TW2Beers

**Sample Only**

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Course Project Proposal

Revision Number 1

**1. Overview**

Three entrepreneurs who love beer have built their own brewery in Topeka, Kansas. Ultimately, their goal is to deliver beer across the nation, but since start-up funds are tight, they must select one initial city to which they will deliver beer over the next twelve months. They are now trying to decide in which city to initiate sales and have narrowed their choices down to Madison, Wisconsin or Austin, Texas. We propose a spreadsheet model named TW2Beers that will help the three brewery owners decide between initiating sales in Madison or Austin. The overall business objective is to select the city that yields the highest bottom line over the next twelve months (i.e., the highest net income on the projected income statement). The scope of the model will include revenue projections (i.e., sales less cost of goods sold); operating expenses (i.e., human resources and transportation expenses); and net income (i.e., revenues less expenses and taxes). Analyses other than those mentioned here will be out of scope for the proposed model.

The two scenarios being considered are: (1) initiating beer sales in Madison, Wisconsin or (2) initiating beer sales in Austin, Texas. In Madison, the predominantly cold weather leads consumers to purchase more dark beer than light beer; dark beer is more expensive to make but has a higher price point. In Austin, the predominantly hot weather leads consumers to purchase more light beer than dark. Overall, consumers in Madison buy more beer than consumers in Austin, but transporting the beer to Madison is more expensive because during the winter, the roads are snowy requiring delivery trucks to use specialized snow tires and to drive more slowly. Using sales projections from the TW2Beers sales department and reasonable assumptions about the sales price of beer, number and cost of kegs manufactured per brewed batch, employee productivity and pay rates, transportation capacity and cost, and tax rates, we will be able to model the effect that initiating sales in Madison versus Austin will have on the projected bottom line on the forecasted income statement.

**2. Budget**

We estimate that the total cost to deliver the proposed spreadsheet model is 53 hours. The itemized breakdown can be found below. Please note, the estimated cost is reported in hours per team, not hours per individual.

|  |  |
| --- | --- |
| BUDGET | |
| Action Item | Estimated Cost  (hours per team) |
| Planning |  |
| Define the problem | 5 |
| Allocate the project components amongst the team members | 1 |
| Devise a schedule for completion of the entire project | 1 |
| Modeling |  |
| Actual implementation of the model and its components | 20 |
| Documents |  |
| Cost of producing Course Project Proposal | 4 |
| Cost of producing Midpoint Status Report | 3 |
| Cost of producing Final Report | 9 |
| Cost of producing Usage and Maintenance Guide | 5 |
| Execution |  |
| Explore the problem | 2 |
| Make observations of model’s behavior | 3 |
| TOTAL | 53 |

**3. Team**

The project team consists of XXXX, XXXX, and XXXX. The project team is qualified to develop and construct the proposed spreadsheet model because all three team members are enrolled in Spreadsheet Models for Managers at the Harvard Extension School.

**4. Input streams, input parameters, and output streams**

The proposed spreadsheet model will have X input streams, X input parameters, and X output streams as described in more detail below. The input and output streams will display monthly data for a twelve month time period.

Input Streams:

SalesProjectionsLightBeer – the number of kegs of light beer TW2Beers projects selling in each of the next twelve months

SalesProjectionsDarkBeer – the number of kegs of dark beer TW2Beers projects selling in each of the next twelve months

HoursPerRoundtrip – the number of hours it takes to drive roundtrip from Topeka to destination city in each of the next twelve months

Input Parameters:

SalesPriceLightBeer – the price that a consumer will pay for one keg of light beer

SalesPriceDarkBeer – the price that a consumer will pay for one keg of dark beer

KegsPerBatchLight – the number of sellable kegs that the brewery can fill from one batch of brewed light beer

KegsPerBatchDark – the number of sellable kegs that the brewery can fill from one batch of brewed dark beer

CostPerBatchLight – the cost to the brewery of making one batch of light beer

CostPerBatchDark – the cost to the brewery of making one batch of dark beer

KegsPerEmployee – the number of kegs of beer that can be produced and sold for every employee that works at the brewery (does not include truck drivers)

HourlyPayEmployee – the average hourly pay rate of each employee (does not include truck drivers)

KegsPerTruck – the number of kegs that fit into each delivery truck for transport to customer’s city

NumTrucksOwned – the number of delivery trucks that the brewery owns and can use to make deliveries

CostSpecialEquipment – the cost to the brewery of special truck equipment needed, such as snow tires

MaxHoursPerDriver – the maximum number of hours that a driver can work in any given month

HourlyPayDriver – the average hourly pay rate of each truck driver

TaxRate – the percentage of gross income that the brewery must pay to the government

Output Streams:

SalesRevPerMo – the projected revenue from beer sales in each of the next twelve months

CumSalesRevPerMo – the cumulative projected revenue from beer sales over the next twelve months

ProjectedBatchesLight – the number of batches of light beer the brewery must brew each month in order to meet sales projections

ProjectedBatchesDark – the number of batches of dark beer the brewery must brew each month in order to meet sales projections

CostBatchesLight – the cost to the brewery to make all of the batches of light beer needed to meet each months’ sales projections

CostBatchesDark – the cost to the brewery to make all of the batches of dark beer needed to meet each months’ sales projections

NumEmployeesNeeded – the number of employees that must be on staff (not including truck drivers) in order to meet each months’ sales projections

CostOfEmployees – the cost to the brewery of employee the staff needed (not including truck drivers) to meet each months’ sales projections

NumRoundtrips – the number of roundtrips that each truck will need to make to the destination city in in each month in order to meet sales projections

CostRountrips – the cost to the brewery of truck gas and maintenance each month

NumHoursDriving – the number of hours drivers spend on the road each month in order to make the requisite deliveries

CostOfDrivers - the cost to the brewery of the truck drivers needed to make the requisite deliveries

MoNetIncome – the net income earned by the brewery in each of the next twelve months

CumNetIncome – the cumulative net income earned by the brewery over the next twelve months

**5. Schedule and milestones**

The proposed project will be completed according to the following schedule.

|  |  |
| --- | --- |
| SCHEUDLE | |
| Action Item | Deadline |
| Team meeting | 10/06/2xxx |
| Define the problem | 10/06/2xxx |
| Allocate the project components amongst the team members | 10/07/2xxx |
| Devise a schedule for completion of the entire project | 10/08/2xxx |
| Draft Course Project Proposal | 10/08/2xxx |
| MILESTONE 1: Submit Course Project Proposal deliverable via DropBox | 10/09/2xxx |
| Model sales revenues in Excel | 10/15/2xxx |
| Model cost of goods sold in Excel | 10/23/2xxx |
| Team meeting | 10/25/2xxx |
| Draft Midpoint Status Report | 10/27/2xxx |
| MILESTONE 2: Submit Midpoint Status Report deliverable via DropBox | 10/30/2xxx |
| Model selling expenses in Excel | 11/10/2xxx |
| Model transportation expenses in Excel | 11/20/2xxx |
| MILESTONE 3: Circulate draft spreadsheet model deliverable to all team members for review | 11/30/2xxx |
| Team meeting | 12/6/2xxx |
| Revise spreadsheet model | 12/7/2xxx |
| Draft Final Report | 12/13/2xxx |
| Draft Usage and Maintenance Guide | 12/15/2xxx |
| Team meeting | 12/17/2xxx |
| MILESTONE 4: Submit Final Report and Usage and Maintenance Guide deliverable | 12/18/2xxx |
| De-identify all project documents | 12/20/2xxx |
| MILESTONE 5: Submit De-Identified Project Documents for submission to Course Project Library deliverable via DropBox | 12/20/2xxx |

The significance of millstone 1 is that by 10/09/2xxx, our team will have formed, will have an understanding of TW2Beers’ need for a spreadsheet model to decide between two scenarios, will have a budget and schedule plan, and will have identified the necessary input streams, input parameters, and output streams necessary to create a successful model that meets the specified objectives. The significance of milestone 2 is that by 10/30/2xxx, our team will have a fully realized understanding of TW2Beers’ problem, a concrete division of work established, and an ability to refine the budget and schedule if necessary. The significance of milestone 3 is that the spreadsheet model will be drafted. This is a key point for the team to meet, identify errors, make improvements, pilot test the scenarios, and come to consensus regarding the final projects (model and documents). The significance of milestone 4 is that by 12/18/2xxx, the spreadsheet model, a description of the model, and a user’s guide will be delivered to the customer. The significance of milestone 5 is that by 12/20/2xxx, we will check on our customer to make sure that they are satisfied with our final deliverables. By cultivating this relationship, we hope TW2Beers will use us for their future spreadsheet modeling needs.

**6. Appendix**

None.