Business Case Pastry Company Delivery

Name: ____________________________ Date:

1. – EXECUTIVE SUMMARY

During the last half-year, the Pastry Company experienced a notable decline in revenue. An examination revealed that a substantial portion of this revenue loss could be attributed to customer dissatisfaction with a delivery process that was introduced in June 2016. It is suggested to procure and set up a pre-made Delivery Tracking System (DTS) as a Software as a Service (SaaS) solution to streamline and automate various aspects of the delivery process. The projected timeline for this project is less than two months, and it is anticipated to yield a Net Present Value exceeding $50,000 over the next decade.

2. – PROBLEM STATEMENT

The Pastry Company has experienced a decline in revenue and customer satisfaction ratings over the last six months. Analysis of customer surveys and comment cards revealed that a significant factor contributing to these losses was the introduction of new delivery services in July 2016.

3. – ANALYSIS

In July 2016, Pastry Company responded to emerging competition in the delivery market by introducing a feature allowing customers to have orders exceeding $150 delivered to any location within a 50-mile radius of the Pastry Company store, with a minimal fee applied. This new delivery option was anticipated to enhance customer satisfaction and boost revenue by offering added convenience to our customers.

However, from July 2016 to January 2017, Pastry Company lost nearly $22,000 in revenue. Keeping with this trend, losses are expected to be in excess of $40,000 by the end of June 2017 and above $40,000 for each additional year. To identify the issue of the decreased revenue, in December of 2016 Pastry Company customers were surveyed. It was found that customer satisfaction rating had decreased from 4.7 of 5 (June 2016) to a 4.2 of 5 (January 2017). Over 75% of the surveys indicated the delivery service was the cause of their dissatisfaction. Of the customers unhappy with the delivery services, there were three key reasons that stood out:

- Delivery was late – 38%
- Delivery never arrived - 31%
- Incorrect invoicing – 27%

The following is the existing delivery process within the pastry company's system:

1. The employee receives the order from customer and enter the information into the Pastry Company System. The employee prints out the order and handwrites the delivery

information (address, date, and time), and pin the paper to the bulletin board outside of the General Manager's office.
2. General Manager manually collects the delivery order papers for that day from the board, arranges the order based on requested delivery time, and places them in a box outside the office.
3. On the next day, the drivers grab the delivery slips from the box, load the products to the truck, and dispatch the deliveries.
4. Upon arrival and receive the product, the customer should sign the delivery form.
5. The driver gathers the completed delivery slips and stores them into the Invoice Receivable Inbox.
6. The next day, accounting employee collects the delivery slips, manually adds the shipping cost of $4.95 to the customer's invoice, and then file the delivery packet away into a filing cabinet.

Identified issues with the current process:

- Employees forget to print out the customer order and pin for delivery
- Handwritten delivery information is sometimes forgotten or illegible
- Delivery slips are sometimes lost or destroyed
- Customers don't receive any copies of the paperwork at the time of the delivery
- Committed to delivery times are not cross-checked again feasibility based on other promised deliver times for that day
- The order of deliveries is based solely on the time requested, not the most efficient route
- Since no delivery information is captured within the Pastry Company system, there is no reporting on delivers
- When customers call in to discuss their deliveries, employees must transfer them to Accounts Receivable.

4. – SOLUTION OPTIONS

Note - Due to the recent setbacks and lower than project revenue, cash flow for the business is very low.

1. **Do nothing** – If progress on this project is stalled, Pastry Company is projected to sustain an annual revenue loss exceeding $40,000. At this rate, the company will operate at a loss within the next 7 years.
2. **Modify current Pastry Company system** – Initiate a project aimed at revamping the delivery procedures and integrating these enhancements into the current Pastry Company system. The introduction of features such as data capture, delivery tracking, automated delivery fee calculation, intelligent routing dispatch, and designated delivery time slots would effectively address or eliminate the concerns raised by our customers.

PROS

a. Leverage employee familiarity of the current system
b. Add delivery process automation which will increase employee efficiency
c. Solves most of the identified customer satisfaction concerns
d. Can utilize current system reports with small in-house modifications

CONS

a. Project is expected to take 6-8 months to complete
b. Must research and hire a development contractor
c. Need to get hired contractor up to speed on current system (current system documentation is out of date)
d. Fairly high upfront cost

3. **Delivery tracking software** – Acquire licenses for the pre-developed software from DeliveryTracking.com. This software is highly rated and is ready to meet most of Pastry Company's requirements as is. An internal team member, such as a Business Analyst, would use the administrative and configuration tools provided by the software to align it with the business requirements. DeliveryTracking.com offers support for addressing configuration queries and provides the essential training materials for a smooth employee rollout.

   PROS

   a. Software is already built and can be implemented within 1-2 months
   b. No need to hire an outside contractor
   c. Lower upfront costs
   d. Solves most of the identified customer satisfaction concerns
   e. All future updates to the product, including new features, come at no additional cost
   f. System questions and changes can be handled in-house

   CONS

   a. Causes employees to double enter data reducing efficiency and accuracy
   b. Business Analyst would need to learn and configure the system
   c. Cannot connect data from the existing Pastry Company system and the DeliveryTracking.com system into one report
   d. Ongoing monthly license fees
   e. Scaling (adding more employees) would increase the ongoing costs

4. **Remove the delivery process** – Because many customers are unhappy with the new delivery process, one solution could be to stop offering delivery. In April 2016, a study was done to look at the company's new competitors who were gaining the company's customers by delivering products. The study showed that stopping the delivery service might lose customers to these competitors. It was predicted that Pastry Company could lose 14% of the customers in the first year and 22% in the second year if the company stop the delivery service. This would mean Pastry Company might not make a profit within two years.

4. – COST-BENEFIT ANALYSIS

1. **Modify current Pastry Company system** We need to outsource this project because the lack of technical expertise. The project is estimated to require 100 hours from the contractor. Based on the past projects, we expect a 20% budget overrun, so we're budgeting 120 hours for the contractor. Additionally, our internal Business Analyst will spend an estimated 150 hours defining requirements, managing the project with the vendor, assisting in testing, creating reference materials, and training employees. Lastly, we need to factor in the expected cost of training for our 10 employees, who will each attend a 2-hour training session.

Anticipated Costs		
Contractor (120 hrs @ $175)	$	21,000
Business Analyst (150 hrs @ $40)	$	6,000
Employee Training (10 ppl x 2 hrs @ $15)	$	300
Total Cost of Project	$	27,300

We expect to be able to utilize this newly updated software for 10 years. Year 0 we don't expect any maintenance costs. Year 1 we expect $7,000 in maintenance costs. As the software ages, we expect the costs to rise annually by 10%. For example, Year 2 is anticipated to have $7,700, Year 3 to $8,470, and Year 10 to $16,506.

After calculations, we expect to have the system paid off in 3.16 years. With a Return on Investment of nearly 40%, we expect a net monetary gain of $48,390.

Payback period	3.16 years
ROI	39.49%
NPV	$48,390

2. **Delivery tracking software** – As this product is an off-shelf product, we'll start by buying the software and then get 12 licenses. DeliveryTracking.com sells licenses in packs of 10, and they have a fixed rate for all types of licenses (user, manager, admin). Our Business Analyst will collect and write down our business needs, understand the new system, and set it up accordingly. Additionally, we should account for the expected training cost for our 10 employees attending a 4-hour training session.

Anticipated Costs		
Software Cost	$	5,000
Licenses ($144 per yr x 15 users	$	2,160
Business Analyst (200 hrs @ $40)	$	8,000
Employee Training (10 ppl x 4 hrs @ $15)	$	600
Total Cost of Project	$	15,760

We expect to be able to utilize this off-the-shelf software for 10 years. Year 0 we don't expect any maintenance costs. Year 1 we expect $3,000 in maintenance costs and $2,160 in license costs. As the software ages, we expect the maintenance costs to rise annually by 25%. We also expect to have to purchase another block of 5 licenses in Year 6. For example, Year 2 is anticipated to have $5,910 ($3,750 maintenance and $2,160 licenses), Year 3 $6,848 ($4,688 maintenance and $2,160 licenses), Year 6 $12,035 ($9,155 maintenance and $2,880 licenses), Year 10 to have $25,352 ($22,352 maintenance and $2,880 licenses).

After calculations, we expect to have the system paid off in 3.27 years. With a Return on Investment of over 87% we expect a net monetary gain of $52,361.

Payback period	3.27 years
ROI	87.85%
NPV	$52,361

5. – RECOMMENDATION

After a thorough review, it is advised that Pastry Company chooses the Delivery Tracking Software (DTS). While both DTS and modifying the current system can solve the business issue similarly, DTS offers several advantages considering the current situation:

a. Cost-Effectiveness

Modifying or updating a legacy system can incur high costs in terms of development, integration, and maintenance. On the other hand, utilizing dedicated delivery tracking software offers a cost-effective solution. Of the two options, the DTS has a much lower initial investment at $15,760. This will reduce the amount of loan the business needs to obtain, and thus reduce the monthly interest payments.

b. Scalability and Flexibility

The delivery tracking software solutions which is created by ABC Technologies are scalable and flexible, allowing for easy customization and adaptability to evolving business requirements without the challenges associated with modifying a legacy system. They also offer vendor support including updates, patches, and customer service, ensuring smooth operations and assistance in case of issues.

c. Time Savings

Implementing a ready-made delivery tracking software takes less time compared to modifying the existing system, providing quicker results and addressing the business problem promptly. The DTS system should be able to get up in running within a month or so, while the other solution would take more than half a year.

d. Features and Functionality

Dedicated delivery tracking software comes with a comprehensive set of features tailored to the tracking needs, providing a rich set of functionalities right 'out of the box.'

e. Reduced Risk

Implementing proven delivery tracking software with a track record of success reduces the risk associated with custom modifications, potential errors, and system downtimes.