

A Study on Distribution Network at Nandi Polymers Pvt.Ltd., In Nandyala

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Abstract- Distribution is a key element of marketing, ensuring products reach customers efficiently. This study examines the distributor network of Nandi Polymers India Pvt. Ltd., a manufacturer of PVC and HDPE products. Data were collected from 100 dealers using questionnaires and analyzed using percentages and bar charts. Findings show that 92% of dealers receive products directly from the company, with 63% getting deliveries within 1–2 days. Company-owned trucks handle 87% of deliveries, ensuring smooth logistics. Major challenges include market competition (56%) and credit issues (30%). The study suggests improving transportation tracking, credit support, and marketing assistance to strengthen the distribution system and enhance customer satisfaction.

I. INTRODUCTION

Distribution is one of the key elements of marketing. It refers to the process of making a product or service available to customers through different channels such as distributors, wholesalers, retailers, or direct sales. An effective distribution system ensures that products reach the right place at the right time and in the right quantity.

Organizations normally use different channel members to move goods from producers to final consumers. These members may include distributors, agents, wholesalers, and retailers. Each participant in the channel performs specific functions such as transportation, storage, promotion, and customer support.

Distribution decisions are very important because they influence product availability, customer satisfaction, and overall business performance. Companies often combine multiple distribution channels to reach both large and small customers efficiently.

II. COMPANY PROFILE

S. P. Y. Reddy is the founder of Nandi Polymers India Pvt. Ltd., which began its operations in 1977. The company is engaged in the manufacturing of plastic products such as PVC pipes, HDPE pipes, storage containers, flexible hoses, and fittings. These products are widely used in water supply systems, agricultural irrigation, and industrial applications. The company focuses on delivering high-quality products and ensuring customer satisfaction. It aims to build long-term relationships with customers and distributors. Nandi Polymers operates both manufacturing and distribution activities to support various projects. The organization follows a structured management system with departments such as finance, marketing, personnel, and purchasing. Each department contributes to the smooth functioning and operational efficiency of the company. The company designs its products according to standard specifications to ensure reliability and durability. Through its operations, Nandi Polymers supports irrigation development and infrastructure growth.

III. REVIEW OF LITERATURE

Philip Kotler and Gary Armstrong (2000), organizations use different targeting strategies in the marketing process. They identified three main approaches: undifferentiated marketing, differentiated marketing, and concentrated marketing. These strategies help companies select the most suitable market segments and effectively position their products to meet customer needs. Their ideas were discussed in the book Principles of Marketing.

Similarly, Paul Baines et al. (2008) explained that selecting an appropriate target market depends on several factors such as market growth, segment profitability, segment size, and the level of competition. They also highlighted two ways of positioning a brand in the market: functional positioning, which focuses on product features and benefits, and expressive positioning, which focuses on emotional and social values. These concepts were presented in the book Marketing.

Hudson (2008: 8) cited Kotler's (1984) definition of marketing which reflected the importance of distribution as a major aspect of the marketing process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchange that satisfy individual (customer) and organizational objectives.

McCabe (2009) stated five characteristics which help marketers to designate the targeted market: attainable; measurable; large enough; defendable; sustainable. Baines et al. (2008) pointed to another approach to select the appropriate target market which builds on assessing the attractiveness of each of several factors, such as: market growth; segment profitability; segment size; competitive intensity within the segment; the cyclical nature of the industry (i.e. the seasonality of the industry)

Pavithra S. & Dr. R. Priyadarshini (2025) Article: A Study on Evaluation of Distribution Channel Performance Finding: Digital transformation and optimization of distribution channels improve efficiency, customer satisfaction, and overall sales performance

IV. NEED FOR THE STUDY

- The study on the distributor network of Nandi Polymers is needed to understand how effectively products are supplied from the company to distributors and further to retailers and customers.
- It helps in assessing product availability, delivery timeliness, and the efficiency of distributors in covering different market areas, ensuring smooth flow of goods without delays or shortages.

- Further, the study is essential to identify problems faced by distributors such as transportation issues, stock shortages, and communication gaps with the company.
- By analyzing these factors, Nandi Polymers can improve distributor coordination, reduce distribution costs, strengthen market presence, and enhance customer satisfaction in a competitive market

V. SCOPE OF THE STUDY

- The scope of the study on the distributor network of Nandi Polymers includes examining the structure and functioning of its distributors and dealers.
- The study focuses on understanding product flow from the company to distributors, delivery schedules, stock availability, and the extent of market coverage in different regions.
- Further, the study covers the analysis of distributor performance, transportation facilities, inventory management practices, and communication between the company and distributors.
- It also aims to identify problems faced by distributors and suggest improvements to strengthen the distribution system and enhance customer satisfaction

VI. OBJECTIVES OF THE STUDY

- To understand how Nandi Polymers supplies its products through distributors and dealers.
- To find out whether products are delivered on time to distributors and retailers.
- To study how stock is managed and transported within the distributor network.
- To identify problems faced by distributors and suggest ways to improve the distribution system

VII. RESEARCH METHODOLOGY

Descriptive research

Sample size: A total of 133 dealers were chosen for the study.

Sample size is being determined by using the formula of finite population

$$n = \frac{N}{1 + N(e^2)}$$

Here

n: Required sample size

N: Population

e: margin of error

population of study i.e :N:200

e: margin of error is taken 5% i.e e value is e:0.05

$$n = \frac{200}{1+200(0.05^2)}$$

$$n = \frac{200}{1 + 200(0.0025)}$$

$$n = \frac{200}{1+0.5} = 200 \div 1.5 = 133.33$$

Sampling technique: A simple random sampling method.

VIII. DATA COLLECTION METHOD

Primary Data: Questionnaires.

Secondary Data: Company website, published articles and journals.

Research instrument: Questionnaire.

Data analysis: Percentage and graphical analysis (Bar charts).

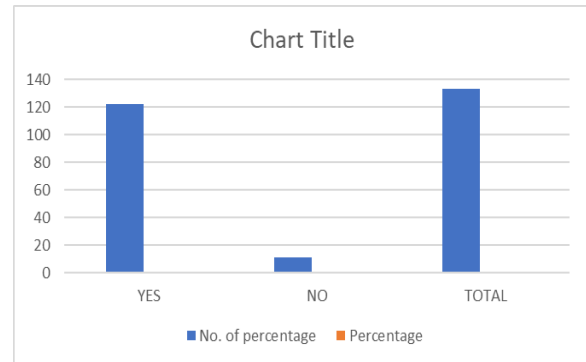
IX. DATA ANALYSIS AND INTERPRETATION

Table -4.1.1

1. Does Nandi polymers supply products directly to distributors?

Option	No. of percentage	Percentage
YES	122	92%
NO	11	8%

TOTAL	133	100%
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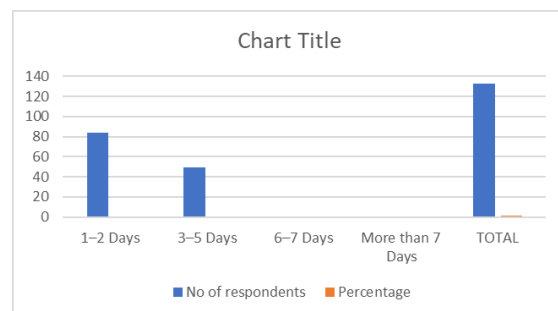


Interpretation: A vast majority of respondents (92%) confirmed that Nandi Polymers supplies products directly to distributors, indicating a strong direct distribution system, while only 8% reported otherwise.

Table -4.1.2

2. Average delivery time after placing an order:

Dealers option	No of respondents	Percentage
1–2 Days	84	63%
3–5 Days	49	37%
6–7 Days		
More than 7 Days		
TOTAL	133	100%

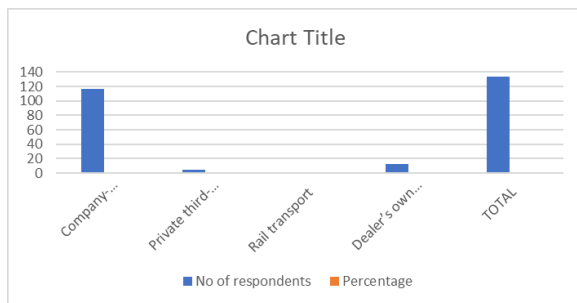


Interpretation: The majority of dealers (63%) receive their orders within 1–2 days, while 37% experience delivery in 3–5 days, indicating a generally prompt delivery system.

Table -4.1.3

3. What is the most frequent mode of transport used for your deliveries?

Dealers option	No of respondents	Percentage
Company-owned trucks	116	87%
Private third-party carriers	4	3%
Rail transport		
Dealer's own vehicle	13	10%
TOTAL	133	100%

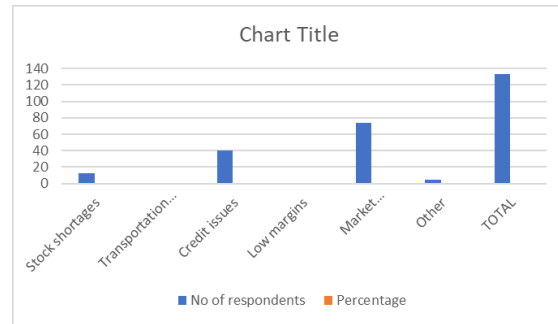


Interpretation: The majority of dealers (87%) rely on company-owned trucks for deliveries, indicating strong control over logistics operations, while a small percentage use dealer-owned vehicles (10%) or private carriers (3%), showing limited dependence on external transport options.

Table -4.1.4

4. What challenges do you face in distributing Nandi Polymers products?

Dealers option	No of respondents	Percentage
Stock shortages	13	10%
Transportation delays		
Credit issues	40	30%
Low margins		
Market competition	74	56%
Other	5	4%
TOTAL	133	100%



Interpretation: The major challenge faced by dealers is market competition (56%), followed by credit issues (30%), while stock shortages (10%) and other minor issues (4%) affect only a small percentage of dealers

X. FINDINGS

- The company follows a direct and systematic distribution network, enabling effective control over the flow of products from manufacturing to distributors and dealers.
- Product delivery performance is generally reliable and timely, which supports dealers in meeting market demand and maintaining customer satisfaction
- Transportation and logistics are largely managed by the company, resulting in better supervision, reduced dependency on third-party carriers, and improved delivery consistency.
- Dealers face intense competition in the market, which is the major challenge affecting distribution effectiveness and dealer profitability

XI. SUGGESTIONS

- Transportation should be improved by using modern tracking systems to monitor vehicles and deliveries.
- The company should provide flexible credit support to loyal dealers to help them manage business smoothly.
- More marketing and promotional support should be given to dealers to help them face market competition.

XII. CONCLUSION

An effective distribution network plays a key role in ensuring timely product delivery and maintaining strong dealer relationships. However, challenges such as market competition, occasional stock shortages, and limited feedback need to be addressed. Improving planning, communication, and marketing support can strengthen the distribution system and support sustainable growth.

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