

INTRODUCTION TO FINANCIAL ACCOUNTING

CASE PROJECT

ARCTIC BLAST
ICE CREAM STORE

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INTRODUCTION TO FINANCIAL ACCOUNTING ARCTIC BLAST ICE CREAM STORE

Comprehensive Case for Introduction to Financial Accounting

Introduction

This case will give you an opportunity to work with other students to apply accounting concepts to a simple business venture. You will be operating a simulated ice cream store during a two month period. During this time, you will be asked to make some operating decisions about product mix, franchising, advertising and other variables that will actually affect the operating results that you obtain. Your results will be different from other groups in the class because you will make different decisions and because random economic events will impact the success of your store. This is similar to the environment that most small entrepreneurs face. You will do some planning for your business, record transactions for two months (August and September). Finally, you will prepare a written analysis of your performance and make suggestions for improved future operations.

Case Objectives

This case has been designed to improve skills and knowledge in the following areas:

- 1) Working as a team to complete a business objective
- 2) Preparing a high-quality business report
- 3) Experiencing the complexities of starting a business and making decisions about
 - a) product lines
 - b) location
 - c) product pricing
 - d) advertising
 - e) management salaries
 - f) franchising
 - g) financing
- 4) Performing steps in the accounting cycle including
 - a) journalizing entries
 - b) posting to accounts
 - c) preparing adjusting entries
 - d) preparing financial statements
 - i) Income Statement
 - ii) Statement of Stockholders' Equity
 - iii) Balance Sheet
- 5) Evaluating operations after two periods

CASE NARRATIVE

ARCTIC BLAST ICE CREAM STORE

INTRODUCTION:

Your group has decided to open and operate an ice cream store in our community¹. The ice cream store will be organized as a corporation. As controlling shareholders, your group will be responsible for managerial decisions, the preparation and maintenance of appropriate accounting records, and the evaluation of operating results.

The project will extend over a 4-6 week period and will cover the three distinct phases of the management process: making choices for your business, performance and evaluation. Once your initial choices are made, a set of transactions will be generated by the instructor based on each group's specific decisions. The group will then record all appropriate events and perform an evaluation of the operating results.

EVALUATION:

The case will be graded on completeness, clarity, organization and logic. The distribution of grade to the various phases of the project will be as follows:

Planning phase	10%
Recording transactions in month one	35%
Recording transactions in month two	35%
Evaluation and written report	20%

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MAKING CHOICES FOR YOUR BUSINESS

Owners and managers of small businesses face many decisions that directly affect their success as an ongoing business. While these decisions are not necessarily accounting decisions, you will gain a sense of how difficult it can be to organize a successful business. This case is designed to be somewhat realistic in terms of the level of revenues and expenses you might incur in a college market such as our community. There will be six decisions that you will need to make. They include:

1. **Will you buy a franchise?** Franchised products generally have greater name recognition for people that are not familiar with a particular business. For example, you and other students might recognize Baskin & Robbins or Ben & Jerry's Ice Cream. This will

¹ Note to instructors: The case is more appealing for students if you customize the case for specific locations near your school. When the authors developed the case, they used specific locations, media names and local landmarks to make the case more appealing.

² Note: These percentages are approximate and the instructor should use the relative weights that will be most effective for each class.

increase the likelihood that customers will frequent your business, at least at first. This will also mean that you can charge more for your product and may pay slightly higher costs for bulk ice cream and novelties. Local establishments can also build a great reputation that works by word of mouth and involves lower costs for ice cream. Franchise operations will need to pay an upfront franchise fee but independent (non-franchise) establishments will not pay such a fee. In this Arctic Blast case, the franchise fee for the first two years of operation will be \$24,000 for the two-year period. This fee will need to be paid on the first day that you open your business.

- 2. What product lines will you offer?** Most ice cream establishments will offer a wide range of products including scoops of ice cream in a cup or on a cone, milk shakes, malts, milk shakes with candy or fruit blended into them and pre-packaged novelties such as ice cream sandwiches, popsicles or other items stored in a self-serve freezer. For purposes of this case, the number of products lines is reduced, even though this diminishes the reality of the case. You may sell either (1) just ice cream scoops (either in cups or on cones; there will be no difference in selling price, units sold or cost) or (2) both ice cream scoops and ice cream novelties that you will buy.

You will buy the ice cream in bulk and your employees will scoop it out for the customers as they order it. You will buy the novelties as pre-packaged items. You should assume that the ice cream and novelties are premium quality items that are generally better than what consumers can buy in the grocery store.

Based on the results of a market study performed in the previous year, demand for ice cream and related products are projected as follows. It should be noted that actual demand might vary due to market conditions, franchise recognition, location, and the amount spent on advertising:

Ice Cream	10,000-18,000 scoops per month
Novelties	1,250-2,200 per month

All sales will be made on the cash basis.

- 3. What price will you charge for your product(s)?** You should set the sales price of your product at any amount within the following ranges:
Scoops: Selling price should be set between \$0.75 and \$5.00 per scoop. We recommend that prices not exceed \$2.25 per scoop.
Novelties: Selling price should be set between \$0.70 and \$4.00 per novelty (if you offer novelties). We recommend that prices not exceed \$3.00 per item.

The cost to you for products will vary, depending on whether you operate a franchise operation and buy your product from the franchiser or buy your products from an independent supplier. The costs are shown below. Included in each of the prices is the cost of cups, spoons, napkins, etc. that would be needed for each serving sold. Normally most business people would need to calculate these costs but to simplify this exercise, the calculations have been done for you.

Franchise

Cost of ice cream and supplies per scoop is \$0.40

Cost of novelty and supplies per novelty item is \$0.55

Independent

Cost of ice cream and supplies per scoop is \$0.30

Cost of novelty and supplies per novelty item is \$0.50

4. **Where will you place your store?** As the management group, you must decide the best location for your store. Below are the three available sites for your store. Each site will impact your operating hours, the traffic pattern for your business, and overhead costs and these factors will influence the number of items you sell. You should consider each of these locations carefully. Because the case is designed with a limited number of variables, the choice of location will also determine the number of hours that you will be open each week.

Location 1: Near campus

Rent: \$2,500 per month

Operating hours for this location:

Sunday: 12 noon – 7:00 p.m.

Monday – Thursday: 12:00 noon - 10:00 p.m.

Friday and Saturday: 12:00 noon - 11:00 p.m.

Total of 69 hours per week

Location 2: In a strip mall on a major commercial street but away from the high growth areas.

Rent: \$1,200 per month

Operating hours for this location:

Monday – Saturday: 11:30 a.m. – 11:00 p.m.

Total of 69 hours per week

Location 3: Near Wal-Mart in a high volume traffic area.

Rent: \$2,600 per month

Operating hours for this location:

Monday – Friday: 1:00 p.m. – 10:00 p.m.

Saturday and Sunday: 12 noon – 10:00 p.m.

Total of 65 hours per week

5. **Decide how to inform customers about your new business.** The following information represents the options you may select regarding the advertising for your store. You must determine the amount that you will spend on advertising and the types of advertising. You will be given an opportunity to change your selection for your second month of operation. You are encouraged to spend at least \$2,000 in the first month.

Print Media

Local newspaper	\$150 for a grand opening ad (10" x 14") \$60 per daily ad (8" x 8")
Student newspaper	\$20 per week - one issue (8" x 8")

Radio

Radio station 1 (Rock) - 30 seconds - 10 airings/week	Cost: \$147 per week
Radio Station 2 (Country) - 30 seconds - 10 airings/week	Cost: \$160 per week
Radio Station 3 (Adult Contemporary) - 30 seconds - 10 airings/week	Cost: \$147 per week
Radio Station 4 (Campus radio) - 30 seconds - 10 airings/week	Cost: \$160 per week
Radio Station 5 (Talk/sports) - 30 seconds - 10 airings/week	Cost: \$140 per week

Television

Television station - 30 seconds - 10 airings/week	Prime Time: 6:00 - 6:30 p.m. costs \$200 Afternoon: 12 noon – 1:00 p.m. costs \$125
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Billboard

\$196 set-up fee for artwork
\$200/month (3-year contract), 12 ft. long x 24 ft. wide

Web Page Hosting

\$250 fee for hosting a simple web page per month

- 6. How much will you pay your manager?** You must write a contract for your store manager that specifies his or her duties. You must also decide how much you will pay your manager each month. We suggest that you choose a salary between \$2,000 and \$9,000 per month.

Other Information for planning your operation

Some information for your store has already been determined based on the normal experience of operating a business. You will need this information to make a reasonable plan for operating your ice cream store.

Start-up Costs:

New businesses incur costs that occur only at the beginning of business such as deposits or that occur periodically but must be paid at the beginning of the business to get things started such as insurance and beginning inventory.

Deposits:

Deposits must be paid on the first day you open for business:

Rent: a deposit equal to the first month's rent is required for all locations.
Telephone: \$150
Utilities: \$200

Insurance:

Insurance coverage will be \$2,400 for the year. The policy must be purchased at the time you open for business.

Office Supplies:

The corporation will need to purchase about \$300 of office supplies to start the business.

Inventory:

The amount of inventory that must be purchased to start the business will depend on whether you choose to franchise or not. Quantities (not dollars) are detailed below:

	<u>Franchise</u>	<u>No Franchise</u>
Ice Cream (scoops)	10,000	8,000
Novelties (units)	1,250	1,150

You will start out with these levels of inventory and replenish to these levels every 1 to 2 weeks. Your journal entries will indicate to you when you receive more inventory. You will use the net method to account for all inventory, cost of goods sold and cash payment transactions.

Equipment:

You will purchase your equipment on the first day of operating your business. Depreciation will be discussed in the next section. The following equipment will be needed in the ice cream store:

Group 1: Store Equipment: \$79,400

Cash Register

Tables and Chairs

Freezers

Television for store

Useful Life: 15 years

Salvage Value: \$2,000

Group 2: Office Equipment-Store: \$9,000

Telephone

Desk

3 Chairs

File Cabinet/Shelving

Computer and Printer

Useful Life: 5 years

Salvage Value: none

Ongoing Expenses:

Payroll:

One member of your group will serve as the store manager. As a part your initial decisions, you should determine the monthly compensation of the manager. The store manager's salary will be paid on the last Friday of the month.

In addition to the store manager, you will need to have two employees at the store during all operating hours. Non-management employees will be paid \$7.00 an hour. The company will incur other payroll expenses equal to approximately 11 percent of the hourly employee rate. Employer payroll taxes include social security taxes, Medicare taxes, state unemployment taxes (SUTA) and federal unemployment taxes (FUTA). Employees are paid on the last Friday of each month (hours worked to date). While the rules for paying payroll taxes depending on the amount of the payroll, in this case, we assume that payroll taxes will be paid to the government within 5 working days from the payroll date.

Other ongoing expenses:

Rent is payable on the first day of every month. This expense varies by location. See information above.

Utilities are expected to run about \$3.50 per hour for each hour the store is open. Telephone expenses are estimated to be about \$120 per month.

Office supplies expense should run about \$100 per month.

Revenue from sales will be reported weekly.

Inventory will be replenished weekly (except for the first two weeks which will be replenished after week two), based on the amount of product that you have sold.

You may record depreciation for each group of assets (Group 1 and Group 2) as a whole.

Financing:

Under the articles of incorporation, the company is authorized to issue 50,000 shares of common stock. The issue price is to be \$5.00 per share. Only 10,000 of the authorized shares of stock will be issued. Stock will be issued on the first day of the first month of operation and all shares will be sold for cash.

Additional sources of funds must be obtained through a bank loan. The interest rate will be 10 percent. The maximum loan that you can request is \$100,000. Interest will be payable quarterly and the loan must be repaid two years from the date of the loan. The interest accrual should be recorded at the end of each month.

Dividend Policy:

Your company plans to pay a monthly dividend of 10 percent of each month's net income. Dividends will be paid on the 5th of the following month and should not be recorded until paid. In this case, please debit Retained Earnings directly (you don't need a Dividends account) and credit Cash³.

³ Different instructors have different policies in this area. Please customize this to fit your preferences. The answer key assumes this method.

REQUIREMENTS

PART 1—PLANNING PHASE

1. You will need to develop a written compensation agreement between the store manager and the corporation. The agreement must specify the duties to be performed by the manager and the monthly salary.
2. You are to prepare a written analysis supporting each of the six decisions made for your ice cream store. Your analysis should include both quantitative and qualitative factors considered in your decisions.

Example:

Decision: Location 1 – Near campus

Analysis: Include the quantitative and qualitative factors used in making your decision to locate the store near downtown.

Supporting Calculations: To enhance readability, present your supporting calculations following the analysis section.

<u>Decision:</u> Advertising Medium	Units	Dollars
Local newspaper	6	\$360
Radio station 1	4	588
Radio station 2	4	640
Television: Prime time	1	200
Television: Afternoon	2	250
Website hosting	1	<u>250</u>
		<u>\$2,288</u>

Analysis:

Supporting Calculations:

3. You must determine how much additional financing will be required for operations and prepare a loan request from the bank for the appropriate amount. The loan request should include estimates of cash you will receive from sales and cash you will pay to buy inventory and pay for normal operating activities. You may also include any other helpful information that would support obtaining the loan. Disregard all corporate income tax issues in your analysis. In addition, you should plan to estimate cash that you will receive (from sale of common stock and loan proceeds) and spend (purchase of franchise, equipment, insurance, deposits and initial purchase of starting inventory) before you start your operations. This will show the cash transactions that occur before your active operations begin. Please be sure that you have enough cash to make your initial purchases and operate effectively for two months. Please prepare all calculations in whole dollars—No pennies!

PART II—OPERATING PHASE

Your group will be required to maintain a set of financial records and record two months of transactions. The transactions will be generated by the instructor and will vary depending on your specific operating decisions. The books will be closed at the end of each month and a complete set of financial statements will be prepared. At the end of the first month, you **must change** the amount spent on advertising and its allocation among the various advertising mediums. If you are happy with current performance, you can make a very small change to your advertising plan.

Each group will need to hand in a set of journal entries, adjusting journal entries, a set of “T” Accounts and financial statements (Balance Sheet, Income Statement and Statement of Stockholders’ Equity). I strongly recommend that you prepare an adjusted trial balance so that you know that you have posted correctly.

PART III—EVALUATION PHASE

You will perform a simple evaluation of your first two months of operations. At a minimum, the evaluation should include a comparison between the two months of operation. You should also discuss how the actual operation of the business varied from your expectation. You should identify changes in operating strategy for future operations.

At a minimum, you must present:

1. Comparative Balance Sheets for August and September
2. Comparative Income Statements for August and September
3. A statement of Stockholders’ Equity
4. Appropriate ratios as determined by your instructor
5. A discussion of the above items; and
6. Plans for the future.

You are to submit a formal written report.