# Two Kings Pizza - Redesign Project - Brandon Kemmery

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## Table Of Contents

## Background

Two Kings Pizza in Hometown is a small family-owned Italian restaurant in Schuylkill county Pennsylvania. Currently one of the issues with small family-owned restaurants is that they are very out of date in comparison to current technology. One of the things this particular restaurant is behind on is a modern ticketing system to help the workflow of order be completed more efficiently. The restaurant also lacks a modern ordering system such as online ordering and a contactless ordering kiosk.

## Scope Overview

In order to do this process, the restaurant will need to undergo changes that will change the way the restaurant completes its processes inside of the restaurant. I've divided this process into 4 different stages. One important thing to mention about this restaurant is that it is open 7 days a week, so it does not have the downtime to install a system over a period of days. Any changes must be implemented quickly and will most likely be completed during operational hours at the restaurant.

1. Planning - Initial brainstorming of ideas and planning how the system will work and be implemented. What are the changes that are planned to take effect and how are these plans going to be implemented.

2. Briefing - Brief employees on the changes that are going to be taking place with the new upgraded software, systems, environment, and get their inputs on possible changes and improvements.
3. Implementation - Implement the new system into the organization. Acts as the test stage of the project, makes sure that the project is working properly.
4. Training - Train employees on the new and improved system to ensure the restaurant will still function.

## Business Case

These changes would be an important addition and change to the company because it would allow for the increased efficiency of the business and will overall lead to happier clients, shorter wait times, and a higher employee retention rate. I would estimate the cost of this project to be around the $25,000 dollar range. These majority of these costs would be caused from the losses of revenue based on training, the implementation of the new systems, and incorrect orders due to newly trained employees.

## Milestone Schedule

| Milestone | Date | Who Judges | Acceptance |
|---|---|---|---|
| 1. Existing Restaurant | | | |
| 2. Site Visit/Framing of issues | Week 1 | Project manager/customers/workers | Finding issues and brainstorming solutions |
| 3. Redesign and approval | Weeks 2-3 | Workers/customers | Finalizing solution to problem |

| | | | |
|---|---|---|---|
| 4. Equipment deliverable | Week 4-5 | External equipment provider | Ordering the new software and training. |
| 5. Project execution | Week 6 | Installation/customer/ worker | Implementation of software and training of employees |
| 6. System turnover | Week 6-10 | Workers/customers | Trained employees take over system |

**Restaurant Tech Fix**

In my restaurant tech overhaul project, there are three main types of stakeholders that would primarily be affected by the project as a whole. These stakeholders would be the customers that order from the restaurant, the workers who work inside of the restaurant, and the owner of the restaurant.

**List of Stakeholders**

I have identified three different stakeholders inside of the company.

1. Owner/Manager - The Owner/Manager wants to make his business more efficient, overall increasing the profitability of the organization.
2. Customers - Want their orders to be done quickly and correctly. The faster and overall correctness of an order will increase the turnaround rate of customers.
3. Workers - Workers would like to complete their work more efficiently, given them time to complete other tasks inside of the restaurant in less of a rush.

**Customer**

The customer is the most important driving factor inside of the restaurant. This is because without the customer, the business would not be able to stay alive. The customer, therefore, has a

lot of influence on the actions of the restaurant as a whole. The restaurant is actually at the burden of the customer and must please be able to please them. A complete redesign of the tech inside of the restaurant would be able to speed up the processes of the restaurant causing shorter waits, less mistakes, and the potential for cost savings.

**Requirements (From most important to least important)**

1. **Shorter wait times for orders.**
    a. A more efficient system would reduce the amount of wait time for customers inside of the restaurant.
2. **Less mistakes within orders.**
    a. A more efficient and better system would help workers minimize errors, overall saving the business and customer money.
3. **Potential savings passed on to customers.**
    a. These potential savings would come from the increased efficiency inside of the kitchen and the lessened amount of mistakes caused in the kitchen.

## Workers

The workers in the restaurant are another important stakeholder inside of the business. The business provides them with a very important source of their income. Their livelihoods depend on the business, but in return, the business also depends on them. Without the workers the business can not function. A complete redesign of the technology inside of the restaurant would make the worker's time more efficient, increase the security of their jobs, and reduce the amount of stress caused to them.

**Requirements (From most important to least important)**

1. **Increase job efficiency.**
    a. A better technological system in the restaurant would reduce the amount of mistakes and wait time caused by the current system in the restaurant.
2. **Increased job security.**
    a. Decreased mistakes means a happier customer base. Increased traffic to the restaurant.
3. **Reduce stress and mistakes.**
    a. A more efficient system would allow for less mistakes, giving employees more time to calm themselves before the next order.

## Owners/Manager

The primary job of the owner and manager is to make sure that the other stakeholders are happy and the business stays afloat. They are ultimately the people who take the most risk in the business model. The owner and manager use their capital in order to invest in the success of the business. A tech redesign of the company would benefit them by making the work in the restaurant more efficient, increasing the happiness of workers and customers, and increasing the profits of the business.

**Requirements (From most important to least important)**

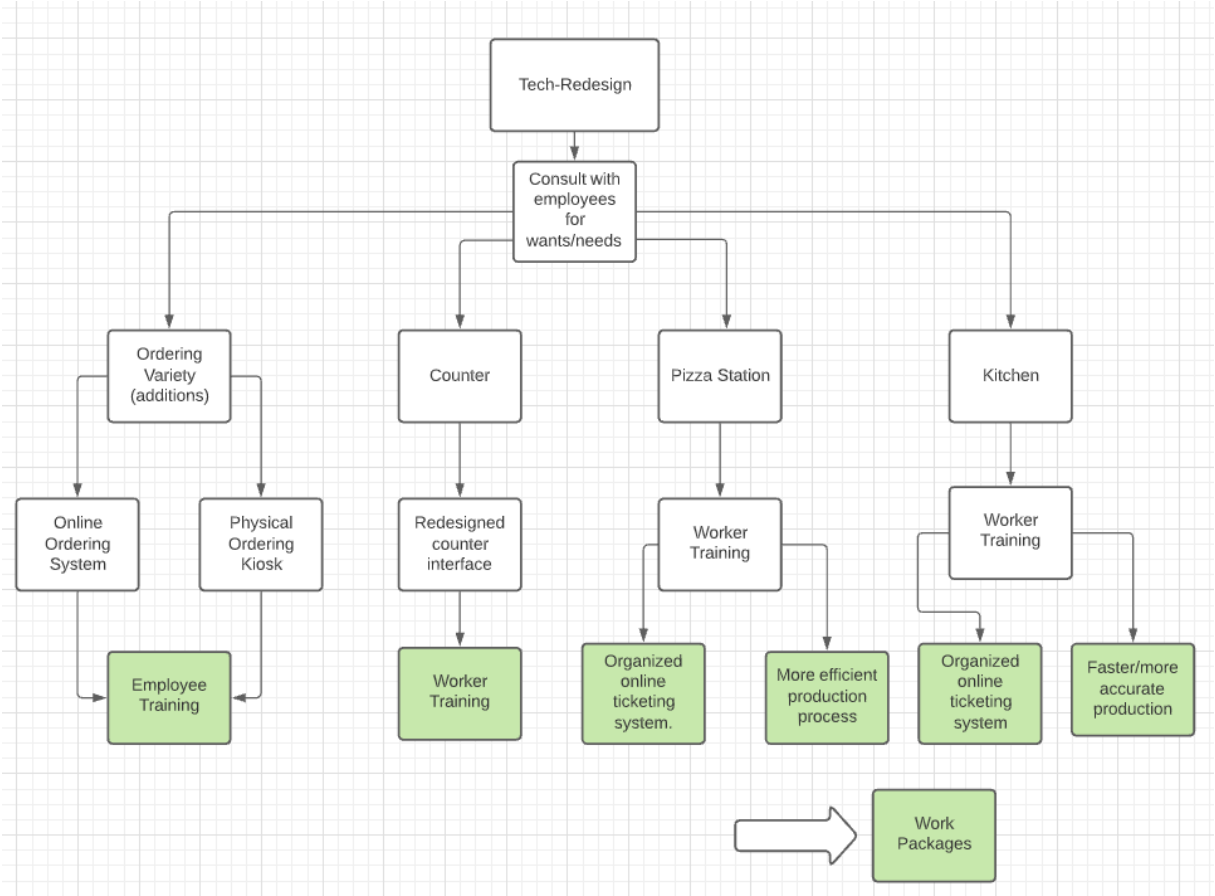
1. **Increasing Profits**
    a. The main goal of every for profit business.

2. **Increasing efficiency**
    a. Increasing the efficiency of the workers and the purchasing process for customers.
3. **Increasing happiness of workers and customers.**
    a. A more efficient and smoothly run process would decrease stress and burnout on workers.
    b. This would also decrease wait times for customers
    c. All of these ultimately contribute to the main goal of the owner/manager by allowing him to gain capital from the business.

## Scope Plan

The project of my business would be a tech redesign for an older, outdated, family-owned restaurant. The business is currently lacking an updated technology system that would be used for inputting orders, tracking orders, and dispersing orders properly. A project revolving around the project would benefit the major stakeholder groups in the project in various ways each. Would have increased profit margins for the owner, less wait time for customers, more orders completed correctly, and less confusion from workers. In order to do this I have separated the final project implementation into 4 separate stages. Including a planning stage, briefing stage (explaining to employees), Implementation phase, and employee training stage (also acts as a final change stage).

**WBS**




**Work Package -**

1. **Ordering Variety -**
    a. Speak with employees in order to figure out what they think would work and not work for their specific niche of the restaurant.

i. Worker-less ordering kiosks and an online system would help reduce worker workload throughout the day. This would reduce burnout of employees and increase efficiency.

b. Workers will have to know how to manage these kiosks in case of customer questions or glitches in the system. This will require training to be able to manage correctly.

2. **Counter - (Hands orders to customers and handles phone calls inside of the restaurant.)**

   **a.** Speak with employees in order to figure out what they think would work and not work for their specific niche of the restaurant.

      i. One of the current pain points of a counter worker in the restaurant is the confusing interface of the ordering screen. Re-designing this would be an excellent way to reduce the pain points of the employees.

      ii. I cannot physically explain to you how bad the ordering station is at our restaurant. Employees actually get paid more to learn it.

   b. A complete redesign of the system would increase employee efficiency and allow for a more reasonable and stress free environment for employees. This would also need training though, employees would be used to the old system and have to learn the new one.

3. **Pizza Station -**

   **a.** Speak with employees in order to figure out what they think would work and not work for their specific niche of the restaurant.

   b. Employees would have to learn the new ticketing system that is being implemented into the restaurant in order to properly label food that is being sent out to customers.

i. New ticketing system prints specific orders to the spots that the specific food is made at.

ii. This ensures that food is given to the correct customer.

iii. New system, on the other hand, allows for less cluster and movement inside of the restaurant. Which, in return, increases productivity.

c. New system would be completely implemented into the restaurant.

4. **Kitchen -**

**a.** Speak with employees in order to figure out what they think would work and not work for their specific niche of the restaurant.

b. Learn a new ticketing system that is being put in place. Allows the correct marking of orders inside of the restaurant. Allows for correct order shipped to correct customers.

i. New ticketing system prints specific orders to the spots that the specific food is made at.

c. Complete implementation of the system.

**Schedule - Correction**

- I forgot to add a revamped ticketing system to my critical path graphic. This would be inserted into the chain before the kitchen and pizza station.

| Activity | Start Date | End Date |
|---|---|---|
| Consult Employees Wants/Needs | Day 1 | Day 7 |
| Ordering Options (Variety) Consult and research different models | Day 7 | Day 21 |
| Counter Computer Layout | Day 7 | Day 21 |

| | | |
|---|---|---|
| Redesign for easier use. | | |
| Implementation of online ordering system and physical kiosk. | Day 21 | Day 28 |
| Counter Redesign Training | Day 28 | Day 35 |
| Training for new ordering system | Day 28 | Day 35 |
| Worker ticketing system training time<br>Gives workers time to learn new systems. | Day 35 | Day 42 |
| Worker Training on new ticketing system | Day 35 | Day 42 |

## Budget

### Level 3 WBS Budgets

| Description | Cost | Type of Cost |
|---|---|---|
| Employee Training for new Ordering Systems | $500 | Variable (Depends how much training is needed) |
| Employee Training for new Counter Computer System | $500 | Variable (Depends how much training is needed) |
| Worker Ticketing system training | $500 | Variable (Depends how much training is needed) |
| Pizza Station Ticketing Training | $500 | Variable (Depends how much training is needed) |
| Total Cost | $2,000 | |

**Level 2 WBS Budgets**

| Description | Cost | Type of Cost |
|---|---|---|
| Implement Self-Ordering Kiosk (x2) + Training Costs | $10,000 + $500 = $10,500 | Fixed (Ordering Kiosks that I found cost $5000 each) |
| Implement Online Ordering System | $1.95 per order on Slice | Recurring Cost (Fee happens with every purchase) |
| Redesigned counter-interface + Training Costs | $5000 + $500 = $5500 | Variable (Outside employee would be hired to redesign) |
| Revamped Ticketing System in Kitchen + Training Costs | $1000 + $500 = $1500 | Fixed (Would need hardware and software to produce a better system) |
| Revamped Ticketing System in Pizza Station + Training Costs | $1000 + $500 = $1500 | Fixed (Would need hardware and software to produce a better system) |
| Total Cost | $19,000 + $1.95 per order. | |

**Cost Baseline**

From what I have estimated in costs, my initial estimation of cost at around $25,000 was not far off. In the end, I would budget around $20,000 in order to complete this project. I would need roughly $19,000 in order to complete the project, while including a portion of the budget as padding. Some of the padding will be used in order to pay for the beginning stages of using a third party platform, called Slice, until funds are being generated from them. Slice is a leader in online commerce for restaurants which costs $1.95 per order placed on their platform. I would assume that I would not use the full $25,000 and there is likely room to reduce costs across the board.