

# Baking a Wedding Cake

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## Executive Summary

Baking a wedding cake as per a customer's request is a multi-step process that is time dependant while involving risks, costs and income. The following project analyzes risk, plans the tasks to be executed leading to the final objective and analyzes the financial viability of the project. The vision for the project is to design and bake a unique cake as envisioned by our customer. The project mission is to bake and design a wedding cake, using our knowledge and expertise, to our customer's desires. Applying unique techniques and ideas to create product that is truly superior in taste and design. The cake will be delivered on time and on budget leading to customer satisfaction. The major tasks in the project are processing the request, preparation, design and creation, baking, completion and the afterword. These tasks can be viewed in figure 1. All of the major tasks fall on the critical path so it is key that each task is completed within the allotted time in order to not delay the project. The project has certain risks associated with it. Such a risk is failing to find required ingredients at the preferred supplier which can be seen in table 3. The probability of occurrence this risk is to be mitigate by ensuring that the cake ingredients are not particularly uncommon. If the ingredients cannot be obtained through the preferred supplier alternate suppliers will be used. Using an alternate supplier will result in an additional transportation cost of \$4.00. The risk score of the aforementioned possible problem is medium. Additional risks can be seen in the risk matrix in table 3. The financial analysis determined the project will be profitable and the expected value including the risk of being unable to find ingredients at the preferred supplier is \$99.65. It is expected that due to the planning, risk analysis and financial analysis contained in this report the project is able to meet the outlined mission.

## Introduction

The aim of the project is to break a wedding cake. Our project is focused on the customer and their satisfaction. Key elements that have been identified as linked to the satisfaction of our customer include communication, clear design objectives, meeting deadlines, and producing a product that is both aesthetically pleasing and delicious. In order to ensure that we are understand the customers' requests we have included risk analysis and contingency plans in the event that customer request are for any reason unknown or uncertain. To additionally ensure against miscommunication between the designer and the customer a stage of planning has been added to consult and confirm the customers' requests. To ensure that the product is high quality and delivered according to schedule a risk matrix has been created to analyse possible problems and create contingency plans. While the project is customer focused it remains important to ensure that the project is profitable. A financial analysis has been included to determine the profitability of the project with the alternate scenarios for likely additional costs. The financial analysis determined the project has an expected value of \$99.65.

## Our Vision

Our vision is to design and bake unique cakes as envisioned by our customers.

## Our Mission Statement

Our mission is to bake and design a wedding cake, using our knowledge and expertise, to our customers desires. Applying unique techniques and ideas to create product that is truly superior in taste and design. We will deliver our cake on time and on budget so that the customer is satisfied.



## Risk Analysis

Risk is not a particularly large factor in the project however as with any project there are some possible risk factors that must be accounted for. Table 1 and table 2 include data for how the level of risk will be assessed while table 3 is focused on specific risks and the associated risk level. In order to reduce the possibility of risks occurring triggers have been identified, prevention measure put in place and contingency plans created.

**Baking a wedding Cake**  
**Risk Levels**  
**Table 1**

		SEVERITY			
		NEGLIGIBLIE	MARGINAL	CRITICAL	CATASTROPHIC
PROBABILITY	LOW	LOW (1)	MEDIUM (4)	MEDIUM (6)	HIGH (10)
	MEDIUM	LOW (2)	MEDIUM (5)	HIGH (8)	EXTREME (11)
	HIGH	MEDIUM (3)	HIGH (7)	HIGH (9)	EXTREME (12)

**Baking a wedding Cake**  
**Risk Rankings**  
**Table 2**

<b>RISK RANKING/PRIORITY</b>	
<b>LOW</b>	Low chance of happening and low chance of effecting the overall project. <b>(LOW PRIORITY)</b>
<b>MEDIUM</b>	Medium chance of happening and medium impact on the project, should be solved since it will affect the project but not a great deal. <b>(MEDIUM PRIORITY)</b>
<b>HIGH</b>	High chance of happening and will have a big impact on the project. Problem should be dealt with immediately. <b>(HIGH PRIORITY)</b>
<b>EXTREME</b>	Extremely high chance of happening and will mostly ruin the project if not dealt with immediately. <b>(HIGHEST PRIORITY)</b>

# Risk Matrix Table of Baking a Wedding Cake

Table 3

Events	Risk(s)	Severity	Probability	Risk Score	Prevention
<b>Process Request</b>	<ol style="list-style-type: none"> <li>1. Customer details get lost</li> <li>2. Project cannot be completed in allotted time</li> <li>3. Quote was incorrect</li> </ol>	<ol style="list-style-type: none"> <li>1. Critical</li> <li>2. Critical</li> <li>3. Critical</li> </ol>	<ol style="list-style-type: none"> <li>Low</li> <li>Medium</li> <li>Low</li> </ol>	<ol style="list-style-type: none"> <li>Medium (6)</li> <li>High (6)</li> <li>Medium (6)</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure to confirm what the customer wants more than once.</li> <li>2. Negotiate with customer to make sure the project can be done on time</li> <li>3. Go over details and review the quote multiple times to find and mistake</li> </ol>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Ingredients cannot be found</li> <li>2. Not all equipment can be used/broken</li> </ol>	<ol style="list-style-type: none"> <li>1. Marginal</li> <li>2. Critical</li> </ol>	<ol style="list-style-type: none"> <li>Medium</li> <li>Medium</li> </ol>	<ol style="list-style-type: none"> <li>Medium (5)</li> <li>High (8)</li> </ol>	<ol style="list-style-type: none"> <li>1. Don't make a list of ingredients that are hard to find</li> <li>2. Make sure all equipment is ready and available at the time when its need</li> </ol>
<b>Design and Create</b>	<ol style="list-style-type: none"> <li>1. Cake board is too small</li> </ol>	<ol style="list-style-type: none"> <li>1. Marginal</li> </ol>	<ol style="list-style-type: none"> <li>Medium</li> </ol>	<ol style="list-style-type: none"> <li>Medium (5)</li> </ol>	<ol style="list-style-type: none"> <li>1. Make multiple boards that are larger than needed.</li> </ol>
<b>Bake the Cake</b>	<ol style="list-style-type: none"> <li>1. Run out of ingredients</li> <li>2. Cake does not bake properly</li> </ol>	<ol style="list-style-type: none"> <li>1. Critical</li> <li>2. Marginal</li> </ol>	<ol style="list-style-type: none"> <li>Medium</li> <li>Medium</li> </ol>	<ol style="list-style-type: none"> <li>High (8)</li> <li>Medium (5)</li> </ol>	<ol style="list-style-type: none"> <li>1. Buy more ingredients than needed, but not an excess amount</li> <li>2. Make sure cake is properly prepared before baking and/or have more the one cake baked.</li> </ol>
<b>Completion</b>	<ol style="list-style-type: none"> <li>1. Cake was not safely stored</li> <li>2. Delivery of Cake is Late</li> <li>3. Parts of Cake setup breaks.</li> </ol>	<ol style="list-style-type: none"> <li>1. Catastrophic</li> <li>2. Critical</li> <li>3. Marginal</li> </ol>	<ol style="list-style-type: none"> <li>Low</li> <li>Medium</li> <li>Medium</li> </ol>	<ol style="list-style-type: none"> <li>High (10)</li> <li>High (8)</li> <li>Medium (5)</li> </ol>	<ol style="list-style-type: none"> <li>1. Check storage system to make sure its functionally properly. Have an emergency cake.</li> <li>2. Deliver the cake early and expect traffic delays.</li> <li>3. Have multiply setups planned</li> </ol>

## Trigger Points and Contingencies Table *Baking a Wedding Cake*

Table 4

Events	Trigger Points	Contingencies
<b>Process Request</b>	<ol style="list-style-type: none"> <li>1. Can't find details for the cake during the designing stage</li> <li>2. While talking to customer it will become clear that their desired cake cannot be finished in time for wedding</li> <li>3. Customer complains of being overcharged</li> </ol>	<ol style="list-style-type: none"> <li>1. Setup another up appointment and gather details once again</li> <li>2. Negotiate with customer to simplify designs to complete cake on time</li> <li>3. Take ownership of incorrectly calculating quote and come with an agreement with customer</li> </ol>
<b>Preparation</b>	<ol style="list-style-type: none"> <li>1. Can't find ingredients needed to bake cake</li> <li>2. Equipment is broken and unable to be used. Even the extra (if one was Prepared)</li> </ol>	<ol style="list-style-type: none"> <li>1. Find alternatives to use and/or scrap some ideas where the Design of the cake still works</li> <li>2. Borrow/rent equipment from other stores</li> </ol>
<b>Design and Create</b>	<ol style="list-style-type: none"> <li>1. Cake doesn't fit on board</li> </ol>	<ol style="list-style-type: none"> <li>1. Use spare larger boards and cut them to fit the cake</li> </ol>
<b>Bake the Cake</b>	<ol style="list-style-type: none"> <li>1. No more ingredients left to use</li> <li>2. Cake comes out with bad texture and/or is deformed.</li> </ol>	<ol style="list-style-type: none"> <li>1. Quickly buy more. If some ingredients are hard to acquire make do without it and find an alternative.</li> <li>2. Use extra cakes that were prepared (if prepared) or bake another cake with extra ingredients. (if there are no extra ingredients buy more)</li> </ol>
<b>Completion</b>	<ol style="list-style-type: none"> <li>1. Cake is spoiled</li> <li>2. Cake will not be delivered on time</li> <li>3. Setup Pieces broke during transportation</li> </ol>	<ol style="list-style-type: none"> <li>1. Use emergency cake that was made, won't be as big or as good.</li> <li>2. Have Cake to be delivered early. Try the best to deliver cake as fast possible in a safely manner.</li> <li>3. Use one of the other multiple setup designs that were planned</li> </ol>



## Project Plan

The project plan is relatively simple as baking a wedding cakes is a project where each task is dependant one single task being finished before it can be completed. All major tasks in grey boxes in figure 1 – Work Break-Down Structure are critical tasks. The Minor tasks underneath the major tasks are not individually included in the critical path determination as they do not take up enough time individually for this to be an effective method of planning the project. In figure 2 – Critical path determination the critical path of major tasks is shown, which includes all major tasks in the work break down structure. Given that each task is a critical task it is important that there are no delays at any point as this would result in a delay. The critical path determination also calculates a time duration for the project which is 22.5 days from start to finish. Figure 3 – Gantt chart displays both major and minor tasks in a visually. This will assist with identifying all task to be completed and the order in which they are to be completed. Referring to the Gantt chart during the execution of the project will help to endure that no steps are missed or other mistakes made. On the Gantt chart major tasks are show with a grey background while minor tasks have a background.

## Work Break-Down Structure

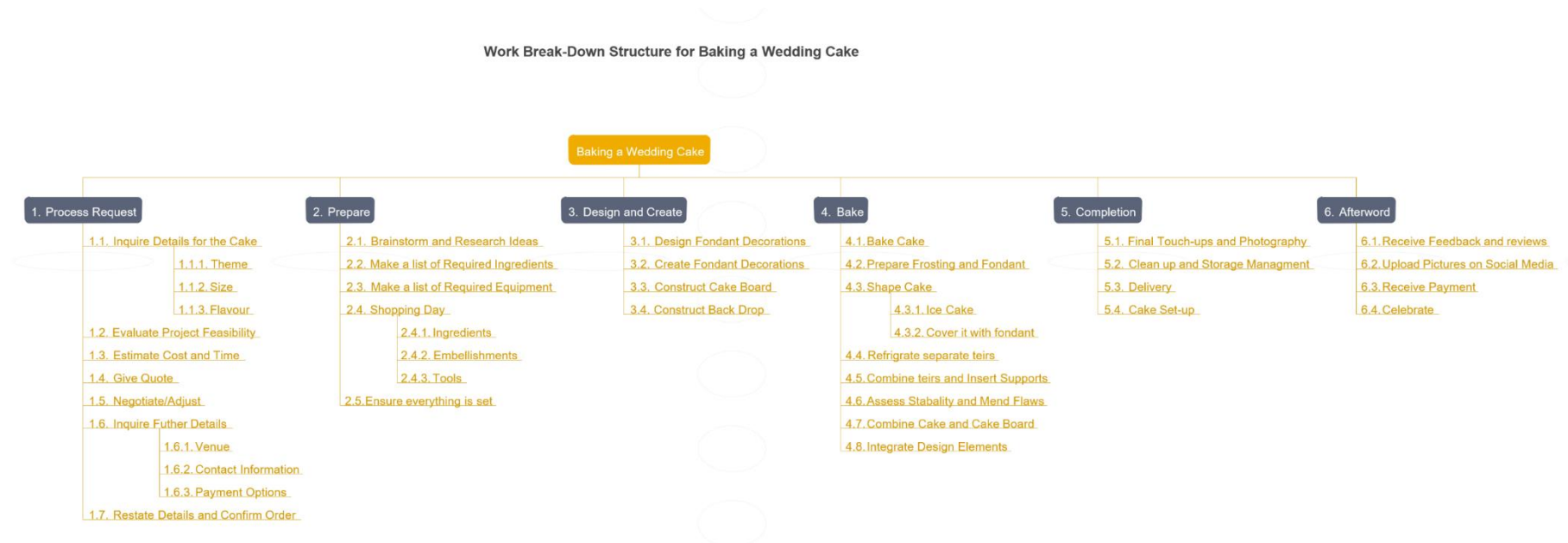


Figure 1- Work Break-Down Structure

## Critical Path Determination

### Baking a Wedding Cake

#### Critical Path Determination Diagram

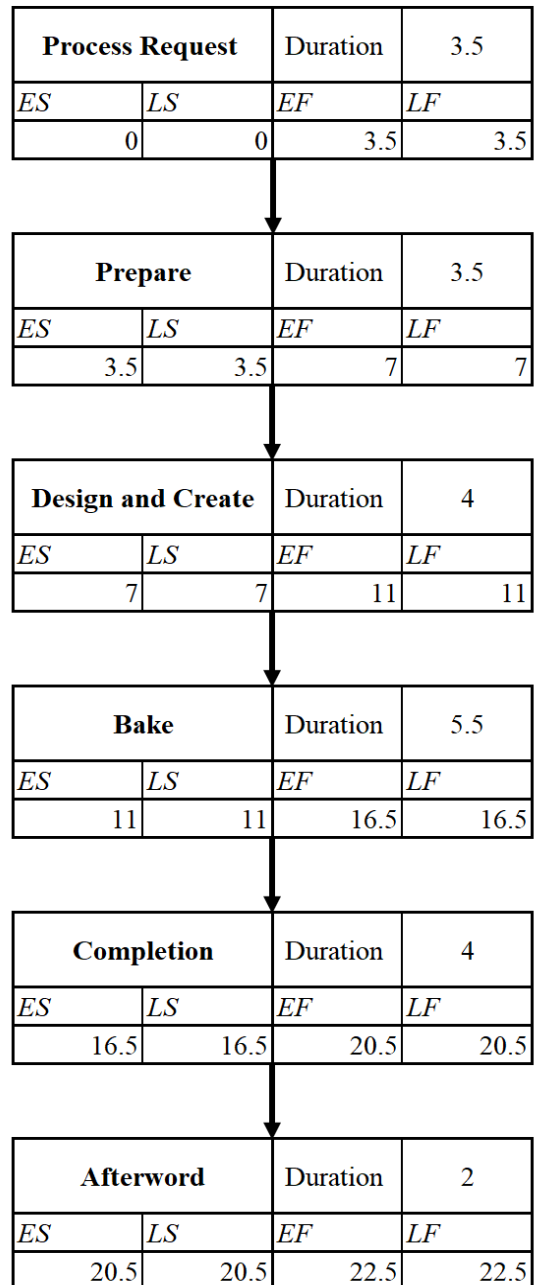


Figure 2- Critical Path Determination



## Baking a Cake – Gantt Chart

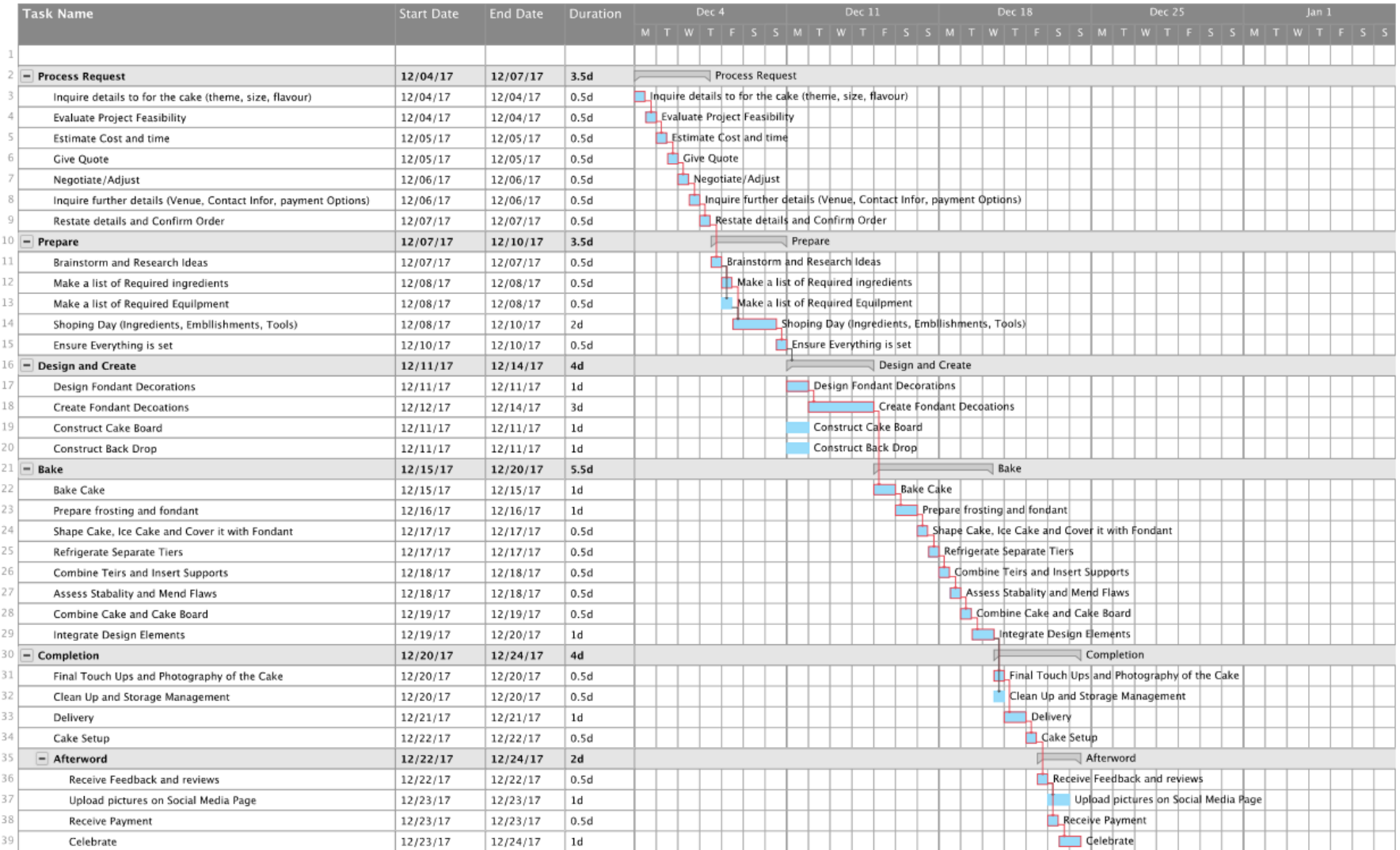


Figure 3- Gantt Chart

## Financial Analysis

Tables:

Baking a Wedding Cake Table 6 Financial analysis					
Categories	Items	Column 1	Column 2	Column 3	Column 4
		Standard Case (case 1)		Ingredients Unavailable (case 2)	
		Cost	Income Generated	Cost	Income Generated
ingredients	icing	\$ 10.00	\$ 40.00	\$ 10.00	\$ 40.00
	cake ingredients	\$ 20.00	\$ 65.00	\$ 20.00	\$ 65.00
	decorations	\$ 15.00	\$ 25.00	\$ 15.00	\$ 25.00
	other	\$ 1.00	\$ 5.00	\$ 1.00	\$ 5.00
Transportation	shopping	\$ 1.00	\$ -	\$ 5.00	\$ -
	meeting with customer	\$ 5.00	\$ 10.00	\$ 5.00	\$ 10.00
	delivery	\$ 8.00	\$ 40.00	\$ 8.00	\$ 40.00
Other	planning materials	\$ 1.00	\$ -	\$ 1.00	\$ -
	additional fees	-	\$ 30.00	-	\$ 30.00

Baking a Wedding Cake Table 6 Profitability Analysis		
	case 1	case 2
Total cost	\$ 61.00	\$ 65.00
Total income	\$ 215.00	\$ 215.00
Total taxes	\$ 53.75	\$ 53.75
Profit	\$ 100.25	\$ 96.25
probability of occurrence	85%	15%

$$\begin{aligned} \text{Expected Value} &= \sum (\text{Probability of Occurrence} \times \text{Profit}) \\ &= (\$100.25 \times 0.85) + (\$96.25 \times 0.15) = \$99.65 \end{aligned}$$

### Analysis:

The project has an expected capital cost of \$61.00 which includes the cost of planning, miscellaneous materials, cake ingredients and transportation. In the event that required ingredients cannot be purchased from the preferred supplier additional transportation cost will be incurred while shopping. The aforementioned increase in capital costs results in a capital cost of \$65.00. The information for this case (case 3) may be seen in column 3 and 4 of table 5 and in case 2 of table 6. The Expected value for which the sample calculation is shown above is \$99.65

### Conclusion

It is determined that it is profitable to bake a wedding cake. The expected value is \$99.65. Given our companies customer focus care is taken to ensure the quality of the product, adherence to the given schedule and that the customers' requests are clearly understood. The creation of a risk matrix identifies possible risk factors as being miscommunication with the customer and unrealistic expectations from the customer. In order to mitigate this risk we will review the order details, confirm them with the customer and schedule additional meetings with the customer if necessary. There is also the possibility that some ingredients are unavailable from the preferred supplier. In this case it is likely that another supplier carries the required ingredients in which case an extra \$4.00 in transportation costs will be incurred. If other suppliers do not carry the ingredients the scope of the cake would need to be reworked. The project plan is straightforward with all major tasks on the critical path. A Gantt chart has been created including both major and minor tasks so that the process may be followed without error. Being aware of the risks, consulting the plan, and understanding the financials of the project ensure that the wedding cake will be unique, delicious and presentable as the customer requests. Delays are unlikely to be significant as risks have been accounted for and all tasks have been organized and timed in previous runs so that an achievable deadline has been set.