Information Item Content

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1. General Content

1.1 Identification

a.) Title: Sales Lead Locker
b.) Version: 1.0.0

1.2 Front Matter

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1.3. Definitions

1.3.1 SLL
Sales Lead Locker

1.3.2 RMS
Retail Management System - Program used to create, modify and delete transactions between customers through customer accounts and the sales representative.

1.3.3 ASL: Account Spending Limit
A fee issued to sub-prime customers that have individual liable accounts. ($7.99)

1.3.4 Sprint Complete
Device protection or insurance issued by Asurion. Sprint Complete varies in price depending on the price of the device and whether it is a smartphone, basic phone, tablet or mobile broadband.

1.3.5 Plan
A service data plan provided to any device activated on a customer's account.

1.3.6 Activation
A new line of service that is added to a customer's account or a part of a new account in which is a new number or a ported number from Sprint.

1.3.7 MSA Tablets
Mobile Sales Assistant tablet – a Sprint owned tablet used to complete trainings, process sales and run many operations that RMS does.

1.3.8 Port
A number that was transferred from one telecommunication company to Sprint.

1.5 Acronyms and Abbreviations

1.5.1 AI
Artificial Intelligence: The simulation of human intelligence processes by machines, especially computer systems. These processes include learning (the acquisition of information and rules for using the information), reasoning (using rules to reach approximate or definite conclusions) and self-correction.

1.5.2 ASL

Account Spending Limit – A fee issued to sub-prime customers that have individual liable accounts. ($7.99)

1.5.3 LG

LG Electronics - South Korean multinational electronics company headquartered in Yeouido-dong, Seoul, South Korea, and is part of LG Corporation, employing 82,000 people working in 119 local subsidiaries worldwide.

1.5.4 MSA tablet

Mobile Sales Assistant that is a Sprint owned Apple iPad, used to perform the daily operations for retail consultants.

1.5.5 RMS

Retail Management System - Program used to create, modify and delete transactions between customers through customer accounts and the sales representative.

1.5.6 SLL

Sales Lead Locker

1.5.7 ID

Identification

1.6 Stakeholder Requirements Specification (StRS)

1.6.1 Introduction

The purpose of SLL is to provide a quote sheet database that will file new and existing quote sheets. This includes the actions of adding, modifying and deleting quote sheets. This is to reduce paperwork, reduce human error, reduce mathematical errors, and provide information that is accessible to both management and staff.

1.6.2 Business Purpose

[1]"Sprint's vision to be a world class company, the standard by which others are measured, includes a commitment to developing a world class supplier base that is reflective of the communities we serve."

1.6.3 Business Scope

Sprint is one of the world leaders in telecommunications services. They provide cellular service to mobile devices such as smartphones tablets mobile broadbands and smart watches within the United States. They also provide additional services internationally. Sprint strives to lead the telecommunications industry with cutting edge technology.

1.6.4 Business Overview

Sprint provides telecommunications services throughout the world. The company also strives to implement the latest technology available. They are focusing on the immerging 5G band that will change how businesses do business. 5G is going to provide the ability to further automate their systems. This means self-driving cars, AI and the Internet of Things will have improved reliability and improved efficiency in service.

1.6.5 Stakeholders

Direct, Sales Channel
Indirect Sales Channel
Tele-Sales Channel
Product management
Chief Executive Officer
Chief Information Officer
Business Analyst
Customer
Operational Support
Project Manager
Regulator
Sponsor
Tester
Store Manager
Assistant Store Manager
Sales Supervisor
Retail Consultant

1.6.6 StRS References

[1] "Corporate Policy," Sprint, 2013. Accessed on Feb 1, 2019. [Online]. Available: https://www.sprint.com/companyinfo/scm/supplierdiversity/policy.shtml

[2] "Why Sprint" Sprint 2019. Accessed Feb 4, 2019. [Online]. Available: https://investors.sprint.com/why-sprint/default.aspx

1.6.7 Business Management Requirements

1.6.7.1 Business Environment

Sprint's internal factors that influence's the company's operating situation are its customer base that includes individuals and businesses that use telecommunication services. Its employees that provide goods as far as electronic devices and services that include the ability to call, access the internet, and send text messages to one another. Its supplies are smart electronic device manufactures such as Apple, Samsung and LG which also play a role. Their external factors include technology in terms of network advancements and infrastructure, and the advancements in handheld mobile devices.

1.6.7.2 Goal and objective

[2] Sprint Corporation and its subsidiaries is a communications company offering a comprehensive range of wireless and wireline communications products and services that are designed to meet the needs of consumers, businesses, government subscribers and resellers.

1.6.7.3 Business Model

Sprint provides telecommunication services and resell electronic devices that are compatible with their services across the world. It generates revenue by assigning voice, text, and or data plans that varies depending your lifestyle and what it demands from a service provider. It's customer base includes individuals and businesses including their

own who use telecommunication services to communicate among one another. The services it provides allow mobile devices to communicate with one another through a network with many interactive ways such as voice calls, text messaging, video chatting and plenty more.

1.6.7.4 Information Environment

There are a multitude of information environments Sprint has. It has its social media platform along with television which are outlets for its advertisements. It has an online website which contains the ability to learn about business activities the corporation has been engaging in, current and future goals, news and advertisements that display the latest technology and devices, and an online access to Sprint accounts. This includes the ability to change information within your account, sign up with Sprint, purchase devices and pay for services.

1.6.8 Business Operational Requirements

1.6.8.1 Business Processes

New and existing customers are greeted upon entry, sign into our que system and wait for one of our representatives to be free in order to help the customers. Once the customer is called upon by the consultant, the consultant begins to engage with the customer in order to figure out what the customer came in for. Customers either inquire on a new device or add-on services Sprint has to offer, review their bill in order to figure out if they're getting the most out of Sprint and their money, or for possible equipment issues. In order for a customer to be able to make any financial changes to the account or create a new account, it is critical that the consultant scans the customer's ID in order to further assist the them. Otherwise if the customer has equipment issues then the consultant will do a warm handoff to a technician that will take over the transaction.

Customers who want a new device continues to be helped by the representative. The representative builds a package solution that is tailored to the customer's lifestyle based on the rapport that was built during the interaction. The consultant may handle other tasks with the customer such as data transfers between old to new devices. Once the transaction is complete, the customer is provided with a quote sheet that gives them a detailed summary of what their bill will look like that is approved by the manager.

1.6.8.2 Business Operational Policies and Rules

The policies placed within the Sprint environment is structured for customer data protection and proprietary information, protect Sprint's assets, service and repair devices in a professional manner, and to ensure safety to the employees and clients. Sprint has a policy when creating accounts for new customers and it is different is the customer is a regular customer and a business customer. This is because there are different requirements to open such accounts. For instance, in order for a customer to create an account they must present a valid ID and sometimes a secondary document such as an utility bill if the address on the ID isn't where they currently live. A businessman however would require documents that prove ownership to the business. Employees have a dress code to follow. They must wear Sprint apparel, black or khaki slacks and black shoes at all times, well-groomed and appear professional. New consultants go through a three month training process that goes over Sprint's policies and to understand how to interact with RMS.

1.6.8.3 Business Operational Constraints

One of the most significant types of constraints Sprint deals with would be inventory management in the paradigm of supply and demand. When there is a hot item in the market it is typically out of stock such as the big hit Apple AirPods. This causes consultants to miss out on sales and are forced to figure out alternatives. Otherwise it would have to be the competition Amazon has created that has depleted accessory

numbers across the nation. Typically, a customer knows they can get an accessory cheaper online, but it is up to the consultant to convince them otherwise. Another constraint would have to be their network. Sprint doesn't have the ability to talk and surf and the same time so it is something we must advice most customers or have them invest in some sort of hotspot.

1.6.8.4 Business Operational Modes

Sprint has four operational modes. The first one involves slow traffic during the summer time. Typically, around this time there are no new devices that are being anticipated, the snow birds in Fort Myers are gone, and everyone is on vacation mode. During this mode, retail consultants are encouraged to perform warm calls to old customers to look for the opportunity to drive sales by inviting them into the store. The second mode is during a big device launch such as iPhone launch. Apple themselves provide policies in regard of their new iPhones. This involves how the device is displayed in the store and how many iPhones can be sold per person. The store opens at 8 AM instead of 10AM and usually there would be accessories, deals and promotions that involve the new Apple product. The third mode is during what's called "Sprint Says Thanks." It is an event that occurs once a month that provides special deals and offers to existing customers who have been loyal to Sprint. During this time the store is more decorative. There is a random theme that the store follows that is designed to encourage happiness and pleasure. Retail consultants can wear slightly more informal attire so long as it remains appropriate. The final mode is when the store is packed. During this time there are more customers who are waiting longer than average. This is the time where the store manager, assistant manager and/or the sales supervisor checks with each customer to make sure they are acknowledged and to check if anyone came in for device issues which would be handed off to a technician. They offer beverages and snacks to the customers in order to reduce the unpleasantry of waiting to be helped.

1.6.8.5 Business Operational Quality

Sprint strives to provide an unmatched customer experience. Customer satisfaction is integrated within sales metrics that keep track of surveys customers complete after their visit to a Sprint store. If the customer scores 8-10 down to 6-10, it is deemed as a neutral. 9 and above is a promoter and 5 or below is a detractor. The detractors and neutrals weigh more than promoters, so it is important that the consultants provide a great experience. There are secret shoppers who grade employees on if they know the latest promotions and what's going on with Sprint at the moment. The store carries many diverse devices that covers the targeted markets. They're all high-quality devices from well-respected manufacturers such as Samsung, Apple and LG. The district manager hosts meetings once a month while store meetings are weekly in order to refresh and update the employees on new things to come within the realms of Sprint.

1.6.8.6 Business Structure

Sprint's Business structure is of a corporation and they also franchise. There are corporate stores and third-party stores that are authorized to sell Sprint products and is privately owned. Sprint's business structure goes beyond that as they also have a social media platform that also drive online sales.

1.6.9 Concept of proposed system

1.6.9.1 Background, Objectives, and Scope

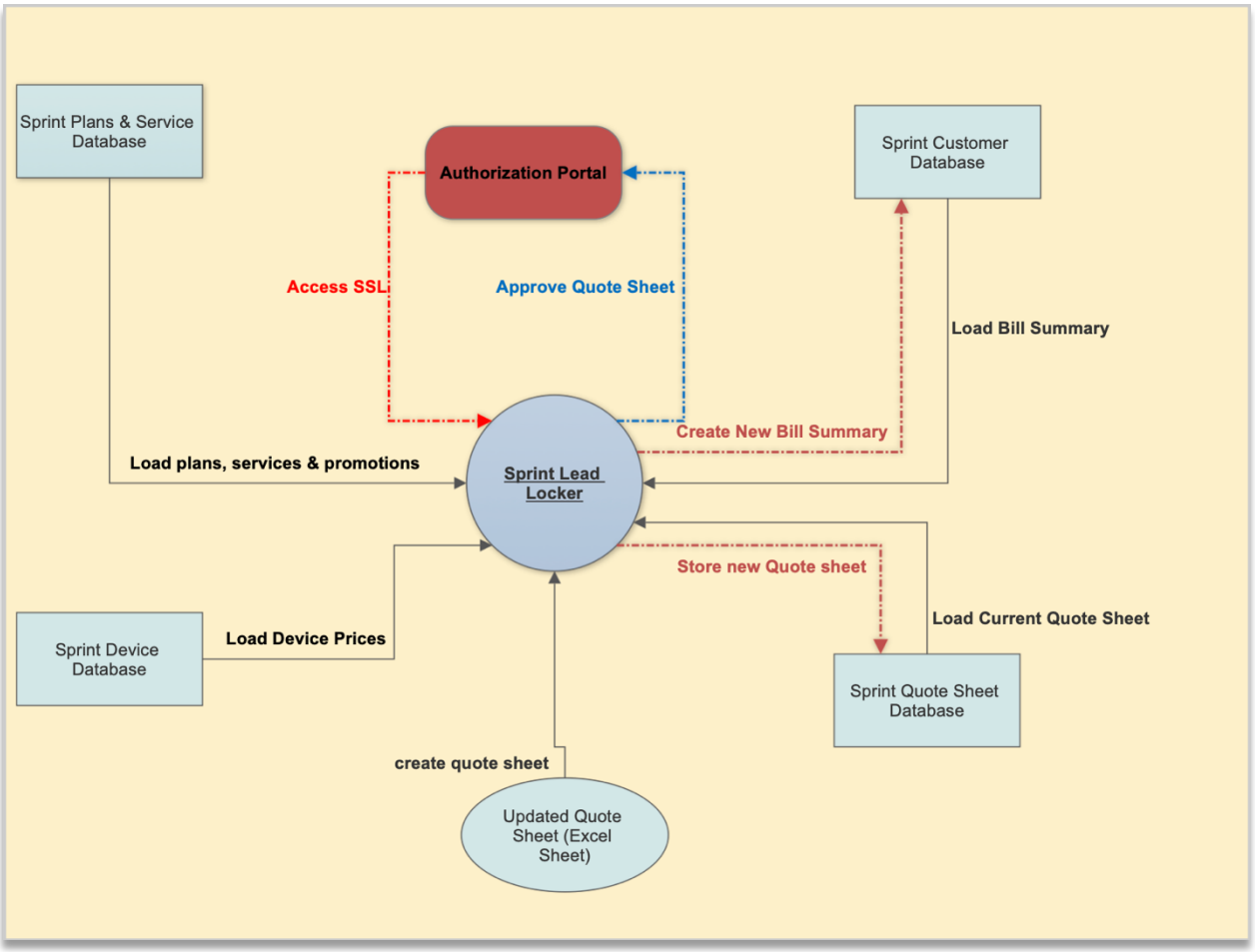
1.6.9.2 Operational Policies and Constraints

In regards of operational policies, the most crucial policy would be having to train employees on how to use the system. Due to the different types of users there are, it is important to cover all aspects of the functionality of the product and how the users will use the program depending on their roles. This training can be done through the

company's methods of training their staff. Aside from that, convincing the stakeholders that is beneficial would be a constraint depending on the stakeholder's position and the direction of the company. One last constraint would be if Sprint has the proper resources to develop the product and deploy it as an in-house product or would they need to outsource it. Considering that Sprint is a company that embraces the latest technology it shouldn't be much of a constraint, but Sprint would ultimately be responsible with how user-friendly the application is.

1.6.9.3 Description of the Proposed System

The program is intended to be a web-based application that can be utilized both by mobile devices and also desktops. This is to ensure that the application can be accessed by any type of employee roll within a retail store. Employees will enter their employee credentials in order to access the program. Once authorization is given, the retail consultant will be able to perform multiple functions such as constructing a new quote sheet, find and view ones that are stored within their database with the ability to share by sending it to the customer via the email stored within their account. Managers will be able to access their entire store's database of quote sheets. They will also have the ability to approve quote sheets in order for employees to be able to proceed through the sales process. Customers will receive a do-not-reply email from Sprint containing their quote sheet and their receipt, but they will also have the option of viewing any quote sheets that have been established for them right through their current Sprint application. Figure 1 below provides an overview of how the system is constructed and the actions that are performed within its components.



(figure 1) Context diagram

1.6.9.4 Modes of Operation

The proposed system has multiple modes as it depends on who the users are, where the system is being accessed from and whether or not an employee is clocked in. For customers, the modes involved do not affect their ability to utilize the system as it plays a minimal role in the system. The first mode is where users are able to use all of the system's functionalities. This is during business hours while an employee is clocked in and is working. Full functionality is only presented through the company's iPads or their desktops. The user will be able to do everything they can do based on their roles. If an employee is using their mobile device to access the system, they must be within the vicinity of a Sprint location to be able to create quote sheets for customers and look up

customers quote sheets. This would be considered the second mode. The employee is limited to only constructing a quote sheet but will not have the ability to save it as a manager cannot approve the quote sheet unless the employee is clocked in and is at their work location. Managers will have the ability to search quote sheets within their store, but they are not able to approve quote sheets without being clocked in or in the Sprint location.

1.6.9.5 User classes and Other involved Personnel

Classes would have to be established for the hierarchy of the staff within a Sprint retail location. Each will have certain permissions and constraints. Customers will have a class that is currently based on a different system that is being utilized to allow customers to be able to view their bill, plans and services through an application. Since the system itself will be pulling from other resources Sprint provides, there must be classes that are established to provide a safe connection and stable connection to the all.

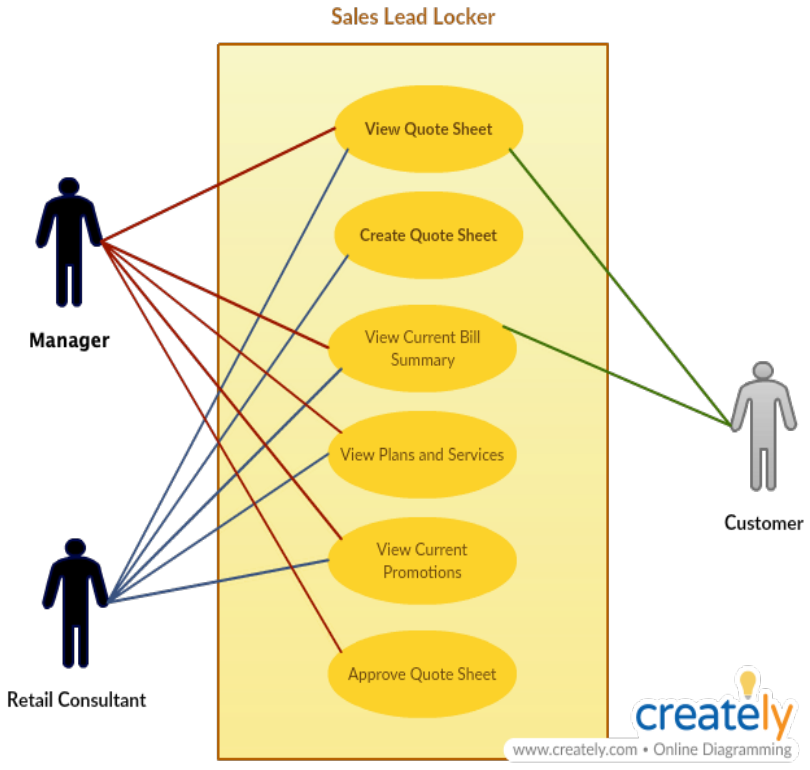
1.6.9.5.1 Organizational Structure

This system is intended to be used by retail personnel within Sprint's corporation as they handle new and existing customers. There will be three different types of accounts. The first type of account is the managerial account. This account is tailored to employees in keyholder positions such as Sales Supervisors, Assistant Managers, and Store Managers. Managers can only access the system through their desktops or laptops as it would reduce the likelihood of an employee without authorization to access the system through manager credentials through the Sprint iPads. The second account type would be the retail consultant account which involves the ability to access the system through two different access methods, desktop or mobile. The employee will have the ability to access the system through the desktop and company iPad and will have full functionality. If the user is using their own personal device, they are only able to create quote sheets without having the ability to save them but will have the ability to look up

customer quote sheets so long as they are within their work location and is currently clocked in. The final account is for the customer. This account is directly tied to their MySprint credentials otherwise they may need to create a new account and it will also work as their MySprint login. Customers will be able to view the quote sheets created for them within their online account.

1.6.9.5.2 Profiles of User Classes

There are three profiles of users. There is a managerial profile which was briefly explained above. It involved Sales Supervisors, Assistant Managers, and Store Managers. The second profile involved retail consultants part-time and full, along with lead retail consultants and keyholders. The last is the customer profile which involves stakeholders, customers, and employees who have Sprint.



1.6.9.5.3 Interactions Among User Classes

Primary actions within the system will mainly involve a retail consultant and a manager. When a retail consultant wants an approval for their quote sheet, they will notify the manager and the manager must review and sign off on the quote sheet to approve it so the consultant can continue with the sales process. Retail consultants will be creating quote sheets, looking up plans and promotions in order to figure out how Sprint can provide the most for the customers. Customers can review quote sheets and their bill summary whenever they please without the need of a retail consultant or a manager and regardless of location and setting. Customers will be signing off on the proposed quote sheet that has been presented by the consultant.

1.6.9.5.4 Other Involved Personnel

Other personnel that may be involved are employees that in the role of a customer. Employees cannot create quote sheets for themselves, but they can still view their quote sheet within their Sprint account.

1.6.9.6 Support Environment

New hires go through Sprint retail training for about three months. During that time, the employee is taught operational roles and learn policies that give them a guideline on how what to follow when working with Sprint. During that time, the employee can go through proper training on how to do plan analysis and how to utilize the Sales Lead Locker where the employee will be managing their quote sheets. If it is a new manager, then that manager will be going through a separate training that will involve how to manage quote sheets for the entire store.

1.6.10 Project Constraints

- The proposed project would require approximately 12-18 months to develop deploy successfully with the required planning and testing. Because of the amount of integration involved with the application that will allow it to properly function, it is very important to make enough time for testing.

- Because the product is supposed to run on multiple platforms, the product can be developed on a framework such as React that allows for the program to be complied by multiple compliers from different operating systems. This makes the product cheaper to code. The cost is estimated to be around $250,000-$750,000 to build.

- The project requires a team of 10-15 employees. The team will consist of a project manager (visionary), designers, program manager, developers, and quality assurance specialists.

1.7 System Requirement Specifications (SyRS)

1.7.1 Introduction

1.7.1.1 System purpose

The Sales Lead Locker system proposed, is a system that will communicate with multiple interfaces in order to create a seamless experience for the users. The system is designed to be tethered to multiple components of Sprint's resources. The resources allow the system to function as it acts as a channel that directs the most important information on to the user interface. This is to reduce the amount of time taken in order to find these resources manually through a different system and improves the accuracy of the presented quote sheet to the customer.

The current system consists of printing out a template of a quote sheet and filling in each portion by hand. If the user needed information about some sort of plan or service, then the user must search through Sprint's search engine to find it which would take time away from the customer. A quote sheet is given to a customer in order to provide them with a preview of what to expect on their bill after the changes that were made to the account. The issue with the current system is the lack of efficiency. The fact that it is written by hand means there

are risks of human error. Incorrect numbers, not having signatures and misplacing them are common occurrences. Proprietary information that goes unattended are a big confidentiality risk and can hurt the store during an audit. Employees must search for plans and services through the search engine which can take time to find the correct document due to the number of documents there are within the system. Sales Lead Locker is designed to be a one solution that makes it easier to create, approve and send/print a copy of the quote sheet to the customer.

1.7.1.2 System Scope

The Sales Lead Locker program envisions a multipurpose application that provides a structure for employees to have a more organized list of resources and can keep track of their quote sheets. SLL is designed to remove the error prone processes Sprint employees must do in order to properly serve Sprint's customer base. In order to do so, the system contains specific requirements to ensure its functionality. In order to provide information about specific Sprint plans and services, the system requires communication with the Oracle database that contains the information about existing plans. The system also needs to be able to access a customer's account in order to load or create a bill summary for the customer, so it also needs to be able to connect to that database as well. Because the system relies on access from an authorized sprint employee and requires for representatives to get approval of new quote sheets by a manager, the system must be able to authenticate and provide access to strictly Sprint employees. This means that the system must also gain access to the employee database. Integrating the system to be able to communicate with different systems Sprint has will allow for a successful product.

Sales Lead Locker in a successful state will provide quick access to information that is constantly being requested in order for Sprint employees to be able to serve their customers. The information being requested are usually tied into different components of Sprint's current system. The SLL bridges the gap enabling the user to construct quote sheets faster and more efficiently thanks to a more organized user interface for the user. The system does cover all resources an employee may use given certain circumstances. The system cannot access specific accounts such as Sprint Employee accounts, and business accounts. This is to ensure that employees are not able to access their own accounts. Business accounts can sometimes be massive accounts that contain different plans, devices and promotions that are provided by Sprint's business channel. The information that may be presented to the user may be incorrect or the system may crash due to the number of devices attached to a business account. Otherwise, the proposed system is designed to utilized for the majority

of transactions done in a store which is primarily individually liable customer accounts.

1.7.1.3 System Overview

1.7.1.3.1 System context

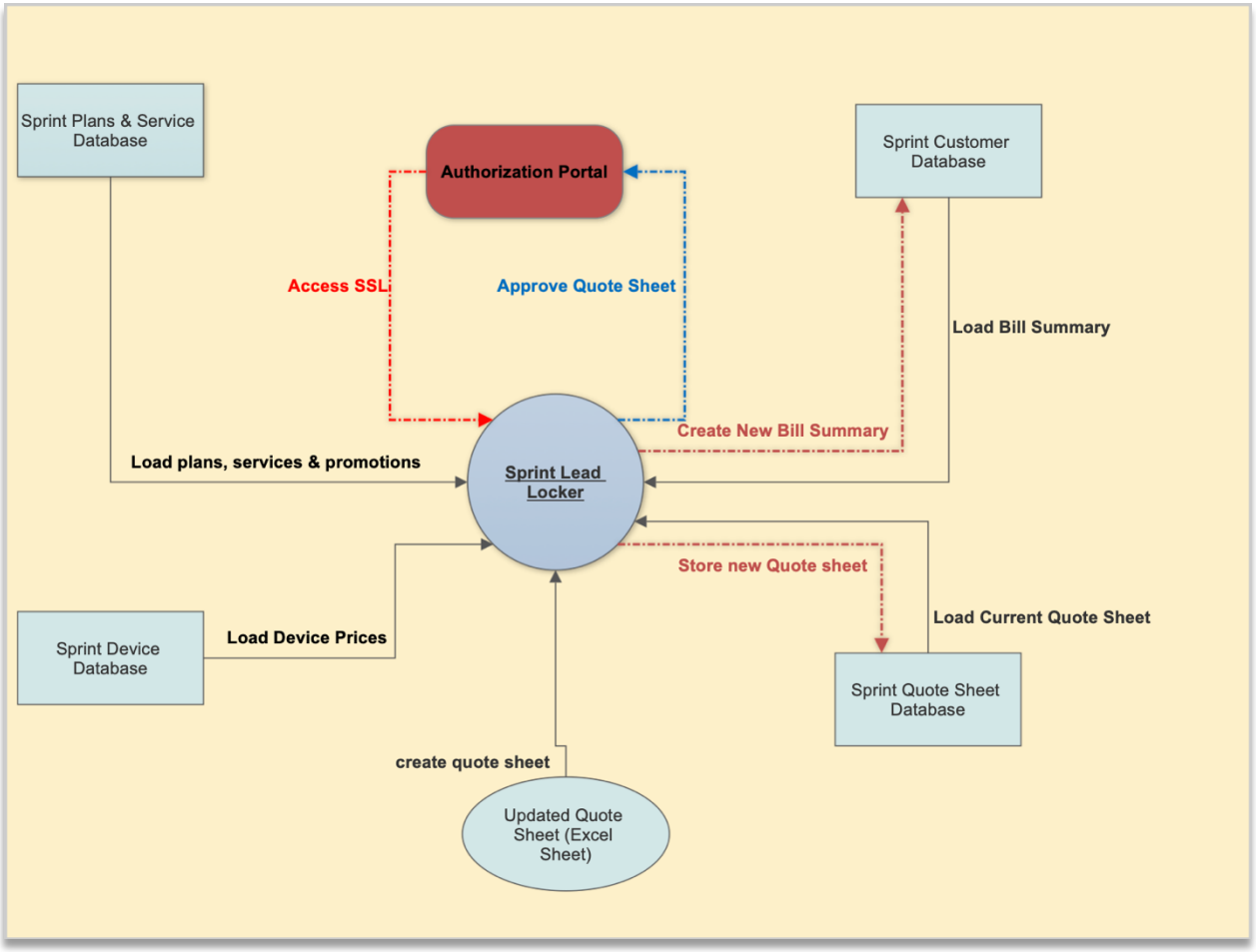


Figure 1 (Context Diagram)

1.7.1.3.2 System Functions

Capabilities

- Access Plan & Service Database in order for the user to view plan information and attach plan onto quote sheet.
- Access Customer Database in order to load current bill summary or to create one for a customer.
- Approve or disapprove quote sheets presented to a manager.
- Provides access only for Sprint employees.
- Store or load quote sheets from a proposed quote sheet database.
- Create quote sheets from the excel template Sprint already has.
- View price of devices and device promotions.

Conditions

Personal Devices
If the program is installed and used within a mobile device such as an employee's phone, the user is limited to what they can do.
Managers cannot approve quote sheets through their own personal device, but they can view quote sheets that are in their respective store.
Representatives cannot access customer's bill summaries through their personal devices, nor can they get a quote sheet approved.
The representative can save the quote sheet into a pending folder that can later be approved by management should they choose to proceed with the process.

MSA Tablets or Desktops
If the user is using the application through the store-owned tablets or desktops, the user has full access to the application without any restrictions regardless of the type of user.

Constraints

- The system must be compatible with Oracle database.
- The system will only use data that exists within the company's databases.
- The system must be available at all times.

1.7.1.3.3 User characteristics

Employee – can either be a manager or a representative.
Manager – A Sprint manager is someone who has the ability to approve or disapprove quote sheets. The manager also has the ability to check all quote sheets from each representative in their store. They do not have the ability to create quote sheets.
Representative – A Sprint representative is someone who has the ability to create quote sheets and requires the approval of a manager in order to store a quote sheet and present it to the customer to proceed within the sales transaction. Representatives do not have the ability to approve their own quote sheets or others.
Customer – A Sprint customer is one who pays Sprint for goods and services. This user can be anyone including Managers and Employees of Sprint if they use Sprint for cellular service. The customer only has the ability to view bill summaries or quote sheets that were approved by the manger and presented to them from a representative.

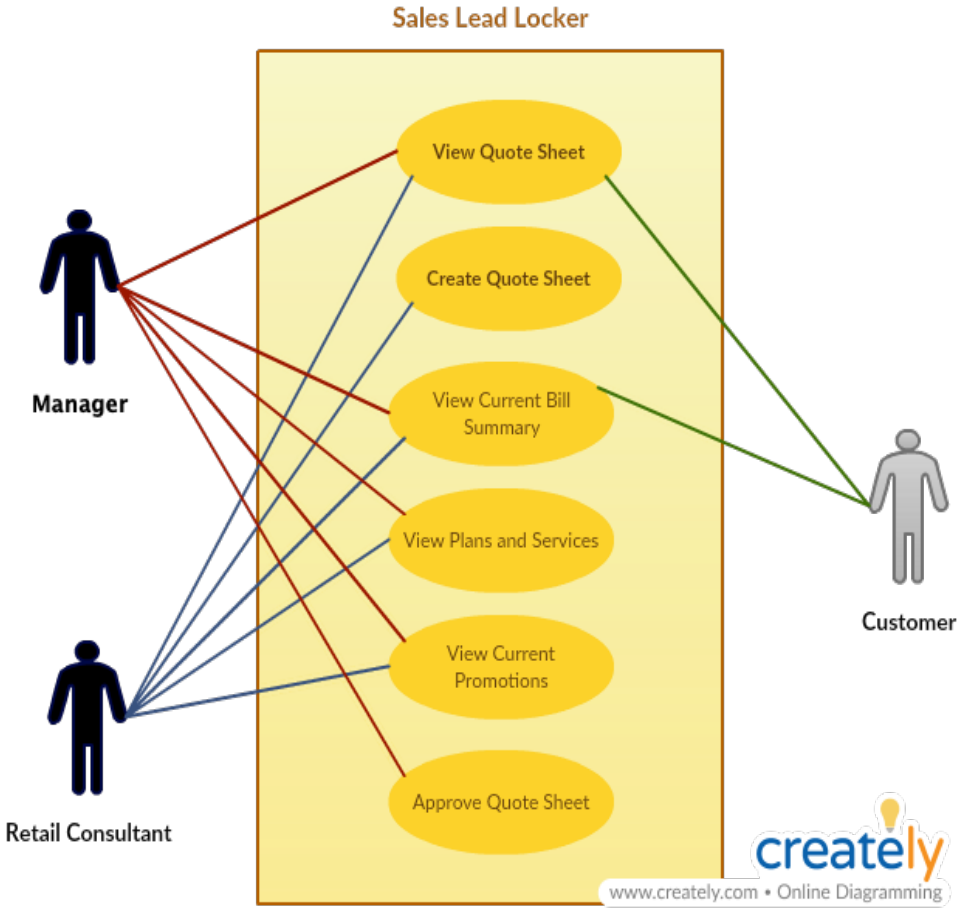


Figure 2 (Use case Diagram)

1.7.2. References

[1] “Corporate Policy,” Sprint, 2013. Accessed on Feb 1, 2019. [Online]. Available: https://www.sprint.com/companyinfo/scm/supplierdiversity/policy.shtml

[2] “Why Sprint” Sprint 2019. Accessed Feb 4, 2019. [Online]. Available: https://investors.sprint.com/why-sprint/default.aspx

1.7.3 System Requirements

1.7.3.1 Functional Requirements

1) The core system shall be tethered to the other components Sprint has in order to maximize portability.
2) The core system shall authorize users based on preexisting employee credentials.
3) The core system shall provide notification on when storing a quote sheet within the quote sheet database.
4) The core system shall identify any misuse from the user.
5) The core system shall utilize an existing web interface that is used to authorize users to use Sprint in-house applications.
6) The core system shall notify user if the system is unavailable.
7) The core system shall notify user if a manager approval is required.
8) The core system shall allow user to view customer's bill summary.
9) The core system shall allow user to store customer's bill summary.
10) The core system shall provide information in regard of what subsystems are available to the user.
11) The core system shall provide which systems are available based on geolocation.
12) The core system shall notify authorized users of an issue with any components of the system.
13) The core system shall contain system security that exists within other Sprint software systems.
14) The core system shall provide a log of quote sheets that have been deleted by an authorized user.

1.7.3.2 Usability Requirements

15) The core system shall contain functions that are available to users who have been granted access by Sprint's current role-based access control methods.
16) The core system shall require small amount of training in order for users to familiarize themselves with the user interface and the functions the system provides.
17) The core system shall provide functions to the user based on the user's role within Sprint.
18) The core system shall allow uses to provide functions to the user based on geolocation.

1.7.3.3 Performance Requirements

19) The core system's subsystem that consist of plans and promotions shall be updated twice a week in order to accommodate for continuous changes to existing promotions and new promotions being integrated.
20) The core system shall update the subsystem that contains functions used for quote sheets every 15 seconds in order provide the ability of printing or emailing the quote sheet.
21) The core system shall update the status of an approved or disapproved quote sheet in 5 seconds in order for the consultant to continue through sales process.
22) The core system shall provide status updates on the system every minute in order for system administrators to monitor and fix any issues that are apparent within the system.

1.7.3.4 System Interface

23) The core system shall interface with the other Sprint systems that will allow the core system to obtain information from Sprint's resources in an efficient manner.
24) The core system shall provide an interface with a layout similar to other in-house applications Sprint has.
25) The core system shall interface with users in regards of system failure or availability.
26) The core system shall utilize the same web interface that current Sprint retail applications use in order for employees to gain access to specific systems and functions.
27) The system shall interface with managers to report any misuse of quote sheets.
28) The system shall interface with the user when applying an invalid promotion.

1.7.3.5 System Operations

1.7.3.6 System modes and states

The system functions under a paradigm that depends solely on the location in which the user is trying to access the system and what device the user is trying to access the system from.

- **Outside of Sprint**: This mode consists of states in the system that identifies that the worker is not on the clock and is not within a Sprint location. In this situation the only way an employee can access the system is through their personal device. During this scenario, the system provided limited options of what the user can do based on the circumstances the user is in.

- **On-The-Clock**: This mode consists of states within the system that are geared towards users who access the system though the MSA tablets. During this scenario, the user must be clocked in, within their respective Sprint store and accessing the system using the MSA tablets. During this mode, the system provides functions all functions to the user that us based on their roles within Sprint.

- **Maintenance**: During this mode, the system is unavailable to all users while the system administrators perform maintenance and updates to ensure the optimization of the system.

1.7.3.7 Physical Characteristics

1.7.3.8 Environmental Conditions

1.7.3.9 System Security

The core system will be responsible for the distributing and manipulating data that is considered proprietary information under Sprint's policy. Because of this, it is imperative that the system security requirements are similar to Sprint's other in-house applications. Employees must log in through the web interfacing using their credentials. The system logs the login attempt and records the status of the login request. The web interface contains the ability to discern user roles by their credentials so the core system will not need to provide different ways to authenticate users based on their roles. The core system must be able to access different resources through a secure network in order to prevent security threats. Penetration testing is strongly advised as it is an effective way of preventing common types of malware or virus that attempt to breach the system.

1.7.3.10 Information Management

29) The core system shall be able to authenticate users through any point of access.
30) The system shall be able to store quote sheets into the proposed quote sheet database.
31) The system's quote sheet database shall be able to handle requests from at least 100,000 users per second.
32) The system shall be able to make calculations and update quote sheet pricing based on the combination of plans, add on services, and mobile devices.
33) The system shall be able to load and store bill summaries.
34) The system shall be able to process approving and disapproving quote sheets.

1.7.3.11 Policies and Regulations

35) The core system shall function under the same enterprise level standards as the rest of Sprint's system.
36) The system shall follow the rules and regulations in regards of data privacy.
37) The system shall only allow each user role to access only their allowed functions.

1.7.3.12 System life cycle sustainment

38) The system shall provide authorized users with statistics based on system utilization.
39) The system shall provide quote sheet statistics to authorized users.
40) The system shall provide authorized users with login attempt and entry data.
41) The system shall provide a report of data when the system experienced errors, failed, or was unavailable.

1.7.3.13 Packaging, handling, shipping and transportation

1.7.4. Verification

1.7.4.1 Inspection

The objective in terms of inspection is to check for quality of code. In order to make inspection timely, there must be a naming convention that is consistent throughout coding the program. There must be a standard documentation format that must be followed throughout the software life cycle.

1.7.4.2 Demonstration

The objective in terms of demonstration is to run the program and run all features within the program. This is to make sure that the functions run as intended to.

1.7.4.3 Test

Test will be undergone in select markets throughout the United States. The program will remain being a beta until all flaws and bugs are eliminated. Tests will be undergone for a period of 5 months.

1.7.4.4 Analysis

Complete a series of tests which provides an overall prediction of performance across all platforms. This will be accomplished by collecting the data and feedback from the beta testers in order to assess performance through the categories of connectivity, security, reliability, and safety.

Test Cases

Req No	Req Desc	Testcase ID	Status
2	Login to the web interface		
3	Load quote sheet		
3	Store quote sheet		
29	Load plans & services		
29	Load devices		

29	Load promotions		
6	Notify user when system is unavailable		
38	Notify user of any system error		
7	Notify user when a manager approval is required		
18	Notify if quote sheet is approved		
18	Notify if quote sheet is not approved		
4	Alert manager of misuse		
10	View list of available services based on geolocation		
8	View customer bill summary		
9	Store bill summary		

1.8 Software Requirements Specifications (SRS)

1.8.1 Introduction

1.8.1.1 Purpose:

The purpose of the software is to convert Sprint's current system from the traditional paper system that is in place with a digital system. There are multiple factors as to why a digital system is would be the most effective way. Retail consultants must create a quote sheet from their computer and print it out to be signed and approved by the customer, the consultant, and the manager on duty. This particular process takes a while because the consultant must look up plans, services, promotions and device prices in order to successfully construct a quote sheet. This process is called performing a rate plan analysis. The proposed system will provide a user interface that allows the client to navigate to different resources to extract information from. The digital system will also improve confidentiality and availability of quote sheets. Because quote sheets contain customer information, it is considered proprietary. Sprint's has a policy that makes sure that proprietary information is properly discarded or stored safely. The current system involves storing quote sheets within an office where anyone can access them. This causes issues when handling quote sheets because of the probability of losing the quote sheets. When they're lost, it puts Sprint at a disadvantage if a customer comes into the store and claims their bill is different from what it was promised to be. The proposed system allows Sprint to be more organized and secure when handling quote sheets.

1.8.1.2 Scope:

Name: Sales Lead Locker

The quote sheet system plans to fix issues in regards of losing quote sheets and having quote sheets store in an unsecure location. This is done by migrating the system onto a digital database that can be accessed via logging in using your employee credentials. Quote sheets will be dated and sorted by last name in order to make it easy to search for. Because of system being digital, it reduces the chances of losing a quote sheet.

The quote sheet system will be designed to be a web application that will be downloaded from Sprint's in-house App Store that resides in the company's MSA tablets. It will reduce transaction time when creating a quote sheet because of all the resources that is needed to create one, being close to each other.
The quote sheet system would completely change how quote sheets are used, but it will help keep quote sheets organized and prevent unauthorized users from accessing quote sheets.

1.8.1.3 Product Overview:

1.8.1.3.1 Product Perspective:

The proposed software's main features that are as described in sections 1.1 and 1.2. Its interactions involve retail consultants, store managers, assistant managers, sales supervisors and operational specialists. All employees mentioned above work together in one store in which they most cooperate in order to complete daily operations. During a customer transaction, most of the time management will be notified of the sale by being presented a quote sheet from their consultants. One of the managers on duty must review the quote sheet to make sure that all the numbers are accurate and then signs off and approves the quote sheet in order for the consultant to complete their transaction. Training will be required in order for employees and new hires to fully understand the extent of the software as it will be required to use during transactions. Understanding the software thoroughly will maximize optimization when integrating the system into Sprint's daily operations. This also educates employees to make sure that the software is being used as intended and not misuse the software. There will be a ClickIt ticket option within the software to leave any feedback or to troubleshoot a problem with the system.

The system itself does not alter or add additional tasks for the end users involved with the system. It replaces certain tasks that require quote sheets with a more efficient alternative that provides multiple benefits to not only the end user, but also Sprint.

1.8.1.3.2 Product Function:

- Consultant will be able to create and store quote sheets within their own profile
- Consultant will be able to view and edit quote sheets and submit it to a manager for approval
- Consultant and Manager will be able to look up device pricing and promotions
- Consultant and Manager will be able to look up plans & services
- Consultant will be able to access customer bill summary to help with rate plan analysis
- Consultant will be able to share quote sheet with the customer after all parties approve and sign off on the sheet
- Manager will be able to view quote sheets at store level
- Manager will be able to view disapproved quote sheets
- Manager will be able to approve or disapprove quote sheets

- Everyone will be able to submit a ClickIt ticket if the system is experiencing technical difficulties
- District Manager will be able to view quote sheets at a district level

1.8.1.3.3 User Characteristics:

There are three users: Consultant, Manager, and District Manager. District Managers have the least access as they only can view quote sheets at a district level meaning they can view all the quote sheets within their own district. Managers have the most access within the system as they are able to approve and disapprove quote sheets, view all quote sheets within the store done by each consultant. The consultant will use the system the most as they will be using it with each transaction that involves financial changes to the customer's bill. The consultant creates the quote sheet, stores it or views it, can share it with the customer via emailing it to their email or printing it out. The consultant sends the quote sheet to the manager in order for the manager to approve the quote sheet to move on with the transaction. If the manager disapproves the quote sheet, the consultant must discuss with the manager what is wrong with it in order to revise it to get it approved. The software will be installed on all MSA tablets.

1.8.1.3.4 Limitations:

A big constraint to the proposed software would be its dependency to wireless networks within the store. Within a retail store, it is preferred to connect all MSA tablets to a secure private network that is configured only to company devices within the store. The reason being the flux of devices that constantly connect and disconnect from the networks within the store. Customer enter the store to connect to the company Wi-Fi in order to use the internet. This slows down overall speed when network traffic is high. This can cause delays with the system when trying to gain access and perform tasks. Another limitation would be if the system is down. When there are network issues, it would prevent users from gaining access to quote sheets. Fortunately, blank quote sheets can be printed out to be used for manual quote sheets. These quote sheets can be created and stored at a later time once the system is back online.

1.8.1.4 Definitions:

MSA Tablet: A company owned Apple iPad that is used by Sprint's employees for numerous tasks such as trainings, accessing customer accounts, creating sales transaction, changing customer preferences and settings and activating devices on the customer's account, and accessing the company's employee portal.

ClickIt Ticket: A ticket that is issued from an end user to Sprint's IT department that troubleshoots issues that end users may be experiencing with the system. A ticket is handled within a week timeframe on average.

1.8.2 References

- Sprint Logo: https://www.greenbot.com/article/2466559/sprint-announces-60-unlimited-plan-to-woo-you-away-from-your-carrier.html
- Information about Sprint's interests: https://newsroom.sprint.com/about-us/?INTNAV=Footer%3AAboutUs
- Sprint's Corporate Policy: https://www.sprint.com/companyinfo/scm/supplierdiversity/policy.shtml
- Additional Information can be found in the following documents:
    - StRS
    - ConOps
    - OpsCon
    - SyRS

1.8.3 Specific Requirements

1.8.3.1External Interfaces:

1.8.3.1.1: The software shall be able to be accessed through MSA tablets via employee credentials.
1.8.3.1.2: The system shall be able to interface with the Customer Database in order to extract customer bill summary data within five seconds.
1.8.3.1.3: The system shall be able to interface with the Sprint's Pricing Database in order to extract pricing within two seconds.
1.8.3.1.4: The system shall be able to interface with the proposed Quote Sheet Database in order to store created quote sheets within ten seconds.
1.8.3.1.5: The system shall be able to interface with the proposed Quote Sheet Database in order to view quote sheets within five seconds.
1.8.3.1.6: The system shall be able to be accessed through Android OS Kitkat running devices.
1.8.3.1.7: The system shall be able to be accessed through iOS 12 running devices.

1.8.3.2Functions:

1.8.3.2.1: The system shall authenticate employees via web-based authentication tool Sprint has in-house.
1.8.3.2.2: When accessed through the MSA tablet, the system shall provide a list of available functions the user can use based on their roles within the company.
1.8.3.2.3: When accessed through the MSA Tablet, system's quote sheet function shall allow the consultant to open a blank quote sheet.
1.8.3.2.4: When the Consultant opens a blank quote sheet through the MSA Tablet, the system shall allow the Consultant to select tables within the document to be edited.
1.8.3.2.5: When the Consultant opens a blank quote sheet through the MSA Tablet, the system shall allow the user to add text fields within the document when a table within the document is selected to be edited.
1.8.3.2.6: The system shall allow the consultant to store the document within the Quote Sheet Database when using the system through the MSA tablet.
1.8.3.2.7: When the Consultant wants to get their quote sheet approved when using the MSA tablet, the system shall show a notification stating the request of approval from the Manager.
1.8.3.2.8: The system shall allow the Manager to enter their credentials to approve or disapprove a quote sheet when the system alerts the Manager.
1.8.3.2.9: The system shall allow the Consultant to send a copy of the quote sheet to the email that is stored within the customer's account if there is one.
1.8.3.2.10: The system shall allow the District Manager to view all quote sheets within the District Manager's district.

1.8.3.2.11: The system shall allow the Manager to view all quote sheets within the Manager's store.
1.8.3.2.12: The system shall allow the Consultant to view quote sheets that are stored within the database that was created by the Consultant.
1.8.3.2.13: The system shall alert the user when a function is unavailable.
1.8.3.2.14: The system shall alert the user when a function or operation has failed.

1.8.3.3 Usability Requirements:

1.8.3.3.1: The system shall enable access to certain functions of the system to the user based on their role within the company.
1.8.3.3.2: When accessed through a user's personal device, the system shall only make functions available according to the policy and the role the user has within the company.
1.8.3.3.3: The software shall be available during business hours.
1.8.3.3.4: The software shall allow users to submit a ClickIt ticket to troubleshoot and issue with the system.
1.8.3.3.5: The system shall be used by Consultants, Managers, and District Managers that have been trained to use it.
1.8.3.3.6: The system shall alert the user when a specific function is unavailable.

1.8.3.4 Performance Requirements:

1.8.3.4.1: 95% of all inputs and requests shall be processed in less than ten seconds.
1.8.3.4.2: The software shall always provide the correct pricing and total price when Consultant creates a quote sheet.
1.8.3.4.3: The system shall update itself once every 30 seconds to make sure that all files are up to date.
1.8.3.4.4: The system shall notify System Administrator when a function failed or is unavailable.
1.8.3.4.5: The system must be updated every time a new operating system update has been deployed for devices that the system is compatible with.
1.8.3.4.6: The system shall be able to process up to [TBD] requests from end-users within one second.

1.8.3.5Logical Database Requirements:

1.8.3.5.1: The database shall be distributed in order to all for less deadlocks and to handle the number of users that will be using the system.
1.8.3.5.2: The database shall store text entered into text fields within the tables of the quote sheets.
1.8.3.5.3: The database availability will depend on the user's role.
1.8.3.5.4: The database shall contain indexes to help sort through quote sheets by last name.

1.8.3.5.5: The database shall have views for when the Manager or Consultant wants to view the customer bill summary.

1.8.3.6 Design Constraints:

1.8.3.6.1: The system shall only run on MSA tablets and registered personal devices that abides by Sprint's policies.
1.8.3.6.2: The system shall only allow users who are able to authenticate via Sprint's current web authentication tool used in Sprint's other components.

1.8.3.7 Software System Attributes:

1.8.3.7.1: The software shall run fully on iOS 12 and newer, Android KitKat and newer, and Windows.
1.8.3.7.2: The software shall be installed only on registered devices.
1.8.3.7.3: The software shall only show functions to the user based on their role.
1.8.3.7.4: The software shall be able to download patches and updates issued by the system administrators.
1.8.3.7.5: The software shall encrypt customer information that is present within the quote sheet.
1.8.3.7.6: The software shall only handle requests from Consultants and Managers through their personal devices only if the users above are within the vicinity in which they work in.
1.8.3.7.7: When using MSA tablets, the system shall only work if the network that the device is connected to Is a secure network that is configured for device within the store.

1.8.3.8 Supporting Information:

- The proposed system is an opportunity for Sprint to make improvements in operations that involve using quote sheets. Utilizing the system reduces the chances of losing quote sheets, reduce the amount of time that is involved with building a quote sheet and doing a rate plan analysis. It reduces the amount of paper being printed within the entire retail section of the company. It allows the consultants to be more accurate when quoting customers and enables the Consultant to focus on creating a great experience for the customer without having to run back and forth when having to print and sign a quote sheet before scanning the signed sheet to make another copy for the customer.
- The software will be available to download through Sprint's in-house version of an Application Store that is installed on registered devices only.

1.8.4 Verification

- **Demonstration** is a requirement that the system can demonstrate without external test equipment.
- **Test** is a requirement that requires some external piece of test equipment (e.g. logic analyzer, and/or volt meter).
- **Analyze** is a requirement that is met indirectly through a logical conclusion or mathematical analysis of a result. For example, Algorithms for congestion: the designer may need to show that the requirement is met through the analysis of count and occupancy calculations in software or firmware.
- **Inspection** is verification through a visual comparison. For example, quality of welding may be done through a visual comparison against an in-house standard.

Requirement ID	Verification Method
3.1.1	Demonstration
3.1.2	Test / Analysis
3.1.3	Test / Analysis
3.1.4	Test / Analysis
3.1.5	Test / Analysis
3.1.6	Demonstration / Inspection
3.1.7	Demonstration / Inspection
3.2.1	Demonstration
3.2.2	Test / Inspection
3.2.3	Demonstration
3.2.4	Demonstration
3.2.5	Demonstration
3.2.6	Demonstration
3.2.7	Demonstration
3.2.8	Demonstration / Inspection
3.2.9	Test
3.2.10	Demonstration / Analyze
3.2.11	Demonstration / Analyze
3.2.12	Demonstration / Analyze
3.2.13	Demonstration / Test
3.2.14	Demonstration / Test

Requirement ID	Verification Method
3.3.1	Test
3.3.2	Test
3.3.3	Demonstration
3.3.4	Demonstration
3.3.5	Test
3.3.6	Demonstration
3.4.1	Test / Analyze
3.4.2	Demonstration
3.4.3	Analyze
3.4.4	Demonstration
3.4.5	Inspection
3.4.6	Test
3.5.1	Test
3.5.2	Demonstration
3.5.3	Demonstration
3.5.4	Test / Analyze
3.5.5	Demonstration
3.6.1	Demonstration
3.6.2	Demonstration
3.7.1	Demonstration
3.7.2	Demonstration / Test
3.7.3	Demonstration
3.7.4	Demonstration
3.7.5	Test
3.7.6	Test / Analyze
3.7.7	Analyze

Annex A

Operational Concept (OpsCon)

A.1 Scope

The purpose of this document is to provide a description of the proposed quote system, Sales Lead Locker. It illustrates the functionality and behaviors of the quote sheet system and its benefits to the company. It improves the quality of productivity, more efficient in terms of storing documentation, and less of a vulnerability in Sprint retail stores. It will also provide a description of who the end-users are and how they connect and operate Sales Lead Locker.

A.1.1 Identification:

Allen Telson
Version 1.0
Date 04/13/2019

A.1.2 Document Overview:

A.1.3 System Overview:

Sprint's current customer quoting system consists of a utilizing a customer quote sheet Excel template found on the company's employee portal online. The retail consultants create a summary of charges that is a part of their bill every month. The quote sheets are to be used whenever a customer is making any financial changes to their account. This could be from financing a new device, changing their plan, adding a new line of service, and/or adding value added services. Once the quote sheet is filled out, the customer representative presents the quote sheet to the customer which them must consent to the proposed quote sheet by signing in order to continue with the transaction. If the customer disagrees, then the representative must edit the quote sheet on their computer and print another one. Once the customer signs, the consultant must sign and a manager on duty must sign before receiving a device to sell. Once all three signatures are on the paper, the representative creates a copy to be stored into a filing cabinet where others are stored. The proposed system pushes the entire process to a digital platform. Customer, consultant and will sign and consent on the Sales Lead Locker application that is built into the MSA tablets. Once the transaction is complete the quote sheet will then be emailed to the customer.

A.2 Referenced Documents:

For any additional information not included, please refer to the StRS.

A.3 Current System

A.3.1 Background, Objectives, and scope:

The current system has been in place for two years. It was in place to reduce calls to customer service and to reduce bill shock. It is conveyed to hold employees accountable for their transactions and gives the employee to opportunity to provide high quality customer service. The proposed system is intended to improve upon it. The new quote sheet system is going to be used on the MSA tablets, located within an application called Sales Lead Locker. This application is designed to provide access to stored quote sheets and grant the ability to create quote sheets that, when signed by all parties including the consultant, the manager on duty and the customer, can be shared to the customer and stored within the quote sheet database. The purpose of the system is to improve efficiency and reduce the potential of losing data due to document mismanagement.

A.3.2 Operational Policies and Constraints:

- Time is an important constraint because of the retail setting. The faster transactions are complete, the more transactions that can be done. What Sprint is looking to do is increase speed and efficiency when creating quote sheets for the client.
- One constraint would be the dependency on an electronic device. If something were to happen to the computer system or network, employees would have a hard time creating quote sheets and making sales.
- Trainings are a big constraint. Sprint often issue trainings for certain new features or to improve certain areas common employees struggle with. It is difficult to make sure all consultants have done the training and sometimes it could take up weeks.

A.3.3 Description of Current System:

Sprint's current system in place in regards to producing, storing, searching, and accessing quote sheets uses a traditional paper system that involves using a computer to generate a quote sheet which contains information about the customer and a proposed summary of the customer's monthly reoccurring charges after any financial changes that impact the customer's bill. The quote sheet is filled out by the represented and presented to the customer. If the customer agrees with the pricing involved in the quote sheet, then the representative prints the quote sheet, sign it along with the manager and the customer and print a copy to store within a filing cabinet. If there is an issue with the customer's bill that is involved with a transaction done in the store, the manager or the representative uses the quote sheet as a reference when resolving the customer escalation. This process has been integrated into Sprint's sales process for the past two years.

A.3.4 Mode of Operation for the Current System:

- All employees can access quote sheets via the filing cabinet where they're stored.
- Employees can create mock quote sheets to provide different deals. Whichever one the customer decides on is the one that is kept, signed, and stored.
- Discarding quote sheets involves placing them inside a shredder to get rid of proprietary information.
- Employees can access the quote sheets during business hours.

A.4 User Classes and Personnel

A.4.1 Organizational structure:

There is no real organizational structure besides organizing the quote sheets according to date. Consultants, managers and above all have equal access to the quote sheets. It is difficult for District Managers that don't work in retail stores to access a quote sheet from a specific store because it lies physically in the store. That means if there is an escalation that is presented all the way up to the district manager, then the district manager must contact the store in order to have one emailed to him. Otherwise, all employees within a store have access to all quote sheets done within the store.

A.4.2 Profile of User Classes:

Currently there would be classes for consultants, managers, and other Sprint employees that would need to access the quote sheet through contacting a store representative.

A.4.3 Interactions Among User Classes:

Most, if not all interactions among user classes are done verbally. Announcements are sent out by GroupMe. This is to ensure all employees in the store will receive the announcement.

A.4.4 Other Personnel:

Other personnel could be employees that are of a higher rank than a store manager or district manager. Otherwise, no other personnel or stakeholder is utilizing the current system.

A.4.5 Support Environment:

Currently the system is issued via paper that is filled out on a computer or by hand. Managers, consultants, and customers are required to sign the quote sheet in order to complete the quote sheet. If there is an error or typo within the quote sheet, the quote sheet is revised on the computer and printed out again for signatures.

A.6 Concepts for Proposed System

A.6.1 Background, Objectives, and Scope:

A.6.2 Operational Policies and Constraints:

In regards of operational policies, the most crucial policy would be having to train employees on how to use the system. Due to the different types of users there are, it is important to cover all aspects of the functionality of the product and how the users will use the program depending on their roles. This training can be done through the company's methods of training their staff. Aside from that, convincing the stakeholders that is beneficial would be a constraint depending on the stakeholder's position and the direction of the company. One last constraint would be if Sprint has the proper resources to develop the product and deploy it as an in-house product or would they need to outsource it. Considering that Sprint is a company that embraces the latest technology it shouldn't be much of a constraint, but Sprint would ultimately be responsible with how user-friendly the application is.

A.6.3 Description of the Proposed System

The program is intended to be a web-based application that can be utilized both by mobile devices and also desktops. This is to ensure that the application can be accessed by any type of employee roll within a retail store. Employees will enter their employee credentials in order to access the program. Once authorization is given, the retail consultant will be able to perform multiple functions such as constructing a new quote sheet, find and view ones that are stored within their database with the ability to share by sending it to the customer via the email stored within their account. Managers will be able to access their entire store's database of quote sheets. They will also have the ability to approve quote sheets in order for employees to be able to proceed through the sales process. Customers will receive a do-not-reply email from Sprint containing their quote sheet and their receipt, but they will also have the option of viewing any quote sheets that have been established for them right through their current Sprint application. Figure 1 below provides an overview of how the system is constructed and the actions that are performed within its components.

A.6.4 Modes of Operation:

The proposed system has multiple modes as it depends on who the users are, where the system is being accessed from and whether or not an employee is clocked in. For customers, the modes involved do not affect their ability to utilize the system as it plays a minimal role in the system. The first mode is where users are able to use all of the system's functionalities. This is during business hours while an employee is clocked in and is working. Full functionality is only presented through the company's iPads or their desktops. The user will be able to do everything they can do based on their roles. If an

employee is using their mobile device to access the system, they must be within the vicinity of a Sprint location to be able to create quote sheets for customers and look up customers quote sheets. This would be considered the second mode. The employee is limited to only constructing a quote sheet but will not have the ability to save it as a manager cannot approve the quote sheet unless the employee is clocked in and is at their work location. Managers will have the ability to search quote sheets within their store, but they are not able to approve quote sheets without being clocked in or in the Sprint location.

A.6.5 User classes and Other involved Personnel

Classes would have to be established for the hierarchy of the staff within a Sprint retail location. Each will have certain permissions and constraints. Customers will have a class that is currently based on a different system that is being utilized to allow customers to be able to view their bill, plans and services through an application. Since the system itself will be pulling from other resources Sprint provides, there must be classes that are established to provide a safe connection and stable connection to the all.

A.6.5.1 Organizational Structure

This system is intended to be used by retail personnel within Sprint's corporation as they handle new and existing customers. There will be three different types of accounts. The first type of account is the managerial account. This account is tailored to employees in keyholder positions such as Sales Supervisors, Assistant Managers, and Store Managers. Managers can only access the system through their desktops or laptops as it would reduce the likelihood of an employee without authorization to access the system through manager credentials through the Sprint iPads. The second account type would be the retail consultant account which involves the ability to access the system through two different access methods, desktop or mobile. The employee will have the ability to access the system through the desktop and company iPad and will have full functionality. If the user is using their own personal device, they are only able to create quote sheets without having the ability to save them but will have the ability to look up customer quote sheets so long as they are within their work location and is currently clocked in. The final account is for the customer. This account is directly tied to their MySprint credentials otherwise they may need to create a new account and it will also work as their MySprint login. Customers will be able to view the quote sheets created for them within their online account.

A.6.5.2 Profiles of User Classes

There are three profiles of users. There is a managerial profile which was briefly explained above. It involved Sales Supervisors, Assistant Managers, and Store Managers. The second profile involved retail consultants part-time and full,

along with lead retail consultants and keyholders. The last is the customer profile which involves stakeholders, customers, and employees who have Sprint.

A.6.5.3 Interactions Among User Classes

Primary actions within the system will mainly involve a retail consultant and a manager. When a retail consultant wants an approval for their quote sheet, they will notify the manager and the manager must review and sign off on the quote sheet to approve it so the consultant can continue with the sales process. Retail consultants will be creating quote sheets, looking up plans and promotions in order to figure out how Sprint can provide the most for the customers. Customers can review quote sheets and their bill summary whenever they please without the need of a retail consultant or a manager and regardless of location and setting. Customers will be signing off on the proposed quote sheet that has been presented by the consultant.

A.6.5.4 Other Involved Personnel

Other personnel that may be involved are employees that in the role of a customer. Employees cannot create quote sheets for themselves, but they can still view their quote sheet within their Sprint account.

A.6.6 Support Environment

New hires go through Sprint retail training for about three months. During that time, the employee is taught operational roles and learn policies that give them a guideline on how what to follow when working with Sprint. During that time, the employee can go through proper training on how to do plan analysis and how to utilize the Sales Lead Locker where the employee will be managing their quote sheets. If it is a new manager, then that manager will be going through a separate training that will involve how to manage quote sheets for the entire store.

A.7 Operational Scenarios:

- Manager Scenario: Currently there is no backups for quote sheets should one go missing. This can cause an issue when dealing with customer escalations that are based on possibly misquoting a customer. With a digital system, it would eliminate the possibility of misplacing a quote sheet.

- Representative Scenario: If the printer is out of order within the retail store, this would halt the production of quote sheets which would lead to undesired events such as possibly misquoting customers or representatives attempting to avoid properly quoting customers due to the printer being down.
- Customer Service Scenario: In this scenario, if a customer calls to inquire about their bill, it is hard for the customer service representative to figure out what the customer was sold on when visiting the sprint store. Instead they must rely on their own knowledge of what may have happened which makes retail representatives look bad because the customer may receive invalid information about their bill and the customer is required to come back to the store unsatisfied. One way the company tries to fix that issue is by encouraging their employees to take ownership of their transactions but unfortunately not all employees do so, and not all customers are able to comprehend some of the sophistication that is involved when constructing a quote sheet. This is where the quote sheet can come into play. If customer service representatives are able to access customer bill summaries that provide them with an overview of what their bill is projected to be every month that includes any special deals that may not be obvious to the customer service representative, it would reduce the likelihood of causing negative transactions. The customer service representative has more opportunities to aid a customer instead of causing a dilemma that may be caused by their lack of understanding what the store representative did to help the customer out.

A.8.1 Operational Impacts:

The primary change will be how quote sheets are utilized within a retail setting. Employees will now view their quote sheets through the same place where they complete transactions via the MSA tablet. Managers will be able to view quote sheets for their store, and district managers will be able to view quote sheets at a store level. Employees will be able to share a quote sheet created for the customer by emailing the customer the quote sheet with the email saved in their account.

Annex B

Concept of Operations (ConOps)

B.1. Purpose

The premise of this document is to provide information in regard to the proposed quote sheet system through the perspective of the user. In addition, this document will also illustrate system components and functions to the stakeholders. The objective is to demonstrate that the proposed system incorporates all the operational requirements for the user and contains enough support to ensure that the system functions properly and can be updated to make any adjustments.

B.2. Scope

Sprint's current system in place in regards to producing, storing, searching, and accessing quote sheets uses a traditional paper system that involves using a computer to generate a quote sheet which contains information about the customer and a proposed summary of the customer's monthly reoccurring charges after any financial changes that impact the customer's bill. The quote sheet is filled out by the represented and presented to the customer. If the customer agrees with the pricing involved in the quote sheet, then the representative prints the quote sheet, sign it along with the manager and the customer and print a copy to store within a filing cabinet. If there is an issue with the customer's bill that is involved with a transaction done in the store, the manager or the representative uses the quote sheet as a reference when resolving the customer escalation. This process has been integrated into Sprint's sales process for the past two years. The proposed system changes the operational processes of using a quote sheet through converting the process into a digital system instead of a paper system.

The outcome would be to reduce how much time is spent during the processes involved with quote sheets to allow a more time efficient sales process that isn't hindered by human error involved with quote sheets. This will also help with confidentiality of proprietary information in

retail stores which is a priority Sprint values that is already integrated in other operations in Sprint. The reducing of time being spent along with the effectiveness of quote sheets will increase.

B.2.1 Proposed System

The proposed system is designed to improve the relationship between Sprint and its customer base. People are all too familiar with bill shock and it often times causes a rift in the established relationship between a company and its customers. Having a medium that can be provided to the customer as a piece of confirmation and reassurance of their current rates creates a trust bond that can be fragile in the cellphone industry. The current system in place involves utilizing paper copies of quote sheets. The employee enters information that include the customer's devices, plan, accessories (if any), Sprint Complete and any other value-added services, and if the customer receives any discounts on their bill. Most of the time the retail consultants create quote sheets using pen, paper and a calculator to provide an estimate of what to expect on their bill. Because of human error, there is the possibility of misquoting the customer thus creating bill shock. It is also inefficient due to the storing methods involved. Once the employee has their quote sheet approved, the make a copy and sign both, the manager signs both, and so does the customer. One copy goes to the customer, the other copy goes to in a filing cabinet and is stored for a year. The process is inefficient as it creates stops during the transaction. With the proposed system, efficiency, availability and confidentiality are established and reinforced.

B.2.2 Proposed System Scenarios

• Manager Scenario: Currently there is no back ups for quote sheets should one go missing. This can cause an issue when dealing with customer escalations that are based on possibly misquoting a customer. With a digital system, it would eliminate the possibility of misplacing a quote sheet.

- Representative Scenario: If the printer is out of order within the retail store, this would halt the production of quote sheets which would lead to undesired events such as possibly misquoting customers or representatives attempting to avoid properly quoting customers due to the printer being down.
- Customer Service Scenario: In this scenario, if a customer calls to inquire about their bill, it is hard for the customer service representative to figure out what the customer was sold on when visiting the sprint store. Instead they must rely on their own knowledge of what may have happened which makes retail representatives look bad because the customer may receive invalid information about their bill and the customer is required to come back to the store unsatisfied. One way the company tries to fix that issue is by encouraging their employees to take ownership of their transactions but unfortunately not all employees do so, and not all customers are able to comprehend some of the sophistication that is involved when constructing a quote sheet. This is where the quote sheet can come into play. If customer service representatives are able to access customer bill summaries that provide them with an overview of what their bill is projected to be every month that includes any special deals that may not be obvious to

the customer service representative, it would reduce the likelihood of causing negative transactions. The customer service representative has more opportunities to aid a customer instead of causing a dilemma that may be caused by their lack of understanding what the store representative did to help the customer out.

B.3. Strategic Plan

Sprint's vision is to be an industry leader in utilizing the latest technology to provide service to people throughout the world. The company focuses on providing great customer service and strive to provide goods and services that are tailored to each and every one of its customers and that starts at their front lines, their retail locations. Customers who look to switch to Sprint do so by three different methods: by phone, online, or in person visiting a Sprint retail location. Visiting a Sprint store is still the most popular option when activating new service or upgrading current service. All a customer will typically know about Sprint is

through the experience they've had during their visit. During that time, it is crucial to be consistent as it generates credibility. Misquoting customers can cause a rift in the interaction or the relationship Sprint has with its customers. The Sales Lead Locker provides the necessary tools that will improve the quality of customer service Sprint can provide to a customer which in return generates more revenue for Sprint with customers being committed to Sprint and customers being more likely to refer friends and family to join Sprint. In order to ensure receiving high-quality results when testing the system, Sprint will test the service out in select markets and branch out once all the testing and improvements have been made.

B.4. Effectiveness

The proposed system is intended to improve the efficiency and accuracy of how Sprint's employees utilize quote sheets. As long as the end users use the system as intended, Sprint will surely improve the satisfactions of its customers. By testing this out in select markets, it saves the company money when revising and testing versus deploying the system nationally.

B.5. Overall Operation

B.5.1 Context

When it comes to corporate-owned Sprint retail stores, Sprint employs different people to perform tasks with the intentions of generating revenue for Sprint. The main method is through providing different types of goods and services to Sprint's clients. The main objective for the employees is to provide services to customers through forms of deals that keep customers onto Sprint and allow the company to charge customers monthly reoccurring charges. Sprint has different types of employees: Retail Consultants, Sales Supervisors, Assistant Store Managers

and Store Managers. These employees work within a location and perform jobs for Sprint that is dependent on their roles. Retail consultants sell devices to customers and set up service on

their devices. Management is present to make sure that daily operations are completed, goals are met and exceeded, inventory management, customer service and managing all of retail operations. Together the employees create a working environment that is healthy, positive and inviting in order to drive sales.

B.5.2 Systems

Sprint has many systems. First, they use an online system to schedule their employees, approve time off and manage budgeted hours. Employees use that tool to also clock in for work, clock out for lunch, clock back in from lunch and clock out of work. They use a paper style system to quote customers and store them in a secured filing cabinet. Sprint has an online system that is used to process customer transactions. Customer accounts are accessed via a Sprint MSA tablet or a company desktop. Through those types of hardware, an employee can make rate-plan-analysis, create tickets for service and repair, move phone numbers from one account to another, port a number onto an account, suspend service and collect payments. The store also contains a kiosk that is used as an express lane for customers who are just looking to pay their bill and do not want to wait on a consultant to be free. Last, the store also has an inventory system that is primarily geared towards security. Sprint sells devices that easily exceed $500 ticketed devices, so it is important that Sprint protect their assets.

B.5.3 Organizational Unit

Sprint follows the traditional company hierarchy which consists of a CEO, CIO, CFO, vice president, vice president of operations, regional managers, district managers, store managers, and so on and so forth. Sprint also has third party stores that people privately own and licensed to sell Sprint's products and services. Sprint is also sold through third party stores such as Best Buy and Costco.

B.6. Governance

B.6.1 Governance Policies

Sprint's policies are formed around three things: securing their assets, customer confidentiality, and availability. The store contains a high-level security system that is in place in case of a burglary. The system contains features that enable employees to notify the police in case of a robbery during store hours. The safes that contain money or devices are all state-of-the-art and comes with a time delay feature that discourages ill-intent people from committing crimes such as robberies. Sprint employees follow strict dress code that helps employees identify each other as employees. Only certain people are able to gain access to inventory, or to make any

changes to a customer's account with special permissions within a manager tool. Sprint relies on a role-based access control to dictate who can do what and who can access what. These policies are in place in order to provide structure within the Sprint store to cover any operational scenarios. Sprint strives to be a leader in technology, so they adapt their policies and operations to new technologies that appear to be beneficial to the business. The policies in place allows for Sprint retail stores to function at a highly efficient rate.

B.6.2 Organization

Sprint's policies depend on different types of stores. Corporate stores and third-party stores may have different policies depending on who is running the third-party stores. Typically, there isn't much derivation from the main policies regardless of location and demographics. The only thing that will change policies within a select store is if there is a history of undesired events that takes place within a store. The most common type of undesired event is internal shrinkage and fraud. This happens when employees are disgruntled or unsatisfied with their current position. Sprint has an entire online resource that contains some of their company policies. They can be found within this link: https://newsroom.sprint.com/csr/.

B.6.3 Investment Plan

Sprint is diligently working to make good use of up and coming technologies. Sprint has a team called the curiosity team. Sprint's curiosity team works on changing Sprint's business operations using new technologies such as AWS to make Sprint a more dynamic and efficient company. The curiosity team also helps with creating new Sprint products such as the Sprint Drive. The Sprint Drive is a product that contains IoT functionality. It is a device that plugs into a car's ODB reader and connects to your phone to provide features. It is able to provide real time vehicle tracking and diagnosis, hotspot capabilities, and has 24/7 road side assistance that is issued by AAA. Products like that drive innovation with the intentions of making the world a better and easier place to live. Sprint is also investing in 5G networks. Investing into technology allows Sprint to continue to be ahead of the game when it comes to offering their customers state-of-the-art products and service.

B.6.4 Information Asset Management

Sprint has an intricate method in which they manage their assets. Because the employees' jobs are to sell Sprint products and services, Sprint uses metrics to keep track of who sells what, how often, how many and to which type of accounts and services. Sprint utilizes MyMetrics which is a company that manages metrics for multiple types of companies that require statistics to help drive their business. Knowing what is sold and how frequent helps with properly supplying stores with products in an efficient manner. Metrics keeping up with tracking demand and the inventory management system helping with stocking the store, these components help create a very valuable system for Sprint.

B.6.5 Security

Sprint's security utilizes role-based access control methods. Keyholders are responsible for opening and closing the store. Their credentials have the access to override and/or authorize certain tasks that retail consultants are trying to do on their computer. They are the only ones to be able to access the backroom where the device safes are, are the only ones who have access to the money safe, and they have the ability to arm or disarm the alarm system in the store. Keyholders consist of store and assistant managers, supervisors and sales leads.

Management have more access than any other type of keyholders. They have authorization to use manager tools, inventory tools, issue credits to a customer's account, and make the store schedule. Retail consultants have access to their profiles through the computer which they must sign into using their credentials. Sprint has detail policies on how they manage customer privacy which also includes customer devices. It is required to wipe or erase user data from a device when it is returned to Sprint. This is to reduce the likelihood of user data falling into the wrong hands. Sprint has policies and guidelines during a burglary. It gives their employees instructions on how to respond to hostile actions within the vicinity. Security is in place to not only protect their assets but also their employees from cyber and physical attacks.

B.6.6 Business Continuity Plan

Sprint's policies can be found on all within this document and through their website. Sprint's ambitious about promoting and offering new and innovative products to the world. They strive to be a leader in tech and made a commitment to provide the community with high quality products and services. They have begun to invest into more recent technology such as AWS and it will begin to reshape how the business operates.

B.6.7 Compliance

Customers are required to sign contracts or leases in order to finance a device or accessories. The paperwork is properly documented within a database and a copy is made and emailed to the customer. Employees must be compliant when it comes to trainings. They must do the trainings and mark that they are compliant. There is also a code of conduct compliance that must be completed every year. Whenever the commission structure changes, you must consent and comply to the changes or else they will not be paid. Sprint employees also must be compliant with their time stamps. There is a lot to be compliant with Sprint but it is to ensure that the employees all understand how to do their job and how to operate as a Sprint employee.