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## Mira's Microbrewery Inc.

In the winter of 2018, Mira Davis graduated with a computer engineering degree and accepted a job in Boston's booming biotech industry. Davis loved Boston, but noticed a void in its beer scene. She considered herself a beer aficionado and was an avid homebrewer, a hobby turned passion she developed in college. Believing the regional craft beer market was oversaturated with Indian Pale Ales (IPAs), Davis formulated a plan to achieve one of her lifelong dreams: opening her own microbrewery.

To buck the IPA trend, Davis planned to instead brew stouts, a recipe she had perfected with years of trial-and-error. While she eventually planned to expand her operations and brew multiple types of beer, she was especially proud of her stouts, which she believed to be higher quality than the region's established breweries. However, she realized it would be difficult to gain a foothold at first, so to distinguish her initial offering, she planned to age the stout in used Bourbon whiskey barrels. Federal law required Bourbon to be aged in new, charred oak barrels which added the color, smokiness, and a woody taste to Bourbons. Afterwards, distillers would often sell the used barrel and it was commonly purchased to finish beers and other spirits (such as Scotch). The secondhand barrel would impute some of Bourbon's characteristics into the beer, a unique flavor profile which was unavailable in other beers, commonly brewed only using stainless steel.

While Davis had an ambitious plan, she lacked the capital needed to begin operations on her own. On January 1, 2019, she and several friends and family formed Mira's Microbrewery Inc. A total of 10,000 shares were issued: Davis received 2,000 in exchange for an exclusive license of her recipe, and the remaining 8,000 shares were sold to family and close friends for \$25 each. After the first six months of 2019, Davis had outlaid \$107,000 for brewing equipment, Bourbon barrels, grains, and legal fees. In the second half of the year, she began operating, but by the end of the year her bank balance was down to \$80,000 and she had taken out a \$15,000 loan with the bank.

In early January 2020, Davis convened a meeting with her family and friend investors to update them on the year's operations and financial performance. Despite her optimism, her uncle, who had invested in the company but had little business experience, expressed concern about the decline in the company's bank balance. Davis wasn't familiar with financial reporting, but she knew there must be a better way to measure the company's performance than just looking at the change in the bank statement balance.

Professor Paul Healy and Teaching Fellow Marshal Herrmann prepared this case. This case is not based on a single individual or company but is a composite based on the author's general knowledge and experience. Funding for the development of this case was provided by Harvard Business School. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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The following day, she met up for dinner with an old college friend, Jennifer Smith, who was attending a local MBA program. Smith advised her to prepare an income statement, balance sheet and cash flow statement for the company for the year to provide more information on its performance. Smith had received an A in her accounting class during the prior year and seemed eager to help.

Davis decided to take advantage of her friend's offer of help and provided Smith with the following information on the events that occurred from January 1, 2019 to June 30, 2019:

- 1. January 1, 2019: 8,000 shares issued for \$25 each. 2,000 shares issued for a five-year license of the recipe, which would begin on July 1, 2019. Each share issued had a par value of \$1.
- 2. January 12, 2019: Paid \$7,000 cash for legal fees to incorporate the business.
- 3. June 1, 2019: Purchased Bourbon barrels to be used in production, which was scheduled to start on July 1, for \$5,000.
- 4. June 9, 2019: Purchased 5,000 pounds of ingredients (hops, barley, malt, and yeast) for \$20,000.
- 5. June 30, 2019: Paid \$75,000 for brewing equipment (including delivery and installation of fermenter, mixing tank, pumps, etc.)

Over the next six months, Davis had ramped up operations and brewed, aged, and sold several batches. She provided Smith with the following information on events that occurred from July 1, 2019 to December 31, 2019:

- 6. Due to supply chain issues, the price of raw materials increased. She purchased an additional 10,000 pounds of ingredients from the supplier for \$50,000. Of that amount, she paid \$45,000 in cash, with \$5,000 unpaid at year-end.
- 7. August 1, 2019: Paid \$18,000 cash for a six-month web advertisement campaign, targeted to beer and Bourbon drinkers.
- 8. October 1, 2019: Purchased office furniture for \$8,000 cash.
- 9. December 1, 2019: Borrowed \$15,000 on a line of credit at an annual interest rate of 8%. No interest had been paid for the month of December.
- 10. Expended \$34,000 for direct manufacturing labor and on manufacturing-related overhead (rent, utilities, supervisory labor). The company spent another \$23,000 on general and administrative costs.
- 11. Sold \$145,000 of beer to regional bottlers, with \$45,000 still uncollected.
- 12. 25% (or 3,750 pounds) of the ingredients were remaining. However, all of the beer had been sold and there was no beer in-process.

Smith sent Davis an email a week later informing her that she was almost ready to present her with the company's financial statements for 2019. But she needed answers to a few questions to complete her work. First, she wondered how much inventory was on hand at the end of the year? Second, how long would the furnishings, brewing equipment and Bourbon barrels last for? Third, did the recipe Davis had developed have any value? And finally, did Davis plan on taking any salary as compensation for the work she had put into the project?

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Davis thought about these questions and provided her friend with the following additional information:

- She anticipated the brewing equipment would last for 10 years and the office furniture for four years, at which point they would be worthless. The Bourbon barrels were expected to last for two years and would then be discarded.
- The recipe had been very popular, and a rival brewery offered her \$75,000 for a five-year license. However, Davis had no intention to sell the license.
- Churchill Downs had placed a firm order for \$50,000 of beer for the 2020 Kentucky Derby in May.
- Although she had not taken a salary, Davis knew that she could have earned around \$75,000 at a competitor microbrewer during the year. She planned to transition to full-time CEO at the company beginning January 2020. However, because it was cash constrained, several investors had suggested she take compensation in the form of stock instead of cash. Mira was unsure about how she should think about these two options.
- Davis began planning for an expansion, and wanted to raise \$200,000 in additional funds next year to open a taproom. She was debating whether to borrow the money from a bank 15-year term, or to raise the funds from friends and family in exchange for equity shares. She was unsure how to approach the decision, and what effects it would have on her financial results in future periods.

Davis was unsure how it would be possible to summarize the company's complex operations and financial health into several financial statements. She suspected that her brewery had been more successful than what her bank balance indicated, but she had no idea how much better. She eagerly awaited her upcoming meeting with Smith to learn more.