MGD Technologies

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ABSTRACT

Gary Skipper had built a growing company that sold extremely accurate flow meters used to measure water flow in pipes and channels. Gary owned 31 percent of the company. RD Instruments, the sole owner of the intellectual property and manufacturing facility for the flow meters, controlled 62 percent of MGD. Gary was considering a personal exit strategy. He had been approached by representatives that expressed an interest in formulating a closer corporate relationship between the two companies and further indicated that they had an interested investor to support their desires.

ABBREVIATED CASE

Gary Skipper, president of MGD, reflected on his most recent visit by Andrew and Mark from the United Kingdom, "is this the answer to how I can get out this company the value I have put into it? Will I ever be able to cash in on my hard work building this business from nothing? I need a personal exit strategy that makes sense."

MGD sold meters used to measure the flow of raw and waste water. The flow meters sold by MGD were supplied exclusively by RDI. RDI owned the intellectual property rights and the manufacturing processes for the flowmeter sold by MGD. MGD had an exclusive license in perpetuity to sell all RDI technology and products for use in fabricated channels. The license gave MGD the exclusive rights to sell anything manufactured by RDI for use in these fabricated channels.

Gary's salary, as president, was comparable to other technology company executives but he was investing a lot of himself (sweat equity) in growing MGD from nothing to become a strong player in the industry. Much of MGD's success was due to his background and contacts in the water measurement industry. Gary's concern was that he would never be able to reap the value of his equity because Fran Rowe, president of RDI, had a controlling interest of MGD. Fran seemed unwilling to relinquish control in any way that might allow Gary to profit from his equity by sale, merger, or other ownership changes.

MGD

MGD was created in 1996 to commercialize the Acoustic Doppler Current Profilers (ADCPs™) technology developed by RDI. RDI developed the first marine instruments capable of capturing full profiles of water current, speed, and direction in oceans, rivers, and lakes. Mike Metcalf, MDG's Vice President and an expert in fluid flow mechanics, while working at RDI, believed that the same technology could be used to measure flow in manufactured channels and pipes. MGD was created to exploit this opportunity.

By 2003 MGD had grown to 30 plus employees. MGD had sales offices in San Diego, Honolulu, Dallas, Tulsa, Rhode Island and Florence, Kentucky plus manufacturer's representatives in Canada, UK, France, Japan, and Korea. Gary believed that more sales offices were needed quickly to take advantage of the increasing appreciation among civil engineers and water agencies for the higher accuracy

measurements of ADFMs. MGD's 2002 revenues were approximately $4 million. Gary Skipper, President, was projecting $6 million in revenues for 2003.

The ADFM measured with higher accuracy than competing meters, particularly in challenging situations. The challenging situations included installations where engineers needed to measure clean or wastewater when the flow through the pipe was turbulent, especially dirty, unusually slow or fast, reversing, or even when the pipe was only partially full. Competitive products typically measured with an accuracy of plus or minus ten percent of the actual flow rate. The ADFM measured with an accuracy of plus or minus two percent. There was no direct competition although approximately ten companies sold meters with less accuracy—some much less expensive. A typical ADFM installation was about $20,000 whereas a competing meter might be only $2,000-4,000.

Production

RDI produced MGD's and RDI's products in the same facility. The production process required a high degree of skill and experience to get the piezo-electric transducers embedded in the ADFM casing precisely. Furthermore, they had to make the entire ADFM unit able to operate in clean or dirty water for years without attention.

During 2000 nearly 25 percent of the ADFMs, made by RDI and sold by MGD, that were installed in customer's pipe systems began to leak or the electronics failed. When this occurred, MGD had to respond with repairs or replacements quickly. Failed units were returned to RDI who repaired or replaced them. The failure of the units could add up to $10,000 to MGD's expenses, frustrate customers, and take MGD's service personnel away from other projects. Mike Metcalf worked with RDI's engineers to improve the design with some success but there were still quality problems in 2003. RDI was ISO 9001 certified in 2002.

RDI sold ADFMs to MGD at a price based on manufacturing cost, including burdened labor, with a markup that gave RDI a 40% gross margin. As volume went up and RDI moved down the learning curve, it was anticipated that the production cost would decrease, decreasing the transfer price.

Financial Management

RDI's chief financial officer (CFO), John Yiannakakis, also served as the CFO for MGD. John was paid by and reported to Fran Rowe of RDI. His assistant was paid by MGD to handle MGD bookkeeping. John's role as CFO gave him the control of cash flow between the two companies and MGD's other financial relationships like banks, vendors, IRS, etc.

Gary Skipper had a troubled relationship with John Yiannakakis. The case writer observed one conversation between the two presidents, Gary Skipper of MGD and Fran Rowe of RDI. Gary was angry because John or his assistant had prepared a cash flow spreadsheet for MGD in which Gary found multiple significant errors that misrepresented MGD's financial condition. Fran's response was to disclaim knowledge of the situation. When Gary persisted and told Fran he could not work with a CFO whose work he distrusted, Fran made multiple attempts to change the subject away from personnel issues and toward technical issues.

The long selling cycle for ADFM products frequently created a cash flow problem for MGD because the faster they grew the more cash they needed. By March of 2003, Gary estimated their cash shortfall to be

about $100,000 for the next month. He had foreseen this problem but John Yiannakakis had refused to cooperate in acquiring a bank line of credit in advance.

The flow measurement industry

Water management was roughly divided into two categories: raw water and wastewater. Accurate raw water measurement was important for billing and management purposes. The most arid areas of the world were the most concerned about accurate measurement. Accurate wastewater measurement was important for pollution control and prevention.

Irrigation and raw water measurement was driven by economic concerns between buyers and sellers, particularly in arid parts of the world where water is scarce and therefore, expensive. Traditional measurement accuracy was in the realm of plus or minus ten percent. That is, an agency that was billed for 1,000,000 gallons of water may have received as little as 900,000 gallons or as much as 1,100,000 gallons. Measurement errors of this magnitude led to millions of dollars in billing errors.

Collection, conveyance, treatment, and disposal of wastewater are a basic need for human health and pollution prevention. Human waste and industrial processes generate wastewater. Without proper handling, wastewater causes polluted land and water. Water pollution degrades water bodies making them unsafe for drinking, fishing, swimming, and other activities.

Cities in developed countries had infrastructures consisting of pipes, access structures (manholes), and treatment facilities to handle wastewater. The wastewater system infrastructure was often the most valuable physical asset a city had and yet the wastewater infrastructure in most cities was in poor condition. The EPA estimated there is a need to spend many billions of dollars to evaluate the condition of the existing infrastructure then repair, rehabilitate or replace it. In addition, rapidly growing cities like Las Vegas and Phoenix needed major new infrastructure investments.

Flow meters were usually small parts of larger projects such as a new treatment plant or a flood control monitoring system. These projects were typically designed by consulting Civil Engineers under contract to a using agency. Flow monitors might be a $100,000 piece of a ten million dollar project. Civil engineers specified the meters as part of the design, and then the agency would contract to a construction company to build the system. From the time that a sales representative talked to a civil design engineer, the flowmeter was specified, the design approved, the project built, and the product was received and paid for, could easily last from three months to well over a year.

Recent developments

Andrew and Mark from the United Kingdom company that represented MGD's product were impressed with the ADFM's capabilities and the key professionals enjoyed working with both Gary Skipper and Mike Metcalf. They had visited each other's homes while on business trips to the respective sites.

They expressed an interest in formulating a closer corporate relationship between the two companies and further indicated that they had an interested investor to support their desires. Gary wondered if this could help him capture some of MGD's added value that he had created over the last several years. It also raised numerous questions about the potential alliance for him.

Note: Financial Statements, technical appendix and complete teaching note are omitted.