

SBQ2423 Cost Studies

Introduction to Cost Studies

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Learning Outcomes

- This course is designed to provide students with the knowledge and skills required for identifying cost components, build-up rates and undertake basic costing
- It includes cost estimating techniques, cost analysis and build-up rates. Focus is on simple buildings and basic civil engineering works.

Introduction

- The process of preparing a build-up rates is very much similar to the process of preparing the cost for a meal. For instance, you need to determine the quantity of ingredients needed, the type and quantities of cutleries/tools needed and the number of persons required to prepare the meals.



Introduction (continue)

- To give an overview of how a build-up rates is prepared, you will be asked to do a few simple exercises. This exercise will use the preparation of bread pudding as an example.
- All of the activities will lead to the development of the cost of bread pudding. This is known as breaking down the components of the build-up rate.



Reminder...

- But before we could go on, the most important thing to prepare a bread pudding and eventually the cost is the recipe.
- The recipe will represent not only the description of works but also the brief method of statements. The recipe will serve up to 3-4 persons.

The recipe – the ingredients

Ingredients:

1. 6 slices day-old bread
2. 2 tablespoons butter, melted
3. 1/2 cup raisins (optional)
4. 4 eggs, beaten
5. 2 cups milk
6. 3/4 cup white sugar
7. 1 teaspoon ground cinnamon
8. 1 teaspoon vanilla extract



The recipe - Directions

Directions

1. Preheat oven to 350 degrees F (175 degrees C).
2. Break bread into small pieces into an 8 inch square baking pan. Drizzle melted butter or margarine over bread. If desired, sprinkle with raisins.
3. In a medium mixing bowl, combine eggs, milk, sugar, cinnamon, and vanilla. Beat until well mixed. Pour over bread, and lightly push down with a fork until bread is covered and soaking up the egg mixture.
4. Bake in the preheated oven for 45 minutes, or until the top springs back when lightly tapped.

Break it down #1

- As you know, most of the ingredients sold in standard quantities/sizes.
 - However, you might not need the whole quantities of the items purchased. For instance, you may not need the whole cube of butter, sugar and carton of eggs.
 - This is where you need to determine the actual quantities of the ingredients needed to prepare and the costs incurred.
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Example of Answers

- A loaf of bread?
- A cube of butter?
- A pack of raisins?
- A few eggs?
- A bottle of milk?
- Some white sugar?



Break it down #2

- Next, you know need to identify the kitchen utensils needed and time required to prepare the menu. You can check from either the recipe or the directions stated in the recipe.
- You are also need to determine the costs involved for each of the kitchen utensils/tools.



Example of answers

- An oven
- A pan
- A baking dish
- A mixing bowl
- A whisk
- A fork



Break it down #3

- Finally, you need to determine the number of human resources required to prepare the menu according to the process and the approximate time needed to prepare the menu.
- Once again, just like the ingredients and the utensils, you also need to quantify the costs incurred for the human resources needed.



Example of Answers – Human Resources

- A chef?
- A chef and sous chief?
- Mom?
- Mom and Sister?



Example of Answers – Time Required?

- A chef – 10 mins + 20 mins soaking time?
- A chef and sous chef – 8 mins + 20 mins soaking time?
- Mom – 12 mins + 20 mins soaking times?
- Mom and Sister- 10 mins + 20 mins soaking times?



What's next?

- Now that you have listed and quantified the ingredients, tools, resources and time needed to prepare a bread pudding, how much is the costs for a bread pudding that can serve 3-4 person?



Your Answers

- In your own currency – eg. RM?, \$?, £?, €?, ¥?
Etc.
- Please remember that you need to determine the costs of each tools listed such as the oven, the pan etc.

Reflection

- Why do we need to know the ingredients of the said menu?
- Why did I asked you to list out the tools needed to prepare the menu you have chosen?



Reflection (cont'd)

- What is the importance in knowing the process of preparing the selected menu?
- How did you manage to come out with the cost of the menu selected?
- What is the use of all four activities conducted in the class?



Concluding remarks

- It is important to break down the costs to prepare a bread pudding in 3 namely;
- Ingredients – quantities of materials
- Tools/cutleries – no of plant and machineries
- Human resources – number of plant operators, labours etc.



Concluding remarks (cont'd)

- It is also important to know how much time is needed to prepare the bread as it will reflect the costs incurred for the appointment of the human resources.



Concluding remarks (cont'd)

- By breaking down the components for the preparation of bread pudding according to the recipe and instructions it will help to prepare the costs of bread pudding.
- However, you need to bare in mind that the costs can only be prepared by referring to the recipe and the instructions stated.

Concluding remarks (cont'd)

- The recipe and the instructions is very much similar to the descriptions of work for a construction item.
 - It also detailed out the job, materials, tools and the placement of the job.
 - It is like a simple method of statement for any construction item.
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Concluding remarks (cont'd)

- Hence, by breaking down the components according to the 3 major components will help you to prepare a more accurate construction build-up rate.

The End

Thank You.

