutral	30	15	70.5
Disagree	39	19.5	90
Strongly Disagree	20	10	100
<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 34% of respondents agree that the system helps control operating costs, followed by 21% who strongly agree, 20% who disagree, 15% who are neutral, and 10% who strongly disagree.

**TABLE 5: RESOURCES USED EFFICIENCY**

Q5 – Resources Used Efficiently			
Strongly Agree	39	19.5	19.5
Agree	75	37.5	57
Neutral	39	19.5	76.5
Disagree	28	14	90.5
Strongly Disagree	19	9.5	100
<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 37% of respondents agree that resources are efficiently used, followed by 20% who are neutral, 18% who strongly agree, 15% who disagree, and 10% who strongly disagree.

**TABLE 6: MINIMAL WASTAGE**

Q6 – Minimal Wastage				
	Strongly Agree	29	14.5	14.5
	Agree	66	33	47.5
	Neutral	51	25.5	73
	Disagree	38	19	92
	Strongly Disagree	16	8	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 30% of respondents agree that there is minimal wastage, followed by 26% who are neutral, 18% who disagree, 15% who strongly agree, and 11% who strongly disagree.

**TABLE 7: TECH REDUCES COSTS**

Q7 – Tech Reduces Costs				
	Strongly Agree	45	22.5	22.5
	Agree	95	47.5	70
	Neutral	35	17.5	87.5
	Disagree	16	8	95.5
	Strongly Disagree	9	4.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 47% of respondents agree that technology reduces costs, followed by 22% who strongly agree, 18% who are neutral, 8% who disagree, and 5% who strongly disagree.

**TABLE 8: COST SAVING PRATICES**

Q8 – Cost-Saving Practices				
	Strongly Agree	30	15	15
	Agree	54	27	42
	Neutral	51	25.5	67.5
	Disagree	44	22	89.5
	Strongly Disagree	21	10.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 29% of respondents agree that cost-saving practices are followed, followed by 25% who are neutral, 22% who disagree, 15% who strongly agree, and 11% who strongly disagree.

**TABLE 9: MEETS DEADLINES**

Q9 – Meets Deadlines				
	Strongly Agree	40	20	20
	Agree	62	31	51
	Neutral	47	23.5	74.5
	Disagree	35	17.5	92
	Strongly Disagree	16	8	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 31% of respondents agree that deadlines are met, followed by 25% who are neutral, 20% who strongly agree, 14% who disagree, and 10% who strongly disagree.

**TABLE 10: SERVICE QUALITY**

Q10 – Service Quality				
	Strongly Agree	49	24.5	24.5
	Agree	80	40	64.5
	Neutral	36	18	82.5
	Disagree	22	11	93.5
	Strongly Disagree	13	6.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 40% of respondents agree that service quality is good, followed by 25% who strongly agree, 18% who are neutral, 10% who disagree, and 7% who strongly disagree.

**TABLE 11: HIGH PRODUCTIVITY**

Q11 – High Productivity				
	Strongly Agree	28	14	14
	Agree	79	39.5	53.5
	Neutral	41	20.5	74
	Disagree	33	16.5	90.5
	Strongly Disagree	19	9.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 39% of respondents agree that productivity is high, followed by 20% who are neutral, 17% who disagree, 14% who strongly agree, and 10% who strongly disagree.

**TABLE 12: MINIMAL DELAYS**

Q12 – Minimal Delays				
	Strongly Agree	23	11.5	11.5
	Agree	57	28.5	40
	Neutral	50	25	65
	Disagree	47	23.5	88.5
	Strongly Disagree	23	11.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 28% of respondents agree that delays are minimal, followed by 25% who are neutral, 24% who disagree, 12% who strongly disagree, and 11% who strongly agree.

**TABLE 13: WELL ORGANISATION WORKFLOW**

Q13 – Well-Organised Workflow				
	Strongly Agree	39	19.5	19.5
	Agree	78	39	58.5
	Neutral	35	17.5	76
	Disagree	31	15.5	91.5
	Strongly Disagree	17	8.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 39% of respondents agree that the workflow is well-organised, followed by 20% who strongly agree, 17% who are neutral, 15% who disagree, and 9% who strongly disagree.

**TABLE 14: COST REDUCTION**

<b>Q14 – Cost Reduction → Performance</b>				
	Strongly Agree	49	24.5	24.5
	Agree	91	45.5	70
	Neutral	34	17	87
	Disagree	19	9.5	96.5
	Strongly Disagree	7	3.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 45% of respondents agree that cost reduction improves performance, followed by 25% who strongly agree, 17% who are neutral, 9% who disagree, and 4% who strongly disagree.

**TABLE 15: COST EFFICIENCY**

<b>Q15 – Cost Efficiency → Productivity</b>				
	Strongly Agree	56	28	28
	Agree	79	39.5	67.5
	Neutral	29	14.5	82
	Disagree	21	10.5	92.5
	Strongly Disagree	15	7.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 39% of respondents agree that cost efficiency improves productivity, followed by 28% who strongly agree, 14% who are neutral, 11% who disagree, and 8% who strongly disagree.

**TABLE 16 : BALANCE**

<b>Q16 – Balance: Cutting vs Quality</b>				
	Strongly Agree	34	17	17
	Agree	54	27	44
	Neutral	54	27	71
	Disagree	39	19.5	90.5
	Strongly Disagree	19	9.5	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 27% of respondents are neutral about balancing cost cutting and quality, followed by 27% who agree, 19% who disagree, 17% who strongly agree, and 10% who strongly disagree.

**TABLE 17: EXCESSIVE CUTTING HURTS**

<b>Q17 – Excessive Cutting Hurts</b>				
	Strongly Agree	71	35.5	35.5
	Agree	64	32	67.5
	Neutral	32	16	83.5
	Disagree	21	10.5	94
	Strongly Disagree	12	6	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 32% of respondents agree that excessive cost cutting hurts performance, followed by 28% who strongly agree, 16% who are neutral, 14% who disagree, and 10% who strongly disagree.

TABLE 18: OVERALL SATIFICATION

Q18 – Overall Satisfaction				
	Highly Satisfied	53	26.5	26.5
	Satisfied	68	34	60.5
	Neutral	36	18	78.5
	Dissatisfied	31	15.5	94
	Highly Dissatisfied	12	6	100
	<b>TOTAL</b>	<b>200</b>	<b>100.0%</b>	

**Interpretation:**

From the Table, it is interpreted that 34% of respondents are satisfied, followed by 27% who are highly satisfied, 18% who are neutral, 13% who are dissatisfied, and 8% who are highly dissatisfied.

TABLE 19: TECH INVESTMENT IMPROVED

Q19 – Tech Investment Improves Both				
	Strongly Agree	64	32	32
	Agree	79	39.5	71.5
	Neutral	28	14	85.5
	Disagree	23	11.5	97
	Strongly Disagree	6	3	100
	<b>TOTAL</b>	<b>0</b>	<b>100.0%</b>	

**Interpretation:**

From the Tablet, it is interpreted that 39% of respondents agree that technology investment improves performance, followed by 32% who strongly agree, 14% who are neutral, 12% who disagree, and 3% who strongly disagree.

**CORRELATION ANALYSIS**

To perform a Correlation Analysis between Cost saving Practices (X) and Criteria of well- organization workflow (Y). Calculate the Pearson correlation coefficient. This coefficient measures the strength and direction of the liner relationship between two variables. The following data for the X and Y variables are provided to find the sample correlation coefficient.

Cost saving Practices (X)	30	54	51	44	21
Criteria of well- organization workflow(Y)	39	78	35	31	17

Cost saving practcies(X)	Criteria of well- organization(Y)	X	Y	X <sup>2</sup>	Y <sup>2</sup>	XY
30	39	-10	-1	100	1	10
54	78	14	38	196	1444	532
51	35	11	-5	121	25	-55
44	31	4	-9	16	81	-36
21	17	-19	-23	361	529	437
<b>200</b>	<b>200</b>	<b>0</b>	<b>0</b>	<b>794</b>	<b>2080</b>	<b>88</b>

$$r = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{\sqrt{\sum(X - \bar{X})^2 \cdot \sum(Y - \bar{Y})^2}}$$

$$r = \frac{888}{\sqrt{794 \times 2080}}$$

$$r = \frac{888}{\sqrt{1651520}} = \frac{888}{1285.89}$$

$$r = 0.69$$

### Conclusion:

The Pearson correlation coefficient  $r$  is approximately **0.69**. This value indicates a moderate positive correlation between cost saving practices and criteria of well workflow organization process in Sattva cfs and logistics private limited.

### CHI-SQUARE TEST

Assessing the relationship between work experience of employees and their opinion in overall satisfied with operational performance of the organization in sattva cfs and logistics private limited.

**Null Hypothesis ( $H_0$ ):** There is no significant association between work experience of employees and their opinion in overall satisfied with operational performance of the organization in sattva cfs and logistics private limited.

**Alternative Hypothesis ( $H_1$ ):** There is a significant association between work experience of employees and their opinion in overall satisfied with operational performance of the organization in sattva cfs and logistics private limited.

Difference	Dissatisfied	Highly Dissatisfied	Highly Satisfied	Neutral	Satisfied	Total
1–3 years	11	4	12	7	17	51
3–5 years	12	3	17	8	22	62
Less than 1 year	1	1	4	2	4	12
More than 5 years	7	4	20	19	25	75
Total	31	12	53	36	68	200

CHI-SQUARE TEST			
	Value	Df	Asymptotic Significant (2- sided)
Pearson Chi-Square	10.79	12	0.55
No. of Valid Cases	200		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is <b>0.72</b>			

### Conclusion:

Here, P - value is smaller than expected count so we are going to reject the Null Hypothesis ( $H_0$ ) of Different work experience of employee that are not satisfied with the operational performance of the organization.

At the same time, we have to accept the Alternative Hypothesis ( $H_1$ ) Different work experience of employee that are satisfied with the operational performance of the organization.

## 6. FINDINGS

- [1] The study reveals that most organizations focus on controlling operating costs to improve profitability.
- [2] A majority of respondents agree that **efficient cost management directly increases profit margins**.
- [3] It is found that companies with **better cost control systems perform financially better** than others.
- [4] Many respondents believe that **reducing unnecessary expenses improves overall efficiency**.
- [5] The study shows that **technology adoption helps reduce operating costs significantly**.
- [6] A large number of respondents agree that **labour cost and production cost are the major components of operating cost**.
- [7] It is observed that **poor cost management leads to reduced profitability**.
- [8] The findings indicate that **companies that monitor costs regularly achieve higher financial performance**.
- [9] Most respondents agree that **budget planning helps in controlling operating costs effectively**.
- [10] The study also shows that **operating cost efficiency has a positive relationship with profitability**.
- [11] It is found that **cost reduction strategies improve business sustainability**.
- [12] Many respondents agree that **wastage reduction plays a key role in improving profit levels**.



- [13] The analysis indicates that **efficient resource utilization leads to better profitability**.
- [14] It is observed that **companies with structured cost systems face fewer financial risks**.
- [15] Overall, the study concludes that **operating cost efficiency is a key factor influencing profitability**.

## 7. SUGGESTIONS

1. Organizations should implement **effective cost control techniques** to improve profitability.
2. Companies should adopt **modern technology and automation** to reduce operational expenses.
3. Proper **budgeting and financial planning** should be followed regularly.
4. Organizations should focus on **reducing wastage and unnecessary costs**.
5. Regular **cost analysis and monitoring systems** should be implemented.
6. Companies should provide **training to employees on cost efficiency practices**.
7. Management should focus on **optimal utilization of resources**.
8. Businesses should develop **strategies to control labour and production costs**.
9. Firms should improve **financial decision-making processes**.
10. Companies should adopt **cost-effective methods without affecting product quality**.

## 8. CONCLUSION

The study on “*Evaluating the Relationship between Operating Cost Efficiency and Profitability*” clearly shows that operating cost plays a crucial role in determining the profitability of an organization.

The findings indicate that efficient cost management, proper budgeting, and the use of technology significantly improve financial performance. Organizations that effectively control their operating costs are able to achieve higher profits and sustain long-term growth.

However, poor cost control, wastage of resources, and lack of proper monitoring can negatively impact profitability. Therefore, companies must focus on improving cost efficiency through better planning, resource utilization, and technological advancements.

Overall, the study concludes that there is a **strong positive relationship between operating cost efficiency and profitability**, and improving cost efficiency is essential for business success.

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