



**CAREER CLUSTER**

Finance

**CAREER PATHWAY**

Accounting

**INSTRUCTIONAL AREA**

Financial Analysis

**ACCOUNTING APPLICATIONS SERIES EVENT**

**PARTICIPANT INSTRUCTIONS**

**PROCEDURES**

1. The event will be presented to you through your reading of these instructions, including the Performance Indicators and Event Situation. You will have up to 10 minutes to review this information to determine how you will handle the role-play situation and demonstrate the performance indicators of this event. During the preparation period, you may make notes to use during the role-play situation.
2. You will have up to 10 minutes to role-play your situation with a judge (you may have more than one judge).
3. You will be evaluated on how well you meet the performance indicators of this event.
4. Turn in all your notes and event materials when you have completed the role-play.

**PERFORMANCE INDICATORS**

1. Determine factors affecting business risk.
2. Explain the nature of cost accounting decision making.
3. Explain the nature of managerial cost accounting (e.g., activities, costs, cost drivers, etc.).
4. Compute overhead rates.
5. Discuss the use of cost-volume-profit analysis.



## **EVENT SITUATION**

You are to assume the role of a restaurant owner in a beachside location called, ROCKING RIBS. Your partner (judge) has invested startup funds for ROCKING RIBS but knows very little about the daily operations of running a restaurant or cost accounting.

Since your restaurant is just across the street from the beach in a tourist area, your sales greatly fluctuate from high season to low season. Your 50 table restaurant is known for its tender meat, which cooks over low flames for 14 hours. You must make sure you order and cook enough meat the night before because if you run out of an item, you cannot just pull it from the freezer and cook it on the spot.

### **During high season**

- ROCKING RIBS fills to capacity.
- ROCKING RIBS is open 12 hours a day 7 days a week. (totaling 336 hours a month)
- ROCKING RIBS employs 8 servers and 3 cooks.
- Servers are paid \$5 per hour plus tips, cooks earn \$10 per hour.
- To staff the restaurant for the month, it costs \$23,520.
- The fixed cost of rent, insurance and utilities is \$4,300.
- The monthly meat order costs \$80,000.
- The mark up on meat is 1 ½ times what it costs. This makes sales in high season average \$120,000.
- ROCKING RIBS maintains a profit margin of just about 10%

**During low season** about half of your customers return to their summer homes so you only order half as much meat.

	<b>High season</b>	<b>Low season</b>
Fixed (rent, insurance, utilities) per month	\$4,300	\$4,300
Food/month	\$80,000	\$40,000
Salary/month	\$23,520	
Total Expenses	\$107,820	
Total income/ month	\$120,000	\$60,000
Total profit	\$12,180	\$6,000

	Total hours open	Cost for 1 employee	Cost for 2 employees	Cost for 3 employees
Server \$5.00/hour	X 336 hours	\$1,680	\$3,360	\$5,040
Cook \$10.00/hour	X 336 hours	\$3,360	\$6,720	\$10,080

Now that high season has ended and low season is starting, your partner (judge) has asked you to explain how you determine the following for low season:

- Appropriate number of employees using data mining
- Potential risks of overscheduling employees
- Potential risks of food surplus
- Fixed vs. Variable costs

You will present your expertise to your partner (judge) in a role-play to take place in your office. Your partner (judge) will begin the role-play by greeting you and asking to hear about low season. After you have presented your explanation and have answered your partner's (judge's) questions, your partner (judge) will conclude the role-play by thanking you for your advice.

## JUDGE'S INSTRUCTIONS

### DIRECTIONS, PROCEDURES AND JUDGE'S ROLE

In preparation for this event, you should review the following information with your event manager and other judges:

1. Procedures
2. Performance Indicators
3. Event Situation
4. Judge Role-play Characterization

Participants may conduct a slightly different type of meeting and/or discussion with you each time; however, it is important that the information you provide and the questions you ask be uniform for every participant.

5. Judge's Evaluation Instructions
6. Judge's Evaluation Form

Please use a critical and consistent eye in rating each participant.

### JUDGE ROLE-PLAY CHARACTERIZATION

You are to assume the role of a restaurant owner in a beach side location called, ROCKING RIBS. You have invested startup funds for ROCKING RIBS but know very little about the daily operations of running a restaurant or cost accounting. Your partner (participant) is an experienced restaurant owner.

Since your restaurant is just across the street from the beach in a tourist area, your sales greatly fluctuate from high season to low season. Your 50 table restaurant is known for its tender meat, which cooks over low flames for 14 hours. You must make sure you order and cook enough meat the night before because if you run out of an item, you cannot just pull it from the freezer and cook it on the spot.

#### During high season

- ROCKING RIBS fills to capacity.
- ROCKING RIBS is open 12 hours a day 7 days a week. (totaling 336 hours a month)
- ROCKING RIBS employs 8 servers and 3 cooks.
- Servers are paid \$5 per hour plus tips, cooks earn \$10 per hour.
- To staff the restaurant for the month, it costs \$23,520.
- The fixed cost of rent, insurance and utilities is \$4,300.
- The monthly meat order costs \$80,000.

- The mark up on meat is 1 ½ times what it costs. This makes sales in high season average \$120,000.
- ROCKING RIBS maintains a profit margin of just about 10%

**During low season** about half of your customers return to their summer homes so you only order half as much meat.

	<b>High season</b>	<b>Low season</b>
Fixed (rent, insurance, utilities) per month	\$4,300	\$4,300
Food/month	\$80,000	\$40,000
Salary/month	\$23,520	
Total Expenses	\$107,820	
Total income/ month	\$120,000	\$60,000
Total profit	\$12,180	\$6,000

	Total hours open	Cost for 1 employee	Cost for 2 employees	Cost for 3 employees
Server \$5.00/hour	X 336 hours	\$1,680	\$3,360	\$5,040
Cook \$10.00/hour	X 336 hours	\$3,360	\$6,720	\$10,080

Now that high season has ended and low season is starting, you have asked your partner (participant) to explain how to determine the following for low season:

- Appropriate number of employees using data mining
- Potential risks of overscheduling employees
- Potential risks of food surplus
- Fixed vs. Variable costs

Your partner (participant) will present his/her expertise to you in a role-play to take place in your partner's (participant's) office. Your will begin the role-play by greeting your partner (participant) and asking for advice on how to schedule the employees

During the course of the role-play you are to ask the following questions of each participant:

1. What other business opportunities might I consider to make the business more profitable during low season?
2. What other ways could you decrease expenses to survive low season without running in the red?

Once your partner (participant) has explained the information and has answered your questions, you will conclude the role-play by thanking your partner (participant) for their advice. You are not to make any comments after the event is over except to thank the participant.

## SOLUTION

### Managerial Cost Accounting

Managerial accounting focuses primarily on the preparation of reports for internal users of financial information, such as managers and officers of a company. Managerial accounting provides tools for assisting management in making decisions and evaluating the effectiveness of those decisions. Cost accounting may be defined as the process of measuring, analyzing, computing, and reporting the cost, profitability, and performance of operations.

### Cost Allocation – Cost behavior analysis

Fixed Costs – are costs that remain the same in total regardless of changes in the activity level. Fixed costs per unit vary inversely with the level of activity. As volume increases, unit cost declines, and vice versa. Examples of fixed costs include: property taxes, insurance, rent, supervisory salaries, and depreciation on buildings and equipment.

The only fixed costs for the restaurant that were included in this role play were: rent, insurance and utilities.

Variable Costs – are costs that vary in total directly and proportionately with changes in the activity level. A variable cost is a cost that remains the same *per unit* at every level of activity. Examples of variable costs include: direct materials and direct labor for a manufacturer; cost of goods sold, sales commissions, and freight-out for a merchandiser; and gasoline in airline and trucking companies.

The only variable costs for the restaurant that were included in this role play were: payroll and food.

### Cost Accounting Decision Making

Cost accounting involves the measuring, recording, and reporting of product costs. From the data accumulated, both the total cost and the unit cost of each product is determined. The accuracy of product cost information produced by cost accountants is critical to the success of the company. This information is used to make important decisions such as which products to produce, what price to charge, and the amounts to produce.

### Cost-Volume-Profit Analysis

CVP analysis is the study of the effects of changes in costs and volume on a company's profits. CVP analysis is important in profit planning. Identifying the breakeven point is a special case of CVP analysis. Breakeven occurs where total sales equal variable costs plus fixed costs. Breakeven analysis allows a company to determine the level of activity (sales) where the company realizes no profit and suffers no loss.

Data mining might be explained by the participant, but it doesn't have to be because it was not one of the performance objectives. Data mining is the process of analyzing data from different perspectives and summarizing it into useful information - information that can be used to increase revenue, cuts costs, or both. It allows users to analyze data from many different dimensions or angles, categorize it, and summarize the relationships identified. Stored data is

used to locate data in predetermined groups. For example, a restaurant chain could mine customer purchase data to determine when customers visit and what they typically order. This information could be used to increase traffic and calculate food ordering needs.

How salary per month was determined in high season:

Server: 12 hours/day X 7 days X \$5/hr= \$420 for each server X 8= \$3360/week

Cook: 12 hours/day X 7 days X \$10/hr= \$840 for each server X 3= \$2520/week

Total salary  $3360 + 2520 = \$5880$ / week X 4 = \$23,520 salary for the month

	High season	Low season
Fixed (rent, insurance, utilities) per month	\$4,300	\$4,300
Food/month	\$80,000	\$40,000
Salary/month	\$23,520	<b>\$9,700</b>
Total Expenses	\$107,820	\$54,000
Total income/ month		\$60,000
Total profit	\$12,180	\$6,000

How figures were determined in low season:

- First calculate half of the high season meat \$80,000 to get low season meat \$40,000.
- Then figure the total income in low season by multiplying the meat \$40,000 by 1.5 mark up to get \$60,000.
- Then multiply the total income of \$60,000 by 10% (profit margin) to get \$6,000 profit.
- Then add the fixed costs \$4,300 plus the meat \$40,000 and the profit \$6,000 totaling \$50,300.
- Then subtract \$50,300 from the income \$60,000 = \$9700.
- This \$9,700 is what you can pay for salary.

	Total hours open	Cost for 1 employee	Cost for 2 employees	Cost for 3 employees
Server \$5.00/hour	X 336 hours	\$1,680	\$3,360	\$5,040
Cook \$10.00/hour	X 336 hours	\$3,360	\$6,720	\$10,080
Total		\$5,040	\$10,080	\$15,120

The participant should say:

You cannot schedule 3 servers (for \$5,040) and 2 cooks (for \$6,720) because it will cost \$11,760 which is more than the allotted \$9,700 you have to spend on salary.

Risks include:

Decreased profit if too many employees are scheduled or operating in the red.

Wasted meat if too much was ordered and cooked which means wasted money and decreased profit.

**Identify other factors affecting business's profit**

Target market (What did the market analysis say about the number tourists during different seasons?)

Disposable income of area residents

Supply and Demand

Economic Growth

Competition

**ANSWERS TO JUDGES QUESTIONS**

1. As the owner you could increase profit if you
  - Sell products –t-shirts, souvenir glasses, floats and beach gear with your name & logo on them
  - Host an “in the biz” night to attract other local hospitality industry employees
  - Bottle your BBQ sauce and sell it during season in the store but also ship it to out of town customers
  - Start a line of frozen dinners- packaging your meals to send to out of town customers.
  - Start an online ordering/shipping service for your frozen meals
  - Rent out your restaurant for school events/fundraisers
  - Cater parties
  - Purchase catering trucks then have them sell meals at local football, baseball or other sporting events
  - Possible relocation of the restaurant to an area with more year round residents as opposed to tourists
  - Provide delivery service to neighborhoods with year round residents further from your restaurant
  
2. As the owner, you could decrease expenses during low season by:
  - Lowering utilities,
    - seating guests in only the main dining area and turning off chillers for other areas
    - only using 1 freezer
    - only using 1 deep fryer
  - Cutting staff hours per week
  - Letting employees go, (but this should be a last resort)
  - Decrease the number of menu items available in low season which would help decrease ordering dilemmas. You wouldn't need to have full stock in all the items that were offered in high season.
  - Shorten the hours of operation (when the restaurant is not busy)

## JUDGE'S EVALUATION INSTRUCTIONS

### Evaluation Form Information

The participants are to be evaluated on their ability to perform the specific performance indicators stated on the cover sheet of this event and restated on the Judge's Evaluation Form. Although you may see other performance indicators being demonstrated by the participants, those listed in the Performance Indicators section are the critical ones you are measuring for this particular event.

### Evaluation Form Interpretation

The evaluation levels listed below and the evaluation rating procedures should be discussed thoroughly with your event chairperson and the other judges to ensure complete and common understanding for judging consistency.

Level of Evaluation	Interpretation Level
Exceeds Expectations	Participant demonstrated the performance indicator in an extremely professional manner; greatly exceeds business standards; would rank in the top 10% of business personnel performing this performance indicator.
Meets Expectations	Participant demonstrated the performance indicator in an acceptable and effective manner; meets at least minimal business standards; there would be no need for additional formalized training at this time; would rank in the 70-89 <sup>th</sup> percentile of business personnel performing this performance indicator.
Below Expectations	Participant demonstrated the performance indicator with limited effectiveness; performance generally fell below minimal business standards; additional training would be required to improve knowledge, attitude and/or skills; would rank in the 50-69 <sup>th</sup> percentile of business personnel performing this performance indicator.
Little/No Value	Participant demonstrated the performance indicator with little or no effectiveness; a great deal of formal training would be needed immediately; perhaps this person should seek other employment; would rank in the 0-49 <sup>th</sup> percentile of business personnel performing this performance indicator.



ACCOUNTING APPLICATIONS SERIES, 2015

JUDGE'S EVALUATION FORM  
SAMPLE SCENARIO 2015

INSTRUCTIONAL AREA  
Financial Analysis

Participant: \_\_\_\_\_

I.D. Number: \_\_\_\_\_

Did the participant:		Little/No Value	Below Expectations	Meets Expectations	Exceeds Expectations	Judged Score
1.	Determine factors affecting business risk?	0-1-2-3-4-5	6-7-8-9	10-11-12-13	14-15-16	
2.	Explain the nature of cost accounting decision making?	0-1-2-3-4-5	6-7-8-9	10-11-12-13	14-15-16	
3.	Explain the nature of managerial cost accounting?	0-1-2-3-4-5	6-7-8-9	10-11-12-13	14-15-16	
4.	Compute overhead rates?	0-1-2-3-4-5	6-7-8-9	10-11-12-13	14-15-16	
5.	Discuss the use of cost-volume-profit analysis?	0-1-2-3-4-5	6-7-8-9	10-11-12-13	14-15-16	
6.	Reason effectively, use systems thinking, make judgments and decisions, and solve problems?	0-1-2-3	4-5-6	7-8	9-10	
7.	Overall impression and responses to the judge's questions	0-1-2-3	4-5-6	7-8	9-10	
TOTAL SCORE						