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NIPPONPLY: ANALYZING THE FEASIBILITY OF GEOGRAPHICAL EXPANSION

Ritesh Patel wrote this case solely to provide material for class discussion. The author does not intend to illustrate either effective or ineffective handling of a managerial situation. The author may have disguised certain names and other identifying information to protect confidentiality.

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In December 2017, Ketan Thakkar, managing director of Nippon Distributors Private Limited (Nipponply) in the state of Gujarat, India, had a business plan. For quite some time, he had been doing market research to explore the potential of an idea—namely, geographical expansion of his current business into the western Indian states of Rajasthan, Maharashtra, and Madhya Pradesh. Thakkar had seen the huge potential for profit in this expansion. With his 25 years of experience in trading plywood products, he realized that these geographical areas had large volume requirements for plywood in housing, corporate sectors, and industrial projects. Thakkar discussed his dream of expansion with his childhood friend, Ronit Shah.

Based on an initial analysis, Thakkar decided to set a production goal of 45,000 units per year for the states into which he expanded, but actual production would depend on market demand. Thakkar estimated that 29,250 units could be sold per year at an average price of ₹2,200 per unit.[[1]](#footnote-1) He wanted to evaluate the feasibility of the project using a cost–volume–profit (CVP) analysis.

BACKGROUND

Nipponply began its journey in 1994, when Thakkar conceived the idea of providing plywood and veneers to consumers. Over the years, Nipponply developed various plywood products, veneers, laminates, and flush doors, with a strategy of delivering quality products based on natural raw materials. The firm preferred to obtain 100 per cent natural raw materials for its manufacturing and built its reputation on the quality of these materials. Further, Nipponply carefully selected manufacturers who were conveniently located in places where quality raw materials were available locally. The manufacturers’ modern technology combined with Nipponply’s experience resulted in continuous innovation and superior products. Nipponply had also established a strong and well-connected distribution network in the state of Gujarat. The firm had grown to provide one of the widest ranges of plywood, veneers, laminates, and flush doors in Gujarat.[[2]](#footnote-2)

Buyers favoured Nipponply’s products for two reasons. First, Nipponply promised that its products had a longer life and were of better quality compared to competitors’ products. This factor was important for many retail and industrial customers. Second, Nipponply offered competitive prices and more options in design and customization. The products were prepared according to customers’ specifications of shape, size, colour, and design. For its production and delivery processes, Nipponply followed a stepwise trading process (see Exhibit 1).

THAKKAR’S expansion PROJECT

Thakkar had a plan to expand his current business geographically into western India by offering Nipponply’s plywood products through business-to-business and business-to-consumer sales. The firm provided plywood, veneers, laminates, and flush doors in Gujarat state, but Thakkar wanted to provide only plywood products in the areas Nipponply would be expanding to.

Thakkar discussed the expansion with Shah.

Shah. Your idea is good, but why do you want to expand into western India?

Thakkar. There are various reasons for the geographical expansion. First, over the last 25 years of running this business in Gujarat, I have developed superior products and a wide variety of designs using natural raw materials and continuous innovation. If I expand the areas where I sell these products, I can take advantage of economies of scale to offset the costs of maintaining high-quality production. Due to their superior quality, I anticipate that I will be able to sell the products in western Indian markets as easily as I can in Gujarat. Second, after a few years, my son, Smit Thakkar, is going to join this business; as a next-generation entrepreneur, he wants to expand the family business for further growth. Third, the expansion will help increase the profitability of the firm and reduce our dependency on the local (i.e., Gujarat state) market.

Shah. What is the plan to manage the business while incorporating the idea of expansion?

Thakkar. We use an enterprise resource planning platform to make every business transaction as smooth as possible. The products are distributed through an organized network of business partners and associates. After receiving an order, it is processed by the warehouse and administrative departments. The product location is identified in the warehouse using information technology (IT) infrastructure. The products are shipped with a delivery note, which lists the description and quantity of goods delivered. The products are then delivered against payment to the end customer through the business partner and associate. Finally, the payment is transferred by the business partner and associate to Nipponply.

Shah. Great, but what about the organizational network?

Thakkar. I am using a hierarchical organizational network for this expansion plan, targeting three states in western India—namely, Rajasthan, Maharashtra, and Madhya Pradesh. (*Thakkar continued, referring to the hierarchical organizational network [see Exhibit 2].*)Each of these states will have one regional sales manager, one business development manager, two sales executives, and one office assistant. The firm will appoint one business partner and associate for each district within a state to look after the district’s business and customer requirements.

Shah. Good, but who is going to manage the office?

Thakkar. The office is going to be managed by people at three different levels. (*Thakkar referred again to Exhibit 2.*) At the top level, I, as managing director, will provide oversight for all three states. At the middle level, the regional sales manager will manage the office of their respective state, though the business development manager will be in charge of the development strategy. The bottom level of management is concerned with district-level activities. The business partner and associate will be responsible for district-level management.

Shah. Great, but where will the employees come from?

Thakkar. Employees will be hired from their local areas. In each state, the regional sales manager, business development manager, sales executives, and office assistant will come from that state only. The products will be distributed through a well-connected network of authorized business partners and associates who will be selected from their respective districts for two reasons. First, employees who are local have better knowledge and understanding of their market as compared to outsiders. Second, the local language differs from state to state, so local employees can manage business-related communications better because of their familiarity with the local language.

Shah. But what about the market?

Thakkar. The availability of potential customers who want to buy plywood will never be a problem. With the growing infrastructure and urban development plans of the government of India, the future demand for plywood is assured. I also see an opportunity generated by the conversion of the unorganized sector[[3]](#footnote-3) to an organized sector.[[4]](#footnote-4)

Shah. Good. What about expenses?

Thakkar. When expanding plywood products into new markets, Nipponply must consider manufacturing, advertising, promotional, and electricity expenses. These are the expenses related to the volume of sales per month.(*Thakkar shared the cost sheet [see Exhibit 3].*)

Shah. Were you also doing some research on market potential?

Thakkar. Yes, I did do some research. Let me show you. (*Thakkar then delivered a presentation on the market potential.*)

MARKET POTENTIAL

Thakkar’s presentation predicted increasing market potential due to two new opportunities: (1) a new initiative recently launched by the government of India, and (2) changes in market trends in the Indian plywood industry. First, the government of India had undertaken an initiative to provide affordable housing to lower-income groups,[[5]](#footnote-5) middle-income groups,[[6]](#footnote-6) and the economically weaker section of society[[7]](#footnote-7) (essentially, the urban below-poverty-line population[[8]](#footnote-8)), by 2022.[[9]](#footnote-9) According to the estimate, this initiative would necessitate the construction of 114 million houses by 2022[[10]](#footnote-10) and include the western Indian states (i.e., Rajasthan, Maharashtra, and Madhya Pradesh). Because this scheme would require plywood materials and products used for housing development, it would generate a rise in demand and a new opportunity for the plywood industry.

In addition, India’s plywood market was estimated to reach a value of US$5.5 billion by 2023 due to changes in market trends, such as increasing incomes, urbanization, investment in real estate, and western influence. The demand for plywood products was expected to increase among household consumers, architects, interior designers, and original equipment manufacturers and for residential- and commercial-building purposes, creating additional opportunities for the plywood industry.[[11]](#footnote-11)

On the basis of this preliminary analysis, Thakkar decided to pursue an expansion in the three target western states, with a trading capacity of 45,000 units. He presented the calculations to Shah for discussion.

INVESTMENT NEEDED

Thakkar. Shah, according to my estimate, the investment for the expansion project would be about ₹29.125 million. Investments would need to be made in various fixed assets, such as information technology [IT] infrastructure, a manufacturing plant and machinery, a building or office, and other miscellaneous assets.

As we have already discussed, there would be other operating expenses related to the volume of production. According to my estimates, these costs would total ₹7.0125 million per month (*see Exhibit 3*).

*Shah examined the estimated investment costs* (*see Exhibit 4*)*.*

Thakkar. In addition to the above investments, I have estimated working capital requirements of ₹0.84 million per year to pay for routine expenses such as administrative costs, office supplies, electricity, and other miscellaneous costs (*see Exhibit 5*).

Further, the estimated workforce cost would be about ₹2.952 million per year (*see Exhibit 6*). The personnel cost would be for the aforementioned regional sales managers, business development managers, sales executives, and office assistants.

FINAL DECISION

A comprehensive analysis followed the discussion.

Thakkar’s initial decision was to pursue a business plan that had a trading capacity of 45,000 units per year, but the actual production had to be based on market demand. Thakkar estimated that, ultimately, 29,250 units could be sold per year at an average price of ₹2,200 per unit. Nipponply could produce 29,250 units with 65 per cent capacity utilization (i.e., the lowest level of capacity). For the second and third year, Thakkar estimated that Nipponply would have 38,250 units and 45,000 units with 85 per cent capacity utilization (a moderate level of capacity) and 100 per cent capacity utilization (the highest level of capacity), respectively.

The initial investment in the project would cost ₹29.965 million, of which ₹21.915 million would be drawn from the firm’s own resources; the rest would come from a bank loan at an interest rate of 11 per cent (see Exhibit 7). The life of the project was estimated to be fifteen years. The salvage value of the IT infrastructure, plant, and machinery at the end of fifteen years would be negligible and therefore could be ignored. The salvage value of the building machinery at the end of fifteen years would be ₹250,000.

Before investing in this project, Thakkar asked a consultant to review his business plan.

EXHIBIT 1: nipponply’s TRADING PROCESS

Customer Inquiry

Quotation

Inventory Check

Receipt of Order from Customer

Confirmation of Order Receipt

Customer Feedback

Preparation of Order Form

Processing of Sales Form

Location of Product in the Warehouse Using IT Infrastructure

Delivery with Accompanying Delivery Note

Delivery to End Consumer

Warehouse and Administration Department’s Receipt and Processing of Order

Invoicing

Collection of Payment

Note: IT = information technology.

Source: Created by the case author based on company documents.

EXHIBIT 2: HIERARCHICAL ORGANIzATION NETWORK

Regional Sales Manager

Managing Director

Business Development Manager (State-Wide)

Sales Executive (Region-Wide in a Particular State) and Office Assistant (State-Wide)

Business Partner and Associate (District-Wide)

Source: Created by the case author based on company documents.

EXHIBIT 3: EXPENSES RELATED TO THE VOLUME OF SALEs PER MONTH (FOR 3,750 UNITS)

|  |  |
| --- | --- |
| **Particulars** | **Amount (₹)** |
| Manufacturing cost | 6,682,500 |
| Advertising expense | 165,000 |
| Promotional expense | 82,500 |
| Electricity expense | 82,500 |
| **Total expenses** | **7,012,500** |

Source: Created by the case author based on company documents.

EXHIBIT 4: ESTIMATED INVESTMENT

|  |  |
| --- | --- |
| **Particulars** | **Amount (₹)** |
| Information technology infrastructure | 1,575,000 |
| Plant and machinery | 1,250,000 |
| Building | 26,100,000 |
| Other miscellaneous assets (i.e., inventory) | 200,000 |
| **Total investment** | **29,125,000** |

Source: Created by the case author based on company documents.

EXHIBIT 5: ROUTINE EXPENSES PER MONTH

|  |  |
| --- | --- |
| **Particulars** | **Amount (₹)** |
| Administrative costs | 20,000 |
| Office supplies | 5,000 |
| Electricity | 40,000 |
| Miscellaneous | 5,000 |
| **Total monthly expenses** | **70,000** |

Source: Created by the case author based on company documents.

EXHIBIT 6: PERSONNEL COSTS PER MONTH

|  |  |  |
| --- | --- | --- |
| **Employee Designation** | **Number of Employees** | **Amount (₹)** |
| Regional sales managers | 3 | 1,080,000 |
| Business development managers | 3 | 720,000 |
| Sales executives | 6 | 864,000 |
| Office assistants | 3 | 288,000 |
| **Total monthly personnel costs** |  | **2,952,000** |

Source: Created by the case author based on company documents.

EXHIBIT 7: CAPITAL STRUCTURE

|  |  |
| --- | --- |
| **Source** | **Amount (₹)** |
| Equity | 21,915,000 |
| Debt (bank loan) | 8,050,000 |
| **Total capital** | **29,965,000** |

Source: Created by the case author based on company documents.

1. ₹ = INR = Indian rupee; all currency amounts are in ₹ unless otherwise stated; US$1 = ₹64.53 on December 1, 2017. [↑](#footnote-ref-1)
2. “Plywood” referred to wood veneers bonded together to produce a flat sheet. “Veneer” was a commonly used finishing material for furniture made from medium-density fibreboard (commonly known by the acronym MDF), particleboard plywood, or solid wood. “Laminates” were commonly used finishing materials for furniture, often referred to as “Sunmica” in India—the name of a popular Indian brand of laminates. “Flush doors” were simple interior door designs that had plain facings on both sides. Forest and Wood Products Australia Ltd., “Plywood,” WoodSolutions, accessed June 1, 2018, https://www.woodsolutions.com.au/wood-product-categories/plywood; Srishti Jain, “Laminate or Veneer: What Should You Choose for Your Furniture?,” Livspace.com, May 19, 2017, accessed June 1, 2018, www.livspace.com/magazine/laminate-veneer-difference; “What Are Flush Doors?,” Enfield Specialty Doors, December 2, 2014, accessed June 1, 2018, https://www.enfielddoors.co.uk/what-are-flush-doors. [↑](#footnote-ref-2)
3. An “unorganized sector” was one that was not arranged into an organized system, structure, or unity. KeyDifferences, accessed October 5, 2018, https://keydifferences.com/difference-between-organised-and-unorganised-sector.html. [↑](#footnote-ref-3)
4. An “organized sector” was one that was planned and controlled on a large scale and involved many people. Sectors could become organized due to market development; the opportunity was created by the normal preference of customers for purchasing products from an organized market. KeyDifferences, accessed October 5, 2018, https://keydifferences.com/difference-between-organised-and-unorganised-sector.html. [↑](#footnote-ref-4)
5. “Lower income groups” were households with annual incomes between ₹300,000 and ₹600,000. Government of India, Ministry of Housing and Urban Affairs, *Annual Report 2017–18*, accessed June 3, 2018, http://mohua.gov.in/upload/uploadfiles/files/new\_AR-2017-18%20(Eng)-Website.pdf. [↑](#footnote-ref-5)
6. “Middle-income groups” referred to two categories of households, categorized on the basis of annual income: MIG-I households had annual incomes between ₹600,001 and ₹1,200,000; MIG-II households had annual incomes between ₹1,200,001 and ₹1,800,000. Ibid. [↑](#footnote-ref-6)
7. “Economically weaker sections of society” were those households with annual incomes below ₹300,000. Ibid*.* [↑](#footnote-ref-7)
8. The “urban below-poverty-line population” were individuals with a monthly per capita consumption expenditure of less than ₹1,407 (at 2011–12 prices). Express News Service, “Urban, Poor,” *Indian Express*, July 18, 2015, accessed June 3, 2018, http://indianexpress.com/article/opinion/editorials/urban-poor. [↑](#footnote-ref-8)
9. Anupam Gupta, “Housing for All by 2022? An Ambitious Scheme in India is Showing Early Signs of Success,” Scroll.in, July 1, 2017, accessed February 26, 2018, https://scroll.in/article/841852/housing-for-all-by-2022-an-ambitious-scheme-in-india-is-showing-early-signs-of-success. [↑](#footnote-ref-9)
10. Harshad Borawake, Housing for All by 2022: A Big Opportunity in the Making (Mirae Asset Global Investments (India), 2017), accessed July 2, 2018, https://www.miraeassetmf.co.in/uploads/downloads/Mirae\_Asset\_LENS\_Issue9\_Affordable\_Housing\_in\_India.pdf. [↑](#footnote-ref-10)
11. IMARC Group, *Indian Plywood Market: Industry Trends, Share, Size, Growth, Opportunity and Forecast, 2018–2023* (Research and Markets, April 2017), accessed July 2, 2018, https://www.researchandmarkets.com/reports/4535109/indian-plywood-market-industry-trends-share. [↑](#footnote-ref-11)