Marketing Website and Extranet Site

John Suarez

Dakota State University

Follow this and additional works at: https://scholar.dsu.edu/theses

Part of the Databases and Information Systems Commons

Recommended Citation

https://scholar.dsu.edu/theses/316

This Thesis is brought to you for free and open access by Beadle Scholar. It has been accepted for inclusion in Masters Theses & Doctoral Dissertations by an authorized administrator of Beadle Scholar. For more information, please contact repository@dsu.edu.
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.

Student Name: John Suarez

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

Faculty supervisor: William Figg PhD Date: ______________

Committee member: Jun Liu PhD Date: ______________

Committee member: Ahmad Al-Omari PhD Date: ______________
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 items, 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.
Finally, a heartfelt and sincere thank you to all my professors at Dakota State University who have selflessly and diligently shared of their knowledge and experience throughout this degree program with a fair bit of patience, grace, and good humor, a huge thank you for helping me to grow more into the professional I strive to be. Your mark will be on my future work in both the for profit and non-profit arenas where I work.
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
# TABLE OF CONTENTS

ACKNOWLEDGMENT ........................................................................................................... 3  
ABSTRACT .......................................................................................................................... 5 
DECLARATION ..................................................................................................................... 7 
TABLE OF CONTENTS ...................................................................................................... 8  
LIST OF TABLES ................................................................................................................ 9 
LIST OF FIGURES ............................................................................................................... 9 
INTRODUCTION .................................................................................................................. 12 
  BACKGROUND OF THE PROBLEM ........................................................................... 12 
  STATEMENT OF THE PROBLEM .............................................................................. 12 
  OBJECTIVES OF THE PROJECT .............................................................................. 13 
LITERATURE REVIEW ...................................................................................................... 15 
SYSTEM DESIGN ............................................................................................................... 23 
  SYSTEM ARCHITECTURAL DESIGN APPROACH AND SELECTION .................. 23 
  USER INTERFACE DESIGN ...................................................................................... 27 
  REQUIREMENTS ANALYSIS ................................................................................. 30 
RESULTS ............................................................................................................................ 34 
CONCLUSIONS .................................................................................................................. 56 
REFERENCES ..................................................................................................................... 57 
APPENDIX A: USERS’ MANUAL .................................................................................... A1 
APPENDIX B: SYSTEM TECHNICAL DOCUMENTATION .............................................. B1 
  WEBSITE DIAGRAMS .............................................................................................. B1 
  USE CASE DESCRIPTIONS ....................................................................................... B3 
  USE CASE STATE DIAGRAMS ............................................................................... B47 
  DATABASE ARCHITECTURE ................................................................................... B58
LIST OF TABLES

TABLE 3.1 – WEB/APPLICATION SERVER SOFTWARE SPECIFICATIONS ............................................. 26
TABLE 3.2 – DATABASE SERVER SOFTWARE SPECIFICATIONS ......................................................... 27
TABLE B-M1. SUBMIT CONTACT US FORM RULES ........................................................................ B4
TABLE B-D1. MAINTAIN B2B CALENDAR RULES ............................................................................. B6
TABLE B-D2. MAINTAIN B2B TASK RULES .................................................................................... B8
TABLE B-D3. MAINTAIN SHARED DOCUMENTS RULES ............................................................... B10
TABLE B-D4. MAINTAIN SHARED RESOURCES RULES ................................................................. B12
TABLE B-D5. MAINTAIN ALTERNATIVE VENDOR RULES ........................................................... B14
TABLE B-D6. MAINTAIN STORE RULES .......................................................................................... B16
TABLE B-D7. MAINTAIN STORE CONTACT RULES ......................................................................... B18
TABLE B-D8. MAINTAIN B2B DISCUSSIONS BOARD RULES ....................................................... B20
TABLE B-D9. MAINTAIN PICTURES RULES ..................................................................................... B22
TABLE B-D10. MAINTAIN ISSUES RULES ....................................................................................... B24
TABLE B-S1. MAINTAIN SALES CALENDAR RULES ........................................................................ B26
TABLE B-S2. MAINTAIN SALES TASK RULES .................................................................................. B28
TABLE B-S3. MAINTAIN ACTIVITY LOG RULES .............................................................................. B30
TABLE B-S4. MAINTAIN LEADS RULES .......................................................................................... B32
TABLE B-S5. MAINTAIN OPPORTUNITY RULES ............................................................................... B34
TABLE B-S6. MAINTAIN ACCOUNT RULES ....................................................................................... B36
TABLE B-S7. MAINTAIN ACCOUNT DOCUMENTS RULES ............................................................. B38
TABLE B-S8. MAINTAIN ACCOUNT CONTACT RULES ...................................................................... B40
TABLE B-S9. MAINTAIN COMPETITOR RULES .................................................................................. B42
TABLE B-S10. MAINTAIN SALES LOG RULES ................................................................................. B44
TABLE B-S11. MAINTAIN ACE B2B REPORT RULES ....................................................................... B46
TABLE B1. DATA DICTIONARY ......................................................................................................... B58

LIST OF FIGURES

FIGURE 1. MARKETING WEBSITE USE CASE DIAGRAM ................................................................. 30
FIGURE 2. EXTRANET SITE USE CASE DIAGRAM ........................................................................ 33
FIGURE 3. YAR CONSULTING PUBLIC WEBSITE HOME PAGE ................................................. 35
FIGURE 4. YAR CONSULTING PUBLIC WEBSITE BEING YAR PAGE ........................................ 35
FIGURE 5. YAR CONSULTING PUBLIC WEBSITE ABOUT US PAGE (TOP HALF) ..................... 36
FIGURE 6. ABOUT US PAGE (BOTTOM HALF) ................................................................................ 36
FIGURE 7. YAR CONSULTING PUBLIC WEBSITE SERVICES HOME PAGE

FIGURE 8. YAR CONSULTING PUBLIC WEBSITE BUSINESS CONSULTATION PAGE

FIGURE 9. YAR CONSULTING PUBLIC WEBSITE IS SERVICES PAGE

FIGURE 10. YAR CONSULTING PROGRAM/PROJECT MGMT PAGE

FIGURE 11. YAR CONSULTING CONTRACT MANAGEMENT PAGE

FIGURE 12. YAR CONSULTING CONTACT US PAGE

FIGURE 13. GHARG EXTRANET B2B HOME PAGE

FIGURE 14. GHARG EXTRANET B2B GROUP CALENDAR PAGE

FIGURE 15. GHARG EXTRANET B2B GROUP TASK PAGE

FIGURE 16. GHARG EXTRANET B2B SHARED DOCUMENTS PAGE

FIGURE 17. GHARG EXTRANET B2B SHARED RESOURCES PAGE

FIGURE 18. GHARG EXTRANET B2B ALTERNATIVE VENDORS PAGE

FIGURE 19. GHARG EXTRANET B2B STORES PAGE

FIGURE 20. GHARG EXTRANET B2B STORE CONTACTS PAGE

FIGURE 21. GHARG EXTRANET B2B DISCUSSION BOARD PAGE

FIGURE 22. GHARG EXTRANET B2B PICTURES PAGE

FIGURE 23. GHARG EXTRANET B2B ISSUES PAGE

FIGURE 24. GHARG EXTRANET IND. STORE SITE B2B HOME DASHBOARD LINK EX.1

FIGURE 25. GHARG EXTRANET IND. STORE SITE B2B HOME DASHBOARD LINK EX.2

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)

FIGURE 29. EXTRANET IND. STORE B2B CALENDAR PAGE

FIGURE 30. EXTRANET IND. STORE B2B TASK PAGE

FIGURE 31. EXTRANET IND. STORE B2B ACTIVITY LOG PAGE

FIGURE 32. EXTRANET IND. STORE B2B LEADS ENTRY PAGE

FIGURE 33. EXTRANET IND. STORE B2B OPPORTUNITIES PAGE

FIGURE 34. EXTRANET IND. STORE B2B ACCOUNTS PAGE

FIGURE 35. EXTRANET IND. STORE B2B ACCOUNT DETAILS PAGE (1)

FIGURE 36. EXTRANET IND. STORE B2B ACCOUNT DETAILS PAGE (2)

FIGURE 37. EXTRANET IND. STORE B2B ACCOUNT DOCUMENTS PAGE

FIGURE 38. EXTRANET IND. STORE B2B CONTACTS PAGE

FIGURE 39. EXTRANET IND. STORE B2B COMPETITORS PAGE

FIGURE 40. EXTRANET IND. STORE B2B SALES REPORTING HOME DASHBOARD

FIGURE 41. EXTRANET IND. STORE B2B PIPELINE STATISTICS PAGE

FIGURE 42. EXTRANET IND. STORE B2B SALES LOG PAGE

FIGURE 43. EXTRANET IND. STORE B2B ACE REPORTS PAGE
FIGURE 44. EXTRANET IND. STORE B2B SITE HELP PAGE .......................................................... 55
FIGURE B1. WEBSITE DIAGRAM 1 – MARKETING WEBSITE ........................................ B1
FIGURE B2. WEBSITE DIAGRAM 2 – EXTRANET SITE ..................................................... B2
FIGURE B3. SUBMIT CONTACT US FORM – STATE DIAGRAM ........................................ B47
FIGURE B4. MAINTAIN B2B CALENDAR – STATE DIAGRAM ........................................ B47
FIGURE B5. MAINTAIN B2B TASKS – STATE DIAGRAM .................................................. B48
FIGURE B6. MAINTAIN SHARED DOCUMENTS – STATE DIAGRAM ............................... B48
FIGURE B7. MAINTAIN SHARED RESOURCES – STATE DIAGRAM .............................. B49
FIGURE B8. MAINTAIN ALTERNATIVE VENDORS – STATE DIAGRAM ........................ B49
FIGURE B9. MAINTAIN STORES – STATE DIAGRAM ...................................................... B50
FIGURE B10. MAINTAIN STORE CONTACTS – STATE DIAGRAM .................................. B50
FIGURE B11. MAINTAIN B2B DISCUSSIONS BOARD – STATE DIAGRAM ..................... B51
FIGURE B12. MAINTAIN PICTURES – STATE DIAGRAM ................................................ B51
FIGURE B13. MAINTAIN ISSUES – STATE DIAGRAM ..................................................... B52
FIGURE B14. MAINTAIN SALES CALENDAR – STATE DIAGRAM ................................ B52
FIGURE B15. MAINTAIN SALES TASKS – STATE DIAGRAM .......................................... B53
FIGURE B16. MAINTAIN ACTIVITY LOG – STATE DIAGRAM ........................................ B53
FIGURE B17. MAINTAIN LEADS – STATE DIAGRAM ..................................................... B54
FIGURE B18. MAINTAIN OPPORTUNITIES – STATE DIAGRAM ...................................... B54
FIGURE B19. MAINTAIN ACCOUNTS – STATE DIAGRAM .............................................. B55
FIGURE B20. MAINTAIN ACCOUNT DOCUMENTS – STATE DIAGRAM ......................... B55
FIGURE B21. MAINTAIN ACCOUNT CONTACTS – STATE DIAGRAM ........................... B56
FIGURE B22. MAINTAIN COMPETITORS – STATE DIAGRAM .......................................... B56
FIGURE B23. MAINTAIN SALES LOG – STATE DIAGRAM ............................................. B57
FIGURE B24. MAINTAIN ACE B2B REPORTS – STATE DIAGRAM ................................ B57
FIGURE B25. EXTRANET ENTITY RELATIONSHIP DIAGRAM (ERD) - GHARG ............... B69
FIGURE B26. EXTRANET ENTITY RELATIONSHIP DIAGRAM (ERD) - STORE .................. B69
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
  o Site Architecture Details
  o 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 though SharePoint list control interface.

• Performance requirements:
  o Response time to End Users using high speed Internet in 1-3 seconds.
  o 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.
  o 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

<table>
<thead>
<tr>
<th>Web/Application Server Software Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System: 64bit Windows Server 2012</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Database Server Software Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System:</td>
</tr>
<tr>
<td>Applications:</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

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
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.
The Being YAR page below gives an explanation of the firm’s name and more business philosophy.
The About Us page gives an overview of the history and structure of the firm with introduction to the firm’s principals.
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.

![IS Services Page](image)

Figure 9. YAR Consulting Public Website IS Services Page

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

![Program/Project Mgmt Page](image)

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](image)

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

![Figure 12. YAR Consulting Contact Us Page](image)
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](image1)

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](image2)
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.

![GHARG Extranet B2B Shared Resources Page](image)

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.

![GHARG Extranet B2B Alternative Vendors Page](image)

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.

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.

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.

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


APPENDICES

APPENDIX A: USERS’ MANUAL

EXTRANET SITE

USER MANUAL
Table of Contents

Microsoft SharePoint List and Library Basic Tutorials ........................................... 3
  Add, Edit or Delete List Items ........................................................................ 3
  Upload Files to a Library ................................................................................ 7
  Check Out, Check In or Discard Changes to a File in a Library ..................... 9
  How Does Versioning Work in a List or Library ........................................... 13

Net2xs Sales Lead Pipeline Solution Tutorials .................................................... 17
  Setting up the Competitors list ...................................................................... 17
  Creating a Lead ............................................................................................... 18
  Starting the Process ....................................................................................... 19
  Pushing thru the Opportunity path ................................................................. 19
  Navigating the My Store Home dashboard .................................................... 21
  Navigating the Sale Reporting dashboard ..................................................... 22
  About the Sales Lead Pipeline workflows ..................................................... 23
    Workflows associated with Leads ................................................................. 24
    Workflows associated with Opportunities ................................................... 24
    Workflows associated with Accounts .......................................................... 25
List and Library Basic Tutorials

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](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 buildings 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 \(\text{Settings}\), 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.
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.
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](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.
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 a 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.
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.

---

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).
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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Marketing Website System shall validate all required data and data types are submitted</td>
</tr>
<tr>
<td>01.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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
4c1. System displays Delete confirmation message
4c2. Administrator selects OK to Delete
4c3. 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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>D01.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>D02.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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
   4c1. System displays Delete confirmation message
   4c2. Administrator or Store User selects OK to Delete
   4c3. 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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>D03.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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].
The Administrator or Store selects exit:
The system discards any data not previously saved and exits [fail].

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]

Administrator or Store User selects Delete item link
4c. System displays Delete confirmation message
4c1. Administrator or Store User selects OK to Delete
4c2. System deletes Shared Document item data and displays success message to Administrator or Store User

Administrator or Store User selects View item link
4d. System displays Document and/or View Properties item form

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**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description:</th>
<th>The Extranet Site System shall validate all required data and data types are submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>D04.1</td>
<td>Validate all required data and data types are submitted</td>
<td></td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>D05.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

**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
   4b1. System displays Delete confirmation message
   4b2. Administrator selects OK to Delete
   4b3. 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

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

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

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

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
4c1. System displays Delete confirmation message
4c2. Administrator or Store User selects OK to Delete
4c3. 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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall validate all required data and data types are submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>D08.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>D09.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>D10.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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 User 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**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description:</th>
<th>The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S01.1</td>
<td>Validate all required data and data types are submitted</td>
<td></td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description:</th>
<th>The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S02.1</td>
<td>Validate all required data and data types are submitted</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S03.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S04.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
<tr>
<td>S04.2</td>
<td>Validate deletion check for related Activity Log items</td>
</tr>
</tbody>
</table>

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 User 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

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

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 User 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**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S06.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
<tr>
<td>S06.2</td>
<td>Validate deletion check for related Account Contact, Account Document, Sales Log or Activity Log items</td>
</tr>
</tbody>
</table>

**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
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**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description:</th>
<th>The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S07.1</td>
<td>Validate all required data and data types are submitted</td>
<td></td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description:</th>
<th>The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S08.1</td>
<td>Validate all required data and data types are submitted</td>
<td></td>
</tr>
<tr>
<td>S08.2</td>
<td>Validate deletion check for related Sales Calendar items</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S09.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>S10.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>

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
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**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>Rule Description: The Extranet Site System shall</th>
</tr>
</thead>
<tbody>
<tr>
<td>S11.1</td>
<td>Validate all required data and data types are submitted</td>
</tr>
</tbody>
</table>
Use Case State Diagrams
Marketing Website

User logs into SharePoint
User navigates to YAR Consulting site
User navigates to Contact Us List
User selects Add / Edit Contact Us Item
User Submits Data
Valid Data Submitted?
New / Updated Data is displayed in the screen.

Figure B3. Submit Contact Us Form – State Diagram

Extranet Site - Greater Houston Ace B2B Site

User logs into SharePoint
User navigates to GHARG B2B site
User navigates to B2B Calendar List
User selects Add / Edit Calendar Item
User Submits Data
Valid Data Submitted?
New / Updated Data is displayed in the screen.

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
Extranet Site - Store Sub-Site

User logs into SharePoint

GHARG B2B Site

User navigates to GHARG B2B site

Issues List

User navigates to Issues List

Add / Edit Screen

User selects Add / Edit Issues Item

Valid Data Submitted?

New / Updated Data is displayed in the screen.

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

User logs into SharePoint
User navigates to GHARG B2B Site
User navigates to Account Contacts List
User selects Add / Edit Account Contacts Item

Add / Edit Screen

No

User submits Data
Valid Data Submitted?

Yes

New / Updated Data is displayed in the screen.

User logs into SharePoint
User navigates to GHARG B2B Site
User navigates to Competitors List
User selects Add / Edit Competitors Item

Add / Edit Screen

No

User submits Data
Valid Data Submitted?

Yes

New / Updated Data is displayed in the screen.
Figure B22. Maintain Competitors – State Diagram

User logs into SharePoint

User navigates to GHARG B2B site

Sales Log List

User navigates to Sales Log List

Add / Edit Screen

User selects Add / Edit Sales Log Item

No

User Submits Data

Valid Data Submitted?

Yes

New / Updated Data is displayed in the screen.

Figure B23. Maintain Sales Log – State Diagram

User logs into SharePoint

User navigates to GHARG B2B site

GHARG B2B Site

User navigates to Sales Log List

Sales Log List

User selects Add / Edit Sales Log Item

Ace B2B Reports Library

Add/edit or Upload Screen

User selects Add / Edit or Upload Report

No

User Submits Data

Valid Data Submitted?

Yes

New / Updated Data is displayed in the screen.
Figure B24. Maintain Ace B2B Reports – State Diagram

Data Architecture

Table B1. Data Dictionary

<table>
<thead>
<tr>
<th>Lists</th>
<th>Columns</th>
<th>Data Type</th>
<th>Null</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Houston Ace B2B Site</td>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>Name: B2B Calendar</td>
<td>Title</td>
<td>Single line of text</td>
<td>No</td>
<td>Title for the item</td>
</tr>
<tr>
<td>Identifier: ID</td>
<td>Description</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Long description for item</td>
</tr>
<tr>
<td>Definition: Calendar list</td>
<td>Location</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Location for item</td>
</tr>
<tr>
<td>for B2B Events</td>
<td>Start Time</td>
<td>Date and Time</td>
<td>No</td>
<td>Start date and time for item</td>
</tr>
<tr>
<td>Relationships: N/A</td>
<td>End Time</td>
<td>Date and Time</td>
<td>No</td>
<td>End date and time for item</td>
</tr>
<tr>
<td></td>
<td>Free/Busy</td>
<td>Free/Busy</td>
<td>Yes</td>
<td>Free/Busy indicator for item</td>
</tr>
<tr>
<td></td>
<td>All Day Event</td>
<td>All Day Event</td>
<td>Yes</td>
<td>Add Day Event indicator</td>
</tr>
<tr>
<td></td>
<td>Recurrence</td>
<td>Recurrence</td>
<td>Yes</td>
<td>Recurrence indicator for item</td>
</tr>
<tr>
<td></td>
<td>Category</td>
<td>Choice</td>
<td>Yes</td>
<td>Category of item</td>
</tr>
<tr>
<td></td>
<td>Attendees</td>
<td>Person or Group</td>
<td>Yes</td>
<td>Attendees list for item</td>
</tr>
<tr>
<td></td>
<td>Resources</td>
<td>Resources</td>
<td>Yes</td>
<td>Resources list for item</td>
</tr>
<tr>
<td></td>
<td>Check Double Booking</td>
<td>Check Double Booking</td>
<td>Yes</td>
<td>Check Double Booking indicator</td>
</tr>
<tr>
<td></td>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td></td>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td></td>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td></td>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

| Name: B2B Tasks            | ID         | Number                         | No   | Unique identifier for item                                                  |
| Identifier: ID             | % Complete | number                         | Yes  | Percentage of completion for item                                          |
| Definition: Action task    | Assigned To| Person or Group                | Yes  | Person item is assigned to                                                 |
| assigned to a person or    | Completed  | Date and Time                  | Yes  | Date and time item was completed                                           |
| group                      | Created    | Date and Time                  | No   | Date and time item was created                                             |
| Relationships: N/A         | 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 |

**Name:** Shared Documents  
**Identifier:** ID  
**Definition:** Library of shared documents  
**Relationships:** 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 |

**Name:** Shared Resources  
**Identifier:** ID  
**Definition:** Library of shared resource documents  
**Relationships:** 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 |

**Name:** Alternative Vendors  
**Identifier:** ID  
**Definition:** List of alternative vendors  
**Relationships:** N/A

<p>| 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 |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zip/Postal Code</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Zip code for item</td>
</tr>
<tr>
<td>Country/Region</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Country and/or Region of item</td>
</tr>
<tr>
<td>Web Page</td>
<td>Hyperlink</td>
<td>Yes</td>
<td>Link to web page for item</td>
</tr>
<tr>
<td>Notes</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Notes regarding item</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Stores  
**Identifier:** ID  
**Definition:** List of stores  
**Relationships:** has Store Contacts

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>Store Number</td>
<td>Single line of text</td>
<td>No</td>
<td>Secondary unique identifier for item</td>
</tr>
<tr>
<td>Store Name</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Store name of item</td>
</tr>
<tr>
<td>Group</td>
<td>Choice</td>
<td>Yes</td>
<td>Group name item belongs to</td>
</tr>
<tr>
<td>Address</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Address of item</td>
</tr>
<tr>
<td>City</td>
<td>Single line of text</td>
<td>Yes</td>
<td>City of item</td>
</tr>
<tr>
<td>State/Province</td>
<td>Single line of text</td>
<td>Yes</td>
<td>State or Province of item</td>
</tr>
<tr>
<td>Zip/Postal Code</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Zip code for item</td>
</tr>
<tr>
<td>Business Phone</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Business phone of item</td>
</tr>
<tr>
<td>Store Owners</td>
<td>Lookup</td>
<td>Yes</td>
<td>Store owner(s) of item</td>
</tr>
<tr>
<td>Store Managers</td>
<td>Lookup</td>
<td>Yes</td>
<td>Store manager(s) of item</td>
</tr>
<tr>
<td>B2B Specialists</td>
<td>Lookup</td>
<td>Yes</td>
<td>B2B Specialist(s) of item</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Store Contacts  
**Identifier:** ID  
**Definition:** List of store contacts  
**Relationships:** belongs to Store(s)

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>Store</td>
<td>Lookup</td>
<td>No</td>
<td>Store item belongs to</td>
</tr>
<tr>
<td>First Name</td>
<td>Single line of text</td>
<td>Yes</td>
<td>First Name of item</td>
</tr>
<tr>
<td>Last Name</td>
<td>Single line of text</td>
<td>No</td>
<td>Last Name of item</td>
</tr>
<tr>
<td>Full Name</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Full Name of item</td>
</tr>
<tr>
<td>Email Address</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Email address of item</td>
</tr>
<tr>
<td>Job Title</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Job title of item</td>
</tr>
<tr>
<td>Business Phone</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Business phone of item</td>
</tr>
<tr>
<td>Notes</td>
<td>Multiple lines</td>
<td>Yes</td>
<td>Notes regarding item</td>
</tr>
<tr>
<td>Name: B2B Discussions Board</td>
<td>ID</td>
<td>Number</td>
<td>No</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----</td>
<td>--------</td>
<td>----</td>
</tr>
<tr>
<td>Identifier: ID</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition: List of B2B discussions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships: N/A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name: Pictures</th>
<th>ID</th>
<th>number</th>
<th>No</th>
<th>Unique identifier for item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier: ID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition: Pictures library</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships: N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
<td></td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
<td></td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
<td></td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name: Issues</th>
<th>ID</th>
<th>number</th>
<th>No</th>
<th>Unique identifier for item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifier: ID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition: List of issues for Yar administrator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationships:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
<td></td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
<td></td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
<td></td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
<td></td>
</tr>
<tr>
<td>Store Site</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Name:</strong> Sales Calendar</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identifier:</strong> ID</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Definition:</strong> Calendar list for Sales Events</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relationships:</strong> is of Account Contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Single line of text</td>
<td>No</td>
<td>Title for the item</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Long description for item</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Location for item</td>
<td></td>
</tr>
<tr>
<td>Start Time</td>
<td>Date and Time</td>
<td>No</td>
<td>Start date and time for item</td>
<td></td>
</tr>
<tr>
<td>End Time</td>
<td>Date and Time</td>
<td>No</td>
<td>End date and time for item</td>
<td></td>
</tr>
<tr>
<td>Free/Busy</td>
<td>Free/Busy</td>
<td>Yes</td>
<td>Free/Busy indicator for item</td>
<td></td>
</tr>
<tr>
<td>All Day Event</td>
<td>All Day Event</td>
<td>Yes</td>
<td>Add Day Event indicator</td>
<td></td>
</tr>
<tr>
<td>Recurrence</td>
<td>Recurrence</td>
<td>Yes</td>
<td>Recurrence indicator for item</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Choice</td>
<td>Yes</td>
<td>Category of item</td>
<td></td>
</tr>
<tr>
<td>Attendees</td>
<td>Person or Group</td>
<td>Yes</td>
<td>Attendees list for item</td>
<td></td>
</tr>
<tr>
<td>Resources</td>
<td>Resources</td>
<td>Yes</td>
<td>Resources list for item</td>
<td></td>
</tr>
<tr>
<td>Check Double Booking</td>
<td>Check Double Booking</td>
<td>Yes</td>
<td>Check Double Booking indicator</td>
<td></td>
</tr>
<tr>
<td>Related Customer</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related Customer (contact) of item</td>
<td></td>
</tr>
<tr>
<td>Related Customer: Business Phone</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related customer’s business phone</td>
<td></td>
</tr>
<tr>
<td>Related Customer: Company</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related customer’s company name</td>
<td></td>
</tr>
<tr>
<td>Related Customer: Email Address</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related customer’s email address</td>
<td></td>
</tr>
<tr>
<td>Related Customer: Job Title</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related customer’s job title</td>
<td></td>
</tr>
<tr>
<td>Related Customer: Mobile Number</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related customer’s mobile number</td>
<td></td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
<td></td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
<td></td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
<td></td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
<td></td>
</tr>
</tbody>
</table>

<p>| Name: Sales Tasks |  |
| Identifier: ID |  |
| Definition: 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 |</p>
<table>
<thead>
<tr>
<th>Relationships: is of Opportunity</th>
<th>Completed</th>
<th>Date and Time</th>
<th>Yes</th>
<th>Date and time item was completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Long description for item</td>
<td></td>
</tr>
<tr>
<td>Due Date</td>
<td>Date and Time</td>
<td>Yes</td>
<td>Date the item is due</td>
<td></td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
<td></td>
</tr>
<tr>
<td>Priority</td>
<td>Choice</td>
<td>Yes</td>
<td>Priority level for item</td>
<td></td>
</tr>
<tr>
<td>Related Items</td>
<td>Related Items</td>
<td>Yes</td>
<td>Items related to this item</td>
<td></td>
</tr>
<tr>
<td>Start Date</td>
<td>Date and Time</td>
<td>Yes</td>
<td>Start date and time for item</td>
<td></td>
</tr>
<tr>
<td>Task Name</td>
<td>Single line of text</td>
<td>No</td>
<td>Title for the item</td>
<td></td>
</tr>
<tr>
<td>Task Status</td>
<td>Choice</td>
<td>Yes</td>
<td>Status for the item</td>
<td></td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
<td></td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
<td></td>
</tr>
</tbody>
</table>

### Activity Log

<table>
<thead>
<tr>
<th>Name: Activity Log</th>
<th>Identifier: ID</th>
<th>Definition: Log list of sales activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Relationships: is of Account, is Lead</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID</th>
<th>Number</th>
<th>No</th>
<th>Unique identifier for item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Date</td>
<td>Date and Time</td>
<td>No</td>
<td>Activity date of item</td>
</tr>
<tr>
<td>Activity Type</td>
<td>Choice</td>
<td>Yes</td>
<td>Activity type of item</td>
</tr>
<tr>
<td>Comments</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Comments regarding item</td>
</tr>
<tr>
<td>Related Account</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related Account of item</td>
</tr>
<tr>
<td>Related Account: Account ID</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related account's account ID</td>
</tr>
<tr>
<td>Related Lead</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related Lead of item</td>
</tr>
<tr>
<td>Related Lead: Lead ID</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related lead's lead ID</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

### Leads

<table>
<thead>
<tr>
<th>Name: Leads</th>
<th>Identifier: ID</th>
<th>Definition: List of leads</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Relationships: has Activity Log</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID</th>
<th>Number</th>
<th>No</th>
<th>Unique identifier for item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead ID</td>
<td>Single line of text</td>
<td>No</td>
<td>Secondary unique identifier for item</td>
</tr>
<tr>
<td>First Name</td>
<td>Single line of text</td>
<td>Yes</td>
<td>First Name of item</td>
</tr>
<tr>
<td>Last Name</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Last Name of item</td>
</tr>
<tr>
<td>Full Name</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Full Name of item</td>
</tr>
<tr>
<td>Email Address</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Email address of item</td>
</tr>
<tr>
<td>Company</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Company name of item</td>
</tr>
<tr>
<td>Job Title</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Job title of item</td>
</tr>
<tr>
<td>Business Phone</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Business phone of item</td>
</tr>
<tr>
<td>Mobile Number</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Mobile number of item</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Required</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>---------------------------</td>
<td>----------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Fax Number</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Fax number of item</td>
</tr>
<tr>
<td>Address</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Address of item</td>
</tr>
<tr>
<td>City</td>
<td>Single line of text</td>
<td>Yes</td>
<td>City of item</td>
</tr>
<tr>
<td>State/Province</td>
<td>Single line of text</td>
<td>Yes</td>
<td>State or Province of item</td>
</tr>
<tr>
<td>Zip/Postal Code</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Zip code for item</td>
</tr>
<tr>
<td>Web Page</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Web page hyperlink of item</td>
</tr>
<tr>
<td>Notes</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Notes regarding the item</td>
</tr>
<tr>
<td>Rating</td>
<td>Choice</td>
<td>Yes</td>
<td>Rating of item</td>
</tr>
<tr>
<td>Preferred Contact Method</td>
<td>Choice</td>
<td>Yes</td>
<td>Preferred contact method of item</td>
</tr>
<tr>
<td>Email</td>
<td>Choice</td>
<td>Yes</td>
<td>Boolean indicator for email contact</td>
</tr>
<tr>
<td>Phone</td>
<td>Choice</td>
<td>Yes</td>
<td>Boolean indicator for phone contact</td>
</tr>
<tr>
<td>Mail</td>
<td>Choice</td>
<td>Yes</td>
<td>Boolean indicator for mail contact</td>
</tr>
<tr>
<td>Newsletter</td>
<td>Choice</td>
<td>Yes</td>
<td>Boolean indicator for newsletter</td>
</tr>
<tr>
<td>Send Marketing Materials</td>
<td>Choice</td>
<td>Yes</td>
<td>Boolean indicator for send marketing materials</td>
</tr>
<tr>
<td>Lead Status</td>
<td>Choice</td>
<td>Yes</td>
<td>Lead status of item</td>
</tr>
<tr>
<td>Lead Source</td>
<td>Choice</td>
<td>Yes</td>
<td>Lead source of item</td>
</tr>
<tr>
<td>Salesperson</td>
<td>Person or Group</td>
<td>Yes</td>
<td>Salesperson of item</td>
</tr>
<tr>
<td>Annual Revenue</td>
<td>Currency</td>
<td>Yes</td>
<td>Annual revenue of item</td>
</tr>
<tr>
<td>Revenue Opportunity</td>
<td>Currency</td>
<td>Yes</td>
<td>Revenue opportunity of item</td>
</tr>
<tr>
<td>Employees</td>
<td>Number</td>
<td>Yes</td>
<td>Number of employees of item</td>
</tr>
<tr>
<td>Closed Date</td>
<td>Date and Time</td>
<td>Yes</td>
<td>Closed date of item</td>
</tr>
<tr>
<td>Minutes Worked</td>
<td>Calculated</td>
<td>Yes</td>
<td>Minutes worked of item</td>
</tr>
<tr>
<td>Time to Close</td>
<td>Calculated</td>
<td>Yes</td>
<td>Time to close of item</td>
</tr>
<tr>
<td>New Lead</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>New lead hyperlink</td>
</tr>
<tr>
<td>Convert Lead</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Convert lead hyperlink</td>
</tr>
<tr>
<td>Closed Lead</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Closed lead hyperlink</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Opportunities  
**Identifier:** ID  
**Definition:** List of opportunities  
**Relationships:** has Sales Tasks, has Competitors  

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>Account ID</td>
<td>Single line of text</td>
<td>No</td>
<td>Account ID of item</td>
</tr>
<tr>
<td>Account</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related Account of item</td>
</tr>
<tr>
<td>Salesperson</td>
<td>Person or Group</td>
<td>Yes</td>
<td>Salesperson of item</td>
</tr>
<tr>
<td>Stage</td>
<td>Choice</td>
<td>Yes</td>
<td>Stage of item</td>
</tr>
<tr>
<td>Opportunity type</td>
<td>Choice</td>
<td>Yes</td>
<td>Opportunity type of item</td>
</tr>
<tr>
<td>Probability</td>
<td>Number</td>
<td>Yes</td>
<td>Probability of opportunity closing</td>
</tr>
<tr>
<td>Next step</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Next step of item</td>
</tr>
<tr>
<td>Key requirements</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Key requirements of item</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------------</td>
<td>-----</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Competitors</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related competitors of item</td>
</tr>
<tr>
<td>Revenue opportunity</td>
<td>Currency</td>
<td>Yes</td>
<td>Revenue opportunity of item</td>
</tr>
<tr>
<td>Closed date</td>
<td>Date and Time</td>
<td>Yes</td>
<td>Closed date of item</td>
</tr>
<tr>
<td>Deal loss reason</td>
<td>Choice</td>
<td>Yes</td>
<td>Deal loss reason of item</td>
</tr>
<tr>
<td>Minutes worked</td>
<td>Calculated</td>
<td>Yes</td>
<td>Minutes worked of item</td>
</tr>
<tr>
<td>Time to close</td>
<td>Calculated</td>
<td>Yes</td>
<td>Time to close of item</td>
</tr>
<tr>
<td>Qualification</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Qualification</td>
</tr>
<tr>
<td>Analysis</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Analysis</td>
</tr>
<tr>
<td>Value</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Value</td>
</tr>
<tr>
<td>Identify</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Identify</td>
</tr>
<tr>
<td>Perception</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Perception</td>
</tr>
<tr>
<td>Proposal</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Proposal</td>
</tr>
<tr>
<td>Negotiation</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Negotiation</td>
</tr>
<tr>
<td>Sale</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Sale</td>
</tr>
<tr>
<td>No Sale</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to No Sale</td>
</tr>
<tr>
<td>Active Tasks</td>
<td>Calculated</td>
<td>Yes</td>
<td>Active tasks of item</td>
</tr>
<tr>
<td>Forecasted Close</td>
<td>Date and time</td>
<td>Yes</td>
<td>Forecasted close date of item</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Accounts  
**Identifier:** ID  
**Definition:** List of accounts  
**Relationships:** has Account Contacts, has Account Documents, has Sales Log, has Activity Log

<table>
<thead>
<tr>
<th>ID</th>
<th>Number</th>
<th>No</th>
<th>Unique identifier for item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account ID</td>
<td>Single line of text</td>
<td>No</td>
<td>Secondary unique identifier for item</td>
</tr>
<tr>
<td>Account Name</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Account name of item</td>
</tr>
<tr>
<td>Account Type</td>
<td>Choice</td>
<td>Yes</td>
<td>Account type of item</td>
</tr>
<tr>
<td>Account Status</td>
<td>Choice</td>
<td>Yes</td>
<td>Status of item</td>
</tr>
<tr>
<td>Annual Revenue</td>
<td>Currency</td>
<td>Yes</td>
<td>Annual revenue of item</td>
</tr>
<tr>
<td>Employees</td>
<td>Number</td>
<td>Yes</td>
<td>Number of employees of item</td>
</tr>
<tr>
<td>Salesperson</td>
<td>Person or Group</td>
<td>Yes</td>
<td>Salesperson of item</td>
</tr>
<tr>
<td>Address</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Address of item</td>
</tr>
<tr>
<td>City</td>
<td>Single line of text</td>
<td>Yes</td>
<td>City of item</td>
</tr>
<tr>
<td>State/Province</td>
<td>Single line of text</td>
<td>Yes</td>
<td>State/Province of item</td>
</tr>
<tr>
<td>ZIP/Postal Code</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Zip code of item</td>
</tr>
<tr>
<td>Web Page</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Web page of item</td>
</tr>
<tr>
<td>Business Phone</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Business phone of item</td>
</tr>
<tr>
<td>Fax Number</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Fax number of item</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Required</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------</td>
<td>----------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Notes</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Notes regarding item</td>
</tr>
<tr>
<td>Account Opened Date and Time</td>
<td>Yes</td>
<td></td>
<td>Date account opened</td>
</tr>
<tr>
<td>Account Closed Date and Time</td>
<td>Yes</td>
<td></td>
<td>Date account closed</td>
</tr>
<tr>
<td>Related Contacts</td>
<td>Calculated</td>
<td>Yes</td>
<td>Related contacts of item</td>
</tr>
<tr>
<td>New Opportunity Hyperlink or Picture</td>
<td>Yes</td>
<td></td>
<td>Hyperlink to New Opportunity</td>
</tr>
<tr>
<td>Close Account Hyperlink or Picture</td>
<td>Yes</td>
<td></td>
<td>Hyperlink to Close Account</td>
</tr>
<tr>
<td>Shipping Preference</td>
<td>Choice</td>
<td>Yes</td>
<td>Shipping preference of item</td>
</tr>
<tr>
<td>Ordering Preference</td>
<td>Choice</td>
<td>Yes</td>
<td>Ordering preference of item</td>
</tr>
<tr>
<td>Other Supply Sources</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Other supply sources of item</td>
</tr>
<tr>
<td>Payment Type</td>
<td>Choice</td>
<td>Yes</td>
<td>Payment type of item</td>
</tr>
<tr>
<td>Service Ranking 1</td>
<td>Choice</td>
<td>Yes</td>
<td>Service Ranking 1 of item</td>
</tr>
<tr>
<td>Service Ranking 2</td>
<td>Choice</td>
<td>Yes</td>
<td>Service Ranking 2 of item</td>
</tr>
<tr>
<td>Service Ranking 3</td>
<td>Choice</td>
<td>Yes</td>
<td>Service Ranking 3 of item</td>
</tr>
<tr>
<td>Service Ranking 4</td>
<td>Choice</td>
<td>Yes</td>
<td>Service Ranking 4 of item</td>
</tr>
<tr>
<td>Service Ranking 5</td>
<td>Choice</td>
<td>Yes</td>
<td>Service Ranking 5 of item</td>
</tr>
<tr>
<td>Service Ranking 6</td>
<td>Choice</td>
<td>Yes</td>
<td>Service Ranking 6 of item</td>
</tr>
<tr>
<td>Service Ranking 7</td>
<td>Choice</td>
<td>Yes</td>
<td>Service Ranking 7 of item</td>
</tr>
<tr>
<td>Multi-Locations</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Multiple locations of item</td>
</tr>
<tr>
<td>Purchase Frequency</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Purchase frequency of item</td>
</tr>
<tr>
<td>Created Date and Time</td>
<td>No</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By Person or Group</td>
<td>No</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified Date and Time</td>
<td>No</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By Person or Group</td>
<td>No</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Account Documents
**Identifier:** ID
**Definition:** Account documents library
**Relationships:** belongs to Account

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>Title</td>
<td>Single line of text</td>
<td>No</td>
<td>Title for the item</td>
</tr>
<tr>
<td>Related Account Lookup</td>
<td>Yes</td>
<td></td>
<td>Related Account of item</td>
</tr>
<tr>
<td>Related Account: Account ID Lookup</td>
<td>Yes</td>
<td></td>
<td>Related account’s account ID</td>
</tr>
<tr>
<td>Checked Out To Person or Group</td>
<td>Yes</td>
<td></td>
<td>User who has item checked out</td>
</tr>
<tr>
<td>Created Date and Time</td>
<td>No</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By Person or Group</td>
<td>No</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified Date and Time</td>
<td>No</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By Person or Group</td>
<td>No</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Account Contacts
**Identifier:** ID
**Definition:** List of account contacts
**Relationships:** belongs to Account

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>First Name Single line of text</td>
<td>Yes</td>
<td></td>
<td>First Name of item</td>
</tr>
<tr>
<td>Last Name Single line of text</td>
<td>No</td>
<td>No</td>
<td>Last Name of item</td>
</tr>
<tr>
<td>Full Name Single line of text</td>
<td>Yes</td>
<td></td>
<td>Full Name of item</td>
</tr>
<tr>
<td>Field</td>
<td>Type</td>
<td>Required</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------</td>
<td>----------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Email Address</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Email address of item</td>
</tr>
<tr>
<td>Company</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Company name of item</td>
</tr>
<tr>
<td>Job Title</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Job title of item</td>
</tr>
<tr>
<td>Business Phone</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Business phone of item</td>
</tr>
<tr>
<td>Mobile Number</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Mobile number of item</td>
</tr>
<tr>
<td>Fax Number</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Fax number of item</td>
</tr>
<tr>
<td>Address</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Address of item</td>
</tr>
<tr>
<td>City</td>
<td>Single line of text</td>
<td>Yes</td>
<td>City of item</td>
</tr>
<tr>
<td>State/Province</td>
<td>Single line of text</td>
<td>Yes</td>
<td>State or Province of item</td>
</tr>
<tr>
<td>Zip/Postal Code</td>
<td>Single line of text</td>
<td>Yes</td>
<td>Zip code for item</td>
</tr>
<tr>
<td>Notes</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Notes regarding the item</td>
</tr>
<tr>
<td>Related Account</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related Account of item</td>
</tr>
<tr>
<td>Schedule Meeting</td>
<td>Hyperlink or Picture</td>
<td>Yes</td>
<td>Hyperlink to Schedule Meeting</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Competitors  
**Identifier:** ID  
**Definition:** List of competitors  
**Relationships:** is of Opportunity

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>Company</td>
<td>Single line of text</td>
<td>No</td>
<td>Company name of item</td>
</tr>
<tr>
<td>Competition Level</td>
<td>Choice</td>
<td>Yes</td>
<td>Competition level of item</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By</td>
<td>Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>

**Name:** Sales Log  
**Identifier:** ID  
**Definition:** Log list of sales summary transactions from closed opportunities  
**Relationships:** is of Account

<table>
<thead>
<tr>
<th>Field</th>
<th>Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>Number</td>
<td>No</td>
<td>Unique identifier for item</td>
</tr>
<tr>
<td>Transaction ID</td>
<td>Single line of text</td>
<td>No</td>
<td>Secondary unique identifier for item</td>
</tr>
<tr>
<td>Salesperson</td>
<td>Person or Group</td>
<td>Yes</td>
<td>Salesperson of item</td>
</tr>
<tr>
<td>Account</td>
<td>Lookup</td>
<td>Yes</td>
<td>Related Account of item</td>
</tr>
<tr>
<td>Revenue</td>
<td>Currency</td>
<td>Yes</td>
<td>Revenue of item</td>
</tr>
<tr>
<td>Date of sale</td>
<td>Date and Time</td>
<td>Yes</td>
<td>Date of sale</td>
</tr>
<tr>
<td>Product or Details</td>
<td>Multiple lines of text</td>
<td>Yes</td>
<td>Product or details of item</td>
</tr>
<tr>
<td>Month</td>
<td>Calculated</td>
<td>Yes</td>
<td>Month of item</td>
</tr>
<tr>
<td>Year</td>
<td>Calculated</td>
<td>Yes</td>
<td>Year of item</td>
</tr>
<tr>
<td>Created</td>
<td>Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By Person or Group</td>
<td>No</td>
<td>User who created item</td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td>-----</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>Modified Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
<td></td>
</tr>
<tr>
<td>Modified By Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
<td></td>
</tr>
</tbody>
</table>

**Name:** Ace B2B Reports  
**Identifier:** ID  
**Definition:** Document library for Ace B2B reports  
**Relationships:** N/A

<table>
<thead>
<tr>
<th>ID number</th>
<th>No</th>
<th>Unique identifier for item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Person or Group</td>
<td>No</td>
</tr>
<tr>
<td>Checked Out To Person or Group</td>
<td>Yes</td>
<td>User who has item checked out</td>
</tr>
<tr>
<td>Created Date and Time</td>
<td>No</td>
<td>Date and time item was created</td>
</tr>
<tr>
<td>Created By Person or Group</td>
<td>No</td>
<td>User who created item</td>
</tr>
<tr>
<td>Modified Date and Time</td>
<td>No</td>
<td>Date and time item was last modified</td>
</tr>
<tr>
<td>Modified By Person or Group</td>
<td>No</td>
<td>User who last modified item</td>
</tr>
</tbody>
</table>
Figure B25. Yar Consulting Extranet Entity Relationship Diagram (ERD) - GHARG
Figure B26. Yar Consulting Extranet Entity Relationship Diagram (ERD) - Store