

MEJZLÍK MODELLBAU: SEEKING DIRECTIONS TO FLY HIGH

Mohit Srivastava and Ladislav Tyll 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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Tomáš Mejzlík launched his propeller manufacturing company, Mejzlík Modellbau, in 1989, after significant changes in the political scenario of the Czech Republic. The company produced high-quality carbon fibre propellers for remote-controlled (RC) planes in the business-to-business (B2B) market. The company was headquartered in Brno, the second-largest city in the Czech Republic, and had a highly centralized business model to achieve an efficient communication and distribution system. The key highlight of Mejzlík Modellbau was its high-quality customized carbon fibre propeller, which was used for a wide variety of applications.

Mejzlík Modellbau gained high visibility in the RC plane market and achieved a strong position by maintaining quality standards and providing excellent customer service. These factors helped Mejzlík Modellbau to attain a strong cash position and excellent credit rating. However, in July 2018, the market for RC planes was reaching a saturation stage, leading to a decline in the growth of the RC plane market. Mejzlík was well aware that if he continued to rely solely on the RC plane market, the company might soon face bankruptcy. This thought provoked Mejzlík to explore various other markets where he could utilize his expertise of making high-quality carbon fibre propellers. Mejzlík was also aware that he needed a market where he could effectively exploit the company's existing competences rather than inventing or exploring new competencies. He thus conducted a thorough analysis of the market and came up with several exciting market segments. However, the critical task was to find a right fit between, on the one hand, Mejzlík Modellbau's current financial position and its core competencies and, on the other hand, the revenue attractiveness of the new market.

MEJZLÍK MODELLBAU

In 1989, Mejzlík took the excellent opportunity presented by the favourable business environment and exploited his keen interest in making propellers into a real business opportunity. However, as with any start-up, the conditions were not conducive in the beginning, and Mejzlík Modellbau encountered a less developed market and low demand for high-quality propellers. However, Mejzlík's intense interest and zeal to excel in this field kept him going.

In 1994, the famous model trade fair held in Toledo, Ohio, was a significant turning point for the company, as the company's propellers caught the attention of several prominent players. From 1994 to late 2000, the company aggressively participated in several major championships around the world, where it gained significant visibility in the market. This participation helped the company to secure a reasonable number of

orders, and by the end of 2001, almost half of the pilots participating in the world's leading tournaments and championships were using Mejlík's custom-made propellers. Initially, the delivery period for the propellers was eight to nine months, due to the higher number of orders; however, Mejlík had implemented efficient manufacturing and a centralized distribution system, so the company was able to deliver the propellers at a much faster pace. The market for RC planes had evolved over a period of time and had developed into a profitable business segment. The company had a staff of 20 employees and focused mainly on international exports (90 per cent in Western Europe and the United States) in the business-to-consumer (B2C) market by delivering safe, efficient and modern custom-made propellers for worldwide customers. By July 2018, the Mejlík Modellbau's product portfolio ranged from two- and three-blade propellers for gas engines, electric motors, and multicopters to contra-rotating and electric propellers for F3A aircraft of various sizes. Spinner sets and spare parts were also available (see Exhibit 1).

STRATEGIC POSITION OF MEJZLÍK MODELLBAU

Mejlík Modellbau operated in a highly competitive B2C market with a sharp brand image. The company had several competitive advantages over other players, including high-quality products, perfect customization, and excellent value. Due to these advantages, Mejlík Modellbau had a favourable strategic position compared with competitors such as Tiger Motor (T-Motor), Aero-naut Modellbau (Aero-naut), and KDE Direct (see Exhibit 2). T-Motor offered customization similar to that offered by Mejlík Modellbau—but at a higher cost.¹ On the other hand, Xoar International offered propellers at a similar cost to Mejlík Modellbau but delivered slightly less customization.² KDE Direct provided medium customization but at a higher price than Mejlík Modellbau.³ Aero-naut⁴ and SZ DJI Technology⁵ offered lower-priced propellers; however, their customization level was shallow. In addition, Mejlík Modellbau had a knowledge advantage of having produced propellers for more than 27 years. Mejlík Modellbau propellers were considered the most efficient, quietest, and safest propellers available in the market. This competitive advantage showed up in Mejlík Modellbau's financial statements (see Exhibits 3–5), which showed a strong cash position (with almost no debt) and a favourable credit rating with potential debt capacity of up to 50 per cent of the asset base. Nevertheless, there were some challenges, such as the limitation of the production capability and the missing bundling option with engines. Moreover, since 2011, the company had not made any significant investments, and its critical long-term assets were depreciating. Therefore, it was possible the company would need to make some investments. (A Porter's five-forces analysis and a SWOT [strengths, weaknesses, opportunities, and threats] analysis are shown in Exhibits 6 and 7, respectively.)

The overall analysis of the company and industry showed that Mejlík needed to find a suitable potential market to further grow the company's revenue. According to 2018 estimates, the demand for RC models of airplanes was on a steady decline (e.g., a compound annual growth rate [CAGR] of –10 per cent from 2014 to 2017),⁶ as fewer people were flying with these specific models of planes. Consequently, since 2014, the company had faced a significant decrease in revenues (approximately 15 per cent year on year) due to the mature phase of the market. This situation created immense pressure on Mejlík to explore other possible options. However, the company had developed specific competencies in the RC market. Although the company had a satisfactory financial

¹ "Carbon Fiber Propellers," T-Motor, accessed September 9, 2018, <http://store-en.tmotor.com/category.php?id=65>.

² "R/C Propellers," Xoar accessed September 9, 2018, www.xoarintl.com/rc-propellers/; "XOAR DJI Inspire 2 Carbon Fiber Propellers High Quality Props 1550 15x5 CW CCW (2 Pairs)," Xoar, accessed September 9, 2018, <https://shop.xoarintl.com/products/xoar-dji-inspire-2-carbon-fiber-propellers-1550>.

³ "UAS Multi-Rotor Propellers Blades," KDE Direct, accessed September 9, 2018, www.kdedirect.com/collections/multi-rotor-propeller-blades.

⁴ "CAMcarbon Light Prop," Aero-naut, accessed September 9, 2018, www.aero-naut.de/en/products/airplanes/accessories/propellers/camcarbon-light-prop/.

⁵ "Online Store," DJI, accessed on September 9, 2018, <https://store.dji.com/>.

⁶ Company data.

position in July, no excess cash was available to explore additional capabilities for a different market. Therefore, the ideal approach would be to find a potential market where the company could exploit its existing capacities to grow further in that specific market segment. It was evident that if the company continued on the current trend without exploring growth options, it might soon face bankruptcy. Nevertheless, finding a potential market to exploit its current capabilities was equally challenging.

GROWTH CHALLENGES

To handle this situation, Mejzlík had already started consulting with various stakeholders and external consultants to help him determine the best possible market to explore. He received several recommendations for various markets where he could utilize the company's existing capabilities for making high-quality carbon fibre propellers.

One suggestion was to explore the drone market, especially the commercial segment, which had grown at a fast pace and was expected to speed up to 35 per cent CAGR by 2021 (see Exhibit 8).⁷ The key growth drivers for the drone market were improvements in batteries, payload capacities, and the availability of sensors for capturing high-resolution images. Moreover, an immense investment in drone research and development had created exciting opportunities in new submarkets, such as agriculture, construction, telecommunications, mining, and transportation. In addition, vendors were focusing on customizing these drones to ensure that they could withstand harsh conditions such as wind gusts of 70 kilometres per hour. Therefore, it was possible that flexible manufacturing, pricing adjustments, and scaling up would be required. All of these factors cumulatively increased the attractiveness of this market and the possibility of revenue stream diversification. However, all regulations needed to be followed strictly. This growth pace was further fuelled by the decreasing price of drones, which made drones attractive for massive utilization within multiple industries (see Exhibit 9). Although the recommendation was appealing for Mejzlík, he was unsure how to enter this market. For example, should he focus on drone manufacturers by selling to them directly or focus instead on B2B2B⁸ partnerships with engine manufacturers to offer a balanced compatibility? Moreover, he needed to decide on which sector would be the most attractive to start with. However, Mejzlík was aware that strict regulations in this sector might be an essential point to consider. He was also worried about the cost and the expected return from this market segment.

The external consultants had also advised him to explore the military segment, such as supplying the propellers needed for military drones, as this segment had potential for high growth. The military drones were categorized in three categories: Class I (< 150 kilograms [kg]), which included micro, mini, or small drones; Class II (150–600 kg), which represented tactical application drones; and Class III (> 600 kg), which referred to highly specialized strategic drones. (A list of possible military partners is shown in Exhibit 10.) This segment's significant advantage was that government played the role of the end consumer, and strict regulations did not affect the military section. Moreover, in addition to offering high-value deals, the government would be willing to pay premium prices; however, this segment had several domestic suppliers, which could result in severe competition. Mejzlík needed to decide on which class of drones to focus on. Although the hobby segment initially showed some growth, that growth was expected to decline in the next four years (see Exhibit 11). This decreasing growth puzzled Mejzlík and made him question whether to consider the hobby segment or ignore it altogether.

⁷ Goldman Sachs, *Drones Reporting for Work*, 2017, accessed June 1, 2018, www.goldmansachs.com/our-thinking/technology-driving-innovation/drones/.

⁸ B2B2B referred to selling to businesses, which then resold the goods to other businesses.