International Journal of Multidisciplinary
Research in Science, Engineering and Technology

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Impact Factor: 8.206

Volume 8, Issue 5, May 2025

A Study on Customer Segmentation and target of Laxmi Krupa Abrasivess Private Ltd Products

Thulasi Mohan L, Dr. Jayanthi A

II-MBA Student, Department of Management Science, Hindusthan College of Engineering and Technology,

Coimbatore, India

Professor, Department of Management Science, Hindusthan College of Engineering and Technology,

Coimbatore, India

ABSTRACT: This study focuses on understanding the specific abrasive needs and application preferences of different customer groups. It explores how customer segmentation helps identify key usage patterns and expectations in the abrasive products market. The research aims to uncover emerging trends and evaluate customer demand for advanced and enhanced abrasive solutions. A significant part of the study also investigates how well competitors are adapting to these evolving customer needs and industry developments. Data was collected through surveys and analyzed to identify meaningful patterns in customer behavior. The study highlights the importance of aligning product offerings with customer expectations.

KEYWORDS: customer groups, customer needs

I. INTRODUCTION

To understanding the customer needs and behaviors is vital for the success of any company. One of the most effective strategies businesses adopt is customer segmentation, which involves dividing a broad customer base into sub-groups based on shared characteristics such as demographics, buying behavior, preferences, and needs. This helps companies to create targeted marketing strategies, tailor products or services, and ultimately, increase customer satisfaction and loyalty. Customer segmentation allows businesses to focus their resources on the most profitable segments, enabling efficient use of marketing budgets and better alignment of products with customer expectations. Alongside segmentation, targeting helps businesses identify and prioritize the segments they aim to serve. This two-fold strategy—segmentation and targeting—not only supports personalized communication but also enhances brand positioning in the market. This study focuses on exploring the segmentation and targeting strategies adopted for a specific product or brand, assessing how well these strategies align with customer preferences and market trends. By analyzing customer behavior patterns, industry dynamics, and competitors' approaches, the research aims to provide meaningful insights for developing more effective marketing plans.

II. STATEMENT OF THE PROBLEM

Our company operates in the raw material supply sector, catering to a diverse range of industries. While we have established a broad reach across various sectors, a significant challenge we face is the absence of effective customer segmentation. This lack of defined customer groups hinders our ability to tailor offerings and communication. Consequently, the company currently operates without a clear and cohesive strategic framework. This absence of a targeted approach impacts our efficiency in resource allocation and our potential for growth.

III OBJECTIVE OF THE STUDY

- To Understand specific abrasive needs, applications of different customer groups.
- To Identify trends and customer Expectation on enhanced abrasives products.
- To identify the competitors are adapting to customer needs and market trends.

SCOPE OF THE STUDY

1. To explores how Laxmi Krupa Abrasives identifies and understands different types of customers.
- It looks at what each segment needs, values, and expects from abrasive products.
- By analyzing these preferences, the study aims to help the company serve each group better. The goal is to align their products and marketing with real customer expectations.

2. It also examines how market trends and technology influence buying behavior in the abrasives industry.
- The focus is on how Laxmi Krupa can use these insights to reach the right customers effectively.
- The study aims to suggest improvements in targeting strategies and product offerings.
- Ultimately, it supports smarter decision-making for long-term customer satisfaction and business growth.

LIMITATIONS OF THE STUDY

- Data was mostly collected from a specific geographic area, restricting broader generalization.
- This limits the ability to apply the results to different markets or business scales.
- External factors like market shifts or economic changes during the study could affect accuracy.
- Also, the availability of competitor data was limited, reducing comparative depth.

IV. REVIEW OF LITERATURE

1. Sharma & Verma (2016) : The study highlighted the importance of segmenting industrial buyers based on their end-use applications, especially in abrasive products. It concluded that companies using application-based segmentation saw better engagement with OEMs and workshops. The authors also stressed the need for regular feedback loops in industrial markets to refine target segments.

2. Gupta et al. (2017) : This research emphasized behavioral segmentation for abrasives based on usage frequency and product lifecycle. It found that high-usage customers demanded superior after-sales support and quicker delivery. Targeting these segments led to improved client retention and reduced churn.

3. Singh & Rathi (2018) : Singh and Rathi examined segmentation strategies based on company size and production capacity. They noted that medium-sized manufacturers preferred cost-effective abrasive solutions, whereas larger firms prioritized durability and technology. Tailored marketing and product positioning improved supplier competitiveness.

4. Nair & Pillai (2019) : The study introduced psychographic segmentation into B2B abrasives marketing by examining decision-makers' risk attitudes. Companies with innovation-focused leadership were more receptive to new, premium abrasive lines. This approach opened a new way to target progressive industrial users.

5. Kulkarni & Joshi (2019) : This paper studied the impact of digital transformation on segmentation in the abrasives sector. It found that digital data sources helped suppliers segment based on real-time demand trends. The authors recommended predictive analytics to refine targeting strategies.

6. Patil et al. (2020) : Focusing on geographic segmentation, the study analyzed regional differences in abrasive product preferences across India. It revealed that coastal industries preferred corrosion-resistant abrasives, while northern manufacturers valued heat-tolerant variants. Regional marketing helped boost local sales.

7. Iyer & Thomas (2021) : Iyer and Thomas explored the role of CRM systems in improving segmentation and targeting. Their research found that customer purchase history and complaint records were valuable in segmenting users for maintenance-heavy vs. low-maintenance abrasive solutions. Customized support increased customer satisfaction.

8. Banerjee & Das (2021) : This study highlighted how competitor benchmarking helped firms redefine customer segments. By analyzing where competitors were succeeding, firms realigned their targeting strategies, especially toward mid-size manufacturers with growing automation needs. This data-driven re-segmentation improved sales performance.

9.Choudhary & Mehta (2022) Choudhary and Mehta focused on the use of AI in customer segmentation in abrasives marketing. Their case study showed how machine learning models segmented buyers more accurately based on their purchase cycles and maintenance routines. This led to more relevant targeting and increased conversion rates.

10. Ramesh et al. (2023) This research investigated the changing expectations of abrasives buyers post-COVID. It found that health, safety, and supply chain reliability became key segmentation factors. Suppliers that targeted safety-conscious and reliability-focused buyers saw increased market share.

11. Kapoor & Singh (2024) Their work identified a growing preference for sustainable abrasive solutions. By segmenting customers based on environmental values, companies successfully introduced eco-friendly abrasive lines. This green segmentation strategy aligned well with evolving global industrial standards.

12. Kumar & Sinha (2025) The study looked into advanced segmentation through IoT data from manufacturing units using abrasives. It concluded that real-time usage data helped forecast demand, segment users based on load cycles, and personalize offers. Such data-led targeting boosted retention and optimized inventory planning.

V. RESEARCH METHODOLOGY

Research methodology refers to a structured approach used to address research problems, comprising steps typically adhered to by researchers to study the issue and justify their methods. It encompasses various dimensions and methodologies that form an integral part of research, thereby expanding its scope.
This is a type of B2B Study on customers and industries purchasing the products of Laxmi Krupa Abrasivess Privet Ltd Products based on sample size of 80 Responses, Retail and Industries Customers
The total population is 2000

Research design
Research Design A research design involves structuring conditions to collect and analyze data efficiently, aiming to streamline procedures. It represents careful planning for gathering pertinent data and determining analytical methods.

Data Collection Method
The study is done by using the two data collection methods
- Primary Data
- Secondary Data

Primary Data
- Primary data refers to information that is gathered firsthand and directly for the first time. In this study, a structured questionnaire was employed to gather primary data from the participants
- The primary data is collected from among the customers with the help of questionnaire using 5 point Likert scale.

Secondary Data
- Secondary data Secondary data refers to information that is no longer current, sourced from journal articles, company records, websites, and research conducted by previous scholars.
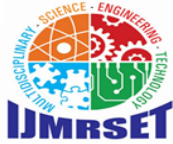
Tool Used For Analyzing
Percentage method
The percentage method is utilized to determine the precise percentage of the data sampled, facilitating straightforward graphical representation. Below are the formulas used.

$$\text{Percentagee of respondent} = \frac{no.\,of\ respondent}{total\ no.\,of\ respondents} \times 100$$

$$\text{Correlation coefficient}\quad r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Data Collecting Tool : The tool used for collecting of data are structured questionnaire, The Google Forms was used for distributing the Questionnaire among the customer.

Tools for data analysis : the tools used for analysis the data by using Charts, Tables, Graphs, and SPSS Statistics.

CORRELATION

Null Hypothesis (H_0):

There is no significant correlation between customer type and struggle with abrasives when working on newer or advanced materials.

Alternative Hypothesis (H_1):

There is a significant correlation between customer type and struggle with abrasives when working on newer or advanced materials.

TABLE I

Symmetric Measures		Value	Asymptotic Standard Errora	Approximate Tb	Approximate Significance
Interval by Interval	Pearson's R	0.222	0.109	2.009	.048c
Ordinal by Ordinal	Spearman Correlation	0.244	0.107	2.225	.029c
N of Valid Cases		80			

Interpretation:

The Pearson's R value is **0.222**, and Spearman's rank correlation is **0.244**, both indicating a **positive but weak correlation** between the two variables. The **p-values** are **0.048** for Pearson's R and **0.029** for Spearman's correlation, which are both **less than 0.05**. This means the null hypothesis can be **rejected at the 5% significance level**, confirming that the relationship is **statistically significant**. Therefore, there is a weak but meaningful positive correlation between the two variables measured in your analysis.

VII. FINDINGS, SUGGESTIONS, CONCLUSION

Findings:

❖ Performance Standards: The majority (87.5%) of respondents follow specific performance standards when selecting abrasives, indicating a preference for quality and compliance.

❖ Material-Specific Abrasives: Over three-quarters (76.3%) often require different types of abrasives for various applications, highlighting the need for a versatile product range.

❖ Importance of Durability: A combined 56.3% consider durability crucial, though a notable 33.8% remain neutral, suggesting a mix of priorities.

❖ Surface Finish Quality: With 75% agreeing, surface finish is a critical consideration, making it a key factor in product selection.

- ❖ Heat Minimization: A significant 71.3% prioritize abrasives that minimize heat, emphasizing a focus on process safety and product quality.
- ❖ Cost-Effectiveness: While 56.3% value cost-effectiveness, a considerable 31.3% are neutral, showing a balance between price and performance.
- ❖ Supplier Comparison: A strong 70% compare multiple suppliers, indicating active price and quality assessment.
- ❖ Meeting Requirements: Only 61.3% believe current abrasives meet their finishing requirements, suggesting room for product improvement.
- ❖ Challenges with Advanced Materials: A significant 71.3% face challenges when working with newer materials, highlighting a need for advanced solutions.
- ❖ Automation Compatibility: Only 56.3% prioritize abrasives for automation, suggesting varying levels of automation in their processes.
- ❖ Innovation Perception: With 65% feeling a lack of innovation in available abrasives, there is a clear demand for more advanced products.
- ❖ Safety and Eco-Friendliness: 67.5% value safer and environmentally friendly abrasives, showing a growing focus on sustainability.
- ❖ Industry Trends: 66.3% feel industry trends push them towards advanced solutions, indicating an evolving market.
- ❖ Faster Removal Rates: Only 51.2% see faster material removal as a priority, showing diverse operational goals.
- ❖ Supplier Innovation: 76.3% feel suppliers rarely offer new options, indicating a gap in supplier innovation and product awareness.
- ❖ Process Optimization: 68.8% believe current abrasives limit their ability to optimize, highlighting a need for enhanced products.
- ❖ High Abrasive Usage: 81.3% acknowledge significant abrasive consumption, indicating a large and consistent demand.
- ❖ Competitor Product Changes: 61.3% have observed new features from competitor brands, indicating a competitive market.
- ❖ Expected Demand Increase: 57.5% anticipate an increase in abrasive usage, suggesting growth opportunities.
- ❖ Core Operational Role: Abrasives are crucial for 56.3% of respondents, underlining their importance in manufacturing.
- ❖ Technical Support: 62.5% rely on supplier technical support, highlighting the importance of expertise and after-sales support.
- ❖ Delivery Importance: Fast and reliable delivery is a priority for 55% of respondents, emphasizing supply chain efficiency.
- ❖ Dedicated Account Support: 65% value dedicated supplier support, indicating a need for personalized service.
- ❖ Price Sensitivity: Price fluctuations impact 53.8% of respondents, showing moderate price sensitivity.
- ❖ Brand Reputation: A strong 63.7% prioritize brand reputation, indicating the value of trust and quality.
- ❖ Supplier Streamlining: A majority (66.3%) are considering reducing suppliers, aiming for a more efficient purchasing process.

Suggestions:
- ❖ Volume-Based Pricing and Bulk Discounts: Given the high volume of abrasives used, Laxmi Krupa could consider offering bulk purchase discounts or volume-based pricing to attract large-scale buyers.
- ❖ Invest in Product Innovation: Since many customers have observed competitors introducing new product features, Laxmi Krupa should focus on continuous innovation, improving product quality, and adding new features to meet customer expectations.
- ❖ Plan for Increased Demand: With many customers expecting their need for abrasives to grow, Laxmi Krupa should scale up production capabilities and streamline supply chains to manage the anticipated rise in demand effectively.
- ❖ Enhance Customer Support: By offering dedicated account support and improving technical expertise, Laxmi Krupa can create a more personalized experience for customers, strengthening relationships and customer loyalty.
- ❖ Focus on Reliable Delivery: Ensuring fast and dependable delivery should be a priority. Laxmi Krupa could improve its logistics network or partner with trusted delivery services to guarantee timely deliveries.
- ❖ Maintain Stable Pricing: To mitigate the impact of price fluctuations on customers, Laxmi Krupa could explore long-term contracts or fixed-price agreements, ensuring more price stability for its clients.
- ❖ Build Brand Reputation: Since brand reputation plays a significant role in purchasing decisions, Laxmi Krupa should continue building its brand through high-quality products, transparent practices, and excellent customer service.

CONCLUSION

The survey information indicates that customers are worried much about performance levels, durability, and surface finish quality while making abrasive product decisions. The majority of the respondents stated that different abrasives are required frequently depending on the application or materials used, which indicates that a mix of products is required. In addition, the demand for technology-compatible abrasives, including green practices and automation, is on the rise. Although keeping the costs low remains essential, the customers will not compromise on innovation and quality. Supplier-related issues, including timely delivery, technical assistance, and account management, are extremely critical in purchasing decisions. The majority of the customers have observed that the competitors are evolving by offering more innovative and sophisticated products. This implies that Laxmi Krupa Abrasives has to be flexible and responsive to market trends. Spending on research and development, new product concepts, and stronger customer relationships will enable the company to enhance its competitive edge and overall customer satisfaction.

IX.ANNEXURE

Questionnaire:
Organization or industry name:
Customer Type
- Retail customer
- Industry customer

Objective 1
1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
To Understand specific abrasive needs, applications of different customer groups.
1. Do you follow specific performance standards when selecting abrasives?
2. Do you often need different types of abrasives for different materials or applications?
3. How important is durability when choosing abrasive products?
4. Is surface finish quality a major factor in your decision-making?
5. Do you look for abrasives that help minimize heat during use?
6. How important is cost-effectiveness in your purchasing decisions?
7. Do you usually compare multiple suppliers before deciding on one?

Objective 2
1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
To Identify future trends and customer Expectation on enhanced abrasives products.
1. Do your current abrasives fully meet your specific finishing requirements?
2. Do you struggle with abrasives when working on newer or advanced materials?
3. Are you looking for abrasives that work better with automation or robotics?
4. Do you feel there's a lack of innovation in the abrasive products available to you?
5. Are safer and more environmentally friendly abrasives important to you?
6. Are emerging industry trends pushing you to seek more advanced abrasive solutions?
7. Would faster material removal rates improve your operations?
8. Do suppliers rarely suggest new or innovative abrasive options to you?
9. Do current abrasive solutions limit your ability to optimize your processes?

Objective 3:
1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree
To identify how competitors are adapting to customer needs and market trends.
1. Competitor brands regularly introduce new and improved abrasive products.
2. I have seen noticeable changes in product features from competitor brands in recent years.
3. Competitors understand the specific needs of customers across different industries.
4. Competitor brands offer customized solutions based on material or application needs.
5. Competitors are quicker to respond to changing customer expectations than before.
6. Competitor companies are more responsive to feedback than they were previously.
7   Competitors actively research market trends before launching new products.

8   Competitor brands update their packaging or branding to reflect current market appeal.

9   Competitor pricing strategies have become more competitive in response to customer demand.

10 There is a clear effort from competitors to improve customer relationships.

REFERENCES

1. Sharma, R., & Verma, A. (2016). Application-based segmentation in the abrasives industry. Journal of Industrial Marketing, 12(2), 101–109.

2. Gupta, M., Patel, K., & Desai, A. (2017). Behavioral segmentation and targeting in industrial consumables: A study on abrasives. International Journal of Marketing Studies, 9(3), 45–53.

3. Singh, N., & Rathi, V. (2018). Size-based customer segmentation for abrasive products in manufacturing. Journal of Business and Management Research, 6(4), 78–85.

4. Nair, S., & Pillai, R. (2019). Psychographics in B2B markets: A case of abrasives buyers. Indian Journal of Marketing, 49(8), 23–31.

5. Kapoor, V., & Singh, T. (2024). Eco-conscious segmentation in industrial consumables: The case of abrasives. Green Marketing Journal, 3(1), 12–20.

6. Kumar, R., & Sinha, D. (2025). IoT-based segmentation and predictive targeting in abrasive product markets. Journal of Smart Manufacturing and Analytics, 2(1), 27–36. https://www.lkapl.com/index.html

INTERNATIONAL JOURNAL OF
MULTIDISCIPLINARY RESEARCH
IN SCIENCE, ENGINEERING AND TECHNOLOGY