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# Marketing Website and Extranet Site

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# **MARKETING WEBSITE AND EXTRANET SITE**

A graduate project submitted to Dakota State University in partial fulfillment of the requirements for the degree of

Master of Science

in

Information Systems

July, 2014

By

John Suarez

Project Committee:

William Figg PhD (Project Supervisor)

Jun Liu PhD

Ahmad Al-Omari PhD



## PROJECT APPROVAL FORM

We certify that we have read this project and that, in our opinion, it is satisfactory in scope and quality as a project for the degree of Master of Science in Information Systems.

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Master's Project Title: Yar Consulting Marketing Website and Extranet

Faculty supervisor: William Figg PhD Date: \_\_\_\_\_

Committee member: Jun Liu PhD Date: \_\_\_\_\_

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## ACKNOWLEDGMENT

This project, like all projects, is the culmination of contributions from a variety of individuals who availed themselves as resources and contributed input in the form of teaching, advice, directions, disagreement, challenge, and partnership.

First, and foremost, I thank my wife Darlene Suarez MSIS, PMP, MCPD, ISA, - life partner, business partner, and vocational partner, for her enduring, faithful, loving, and at times, challenging, support and partnership.

Although this project is bigger than just the component for Ace Hardware Corporation, many individual Ace business owners and corporate staff provided the open doors to finding new opportunities and better solutions for their membership of over 4,400 coop members. In specific, a number of the leaders of the Greater Houston Ace Retailer Group have lent their support and input to this field generated and focused project.

Their partnership and friendship have been key drivers of this project. Their honest input, openness to share their business challenges, and open door attitude have facilitated the process and helped to encourage the participation of others.

There have been countless individuals who are members of the Houston SharePoint Users Group, Toshiba International, Microsoft's SharePoint Team, Improving Enterprises, Entrance Software, Sogeti, and fellow IS professionals at Microsoft's World SharePoint Conference, Houston TechFest, and other venues who have been willing to talk, discuss, and argue benefits, challenges, and ideas. To all, thank you for your encouragement, support, and input.

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## ABSTRACT

This is a hybrid project. As a new Information Systems consultancy the need for a website to market to potential clients was evident. The decision to add an extranet site was made after specific needs for Ace Hardware were made evident to Yar's founders. Ace Hardware Corporation is a cooperative with over 4,400 members in over 100 nations worldwide. Ace corporate rolled out a B2B pilot program in the fall of 2013 to help Ace independently owned retail stores learn how to sell to other businesses. One of YAR's founders is currently working with Ace corporate as a program consultant for the B2B group along with four other consultants nationally. The stores have focused on the homeowner and Do It Yourself (DIY) customers for almost 90 years and see the potential in Business to Business sales. However, the stores are not prepared and need training, tools, processes, alignment, and counsel to be successful.

Ace corporate provides much of the IS infrastructure to the stores through Epicor's ERP suite and other programs. In order for the stores to be successful they need to become competent in account management in sales and customer relationship management and a key tool for that is a Customer Relationship Management (CRM) tool or package. Salesforce and Microsoft's Dynamics CRM are two of the most popular today. Epicor does offer CRM capabilities in their ERP suite but that is not available to the retail stores and would be extremely cost prohibitive if it was. Before the stores commit to larger and more robust CRM offerings they need a basic tool to help them learn and get the process moving.

The extranet was initiated to provide a simple, cloud based CRM tool that the stores could utilize as they begin to build the B2B segment in their stores. Because it is cloud based the stores can all participate with the same tool instead of incurring the cost of having to

individually find and purchase off the shelf CRM software or have it custom built by a local developer. They will have to purchase cloud storage, administration fees, and maintenance costs but all those will be a fraction of buying Epicor's offering and much less than off the shelf or local developer options.

The stores from the Houston retailer group that are participating are encouraged at the prospect of finally having a CRM solution even if it is in trial stages and are beginning to engage their B2B program more assertively. As the extranet is accepted integration with Epicor will have to occur at a later date in order to feed the CRM tool with the stores POS data currently being gathered so as to prevent double entry labor.

## DECLARATION

I hereby certify that this project constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions or writings of another.

I declare that the project describes original work that has not previously been presented for the award of any other degree of any institution.

Signed,

---

John Suarez



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# CHAPTER 1

## INTRODUCTION

### **Background of the Problem**

YAR Consulting is a new “boutique” consultancy in the Houston, TX metroplex. The external website is for marketing purposes to help stimulate awareness of the businesses offerings. The extranet site is in response to existing clients and partners who wanted a more collaborative experience with YAR. It also is in response to a need one of YAR’s founders saw at Ace Hardware where he is currently working as a Program Consultant on a new pilot program to help Ace’s independently owned retail stores be able to sell in a business to business environment.

Ace has over 4,400 independently owned retail stores that are members of the Ace Hardware coop. The B2B pilot program is live in 4 districts but will be offered nationally. A main focus on B2B is the ability to track sales and customer relationship management information and use it to grow the business. The B2B program team is looking for tools and solutions to help the store succeed in B2B sales.

### **Statement of the problem**

Ace corporate uses Epicor’s ERP suite for much of their interactions with coop member stores. Although Epicor has an enterprise level CRM package it is not offered to the stores and is cost prohibitive. The stores do not currently have any tools to assist them in managing and growing their sales and in fact have not yet built up the discipline to follow a

B2B sales program so whatever tools can be issued to them have to be simple enough for them to learn the basics of Customer Relationship Management and be simple enough to encourage the use of the tool.

### **Objectives of the project**

There are three objectives for this project. The development and implementation of a public facing marketing website, the development of a simple CRM tool on an extranet for a select pilot group of Ace retailers currently participating in the Ace B2B pilot program, and a collaboration extranet for the same group of Ace retailers to use as a group site for the Greater Houston Ace Retailer Group.

The main focus to be discussed here will be the extranet for the Ace retailers in Houston currently participating in the Ace B2B pilot. The extranet serves both the individual stores and the Greater Houston Ace Retailer Group.

At the group level the goals are to provide a simple to use, user friendly collaboration and shared resources management tool that:

- Provides a group calendar that tracks events that the entire group needs to be aware of
- Provides a task view for tasks pertinent to the group
- Provide a shared resources library from YAR
- Provide a place for members to share documents with each other
- A library of shared vendors where each store can share non-Ace vendors they use
- A listing of all the participating stores

- A listing of the contact information for all participating stores
- A discussion board for the stores to communicate and share

At the store level the goals are to provide a simple to use, user friendly sales and CRM tool in addition to a reporting tool that:

- Provides a calendar list for the store to schedule sales and CRM related events
- Provide a task list for the store B2B team to enter sales and CRM related tasks
- An activities log list that tracks sales activities
- An opportunities list that tracks opportunities and their status
- An accounts list that tracks customer accounts and allows updates
- An account details list
- An account contacts list
- A competitors list that allows them to identify and rank their main competitors
- A sales reporting list
- A sales pipeline dashboard
- A sales log list
- A library of Ace reports that will be uploaded for their viewing on a schedule

#### **Product-related deliverables**

- System Documentation
  - Site Architecture Details
  - Website Diagrams – Marketing Website and Extranet Site
- Site Files Online - Marketing Website and Extranet Site
- Extranet User Manual

## CHAPTER 2

### LITERATURE REVIEW

The decision to use SharePoint for both the public facing Internet site and the extranet was made after months of research using a number of methods. Company founders are members of the Houston SharePoint User Group where they have engaged members using SharePoint at a number of companies such as ExxonMobil, United Airlines and others, both founders attended Microsoft's week long Global SharePoint Conference in Las Vegas in March of 2014 attending key sessions and talking with a number of consultants and Microsoft staff, they reviewed the capabilities of SharePoint being used at Toshiba International in Houston where one of the founders is a Sr. SharePoint Developer and Analyst, they have interacted with Microsoft's SharePoint team in Houston, Las Vegas and Redmond, both have talked with consultants and developers from key consulting firms in the Houston area such as Improving Enterprises, Entrance Software, Sogeti and others, and both have done research on the Internet on what other companies were using and how SharePoint was able to compete. This literature review is a combination of all the information they have gathered over months of researching from a variety of sources, some literature but also meetings, seminars, interviews, workshops, and more.

To understand the choice more fully here is some explanation of the project background.

These project sites are a hybrid born out of necessity. As a new consultancy the need for a public facing Internet marketing site was always in the plan. The need for an additional



extranet component became apparent as the founders realized that many of the firm's new clients were interested in having more interaction and collaboration with YAR Consulting's team and with each other. Additionally an opportunity came open with a portion of Ace Hardware Corporation, to differentiate the new consultancy by providing some of Ace's coop members with a unique cloud based extranet of services and tools for a select pilot group of their over 4,400 coop members.

YAR's leadership knew that the extranet would have to have customized features to meet the unique needs of Ace's independently owned retail stores and store groups while maintaining a high degree of security and well known and supported technology.

A key consideration was that the site would offer the customer the ability to administer to a point their own "store sites". Microsoft's SharePoint has become an important enterprise level tool for many companies including Toshiba International, ExxonMobil, United Airlines, Toyota, ConocoPhillips, Chrysler Group, Monsanto, Emerson, Valero Energy, Anadarko, ADM, Flour, and many others. A consideration for many of these companies is that "site administrators" that are part of the business units are able to configure and administer their own unit sites without over relying on IT. IT groups are generally very supportive as this frees them to focus on more intense development issues.

"Toyota has over 300,000 pages of content, and the SharePoint 2013 search capabilities help us quickly retrieve the information that customers really want and recommend content that they'll enjoy."-Hidako Sasaki, General Manager, Internet Planning Department, e-Toyota Division, Toyota. (Microsoft, 2013)

"Boise State University built up several disparate line-of-business (LOB) systems over

the years, each serving different groups of people. They wanted to get more value out of their investments and deliver a campus-wide, unified system without rip and replace. They chose a Business-Critical SharePoint solution, InFlight™ to connect Microsoft® SharePoint® 2010 with PeopleSoft, bringing teams closer, simplifying processes, and improving return on investment (ROI).” (Microsoft, 2013)

“According to Association for Information and Image Management (AIIM) one in two corporations are now using SharePoint Server and in 22% of the companies, every employee uses this popular Microsoft collaboration tool. SharePoint usage is widely spread due to its complex collaboration structure and its flexibility. From enterprise search, enterprise content management (ECM), Business Process Management, business intelligence, records management, archiving, Intranet/Extranet, file sharing to public-facing websites,...” (Kerr, 2013)

YAR is using one group of Houston based Ace Hardware stores as a pilot for the extranet site. This group consists of Ace Hardware Corporation’s B2B group and a group of 14 Ace Hardware stores located in the greater Houston area. If the pilot in Houston is successful YAR will then look to add the rest of the Houston groups members and add three more district pilots for Ace bringing the number of stores to between 90-120 stores. The stores in this pilot are all part of another Ace pilot that is testing a new B2B (business to business) program helping the local, independently owned stores to learn how to sell to other businesses. One of YAR’s founders is a program consultant for Ace on that B2B pilot. If YAR is successful in scaling the extranet to serve two or three larger, district groups of stores then the firm will consider, with Ace Hardware corporate, the merits of offering the extranet to all stores involved in Ace’s national B2B program. This is why YAR needed technology

that Ace's corporate IT group would feel would be well supported, cost effective, and known, such as Microsoft's SharePoint and cloud services.

Ace Hardware Corporation is a cooperative. Almost all 4,400 plus stores worldwide are individually owned and operated. Although all of the Ace retail stores are a part of the Ace cooperative they operated as individually owned businesses that purchase either product or services from Ace corporate. They can purchase product or services from other vendors if they feel they would get more value than dealing with Ace corporate.

Ace Hardware corporate provides much of the infrastructure that the stores use for IT and IS purposes. They use Epicor's ERP software suite. Although Ace corporate provides a variety of needed services through Epicor most of the stores YAR's founder has interviewed are not happy with the costs of upgrading or poor service that Epicor is providing. A key tool for the stores involved in the B2B program is a CRM package for account management. Epicor is not offering much for the stores in the B2B pilot and what they are offering is cost prohibitive and cannot be customized. The cost of purchasing the program from Epicor and then the cost of ongoing upgrades discourages the retailers.

The focus of YAR's extranet offering is to offer a simple, cloud based, CRM suite and collaboration site that the stores do not have to purchase. The stores understand that there will be costs for cloud storage, use of the extranet, and on-going service but the costs will not be anywhere as high as the Epicor costs.

For the stores to have a shared extranet where they could collaborate, store shared resources (such as training, shared documents, access to a CRM and sales tools, and collaborate) would encourage more stores to engage in the B2B vision and program.

The extranet site offers them:

### **1. Buy or build?**

In every project there is the decision to either buy a solution or build it internally. The decision to buy was made in no small part to the fact that this site had to be very customized for some of YAR's clients and especially the Ace Hardware group of stores and their particular needs while providing robust security in the cloud, and an infrastructure that could facilitate the required needs and be scalable.

Time and costs were important factors. To develop a site that had the needed components using .Net and two developers would have taken approximately 6 months, putting the project over the deadline and budget.

By buying SharePoint and developing within the package using prebuilt structures YAR's team was able to build a robust public facing internet site and an extranet within a two month period keeping the costs manageable and setting up for future scalability.

The decision to build the extranet using SharePoint will offer the individual stores the specific resources they need without the cost, poor service, or implementation and integration problems usually a part of working with the Epicor offerings from Ace corporate.

### **2. Buying then building**

SharePoint Online was chosen because of the value it creates. Currently 70% of the Fortune 500 companies use SharePoint for key features that include Internet portals, file and document management, social networks, websites, extranets, advanced search, enhanced business intelligence, collaboration, and more.

The combination of a public facing website with an extranet for client interaction all within the same package, using the cloud and same domain makes this an attractive, efficient, and effective solution.

### **3. Consideration of both the business and technical impacts**

The extranet will impact a number of business functions for the small businesses using it. Many of these businesses have limited knowledge of, experience with, or budgets for key functions that larger companies have. In the case of the Ace stores in the B2B program they have almost no tools for actually accomplishing their objectives as Ace corporate did not have all areas aligned prior to the pilot rollout. The extranet now affords YAR the opportunity to help these small business clients by providing cost effective yet efficient solutions.

#### **A. Business Impacts**

The extranet will impact a number of business functions for the small stores/businesses by providing shared resources and services that can be used through the site.

Sales – YAR will provide basic sales tools for Call Management, Leads Tracking and Development, Sales Pipeline, Forecasting, processes and workflows, etc.

CRM – Customer contact management and scheduler

Marketing – A repository for marketing tools and resources will be provided and the stores can check these out to use for their business. They can add to these or collaborate with another store to create special ones.

Supply Chain – This is a shared list of non-Ace vendors that stores have used successfully when Ace corporate has not been able to provide product or services that were

competitively priced. These vendor resources can be shared by the stores with each other.

Operational processes and workflows – Tools and resources will be provided to help the stores streamline processes and workflows that are related to the B2B side of their business such as B2B inventory management, B2B Pricing Strategy, Account Management, SWOT analysis, and performance metrics.

Scheduling – Interactive calendars will be provided for different purposes from consultation sessions to joint events between the stores.

Training – A modular library of training resources that the stores can check out for their staff.

## **B. Technical Impacts**

There are a number of technical impacts and advantages but listed are only some of the main ones that led to the decision to use the product.

- SharePoint offers centralized administration through the Central Administration console
- Strong suite of tools that allows the development team to either keep the prebuilt structure and features or develop custom applications and components
- It allows the consolidation of all sites under one platform while it reduces the overall costs associated with each one
- It allows security at differing levels
- It allows non-developer business people to create a variety of tools and solutions without having to contact IT or a developer

- The cloud based version eliminates the need for a server or upgrades for small businesses with limited budgets
- It will run a database
- It provides a number of hosting options for budget and needs – on premise or in the cloud, with Office 365, Azure, and more.

### **C. Discuss and justify options and choices**

In review of the benefits and costs associated with the decision to use SharePoint Online for building and managing a public facing website and an extranet the choice became compellingly clear that this is the best option.

Although the initial pilot for Ace Hardware and the stores involved in the B2B pilot is a good starter project, this is an opportunity to offer unique services to other clients who are seeking similar solutions.

## CHAPTER 3

### SYSTEM DESIGN

#### **System Architectural Design Approach & Selection**

The system structure components used in the YAR Consulting marketing site and the extranet site for customers was chosen based on the widespread use by other companies and organizations, their scalability, the level of support, cost and functionality.

Originally consideration was given to developing the sites in .Net but time and cost constraints along with thought to user ability led to exploration of Microsoft's cloud based SharePoint 2013 online. The experience of one of YAR's principals as a Sr. SharePoint Developer and Analyst at Toshiba International in developing Toshiba's SharePoint infrastructure led to further investigation and meetings with a variety of SharePoint developers from ExxonMobil, United Airlines, Sogeti, Cameron, and a number of other organizations including meetings with Microsoft's SharePoint team in Houston and Redmond at the SharePoint Global Conference and at the Houston SharePoint users group in Houston. The level of support that Microsoft was giving and the direction and advice from all those companies assured that the product would be well supported and would be scalable, provide for easy and functional user interface, have the capabilities needed and could be developed within the time and cost constraints.

The cloud based infrastructure allows the customer to access the needed functionality without the cost of purchasing the software, an important consideration for the Ace Hardware pilot stores in the Houston market and for Ace corporate. The web interface allows remote



access from anywhere via the Internet. Administration can be performed remotely in the field if necessary. The public facing main site was developed for marketing purposes and allows public access of the site and all its content. The extranet is a content based system that allows authorized non-technical users to access their unique sites and data. They are permitted to have limited administrative access but may add data as needed.

### **Overall Architectural Considerations – Marketing Website**

- **Security Strategy:** There is no specific security for the public access Marketing Website other than the contact form data list which will have SharePoint's built in security and have administrator only access. YAR Consulting administrators will be licensed users on subscription account.
- **Data import and export:** No import or export will be required on this website.
- **Performance requirements:**
  - Response time to End Users using high speed Internet in 1-3 seconds.
  - Client browser resolution should be no less than 1024 x 768 or greater using a modern browser
  - The system needs to be able to initially handle between 50-75 users. As the program grows it will be scalable to several hundred or more as needed.
- **Data encryption and decryption:** Encryption and decryption across TCP/IP will be performed SSL.
- **Disaster recovery:** As the cloud host Microsoft provides ample disaster recovery through site replication and offsite location back up capabilities. Additionally

YAR Consulting will keep backup copies of any site files at its offices in Houston, Texas.

### **System Architecture Components**

**Client Components:** The website will be accessible through compatible web browsers and will not need any client software loaded. The preferred browser is Microsoft Internet Explorer 8 although the site is also accessible with Firefox, Safari, and possibly others.

### **Overall Architectural Considerations – External Website**

- **Security Strategy:** Security for the extranet is provided by Microsoft SharePoint security for cloud based subscriptions. Client users will be external users who will use their own Microsoft accounts to log in. The clients Microsoft account will be given access to authorized areas.
- **Data import and export:** Initial data import, if required for clients will be completed through SharePoint list control interface.
- **Performance requirements:**
  - Response time to End Users using high speed Internet in 1-3 seconds.
  - Client browser resolution should be no less than 1024 x 768 or greater.  
Microsoft Internet Explorer 8 is the recommended browser. There will be limited functionality on Macintosh systems.
  - The system needs to be able to initially handle between 50-75 users. As the program grows it will be scalable to several hundred or more as needed.

- **Data encryption and decryption:** Encryption and decryption across TCP/IP will be performed SSL.
- **Disaster recovery:** As the cloud host Microsoft provides ample disaster recovery through site replication and offsite location back up capabilities. Additionally YAR Consulting will keep backup copies of any site files at its offices in Houston, Texas.

### System Architecture Components

**Client Components:** The website will be accessible through compatible web browsers and will not need any client software loaded as it is in the cloud. The preferred browser is Microsoft Internet Explorer 8 although the site is also accessible with Firefox, Safari, and possibly others. Functionality will be limited on Macintosh systems.

**Web/Application Server:** Microsoft SharePoint Server utilizes the Microsoft Azure cloud environment and ASP.Net Framework to process the http requests between server and client.

Table 3.1 – Web/Application Server Software Specifications

<b>Web/Application Server Software Specifications</b>	
Operating System:	64bit Windows Server 2012
Applications:	SharePoint Server 2013 (Azure cloud-based) IIS 7.5 Microsoft .Net Framework 4.5 Microsoft WCF Data Services 5.0 Microsoft Information Protection and Control Client (MSIPC) Microsoft Sync Framework Runtime v1.0 Windows Management Framework 3.0 Windows Identity Foundation (WIF) 1.0 and Microsoft Identity Extensions Windows Server AppFabric

**Database Server:** Microsoft SQL Server 2012 utilizes the Microsoft Azure cloud environment to process the SQL requests between SharePoint Server and the database server.

Table 3.2 – Database Server Software Specifications

<b>Database Server Software Specifications</b>	
Operating System:	64bit Windows Server 2012
Applications:	SQL Server 2012 R2 (Azure cloud-based) Microsoft .Net Framework 4.5

### **User Interface Design – Marketing Website**

The user interface for this website was designed to be simple, elegant, efficient, and effective displaying the firm’s work style. While not a minimalist website it is intended to communicate the needed information in a simple and brief manner. The logo design was outsourced to a design firm in New York, the site is built in SharePoint 2013, and the images are all professional grade stock from Shutterstock.

### **User Interface Design – Extranet Site**

The extranet site shares some of the same design as the marketing website but was designed to have a look and feel that would be appealing and familiar to the Ace retailers using the site so components of Ace corporate’s The Supply Place website were acquired from Ace’s B2B marketing group and added highlighting the logo The Supply Place, powered by Ace. The colors and layout also reflect the same feel as the Ace B2B site.

The SharePoint interface uses a ribbon similar to Microsoft Office that is familiar to users and this makes navigation in the site more familiar to users.

The sales lead and pipeline tracking components were acquired from Net2XS as a site template for SharePoint and configured for the client.

### **Sitemap Specifications – Marketing Website**

The content pages for the site are listed in the outline below.

#### **Top Menu Navigation:**

- Home
- Being YAR
- About Us
- ▼ Services
  - Business Consultation
  - IS Consultation
  - Project/Program Management
  - Contract Management
- Contact Us

### **Sitemap Specifications – Extranet Site**

The content pages for the extranet site are outlined below. There are two sections. The top site is for the Greater Houston Ace Retailer Group to which all the Ace stores in Houston belong and which acts as their collective representative. This section is accessible to all members of the Greater Houston Ace Retailer Group. The second section is a collection of sites for each of the independently owned and operated stores or groups of stores. The sites

are accessible only to the authorized users of each store who have access only to their stores site.

**Top Menu Navigation – Greater Houston Ace B2B Site:**

- Greater Houston Ace Retailer Group B2B

**Left Menu Navigation – Greater Houston Ace B2B Site:**

- Home
- B2B Calendar
- B2B Tasks
- Shared Documents
- Shared Resources
- Alternative Vendors
- ▼ Stores
  - Store Contacts
- B2B Discussions Board
- Pictures
- Issues
- ▼ Store Sites
  - Store Site Demo
- ▼ Central Ace
  - Central Ace 1

**Top Menu Navigation – Greater Houston Ace B2B Site:**

- Greater Houston Ace Retailer Group B2B

**Left Menu Navigation – Store Sub-Site:**

- ▼ My Store Home

- ▶ Sales Calendar
- ▶ Sales Tasks
- ▶ Activity Log
- ▶ Leads
- ▶ Opportunities
- ▶ Accounts
- ▶ Account Details
- ▶ Account Documents
- ▶ Account Contacts
- ▶ Competitors
- ▼ Sales Reporting
  - ▶ Pipeline Statistics
  - ▶ Sales Log
  - ▶ Ace B2B Reports
- ▶ Site Help

## **Requirements Analysis**

The systems detailed requirements were gathered from the project team during a series of meetings of YAR principals and also with selected customers during initial and subsequent interviews conducted in the field at customer locations and by conference call. These are some of the customers who will be authorized users for their specific store sites. The use cases and other structure were determined based on the information and conclusions arrived at during those meetings and calls. The system documentation which contains the website diagrams, use cases, use case diagram, use case state diagrams, and site structure details is found in Appendix B.

## **Use Cases Overview**

### **Marketing Website**

- Submit Contact Us Form

### **Extranet Site – Greater Houston Ace B2B Site**

- Maintain B2B Calendar
- Maintain B2B Tasks
- Maintain Shared Documents
- Maintain Shared Resources
- Maintain Alternative Vendors
- Maintain Stores
- Maintain Store Contacts
- Maintain B2B Discussions Board
- Maintain Pictures
- Maintain Issues

### **Extranet Site – Store Sub-Site**

- Maintain Sales Calendar
- Maintain Sales Tasks
- Maintain Activity Log
- Maintain Leads
- Maintain Opportunities
- Maintain Accounts
- Maintain Account Documents
- Maintain Account Contacts
- Maintain Competitors
- Maintain Sales Log
- Maintain Ace B2B Reports



Use Case Diagrams are shown in the figure below and on the following page.

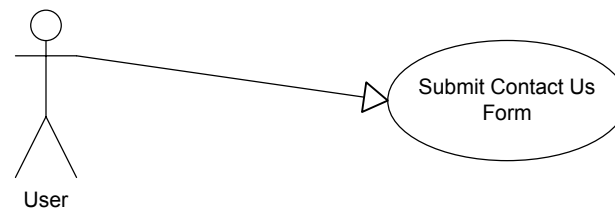


Figure 1. Marketing Website Use Case Diagram

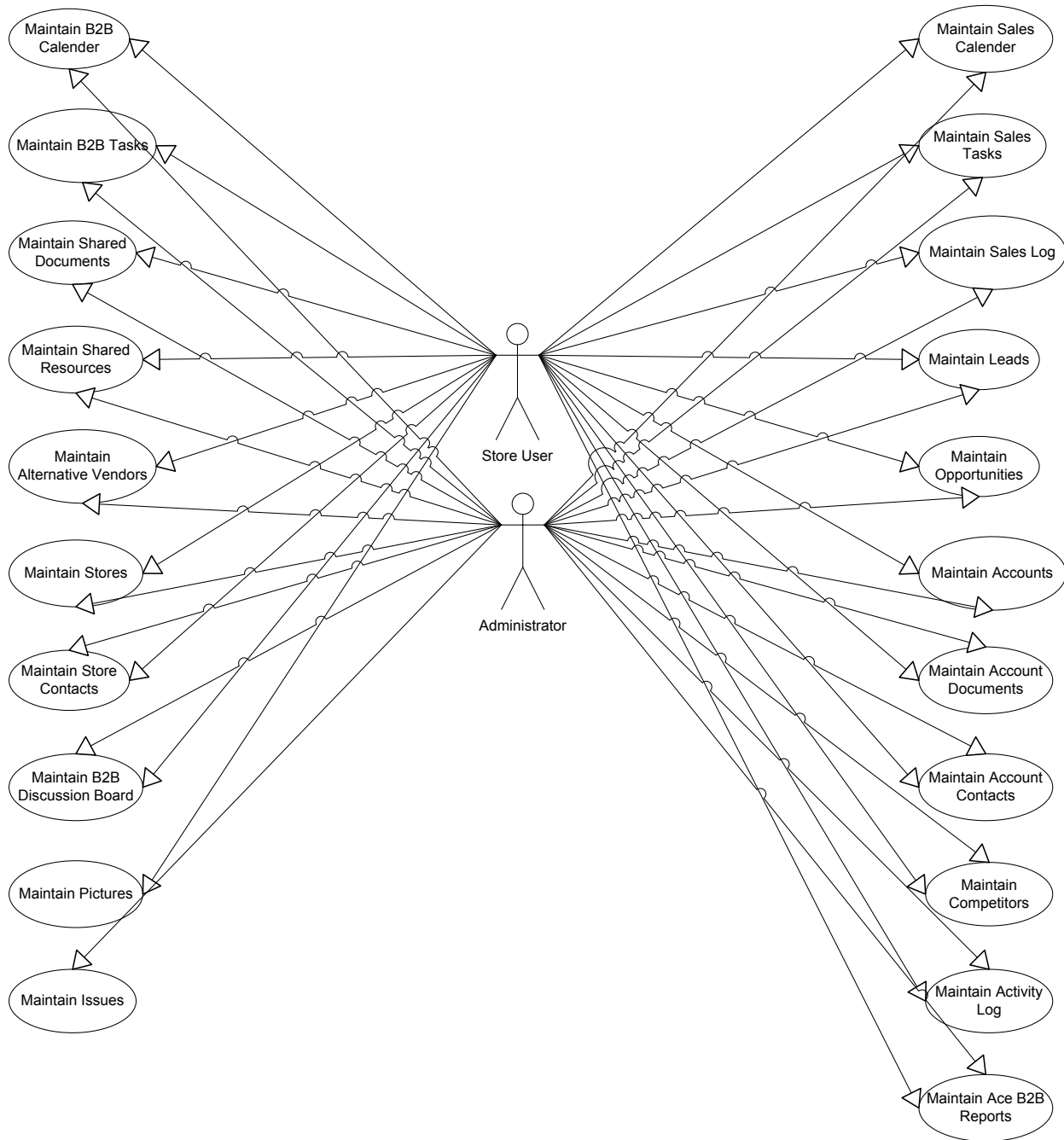


Figure 2. Extranet Site Use Case Diagram

## **CHAPTER 4**

### **RESULTS**

The final results for this project yielded a public facing marketing website for YAR Consulting's general practice, and an extranet site with two segments, one where the Greater Houston Ace Retailer Group can interact collaboratively with discussions and shared resources and a second segment where each individual store can track their sales and CRM activity, track schedules and tasks, and have access to resources on their own unique store site.

Testing for the extranet sites has been on-going for sometime at report publishing with very positive response for both the Greater Houston Ace Retailer Group site and for individual store site template. Initial response from the group and individual retailers who have participated in the demos and requirements gathering phase has been extremely positive and supportive.

These sites will go live simultaneously at the end of August 2014. The extranet site will host 14 individual store sites for the pilot trail. Scaling to 75 sites will not take place until October of 2014 or later.

YAR Consulting will track the user activity metrics through Usage and Audit reports for SharePoint. These results will be shared with the Greater Houston Ace Retailer Group and later with Ace Hardware's corporate B2B leadership and marketing teams.

The YAR Consulting Home Page, shown in the figure below, provides an introduction to the firm, its basic philosophy, and service categories.

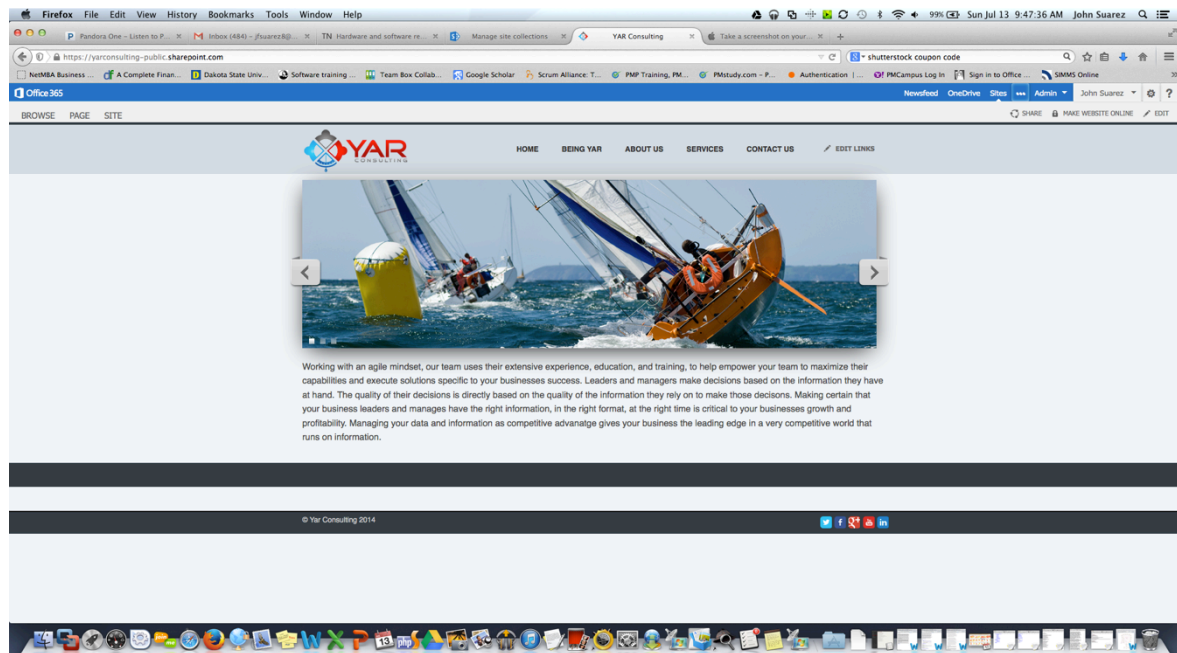


Figure 3. YAR Consulting Public Website Home Page

The Being YAR page below gives an explanation of the firm's name and more business philosophy.

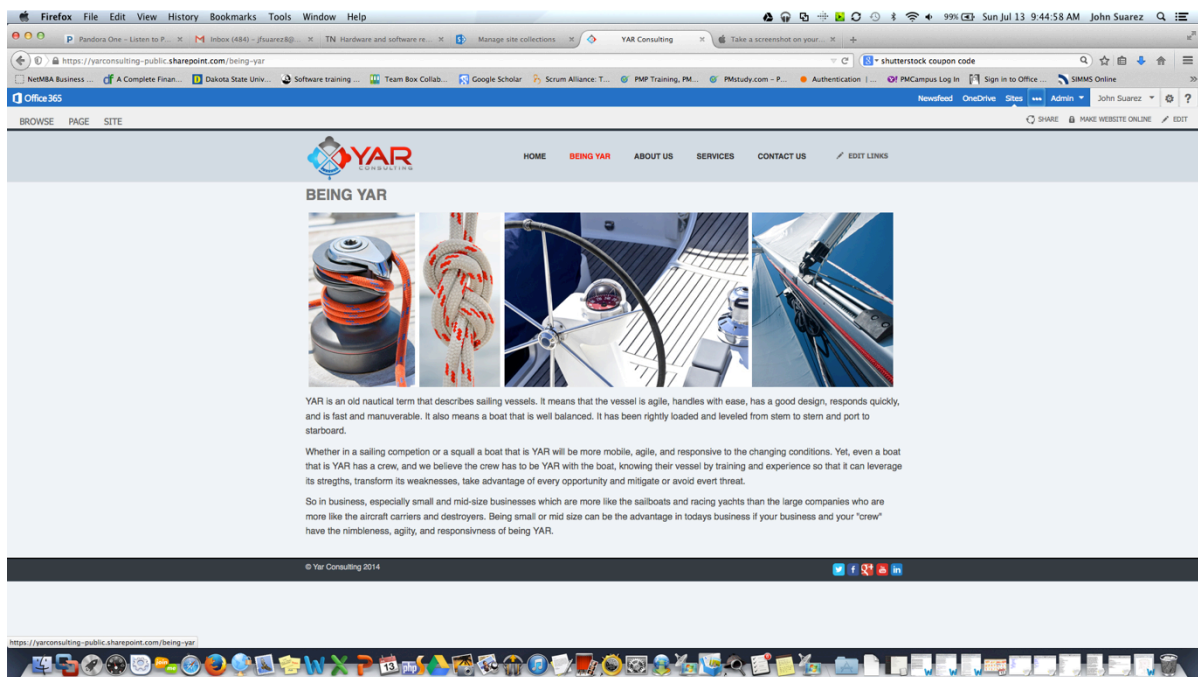


Figure 4. YAR Consulting Public Website Being YAR Page

The About Us page gives an overview of the history and structure of the firm with introduction to the firm's principals.

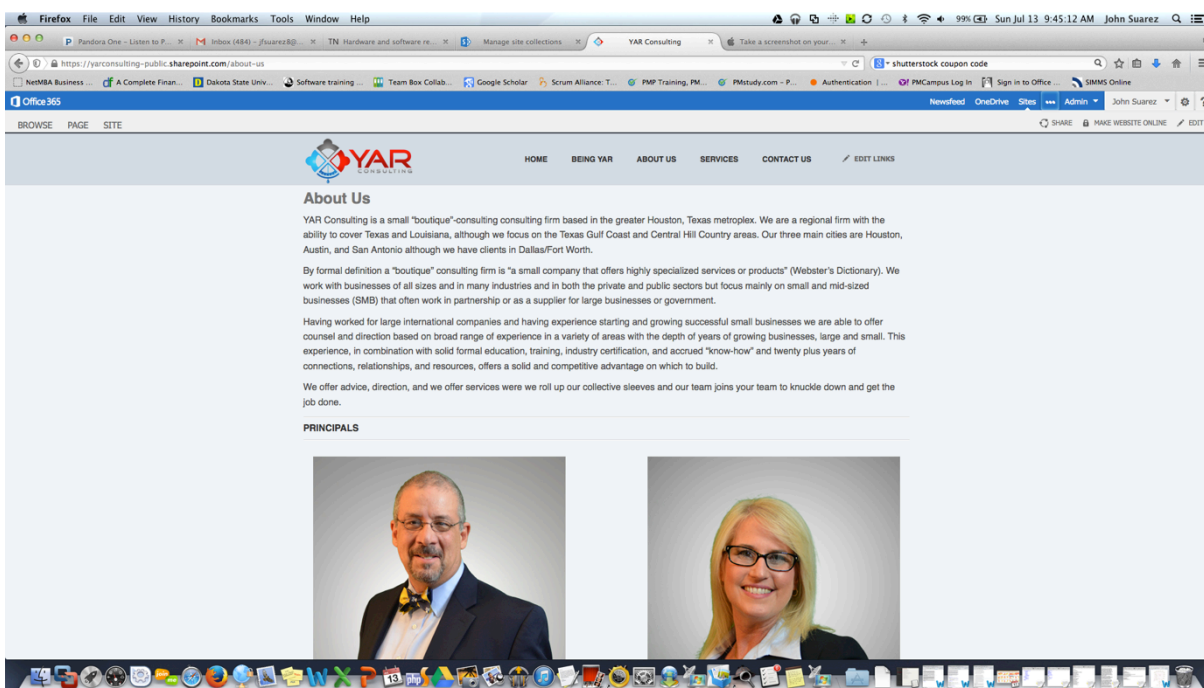


Figure 5. YAR Consulting Public Website About Us Page (Top Half)

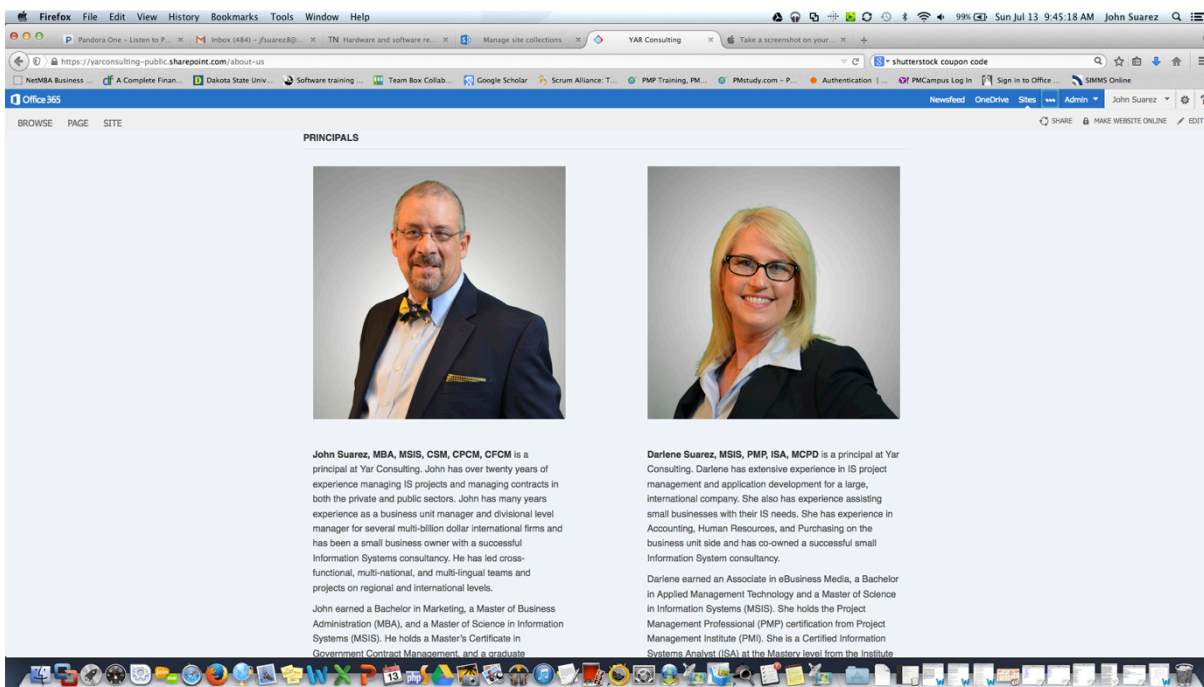


Figure 6. About Us Page (Bottom Half)

The Services Home page below lists the links to the individual services pages.

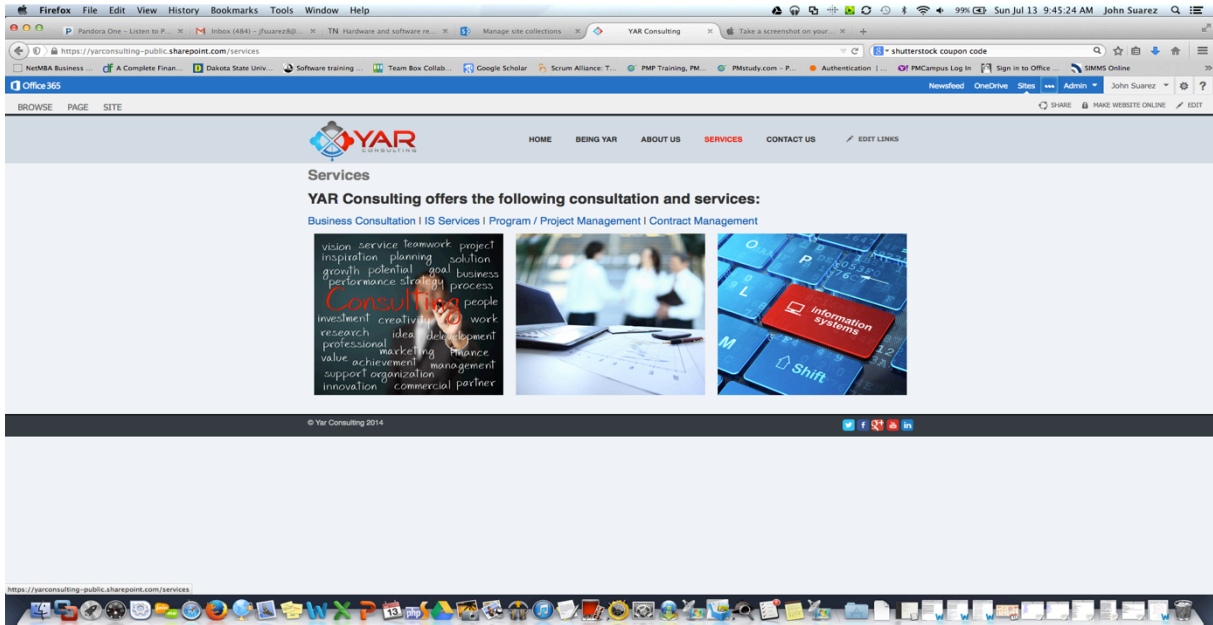


Figure 7. YAR Consulting Public Website Services Home Page

The Business Consultation page below states the seven types of services offered in that category.

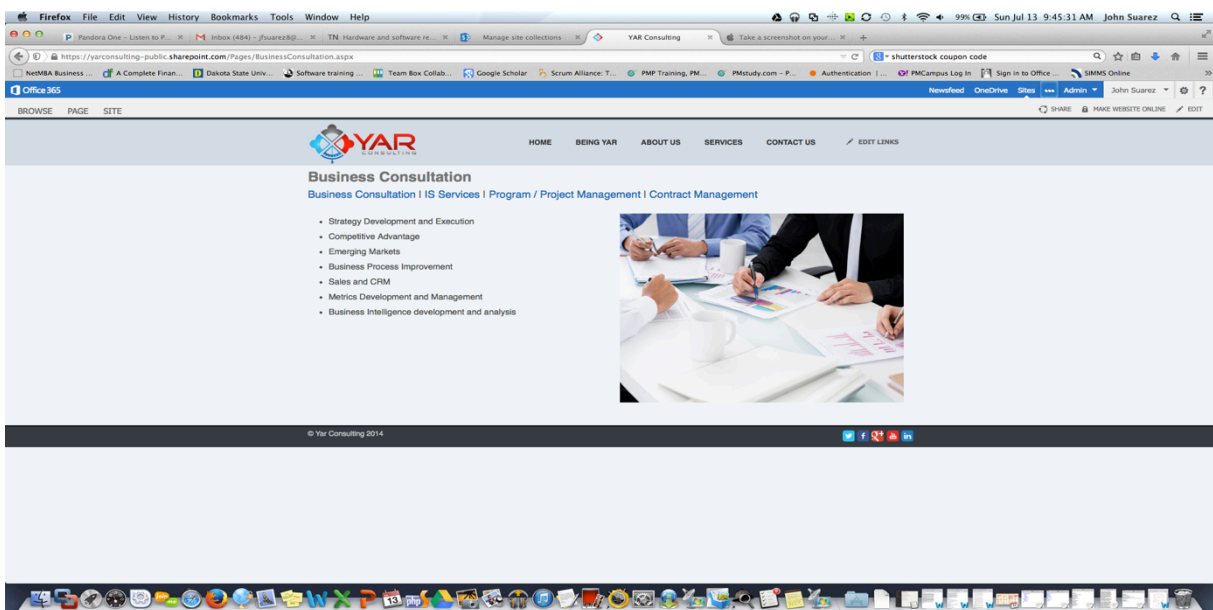


Figure 8. YAR Consulting Public Website Business Consultation Page

The IS Services page below lists the seven services offered in that category.

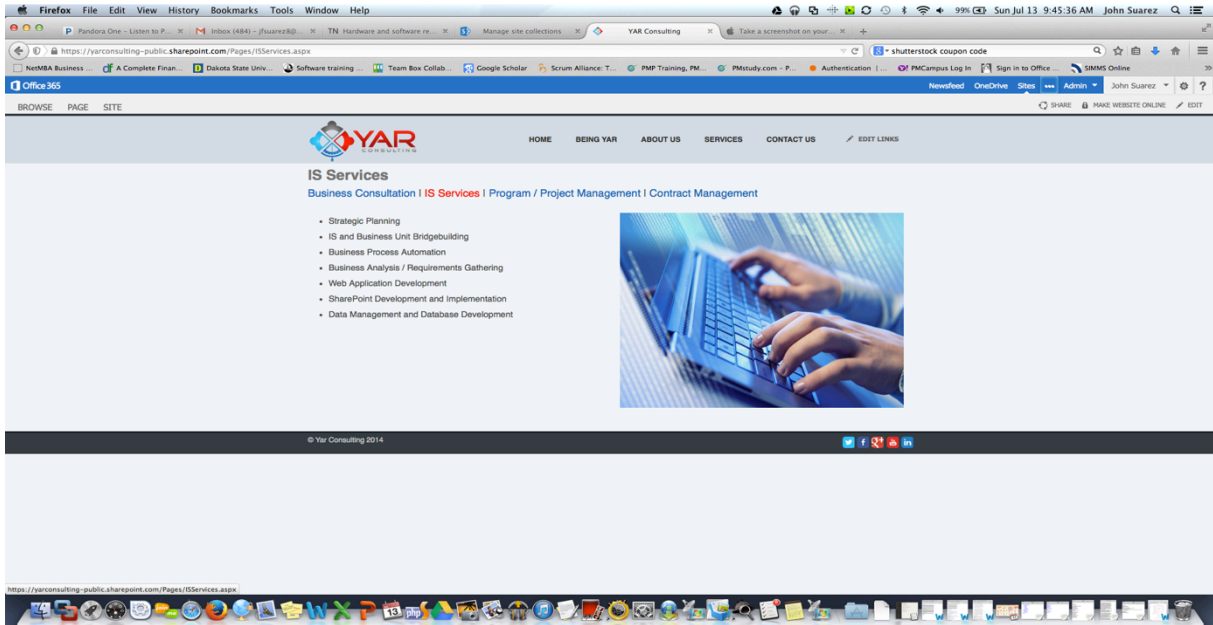


Figure 9. YAR Consulting Public Website IS Services Page

The Program / Project Management page below lists the 3 services offered in that category.

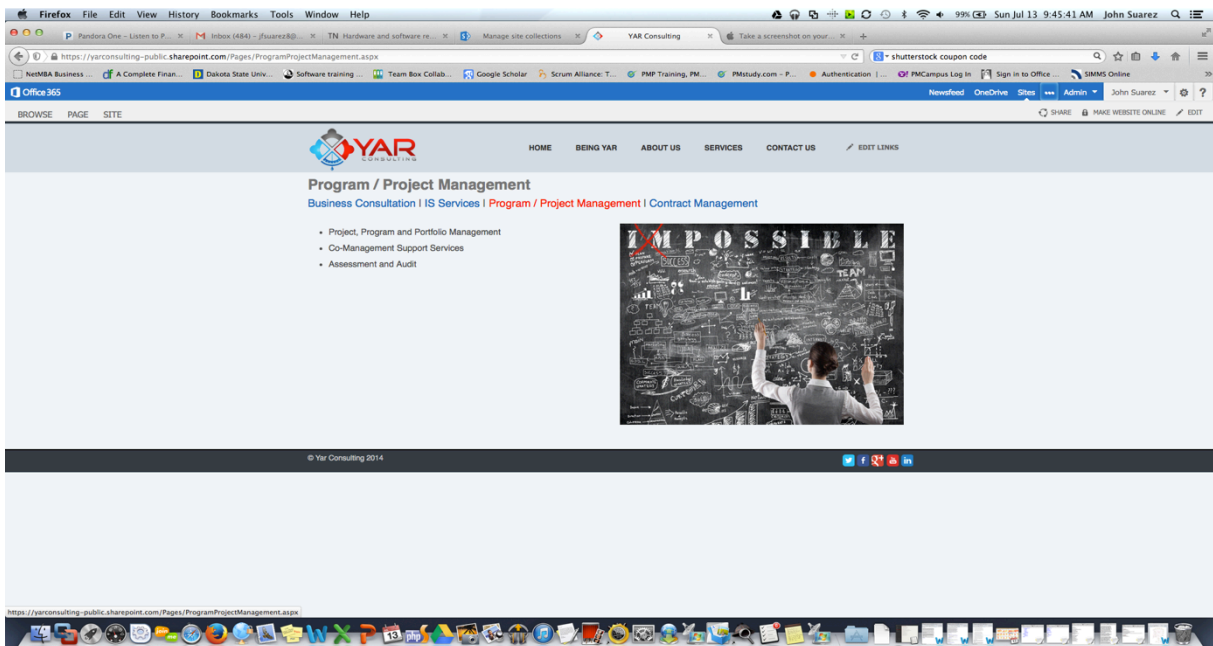


Figure 10. YAR Consulting Program/Project Mgmt Page

The Contract Management page below lists the five services offered in that category.



Figure 11. YAR Consulting Contract Management Page

The Contact Us page below provides a secure way for interested users to contact the firm.

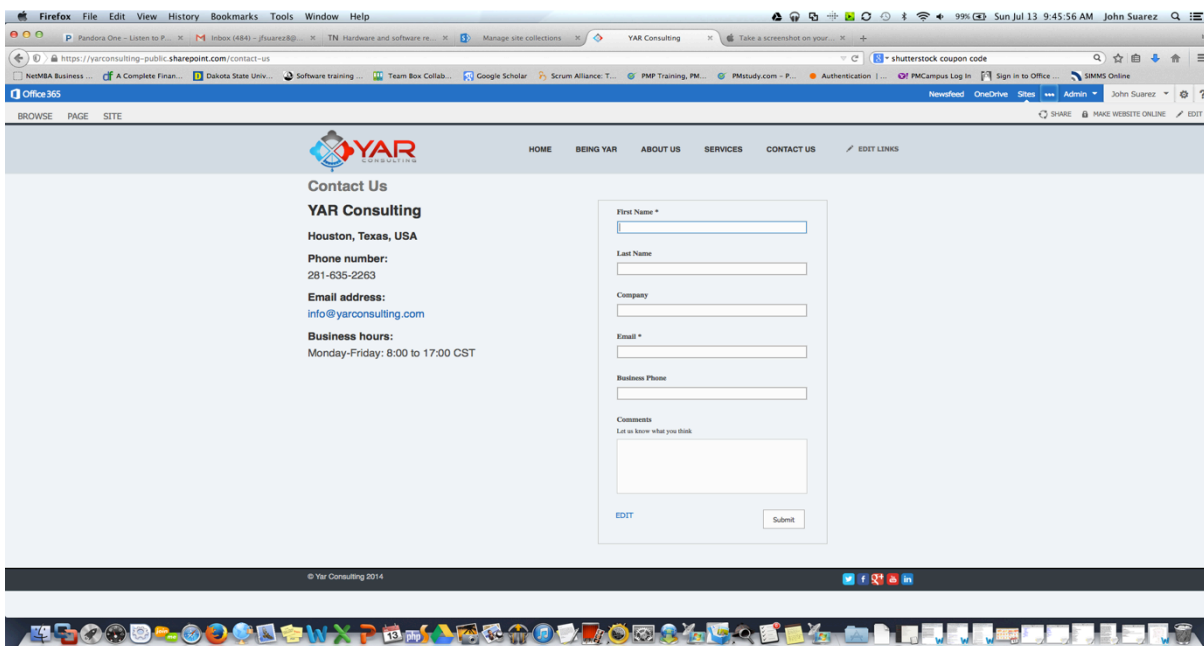


Figure 12. YAR Consulting Contact Us Page



The Greater Houston Ace Retailer Group (GHARG) B2B Home page below is accessible by members of the GHARG that are involved in Ace Hardware’s B2B pilot program. They are able to access all areas using the links on the left side column.

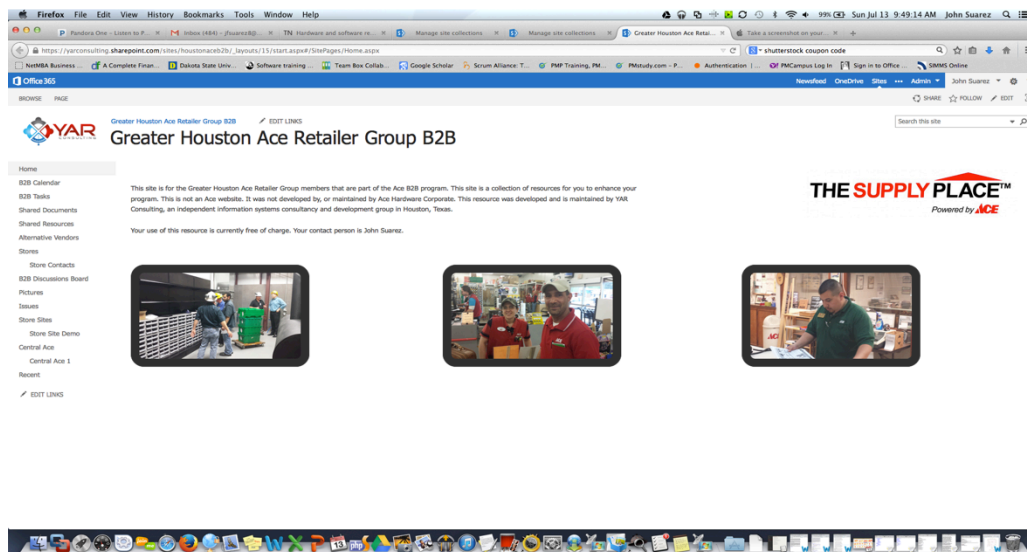


Figure 13. GHARG Extranet B2B Home Page

The B2B Calendar page allows B2B members of GHARG to view a common calendar. They can submit event requests for addition to the site administrator.

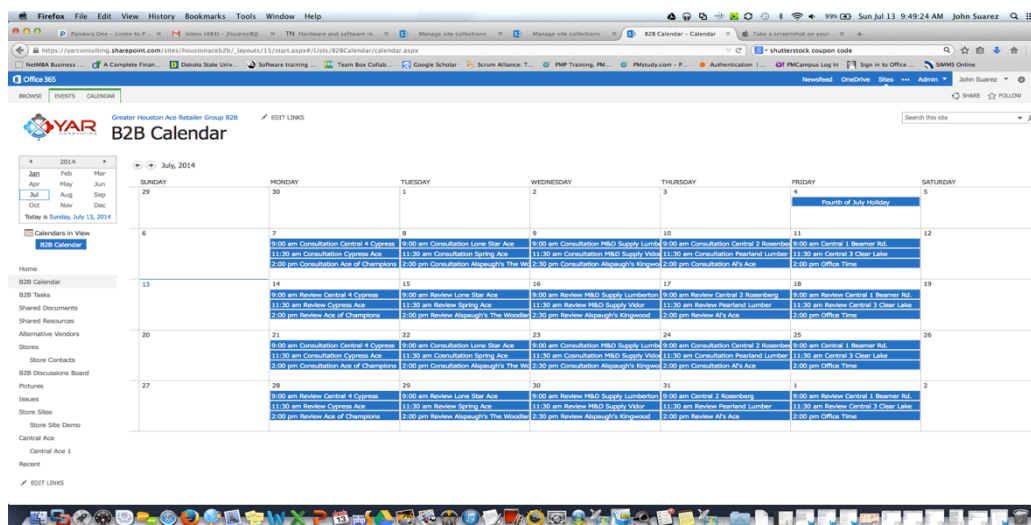


Figure 14. GHARG Extranet B2B Group Calendar Page

The B2B Tasks page allows B2B members of GHARG to view a common task list. They can submit task requests for addition to the site administrator.

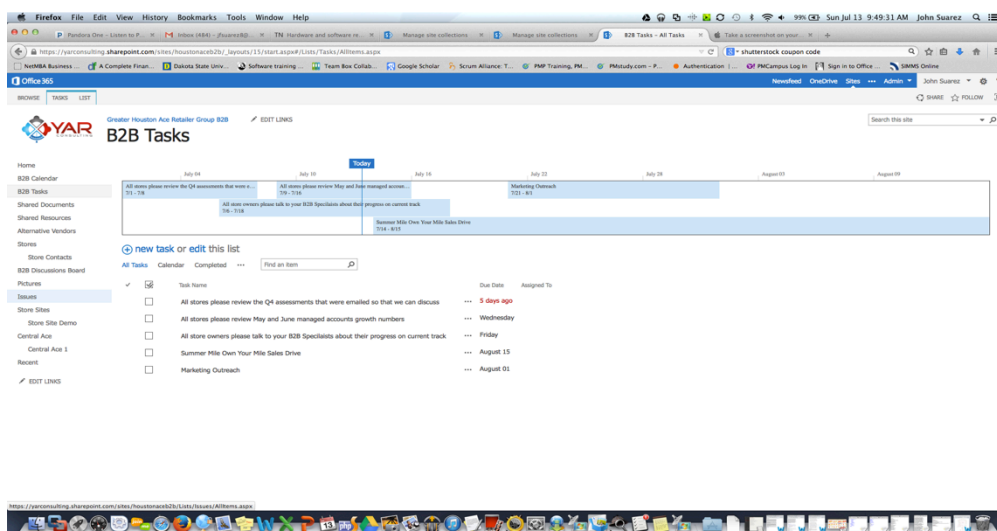


Figure 15. GHARG Extranet B2B Group Task Page

The B2B Shared Documents page allows B2B members of GHARG to view a shared documents library that they can contribute to or check out items from. They can submit event requests for addition to the site administrator.

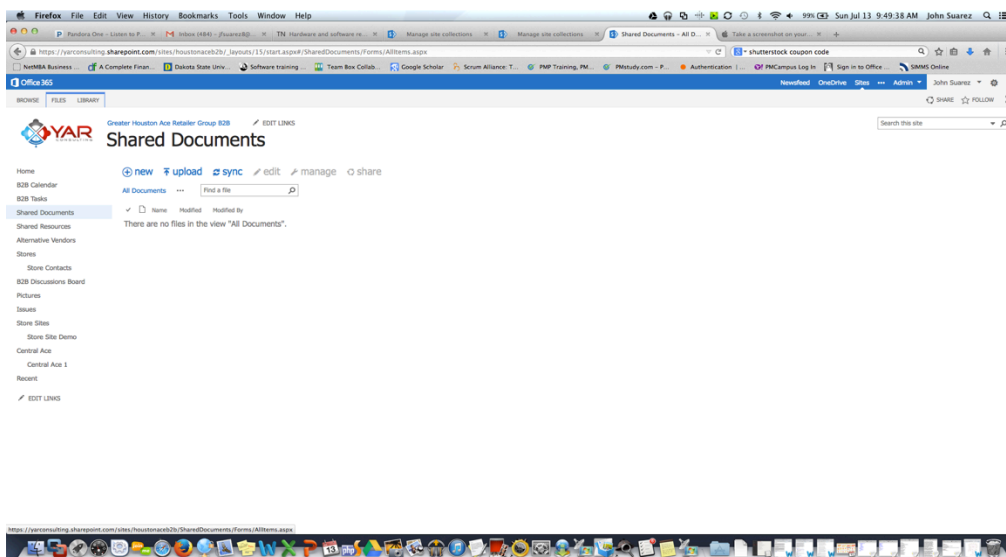


Figure 16. GHARG Extranet B2B Shared Documents Page

The B2B Calendar page allows B2B members of GHARG to view a Shared Resources page provided by the B2B Consultant. They can check out resources for individual store use.

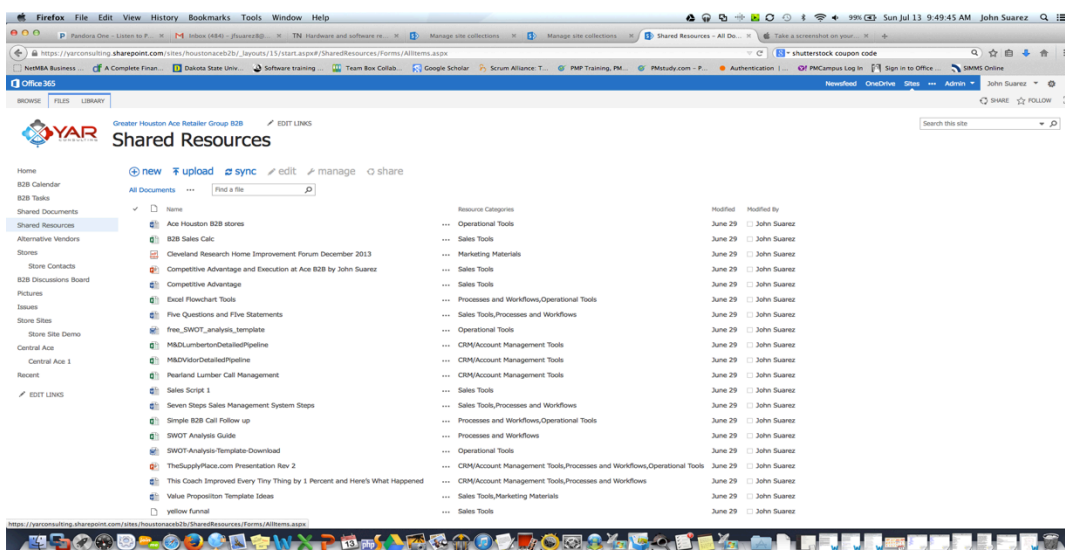


Figure 17. GHARG Extranet B2B Shared Resources Page

The B2B Calendar page allows B2B members of GHARG to view a list of non-Ace alternative suppliers and vendors that they all contribute to. They can use the vendor list for individual store use.

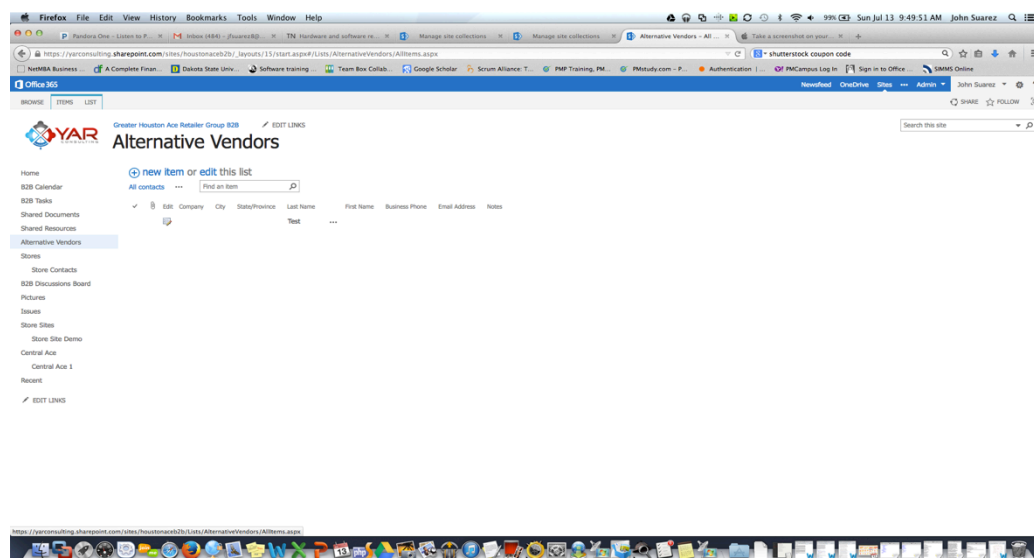


Figure 18. GHARG Extranet B2B Alternative Vendors Page

The B2B Stores page allows B2B members of GHARG members to view a list of all GHARG member stores that are in the Ace B2B pilot program.

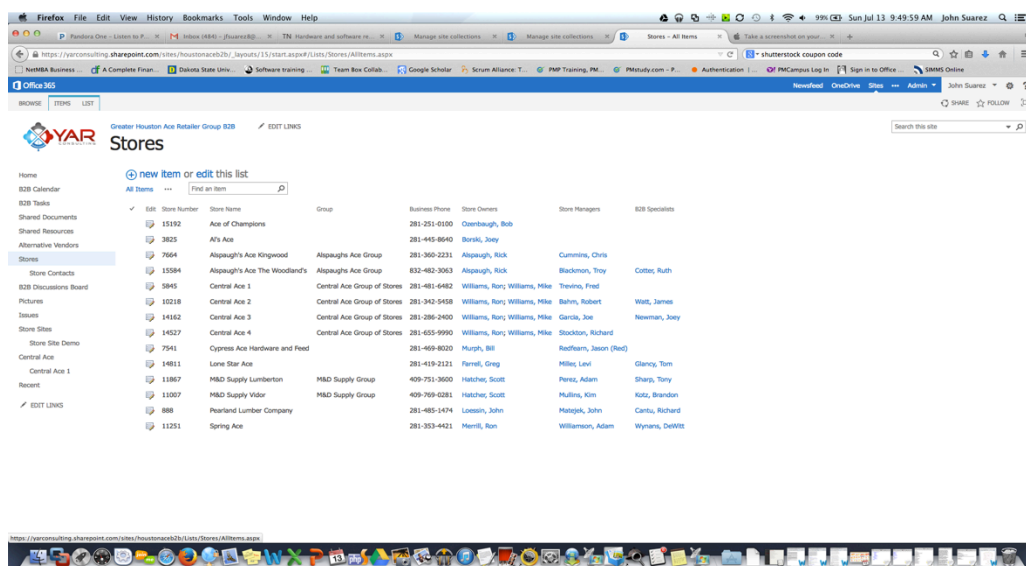


Figure 19. GHARG Extranet B2B Stores Page

The B2B Store Contacts page allows B2B members of GHARG members to view a contact list of store owners, managers, and B2B Specialists from all the stores in Ace's B2B pilot program.

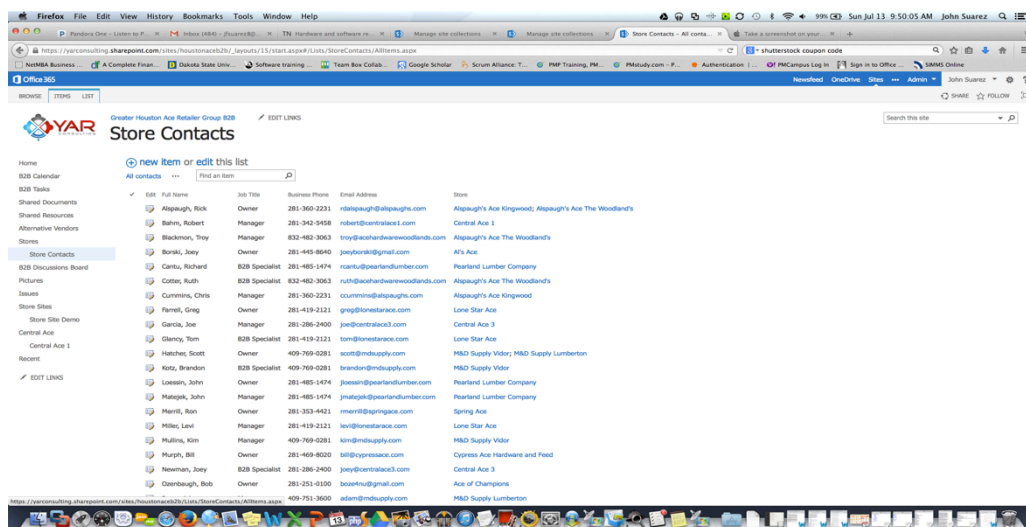


Figure 20. GHARG Extranet B2B Store Contacts Page

The B2B Discussion Board allows B2B members of GHARG to interact and collaborate on common issues they initiate and control.

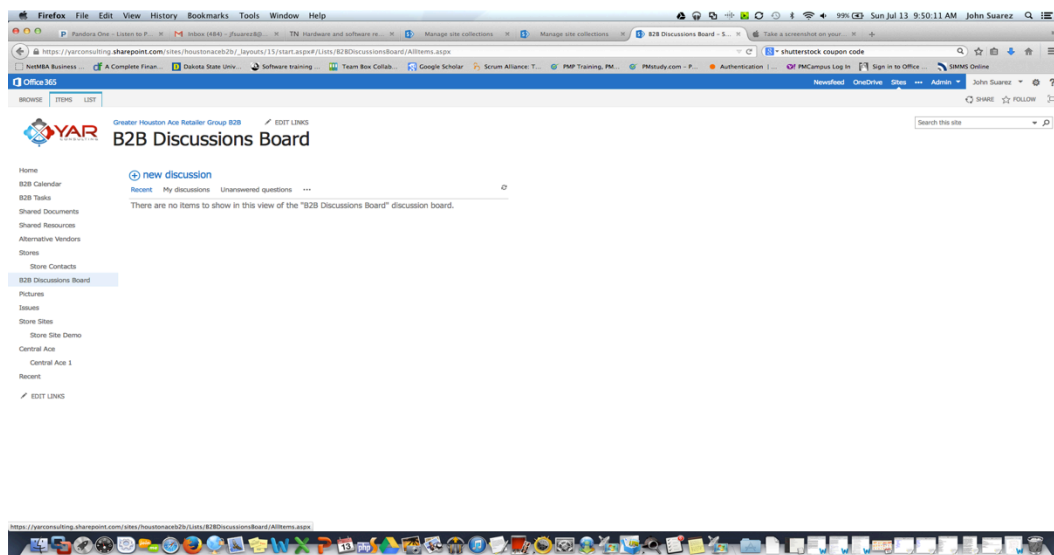


Figure 21. GHARG Extranet B2B Discussion Board Page

The B2B Pictures page allows B2B members of GHARG to view pictures related to the B2B program at each of the individual stores. They can upload pictures for addition to the site.

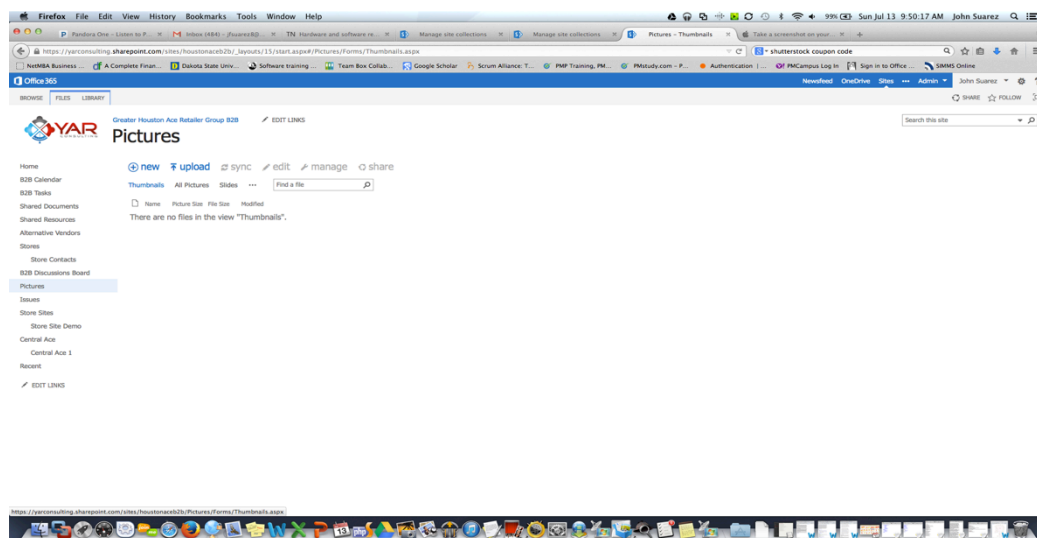


Figure 22. GHARG Extranet B2B Pictures Page

The B2B Issues page is for internal use by the B2B consultant and Ace corporate.

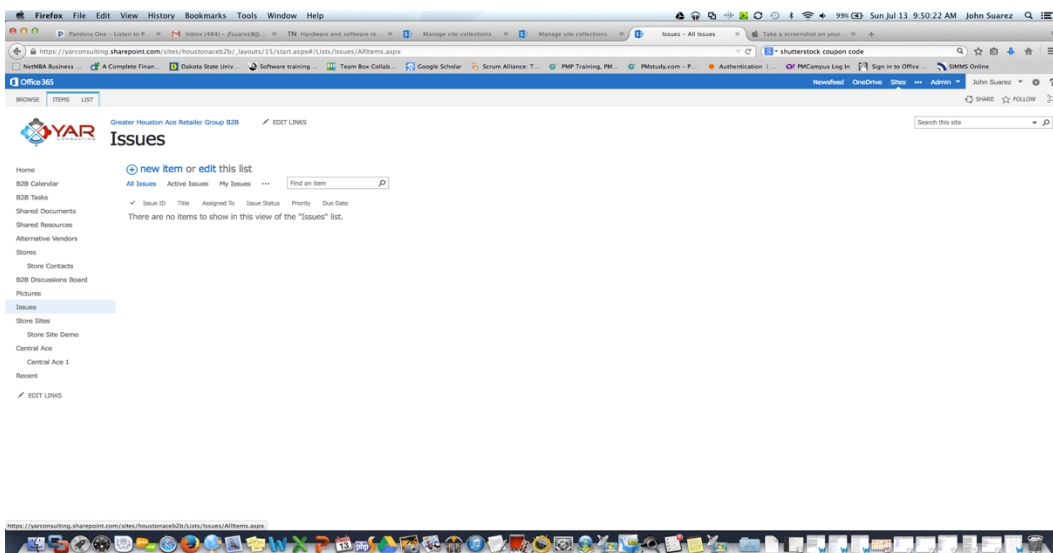


Figure 23. GHARG Extranet B2B Issues Page

The B2B Store Site Demo page allows B2B members of GHARG members to their individual store sites through this link.

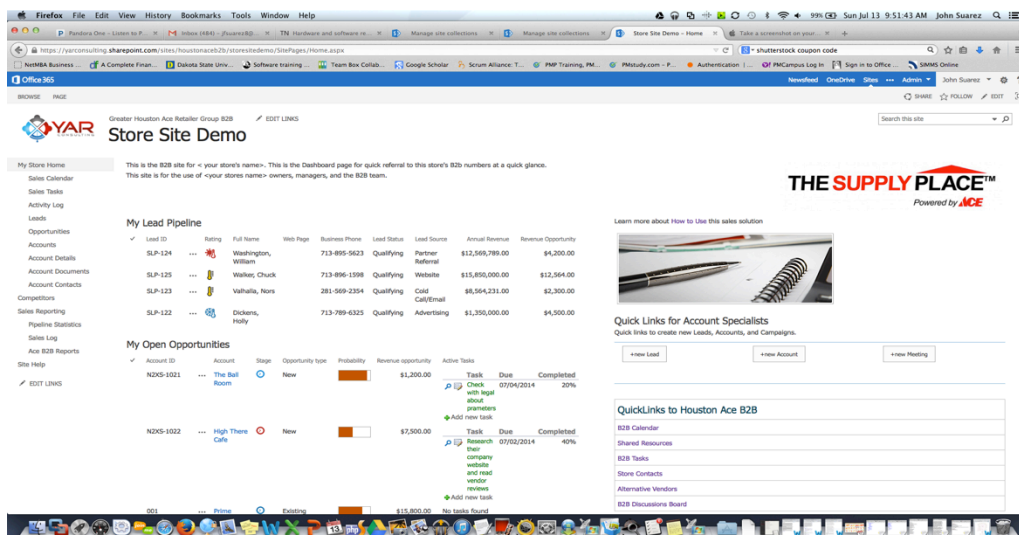


Figure 24. GHARG Extranet Ind. Store Site B2B Home Dashboard Link Ex.1

The B2B Store Site Demo page allows B2B members of GHARG members to their individual store sites through this link.

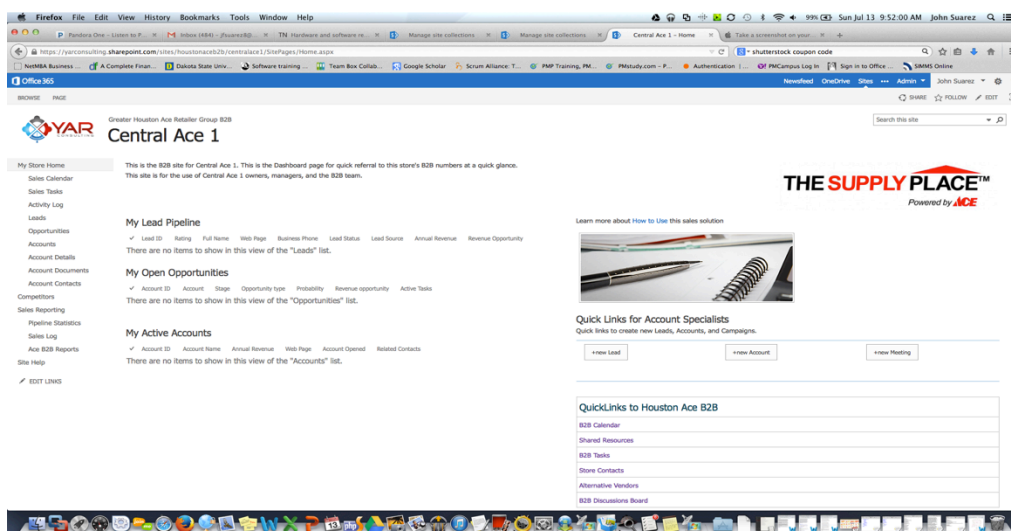


Figure 25. GHARG Extranet Ind. Store Site B2B Home Dashboard Link Ex.2

This is the Store Site Dashboard Home page. It is the first page when stores access their individual store's site. It gives them a quick review of their stores sales and CRM statistics, tasks, and calendar. The next three images are views of the page from top to bottom.

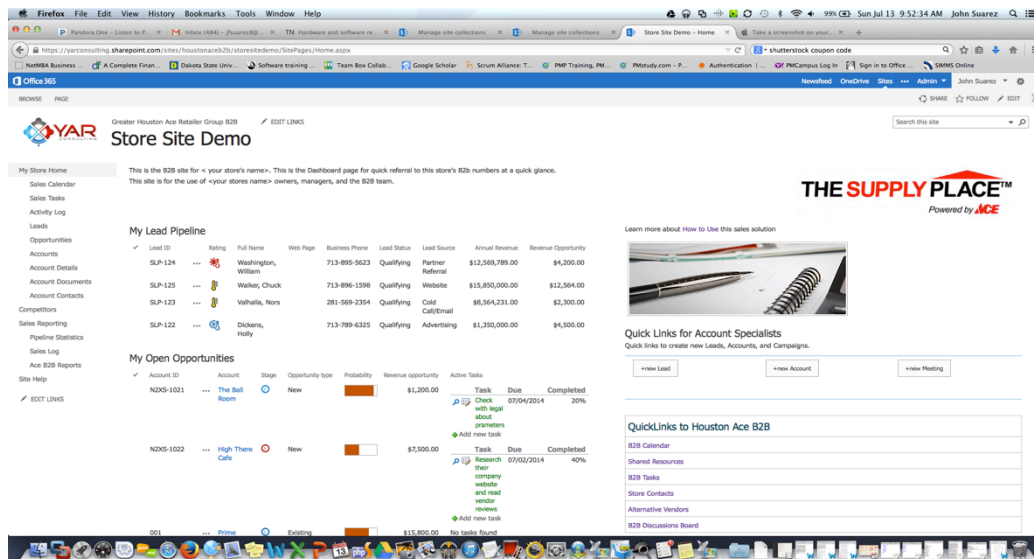


Figure 26. Extranet Ind. Store Home Dashboard Page (top)

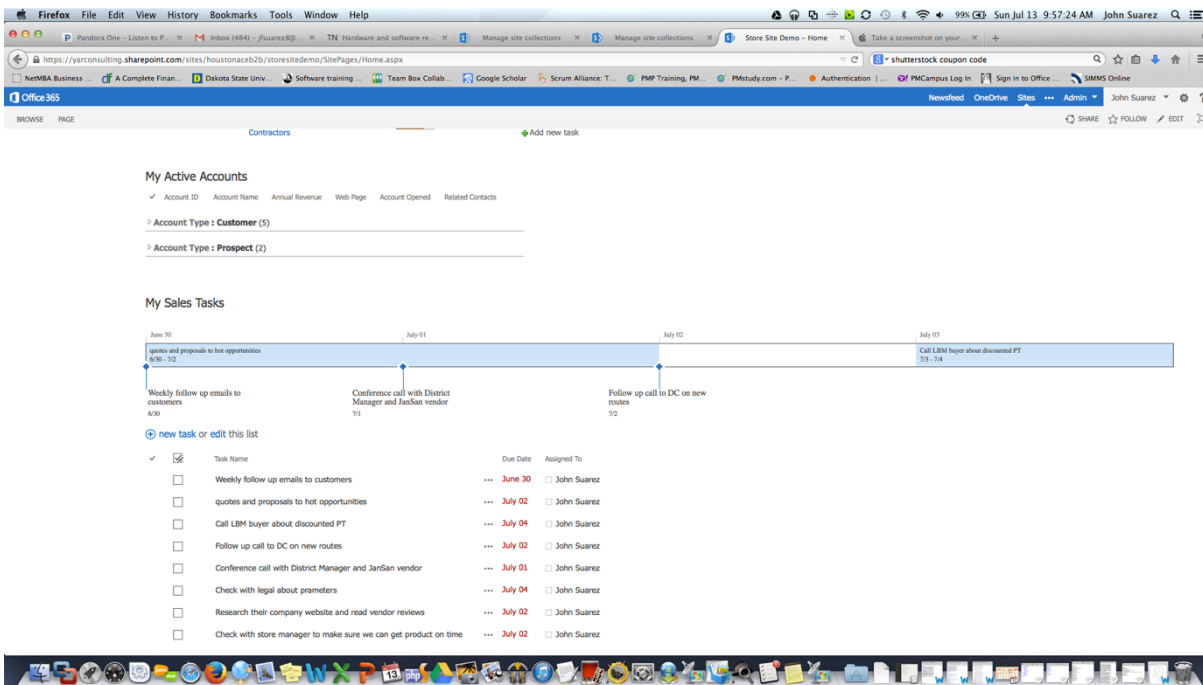


Figure 27. Extranet Ind. Store Home Dashboard Page (Middle)

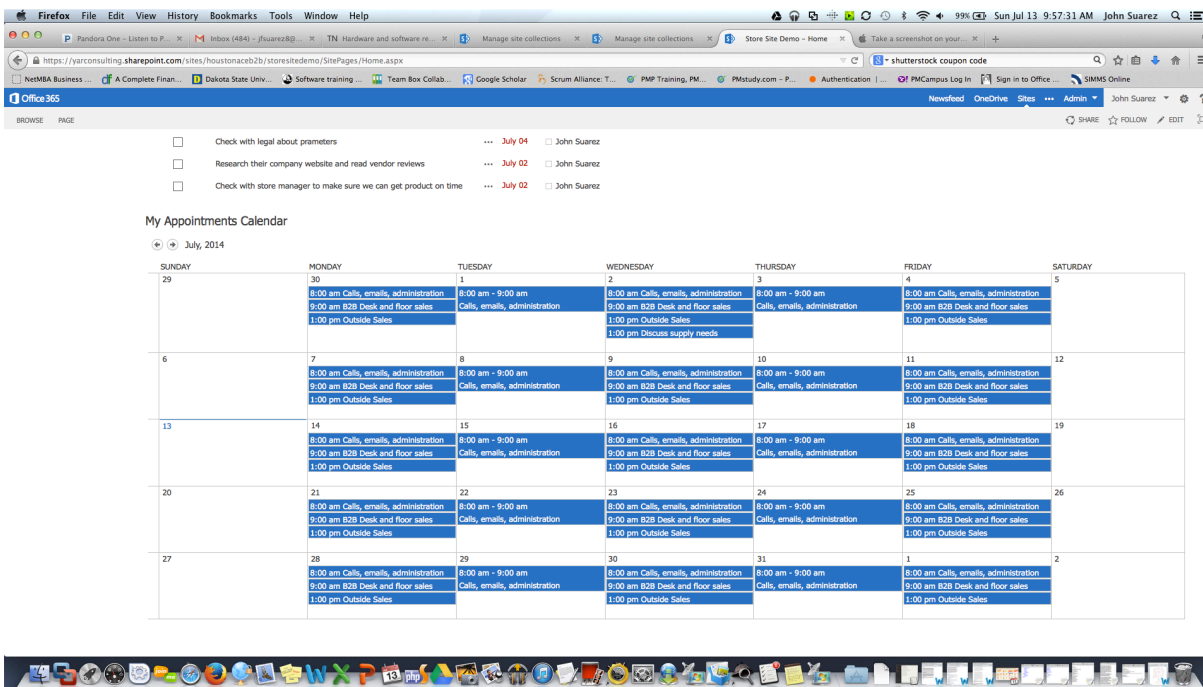


Figure 28. Extranet Ind. Store Home Dashboard Page (Bottom)



The B2B Store Site Calendar page allows B2B members of GHARG to view and add to their individual stores sales related calendar.

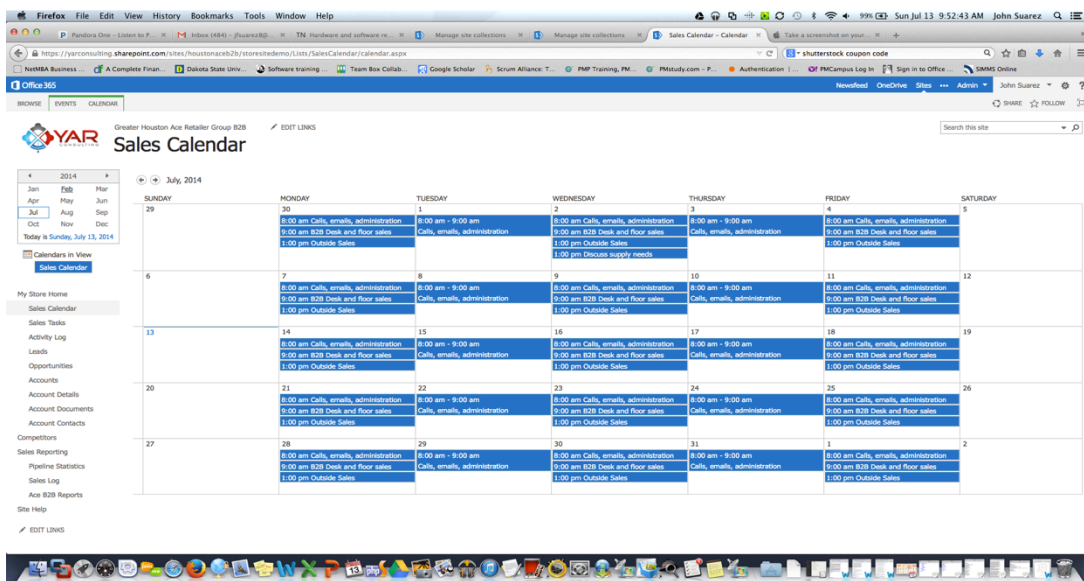


Figure 29. Extranet Ind. Store B2B Calendar Page

The B2B Store Site Calendar page allows B2B members of GHARG to view and add to their individual stores sales related tasks list.

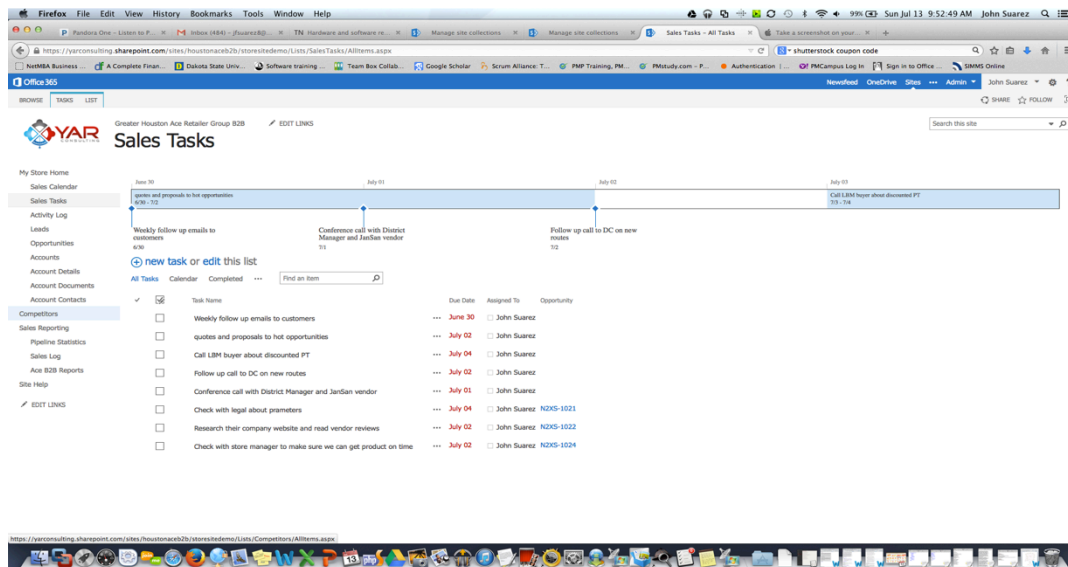


Figure 30. Extranet Ind. Store B2B Task Page

The B2B Store Site Activity Log page allows B2B members of GHARG to view activities that are automatically added as they perform other tasks and add them to the site.

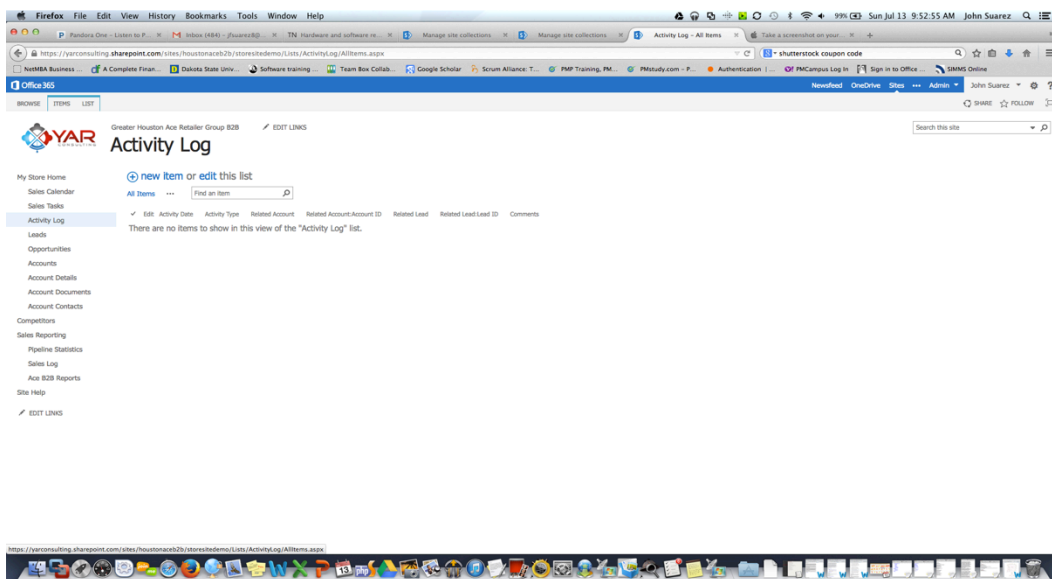


Figure 31. Extranet Ind. Store B2B Activity Log Page

The B2B Store Site Leads page allows B2B members of GHARG to view and add to their individual stores sales related leads and their conversion history as a list.

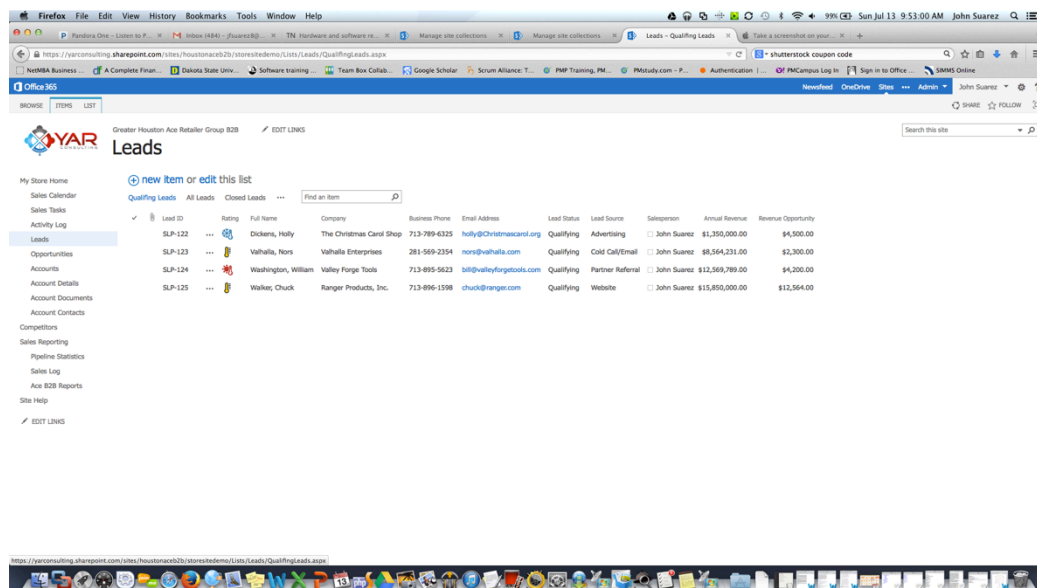


Figure 32. Extranet Ind. Store B2B Leads Entry Page

The B2B Store Site Opportunities page allows B2B members of GHARG to view and add to their individual stores sales related opportunities list.

The screenshot shows the 'Opportunities' page in the YAR Extranet. The page title is 'Greater Houston Ace Retailer Group B2B Opportunities'. There are navigation tabs for 'Open Opportunities', 'All Items', and 'Closed: Loss'. A search bar is present. The main content is a table of opportunities:

Account ID	Account	Stage	Opportunity type	Salesperson	Probability	Revenue opportunity	Competitors	Forecasted Close
NZXS-1022	High There Cafe	New		John Suarez		\$7,500.00	Other	7/12/2014
001	Prime Contractors	Existing		John Suarez		\$15,000.00	The Home Depot	7/25/2014
NZXS-1021	The Ball Room	New		John Suarez		\$1,200.00	HD Supply; Sam's Club	7/16/2014

Figure 33. Extranet Ind. Store B2B Opportunities Page

The B2B Store Site Accounts page allows B2B members of GHARG to view and add to their individual stores sales related accounts list.

The screenshot shows the 'Accounts' page in the YAR Extranet. The page title is 'Greater Houston Ace Retailer Group B2B Accounts'. There are navigation tabs for 'All Items', 'Active Customers', and 'Active Prospects'. A search bar is present. The main content is a table of accounts:

Account ID	Account Name	Account Type	Account Status	Annual Revenue	Employees	Salesperson	Business Phone
*Account Type : Customer (5)							
001	Prime Contractors	Customer	✓	\$8,000,000.00	25	John Suarez	281-635-4587
002	Condon Properties Lakeview Estates	Customer	✓	\$22,000,000.00	65	John Suarez	713-895-9658
003	MC Water District Services	Customer	✓	\$18,000,000.00	50	John Suarez	281-965-7894
005	First Baptist Church of Spring	Customer	✓		33	John Suarez	281-635-5632
NZXS-1024	Bike Seats Shop	Customer	✓	\$1,000.00	3	John Suarez	281-698-5688
*Account Type : Prospect (2)							
NZXS-1021	The Ball Room	Prospect	✓		32	John Suarez	281-635-7894
NZXS-1022	High There Cafe	Prospect	✓		6	John Suarez	281-999-8945

Figure 34. Extranet Ind. Store B2B Accounts Page

The B2B Store Site Accounts Detail page allows B2B members of GHARG to view in detail and add to their individual stores sales related accounts list.

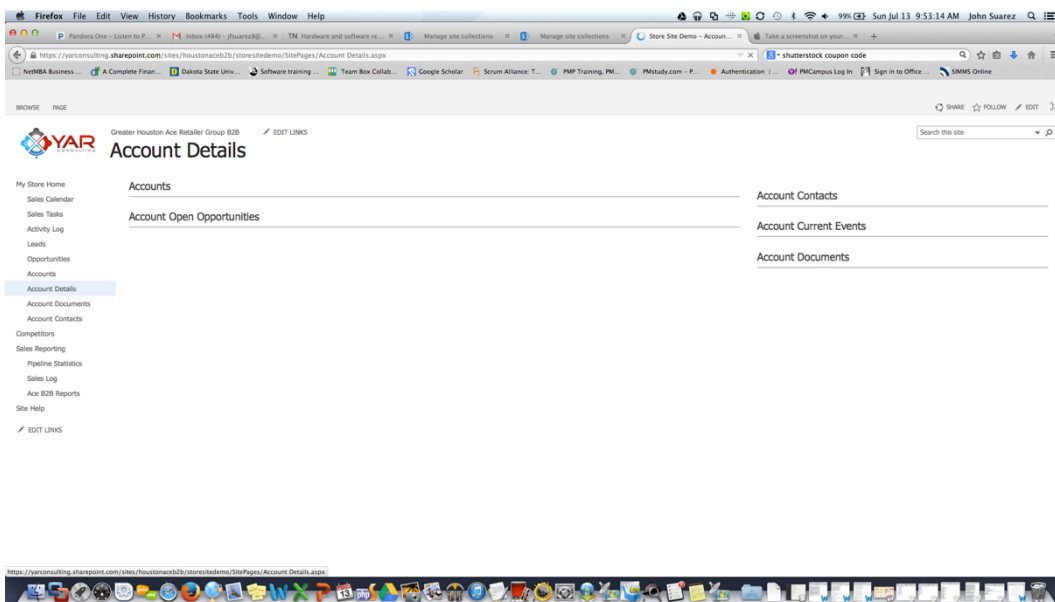


Figure 35. Extranet Ind. Store B2B Account Details Page (1)

The B2B Store Site Accounts Detail page allows B2B members of GHARG to view in detail and add to their individual stores sales related accounts list.

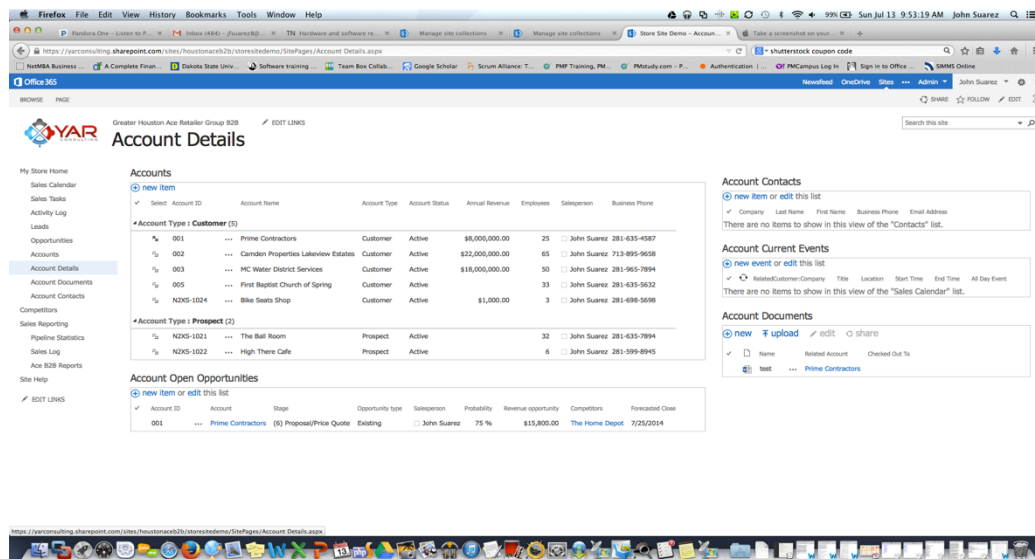


Figure 36. Extranet Ind. Store B2B Account Details Page (2)

The B2B Store Site Accounts Documents page allows B2B members of GHARG to view and add to their individual stores sales account related documents list.

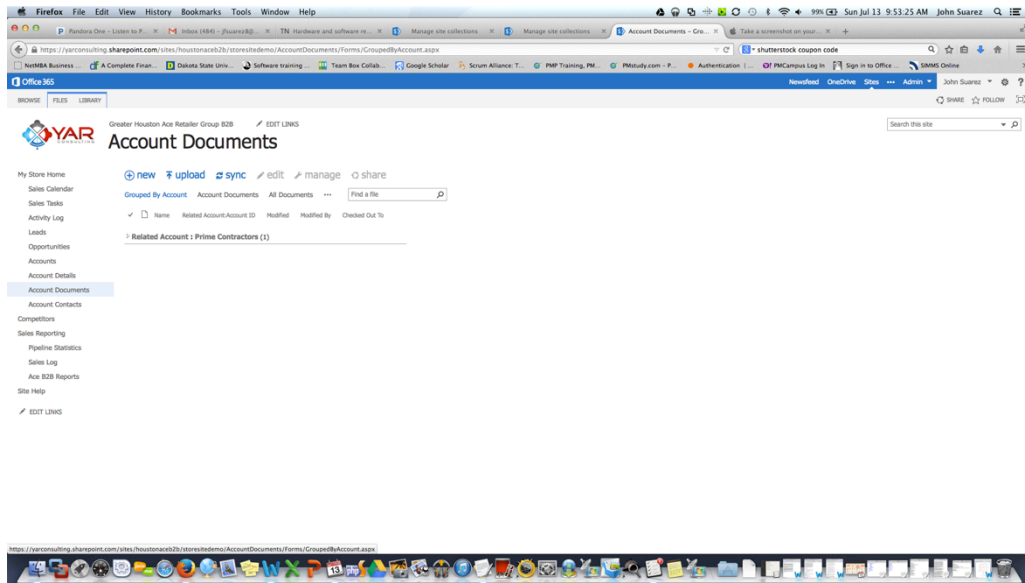


Figure 37. Extranet Ind. Store B2B Account Documents Page

The B2B Store Site Contacts page allows B2B members of GHARG to view in detail and add to their individual stores sales related contacts list.

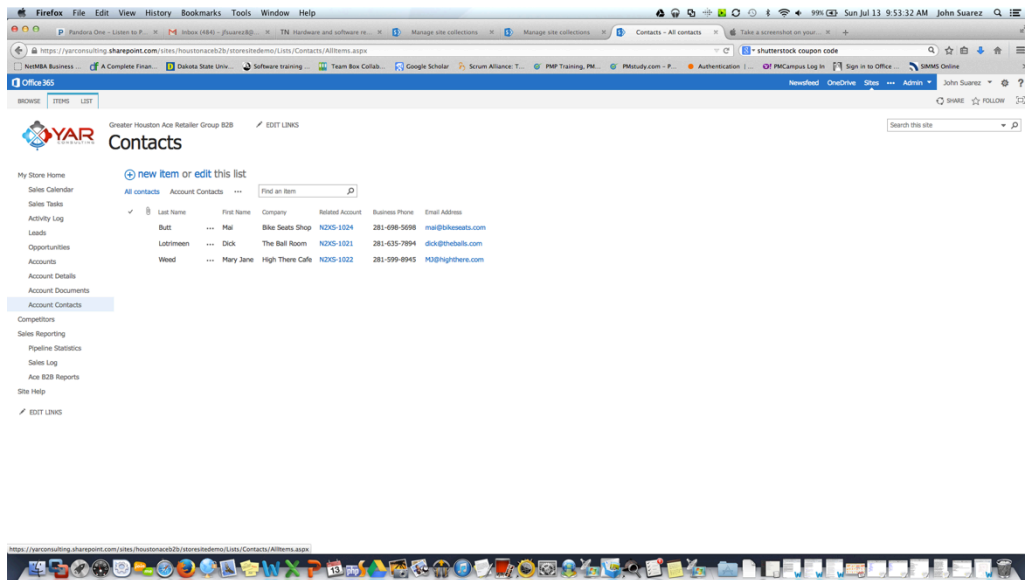


Figure 38. Extranet Ind. Store B2B Contacts Page

The B2B Store Site Competitors page allows B2B members of GHARG to view in detail and add to and rank their individual stores sales related competitors list.

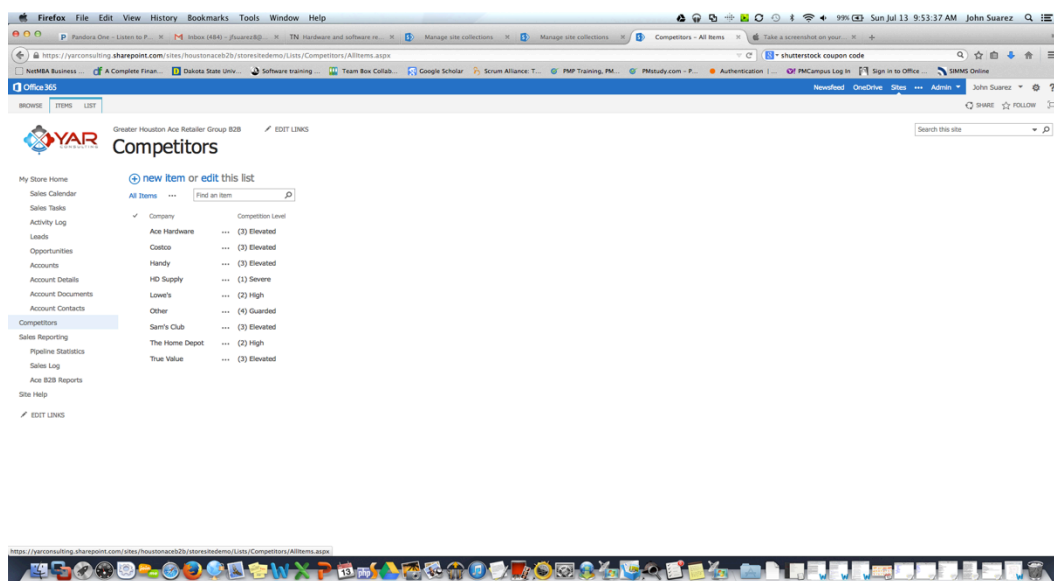


Figure 39. Extranet Ind. Store B2B Competitors Page

The B2B Store Site Sales Reporting Dashboard Home page allows B2B members of GHARG to view their individual stores sales related statistics in a dashboard format.

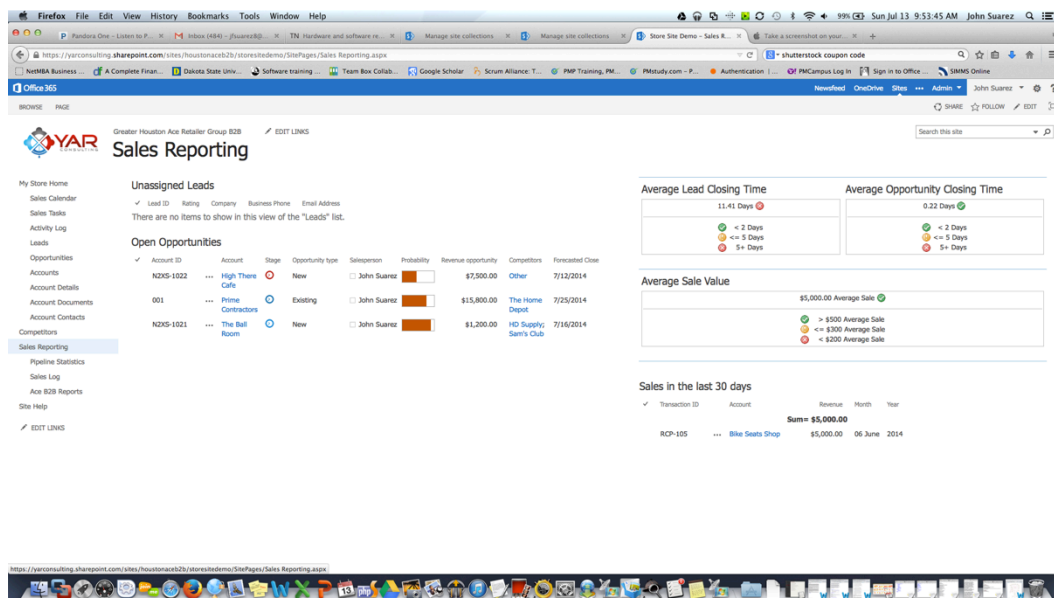


Figure 40. Extranet Ind. Store B2B Sales Reporting Home Dashboard

The B2B Store Site Pipeline Statistics page allows B2B members of GHARG to view their individual stores sales related statistics in a graphical format.

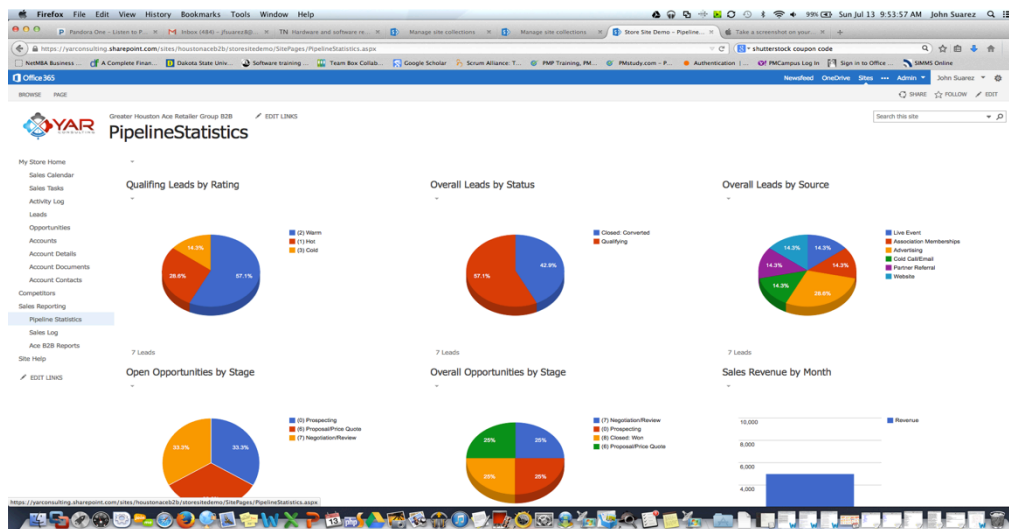


Figure 41. Extranet Ind. Store B2B Pipeline Statistics Page

The B2B Store Site Sales Log page allows B2B members of GHARG to view their individual stores sales log.

The screenshot shows the 'Sales Log' page for 'Greater Houston Ace Retailer Group B2B'. It features a sidebar with navigation options similar to the Pipeline Statistics page. The main content area displays a table with the following data:

Transaction ID	Salesperson	Account	Revenue	Date of sale	Month	Year
RCP-105	John Suarez	Blue Seats Shop	\$5,000.00	6/30/2014 10:00 PM	06	2014

Figure 42. Extranet Ind. Store B2B Sales Log Page

The B2B Store Site Ace B2B Reports page allows B2B members of GHARG to view in detail their individual stores sales reports from Ace Hardware that will be uploaded on a monthly basis for comparison to their numbers.

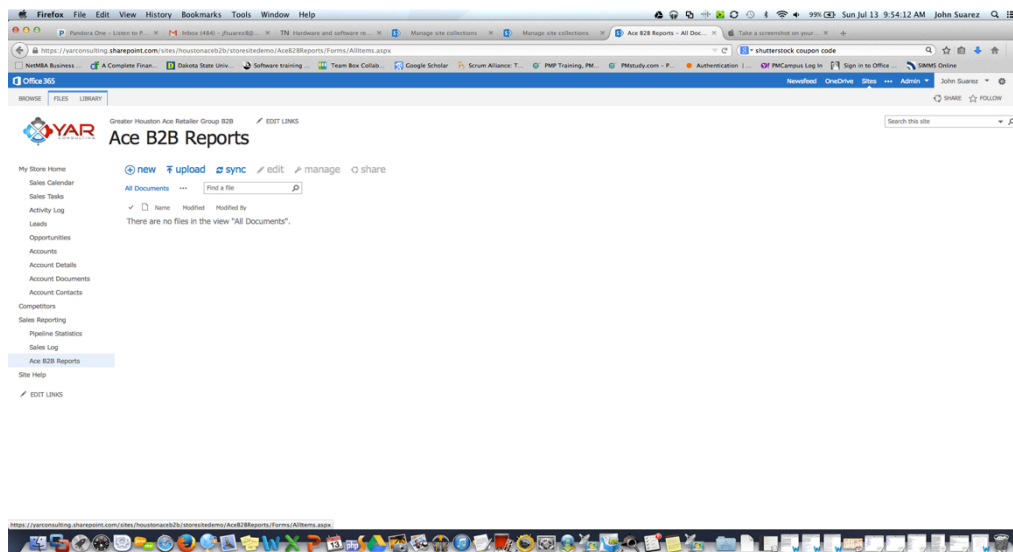


Figure 43. Extranet Ind. Store B2B Ace Reports Page

The B2B Store Site's Site Help page allows B2B members of GHARG to view in detail instructions on how to use all of the areas of their website.

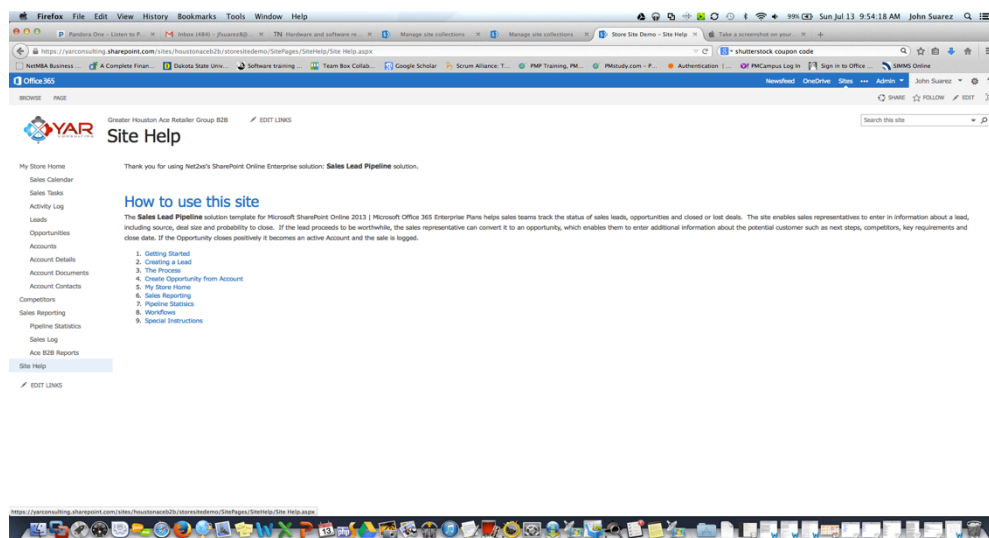


Figure 44. Extranet Ind. Store B2B Site Help Page



## **CHAPTER 5**

### **CONCLUSIONS**

The objective was to develop a website for YAR Consulting, a new information systems “boutique” consultancy based in the Houston, Texas metroplex offering business consultation, IS Consultation, Project / Program Management, and Contract Management services and in addition to develop a cloud based extranet site for a part of Ace Hardware Corporation, and in specific a small group of independently owned Ace stores and store groups that are part of Ace corporate’s B2B pilot program rollout, that would provide simple CRM and sales functionality as those stores beginning to grow their B2B segments. Although more work will have to be done and eventual integration with Epicor’s ERP suite, being used by Ace Hardware corporate, that was not the initial goal of this project. The eventual integration segment will be part of the on-going work in process and future projects with Ace Hardware corporate team. The development of the extranet site for store assessment, and as a beginning tool, has been a success in its initial rollout winning approval and support from all the stores where it has been introduced.

The extranet site developed for the Greater Houston Ace Group of Retailers will also serve as a template for other organizations with similar goals and challenges as the ones at Ace Hardware and the Greater Houston Ace Group of Retailers.

## REFERENCES

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- Microsoft Case Study: Microsoft SharePoint Server 2010 - Boise State University. (n.d.). Microsoft Case Study: Microsoft SharePoint Server 2010 - Boise State University. Retrieved July 7, 2014, from <http://www.microsoft.com/casestudies/Microsoft-SharePoint-Server-2010/Boise-State-University/University-Solution-Unifies-Students-Faculty-Staff-and-Business-Critical-Systems/710000001775>
- Kerr, L. (n.d.). Fortune 500 Companies Using SharePoint. Recent SharePoint Sites RSS. Retrieved July 7, 2014, from <http://www.topsharepoint.com/fortune-500-companies-using-sharepoint>

# **APPENDICES**

## **APPENDIX A: USERS' MANUAL**



### **EXTRANET SITE**

### **USER MANUAL**

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## List and Library Basic Tutorials

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The following SharePoint help tutorials can be found on the Microsoft Office.com support site at <http://office.microsoft.com/en-us/sharepoint-server-help>

### Add, edit, or delete list items

A site can include a variety of lists — from contacts and calendars to announcements and issues-tracking. Regardless of the type of list you are updating, the process is similar for adding, editing, and deleting list items. You can create a list with a variety of columns, including Text, Number, Choice, Currency, Date and Time, Lookup, Yes/No, and Calculated. You can also attach one or more files to a list item to provide additional details, such as a spread sheet containing supporting numbers or a document containing background information.

#### NOTES


- To add, edit, or delete items in a list, you must have permission to contribute to the list.
- The process of adding, editing, and deleting list items in Datasheet View is described in SharePoint Help.

### Add an item to a list

There are two ways to add an item to a list. You can add an item by using a form, which is the default method, or you can add an item in line, which means you add the item directly on the list page.

**NOTE** Some lists may appear in Web Parts, which are basic building blocks of pages on a site. For example, the Announcements, Calendar, and Links lists appear in Web Parts on the default home page. When a list appears in a Web Part, you may be able to add items to the list without directly opening up the list. However, if you do not see the link to add a new item to a list, you need to directly open the list.

### Add an item by using a form

1. Navigate to the site containing the list for which you want to add an item.
2. Click the name of the list on the Quick Launch (the left navigation pane), or click Settings , click Site contents, and then in the appropriate list section, click the name of the list.

**NOTE** A site can be significantly modified in appearance and navigation. If you cannot locate an option, such as a command, button, or link, contact your administrator.


3. In the ribbon, click the Items tab, and then in the New group, click **New Item**.

If additional content types have been added to the list, click the arrow next to **New** to display other choices, such as **New Support Issue** or **New Vendor**.

4. Enter the information for the list item. Note the following:
  - You must enter information if the column label has a red asterisk next to it.
  - To attach a file to the list item, in the ribbon, on the **Edit** tab, in the Actions group, click Attach File, click **Browse** to locate the file, and then click **OK**. You can attach more than one file for each list item. If the Attach File command is unavailable, your list may not support attachments.

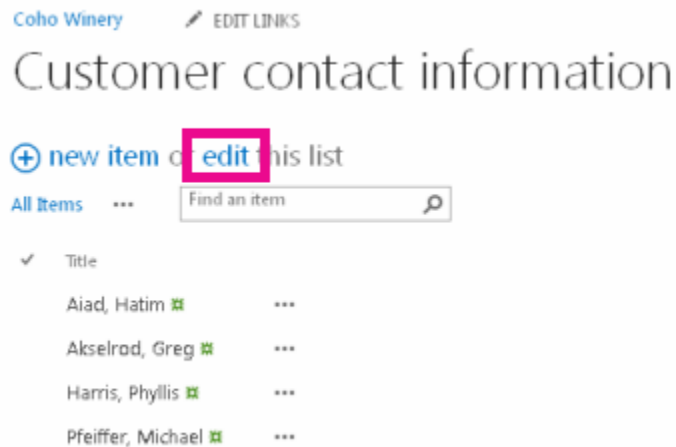
- Depending on the list, additional commands may be available on the Custom Commands tab on the ribbon.
5. Do one of the following:
- When you are finished entering the information, click **Save**, at the bottom of the form.
  - To discard any information you entered, click **Cancel** at the bottom of the form.

## Add or edit an item inline

1. Navigate to the site containing the list for which you want to add an item.
2. Click the name of the list on the Quick Launch, or click **Settings** , click **Site contents**, and then in the appropriate list section, click the name of the list.

**NOTE** A site can be significantly modified in appearance and navigation. If you cannot locate an option, such as a command, button, or link, contact your administrator.

3. Click **edit** at the top of the list.




4. Enter the information for the list item. Note the following:
  - For columns that require information, if you do not enter anything, an error message displays next to the column.
  - You cannot attach a file to a list item when editing inline. However, you can still attach a list item by adding the item with a form.
5. Do one of the following:
  - When you are finished entering the information, click **Stop editing** this list.
  - To discard any information you entered, click the ellipsis ...next to the item and click **Delete Item** from the drop-down menu.

## Edit an item in a list

There are two ways to edit an item in a list. You can edit an item by using a form, which is the default method, or you can edit an item in line, which means you edit the item directly on the list page.

**NOTE** If the list is set up to track versions, a new version of the list item is created each time you edit a list item. You can view a history of how the list item has changed and restore a previous version if you make a mistake in a newer version.

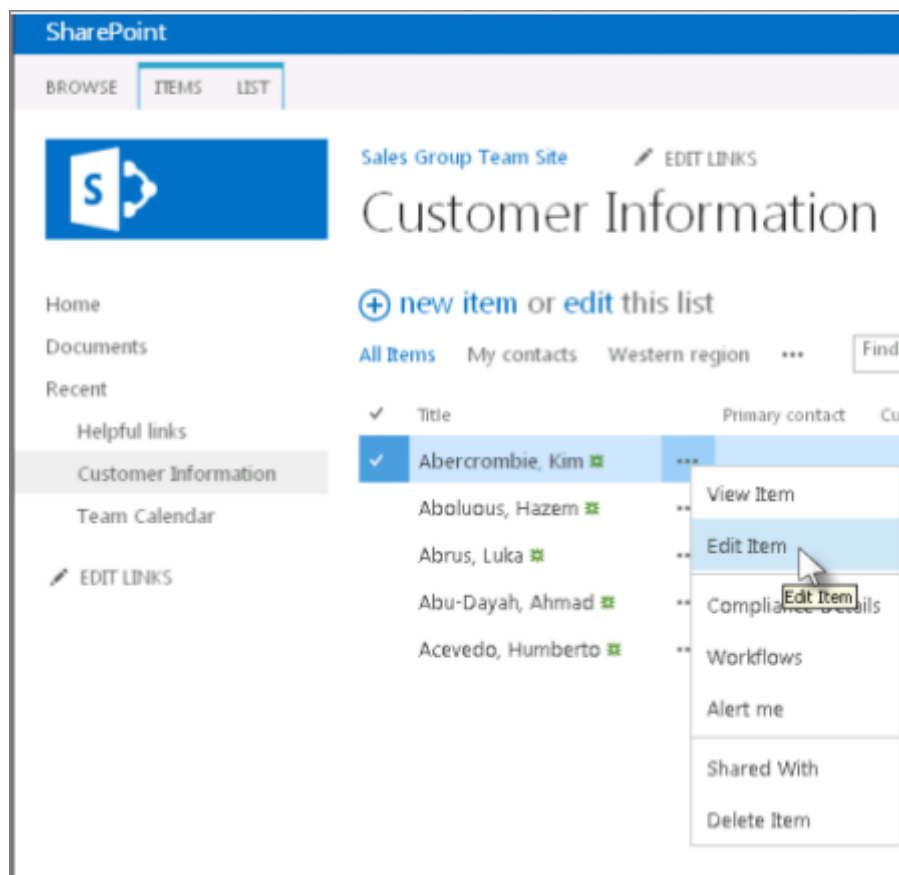
## Edit an item by using a form

1. Navigate to the site containing the list for which you want to edit an item.
2. Click the name of the list on the Quick Launch, or click **Settings** , then click **Site contents**, and then in the appropriate list section, click the name of the list.

**NOTE** A site can be significantly modified in appearance and navigation. If you cannot locate an option, such as a command, button, or link, contact your administrator.

3. Click the check mark next to the item you want to edit.
4. In the ribbon, on the Items tab, in the Manage group, click **Edit Item**.

**NOTE** YOU CAN ALSO CLICK THE ELLIPSIS --- NEXT TO THE ITEM AND SELECT EDIT ITEM FROM THE MENU.



- Edit the information in the list item. Note the following:
- You must enter information if the column label has a red asterisk next to it.
- To attach a file to the list item, in the ribbon, on the Items tab, in the Actions group, click **Attach File**, click **Browse** to locate the file, and then click **OK**. You can attach more than one file for each list item. If the OK command is unavailable, your list may not support attachments.
- To delete an attachment from a list item, select **Edit Item**, and then in the Attachments section on the form, next to the attachment you want to remove, click **Delete**.


Title *	<input type="text" value="Abercrombie, Kim"/>
Primary contact	<input type="text" value="kimabercrombie@constoso.com"/>
Customer ID	<input type="text"/>
Attachments	Notes.txt <input type="button" value="Delete"/>
Created at 9/10/2012 9:58 AM by <input type="checkbox"/> System Account	<input type="button" value="Save"/>
Last modified at 9/10/2012 11:01 AM by <input type="checkbox"/> System Account	<input type="button" value="Cancel"/>

5. Do one of the following:

- When you are finished entering the information, in the ribbon, on the Edit tab, in the Commit group, click **Save**, or at the bottom of the form, click **Save**.
- To discard any information you entered, in the ribbon, on the Edit tab, in the Commit group, click **Cancel**.

## Delete one or more items from a list

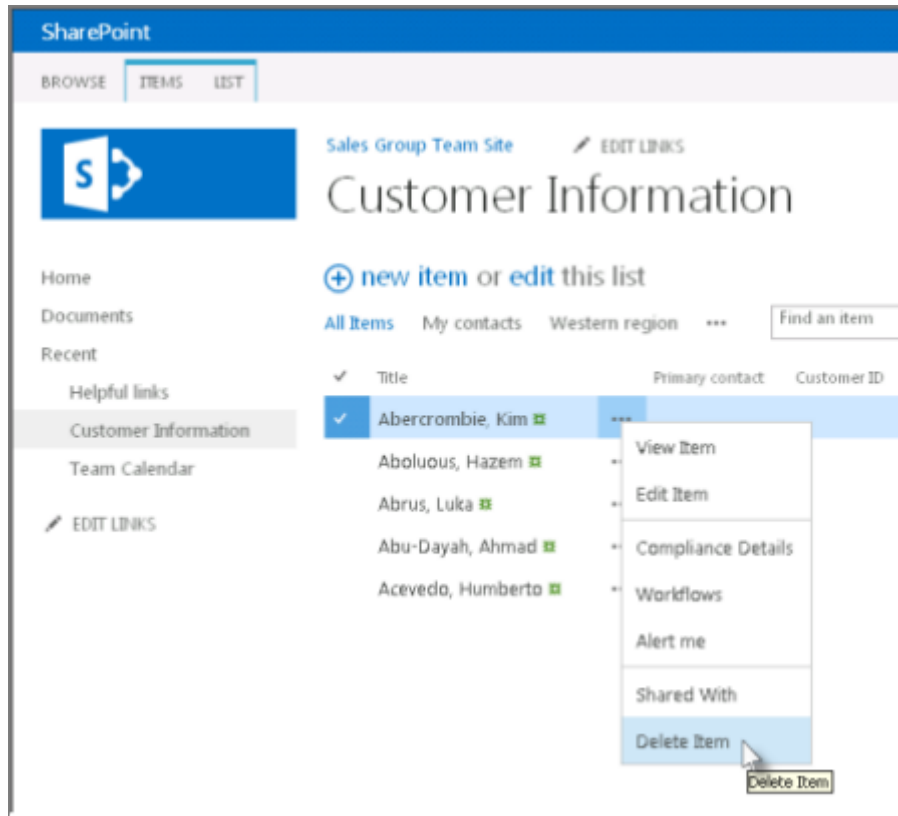
**IMPORTANT** Be careful when you delete items. Deleting items may be permanent and you may not be able to recover them. Consider moving or archiving the items instead. Depending on how your site was configured, you may be able to recover the items and its contents from the **Recycle Bin**.

1. Navigate to the site containing the list for which you want to delete the items.
2. Click the name of the list on the Quick Launch, or click **Settings** , click **Site Contents**, and then in the appropriate list section, click the name of the list.

**NOTE** A site can be significantly modified in appearance and navigation. If you cannot locate an option, such as a command, button, or link, contact your administrator.

Click the check mark in the check mark column corresponding to the items you want to edit and click **Delete Item**.

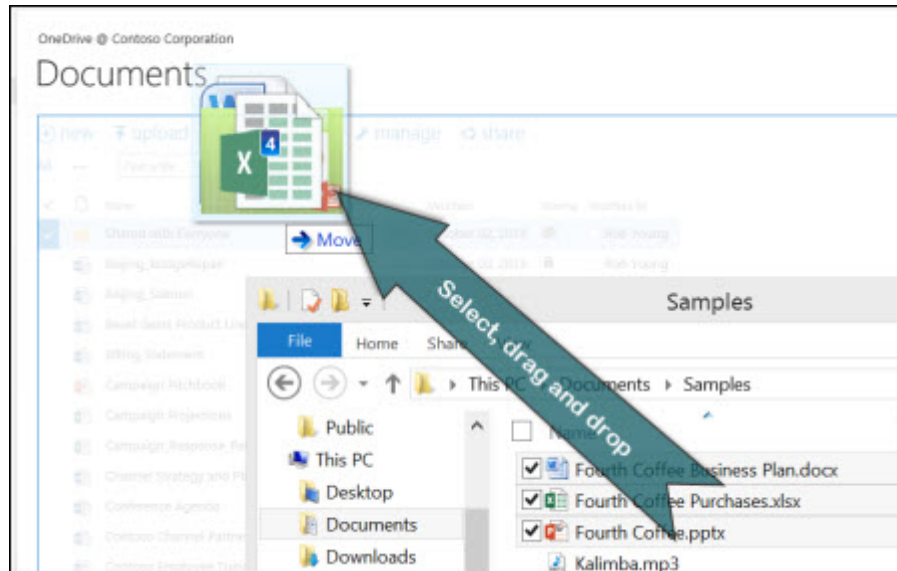




## Upload files to a library

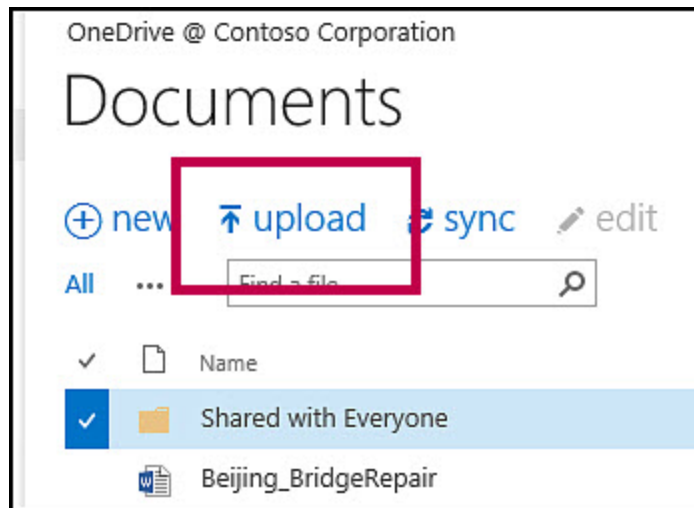
(NOTE: use team site instructions as OneDrive is not available for external users on the account)

You can upload files, to your OneDrive for Business or to your team site, by just dragging them from your computer. First, open OneDrive or the site library. Then find the documents that you want to upload in File Explorer and drag them to the space in the library where it says **drag files here**. For a demonstration, see [Video: Adding documents to a library](#). Not sure where to add the files? See [Should I save my documents to OneDrive for Business or a team site?](#)



**NOTE** If you don't see the option to drag and drop files, update your copy of Office.

Instead of dragging files, you can select Upload.



In the **Add a document** dialog box, you can click **Browse** to upload an individual file or click **Upload files using Windows Explorer instead** to upload multiple files. If you choose the Explorer option, you can drag files from your computer into the File Explorer window. This option is easier to use if you open File Explorer first.

**TIP** Some libraries have restrictions that can limit how many files you can upload at a time. For example, if the library requires a specific content type, or requires a specific field, you can only upload one file at a time.

For a demonstration, see [Video: Copy or move library files by using Open with Explorer](#). To troubleshoot issues, see [Troubleshoot the 'Open with Explorer' command in Microsoft SharePoint Online in Microsoft Office 365](#).

You can also create and manage documents, spreadsheets, presentations, and other types of files in a library. To learn more, see these articles:

[Create a document](#)

**IMPORTANT** Before you can upload or create files in a library, you need to have permission to contribute to the library. Also, if the library that if some file types are blocked for security reasons.

## Upload large files or many files to a library

If you are uploading large files—or many files that add up to a large total size—to a library, you may get errors due to the file size limit in SharePoint or timeout errors in your version of Internet Explorer. Steps you can take to get around these errors include:

- Upload 100 or fewer files. You cannot upload more than 100 files at a time.
- If you are an Office 365 customer, avoid uploading files larger than 2 GB, which is the maximum file size by default.
- If your organization maintains an on-premises deployment of SharePoint, ask the server administrator to verify or increase the maximum file size limit to accommodate the size of the files you are uploading. The default size limit is 250 MB, but it can be increased up to a maximum of 2GB.
- For file sizes exceeding 2 GB, if you see a "Working on it" message that never goes away, follow the instructions in Microsoft Support: Internet Explorer error "connection timed out" when server does not respond.
- If you have the OneDrive for Business sync client available, use it to upload large files or multiple files. Sync will automatically upload them in the background when you're online. For more information, see [Sync a library to your computer](#).

## More about uploading files

Your experience with adding files to a library might differ a little, depending on the version of Office or on the browser that you use. In addition, sometimes site administrators set up additional requirements in a library that you might have to work with.

**NOTE** In a wiki page library, you can create new wiki pages, but you cannot upload existing files.

**Save a file** Before you can save a file for the first time, you may need to add the site as a trusted site in your browser settings. For example, in Internet Explorer, click **Tools > Internet options > Security > Trusted Sites > Sites**.

**Require check out** Site owners can set up a library to require you to check out files before you edit them (and check them in when you finish). If your library requires check out, the file is checked out to you when you first upload it. You have to check the file in before other people can edit it. To learn about checkout, see [Check out, check in, or discard changes to files in a library](#)

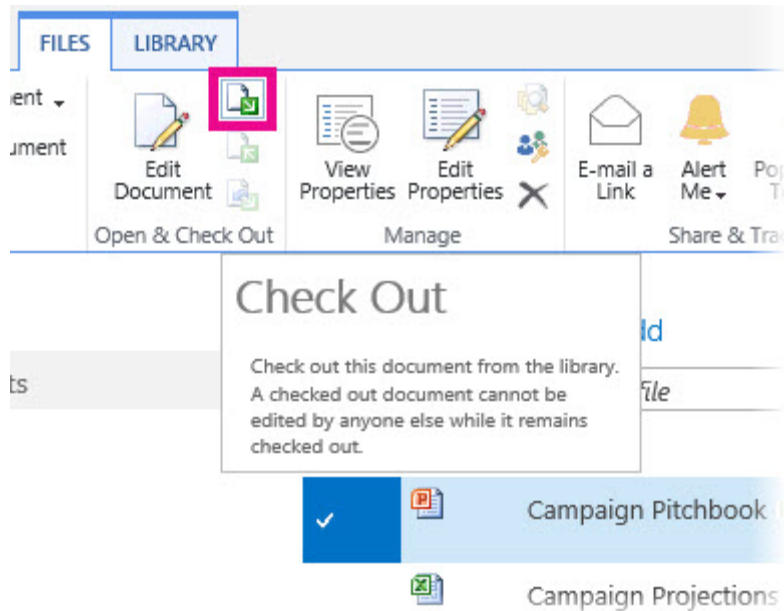
**Track file versions** You can add replace an existing file with a revised version of a file. If the library is set up to track versions, you can add the revised file as a new version, which becomes part of the version history of the file. If you are uploading a new version of a file, consider typing comments about what changed in this version so that you can more easily track the history of the file. To learn more about versioning, see [Video: Document library versioning and email alerts](#)

**Fill out file properties** When you add a file to a library, you may also be required to fill out a form (on the document information panel) with information about the file, such as its description, a department name, or a project number.

**Approve submitted content** Site owners can set up a library to require approval of the content before it becomes visible to others who use the library. As the author, you can see the file listed and work with it, but nobody else can. For example, a legal department might require approval before documents become public. To learn more, see [Require approval of items in a site list or library](#).

## Check out, check in, or discard changes to files in a library

If you want to make changes to a file on a site and you want to make sure no one else can edit it, check out the file. When you have the file checked out, you can edit it online or offline, and save it—multiple times, if necessary.



When you finish editing and check the file back into the library, other people can see your changes and edit the file, if they have permission. And, if you decide not to make or keep any changes in the file, you can simply discard your checkout so you don't affect version history.

**TIP** If you want to edit an Office document at the same time as other people (also called co-authoring), don't check out the document. Just open it and edit it. We recommend turning on versioning for the library first, though, just in case someone makes a mistake later and you need to restore an earlier version of the document. For more information about co-authoring, see [Document collaboration and co-authoring](#).

## Check out files

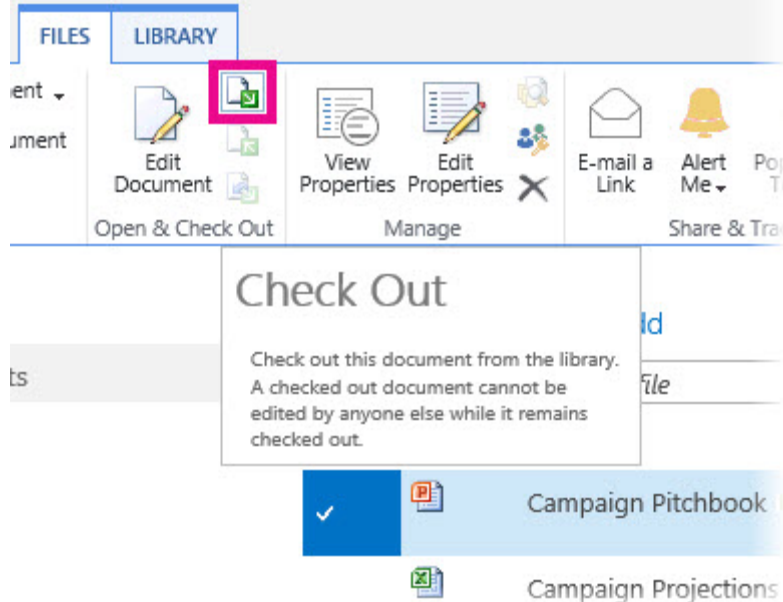
Some libraries are set up to require checkout of files. If checkout is required, you will be prompted to check out any files that you want to edit. When you are finished with the file, you need to check it back in or discard the checkout.

If checkout isn't required in the library, you don't need to check it out as long as you don't mind letting other people edit at the same time as you.

**TIP** If your team plans to use co-authoring, we recommend turning on at least major versioning in the library, just in case someone makes a mistake and uploads a document of the same name in a library where everyone is co-authoring. This way, if you lose changes, you can restore a previous version of the document.

1. Go to the library where your file is saved. (If you're looking at a view of the library on another page, you may have to click the title of the library first. For example, you may have to click Documents first to go to the Documents library.)

2. Select the file, or files, that you want to check out, and then click **Files > Check Out**.



3. A message box opens, reminding you that you are about to check out a file. If you want to save it in the folder where you save your local SharePoint drafts, select Use my local drafts folder. Otherwise, don't check the box.



## NOTES

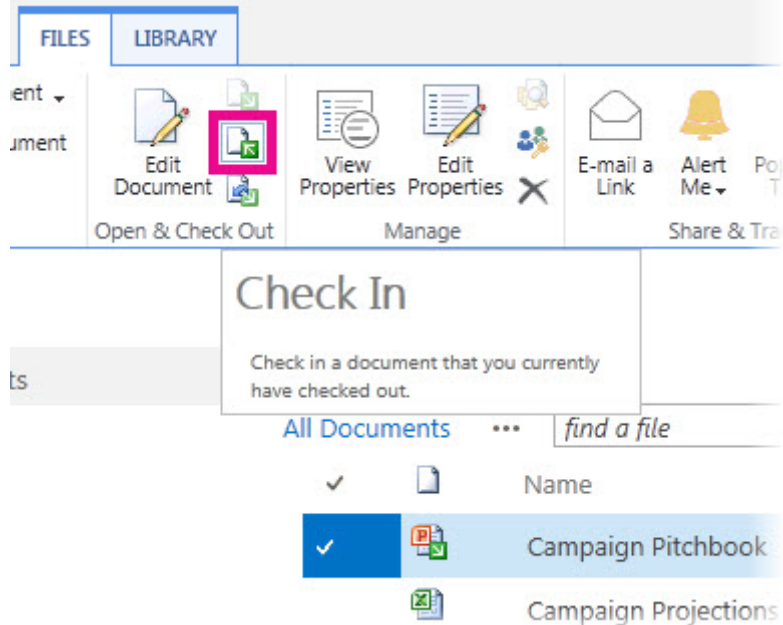
- If you select two or more files for checkout, you don't have the option to save them to a local drafts folder.
- Checking the Use my local drafts folder box lets you take the file offline and makes the file easier to find on your computer, if you need to open it later while you are not connected to a network. Working on a file while online offers file protection advantages. If you don't need to work offline, you might prefer to work online.
- When the file is checked out, the icon next to the file name is partially covered by a green, downward-pointing arrow. This tells you, or anyone else, that the file is checked out. If you point to the icon of any checked-out file, you can see the name of the document and the name of the person who has it checked out.

## Check in files

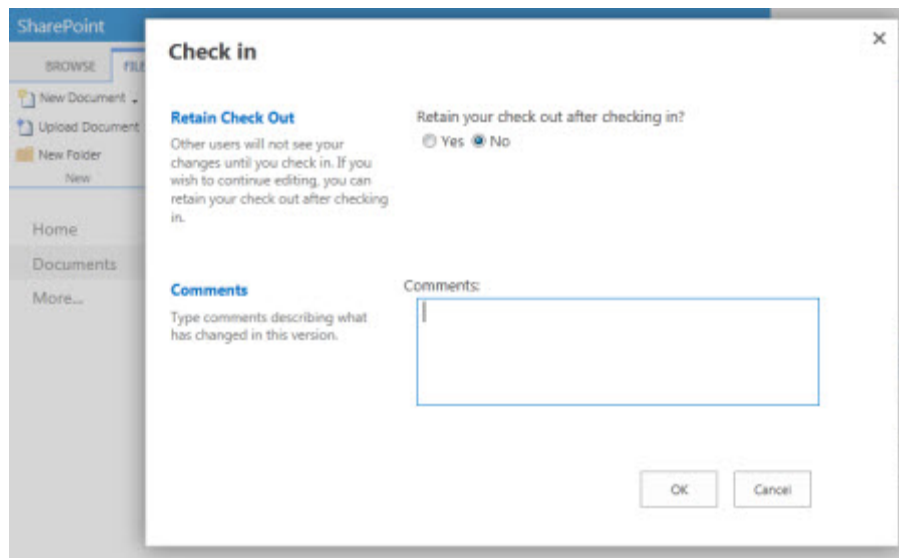
Your files, and any changes you make to them, will not be available to your colleagues until you check the files back into your library.

1. Go to the library where your file is saved. (If you're looking at a view of the library on another page, you may have to click the title of the library first. For example, you may have to click Documents first to go to the Documents library.)

2. Select the file, or files, that you want to check in, and then click **Files > Check In**.



3. If you want to do an interim check-in so you can continue working on the file, select **Yes** in the **Retain Check Out** area. Otherwise, leave **No** selected.



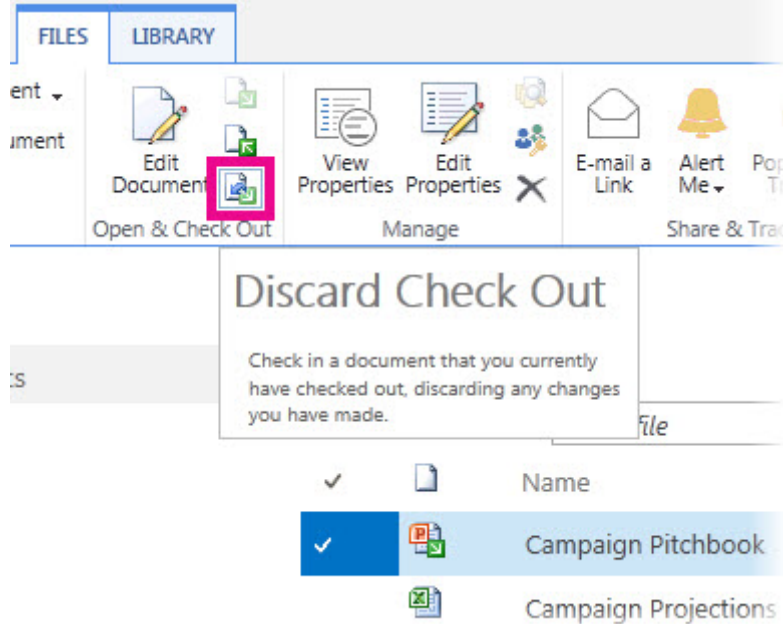
4. In the **Comments** area, add a comment that describes the changes you made. This step is optional but recommended as a best practice. Check-in comments are especially helpful when several people work on a file. Moreover, if versions are being tracked in your organization, the comment becomes part of the version history, which may be important to you in the future, if you need to restore to an earlier version of the file.
5. Click **OK**. The green arrow disappears from the file icon when the file is checked back in.

## Discard a check-out

If you check out a file and don't make changes to it, or you make changes that you don't want to keep, you can simply discard the checkout, rather than saving the file. If your organization tracks versions, a new version is created each time you

check a file back into the library. By discarding the checkout, you can avoid making new versions when you haven't made any changes to the file.

1. Go to the library where your file is saved. (If you're looking at a view of the library on another page, you may have to click the title of the library first. For example, you may have to click **Documents** first to go to the **Documents** library.)
2. Select the file, or files, that you want to discard changes for, and then click **Files > Discard Checkout**.



3. Click **OK** to finish discarding the checkout. The green arrow disappears from the file icon when the file is checked back in.

## How does versioning work in a list or library?

When versioning is enabled in your list or library, you can store, track, and restore items in a list and files in a library whenever they change. Versioning, combined with other settings, such as checkout, gives you a lot of control of the content that is posted on your site and can provide real value if you ever have a need to look at or restore an old version of an item or file.

## Versioning overview

Anyone with permission to manage lists can turn versioning on or off for a library. Versioning is available for list items in all default list types—including calendars, issue tracking lists, and custom lists. It is also available for all file types that can be stored in libraries, including Web Part pages.

**NOTE** If you are an Office 365 customer, versioning is now turned on by default when you create new OneDrive for Business libraries, and it will automatically save the last ten versions of a document. This will help you prevent losing important documents or data. If you have existing libraries on your OneDrive for Business site or on your team site that do not have versioning enabled, you can turn versioning on for them at any time.

You can use versioning to:

- **Track history of a version** When versioning is enabled, you can see when an item or file was changed and who changed it. You can also see when properties (information about the file) were changed. For example, if someone changes the due date of a list item, that information appears in the version history. You can also see the comments people make when they check files into libraries.
- **Restore a previous version** If you made a mistake in a current version, if the current version is corrupt, or if you simply like a previous version better, you can replace the current version with a previous one. The restored version becomes the new current version.
- **View a previous version** You can view a previous version without overwriting your current version. If you are viewing version history within a Microsoft Office document, such as a Word or Excel file, you can compare the two versions to determine what the differences are.

## When versions are created

When versioning is enabled, versions are created in the following situations:

- When a list item or file is first created or when a file is uploaded.

**NOTE** If file checkout is required, you have to check the file in to create its first version.

- When a file is uploaded that has the same name as an existing file and the Add as a new version to existing files check box is selected.
- When the properties of a list item or file are changed.
- When a file is opened, edited, and saved. A version is created when you first click Save. It retains the new version number for the duration of the current editing session, even though you might save it several times. When you close it and then reopen it for another editing session, another version is created.
- During co-authoring of a document, when a different user begins working on the document or when a user clicks save to upload changes to the library. The default time period for creating new versions during co-authoring is 30 minutes, but an administrator can change that setting.

There can be up to three current versions of a file at any given time: the checked-out version, the latest minor or draft version, and the latest published or major version. All other versions are considered historical versions. Some current versions are only visible to users who have permissions to view them.

## Major and minor versions

Some organizations track both major and minor versions of files in their libraries. Others only track the major versions. Major versions are identified by whole numbers, such as 5.0; minor versions are identified by decimal numbers, such as 5.1.

Most organizations use minor versions when files are under development, and major versions when certain milestones are reached or when the files are ready for review by a wide audience. In many organizations, draft security is set to allow only the owner of a file and people who have permissions to approve files. That means that minor versions cannot be seen by anyone else until a major version is published.

Major versions are available for lists, but minor versions are not available. Each version of a list item is numbered with a whole number. If your organization requires approval of items in a list, the items remain in Pending status until they are approved by someone who has permissions to approve them. While in Pending status they are numbered with decimal numbers and are referred to as drafts.

## Version numbering

Version numbers are automatically added each time you create a new version. In a list or library that has major versioning enabled, the versions have whole numbers, such as 1.0, 2.0, 3.0, and so on. In libraries, your administrator might enable versioning for both major and minor versions. When minor versions are being tracked, they have decimal numbers such as 1.1, 1.2, 1.3, and so on. When one of those versions is published as a major version, its number becomes 2.0. Subsequent minor versions are numbered 2.1, 2.2, 2.3, and so on.





When you discard a checkout, the version number does not change. If the most recent version was version 3.0, it remains at 3.0 after you discard the checkout.

When you delete a version, the version goes to the Recycle Bin and its number goes with it. The Version History will show the remaining version numbers. The other version numbers do not change. For example, if you have a document that has minor versions 2.1 and 2.2, and you decide to delete version 2.1, the resulting version history shows only versions 2.0 and 2.2. The following picture shows this.



## Version History

[Delete All Versions](#) | [Delete Minor Versions](#)

No. ↓	Modified	Modified By	Size
2.2	4/12/2012 3:08 PM	 [blurred]	136.7 KB
This is the current published major version			
2.0	4/12/2012 3:02 PM	 [blurred]	151.1 KB
1.1	4/12/2012 2:59 PM	 [blurred]	151.1 KB
1.0	4/2/2012 5:13 PM	 [blurred]	157 KB
Title		Campaign Pitchbook	

### Is there any limit to the number of available versions?

Some organizations allow unlimited versions of files and others apply limitations. You might discover, after checking in the latest version of a file, that an old version is missing. If your most recent version is 26.0 and you notice that there is no longer a version 1.0, it means that the administrator configured the library to allow only 25 major versions of a file. The addition of the 26th version causes the first version to be deleted. Only versions 2.0 through 26.0 remain. Similarly, if a 27th version is added, only versions 3.0 through 27.0 remain.

The administrator may also decide to limit the number of minor versions to just those for a set number of the most recent versions. For example, if 25 major versions are allowed, the administrator might decide to retain minor drafts for only the most recent five major versions. The default number of minor versions between major versions is 512. If you attempt to save another minor version, you will see an error message that tells you that you must first publish the document. Your site administrator can change the default to allow fewer minor versions.

Limiting the number of versions is generally a good practice. It means you can conserve space on the server and reduce clutter for users. But, if your organization is required to save all versions for legal or other reasons, don't apply any limits.

### Enabling, configuring, and using versioning in lists and libraries

Versioning is not turned on automatically when a list or library is created, but anyone with permission to manage lists can turn on versioning. On many sites that is the same person who manages the site, because the lists and libraries inherit permissions from the site. In addition to enabling versioning, the site owner (or another person managing the list or library) decides whether or not to require content approval, who can view draft items, and whether or not checkout is required. Each of these decisions has an impact on how versioning works. For example, if the person managing a library decides to require check-out, version numbers are only created when a file is checked in. If content approval is required, major version numbers are not applied until files are approved by someone who has permission to do so.

Important If the people who work in your library are planning to co-author documents, do not configure the library to require check-out. People cannot work as co-authors when the documents that they need are checked out.

To learn how to turn on versioning for a list or library, see [Enable and configure versioning for a list or library](#). Find related tasks and information below or in the [See Also](#) section of this article.

### How does versioning work with required content approval?

If versioning is enabled in your library, the person who sets it up determines whether or not to track both major and minor versions and also determines who can see the minor versions. In most cases, when content approval is required, only the owner of the file, and people who have permission to approve items, can see the minor versions. In other libraries, anyone who

can edit files in the library, or anyone who has Read permission to the library, can see all versions. After a version is approved, everyone who has Read permission to the list or library can see the version.

Although lists do not have major and minor versions, any item that is in Pending status is considered a draft. In most cases, only the creator of the item and persons who have Full Control or Design permissions can see drafts. A draft shows up in Pending status for those people, but others only see the most recent Approved version in the version history. If the file is rejected, it stays in Pending status until someone who has the necessary permissions deletes it.

Note Draft security, in some lists and libraries, is configured to allow all site users to see both Pending and Approved versions.

## How does versioning work with file checkout?

When you check out a file from a library that has versioning turned on, a new version is created every time you check it back in. And, if major *and* minor versions are turned on, you can decide, at check-in, which type of version you are checking in. In libraries where checkout is required, versions are only created upon check-in.

In libraries where checkout is not required, a new version is created the first time you save after opening the file. Each subsequent save overwrites the version that you created with the first save. If you close the application and then reopen the document, the first save will, once again, produce a version. This can cause the number of versions to proliferate very rapidly.

**IMPORTANT** If you are co-authoring a document, do not check it out unless you have good reason to prevent others from working on the document.



## Sales Lead Pipeline Solution Tutorials

The following Net2xs Sales Lead Pipeline help tutorials can be found in the Site Help for each Store site. For more information about the vendor solution please refer to <http://www.net2xs.com/office365templates/sdo365/o365salesleadpipeline>. Please note that the solution has been customized for use in the Store environment.

The **Sales Lead Pipeline** solution template for Microsoft SharePoint Online 2013 | Microsoft Office 365 Enterprise Plans helps sales teams track the status of sales leads, opportunities and closed or lost deals. The site enables sales representatives to enter in information about a lead, including source, deal size and probability to close. If the lead proceeds to be worthwhile, the sales representative can convert it to an opportunity, which enables them to enter additional information about the potential customer such as next steps, competitors, key requirements and close date. If the Opportunity closes positively it becomes an active Account and the sale is logged.

### Setting up the Competitors list

Now that the permissions for the site have been set you can go to **Site Contents > Competitors**.

Setting up the **Competitors** list allows **Sales Lead Pipeline** users and sales staff to directly link **Opportunities** to each of their applicable **Competitors**. Used in conjunction with **Opportunities** the **Competitors** list can provide insight into the sales approach for individual **Opportunities**.

1. In the **Competitors** list click the **+ new** button to add a new competitor to the site.
2. Fill in the **Company** field with the company name of the competitor you are adding.
3. In the **Location** field enter the **City** and **State** your competitor resides in (*i.e. Los Angeles, CA*).
4. Add as much information as possible in the **Description** field.
5. In the **Web Site** field add the **URL** of the **Competitors** web site.
6. Use the drop down list to select the appropriate **Competition Level** (*i.e. (1) Severe, (2) High, (3) Elevated, (4) Guarded, (5) Low*).
7. Click **Save** to save the new **Competitor** to the list.
8. **Repeat** the process for all competing companies known by the **Sales Lead Pipeline** solution.

### Creating a Lead

Use the following steps to successfully create a Lead within the **Sales Lead Pipeline** to start the **Sales** process. A **Lead** can be started from the **Leads** list by clicking the **+new item** link or by going to the **My Store Home** page and clicking the **+new Lead** button under **Quick Links for Account Executives** web part.

1. In the **Lead ID** field enter "**New**".
2. In the **Last Name** field enter the last name of the contact person for the Lead.
3. In the **First Name** field enter the first name of the contact person for the Lead.
4. In the **Full Name** field enter the full name (last name, first name) format.

5. Enter the Leads email address in the **Email Address** field.
6. Enter the company name in the **Company** field.
7. Enter the contact person's job title in the **Job Title** field.
8. In the **Business Phone** field enter the **Company's** main business phone number in (###) ###-#### format.
9. In the **Home Phone** field enter the contacts home phone number in (###) ###-#### format if provided.
10. In the **Mobile Number** field enter the contacts cell phone number in (###) ###-#### format if provided.
11. In the **Fax Number** field enter the **Company's** main business fax number in (###) ###-#### format.
12. In the **Address** field enter the street address of the company.
13. In the **City** field enter the city of the company address.
14. In the **State/Province** field enter the state of the company address.
15. In the **Zip/Postal Code** field enter the zip code of the company address.
16. In the first part of the **Web Page** field enter the web **URL** of the company web site, in the second field enter the **Company Name** again.
17. In the **Notes** field include any information provided by the call-in about the Leads request or needs.
18. Use the **Rating** drop down list to select the "temperature" of the Lead (*i.e. (1) Hot, (2) Warm, (3) Cold*).
19. Use the **Preferred Contact Method** drop down list to select the **Leads** preferred mode of communication with the sales team.
20. In the **Email** field use the radio selectors to chose "Yes" or "No" if the **Salesperson** can contact the **Lead** by email.
21. In the **Phone** field use the radio selectors to chose "Yes" or "No" if the **Salesperson** can contact the **Lead** by phone.
22. In the **Mail** field use the radio selectors to chose "Yes" or "No" if the **Salesperson** can contact the **Lead** by mail.
23. In the **Newsletter** field use the radio selectors to chose "Yes" or "No" if the **Salesperson** can contact the **Lead** by newsletter.
24. In the **Send Marketing Materials** field use the radio selectors to choose "Yes" or "No" if the **Salesperson** can continue to send the **Lead** marketing materials by one of the methods listed above.
25. Leave the default selection of "Qualifying" in the drop down selector for **Lead Source**.
26. If the Salesperson is known please enter the Salesperson's display name or login name. If no Salesperson is to be assigned when creating the Lead this field can be left blank for a Sales Manager to complete later.
27. In the **Annual Revenue** field please enter the **Leads Annual Revenue** if available.
28. In the **Revenue Opportunity** field enter the approximate value of the **Leads** query.
29. If known enter the **Leads** number of employees in the **Employees** field.
30. Please leave the **Closed Date** field blank at this time.
31. Click **Save** to enter the **Lead** in the **Leads** list and issue the **Lead** a **Lead ID**.

## Starting the Process

The process can begin from either a new **Lead** (see *Creating a Lead*) or from an existing Customer **Account** (see *Create Opportunity from Account*). The **Leads** list is based on a **Contact** list and as such can be connected to a **Salespersons Microsoft Outlook 2013** from the List Menu in the **Leads** list. In this way **Closed Leads** are kept as a marketing tool for **Salespeople** to revisit at a later date. From the **Display view** of an individual **Lead** the **Salesperson** can select **Opportunity** or **Close** from the **Actions** ribbon to close a lead or convert a lead to an **Opportunity** using the built in automated

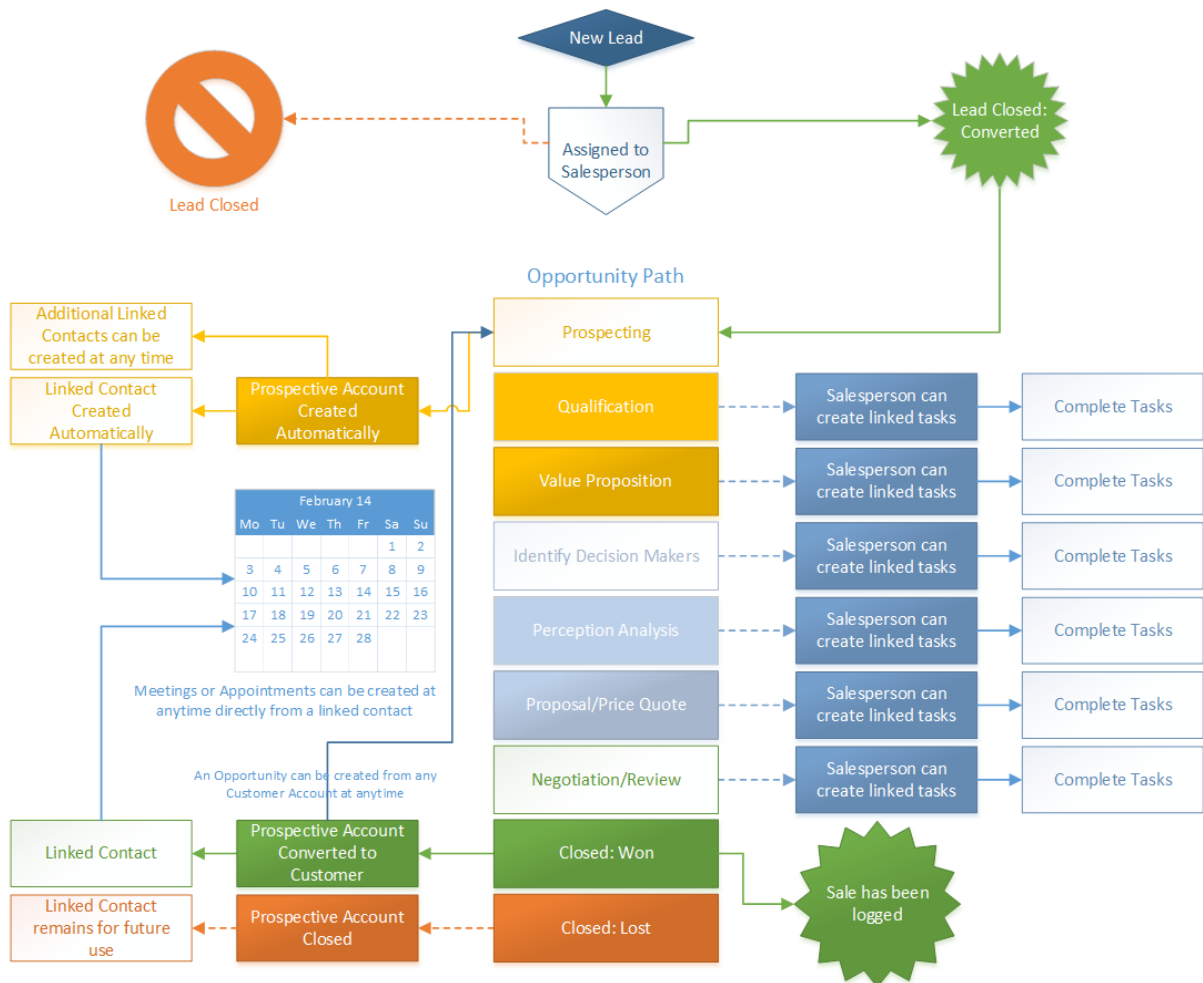
workflows. This same functionality is built into the **Accounts** list; from the Display view of an individual Account the **Salesperson** can select **Opportunity** or **Close** from the **Actions** ribbon to close an Account or create a new **Opportunity** using the built in automated workflows.

### Pushing thru the Opportunity path

Once created, an **Opportunity** begins at the **Prospecting** stage automatically and can be moved thru the process (see descriptions of the stages below) via workflow **Action** buttons in the List view and/or Display view form. Unlike the previous versions of the **Sales Lead Pipeline**, a **Salesperson** can now move an **Opportunity** forward, backward, or even skip steps in the **Opportunity** process on the way to completion. In addition to removing the strictly linear progression of the earlier versions of the **Sales Lead Pipeline** we've added the ability to create **Sales Tasks** directly from the list view or display view form pre-linked to the **Opportunity**.

The screenshot displays the 'Opportunity display view form' in a SharePoint environment. The browser address bar shows the URL: <https://yarconsulting.sharepoint.com/sites/houstonaceb2b/storesitedemo/SitePages/SiteHelp/The%20Process.aspx>. The Office 365 navigation bar is visible at the top, including 'Newsfeed', 'OneDrive', 'Sites', and 'Admin'. The form itself is titled 'Opportunity display view form' and 'Opportunity Qualification workflow initiation form'. It features a progress bar with stages: Qualify, Analyze, Value, Identify, Persuasion, Proposal, Negotiation, Sale, and No Sale. A blue arrow points to the 'Qualify' stage with the text 'Should look like this'. The form includes fields for Account ID (NZXS-1007), Account (True Style, Inc.), Salesperson (David), Stage ((B) Proposal/Price Quote), Opportunity type (Existing), and Probability (75%). The 'Next step' section contains a text box and a 'Start' button.

Opportunity Stage	Icon	Probability	Description of Stage
Prospecting		10%	This is the first stage in the sales process and indicates that the opportunity with this prospect is new and needs to be qualified by a sales representative.
Qualification		10%	The sales rep is currently interacting with the prospect to determine if a sales opportunity exists.
Needs Analysis		20%	After determining that the prospect has interest in the products or services, the sales representative now uncovers the prospect's business problems.
Value Proposition		50%	After uncovering the prospect's business problems, the sales representative now maps the company's products and/or services to the prospect's business problems and describes the value of the solution.
Identify Decision Makers		60%	After determining that there is a match between the prospect's business problems and the company's products and/or services, the sales representative now identifies the decision makers necessary to close this opportunity.
Perception Analysis		70%	The sales representative analyzes the prospect's perceived value of the company's solution at this stage in order to prepare the appropriate combination of products and services for the sales quote.
Proposal/Price Quote		75%	The sales representative delivers the proposal, or sometimes called the price quote, to the prospect.
Negotiation/Review		90%	The sales representative reviews and negotiates the proposal with the prospect.
Closed: Won		100%	The sales representative has won this opportunity, and the company can now bill the customer.
Closed: Lost		0%	The sales representative has lost this opportunity.



## Navigating the My Store Home dashboard

In this tutorial we'll show you how to initiate a **Lead** within the **Sales Lead Pipeline** solution and provide an overview of the **My Store Home** dashboard.

- **My Lead Pipeline** web part
  - Keep track of **Leads** that are assigned to the currently logged on user and have a **Lead Status** of **Qualifying**.
  - Clicking on the ... allows a **Salesperson** to **Close** or convert the **Lead** to an **Opportunity** (see *Workflows associated with Leads*).
- **My Open Opportunities** web part
  - Keep track of **Opportunities** that are assigned to the currently logged on user and are not **Closed**.
  - Clicking on the ... allows a **Salesperson** to easily move an **Opportunity** thru the stages via the **Action** commands (workflow Actions), **Qualify**, **Analyze**, **Value**, **Identify**, **Perception**, **Proposal**, **Negotiation**, **Sale** or **No Sale** (see *Workflows associated with Opportunities*).
  - Clicking on the + **Add new task** allows a **Salesperson** to easily create a **Sales Task** associated with the **Opportunity**.
- **My Active Accounts** web part
  - Keep track of **Accounts** that are assigned to the currently logged on user that are **Open** and **Active**. These **Accounts** are grouped by **Customer** and **Prospect**.
  - Clicking on the + **Add new contact** allows a **Salesperson** to easily create a **Contact** associated with the **Account**. Adding an **Contact** via the + **Add new contact** method pull information from the **Account** and pre-fill the **New Contact** form to shorten the time required to fill in the form.
- **Quick Links for Account Executives** web part
  - Easy buttons to create new **Leads**, **Accounts**, or schedule **Meetings/appointments**.
- **My Sales Tasks** web part
  - Keep track of **Tasks** that are assigned to the currently logged on user.
- **My Appointments Calendar** web part
  - Keep track of future **Appointments** that are assigned to the currently logged on user.

**Sales Lead Pipeline**

**My Lead Pipeline**

Lead ID	Rating	Full Name	Web Page	Business Phone	Lead Status	Lead Source	Annual Revenue	Revenue Opportunity
SLP-102	...	Gina Gigalone	Gigalore Fashions, Inc.	(555) 223-5551	Qualifying	Cold call	\$375,000.00	\$900.00

**My Open Opportunities**

Account ID	Account	Stage	Opportunity type	Priority	Revenue opportunity	Active Tasks	Due	Completed
N2XS-1007	True Style, Inc.	Existing			\$500.00	Task: Get Manager approval on Pricing	02/10/2014	30%
N2XS-1010	Springtime Trees	New			\$2,100.00	Task: Develop a custom solution	02/07/2014	10%
N2XS-1011	321 Action Productions	New			\$1,200.00	No tasks found		

**My Active Accounts**

Account ID	Account Name	Annual Revenue	Web Page	Account Opened	Related Contacts
<b>Account Type : Customer (2)</b>					
N2XS-1007	True Style, Inc.	\$650.00	True Style, Inc.	2/2/2014	Missy Godfried, President
N2XS-1008	Plankton Ridge Lodge	\$7,800.00	Plankton Ridge Lodge	2/1/2014	Ronald Elliot, Operations Director
<b>Account Type : Prospect (2)</b>					
N2XS-1010	Springtime Trees		Springtime Trees	2/2/2014	Juan Morgan, Owner
N2XS-1011	321 Action Productions		321 Action Productions	2/5/2014	Aaron Glickman, President

**Quick Links for Account Executives**

Quick links to create new Leads, Accounts, and Campaigns.

+New Lead +New Account +New Meeting

**My Appointments Calendar**

February, 2014

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
26	27	28	29	30	31	1
2	3	4	5	6	7	8
	4:00 pm - 9:00 am - Sale closure	12:00 pm - 1:00 pm - Testing C#	12:00 pm - 1:00 pm - Testing C#	12:00 pm - 1:00 pm - Testing C#	2:00 pm - 3:00 pm - Meeting to	
9	10	11	12	13	14	15
	11:30 am - 12:30 pm - Testing the				9:30 am - 10:30 am - in office Sa	
16	17	18	19	20	21	22
23	24	25	26	27	28	1

## Navigating the Sales Reporting Dashboard

In this tutorial we'll show you how to navigate the **Sales Reporting**.

- **Unassigned Leads** web part
  - The **Unassigned Leads** web part shows **Leads** that have not been assigned to a **Salesperson**. This allows the **Sales Manager** to easily identify unassigned Leads, review the **Lead**, and assign the **Lead** to the appropriate **Salesperson**.
  - Like other views of the Lead list the ratings are listed by icons, hover the mouse over the icon to see its value. (1) Hot 🔥, (2) Warm 🌡️, and (3) Cold ❄️.
- **Open Opportunities** web part
  - The Open Opportunities web part lists **Opportunities** that are currently open.
  - Opportunities are listed by Stage (see the listing and definitions on the *The Process page*).
- **Sales in the last 30 days** web part
  - This web part lists all sales completed within the last 30 days (*[Today]-30*), and provides a Sum of the sales listed.
- **Average Lead Closing Time** web part
  - Provides a visual indication on the average time to **Close** or **Convert a Lead** (see image below).
- **Average Opportunity Closing Time** web part
  - Provides a visual indication on the average time to **Close** or **Convert an Opportunity** (see image below).
- **Average Sale Value** web part
  - Provides a visual indication of the average sale value against the **Sales Log** list.

The screenshot displays the Office 365 Management Dashboard for the Sales Lead Pipeline. The dashboard includes several key sections:

- Unassigned Leads:** A table listing leads with columns for Lead ID, Rating, Company, Business Phone, and Email Address. Two leads are shown: SLP-102 (Hot) for Gigalore Fashions, Inc. and SLP-109 (Hot) for Stevenson & Sons, Inc.
- Hot Opportunities:** A table listing opportunities with columns for Account ID, Account, Stage, Opportunity type, Salesperson, Probability, and Revenue opportunity. Two opportunities are shown: N2XS-1007 (Existing) for True Style, Inc. and N2XS-1010 (New) for Springtime Trees.
- Average Lead Closing Time:** A gauge showing 0.74 Days, with a legend for < 2 Days (Green), <= 5 Days (Yellow), and > 5 Days (Red).
- Average Opportunity Closing Time:** A gauge showing 0.34 Days, with a legend for < 2 Days (Green), <= 5 Days (Yellow), and > 5 Days (Red).
- Average Sale Value:** A gauge showing \$2,536.00 Average Sale, with a legend for > \$500 Average Sale (Green), <= \$300 Average Sale (Yellow), and < \$200 Average Sale (Red).
- Sales in the last 30 days:** A table showing a total revenue of \$11,700.00, with individual sales transactions listed by Transaction ID, Account, Revenue, Month, and Year.

Transaction ID	Account	Revenue	Month	Year
<b>Sum = \$11,700.00</b>				
RCP-101	True Style, Inc.	\$650.00	02 February	2014
RCP-102	Martin Outdoor Media	\$3,250.00	02 February	2014
RCP-103	Plankton Ridge Lodge	\$7,800.00	02 February	2014

## About the Sales Lead Pipeline workflows



The **Sales Lead Pipeline** solution contains 15 separate workflows that are either automated or manually triggered by **Action** buttons within the various lists, menus, or display view forms. These



workflows help automate the Customer Relationship process and help sales people manage their Leads, Opportunities, and Account in a more effective manner.










### Workflows associated with Leads

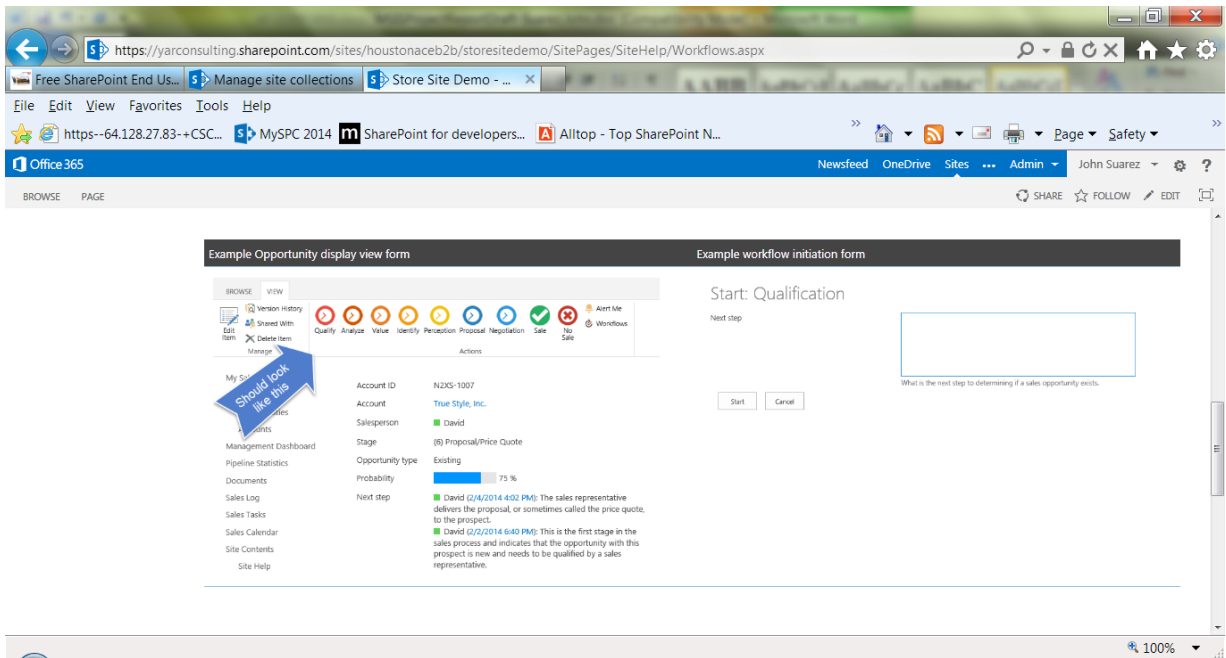
There are three workflows associated with the **Leads** list.

- When a new **Lead** is created in the **Leads** list, the **New Lead** workflow automatically assigns the lead a **Lead ID** to help track the lead thru the process.
- To **Close** a lead (dropped before being converted to an Opportunity) click the **Close**  icon in the display view form ribbon bar **Actions** menu.
- To convert a **Lead** to an **Opportunity** click the **Opportunity**  icon in the display view form ribbon bar **Actions** menu.

### Workflows associated with Opportunities

There are nine workflows associated with the **Opportunities** list. Each of the workflows can be triggered at anytime during the Opportunity process either in progression or out of sequence, this allows Salespeople to follow a more natural progression with their Opportunities. Each workflow allows the Salesperson to detail the next step in the process.

- To move an Opportunity from the initial stage (*Prospecting*) to **Qualification** click the **Qualify**  icon in the display view form (*see example below*).
- To move an Opportunity from the second stage (*Qualification*) to **Needs Analysis** click the **Analyze**  icon in the display view form (*see example below*).
- To move an Opportunity from the third stage (*Needs Analysis*) to **Value Proposition** click the **Value**  icon in the display view form (*see example below*).
- To move an Opportunity from the fourth stage (*Value Proposition*) to **Identify Decision Makers** click the **Identify**  icon in the display view form (*see example below*).
- To move an Opportunity from the fifth stage (*Identify Decision Makers*) to **Perception Analysis** click the **Perception**  icon in the display view form (*see example below*).
- To move an Opportunity from the sixth stage (*Perception Analysis*) to **Proposal/Price Quote** click the **Proposal**  icon in the display view form (*see example below*).
- To move an Opportunity from the seventh stage (*Proposal/Price Quote*) to **Negotiation/Review** click the **Negotiation**  icon in the display view form (*see example below*).
- To Close an Opportunity with a sale (*Can be done from any stage*) to **Closed: Won** click the **Sale**  icon in the display view form (*see example below*). This workflow also updates the related Accounts **Account Type** from **Prospect** to **Customer**, adds the revenue generated by the sale to the Accounts **Annual Revenue** field. In addition this workflow also creates an entry in the **Sales Log** list to account for the sale, date, amount, etc...
- To Close an Opportunity with no sale (*Can be done from any stage*) to **Closed: Lost** click the **No Sale**  icon in the display view form (*see example below*). This workflow also updates the related Accounts **Account Status** from **Active** to **Closed** and sets the date the Account was Closed.



### Workflows associated with Accounts

There are two workflows associated with the **Accounts** list. For a complete walk thru please see *Create Opportunity from Account*.

- To **Close** an Account (*Account type = Customer*) click the **Close** icon in the display view form ribbon bar **Actions** menu. This workflow also updates the **Account Status** from **Active** to **Closed** and sets the date the Account was **Closed**.
- To create a new **Opportunity** from an existing customer **Account** click the **Opportunity** icon in the display view form ribbon bar **Actions** menu and fill out the **Start: New Opportunity** form (see image below).

#### Start: New Opportunity

Revenue opportunity

Next step

Key requirements

Start Cancel

What is the revenue possibility for this opportunity?

What is the first step in converting this opportunity to a sale?

What are the customers Key Requirements for this opportunity?

## APPENDIX B:

# SYSTEM TECHNICAL DOCUMENTATION

### Website Diagrams

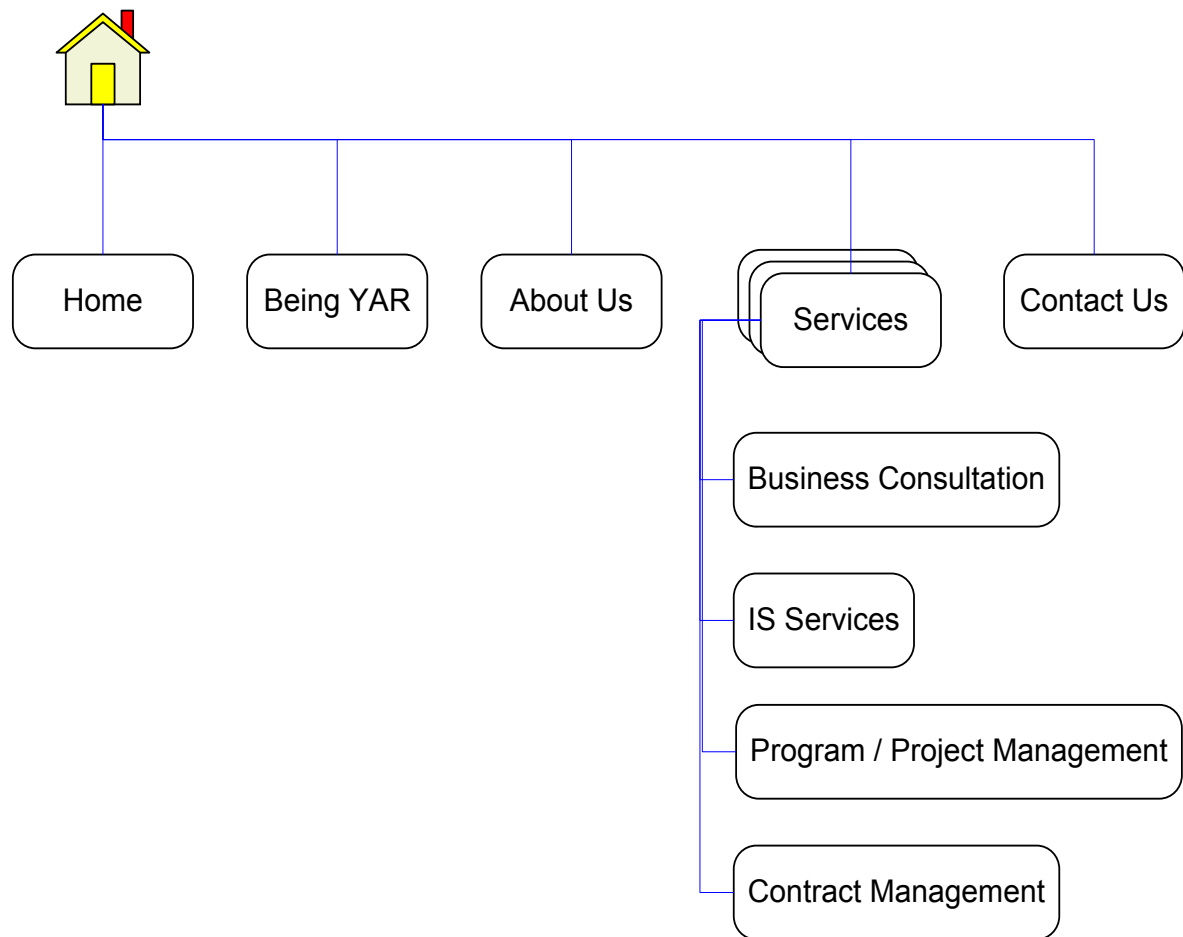


Figure B1. Website Diagram 1 – Marketing Website

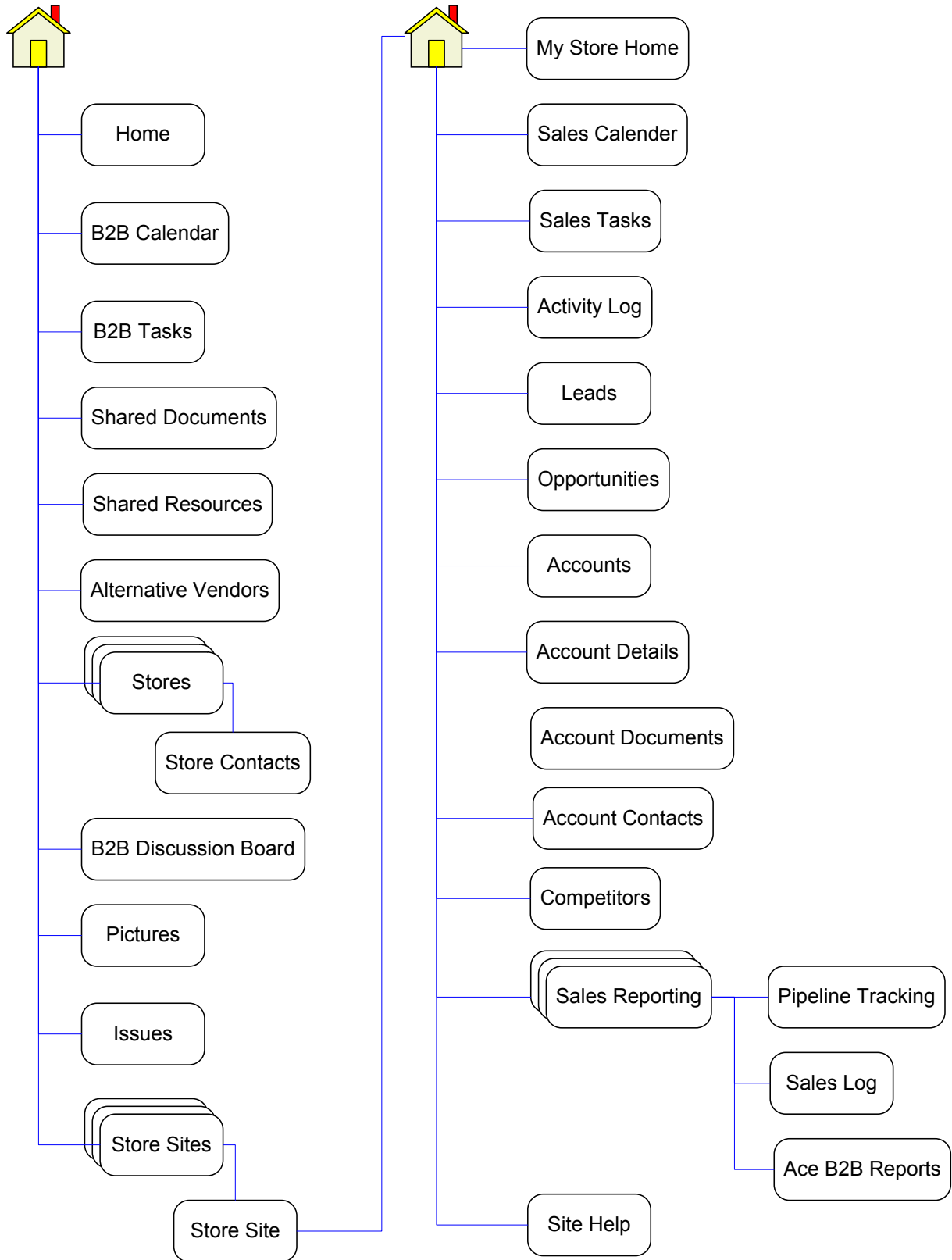


Figure B2. Website Diagram 2 – Extranet Site

## **Use Cases Descriptions**

### **Marketing Website Use Cases**

#### **USE CASE 01 – SUBMIT CONTACT US FORM**

##### **CHARACTERISTIC INFORMATION**

###### **Brief description**

This use case allows a User to submit contact form information.

###### **Primary Actor**

User

###### **Stakeholders**

User

Yar Administrator

###### **Triggers**

User accesses the Marketing Website System.

###### **Preconditions**

User has accessed the Yar Consulting website.

###### **Guarantees**

###### **Success End Condition**

User is able to submit contact information form

###### **Failed End Condition**

Nothing happens

## MAIN SUCCESS SCENARIO

1. System displays Yar Consulting website with top navigation links
2. User navigates to Contact Us page using link on top navigation
3. System displays Contact Us page with form
4. User enters and submits Contact Us form data
- 5a. System validates Contact Us form data, saves data and displays success message to User

## EXTENSIONS

- \*a. User elects to exit without submitting:
  - \*a1. The system discards any data not submitted.
- 5b. System fails validation of Contact Us form data and displays error message to User [repeat at 4]

**Table B-M1. Submit Contact Us Form Rules**

NUMBER	Rule Description: The Marketing Website System shall
01.1	Validate all required data and data types are submitted

## Extranet Site Use Cases

### Greater Houston Ace B2B (District site)

#### USE CASE D01 – MAINTAIN B2B CALENDAR

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator to maintain the B2B Calendar and Store Users to view the B2B Calendar.

#### Primary Actor

Administrator

Store User

### **Stakeholders**

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

### **Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

### **Preconditions**

Administrator or Store User is logged on.

### **Guarantees**

### **Success End Condition**

Administrator is able to update the B2B Calendar item and changes are saved or Store User is able to view the B2B Calendar

### **Failed End Condition**

Nothing happens

### **MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator navigates to B2B Calendar using link on left navigation pane
3. System displays default view of B2B Calendar
- 4a. Administrator selects Add new item link
5. System displays Add item form
6. Administrator enters B2B Calendar item data
- 7a. System validates B2B Calendar item data, saves data and displays success message to Administrator

### **EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).

- \*a1a. The Administrator or Store User selects save:  
The system saves the information and exits . [success].
- \*a1b. The Administrator or Store selects exit:  
The system discards any data not previously saved and exits [fail].
- 4b. Administrator selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator enters updated B2B Calendar item data  
[continue at 7a]
- 4c. Administrator selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator selects OK to Delete
  - 4b3. System deletes B2B Calendar item data and displays success message to Administrator
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of B2B Calendar item data and displays error message to Administrator  
[repeat at 6]

**Table B-D1. Maintain B2B Calendar Rules**

NUMBER	Rule Description: The Extranet Site System shall
D01.1	Validate all required data and data types are submitted

## USE CASE D02 – MAINTAIN B2B TASKS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator to maintain the B2B Tasks and Store Users to Edit/View B2B Tasks.

#### Primary Actor

Administrator  
Store User



**Stakeholders**

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the B2B Task item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator navigates to B2B Tasks using link on left navigation pane
3. System displays default view of B2B Tasks
- 4a. Administrator selects Add new item link
5. System displays Add item form
6. Administrator enters B2B Task item data
- 7a. System validates B2B Task item data, saves data and displays success message to Administrator

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:  
The system saves the information and exits . [success].

- \*a1b. The Administrator or Store selects exit:  
The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated B2B Task item data  
[continue at 7a]
- 4c. Administrator selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator selects OK to Delete
  - 4b3. System deletes B2B Task item data and displays success message to Administrator
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of B2B Task item data and displays error message to Administrator or User  
[repeat at 6]

**Table B-D2. Maintain B2B Task Rules**

NUMBER	Rule Description: The Extranet Site System shall
D02.1	Validate all required data and data types are submitted

## USE CASE D03 – MAINTAIN SHARED DOCUMENTS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator and Store Users to maintain the Shared Documents.

#### Primary Actor

Administrator  
Store User

**Stakeholders**

Administrator  
 Store Users (Owners, Managers, B2B Specialists)  
 Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Shared Document and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator or Store User navigates to Shared Documents using link on left navigation pane
3. System displays default view of Shared Documents
- 4a. Administrator or Store User selects Add New/Upload document link
5. System displays Add/Upload document form
6. Administrator or Store User uploads and enters Shared Document item data
- 7a. System validates Shared Document data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:

The system discards any data not previously saved and exits [fail].

- 4b. Administrator or Store User selects Edit document/Edit Properties link
  - 4b1. System displays Document and/or Edit Properties item form
  - 4b2. Administrator or Store User modifies document and/or enters updated Shared Document item data  
[continue at 7a]
- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Shared Document item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays Document and/or View Properties item form
- 7b. System fails validation of Shared Document item data and displays error message to Administrator or User  
[repeat at 6]

**Table B-D3. Maintain Shared Documents Rules**

NUMBER	Rule Description: The Extranet Site System shall
D03.1	Validate all required data and data types are submitted

## USE CASE D04 – MAINTAIN SHARED RESOURCES

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator to maintain the Shared Resources and Store Users to view Shared Resources.

#### Primary Actor

Administrator  
Store User

**Stakeholders**

Administrator  
 Store Users (Owners, Managers, B2B Specialists)  
 Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator is able to update the Shared Document and changes are saved or Store Users are able to view the Shared Document

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator or Store User navigates to Shared Resources using link on left navigation pane
3. System displays default view of Shared Resources
- 4a. Administrator selects Add New/Upload document link
5. System displays Add/Upload document form
6. Administrator uploads and enters Shared Resources item data
- 7a. System validates Shared Resources data, saves data and displays success message to Administrator

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].

- \*a1b. The Administrator or Store selects exit:  
The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit document/Edit Properties link
  - 4b1. System displays Document or Edit Properties item form
  - 4b2. Administrator or Store User modifies document and/or enters updated Shared Document item data  
[continue at 7a]
- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Shared Document item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays Document and/or View Properties item form
- 7b. System fails validation of Shared Document item data and displays error message to Administrator or User  
[repeat at 6]

**Table B-D4. Maintain Shared Resources Rules**

NUMBER	Rule Description: The Extranet Site System shall
D04.1	Validate all required data and data types are submitted

## USE CASE D05 – MAINTAIN ALTERNATIVE VENDORS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator and Store Users to maintain the Alternative Vendors.

#### Primary Actor

Administrator  
Store User

**Stakeholders**

Administrator  
 Store Users (Owners, Managers, B2B Specialists)  
 Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the B2B Task item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator or Store User navigates to Alternative Vendors using link on left navigation pane
3. System displays default view of Alternative Vendors
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Alternative Vendor item data
- 7a. System validates Alternative Vendor item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:

The system discards any data not previously saved and exits [fail].

- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Alternative Vendor item data [continue at 7a]
- 4c. Administrator selects Delete item link
  - 4c1. System displays Delete confirmation message
  - 4c2. Administrator or Store User selects OK to Delete
  - 4c3. System deletes Alternative Vendor item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Alternative Vendor item data and displays error message to Administrator or User [repeat at 6]

**Table B-D5. Maintain Alternative Vendor Rules**

NUMBER	Rule Description: The Extranet Site System shall
D05.1	Validate all required data and data types are submitted

## USE CASE D06 – MAINTAIN STORES

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator to maintain the Stores and Store Users to view the Stores.

#### Primary Actor

Administrator  
Store User



**Stakeholders**

Administrator  
 Store Users (Owners, Managers, B2B Specialists)  
 Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator is able to update the Store item and changes are saved or Store User is able to view the Store

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator navigates to Stores using link on left navigation pane
3. System displays default view of Stores
- 4a. Administrator selects Add new item link
5. System displays Add item form
6. Administrator enters Store item data
- 7a. System validates Store item data, saves data and displays success message to Administrator

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:  
 The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:

The system discards any data not previously saved and exits [fail].

- 4b. Administrator selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator enters updated Store item data  
[continue at 7a]
- 4c. Administrator selects Delete item link
  - 4c1. System displays Delete confirmation message
  - 4c2. Administrator selects OK to Delete
  - 4c3. System deletes item data and displays success message to Administrator
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Store item data and displays error message to Administrator  
[repeat at 6]

**Table B-D6. Maintain Store Rules**

NUMBER	<b>Rule Description:</b> The Extranet Site System shall
D06.1	Validate all required data and data types are submitted
D06.2	Validate deletion check for related Store Contact items

## USE CASE D07 – MAINTAIN STORE CONTACTS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator to maintain the Store Contacts and Store Users to view the Store Contacts.

#### Primary Actor

Administrator  
Store User

**Stakeholders**

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator is able to update the Store Contact item and changes are saved or Store User is able to view the Store Contacts

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator navigates to Stores Contacts using link on left navigation pane
3. System displays default view of Store Contacts
- 4a. Administrator selects Add new item link
5. System displays Add item form
6. Administrator enters Store item data
- 7a. System validates Store Contact item data, saves data and displays success message to Administrator

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:  
The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:

The system discards any data not previously saved and exits [fail].

- 4b. Administrator selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator enters updated Store Contact item data  
[continue at 7a]
- 4c. Administrator selects Delete item link
  - 4c1. System displays Delete confirmation message
  - 4c2. Administrator selects OK to Delete
  - 4c3. System deletes item data and displays success message to Administrator
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Store Contact item data and displays error message to Administrator  
[repeat at 6]

**Table B-D7. Maintain Store Contact Rules**

NUMBER	<b>Rule Description:</b> The Extranet Site System shall
D07.1	Validate all required data and data types are submitted
D07.2	Validate deletion check for related Store items

## **USE CASE D08 – MAINTAIN B2B DISCUSSIONS BOARD**

### **CHARACTERISTIC INFORMATION**

#### **Brief description**

This use case allows the Administrator and Store Users to maintain the B2B Discussions Board.

#### **Primary Actor**

Administrator  
Store User

**Stakeholders**

Administrator  
 Store Users (Owners, Managers, B2B Specialists)  
 Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the B2B Discussions Board item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator or Store User navigates to B2B Discussions Board using link on left navigation pane
3. System displays default view of B2B Discussions Board
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters B2B Discussions Board item data
- 7a. System validates B2B Discussion Board item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].

- \*a1b. The Administrator or Store selects exit:  
The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated B2B Discussions Board item data [continue at 7a]
- 4c. Administrator selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes B2B Discussions Board item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of B2B Discussions Board item data and displays error message to Administrator or User [repeat at 6]

**Table B-D8. Maintain B2B Discussions Board Rules**

NUMBER	Rule Description: The Extranet Site System shall
D08.1	Validate all required data and data types are submitted

## USE CASE D09 – MAINTAIN PICTURES

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator and Store Users to maintain the Pictures.

#### Primary Actor

Administrator  
Store User

**Stakeholders**

Administrator  
 Store Users (Owners, Managers, B2B Specialists)  
 Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Picture item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator or Store User navigates to Pictures using link on left navigation pane
3. System displays default view of Pictures
- 4a. Administrator or Store User selects Add/Upload new item link
5. System displays Add/Upload item form
6. Administrator or Store User uploads and enters Picture item data
- 7a. System validates Picture item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].

- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Picture item data  
[continue at 7a]
- 4c. Administrator selects Delete item link
  - 4c1. System displays Delete confirmation message
  - 4c2. Administrator or Store User selects OK to Delete
  - 4c3. System deletes Picture item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Picture item data and displays error message to Administrator or User  
[repeat at 6]

**Table B-D9. Maintain Pictures Rules**

NUMBER	Rule Description: The Extranet Site System shall
D09.1	Validate all required data and data types are submitted

**USE CASE D10 – MAINTAIN ISSUES****CHARACTERISTIC INFORMATION****Brief description**

This use case allows the Administrator to maintain the Issues.

**Primary Actor**

Administrator

**Stakeholders**

Administrator  
Store Users (Owners, Managers, B2B Specialists)



Ace Corporate B2B Department Team

### **Triggers**

Administrator accesses the Greater Houston Ace B2B System.

### **Preconditions**

Administrator is logged on.

### **Guarantees**

### **Success End Condition**

Administrator is able to update the Issue item and changes are saved

### **Failed End Condition**

Nothing happens

## **MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator navigates to Issues using link on left navigation pane
3. System displays default view of Issues
- 4a. Administrator selects Add new item link
5. System displays Add item form
6. Administrator enters Issue item data
- 7a. System validates Issue item data, saves data and displays success message to Administrator

## **EXTENSIONS**

- \*a. Administrator elects to exit:
  - \*a1. The system requests the Administrator to save changes (if any).
    - \*a1a. The Administrator selects save:

The system saves the information and exits . [success].
    - \*a1b. The Administrator selects exit:

The system discards any data not previously saved and exits [fail].
- 4b. Administrator selects Edit item link
  - 4b1. System displays Edit Properties item form

- 4b2. Administrator enters updated Issue item data  
[continue at 7a]
- 4c. Administrator selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator selects OK to Delete
  - 4b3. System deletes Issue item data and displays success message to Administrator
- 4d. Administrator selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Issue item data and displays error message to Administrator  
[repeat at 6]

**Table B-D10. Maintain Issues Rules**

NUMBER	Rule Description: The Extranet Site System shall
D10.1	Validate all required data and data types are submitted

**Store Site (Store site – same use cases for all stores)****USE CASE S01 – MAINTAIN SALES CALENDAR****CHARACTERISTIC INFORMATION****Brief description**

This use case allows the Administrator or Store Users to maintain the Sales Calendar.

**Primary Actor**

Administrator  
Store User

**Stakeholders**

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Sales Calendar item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Sales Calendar using link on left navigation pane
3. System displays default view of Sales Calendar
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Sales Calendar item data
- 7a. System validates Store Calendar item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Sales Calendar item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Sales Calendar item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Sales Calendar item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S1. Maintain Sales Calendar Rules**

NUMBER	Rule Description: The Extranet Site System shall
S01.1	Validate all required data and data types are submitted

## USE CASE S02 – MAINTAIN SALES TASKS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator or Store Users to maintain the Sales Tasks.

#### Primary Actor

Administrator  
Store User

#### Stakeholders

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Sales Task item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Sales Task using link on left navigation pane
3. System displays default view of Sales Tasks
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Sales Task item data
- 7a. System validates Store Task item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Sales Task item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Sales Task item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Sales Task item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S2. Maintain Sales Task Rules**

NUMBER	Rule Description: The Extranet Site System shall
S02.1	Validate all required data and data types are submitted

## USE CASE S03 – MAINTAIN ACTIVITY LOG

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator or Store Users to maintain the Activity Log.

#### Primary Actor

Administrator

Store User

#### Stakeholders

Administrator

Store Users (Owners, Managers, B2B Specialists)

Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Activity Log item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Activity Log using link on left navigation pane
3. System displays default view of Activity Log
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Activity Log item data
- 7a. System validates Activity Log item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Activity Log item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Activity Log item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Activity Log item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S3. Maintain Activity Log Rules**

NUMBER	Rule Description: The Extranet Site System shall
S03.1	Validate all required data and data types are submitted

## USE CASE S04 – MAINTAIN LEADS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator or Store Users to maintain the Leads.

#### Primary Actor

Administrator  
Store User

#### Stakeholders

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team



**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Lead item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Leads using link on left navigation pane
3. System displays default view of Leads
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Lead item data
- 7a. System validates Lead item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Lead item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Lead item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Lead item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S4. Maintain Leads Rules**

NUMBER	Rule Description: The Extranet Site System shall
S04.1	Validate all required data and data types are submitted
S04.2	Validate deletion check for related Activity Log items

## USE CASE S05 – MAINTAIN OPPORTUNITIES

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator or Store Users to maintain the Opportunities.

#### Primary Actor

Administrator  
Store User

#### Stakeholders

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Opportunity item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Opportunities using link on left navigation pane
3. System displays default view of Opportunities
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator enters Opportunity item data
- 7a. System validates Opportunity item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Opportunity item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Opportunity item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Opportunity item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S5. Maintain Opportunity Rules**

NUMBER	<b>Rule Description:</b> The Extranet Site System shall
S05.1	Validate all required data and data types are submitted
S05.2	Validate deletion check for related Sales Task or Competitor items

## **USE CASE S06 – MAINTAIN ACCOUNTS**

### **CHARACTERISTIC INFORMATION**

#### **Brief description**

This use case allows the Administrator or Store Users to maintain the Accounts.

#### **Primary Actor**

Administrator  
Store User

#### **Stakeholders**

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Account item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Accounts using link on left navigation pane
3. System displays default view of Accounts
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Account item data
- 7a. System validates Account item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Account item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Account item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Account item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S6. Maintain Account Rules**

NUMBER	Rule Description: The Extranet Site System shall
S06.1	Validate all required data and data types are submitted
S06.2	Validate deletion check for related Account Contact, Account Document, Sales Log or Activity Log items

## USE CASE S07 – MAINTAIN ACCOUNT DOCUMENTS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator and Store Users to maintain the Account Documents.

#### Primary Actor

Administrator  
Store User

#### Stakeholders

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Account Document and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator or Store User navigates to Account Documents using link on left navigation pane
3. System displays default view of Account Documents
- 4a. Administrator or Store User selects Add New/Upload document link
5. System displays Add/Upload document form
6. Administrator or Store User uploads and enters Account Document item data
- 7a. System validates Account Document data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit document/Edit Properties link
  - 4b1. System displays Document and/or Edit Properties item form
  - 4b2. Administrator or Store User modifies document and/or enters updated Account Document item data

[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Account Document item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays Document and/or View Properties item form
- 7b. System fails validation of Account Document item data and displays error message to Administrator or User  
[repeat at 6]

**Table B-S7. Maintain Account Documents Rules**

NUMBER	<b>Rule Description:</b> The Extranet Site System shall
S07.1	Validate all required data and data types are submitted

## USE CASE S08 – MAINTAIN ACCOUNT CONTACTS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator or Store Users to maintain the Account Contacts.

#### Primary Actor

Administrator  
Store User

#### Stakeholders

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team



**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Account Contact item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Account Contacts using link on left navigation pane
3. System displays default view of Account Contacts
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Account Contact item data
- 7a. System validates Account Contact item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Account Contact item data [continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Account Contact item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Account Contact item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S8. Maintain Account Contact Rules**

NUMBER	Rule Description: The Extranet Site System shall
S08.1	Validate all required data and data types are submitted
S08.2	Validate deletion check for related Sales Calendar items

## USE CASE S09 – MAINTAIN COMPETITORS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator or Store Users to maintain the Competitors.

#### Primary Actor

Administrator  
Store User

#### Stakeholders

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Competitor item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Competitors using link on left navigation pane
3. System displays default view of Competitors
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Competitor item data
- 7a. System validates Competitor item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:  
The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:  
The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Competitor item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Competitor item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Competitor item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S9. Maintain Competitor Rules**

NUMBER	Rule Description: The Extranet Site System shall
S09.1	Validate all required data and data types are submitted

## USE CASE S10 – MAINTAIN SALES LOG

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator or Store Users to maintain the Sales Log.

#### Primary Actor

Administrator  
Store User

#### Stakeholders

Administrator  
Store Users (Owners, Managers, B2B Specialists)  
Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System Store Site.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Sales Log item and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Store site home page with left navigation pane
2. Administrator or Store User navigates to Sales Log using link on left navigation pane
3. System displays default view of Sales Log
- 4a. Administrator or Store User selects Add new item link
5. System displays Add item form
6. Administrator or Store User enters Sales Log item data
- 7a. System validates Sales Log item data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit item link
  - 4b1. System displays Edit Properties item form
  - 4b2. Administrator or Store User enters updated Sales Log item data  
[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Sales Log item data and displays success message to Administrator or Store User
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays View Properties item form
- 7b. System fails validation of Sales Log item data and displays error message to Administrator or Store User  
[repeat at 6]

**Table B-S10. Maintain Sales Log Rules**

NUMBER	Rule Description: The Extranet Site System shall
S10.1	Validate all required data and data types are submitted

## USE CASE S11 – MAINTAIN ACE B2B REPORTS

### CHARACTERISTIC INFORMATION

#### Brief description

This use case allows the Administrator and Store Users to maintain the Ace B2B Reports.

#### Primary Actor

Administrator

Store User

#### Stakeholders

Administrator

Store Users (Owners, Managers, B2B Specialists)

Ace Corporate B2B Department Team

**Triggers**

Administrator or Store User accesses the Greater Houston Ace B2B System.

**Preconditions**

Administrator or Store User is logged on.

**Guarantees****Success End Condition**

Administrator or Store User is able to update the Ace B2B Report and changes are saved

**Failed End Condition**

Nothing happens

**MAIN SUCCESS SCENARIO**

1. System displays Greater Houston Ace B2B site home page with left navigation pane
2. Administrator or Store User navigates to Ace B2B Reports using link on left navigation pane
3. System displays default view of Ace B2B Reports
- 4a. Administrator or Store User selects Add New/Upload document link
5. System displays Add/Upload document form
6. Administrator or Store User uploads and enters Ace B2B Report item data
- 7a. System validates Ace B2B Report data, saves data and displays success message to Administrator or Store User

**EXTENSIONS**

- \*a. Administrator or Store User elects to exit:
  - \*a1. The system requests the Administrator or Store User to save changes (if any).
    - \*a1a. The Administrator or Store User selects save:
      - The system saves the information and exits . [success].
    - \*a1b. The Administrator or Store selects exit:
      - The system discards any data not previously saved and exits [fail].
- 4b. Administrator or Store User selects Edit document/Edit Properties link
  - 4b1. System displays Document and/or Edit Properties item form
  - 4b2. Administrator or Store User modifies document and/or enters updated Ace B2B Report item data

[continue at 7a]

- 4c. Administrator or Store User selects Delete item link
  - 4b1. System displays Delete confirmation message
  - 4b2. Administrator or Store User selects OK to Delete
  - 4b3. System deletes Ace B2B Report item data and displays success message to Administrator or Store User
  
- 4d. Administrator or Store User selects View item link
  - 4d1. System displays Document and/or View Properties item form
  
- 7b. System fails validation of Ace B2B Report item data and displays error message to Administrator or User  
[repeat at 6]

**Table B-S11. Maintain Ace B2B Report Rules**

NUMBER	<b>Rule Description:</b> The Extranet Site System shall
S11.1	Validate all required data and data types are submitted



**Use Case State Diagrams**  
**Marketing Website**

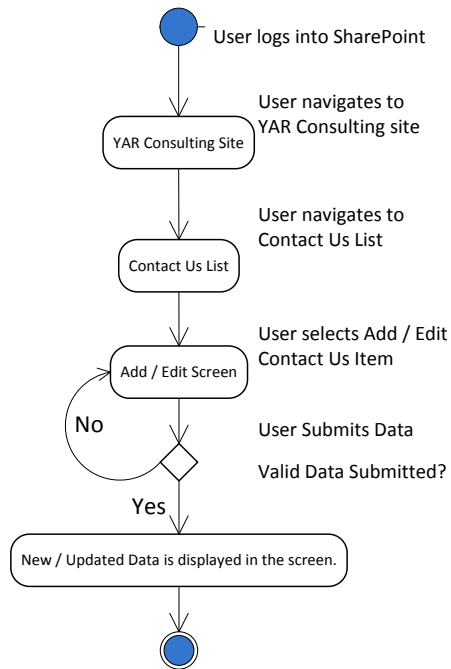


Figure B3. Submit Contact Us Form – State Diagram

**Extranet Site - Greater Houston Ace B2B Site**

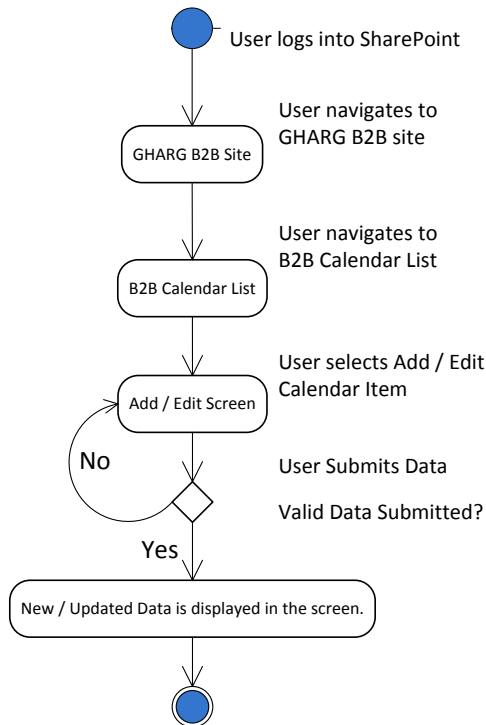


Figure B4. Maintain B2B Calendar – State Diagram

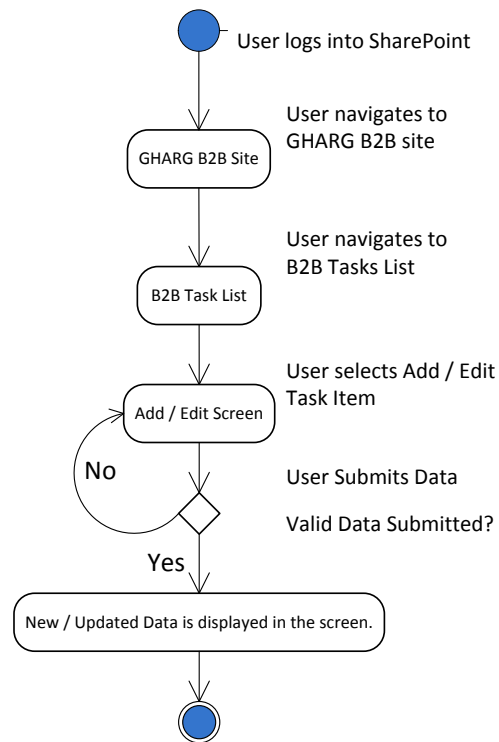


Figure B5. Maintain B2B Tasks – State Diagram

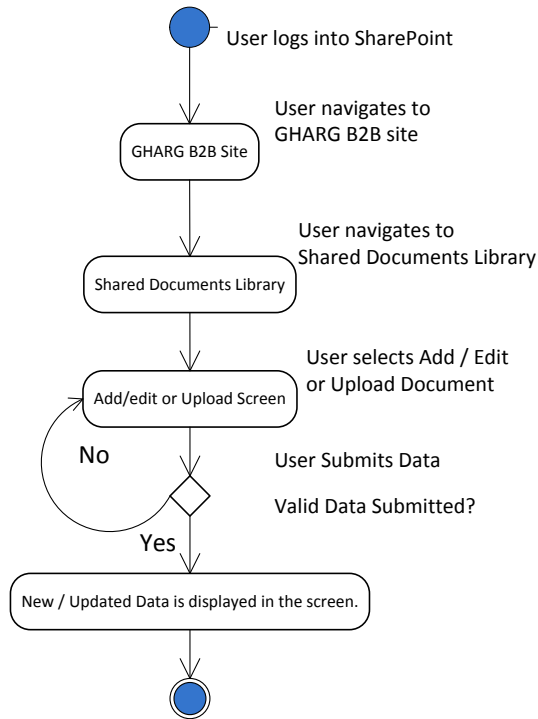


Figure B6. Maintain Shared Documents – State Diagram

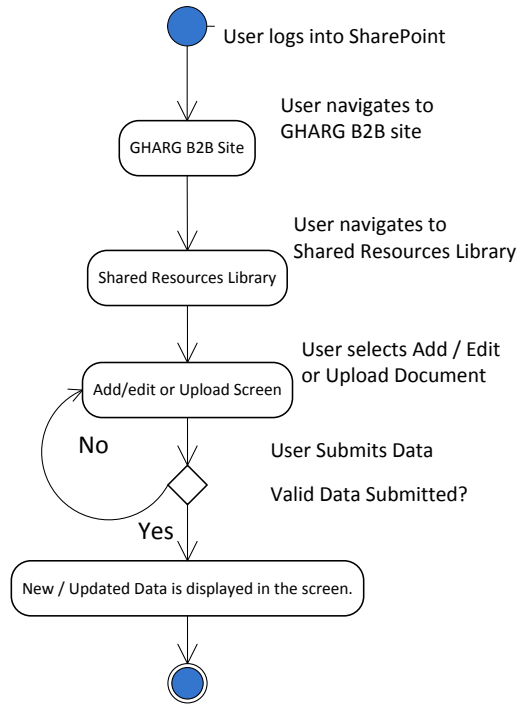


Figure B7. Maintain Shared Resources – State Diagram

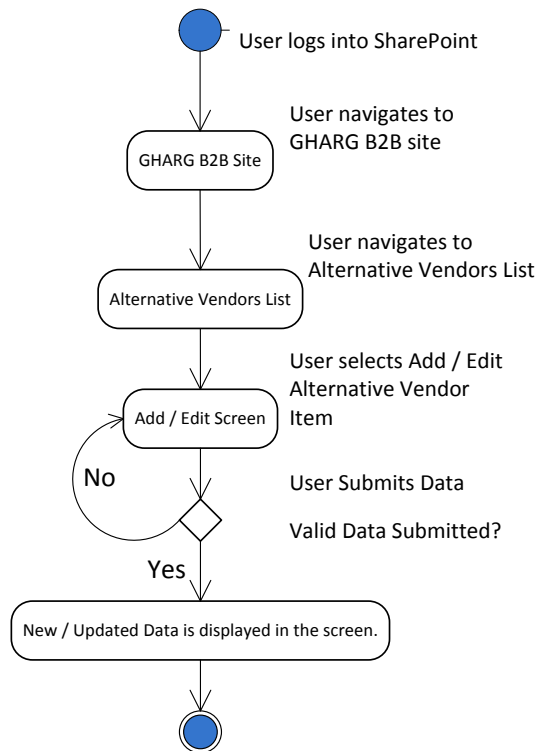


Figure B8. Maintain Alternative Vendors – State Diagram

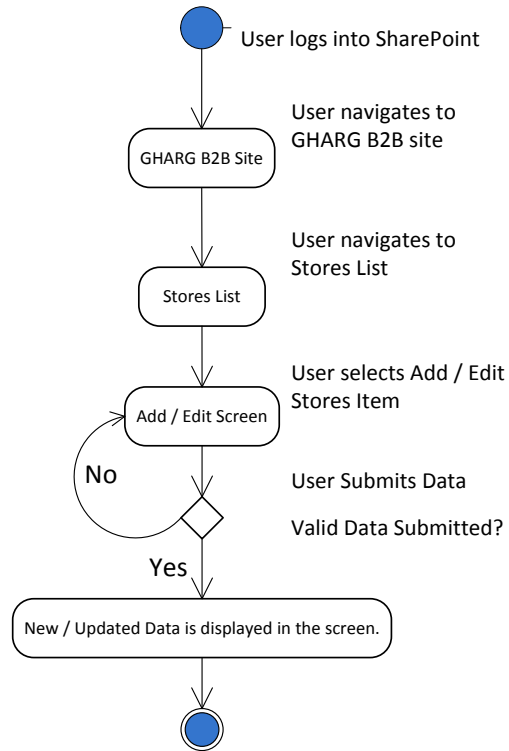


Figure B9. Maintain Stores – State Diagram

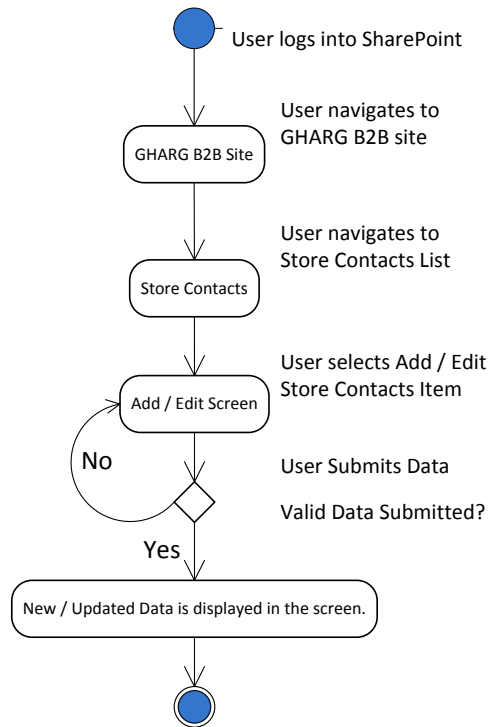


Figure B10. Maintain Store Contacts – State Diagram

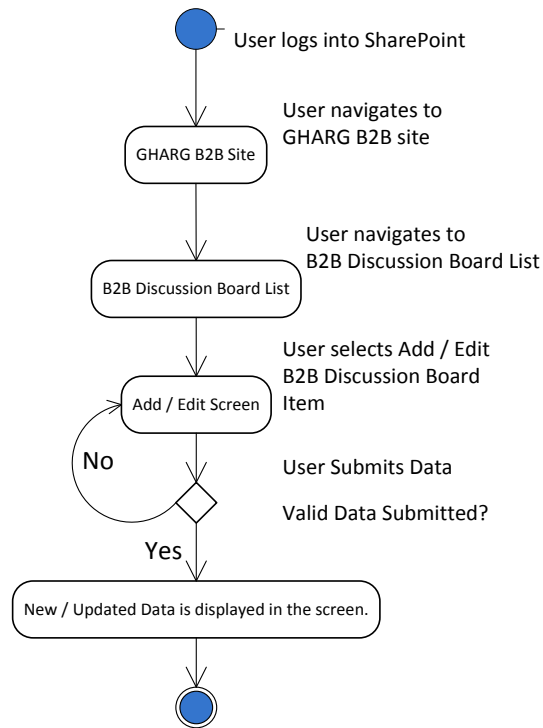


Figure B11. Maintain B2B Discussions Board – State Diagram

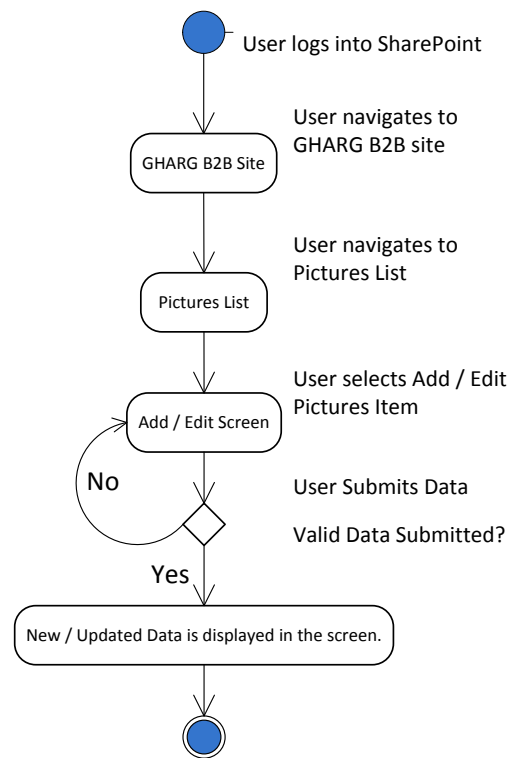


Figure B12. Maintain Pictures – State Diagram

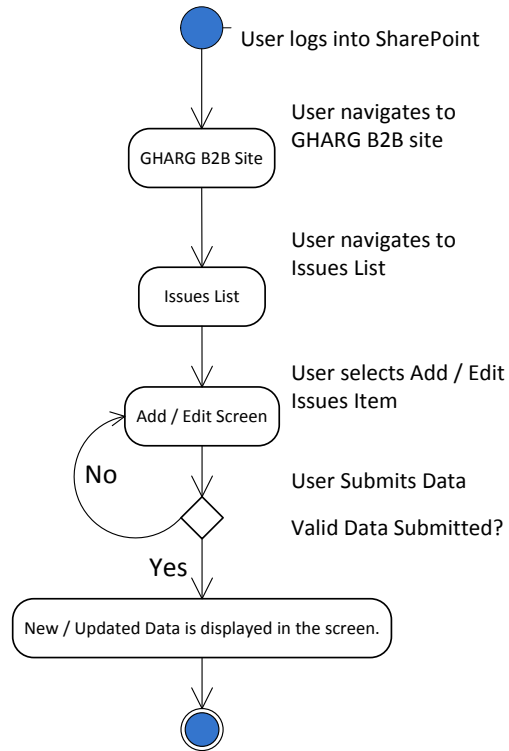


Figure B13. Maintain Issues – State Diagram

**Extranet Site - Store Sub-Site**

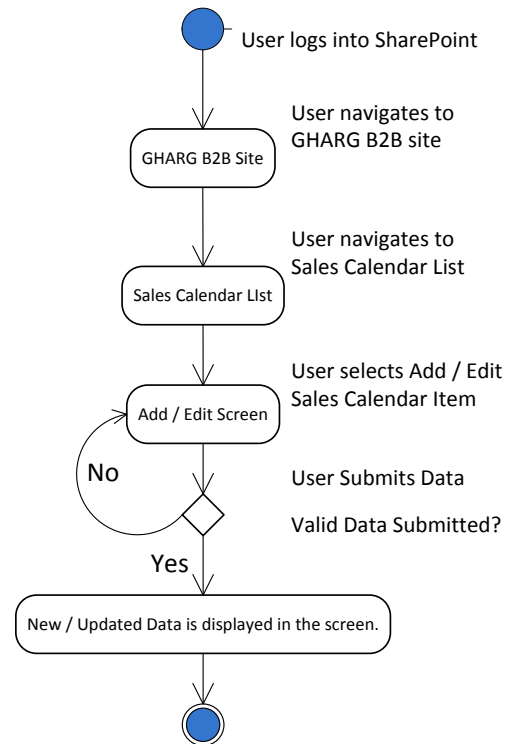


Figure B14. Maintain Sales Calendar – State Diagram

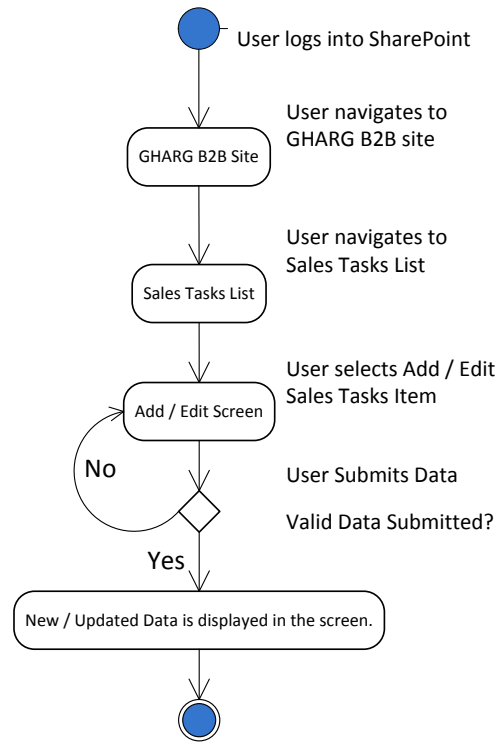


Figure B15. Maintain Sales Tasks – State Diagram

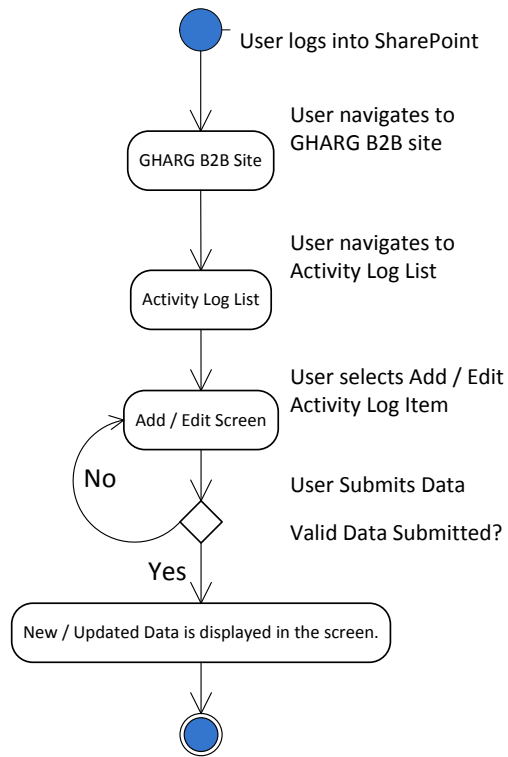


Figure B16. Maintain Activity Log – State Diagram

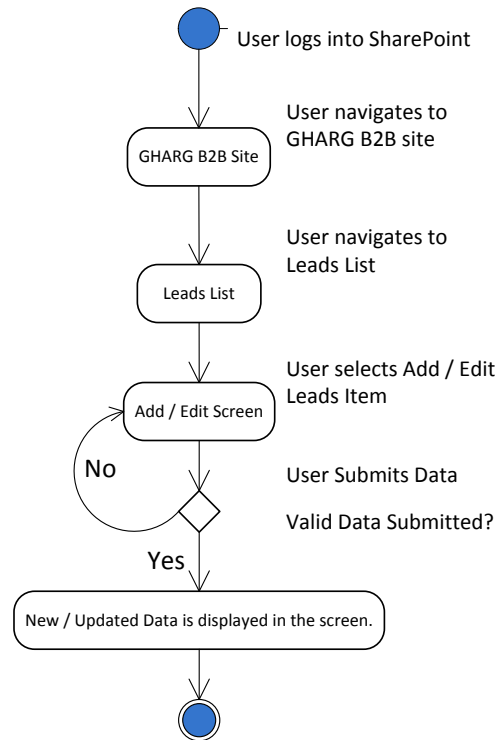


Figure B17. Maintain Leads – State Diagram

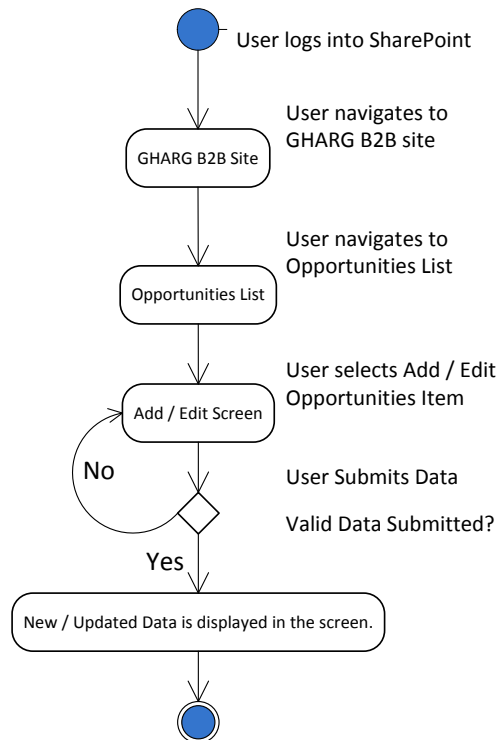


Figure B18. Maintain Opportunities – State Diagram



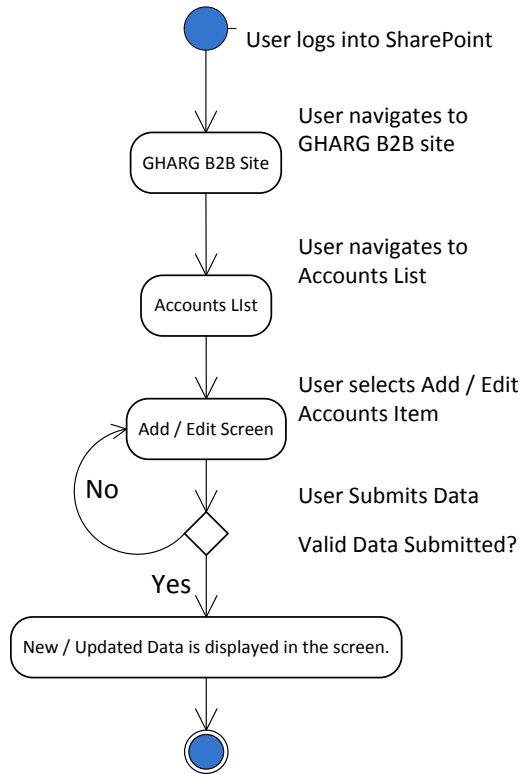


Figure B19. Maintain Accounts – State Diagram

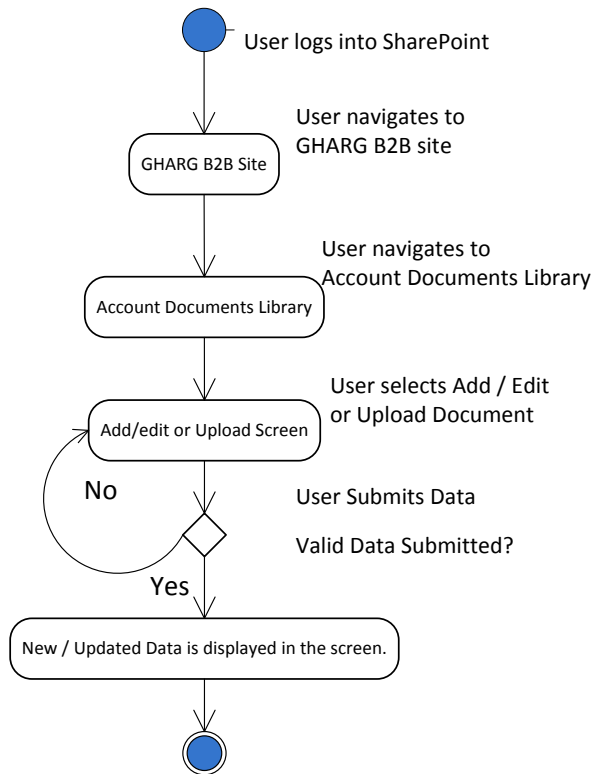


Figure B20. Maintain Account Documents – State Diagram

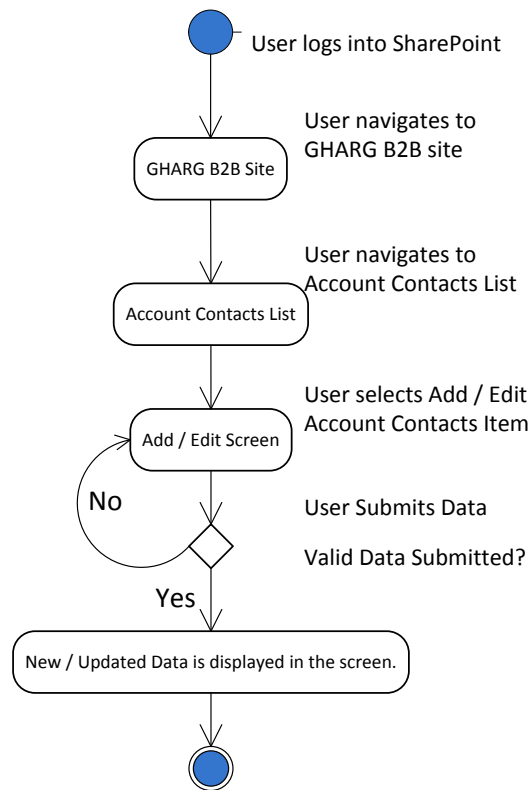


Figure B21. Maintain Account Contacts – State Diagram

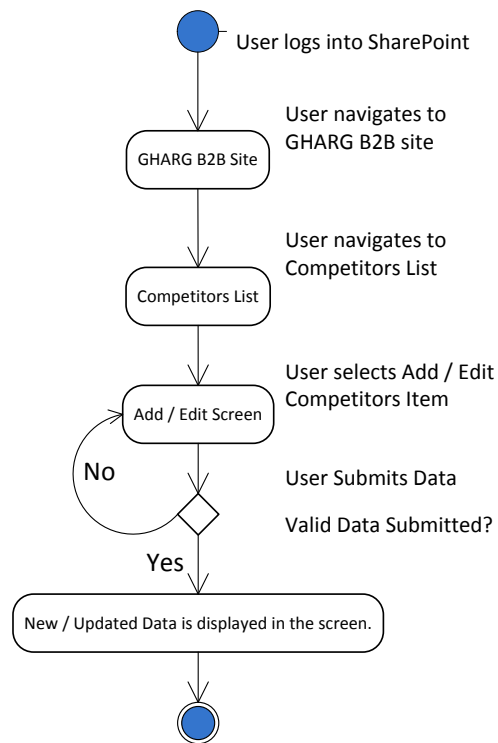


Figure B22. Maintain Competitors – State Diagram

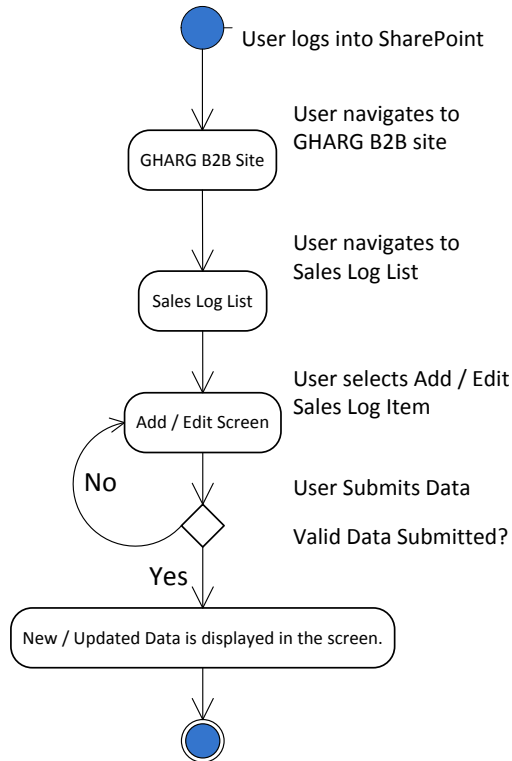


Figure B23. Maintain Sales Log – State Diagram

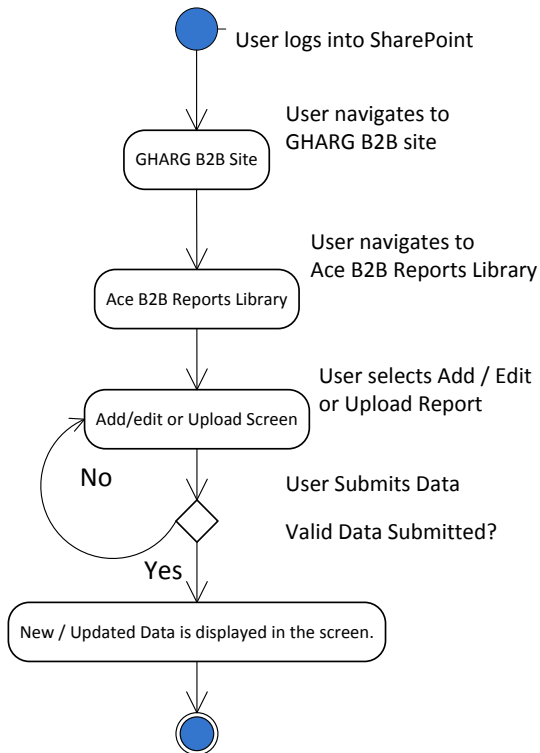


Figure B24. Maintain Ace B2B Reports – State Diagram

**Data Architecture**

Table B1. Data Dictionary

Lists	Columns	Data Type	Null	Description
<b>Houston Ace B2B Site</b>				
<b>Name:</b> B2B Calendar <b>Identifier:</b> ID <b>Definition:</b> Calendar list for B2B Events <b>Relationships:</b> N/A	ID	Number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Description	Multiple lines of text	Yes	Long description for item
	Location	Single line of text	Yes	Location for item
	Start Time	Date and Time	No	Start date and time for item
	End Time	Date and Time	No	End date and time for item
	Free/Busy	Free/Busy	Yes	Free/Busy indicator for item
	All Day Event	All Day Event	Yes	Add Day Event indicator
	Recurrence	Recurrence	Yes	Recurrence indicator for item
	Category	Choice	Yes	Category of item
	Attendees	Person or Group	Yes	Attendees list for item
	Resources	Resources	Yes	Resources list for item
	Check Double Booking	Check Double Booking	Yes	Check Double Booking indicator
	Created	Date and Time	No	Date and time item was created
	Created By	Person or Group	No	User who created item
	Modified	Date and Time	No	Date and time item was last modified
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> B2B Tasks <b>Identifier:</b> ID <b>Definition:</b> Action task assigned to a person or group <b>Relationships:</b> N/A	ID	Number	No	Unique identifier for item
	% Complete	number	Yes	Percentage of completion for item
	Assigned To	Person or Group	Yes	Person item is assigned to
	Completed	Date and Time	Yes	Date and time item was completed
	Created	Date and Time	No	Date and time item was created
	Description	Multiple lines of text	Yes	Long description for item
	Due Date	Date and Time	Yes	Date the item is due
	Modified	Date and Time	No	Date and time item was last modified
	Priority	Choice	Yes	Priority level for item
	Related Items	Related Items	Yes	Items related to this item
	Start Date	Date and Time	Yes	Start date and time for item
	Task Name	Single line of text	No	Title for the item
	Task Status	Choice	Yes	Status for the item

	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Shared Documents <b>Identifier:</b> ID <b>Definition:</b> Library of shared documents <b>Relationships:</b> N/A	ID	Number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
	Checked Out To	Person or Group	Yes	User who has item checked out
<b>Name:</b> Shared Resources <b>Identifier:</b> ID <b>Definition:</b> Library of shared resource documents <b>Relationships:</b> N/A	ID	Number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
	Checked Out To	Person or Group	Yes	User who has item checked out
	Resource Categories	Choice	Yes	Category(ies) assigned to the item
<b>Name:</b> Alternative Vendors <b>Identifier:</b> ID <b>Definition:</b> List of alternative vendors <b>Relationships:</b> N/A	ID	Number	No	Unique identifier for item
	Last Name	Single line of text	No	Last Name of item
	First Name	Single line of text	Yes	First Name of item
	Email Address	Single line of text	Yes	Email address of item
	Company	Single line of text	Yes	Company name of item
	Job Title	Single line of text	Yes	Job title of item
	Business Phone	Single line of text	Yes	Business phone of item
	Last Name	Single line of text	Yes	Last Name of item
	Mobile Number	Single line of text	Yes	Mobile number of item
	Fax Number	Single line of text	Yes	Fax number of item
	Address	Multiple lines of text	Yes	Address of item
	City	Single line of text	Yes	City of item
	State/Province	Single line of text	Yes	State or Province of item

	Zip/Postal Code	Single line of text	Yes	Zip code for item
	Country/Region	Single line of text	Yes	Country and/or Region of item
	Web Page	Hyperlink	Yes	Link to web page for item
	Notes	Multiple lines of text	Yes	Notes regarding item
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Stores <b>Identifier:</b> ID <b>Definition:</b> List of stores <b>Relationships:</b> has Store Contacts	ID	Number	No	Unique identifier for item
	Store Number	Single line of text	No	Secondary unique identifier for item
	Store Name	Single line of text	Yes	Store name of item
	Group	Choice	Yes	Group name item belongs to
	Address	Multiple lines of text	Yes	Address of item
	City	Single line of text	Yes	City of item
	State/Province	Single line of text	Yes	State or Province of item
	Zip/Postal Code	Single line of text	Yes	Zip code for item
	Business Phone	Single line of text	Yes	Business phone of item
	Store Owners	Lookup	Yes	Store owner(s) of item
	Store Managers	Lookup	Yes	Store manager(s) of item
	B2B Specialists	Lookup	Yes	B2B Specialist(s) of item
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Store Contacts <b>Identifier:</b> ID <b>Definition:</b> List of store contacts <b>Relationships:</b> belongs to Store(s)	ID	Number	No	Unique identifier for item
	Store	Lookup	No	Store item belongs to
	First Name	Single line of text	Yes	First Name of item
	Last Name	Single line of text	No	Last Name of item
	Full Name	Single line of text	Yes	Full Name of item
	Email Address	Single line of text	Yes	Email address of item
	Job Title	Single line of text	Yes	Job title of item
	Business Phone	Single line of text	Yes	Business phone of item
	Notes	Multiple lines	Yes	Notes regarding item

		of text		
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> B2B Discussions Board <b>Identifier:</b> ID <b>Definition:</b> List of B2B discussions <b>Relationships:</b> N/A	ID	Number	No	Unique identifier for item
	Body	Multiple lines of text	Yes	Message of item
	Question	Yes/No	Yes	Boolean indicator if item is a question
	Subject	Single line of text	No	Subject of item
	Parent Item Editor	Person or Group	Yes	Person of parent of item
	Last Reply by	Person or Group	Yes	Person last replied to item
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Pictures <b>Identifier:</b> ID <b>Definition:</b> Pictures library <b>Relationships:</b> N/A	ID	number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Date Picture Taken	Date and Time	Yes	Date and time of item
	Description	Multiple lines of text	Yes	Long description for item
	Keywords	Multiple lines of text	Yes	Keywords of item
	Checked Out To	Person or Group	Yes	User who has item checked out
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Issues <b>Identifier:</b> ID <b>Definition:</b> List of issues for Yar administrator <b>Relationships:</b>	ID	number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Assigned To	Person or Group	Yes	Person item is assigned to
	Issue Status	Choice	Yes	Status of item
	Priority	Choice	Yes	Priority level of item
	Description	Multiple lines of text	Yes	Long description for item
	Category	Choice	Yes	Category of item

	Due Date	Date and Time	Yes	Date and time item is due
	Related Issues	Lookup	Yes	Other items related to this item
	Comments	Multiple lines of text	Yes	Comments regarding the item
	Created	Date and Time	No	Date and time item was created
	Modified	Date and Time	No	Date and time item was last modified
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
	<b>Store Site</b>			
<b>Name:</b> Sales Calendar <b>Identifier:</b> ID <b>Definition:</b> Calendar list for Sales Events <b>Relationships:</b> is of Account Contact	ID	Number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Description	Multiple lines of text	Yes	Long description for item
	Location	Single line of text	Yes	Location for item
	Start Time	Date and Time	No	Start date and time for item
	End Time	Date and Time	No	End date and time for item
	Free/Busy	Free/Busy	Yes	Free/Busy indicator for item
	All Day Event	All Day Event	Yes	Add Day Event indicator
	Recurrence	Recurrence	Yes	Recurrence indicator for item
	Category	Choice	Yes	Category of item
	Attendees	Person or Group	Yes	Attendees list for item
	Resources	Resources	Yes	Resources list for item
	Check Double Booking	Check Double Booking	Yes	Check Double Booking indicator
	Related Customer	Lookup	Yes	Related Customer (contact) of item
	Related Customer: Business Phone	Lookup	Yes	Related customer's business phone
	Related Customer: Company	Lookup	Yes	Related customer's company name
	Related Customer: Email Address	Lookup	Yes	Related customer's email address
	Related Customer: Job Title	Lookup	Yes	Related customer's job title
	Related Customer: Mobile Number	Lookup	Yes	Related customer's mobile number
	Created	Date and Time	No	Date and time item was created
	Created By	Person or Group	No	User who created item
Modified	Date and Time	No	Date and time item was last modified	
Modified By	Person or Group	No	User who last modified item	
<b>Name:</b> Sales Tasks <b>Identifier:</b> ID <b>Definition:</b> Action task assigned to a person or group	ID	Number	No	Unique identifier for item
	% Complete	number	Yes	Percentage of completion for item
	Assigned To	Person or Group	Yes	Person item is assigned to



<b>Relationships:</b> is of Opportunity	Completed	Date and Time	Yes	Date and time item was completed
	Created	Date and Time	No	Date and time item was created
	Description	Multiple lines of text	Yes	Long description for item
	Due Date	Date and Time	Yes	Date the item is due
	Modified	Date and Time	No	Date and time item was last modified
	Priority	Choice	Yes	Priority level for item
	Related Items	Related Items	Yes	Items related to this item
	Start Date	Date and Time	Yes	Start date and time for item
	Task Name	Single line of text	No	Title for the item
	Task Status	Choice	Yes	Status for the item
	Created By	Person or Group	No	User who created item
	Modified By	Person or Group	No	User who last modified item
	<b>Name:</b> Activity Log <b>Identifier:</b> ID <b>Definition:</b> Log list of sales activities <b>Relationships:</b> is of Account, is Lead	ID	Number	No
Activity Date		Date and Time	No	Activity date of item
Activity Type		Choice	Yes	Activity type of item
Comments		Multiple lines of text	Yes	Comments regarding item
Related Account		Lookup	Yes	Related Account of item
Related Account: Account ID		Lookup	Yes	Related account's account ID
Related Lead		Lookup	Yes	Related Lead of item
Related Lead: Lead ID		Lookup	Yes	Related lead's lead ID
Created		Date and Time	No	Date and time item was created
Created By		Person or Group	No	User who created item
Modified		Date and Time	No	Date and time item was last modified
Modified By		Person or Group	No	User who last modified item
<b>Name:</b> Leads <b>Identifier:</b> ID <b>Definition:</b> List of leads <b>Relationships:</b> has Activity Log		ID	Number	No
	Lead ID	Single line of text	No	Secondary unique identifier for item
	First Name	Single line of text	Yes	First Name of item
	Last Name	Single line of text	Yes	Last Name of item
	Full Name	Single line of text	Yes	Full Name of item
	Email Address	Single line of text	Yes	Email address of item
	Company	Single line of text	Yes	Company name of item
	Job Title	Single line of text	Yes	Job title of item
	Business Phone	Single line of text	Yes	Business phone of item
	Mobile Number	Single line of text	Yes	Mobile number of item

Fax Number	Single line of text	Yes	Fax number of item	
Address	Multiple lines of text	Yes	Address of item	
City	Single line of text	Yes	City of item	
State/Province	Single line of text	Yes	State or Province of item	
Zip/Postal Code	Single line of text	Yes	Zip code for item	
Web Page	Hyperlink or Picture	Yes	Web page hyperlink of item	
Notes	Multiple lines of text	Yes	Notes regarding the item	
Rating	Choice	Yes	Rating of item	
Preferred Contact Method	Choice	Yes	Preferred contact method of item	
Email	Choice	Yes	Boolean indicator for email contact	
Phone	Choice	Yes	Boolean indicator for phone contact	
Mail	Choice	Yes	Boolean indicator for mail contact	
Newsletter	Choice	Yes	Boolean indicator for newsletter	
Send Marketing Materials	Choice	Yes	Boolean indicator for send marketing materials	
Lead Status	Choice	Yes	Lead status of item	
Lead Source	Choice	Yes	Lead source of item	
Salesperson	Person or Group	Yes	Salesperson of item	
Annual Revenue	Currency	Yes	Annual revenue of item	
Revenue Opportunity	Currency	Yes	Revenue opportunity of item	
Employees	Number	Yes	Number of employees of item	
Closed Date	Date and Time	Yes	Closed date of item	
Minutes Worked	Calculated	Yes	Minutes worked of item	
Time to Close	Calculated	Yes	Time to close of item	
New Lead	Hyperlink or Picture	Yes	New lead hyperlink	
Convert Lead	Hyperlink or Picture	Yes	Convert lead hyperlink	
Closed Lead	Hyperlink or Picture	Yes	Closed lead hyperlink	
Created	Date and Time	No	Date and time item was created	
Created By	Person or Group	No	User who created item	
Modified	Date and Time	No	Date and time item was last modified	
Modified By	Person or Group	No	User who last modified item	
<b>Name:</b> Opportunities <b>Identifier:</b> ID <b>Definition:</b> List of opportunities <b>Relationships:</b> has Sales Tasks, has Competitors	ID	Number	No	Unique identifier for item
	Account ID	Single line of text	No	Account ID of item
	Account	Lookup	Yes	Related Account of item
	Salesperson	Person or Group	Yes	Salesperson of item
	Stage	Choice	Yes	Stage of item
	Opportunity type	Choice	Yes	Opportunity type of item
	Probability	Number	Yes	Probability of opportunity closing
	Next step	Multiple lines of text	Yes	Next step of item

Key requirements	Multiple lines of text	Yes	Key requirements of item
Competitors	Lookup	Yes	Related competitors of item
Revenue opportunity	Currency	Yes	Revenue opportunity of item
Closed date	Date and Time	Yes	Closed date of item
Deal loss reason	Choice	Yes	Deal loss reason of item
Minutes worked	Calculated	Yes	Minutes worked of item
Time to close	Calculated	Yes	Time to close of item
Qualification	Hyperlink or Picture	Yes	Hyperlink to Qualification
Analysis	Hyperlink or Picture	Yes	Hyperlink to Analysis
Value	Hyperlink or Picture	Yes	Hyperlink to Value
Identify	Hyperlink or Picture	Yes	Hyperlink to Identify
Perception	Hyperlink or Picture	Yes	Hyperlink to Perception
Proposal	Hyperlink or Picture	Yes	Hyperlink to Proposal
Negotiation	Hyperlink or Picture	Yes	Hyperlink to Negotiation
Sale	Hyperlink or Picture	Yes	Hyperlink to Sale
No Sale	Hyperlink or Picture	Yes	Hyperlink to No Sale
Active Tasks	Calculated	Yes	Active tasks of item
Forecasted Close	Date and time	Yes	Forecasted close date of item
Created	Date and Time	No	Date and time item was created
Created By	Person or Group	No	User who created item
Modified	Date and Time	No	Date and time item was last modified
Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Accounts			
<b>Identifier:</b> ID			
<b>Definition:</b> List of accounts			
<b>Relationships:</b> has Account			
Contacts, has Account			
Documents, has Sales Log,			
has Activity Log			
ID	Number	No	Unique identifier for item
Account ID	Single line of text	No	Secondary unique identifier for item
Account Name	Single line of text	Yes	Account name of item
Account Type	Choice	Yes	Account type of item
Account Status	Choice	Yes	Status of item
Annual Revenue	Currency	Yes	Annual revenue of item
Employees	Number	Yes	Number of employees of item
Salesperson	Person or Group	Yes	Salesperson of item
Address	Multiple lines of text	Yes	Address of item
City	Single line of text	Yes	City of item
State/Province	Single line of text	Yes	State/Province of item
ZIP/Postal Code	Single line of text	Yes	Zip code of item
Web Page	Hyperlink or Picture	Yes	Web page of item
Business Phone	Single line of text	Yes	Business phone of item
Fax Number	Single line of	Yes	Fax number of item

	text			
Notes	Multiple lines of text	Yes	Notes regarding item	
Account Opened	Date and Time	Yes	Date account opened	
Account Closed	Date and Time	Yes	Date account closed	
Related Contacts	Calculated	Yes	Related contacts of item	
New Opportunity	Hyperlink or Picture	Yes	Hyperlink to New Opportunity	
Close Account	Hyperlink or Picture	Yes	Hyperlink to Close Account	
Shipping Preference	Choice	Yes	Shipping preference of item	
Ordering Preference	Choice	Yes	Ordering preference of item	
Other Supply Sources	Multiple lines of text	Yes	Other supply sources of item	
Payment Type	Choice	Yes	Payment type of item	
Service Ranking 1	Choice	Yes	Service Ranking 1 of item	
Service Ranking 2	Choice	Yes	Service Ranking 2 of item	
Service Ranking 3	Choice	Yes	Service Ranking 3 of item	
Service Ranking 4	Choice	Yes	Service Ranking 4 of item	
Service Ranking 5	Choice	Yes	Service Ranking 5 of item	
Service Ranking 6	Choice	Yes	Service Ranking 6 of item	
Service Ranking 7	Choice	Yes	Service Ranking 7 of item	
Multi-Locations	Multiple lines of text	Yes	Multiple locations of item	
Purchase Frequency	Single line of text	Yes	Purchase frequency of item	
Created	Date and Time	No	Date and time item was created	
Created By	Person or Group	No	User who created item	
Modified	Date and Time	No	Date and time item was last modified	
Modified By	Person or Group	No	User who last modified item	
<b>Name:</b> Account Documents <b>Identifier:</b> ID <b>Definition:</b> Account documents library <b>Relationships:</b> belongs to Account	ID	Number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Related Account	Lookup	Yes	Related Account of item
	Related Account: Account ID	Lookup	Yes	Related account's account ID
	Checked Out To	Person or Group	Yes	User who has item checked out
	Created	Date and Time	No	Date and time item was created
	Created By	Person or Group	No	User who created item
	Modified	Date and Time	No	Date and time item was last modified
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Account Contacts <b>Identifier:</b> ID <b>Definition:</b> List of account contacts <b>Relationships:</b> belongs to Account	ID	Number	No	Unique identifier for item
	First Name	Single line of text	Yes	First Name of item
	Last Name	Single line of text	No	Last Name of item
	Full Name	Single line of	Yes	Full Name of item

	text			
Email Address	Single line of text	Yes	Email address of item	
Company	Single line of text	Yes	Company name of item	
Job Title	Single line of text	Yes	Job title of item	
Business Phone	Single line of text	Yes	Business phone of item	
Mobile Number	Single line of text	Yes	Mobile number of item	
Fax Number	Single line of text	Yes	Fax number of item	
Address	Multiple lines of text	Yes	Address of item	
City	Single line of text	Yes	City of item	
State/Province	Single line of text	Yes	State or Province of item	
Zip/Postal Code	Single line of text	Yes	Zip code for item	
Notes	Multiple lines of text	Yes	Notes regarding the item	
Related Account	Lookup	Yes	Related Account of item	
Schedule Meeting	Hyperlink or Picture	Yes	Hyperlink to Schedule Meeting	
Created	Date and Time	No	Date and time item was created	
Created By	Person or Group	No	User who created item	
Modified	Date and Time	No	Date and time item was last modified	
Modified By	Person or Group	No	User who last modified item	
<b>Name:</b> Competitors <b>Identifier:</b> ID <b>Definition:</b> List of competitors <b>Relationships:</b> is of Opportunity	ID	Number	No	Unique identifier for item
	Company	Single line of text	No	Company name of item
	Competition Level	Choice	Yes	Competition level of item
	Created	Date and Time	No	Date and time item was created
	Created By	Person or Group	No	User who created item
	Modified	Date and Time	No	Date and time item was last modified
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Sales Log <b>Identifier:</b> ID <b>Definition:</b> Log list of sales summary transactions from closed opportunities <b>Relationships:</b> is of Account	ID	Number	No	Unique identifier for item
	Transaction ID	Single line of text	No	Secondary unique identifier for item
	Salesperson	Person or Group	Yes	Salesperson of item
	Account	Lookup	Yes	Related Account of item
	Revenue	Currency	Yes	Revenue of item
	Date of sale	Date and Time	Yes	Date of sale
	Product or Details	Multiple lines of text	Yes	Product or details of item
	Month	Calculated	Yes	Month of item
	Year	Calculated	Yes	Year of item
	Created	Date and Time	No	Date and time item was created

	Created By	Person or Group	No	User who created item
	Modified	Date and Time	No	Date and time item was last modified
	Modified By	Person or Group	No	User who last modified item
<b>Name:</b> Ace B2B Reports <b>Identifier:</b> ID <b>Definition:</b> Document library for Ace B2B reports <b>Relationships:</b> N/A	ID	number	No	Unique identifier for item
	Title	Single line of text	No	Title for the item
	Checked Out To	Person or Group	Yes	User who has item checked out
	Created	Date and Time	No	Date and time item was created
	Created By	Person or Group	No	User who created item
	Modified	Date and Time	No	Date and time item was last modified
	Modified By	Person or Group	No	User who last modified item

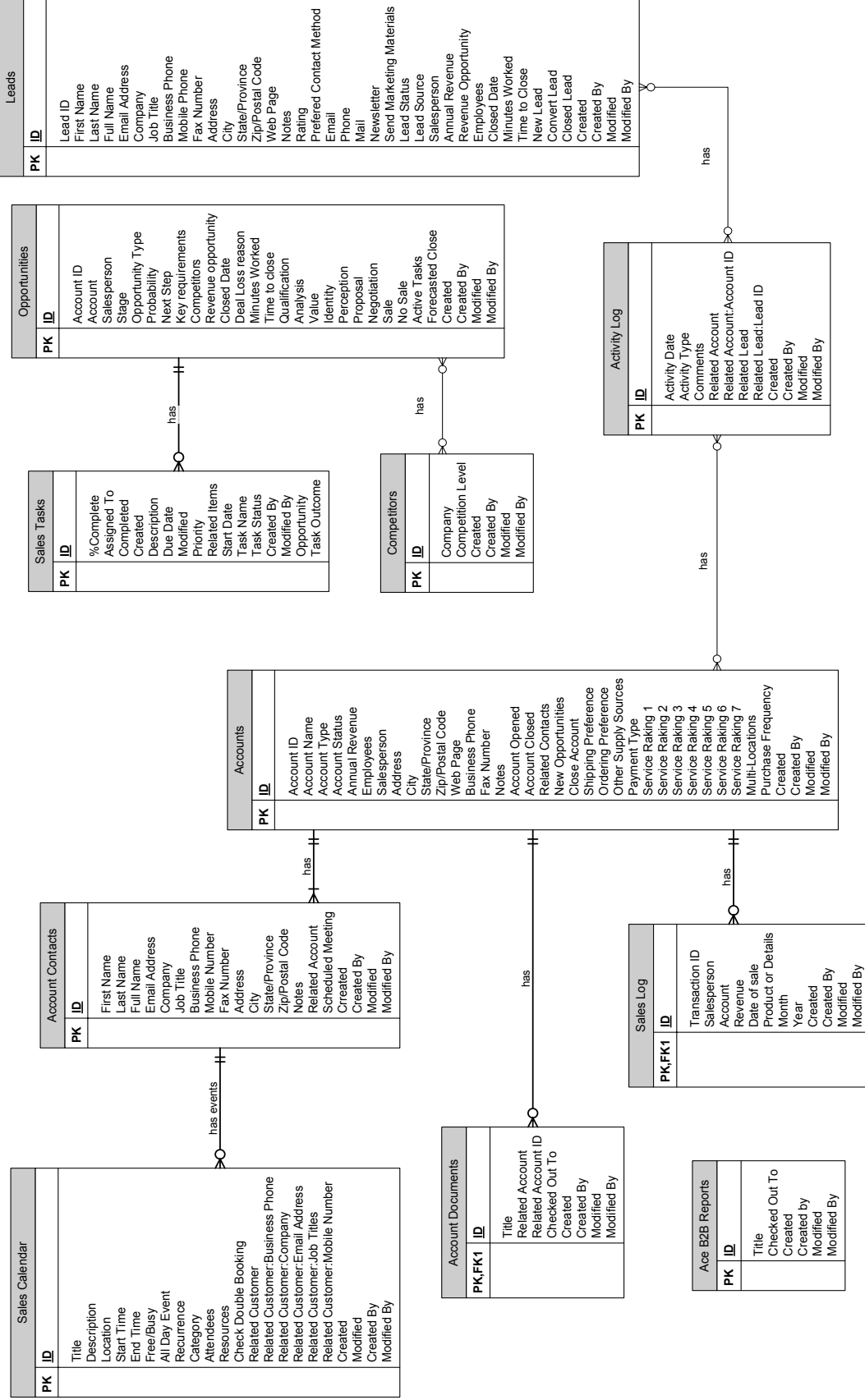


Figure B25. Year Consulting Extranet Entity Relationship Diagram (ERD) - GHARG

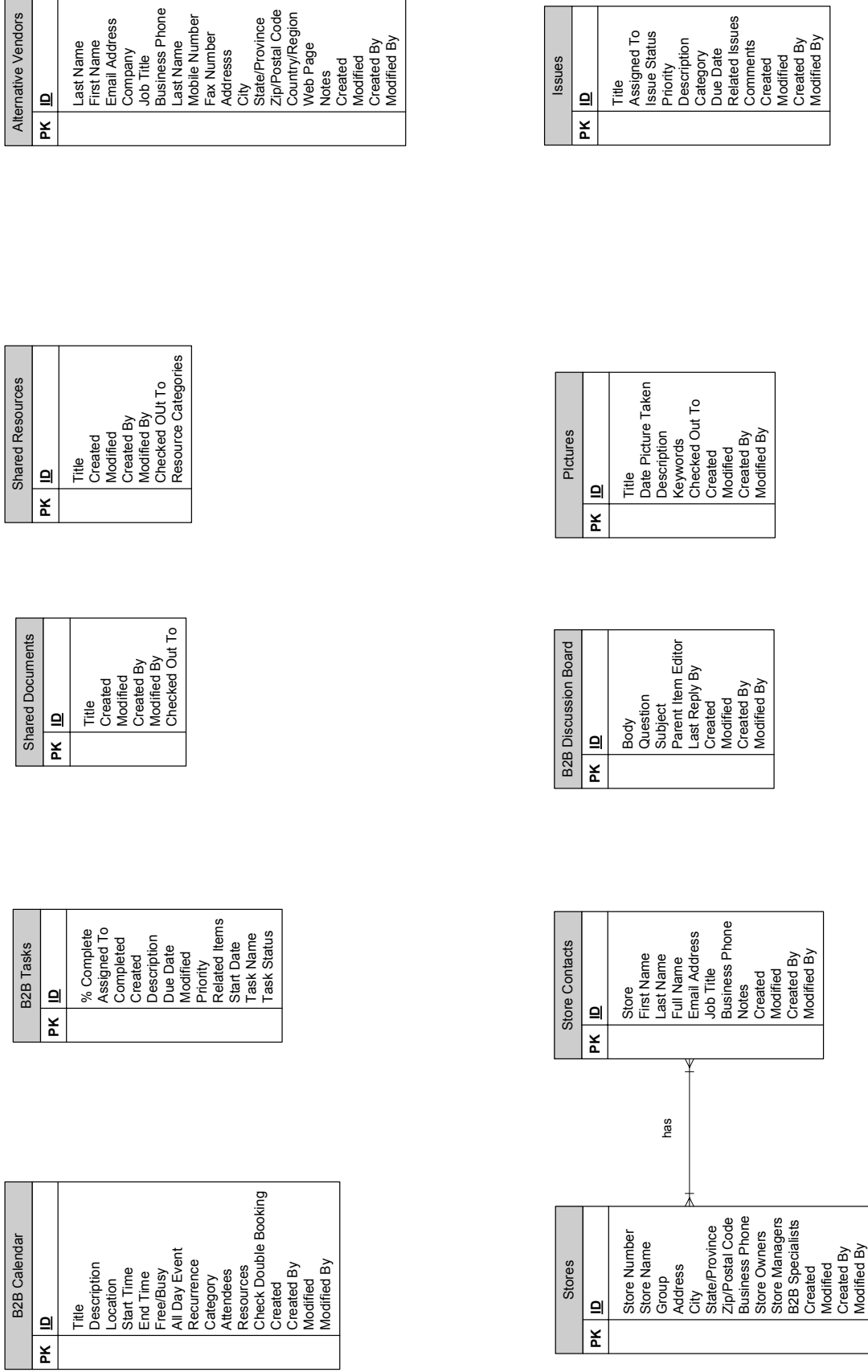


Figure B26. Yar Consulting Extranet Entity Relationship Diagram (ERD) - Store