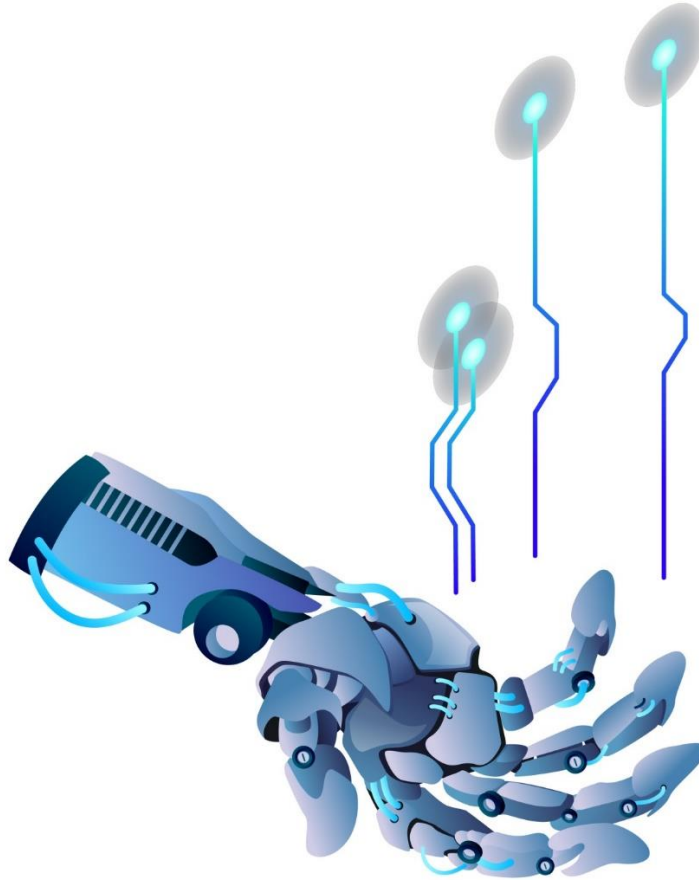# DNT Consulting

Team Members

Vicente Diaz – vxd021@shsu.edu

Khalid Noman – ksn007@shsu.edu

Sadarius Trotter – sjt028@shsu.edu

Lee Baron

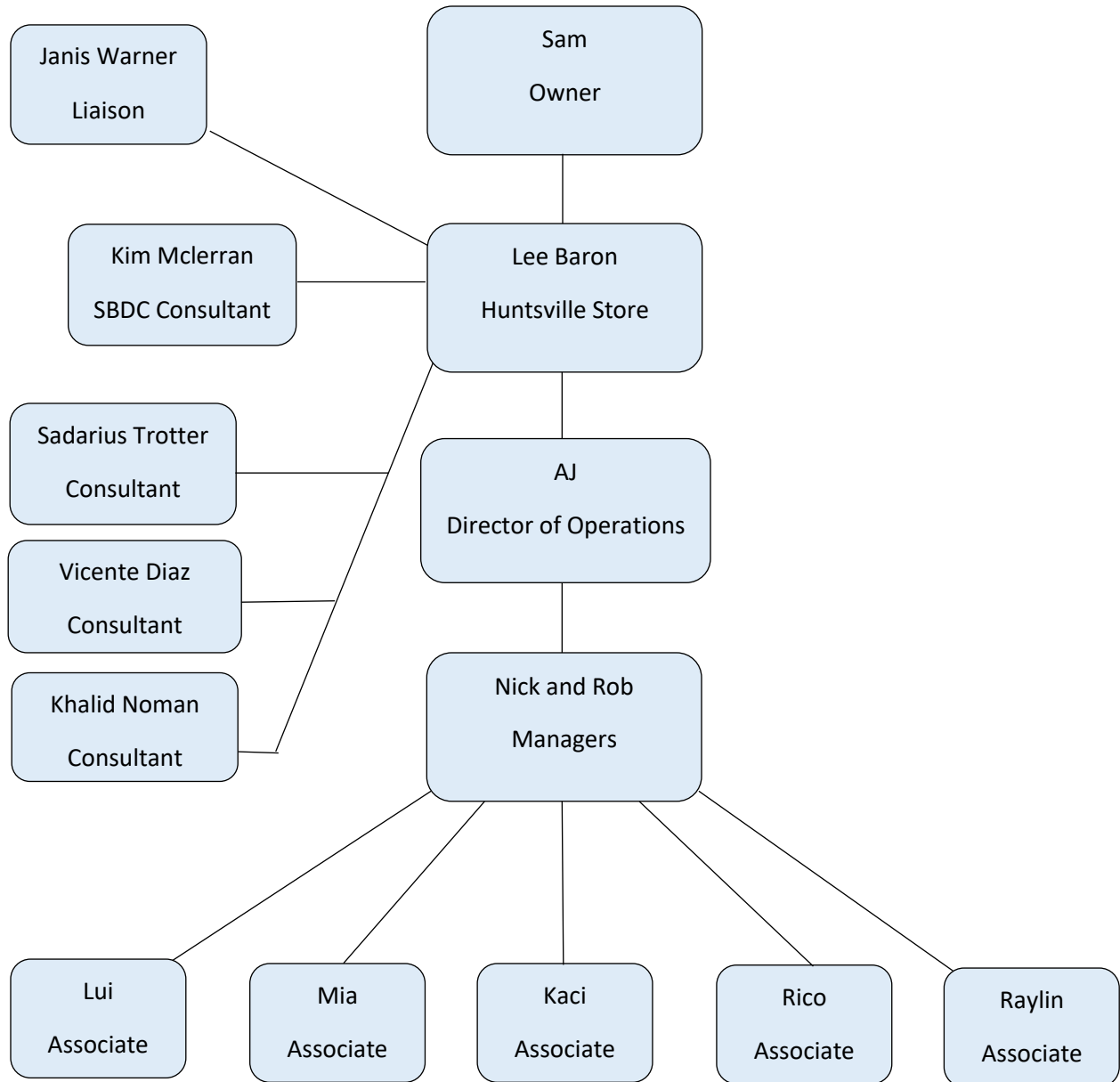# DNT Consulting

Team Members

Vicente Diaz – vxd021@shsu.edu

Khalid Noman – ksn007@shsu.edu

Sadarius Trotter – sjt028@shsu.edu

Table of Contents

Organization Chart

```
                                    ┌─────────────────┐
                                    │      Sam        │
┌─────────────────┐                 │     Owner       │
│  Janis Warner   │                 └─────────────────┘
│    Liaison      │                          │
└─────────────────┘                 ┌─────────────────┐
                                    │   Lee Baron     │
┌─────────────────┐                 │ Huntsville Store│
│  Kim Mclerran   │─────────────────│                 │
│ SBDC Consultant │                 └─────────────────┘
└─────────────────┘                          │
                                    ┌─────────────────┐
┌─────────────────┐                 │       AJ        │
│ Sadarius Trotter│─────────────────│Director of      │
│   Consultant    │                 │  Operations     │
└─────────────────┘                 └─────────────────┘
                                             │
┌─────────────────┐                 ┌─────────────────┐
│  Vicente Diaz   │─────────────────│  Nick and Rob   │
│   Consultant    │                 │    Managers     │
└─────────────────┘                 └─────────────────┘
┌─────────────────┐
│  Khalid Noman   │
│   Consultant    │
└─────────────────┘
```

Lui	Mia	Kaci	Rico	Raylin
Associate	Associate	Associate	Associate	Associate

Organization Description

Lee Baron is a boutique for footwear and apparel that started in 1991 in Huntsville Texas. They have been in the community for over 30 years now, and their presence has been felt through their community events and programs. They had evolved into the current shoe store over the years and have also moved into the markets of formal wear such as suits. Lee Baron have shown interest in becoming known nationally and have Huntsville become a recognizable name like Los Angeles or New York.

The Huntsville boutique is currently being run by the director of operations, AJ, with the owner being his father, Sam. They have two managers employed at the store, Nick and Rob, who manage a total of 5 associates. The inventory and POS systems are currently being done through a Shopify system, but their invoicing is still being done manually.

Address:

2 Financial Plaza # 120B, Huntsville, TX 77340

Website:

https://leebarononline.com/

Social Media:

https://www.facebook.com/leebaron936/

https://twitter.com/leebaron2

https://www.instagram.com/leebaron2/

Contact Information:

936-291-1118

info@leebarononline.com

System Service Request

REQUESTED BY: AJ   Date: September 14, 2022

LOCATION: 2 Financial Plaza # 120B, Huntsville, TX 77340

CONTACT: 936-291-1118

TYPE OF REQUEST

[   ]   New System

[X]   System Enhancement

[   ]   System Error Correction

URGENCY

[   ]   Immediate – Operations are impaired or opportunity lost

[X]   Problem exist, but can be worked around

[   ]   Business losses can be tolerated until a new system installed

PROBLEM STATEMENT

Lee Baron has been in business for over 30 years and is facing issues with the use of technology to improve their productivity of their employees. Technology is not used to its full potential to reach their efficiency goals.

SERVICE REQUEST

AJ requested that the team make a recommendation to implement a change that could improve their utilization of technology.

Is LIAISON   Kim McLerran

SPONSOR   Dr. Janis Warner

[   ]   Request Approved Start Date: _____

[   ]   Recommended revision

[   ]   Reject for reason _____

Project Scope Statement

General Project Information

Project Name:	Lee Baron Improvement	
Sponsor:	Kim McLerran	
Project Manager:	Khalid Noman	

Problem/Opportunity Statement

Technology can help reduce the time needed to complete certain tasks that the employees are completing manually. The changes recommended in this project should help increase the efficiency and productivity of the employees of Lee Baron.

Project Objectives:

To incorporate the use of technology to improve the clients tasks and responsibilities. Through automation and/or assistance from the technology.

Project Description:

Provide a recommendation to the client which would help better utilize technology available to improve the client's efficiency and productivity.

Business Benefits:

It will save time to focus on other objectives.
Time spent completing the tasks manually could be used to complete other tasks leading to improved efficiency.

Project Deliverables:

Recommendation for to improve the performance of the business through the use of technology to simplify and/or automate tasks.

Estimated Project Duration:

3 Months

Project Charter

Project Name: Lee Baron

Project Manager: Dr. Janis Warner

Customer: Lee Baron

Project Sponsor: SBDC, Kim Mclerran

Project Start/End (Projected):   9/06/2022 - 12/06/2022

Project Overview:

This project will take into account the needs of the client and will incorporate the use of technology to facilitate their processes. This incorporation of technology should help the client save time and money through the automation of some tasks.

Objectives:

- Maximize the efficiency of the client
- Increase productivity of client's staff
- Provide different methods of completing tasks

Key Assumptions:

- The systems in place and will integrate with the solution appropriately
- Staff will use the system for designed purpose after being trained
- System upgrade will not disturb process of the client

Stakeholders and Responsibilities:

Stakeholder	Role	*Responsibility*	*Signature*
Lee Baron	Client	Project Vision	
Khalid Noman	Team Member	Project Design and Planning	
Vicente Diaz	Team Member	Project Design and Planning	
Sadarius Trotter	Team Member	Project Design and Planning	
Dr. Janis Warner	Project Coach	Guiding project team	
Kim Mclerran	Consultant	Facilitating communication with the client	

Biweekly Reports

Date: 9/08/2022

Team Leader's Name: Khalid Noman

Team Members: Khalid Noman, Sadarius Trotter, Vicente Diaz

Team Name: DNT Consulting

C: 15 minutes

P: 4 hours

T: 0

Description of the Session:

We (Khalid Noman, Sadarius Trotter, Vicente Diaz) were able to hold a meeting on 9/08/2022.
Our team discussed and deliberated several solutions to problems discussed with the client and
were able to come up with a foundation for a means of communication.

Analysis of the Problem to be Solved:

The client's invoicing system requires significant improvement to both streamline processes and
allow for future scalability. The client also communicated the fact that they currently manage
their invoicing manually in pen and paper.

Actions to be taken to solve the problem:

The team (Khalid Noman, Sadarius Trotter, Vicente Diaz) got together and examined the clients'
existing website. We decided to start here because the inventory tracking services, they use are
also provided by the commerce platform they used to create their website. Given this reliance
on Shopify by the client we have established that our invoicing solution should pair well with
Shopify to ease implementation and streamlining.

Follow up action:

Our team will hold several brief meetings throughout the week to discuss possible system
implementations or solutions that would best fit the client's needs.

Websites visited: https://www.shopify.com/ , https://leebarononline.com/

Social Media visited: https://www.facebook.com/leebaron936/ , https://twitter.com/leebaron2 ,
https://www.instagram.com/leebaron2/

Baseline Project Plan

Introduction

A. Overview
- The purpose of this project is to aid in Lee Baron's efforts to become a well-recognized brand, connect with their community, and introduce customers to the new era of Lee Baron. These goals are certainly attainable however, they involve logistics hurdles caused by outdated financial processes. Updating these processes would allow for scalability of the business and for liberated resources to be redistributed to projects such as connecting with their community.

B. Recommendation
- The team was able to evaluate three alternatives and have come to the conclusion that QuickBooks would be the best recommendation. The conclusion was agreed upon after careful evaluation of both requirements and constraints page (page 42) that Lee Baron faces.

System Description

A. System Description
- The system that is recommended, QuickBooks, includes many of the features that Lee Baron identified as "top priority" such as ease of use and integration with the current system (page 39). QuickBooks can complete the tasks of invoicing while also providing management with concise and informative reports regularly.

B. Alternatives
- The proposed invoicing solutions (page 40) include the use of off the shelf systems that would work with the current system. The systems being examined include QuickBooks, Xero, and Auto Hotkey.

Feasibility Assessment

A. Economic Analysis
- The client has stated that the current budget for their software solutions is 150$/month and would like the team to present them with a solution at 3 budget points high, medium, and low. The team was able to identify three alternatives at three different price points (page 40) and found that QuickBooks would be within the budget.

B. Technical Analysis

- o The website and the inventory tracking services are currently done through Shopify; however, invoicing is done manually and is not supported by technology.
- o QuickBooks has the ability to seamlessly integrate with Shopify whereas the other alternatives would not be as easily integrated. QuickBooks would also be able to work with the current technical infrastructure at Lee Baron.

C. Operational Analysis

- o Currently the business has 9 employees including the owner and the director of operations. The administrative aspects of the business are currently being handled by the director of operations, AJ. The changes to the operations of the client should help increase efficiency and productivity of the employees.
- o QuickBooks' has the advantage of being easy to use and its feature of automating most of the invoicing process will benefit AJ by making invoicing become a less time consuming task.
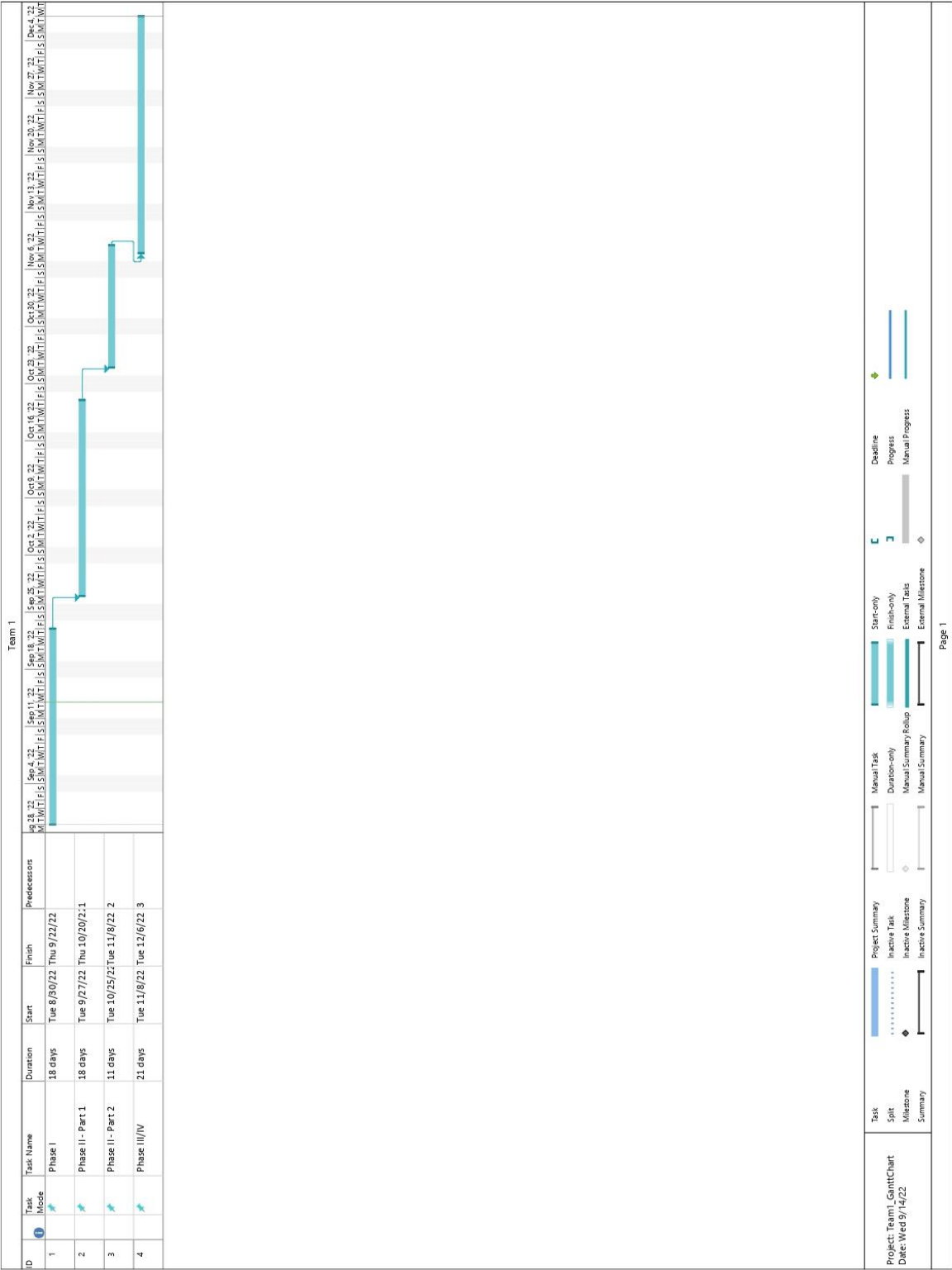
D. Legal and Contractual Analysis

- o Our recommendation will need to consider the licensing needs of the system(s) that will be used to achieve the client's needs. The proposed system(s) will also need to integrate with Shopify, and so need to comply with Shopify's legal requirements.
- o QuickBooks takes care of all the legal work needed to integrate with Shopify, however a license to use QuickBooks would be needed which is acquired through the purchase of a plan.

E. Political Analysis

- o We have seen that the director of operations would like to integrate technology into the business to streamline their day-to-day activities, but some of the employees seem to be unwilling to make the change.
- o Employees have shown that they would be willing to work with QuickBooks due to its user friendly interface and its similarity in design to the current POS/E-Commerce system, Shopify.

F. Schedules, Timeline, and Resource Analysis

- o QuickBooks will require between 2-5 days to be deployed at Lee Baron and will have the ability to be run on current resources. There is no need to upgrade any equipment as QuickBooks requires a basic internet connection and computer.

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		Phase I	18 days	Tue 8/30/22	Thu 9/22/22	
2		Phase II - Part 1	18 days	Tue 9/27/22	Thu 10/20/2:1	
3		Phase II - Part 2	11 days	Tue 10/25/22	Tue 11/8/22	2
4		Phase III/IV	21 days	Tue 11/8/22	Tue 12/6/22	3

Project: Team1_GanttChart
Date: Wed 9/14/22

Task		Project Summary		Manual Task		Start-only		Deadline
Split		Inactive Task		Duration-only		Finish-only		Progress
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress
Summary		Inactive Summary		Manual Summary		External Milestone	

Page 1

Communication Matrix

Stake Holder	Document	Format	Team Contact	Date Due
Khalid Noman	Project Deliverable Phase I-IV	Project Intranet	AJ Kim McLerran Dr. Janis Warner	November 30th, 2022
Vicente Diaz	Project Deliverable Phase I-IV	Project Intranet	AJ Kim McLerran Dr. Janis Warner	November 30th, 2022
Sadarius Trotter	Project Deliverable Phase I-IV	Project Intranet	AJ Kim McLerran Dr. Janis Warner	November 30th, 2022
Kim McLerran	Project Deliverable Phase I-IV	Email/Hard Copy	Team Members Dr. Janis Warner	TBD
Dr. Janis Warner	Project Deliverable Phase I-IV	Hard Copy	Team Members Kim McLerran	November 30th, 2022
AJ	Project Book	Hard Copy	Team Members Kim McLerran Dr. Janis Warner	TBD

T-R Matrix

Project: Lee Baron Improvement		Prepared by: Khalid Noman		Legend: P = Primary S = Support
Manager: Khalid Noman		Page: 1 of 1		
		Responsibility Matrix		
Task ID	Task	Khalid	Vicente	Sadarius
A	Collect Requirements	P	P	P
B	Project Management	P		
C	Communicate with Client			P
D	Research	S	P	S
E	Documentation	P	S	S
F	Meeting Setup		P	

Management Issues

    A. Team Configuration and Management:

                Khalid Noman - Project Manager

                Sadarius Trotter - Communication

                Vicente Diaz - Research

    B. Communication

                The team uses One Drive to share documents and edit each other's papers if needed. All our documents are in one area for ease of accessibility. We use Group Me for communication with each other.

Interview Outline

Interviewee:	Interviewer:
AJ	Vicente Diaz
-Director of Operations at Lee Baron	Khalid Noman
	Sadarius Trotter

Location:	**Date:**
SHB 331	September 9, 2022
	Duration:
	15 minutes
	Time:
	1:05 pm

Agenda:	**Approximate Time:**
Introduction	1 minute
Background of Owner	3 minutes
Overview of Project Details	2 minutes
Overview of What is Needed	3 minutes
Overview of Old System	3 minutes
Summary of Main Concerns	1 minute
Questions from Interviewee	2 minutes

General Observations:

Interview covered most of the major points needed to get started on working with the client. The meeting covered information such as the client's values and concerns, methods of communication, and current systems being used. A follow up meeting will need to be planned to gather more details on requirements for the team's suggestion.

Topics Not Covered:

The client mentioned that they would like to use technology to improve their efficiency, but did not mention if any employees would have issues with including more technology in their day to day business processes.

Interview Details

Questions:	Answer summary:
Question 1: What is your preferred method of communication?	Text is the best method to reach the client 832 524 6804
Question 2: What is the current budget for technology?	$150/month for Shopify
Question 3: Are there any existing issues in your business that should be addressed?	Invoicing is not included in the technology budget
Question 4: What are the plans for future development?	A new location is being setup and they are moving their business from the mall to the new location
Question 5: What is unique about your business that sets you apart from competitors?	Community involvement and consumer experience
Question 6: What is currently being used in terms of technology?	Shopify was used to build their website and E-Commerce side of the business
Question 7: Where is the technology lacking in the business?	Invoicing. It is still being done manually through pen and paper
Question 8: How is marketing being done currently?	Hype videos, social media, and community events are the main marketing techniques being used
Question 9: Where are most of your concerns focused?	The setup and opening of the new location
Question 10: Which area of the business can see the biggest improvement?	Invoicing needs to become less manually taxing on the staff

Meeting Notes

Lee Baron is a sneaker and apparel boutique that has been in the Huntsville area for 30 years. They are very proud of the community reach that they have and are focused mainly on customer experience. They want their boutique to have a vibrant luxury feeling and become "The destination" of the area. They are currently moving to a new location and have shown that they have some concerns with their invoicing process.

Interview Outline

Interviewee:	Interviewer:
AJ	Vicente Diaz
-Director of Operations at Lee Baron	Khalid Noman
	Sadarius Trotter

Location:
Lee Baron, Huntsville Mall
2 Financial Plaza # 120B, Huntsville,
TX 77340

Date:
October 3, 2022

Duration:
90 minutes

Time:
3:00 pm

Agenda:	Approximate Time:
Introduction	1 minute
Observation	20 minutes
Questions for Interviewee	50 minutes
Overview of Concerns	5 minutes
Overview of Priorities	5 minutes
Questions from Interviewee	5 minutes
Summary and Closing	4 minutes

General Observations:

The team observed the daily operation of the business, and mainly focused on the current invoicing system. The client was then interviewed with questions to gather detailed requirements. The client's major concerns and priorities were covered.

Topics Not Covered:

The exact budget for the recommendation was not clearly given. A recommendation was not fully decided on as the some of the concerns and priorities the client had were clashing, another interview will need to be conducted to finalize the decision on the recommendation

Interview Details

Questions:	Answer summary:
Question 1: Would a recommendation to use scripts to automate things be something to look into?	No because user friendliness is most important
Question 2: Would an off the shelf system be better suited to your needs?	Yes as it is easier to use
Question 3: Are there any staff members unwilling to make the change to a technological method?	Everyone is on board with moving to a method that includes technology, and there are no concerns with staff with technology
Question 4: Would it be a smooth transition to move to a technological method for invoicing?	All staff are familiar with Shopify and should be able to use the new system
Question 5: The current system being used is Shopify are there any specific systems you would not like to have?	No any system that integrates should be ok
Question 6: Would you be willing to consider a system to replace Shopify?	No they have been using Shopify for a while and currently base their E-Commerce on it which is why they do not want to replace Shopify
Question 7: What features of Shopify are most valuable to the business?	The user friendliness and ease of use Easy setup and quick launch because it is based off their E-Commerce side
Question 8: Are there any features that Shopify do not provide and you would like?	Invoicing mainly. Recording invoices and their deadlines
Question 9: Are current employees familiar with Shopify?	Yes everyone is familiar
Question 10: Are the current employees responsible for invoicing and accounting familiar with any systems in that field?	No currently invoicing is done manually and the staff is not familiar with any system used in this department

Question 11: How much wiggle room is there in the budget?	There is not a set budget however it is based on family finances so there is not much wiggle room
Question 12: How is the history of invoicing and accounting currently recorded?	Manually through papers and emails
Question 13: Would the invoicing history need to be immediately imported to the new system?	No they would like to start fresh whenever the system would be setup
Question 14: How many users will be needed for the invoicing system?	1 is enough but if there are more that is better
Question 15: How often are reports made on income/expenses and other invoicing done?	Only reports made are the inventory and sales reports from Shopify
Question 16: Would you like reports to become more frequent?	Yes more frequent reports on invoicing would be good for management
Question 17: Would you be willing to look into Quickbooks as an accounting/invoicing system?	Yes they have heard of it but did not have the time to look into the system
Question 18: What would we be the biggest concerns if a new system was implemented?	Ease of use and user friendliness
Question 19: Who is maintaining the Shopify system?	All staff are currently maintaining the Shopify system
Question 20: Who do you believe would be most capable of managing a new system?	AJ but most staff would have the ability to
Question 21: Are invoicing and accounting done by a single employee?	No but mostly done by family members

Question 22:

Is this the employee's main role?	No it usually is a secondary role

Question 23:

Are there any current manuals or instructions for use of Shopify and invoicing?	No AJ trains the employees and it is usually face to face

Meeting Notes

The client would not like to use the automation of reordering currently but might in the future and most likely in the formal wear side of the business

The system should not limit the scaling of the business but growing it is not current the top priority

A onetime payment system would be preferred over a subscription based system

There is not currently a set method of invoicing as it is done differently by each company. Sometimes it is done through email and sometimes just aa paper invoice is done.

Observations

Invoicing at Lee Baron is currently being done manually through paper and email invoices. There is no system currently to alert management and staff of upcoming deadlines for invoicing, and the invoices are not being backed up in case they are lost or destroyed.

The current process for invoicing at Lee Baron can be outlines as follows:
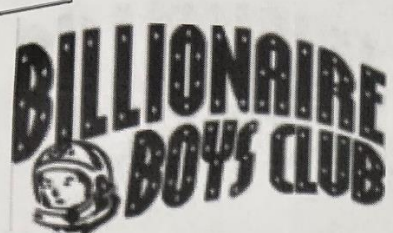
- An order is placed with a vendor
- A package with the order placed is accepted by an employee
- The invoice that arrived with the package is checked for its content
- Check whether all items listed in the invoice were received
    - If a part of the order is incorrectly received, then an order discrepancies list is sent to the vendor
- The inventory in the E-Commerce and POS system (Shopify) is updated to reflect the received package
- Prices of new inventory are determined through a pricing system and then are added to the current system
- The invoice is added to a paper pile of invoices to check later
- Staff check the pile for upcoming deadlines for invoices and pay them before they are due

Notes made during observations:

- The main goal to be achieved through the project would be the automation of parts of the invoicing process with a main focus on alerting staff of deadlines
- Categorization of the invoices pile could also be achieved by the recommendation
- Currently there is no method of backing up the invoices
- Invoices are only kept till they are paid but are not necessarily logged for history

Existing Documents and Files

Currently there are no documents that the client uses to train employees, and the invoicing is currently done in paper meaning there are no files. The client has provided a copy of an invoice

BILLIONAIRE BOYS CLUB

BBC
520 Viking Drive
Virginia Beach, VA 23452
Phone No. 757-428-0300
Fax No. 757-428-2900

Sales - Invoice

August 30, 2022	Page 1
Invoice No.	PI120355
Salesperson	Charles Kang
Delivery Period	2022 F1

BILL TO
Bill-to Customer No. LEE340
Lee Baron Fashions
Westhill Mall #120B
2 Financial Plaza
Huntsville, TX 77340
USA

REMIT TO
BBC
520 Viking Drive
Virginia Beach, VA 23452

SHIP TO
lee baron fashions
Westhill Mall #120B
2 Financial Plaza
Huntsville, TX 77340
USA

Order No. NU81971386
PO #: LB FALL 1
Payment Terms Credit Card
Due Date 08/30/22
Shipment Method UPS
Tracking Info: 1ZX27Y260311577058, 1ZX27Y260311577067, 1ZX27Y260311577076

No.	Description	Color / Size	Quantity	Units	Price	Amount
821-6104	BB Dipstick Short	Black				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	63.00	756.00
821-6104	BB Dipstick Short	Red				
SM 1 M 1 L 1 XL 1 2XL 1 3XL 1			6	Each	63.00	378.00
821-6210	BB Track SS Tee	Black				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00
821-6210	BB Track SS Tee	Bleach White				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00
821-6210	BB Track SS Tee	Cashmere				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00
821-6212	BB Arch Burst SS Tee	Black				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00
821-6212	BB Arch Burst SS Tee	Red				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00
821-6212	BB Arch Burst SS Tee	Heather Grey				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00
821-6212	BB Arch Burst SS Tee	Cashmere				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00

Invoices not paid when due are subject to an interest charge of 1.5% per month or fraction thereof. Customer agrees to pay invoice amount, attorney's fees and accrued interest theron of any unpaid invoice submitted for collections.

All Claims for Shortages must be filed within five (5) days of receipt of merchandise. No returns will be allowed without prior written authorization. To obtain authorization please call 757-428-0300. Return Authorization request must be made within 10 days of receipt of merchandise.

BILLIONAIRE BOYS CLUB

BBC
520 Viking Drive
Virginia Beach, VA 23452
Phone No.   757-428-0300
Fax No.   757-428-2900

Sales - Invoice

Page 2

August 30, 2022
Invoice No.   PI120355
Salesperson   Charles Kang
Delivery Period   2022 F1

BILL TO
Bill-to Customer No.   LEE340
Lee Baron Fashions
Westhill Mall #120B
2 Financial Plaza
Huntsville, TX 77340
USA

REMIT TO
BBC
520 Viking Drive
Virginia Beach, VA 23452

SHIP TO
lee baron fashions
Westhill Mall #120B
2 Financial Plaza
Huntsville, TX 77340
USA

Order No. NU81971386	**Payment Terms**	Credit Card
PO #: LB FALL 1	**Due Date**	08/30/22

Tracking Info: 1ZX27Y260311577058, 1ZX27Y260311577067, 1ZX27Y260311577076

Shipment Method UPS

No.	Description	Color / Size	Quantity	Units	Price	Amount
821-6213	BB Astro SS Tee	Black				
SM 2 M 2 L 1 XL 2XL 1 3XL			6	Each	22.50	135.00
821-6213	BB Astro SS Tee	Garden Green				
SM 2 M 2 L 1 XL 2XL 1 3XL			6	Each	22.50	135.00
821-6213	BB Astro SS Tee	Red				
SM 3 M 3 L 2 XL 2 2XL 1 3XL 1			12	Each	22.50	270.00
821-6213	BB Astro SS Tee	Gardenia				
SM 2 M 2 L 1 XL 1 2XL 3XL			6	Each	22.50	135.00
821-6800	BB Helmet Track Snapback Hat	Black				
O/S 3			3	Each	27.00	81.00
821-6800	BB Helmet Track Snapback Hat	Garden Green				
O/S 3			3	Each	27.00	81.00

UPS 08/30/22	191.56
Total Weight	103.50
Total Pieces	138
Total Cartons	3
Total USD	4,052.56
Credits / Payments applied	0.00
AMOUNT DUE	4,052.56

Invoices not paid when due are subject to an interest charge of 1.5% per month or fraction thereof. Customer agrees to pay invoice amount, attorney's fees and accrued interest theron of any unpaid invoice submitted for collections.

All Claims for Shortages must be filed within five (5) days of receipt of merchandise. No returns will be allowed without prior written authorization. To obtain authorization please call 757-428-0300. Return Authorization request must be made within 10 days of receipt of merchandise.

Rich Picture

Lee Baron

Owners — Community reputation? Profit? Streamline Invoice Processing?

Managers

Associates — Are we earning enough? Job security?

Vendor — Profit?

Cash

Clothing

Consulting — Are our solutions effective?

Solutions

Problem

Other clothing stores — Competition?

Customers — Value for money, clothing quality?

Cash

Enjoyment of Goods
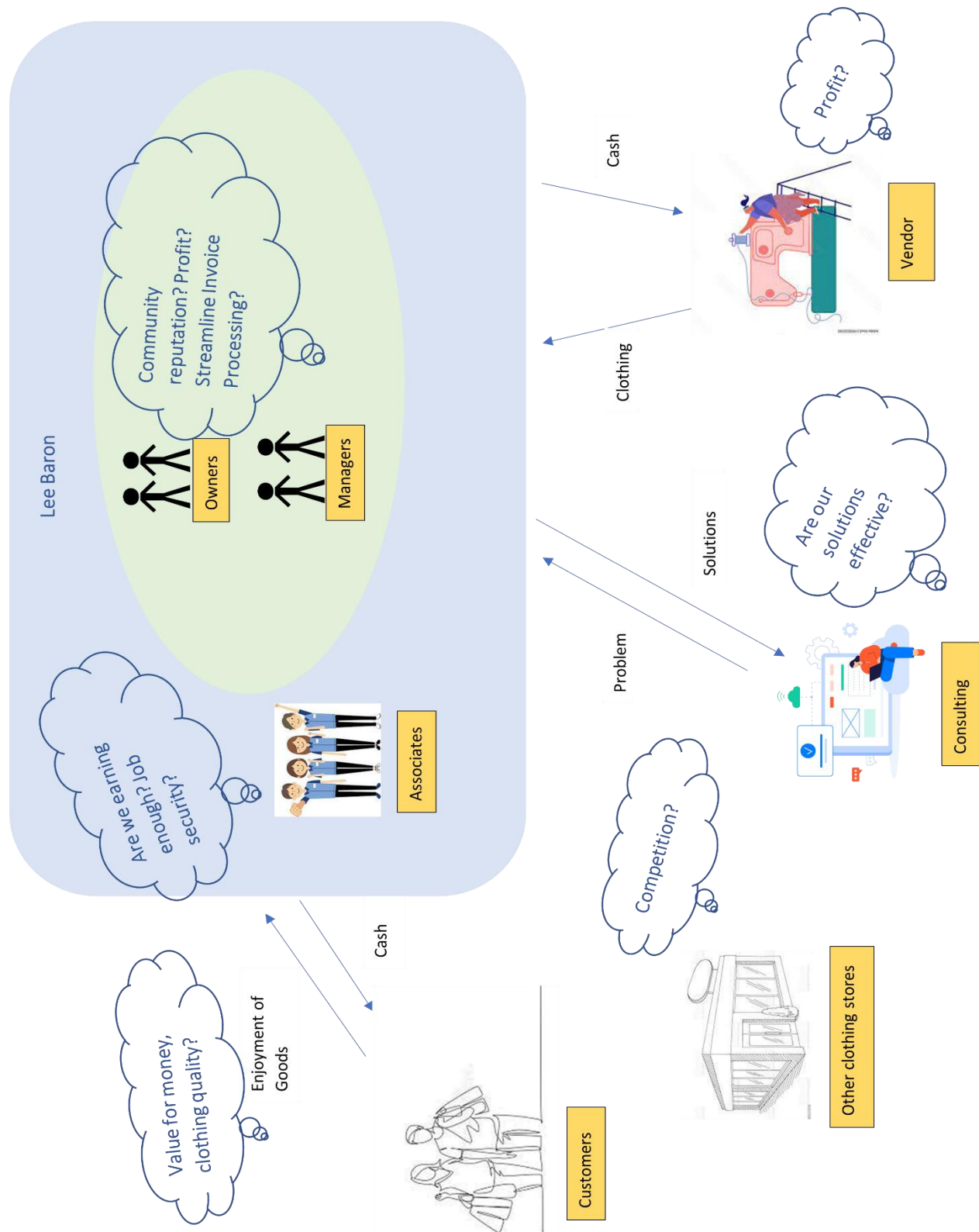
Process Modeling

DFD Descriptions

- **Processes**
    1. <u>E-commerce/POS Processing:</u>
        - Lee Baron's e-commerce and POS provides inventory tracking, Purchase receipt generating, and purchase order tracking.
    2. <u>Invoice Processing:</u>
        - *Bookkeeping* platform designed to easily integrate with Shopify. Its main services include invoicing and record keeping.
    3. <u>Staff Processing:</u>
        - Lee Baron associates receive and log inventory from vendors. This also involves returning and or notifying vendors of any order inconsistencies.
    4. <u>Accept Order</u>
        - Packaged order is accepted by staff which includes bringing the package into the office.
    5. <u>Check Invoice</u>
        - The invoice is checked for details including delivery date and order number.
    6. <u>Check Inventory</u>
        - Received package is unpacked and the items are checked against item list on the invoice accompanying the package
    7. <u>Sale Processing</u>
        - A purchase order is received from a customer with a list of items they would like to acquire.
    8. <u>Payment Processing</u>
        - Payment is processed through the POS system in place and produces a purchase receipt.
    9. <u>E-Commerce Inventory Update</u>
        - The E-Commerce system updates its inventory log to show the decrease in inventory due to a purchase.
- **Data Store**
    1. <u>Backup Storage:</u>
        - Data storage of past invoices which keeps a log of their history.
- **Source/Sink**
    1. <u>Vendor:</u>
        - Lee Baron's apparel, shoes, and other product suppliers.
    2. <u>Customer:</u>
        - Anyone purchasing an item in person or through Lee Baron's webpage.
    3. <u>Staff:</u>
        - These are Lee Baron associates whose responsibilities include receiving and processing invoices.
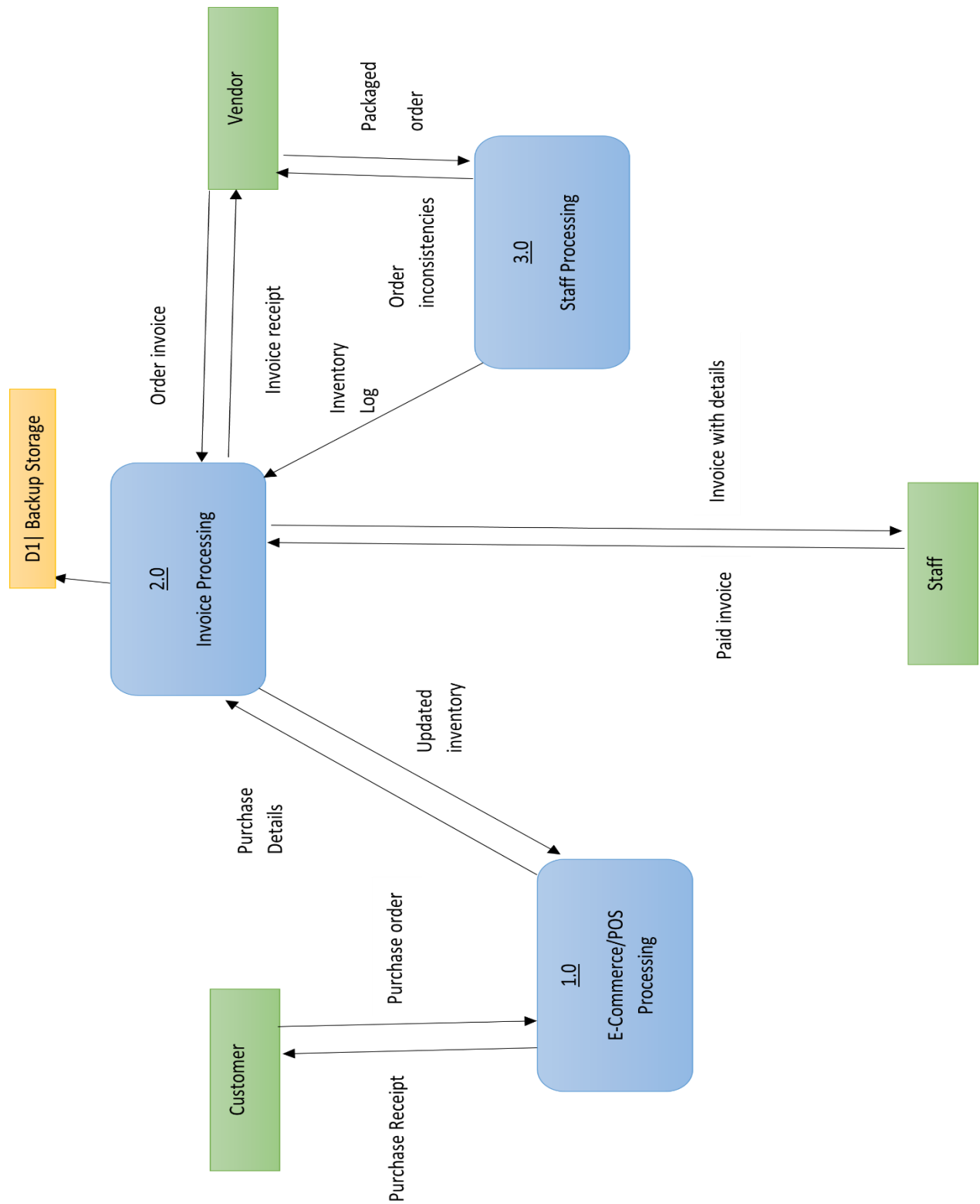
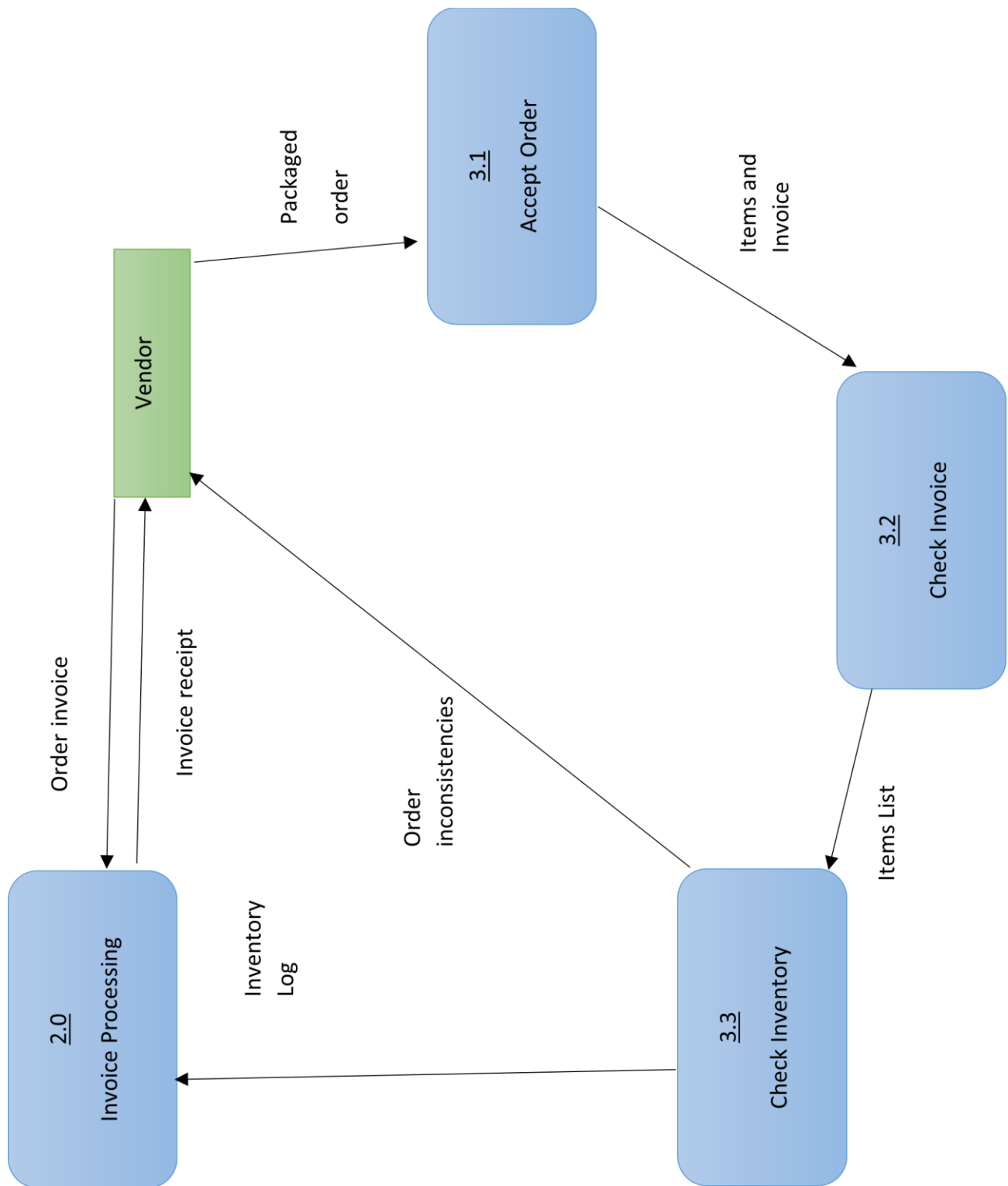- **Data Flow**
  1. Purchase Order:
     - List of items to be purchased by a customer.
  2. Purchase Receipt:
     - POS system returns a purchase receipt to the customer once the purchase order is completed.
  3. Purchase details
     - Once POS processing is completed purchase details are logged.
  4. Updated Inventory
     - Inventory count of items are updated after a purchase is made or inventory is logged.
  5. Invoice with details
     - Unprocessed invoices and details needed to pay vendors.
  6. Paid invoice
     - Invoices who staff have already paid and reviewed.
  7. Inventory log
     - Staff make records of what products have been received from vendors and forward them to the appropriate process.
  8. Packaged order
     - Apparel and other products to be recorded and reviewed.
  9. Order Inconsistencies
     - Recorded inconsistencies between a package received and its invoice.
  10. Invoice receipt
      - Invoice payment confirmation.
  11. Order Invoice
      - Invoices that vendors generate and deliver to Lee Baron either through mail or email.
  12. Items and Invoice
      - Items and invoice unpacked from packaged order from vendor.
  13. Items List
      - List of items included in the unpacked package that will be used to check against items received.
  14. Payment Amount
      - Total amount due to be paid by a customer because of a purchase order.
  15. Item List
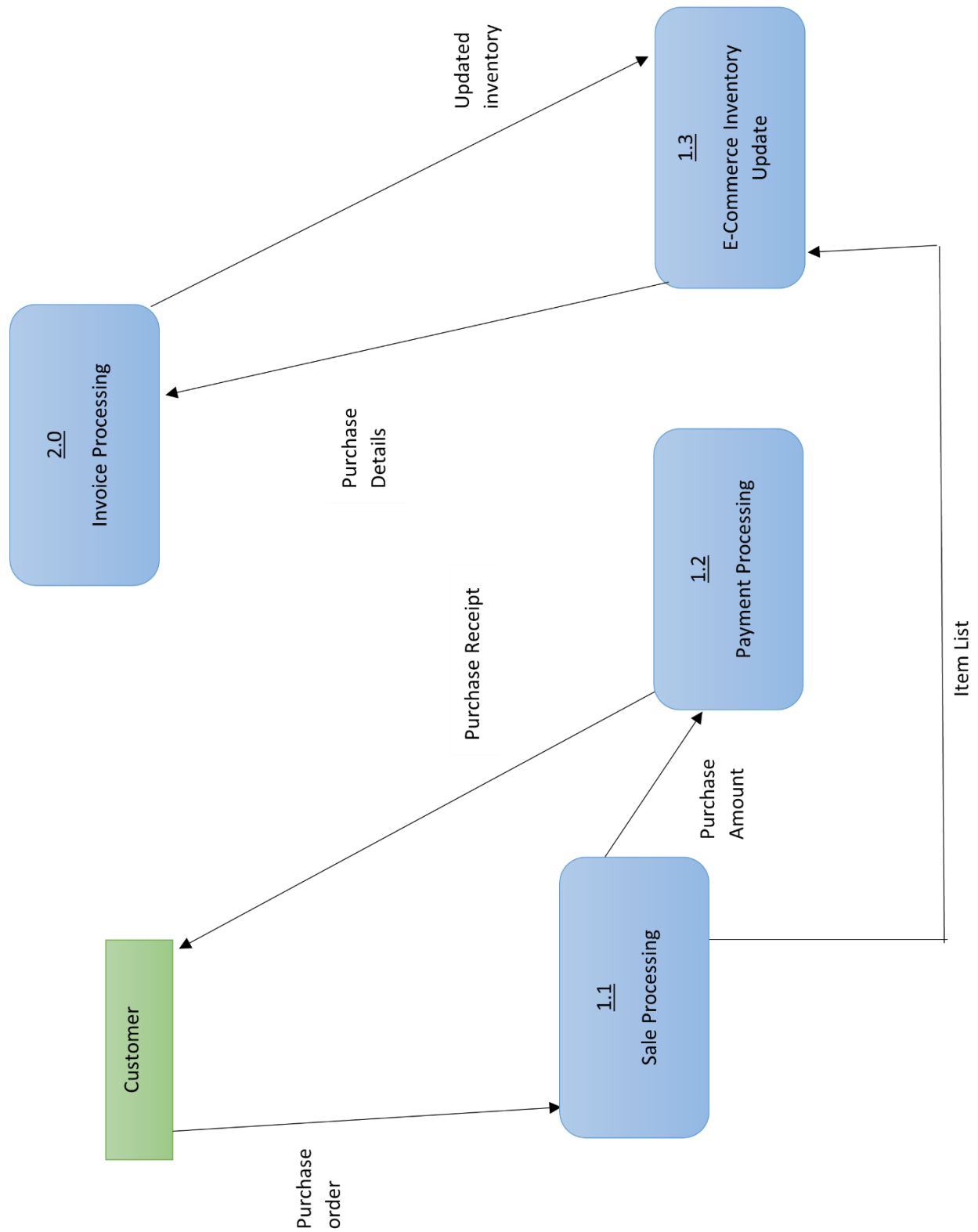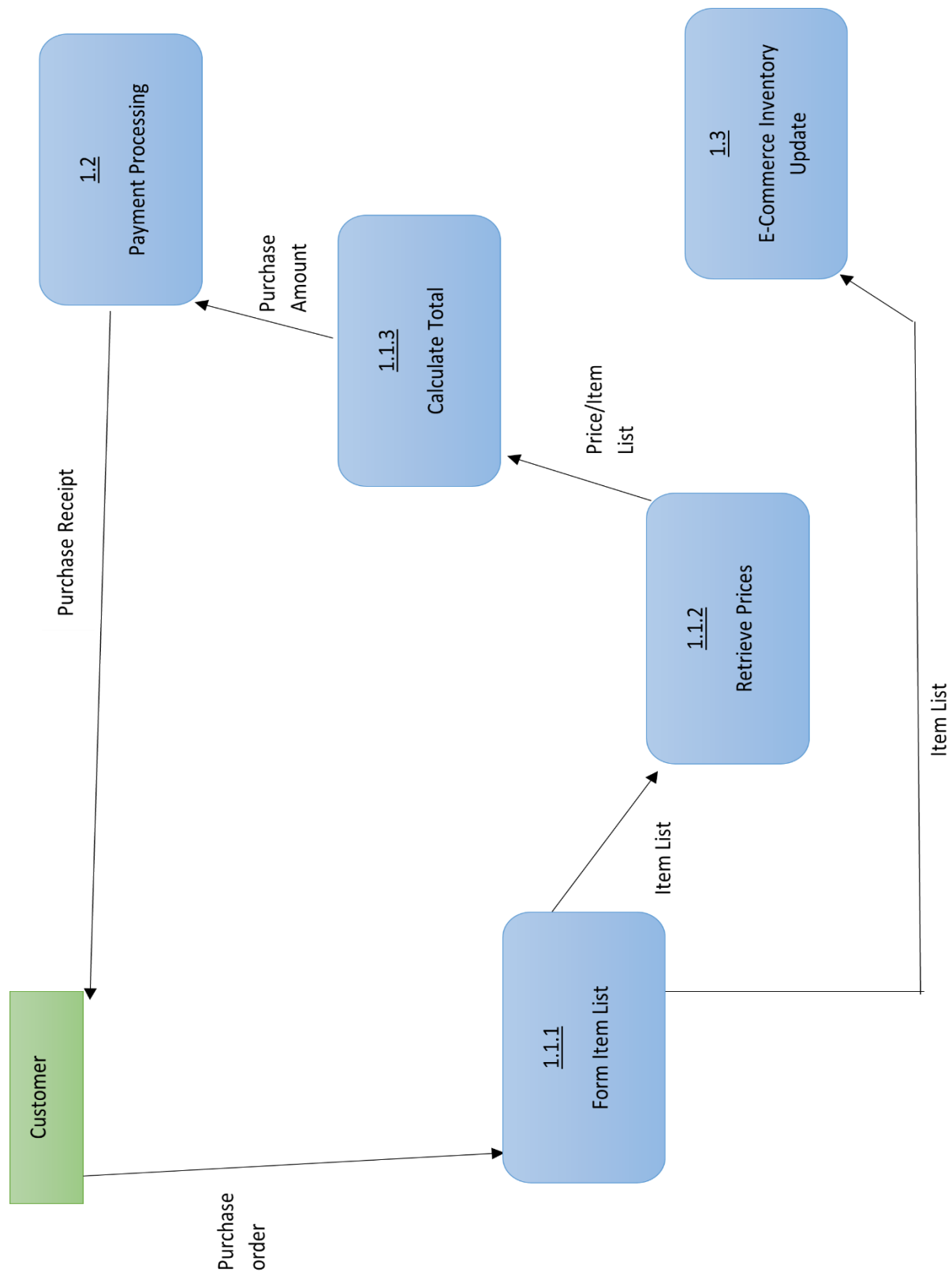   - List of items that have been purchased by a customer.

Vendor

Packaged Order

Order inconsistencies

Order invoice

0

Invoicing/E-Commerce System

Invoice with details

Staff

Paid invoice

Purchase Receipt

Purchase order

Customer

Packaged order

Vendor

Order inconsistencies

Invoice receipt

Order invoice

0

Invoicing/E-Commerce System

Invoice with details

Staff

Paid invoice

Purchase Receipt

Purchase order

Customer

Vendor

Packaged order

3.0

Staff Processing

Order inconsistencies

Order invoice

Invoice receipt

Inventory Log

D1| Backup Storage

Invoice with details

2.0

Invoice Processing

Staff

Paid invoice

Updated inventory

Purchase Details

Purchase order

1.0

E-Commerce/POS Processing

Customer

Purchase Receipt

Summary of Client Meeting

Meeting Details found on page 15 - 19

Location:
    Lee Baron, Huntsville Mall

    2 Financial Plaza # 120B, Huntsville, TX 77340

Date:
    October 3, 2022

Duration:
    90 minutes

Time:
    3:00 pm

Lee Baron is currently facing difficulties with invoicing as it is currently done manually and is not recorded for log keeping. The new system that would be suggested should be easy to use and user friendly as that were the main concerns for the client. The system is most likely going to be used by AJ (Director of Operations) but other staff will be interacting with it every once in a while. It is important to the client that the existing system, Shopify, is not completely ignored as both their E-Commerce and POS systems are connected to it, and whatever the team decides to recommend should have the ability to integrate with Shopify.

Biweekly Status Reports

Date: 9/20/22

Team Leader's Name: Khalid Noman

Team members: Khalid Noman, Sadarius Trotter, Vicente Diaz

Team Name: DNT Consulting

C: 0

P: 6 hours

T: 0

Description of the session:

We (Khalid Noman, Sadarius Trotter, Vicente Diaz) were able to hold a meeting on 9/15/2022 and 9/22/2022. Our team researched the possible solutions found in our previous meeting and were able to compile possible advantages and disadvantages for each.

Analysis of the problem to be solved:

Solutions for the client's problem should be easily implemented into their already existing systems, Shopify being one of them. Certain solutions would require us to consider how the client will properly train their staff and or themselves to use our solution. When it comes to Quickbooks and AutoHotkey, the director of operations (AJ) would be responsible for implementing and maintaining these tools.

Actions to be taken to solve the problem:

Our team (Khalid Noman, Sadarius Trotter, Vicente Diaz) got together and searched for software to address the issues above and thus far, we've found two: QuickBooks and Auto Hotkey. We reviewed their websites for information about their software and any other useful information. From what we've gathered so far, Quickbooks seems to be the better alternative due to its ease of implementation however, AutoHotkey holds the advantage in costs of implementation.

Follow-up action:

Our team will hold several brief meetings throughout the week to compare the solutions we've found up to this point and discern which offers greater ease of use and implementation and is most cost effective. However, we'll continue to look for other software that could be more effective at solving the client's problem.

Websites visited:

AutoHotkey

QuickBooks®: Official Site | Smart Tools. Better Business. (intuit.com)

Date: 10/06/2022

Team Leader's Name: Khalid Noman

Team Members: Khalid Noman, Sadarius Trotter, Vicente Diaz

Team Name: DNT Consulting

C: 90 minutes

P: 3 hours

T: 0

Description of the Session:

We (Khalid Noman, Sadarius Trotter, Vicente Diaz) were able to further research the possible recommendations that the team plans on making. The team discussed the recommendation of using AutoHotkey and have found that this solution would not be optimal due to its need of familiarity with complex technology. Quickbooks was another option that the team was researching and was found to have the ability to seamlessly integrate with the existing technology that the client has in place.

A meeting was held with the client (Lee Baron) at the client's Huntsville location. The team was able to gather more detailed requirements for the recommendation that it is supposed to make, through interviewing the client and observing the current method of invoicing. The client has made it clear in the meeting that they felt that the AutoHotkey recommendation would not best fit them, and that the recommendation the team is to make should not include any complex technology. Quickbooks was discussed as a possible recommendation and the client has shown interest in learning more about it. The team was also able to gather information on important aspects of the recommendation, including priorities and concerns.

The client showed interest in the following aspects for the recommendation.

Top Priority:

- User friendliness and ease of use
- Generation of expense reports
- Seamless integration with current system

Low Priority:

- Scalability
- Portability
- Number of users

Analysis of the Problem to be Solved:

The nature of invoicing currently raises issues such as inefficiency, inconsistency, and unclear deadlines, however, another issue the team was able to identify was the danger of loss of data. The recommendation that the team needs to make needs to account for these issues, while also making sure that it fulfills the needs of the client.

Actions to be taken to solve the problem:

The team (Khalid Noman, Sadarius Trotter, Vicente Diaz) will continue to meet, discuss, and research the available recommendations. Research will need to be made on the costs of both recommendations, while keeping in mind the priorities of the client. Vicente will leading the research on the recommendations, Sadarius will facilitate communication with the clients, and Khalid will assist in research and compiling findings.

Follow up action:

The team will need to continue research on the recommendations identified, with a heavier emphasis on Quickbooks to ensure that it will fulfill all the requirements identified in the meeting. The team will meet in the week of the October 9th to discuss findings of the research done to identify any flaws and adjustments that may need to be made. The team will compile the findings and discuss them with the client to identify any further concerns that may arise.

Task	Member	Due date
Research the current recommendations and alternatives	Vicente Diaz	10/10/2022
Compile findings and assist with researching Quickbooks and other recommendations	Khalid Noman	10/11/2022
Arrange a time to meet with the client to discuss findings	Sadarius Trotter	10/12/2022

ER Diagram
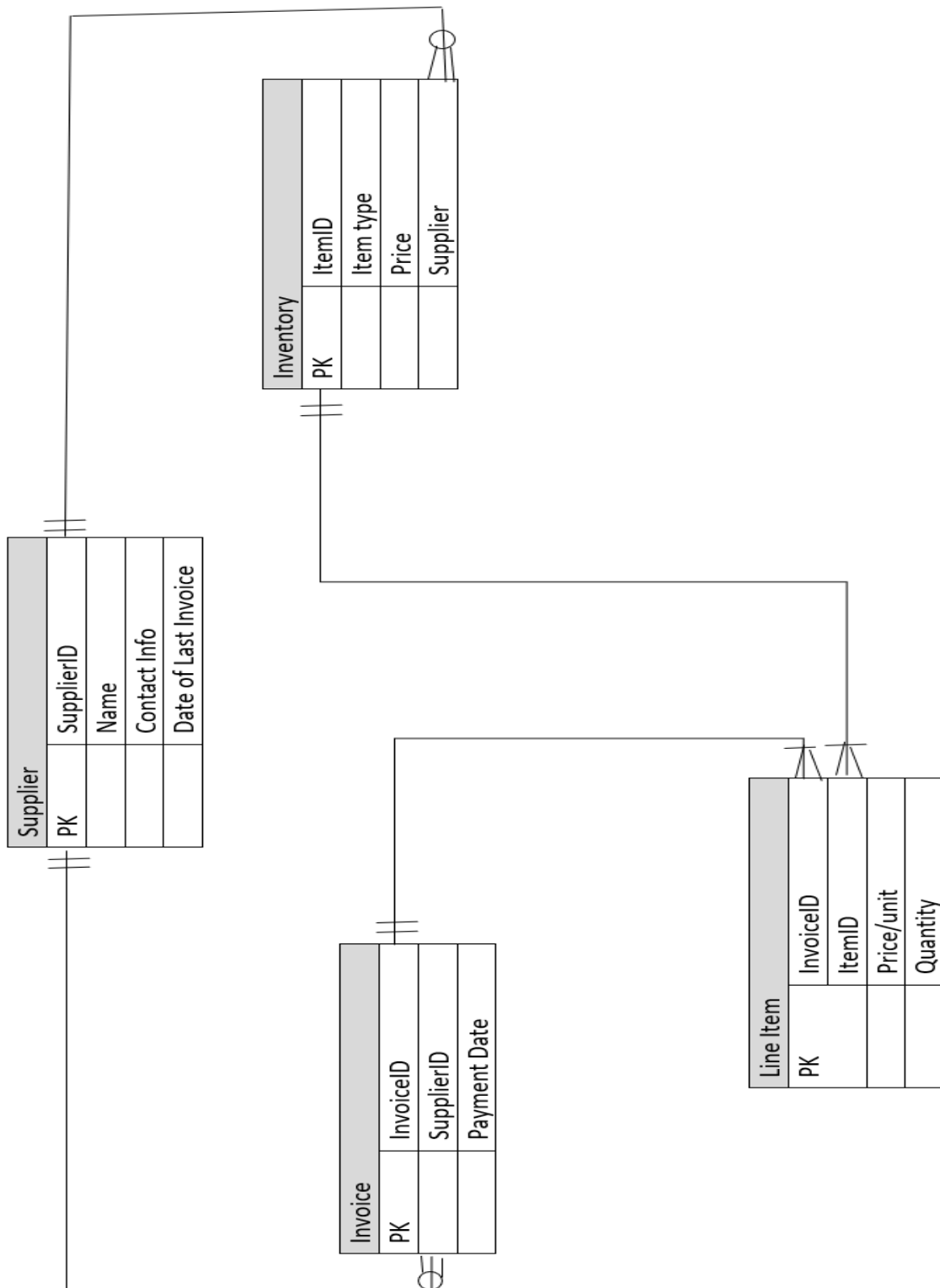
ER Descriptions

- Supplier
  - Stores data relevant to the apparel suppliers that Lee Baron uses to stock their inventory.
    - <u>SupplierID</u>: surrogate key used to identify each supplier uniquely
    - Name: brand name of the supplier
    - Contact Info: email of the representative for the supplier
    - Date of Last Invoice: the most recent invoice received from the supplier
- Invoice
  - Stores data on the invoices that Lee Baron receives from their supplier.
    - <u>InvoiceID</u>: surrogate key used to identify each invoice uniquely
    - SupplierID: foreign key used to identify where the invoice was received from
    - Payment Date: deadline to be met to make an on time payment of the invoice
- Inventory
  - Stores data on the items that Lee Baron have sold or plan to sell in the future.
    - <u>ItemID</u>: surrogate key used to identify each item uniquely
    - Item Type: identifies what category the item falls in (i.e., shoes, shorts, etc.)
    - Price: price given to customer who wish to purchase an item
    - Supplier: foreign key used to identify which supplier provided the item
- Line Item
  - An item that will be listed in an invoice which will be used to calculate the amount due
    - <u>InvoiceID</u>: identifies which invoice the item is connected to
    - <u>ItemID</u>: identifies which item is being referenced
    - Price/unit: price provided by a supplier per unit of an item
    - Quantity: amount of an item being supplied

Alternative Design Strategies

Ranked System Requirements and Constraints

System Requirements

1. The system should be easy to use and should not require a complex set of steps to accomplish day to day tasks. The number of steps should be under 5 to make it as easy as possible to follow through instruction.
2. The system should be able to generate informative reports that give management the ability to distinguish when invoices are due and their balances. A minimum of 1 report per week should be met.
3. The system will be used extensively and therefore the user interface needs to be user-friendly so as to keep employees satisfied with the system.

System Constraints

1. The system should have the ability to integrate with the current system, Shopify, and should not require any replacement or major alterations to the current system.
2. The system should not require an extraordinarily high cost and a one-time cost would be a much better option than a subscription-based option. The cost of the system should not exceed $80/month.
3. The development time of implementing the system should be kept to a minimum and a plug and play type of system would be preferred.
4. A minimum of 1 user for the system should be satisfied, but if the system provides 3 or more it would be preferred.
5. The vendor of the system should be accessible in case an issue with the system comes up.

Overview of Each Alternative

- QuickBooks
  - QuickBooks is a known accounting software which is currently being made by Intuit. The accounting software label may be misleading as that is not its only function. Research into the software revealed that QuickBooks provided users with all the capabilities of an invoicing system. The main factors leading QuickBooks to being considered as an alternative included its ease of use and seamless integration with POS/E-Commerce systems, including Shopify.
  - Contact
    - Phone: 1-844-333-1840
    - Website: https://QuickBooks.intuit.com/
  - Pricing
    - $30 – 48/month
    - Pricing sheet: https://QuickBooks.intuit.com/pricing/
  - Support
    - Phone: 1-800-446-8848
    - Website: https://QuickBooks.intuit.com/learn-support/en-us
- Xero
  - Xero was developed as a cloud-based solution to accounting software, this means that the software is designed using the Software as a Service model. The system specializes in solving accounting system issues in small to medium sized businesses. Xero was not designed to integrate with other systems seamlessly but does have the ability to work with them if configured properly.
  - Contact (Phone not available)
    - Website: https://www.xero.com/us/
  - Pricing
    - $34/month
    - Pricing sheet: https://www.xero.com/us/pricing-plans/
  - Support (Phone not available)

    - Website: https://central.xero.com/s/
- Auto Hotkey
  - Auto Hotkey would be considered as the low budget alternative due to its open source nature, which means that it would be completely free. This alternative is unique in that it is not a stand alone system but a scripting language that can be used to complete invoicing and accounting tasks if programmed to do so. The major drawback with this alternative would be its requirements of either extensive knowledge in programming or complete dedication to learning its basics, which is not simple and is time consuming.
  - Contact (Phone not available)
    - Website: https://www.autohotkey.com/
  - Pricing
    - Opensource
  - Support (Phone and Website not available)
    - Forums: https://www.autohotkey.com/boards/viewforum.php?f=76

Description of Three Alternatives

Criteria	QuickBooks	Xero	Auto Hotkey
Requirements			
Ease of Use	Easy to use after training	Easy steps to complete tasks	Requires complex actions to complete simple tasks
Report Generation	Frequent and informative reports that are concise	Reports not as frequent and contain less information	Customized report frequency but not very concise
User Friendliness	User friendly interface with an inviting look	Continued use does not cause fatigue	Programming language like interface
Constraints			
Shopify Integration	Built in integration with Shopify	Integrates but does not have the full range of options	Integrates after careful setup
Development Costs	$30-48/month	$34/month	Opensource
Development Time	2 to 5 days	2 to 5 days	Requires dedicated implementation
Number of Users	1 to 5 users	1 user	Unlimited users
Vendor Support	Quick response time	Delays are common	Not available

Weighted Ranking Comparison

Criteria	Weight	QuickBooks Rating	Score	Xero Rating	Score	Auto-Hotkey Rating	Score
Requirements							
Ease of Use	25	3	75	4	100	1	25
Report Generation	15	5	75	3	45	3	45
User Friendliness	15	4	60	5	75	1	15
	55		**210**		**220**		**85**
Constraints							
Shopify Integration	20	5	100	3	60	4	80
Development Costs	10	3	30	3	30	5	50
Development Time	10	4	40	3	30	1	10
Number of Users	3	4	12	2	6	5	15
Vendor Support	2	5	10	4	8	1	2
	45		**192**		**134**		**157**
Total	**100**		**402**		**354**		**242**

Recommended Design Strategy

- Recommendation
  - The team has concluded that after evaluating the alternatives described (page 41) that QuickBooks preformed the best in a weighted ranking comparison (page 42).

  - The team recommends QuickBooks as the system to be implemented.

- System Functionality
  - QuickBooks has an appealing user interface and is easy to use. It makes the tasks more simplistic and easy to accomplish to free up time for the employees to complete other important tasks. QuickBooks is able to produce invoice reports frequently that are both complete and concise.

- Benefit
  - QuickBooks can be seen as a cost center, and to justify spending money on it would require a demonstration of its benefits. The main benefit would be to streamline and speed up the invoicing tasks that employees complete on a day-to-day basis.

  - The benefit can be quantitatively calculated by finding the salary of the employee completing the tasks, however currently they are being completed by the director of operations, AJ.
    - According to https://www.payscale.com the average salary of an invoicing clerk would be around $40,000/year, but with QuickBooks in place the tasks of such an employee could be completed in minimal time allowing Lee Baron to dismiss the need of such an employee.

  - AJ's time could be better spent on other areas of the business that require his attention that could lead to growth and development.

- Cost of System/Implementation
  - The weighted comparison distinguished that QuickBooks filled out the most requirements while also handling the constraints best. QuickBooks would cost Lee Baron between $30-48/month depending on the implementation method selected. It can integrate with Shopify easily while also be put used right away after paying the subscription fee/price of the system.

- Hardware
  - QuickBooks will not require any changes to the hardware infrastructure of the client as they mainly run on the cloud or basic computers which are currently being used by the client.

- QuickBooks Information
    - Contact
        - Phone: 1-844-333-1840
        - Website: https://QuickBooks.intuit.com/
    - Pricing
        - $30 – 48/month
        - Pricing sheet: https://QuickBooks.intuit.com/pricing/
    - Support
        - Phone: 1-800-446-8848
        - Website: https://QuickBooks.intuit.com/learn-support/en-us

Post Meeting Summary

Interviewee:	**Interviewer:**
AJ	Vicente Diaz
-Director of Operations at Lee Baron	Khalid Noman
	Sadarius Trotter

Location:	**Date:**
SHB 331	October 28, 2022
	Duration:
	30 minutes
	Time:
	3:00 pm

Agenda:	**Approximate Time:**
Introduction	1 minute
Summary of Talking Points	5 minutes
Questions for Interviewee	10 minutes
Overview of Requirements	5 minutes
Overview of Constraints	5 minutes
Overview of Data Storage	2 minutes
Questions from Interviewee	2 minutes

General Observations:

Interview covered most of the major points needed to be able to develop a list of requirements and concerns with their proper rankings, which is how the weights will be made. The client was asked questions in relation to the requirements, constraints, and data storage of the recommendation be made. The client has agreed with the team on the weighted rankings (page 42) and that QuickBooks seems to be the best fit.

Topics Not Covered:

The client mentioned the requirements and constraints but did not go into details about them as there was not a current system to refer to. The team was able to distinguish a list of entities that the client would like to store data on but were not able to come up with all of the attributes for each entity.

Interview Details

Questions:	Answer summary:
Question 1: What are your requirements?	The system needs to be easy to use and should have the ability to generate informative reports while keeping the UI user friendly.
Question 2: What are your constraints?	Integration with the current system, development costs and time, number of users, and vendor support.
Question 3: What are the highest ranking requirements?	The most important requirement would be user friendliness with report generation and user friendliness being slightly less important.
Question 4: What are the highest ranking constraints?	Integration with the current system should be the main focus with development costs and time not being too far behind. Number of users and vendor support are not as important.
Question 5: Are there any other requirements or constraints you think would pop up in the future?	Currently the listed requirements and constraints are the only ones that come to mind.
Question 6: What entities would you like to store data on?	Vendors and their invoices mainly, customers and inventory would be nice.
Question 7: How do you identify the entities?	Vendors are identified through brand name, inventory through an inventory ID, and customers using names.
Question 8: What information would you want to store about the entities?	General information on each should be enough.
Question 9: Are there any changes you would like to make to the weighted ranking?	The rankings seem to align with the requirements and constraints of Lee Baron.

Question 10:

| Would you agree that QuickBooks seems to be the best fitting option? | According to the weighted ranking yes. |

Meeting Notes

The requirements and constraints were identified and were ranked by importance leading to the development of their weights. Lee Baron made it clear that the ease of use requirement was the highest priority when thinking about the requirements and constraints with current system integration being a priority but does not overtake ease of use. Currently there is no storage of data other than customers and inventory through the use of the current system, however backups are not made and should be addressed.

The meeting concluded with the confirmation on agreement of the weighted ranking comparison (page 42) and that the best ranking alternative, QuickBooks, should be recommended.

Biweekly Status Reports

Date: 10/19/22   Report #4

Team Leader's Name: Khalid Noman

Team members: Khalid Noman, Sadarius Trotter, Vicente Diaz

Team Name: DNT Consulting
C: 0

P: 2 hours

T: 0

Description of the session:
We (Khalid Noman, Sadarius Trotter, Vicente Diaz) were able to hold a meeting on 10/13/2022 and 10/18/2022. Our team discussed QuickBooks being a subscription base and to see if we could find a better, cost effective option for Lee Baron if possible.

Analysis of the problem to be solved:
QuickBooks is currently the most user friendly option that can integrate with Shopify. If possible, the team needs to find another option to integrate into the Shopify system without paying for a constant subscription.

Actions to be taken to solve the problem:
Our team (Khalid Noman, Sadarius Trotter, Vicente Diaz) will get together and focus on finding a better option for the client that focuses on the client's top priorities. Vincente will still be in charge of the research, while Khalid and Sadarius will be assisting in the research process to explore more alternatives to QuickBooks.

Follow-up action:
The Team will continue the research to find other recommendations with the top priority issues (In the last Biweekly Report). The recommendation has to be user friendly, generation of expense reports, and seamless integration with current system. We will meet during the week of 10/24/2022 to see if any of our findings compare to QuickBooks. Once we all agree that the recommended option falls into the client's top priority, we will discuss it with the client by Friday 10/28/2022.

Task	Member	Due date
Research the current recommendations and alternatives	Vicente Diaz	10/27/2022
Assisting with research for alternatives for the recommended option	Khalid Noman	10/27/2022
Arrange a time to meet with the client to discuss findings and assisting in research for alternatives.	Sadarius Trotter	10/26/2022

Design Specification

Narrative Overview:

Interface Name:	Expense
User Characteristics	Staff authorized to handle invoicing
Task Characteristics	Records data needed to create a purchase order/vendor invoice
System Characteristics	QuickBooks WebApp
Environmental Characteristics	Standard Retail/Office Environment

Interface Design:

Testing and Usability Assessment:

- Check if all required fields are available in the form
- Check to make sure all fields are clearly labeled for ease of use
- Check if a help option is available
- Check if save and cancel buttons are working
- Check if payment date can be set with a date picker

Narrative Overview:

Interface Name:	Unpaid Bills
User Characteristics	Staff Authorized to view invoicing information
Task Characteristics	Lists all unpaid bills with due dates, amount and other relevant information
System Characteristics	QuickBooks WebApp
Environmental Characteristics	Standard Retail/Office Environment

**Interface Design:**

Craig's Design and Landscaping Services

Unpaid Bills
All Dates

DATE	TRANSACTION TYPE	NUM	DUE DATE	PAST DUE	AMOUNT	OPEN BALANCE
Brosnahan Insurance Agency						
(650) 555-9912						
07/17/2022	Bill		07/27/2022	112	241.23	241.23
Total for Brosnahan Insurance Agency					**$241.23**	**$241.23**
Diego's Road Warrior Bodyshop						
07/22/2022	Bill		08/21/2022	87	755.00	755.00
Total for Diego's Road Warrior Bodyshop					**$755.00**	**$755.00**
Norton Lumber and Building Materials						
(650) 363-6578						
07/24/2022	Bill		07/24/2022	115	205.00	205.00
Total for Norton Lumber and Building Materials					**$205.00**	**$205.00**
PG&E						
(888) 555-9465						
06/09/2022	Bill		07/09/2022	130	86.44	86.44
Total for PG&E					**$86.44**	**$86.44**
Robertson & Associates						
(650) 557-1111						
07/24/2022	Bill		07/24/2022	115	315.00	315.00
Total for Robertson & Associates					**$315.00**	**$315.00**
TOTAL					**$1,602.67**	**$1,602.67**

Testing and Usability Assessment:

- Check that all data required is available
- Check that listed data is listed in easy to read fashion
- Check that totals add up to the correct amount
- Check that data is updated as the system is used

Dialogue Diagram
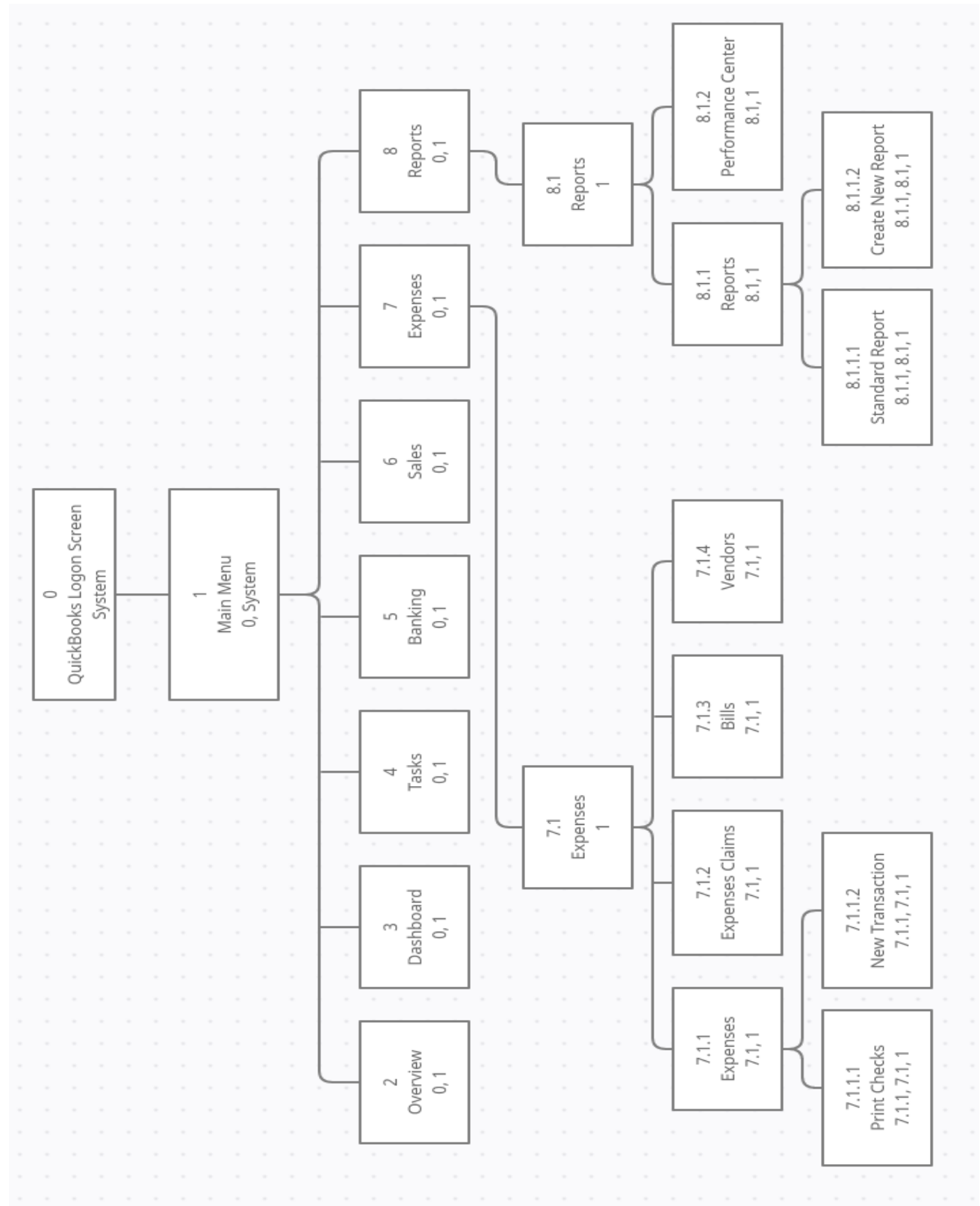
Narrative Description of Dialogue Diagram

When the user launches the QuickBooks WebApp, they will be greeted with the logon screen for the system. After the user logs in to the system, they will be led to the main menu which will have the options of overview, dashboard, tasks, banking, sales, expenses, and reports to select from. The options will be available while navigating most of the system through a side menu.

If the user selects the overview option, they will be shown some details about the system including

- Company setup: information about apps connected, subscription, and other quick settings
- Banking activity: financial information about the bank accounts if the client chooses to add them
- Common issues: areas of the system/business that might require attention
- Transaction volume: log of activities that occurred between two dates

If the user selects the dashboard option, they will be given a quick glance of the business in an easy to read form, which includes the use of charts. The user will be able to see the profit and loss summary, expenses, bank details, invoices (unpaid and paid), and sales.

If the user selects tasks, they will be shown a list of tasks that the user would need to accomplish, these tasks could be from setup recurring tasks, system tasks, or custom tasks the user sets.

If the user selects banking the details of connected bank accounts will be displayed including transactions that occurred through the system. The user can search, filter, and sort the data to find certain information.

If the user selects sales an overview of the sales will be display including the details of the sales transactions that have occurred in a time frame that the user can specify. A chart will be displayed to summarize the data and will change according to filtering that the user selects.

If the user selects expenses the expense transactions will be displayed in table form with 4 tabs to choose from, expenses, expense claims, bills, and vendors.

If the user selects expenses, they will be able to print checks or create a new transaction, where they can enter data of the invoice received from a vendor. After the data has been entered into the form and the user saves the information the system will update with the new entry.

If the user selects expense claims or bills the information related to just the selected tab will be shown. If the user selects vendors they will be able to see a chart summary of the information based on vendors along with a table that includes information about a vendor which includes contact, balance, and vendor name.

If the user selects reports the reports tab will be displayed where the user will be able to either select from standard reports or create a new report. The performance center tab will give the user a chart to summarize reports for multiple departments including expenses, revenue, net profit, cash flow, and many others.

Test Plan

For testing of the QuickBooks platform, we've decided to undergo Alpha testing. This will ensure the system is capable of satisfying the client's requirements under the specified conditions. For these tests, QuickBooks is required to create forms with the financial information needed for the client. These tests will be performed using simulated data to find and address any unforeseen errors. Once these errors are addressed, actual data provided by the client can be tested.

Craig's Design and Landscaping Services

Test Case Description and Summary

Test Case Number: 01

Test Case Description: Unpaid Bills Form Testing

Program/Module Name: QuickBooks

Testing State: Alpha

Test Case Prepared By: Khalid Noman

Test Administrators: Vicente Diaz, Sadarius Trotter

Description of Test Data:

Alpha testing with simulated data. Inputting all vendor information, and financial information such as payment methods, payment dates, and other invoice details.

Expected Results:

The form should accurately and concisely demonstrate any unpaid bills along with identifying information about who the bills are due to.

Actual Results:

The form is easy to read and includes to whom the bills are due with their identifying information being also easy to find.

Explanation of Differences between Actual and Expected Results:

QuickBooks operated as expected and generated a form that was informative and easy to understand.

Suggestions for Next Step:

Make sure all data fields are accurately filled to avoid incorrect data being displayed on the final form.

Craig's Design and Landscaping Services

Test Case Description and Summary

Test Case Number: 02

Test Case Description: Profit and Loss % of Total Income

Program/Module Name: QuickBooks

Testing State: Alpha

Test Case Prepared By: Khalid Noman

Test Administrators: Vicente Diaz, Sadarius Trotter

Description of Test Data:

Alpha testing with simulated data. Inputting all vendor information, and financial information such as payment methods, payment dates, and other invoice details.

Expected Results:

The form should accurately and concisely demonstrate the business's net income in an absolute value and percentage for ease of interpretation.

Actual Results:

The form is easy to read and includes a granular look at the business's total expenses and profit while still making it simple to find important information such as total net income in percentage/absolute value at a quick glance.

Explanation of Differences between Actual and Expected Results:

QuickBooks operated as expected and generated a form that was informative and easy to understand.

Suggestions for Next Step:

Make sure all data fields are accurately filled to avoid incorrect data being displayed on the final form.

File Database Conversion Procedure

Current and new vendor information will be imported to QuickBooks from Shopify and or manually from paper records. During the conversion, the old system will be functioning as usual as a form of redundancy until it can be phased out. Once the client decides to completely remove the old system, vendor, invoice, and other information will be input only through QuickBooks and Shopify.

If the client needs to import other files during the conversion process, they can do this using CSV (comma separated values) files. The procedure is as follows

Digital Data Transfer Procedure:

1. Click the Gear Icon, then select Import data.
2. Select the data/files you want to import.
    a. Helpful Tips:
        i. Once you have selected a data type, selecting "Download a sample file" can help you format your data correctly.
        ii. To ensure your data imports correctly, import spreadsheets in this order
            1. Chart of accounts
            2. Customer
            3. Suppliers
            4. Products and services
            5. Invoices
            6. Bills

Additional resources- Import/export CSV files (intuit.com)

File Database Conversion Cutover Method

The organizational process chosen to transition from the current information system to the new one will be parallel. This involves operating under the old system and the new system simultaneously until the client feels comfortable turning off the old system. Doing this prevents a complete halt of operations or data loss in case the new system malfunctions.
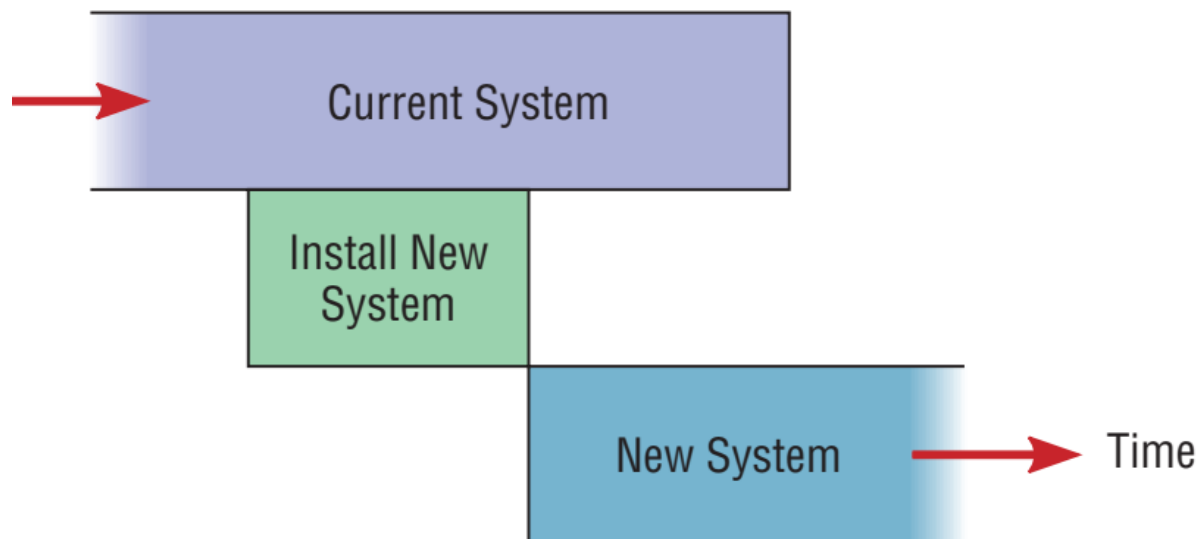
User Training Strategy

Training will be performed between the Director of Operations and individual staff members. While training is underway, operations can continue to normally operate thanks to parallel installation including a grace period for staff to learn and adapt to the new system. This grace period will last for one business quarter or for however long the director of operations decides is apt. This will also give the director of operations time to train the right number of staff before the old system is phased out. Having an adequate number of trained staff once the old system is abandoned will allow for adequate delegation of work involving the new system. Shopify also will also not experience any significant changes therefore navigating QuickBooks and form/report generation will be prioritized during training.

QuickBooks also offers a range of training solutions such as

- Finding a Local QuickBooks Expert
    - o Rates Vary
- Instructor-Led Classes
    - o From $389.95
- Self-Paced Learning
    - o From $39.95
- Student and Educators
    - o From $36.95

QuickBooks Training (intuit.com)

QuickBooks offers an add on when first enrolling in a plan, where a QuickBooks expert will be available to help the process of getting the system setup and how to use the system. This one time training session provided by QuickBooks can be added to the selected plan for a one time fee of 50$.

The advanced plan, which is not being recommended due to its high price, comes with the option of personalized training which can be taken at the clients pace. However QuickBooks provides standardized training videos at:

https://quickbooks.intuit.com/learn-support/en-us/quickbooks-online/help-tutorial/get-started

Maintenance/Modification Procedures

Modification: As discussed with the client, QuickBooks will be implemented along with Shopify therefore any modifications should automatically sync. Staff will also have the ability to make changes to vendors, invoices, and other information when needed.

The recommended plan does not allow for customization of the system, however QuickBooks have made it clear that a plan is requested later on then this can be done. The advanced plan allows for the customization of the system dashboard among other advantages but come at a much higher price.

The plans are summarized on page 65.

Maintenance: If the client chooses to move from QuickBooks online to QuickBooks Desktop in the future**,** it is recommended that the client download and install any future QuickBooks updates in a timely manner to avoid security vulnerabilities and system stability issues. If any issues arise during this, it's advised to contact customer support for further action. However, since the client will be utilizing QuickBooks online, updated and support will not require constant updates.

- QuickBooks Customer support:
    - 1-800-446-8848
    - https://quickbooks.intuit.com/learn-support/en-global/contact

Project Signoff

This project was completed by Khalid Noman, Vincente Diaz, and Sadarius Trotter to help improve Lee Baron Invoicing system. In turn, it will help focus on their day-to-day task.

The requirements

1. The system should be easy to use and should not require a complex set of steps to accomplish day to day tasks.

2. The system should be able to generate informative reports that give management the ability to distinguish when invoices are due and their balances.

3. The system will be used extensively and so the user interface needs to be user friendly so as to keep employees with the system.

The Constraints

1. The system should have the ability to integrate with the current system, Shopify, and should not require any replacement or major alterations to the current system.

2. The system should not require an extraordinarily high cost and a one-time cost would be a much better option over a subscription-based option.

3. The development time of implementing the system should be kept to a minimum and a plug and play type of system would be preferred.

4. The vendor of the system should be accessible in case an issue with the system comes up.

Our recommendation was influenced by our research throughout all the deliverables to the finished project book. This is a sign off to Lee Baron they will take full responsibility from point of signature to implement if they see fit.

Project Approved and signed off by:

Dr. Janis Warner, Project Liason   Mrs. Kim McLerran, SBDC Consultant

AJ, Director of Operations

Project Closedown

It's time to start to plan to close the project. The project will be closed on December 5th, 2022. Currently, team evaluation hasn't been completed for all of the team members. The team has given the recommendation and is ready to be given to the client to decide if they want to implement the system.

The contract with Lee baron has been carried out and will be closed. The deliverables will be handed over to Lee baron and they will be in charge of the operations of QuickBooks.

The remaining parts of the project include:

- Project book finalization
- Project book distribution
- Client Presentation
- Reflective paper
- Project group peer evaluation

Baseline Project Plan

The baseline project plan does not need any updates as the recommendation aligns with the information in the current Baseline Project Plan.

The up to date details of the Baseline Project Plan can be found on pages 9 - 13

Biweekly Status Reports

Date: 11/04/22   Report #5

Team Leader's Name: Khalid Noman

Team members: Khalid Noman, Sadarius Trotter, Vicente Diaz

Team Name: DNT Consulting
C: 30 minutes

P: 2 hours

T: 0

Description of the session:
We (Khalid Noman, Sadarius Trotter, Vicente Diaz) were able to hold a meeting on 10/27/2022 to research attributes on our 3 system alternatives, QuickBooks, Xero, and Auto Hotkey. We collected attributes on these systems such as ease of use, report generation, development costs, development time, etc...
On 10/28/2022 we met with the client to discuss the requirements and constraints involved in implementing certain systems in his business. We provided the client with 3 alternatives coupled with the set of weighted attributes we picked based on his input. Once we reviewed and discussed the information provided, we established which of the three alternatives was best suited for his needs.

Analysis of the problem to be solved:
Given the information provided by the client, QuickBooks surpassed our two alternative solutions in a weighted ranking comparison. QuickBooks received a score of 402, Xero received a score of 354, and Auto-Hotkey received a score of 242. This means QuickBooks's score was 14% larger than Xero's and 66% larger than AutoHotkey's.

Actions to be taken to solve the problem:
Our team (Khalid Noman, Sadarius Trotter, Vicente Diaz) will get together and research the best way to implement the solution outlined in our meeting with AJ, QuickBooks. Vicente will be in charge of research dealing with the implementation of the system while khalid and sadarius will be researching other elements involved in QuickBooks's deployment process

Follow-up action:
The team will carry on with research however, now its focus will mostly shift to QuickBooks. This will involve gathering information on QuickBooks's implementation and deployment process. We will meet during the week of 11/07/2022 to determine the implications of this system's implementation and if any additional information can be expected to be provided.

Task	Member	Due date
Research implementation information for the chosen alternative	Vicente Diaz	11/10/2022
Assisting with research for deployment process	Khalid Noman	11/10/2022
Assisting with research for deployment process Arrange communication with the client	Sadarius Trotter	11/10/2022

Team Leader's Name: Khalid Noman

Team members: Khalid Noman, Sadarius Trotter, Vicente Diaz

Team Name: DNT Consulting
C: 0

P: 4 hours

T: 0

Description of the session:
We (Khalid Noman, Sadarius Trotter, Vicente Diaz) were able to hold a meeting on 11/8/2022 to research the different plans that could also be considered from QuickBooks and was able to distinguish which plan would be best fitting to select for Lee Baron's needs. The version of QuickBooks was also researched to select whether the on premise version would be more beneficial than the online version.

On 11/10/2022 the team met to discuss the implementation of a system from QuickBooks and the design aspects of the QuickBooks system functions such as the use of forms and reports. The team was able to asses the usability of the system and found that all parts of the system that were tested, forms and reports, was able to achieve the minimum requirements and was able to exceed expectations in its user friendliness. The system demo acquired was similar in look and feel to the Shopify system that Lee Baron uses, and this familiarity will help the staff interacting with the system at Lee Baron to not feel overwhelmed with the multiple system that they will deal with on a day to day basis.

On 11/16/2022 Khalid was able to meet with a QuickBooks representative to discuss the process of getting Lee Baron set up with the QuickBooks system. In the meeting the QuickBooks representative discussed the details of the different plans and was able to give us a recommendation of the plan to pursue but notified us that we can change the plan at any time whenever the client sees fit. The representative mentioned that the best form of QuickBooks for a client of Lee Baron's size would be the QuickBooks WebApp since it emphasized ease of use and working with small businesses, this version of the system would also seamlessly connect with Shopify without a complex setup. The development time the representative recommends would be no less than a day to get the system up and running, and a week to get users trained and ready to use it.

The team was able to summarize the plans discussed from QuickBooks in the following table

	Simple Start	Advanced
Price	30$/month	200$/month
User Interface	Standard among users	Customizable based on user
Training	Standard training	Personalized training
Support	Standard support	Dedicated support number
Reports	Standard reports	Customizable reports

After considering Lee Baron's needs and budget, the simple start plan seemed to fit the best.

Analysis of the problem to be solved:
Research the process of implementing a system from QuickBooks. The system selected that the team would recommend is the online version of QuickBooks using the simple start plan.

Actions to be taken to solve the problem:
Our team (Khalid Noman, Sadarius Trotter, Vicente Diaz) will get together and research the best way to implement the online version of QuickBooks without hindering the daily process of Lee Baron.
The team needs to research the different of methods of phased implementation so that it would be the most effective method for Lee Baron.
The QuickBooks online demo will need to be further examined to find any features that might stand out as problem areas.

Follow-up action:
The team will carry on with research on implementation method and the process of phasing out the old method of invoicing in favor of the new system, QuickBooks online. This will involve gathering information on QuickBooks's implementation and deployment process. The team will meet on 11/17/2022 to finalize the recommended implementation process.

Task	Member	Due date
Researching testing methods	Vicente Diaz	11/17/2022
Testing the online demo and researching methods of implementation and user training.	Khalid Noman	11/17/2022
Assisting with testing of the system and assisting the other members research	Sadarius Trotter	11/17/2022