

## CONCISE INDUSTRIES PRIVATE LTD.: CAPITAL BUDGETING IN UNCERTAIN TIMES

*Priti Yadav and Pratap Chandra Biswal from Management Development Institute, Gurgaon, India, wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.*

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Amid the impending economic uncertainty posed by COVID-19, Abhinav Kumar, the owner of Concise Industries Private Limited (Concise Industries), was worried about project expansion decisions. In this regard, he was in discussion with Hemant Verma, chief financial officer (CFO) of the company, as the two formulated strategies for the company's future growth.

According to Kumar, demand for material handling equipment, especially mobile cranes, was expected to increase if the macroeconomic situation continued to improve. The plausible reasons for this growing demand could be prompt and proactive policy intervention from fiscal and monetary authorities, as well as rising infrastructure spending in the Asia-Pacific region. Based on these expectations, Kumar was contemplating project expansion strategies that would entail either venturing into the mobile crane market or achieving economies of scale in the fixed crane market. Meanwhile, Kumar was aware that Omicron, a new and novel strain of the COVID-19 virus, might represent a new threat to worldwide recovery. In such an uncertain environment, Kumar faced the conundrum of assessing the viability of each project.

### CONCISE INDUSTRIES PRIVATE LIMITED: BACKGROUND

After gaining eleven years of experience in an electrical engineering firm and seeing growth opportunities in the ever-expanding expert engineering services sector, Kumar decided to start his venture, Concise Industries, in 2015. Kumar had graduated from the National Institute of Technology, Kurukshetra, with a bachelor of technology degree in mechanical engineering. In addition, his entrepreneurial spirit inspired him to pursue a distant master of business administration degree while working in the corporate sector.

Concise Industries operated in the fixed crane segment (see Exhibit 1) and produced a variety of material handling and control equipment, such as electric overhead travelling (EOT) cranes, jib cranes, wire rope hoists, and bridge cranes. Some of the industries the company catered to were agriculture, telecommunications, logistics and warehousing, automobiles, construction, and power transmission. Concise Industries also undertook annual maintenance contracts for its clients.

Concise Industries had built a state-of-the-art manufacturing facility in the industrial hub of Bhiwadi, Rajasthan, India.<sup>1</sup> The facility was spread across five hectares and had an inbuilt load testing facility of up to 200 tonnes, a well-equipped in-house machine shop, and a chemical laboratory, all of which helped to ensure a smooth manufacturing process. In 2016, within its first year, it delivered twenty successful projects and acquired more than fifty clients. By 2020, Concise Industries had grown to include fifty technical experts and over seven hundred happy clients, and it delivered more than two hundred cranes. In the financial year ending 2021, the company recorded a turnover of US\$10.8 million and a profit after tax of US\$0.42 million, despite COVID-19-led disruptions (see Exhibit 3).

In May 2021, the company acquired ISO 9001:2015 certification for developing an effective quality management system for EOT cranes and for designing, developing, producing, and selling material handling equipment.

## MATERIAL HANDLING AND CONTROL EQUIPMENT INDUSTRY

The worldwide economic rebound was projected to pick up steam as sentiment, demand, and production improved steadily, and this was further aided by continued vaccinations. For emerging economies, the World Bank projected a growth rate of 6 per cent over 2021.<sup>2</sup>

The Indian manufacturing sector had seen rapid growth in recent years. This could be attributed to the disruption of international trade during COVID-19 and to self-reliance initiatives such as Make in India, which aimed to make the country a manufacturing centre. The Indian government was also seeking to raise the manufacturing sector's contribution to gross domestic product (GDP) by 2025 to 25 per cent from its current level of roughly 17 per cent, of which 8 per cent was contributed by micro, small, and medium-sized enterprises.<sup>3</sup> Meanwhile, increasing infrastructure expenditures by US\$1.4 trillion over the next few years was expected to boost the demand for indigenously manufactured goods.

The industrial infrastructure, material handling, and control equipment business had expanded in lockstep with the diverse industries it supported. Material handling and control equipment; particularly cranes, were frequently employed to lift and carry heavy objects in industries and sectors that included transportation, oil and gas, telecommunications, power, construction, and petrochemicals. However, the construction sector contributed more than 50 per cent of the crane market (see Exhibit 2). Notwithstanding a recent COVID-19-related slump, the crane business had been booming because of high demand in the construction sector as the government was investing more in infrastructure and other development projects.

In 2021, the global mobile crane market was valued at US\$15 billion and projected to grow at a compound annual growth rate (CAGR) of 5 per cent through 2030.<sup>4</sup> The adoption of artificial intelligence-enabled technology was propelling the growth of the mobile crane market. Existing dominant market players were leveraging telematics solutions to improve crane efficiency and longevity. These advanced technologies enabled equipment owners to efficiently handle their fleets by tracking equipment operations and locations in real time. The demand for low-emission mobile cranes was predicted to rise as the economy strived for

<sup>1</sup> "About Us," Concise Industries, accessed January 12, 2022, <https://concisecrane.com/about-conciset.php>.

<sup>2</sup> World Bank, *Global Economic Prospects, January 2021* (Washington, DC: World Bank Group, 2021), <https://openknowledge.worldbank.org/handle/10986/34710>.

<sup>3</sup> India Brand Equity Foundation, "Manufacturing Sector in India: Market Size, FOI, Govt Initiatives," India Brand Equity Foundation, accessed October 26, 2022, <https://hqaee.ngontinh24.com/article/manufacturing-sector-in-india-market-size-fdi-govt-initiatives-ibe#toc-16>.

<sup>4</sup> Preeti Wadhwani and Prasenjit Saha, "Mobile Crane Market Size | Growth Analysis Report, 2021-2030," Global Market Insights, accessed April 23, 2022, <https://www.gminsights.com/industry-analysis/mobile-crane-market>.

net-zero emissions. Market leaders were already converting to electric or battery-powered mobile cranes to obtain a competitive advantage.

India ranked fifteenth among the top exporters of cranes in 2019.<sup>5</sup> The Indian crane market was highly fragmented, with five to six significant players accounting for 50 per cent of the market share and large numbers of regional small and medium-sized enterprises (SMEs). This market had two broad segments: mobile cranes, which accounted for 60 per cent of the crane industry, and fixed cranes. A mobile crane was a hydraulically driven crane with a telescopic arm that was either installed on a truck-type carrier or self-propelled (see Exhibit 1). A fixed crane was attached to the ground and provided the most robust support and lifting capacity. During the projected period of 2020-2025, the Indian crane industry was expected to grow at a rate of more than 10 per cent due to increased urbanization and ongoing construction activities, and revenue was predicted to total US\$1.3 billion by 2027.<sup>6</sup>

The phenomenon of customers renting or leasing cranes rather than purchasing them had gained popularity in recent years, as not all customers could pay the entire amount upfront and many preferred to have this expense financed by a third party. Besides that, many retail customers required cranes only for very short periods ranging from one hour to a few days. These customers had originally had to rely on local service providers for this, and they paid very high service charges. Many rental businesses responded to this trend by operating as intermediaries between the original equipment manufacturers (OEMs), such as Concise Industry, and potential customers. The demand for new cranes, which were technologically advanced and better suited for deployment on complex construction projects, had grown significantly as a result of the involvement of these rental companies. Kumar had been apprehensive about this, as many well-established firms in the crane manufacturing industry provided rental services to their clients, but Concise Industries had not pursued such a policy. He considered adding rentals as a separate part of the already established business, but he knew that this would require much more market research.

## GROWTH OPPORTUNITIES

Based on information gleaned from market research about the outlook of the overall economy in general, and of the crane industry in particular, Kumar wanted to consider project expansion proposals in the coming quarter, beginning January 1, 2021. Kumar envisioned Concise Industries becoming India's next unicorn. Concise Industries operated in the fixed crane segment only, but it could enter the mobile crane segment to achieve the necessary growth trajectory. Furthermore, by expanding in the fixed crane segment, the company could leverage its capabilities to reach economies of scale.

### Entering the Mobile Crane Market

Government infrastructure development projects—such as one hundred smart city initiatives; a growing freight corridor; and India's first smart city, Gujarat International Finance Tec-City (GIFT)—had boosted the demand for mobile cranes. Based on his experience and market research, Kumar expected the sales revenue from this project would be around US\$13 million for the first year and would increase at a rate of 5 per cent for the succeeding years if the economic conditions remained favourable.

<sup>5</sup> Reportlinker, *India Crane Market-Strategic Assessment & Forecast 2021-2027*, accessed January 9, 2022, [https://www.reportlinker.com/p06177600/India-Crane-Market-Strategic-Assessment-Forecast.html?utm\\_source=GNW](https://www.reportlinker.com/p06177600/India-Crane-Market-Strategic-Assessment-Forecast.html?utm_source=GNW).

<sup>6</sup> Mordor Intelligence, "India Crane Market-Growth, Trends COVID-19 Impact, and Forecasts (2022-2027)," Mordor Intelligence, accessed January 8, 2022, <https://www.mordorintelligence.com/industry-reports/india-crane-market>.

To set up a mobile crane manufacturing plant, the company could rent an adjacent warehouse space at a total up-front expense of US\$5 million for a five-year lock-in period. The estimated cost of the plant and machinery for producing mobile cranes, including installation costs, would be US\$1 million. After its expected life of five years, the plant would have a salvage value of US\$0.1 million. This plant and machinery could be depreciated over the usage period using a straight-line basis. An additional amount of US\$0.2 million would be needed for research and development to build blueprints for mobile cranes.

Apart from the fixed or lump-sum cash outlay, the company would incur additional operating expenses. The annual variable cost for raw materials would start at US\$5 million and increase at a rate of 3 per cent year on year. Other manufacturing expenses, such as wages for labourers, freight, and factory overhead, would cost US\$1.5 million in the first year, but this was expected to increase by 1.5 per cent in subsequent years. The office and administrative expenses for managing operations, such as salaries to technical staff and professional fees, added another US\$1.8 million to the cash outflow.

### Expanding in the Fixed Crane Market

To fulfill its growth aspirations and achieve economies of scale, Concise Industries could increase the scale of its operations by setting up a new manufacturing unit. The company might cut its cost of production by reaching economies of scale, and it could then pass on these savings to customers in the form of reduced prices. Because input prices were rising due to supply restrictions and supply chain disruptions caused by the adverse impacts of COVID-19, Kumar had thought to establish this new manufacturing plant near the suppliers of raw materials such as iron, carbon steel, and high-strength steel, which constituted the core of a fixed crane. This step would help cut transportation and logistical costs.

Kumar proposed setting up another fixed-crane manufacturing plant, which would require a capital outlay of US\$5.7 million for both the plant (US\$5.0 million) and the machinery (US\$0.7 million). For its fixed assets, the company followed a straight-line depreciation policy. Because depreciation was a non-cash expense that was also tax deductible, this could result in tax savings for the company in the form of a depreciation tax shield. Additional cash outflows to meet operational requirements would include direct materials costs of US\$4.7 million, workers' wages and other factory expenses of US\$0.8 million, and office and administrative expenses of US\$1.7 million. To account for price increases or any other unforeseen issues, these expenses were expected to increase by 1.5 per cent, 1.0 per cent, and 0.0 per cent, respectively, over each of the next three years. The sales revenue from this project was expected to be around US\$11 million per year and to increase at a rate of 2 per cent year on year for the next four years.

In manufacturing organizations, working capital decisions played a crucial part in overall operating decisions. The kind of products Concise Industries manufactured had long inventory conversion periods that required a large amount of working capital. Therefore, Kumar made the following decisions regarding working capital: An inventory of raw materials for smooth operations would account for around 6 per cent of the annual material consumption cost. As far as trade receivables were concerned, Concise Industries had a policy of providing a twenty-day collection window to its clients. However, to attract potential customers, the company planned to increase the average collection period to thirty-five days. The company had maintained good relationships with its raw materials suppliers by making payments on time and sometimes even paying in advance. As a result, the suppliers agreed to provide a forty-day window to Concise Industries for clearing trade payables bills.

Verma, the CFO, briefed Kumar about the financing decisions that would make this project expansion plan feasible. According to Verma, the timing could not be better for financing purposes because the central

Reserve Bank of India was holding the repurchase agreement (or repo rate) fixed at 4 per cent through its monetary policy tools.<sup>7</sup> Similarly, the Indian Ministry of Finance had launched economic relief packages to revive the economy after the second wave of COVID-19. To finance the proposed projects, Verma recommended a mix of 40 per cent debt and 60 per cent equity. Kumar and Verma held a meeting with the Concise Industries' designated bank and shared the project expansion proposals. Provided that Concise Industries generated a return on equity for the shareholders of around 23 per cent in the financial year ending 2021 (see Exhibits 3 and 4), the bank agreed to sanction a loan, at 8.65 per cent interest for five years, to finance the expansion project. Kumar expected a minimum return of 20 per cent on his equity capital investment. The prevailing corporate tax rate was 30 per cent, and the company would make the same working capital and financing decisions regardless of the expansion project.

### THE CONUNDRUM

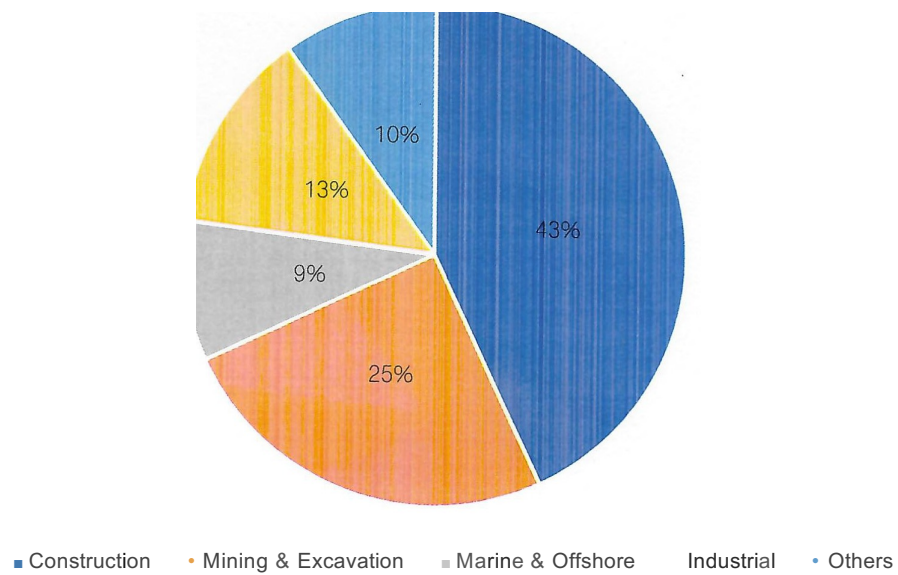
Kumar pondered the investment decisions he should make as he walked through the manufacturing facility. Was this the right time to expand the business to capitalize on industry growth? Should he expand in the fixed crane segment or enter the mobile market segment? How should he approach expansion plans in the thriving rental industry? Given the uncertainty surrounding COVID-19, he would need to thoroughly evaluate all possible expansion scenarios and associated cash flow projections to make a strategic investment decision.

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<sup>7</sup> Anup Roy, "Monetary Policy Committee: RBI Holds Key Rates to Boost Recovery," *Business Standard News*, December 9, 2021, [https://www.business-standard.com/article/finance/monetary-policy-committee-rbi-holds-key-rates-to-boost-recovery-121120900051\\_1.html](https://www.business-standard.com/article/finance/monetary-policy-committee-rbi-holds-key-rates-to-boost-recovery-121120900051_1.html).

**EXHIBIT 1: MOBILE CRANE AND FIXED GANTRY CRANE**

Source: Company website.

**EXHIBIT 2: DISTRIBUTION OF CRANE USERS ACROSS VARIOUS INDUSTRIES IN INDIA, 2019**

Source Mordor Intelligence, *India Crane Market/ 2022 - 27 / Industry Share, Size, Growth*, accessed October 26, 2022  
<https://www.mordorintelligence.com/industry-reports/india-crane-market>.

**EXHIBIT 3: CONCISE INDUSTRIES-INCOME STATEMENT (IN US\$)**

Income Statement, Concise Industries Private Ltd.		
	31-03-2021	31-03-2020
Revenue from Operations	10,862,826.00	8,041,820.00
Other Income	487,967.00	193,600.00
Total Income	11,350,793.00	8,235,420.00
Expenses		
Cost of Raw Material Consumed	8,049,494.00	5,734,090.00
Other Manufacturing Expenses	1,136,129.00	1,003,730.00
Office and Administrative Expenses	1,781,973.00	1,230,161.00
Depreciation	2,020.00	44,000.00
Interest Expenses	70,283.00	11,540.00
Total Expenses	11,089,899.00	8,023,521.00
Profit Before Tax	260,894.00	211,899.00
30%	78,268.20	63,569.70
Profit after Tax	182,625.80	148,329.30

Source: Created by the authors based on Concise Industries Private Ltd. annual reports.

**EXHIBIT 4: CONCISE INDUSTRIES-BALANCE SHEET (IN US\$)**

Balance Sheet, Concise Industries Private Ltd.		
	31-03-2021	31-03-2020
<b>Equity and Liabilities</b>		
<b>Shareholders Fund</b>		
Share Capital	100,000.00	100,000.00
Reserve and Surplus	907,734.00	745,269.00
<b>Short-Term and Long-Term Liabilities</b>		
Long-Term Borrowings	949,982.00	121,840.00
Trade Payables	5,945,951.00	1,844,566.00
Short-Term Provisions	722,438.00	459,037.00
<b>TOTAL</b>	8,626,105.00	3,270,712.00
<b>Assets</b>		
<b>Fixed Assets</b>		
Tangible Assets	754,406.00	618,361.00
Other Non-Current Assets	370,732.00	17,600.00
<b>Current Assets</b>		
Inventories	5,285,000.00	1,522,058.00
Trade Receivables	817,087.00	730,184.00
Cash and Cash Equivalents	1,318,330.00	382,509.00
Short-Term Loans and Advances	75,000.00	-
Other Current Assets	5,550.00	-
<b>TOTAL</b>	8,626,105.00	3,270,712.00

Source: Created by the authors based on Concise Industries Private Ltd. annual reports.