

# **Building Social Intranets**

# at Putnam Investments

## **Submitted by:**

Ilya Chmykh Christopher Molineaux Michael Perruccio

## **Submitted to:**

Project Advisors: Bengisu Tulu Diane Strong

## **Project Sponsors:**

Stephanie Clement Angela Detzel Putnam Investments

2/27/2014

# **Abstract**

The first goal of our project was to create a community page within Cisco WebEx Social for the Defined Contributions department of Putnam Investments. We completed the construction of the page, guided by research on social intranets and WebEx Social as well as individual and group meetings with employees within the DC department. The second goal of the project is to compile a set of recommendations to improve the Putnam corporate intranet. We provided a variety of recommendations on how to move forward with the corporate intranet project by gathering data from case studies as well as individual and group meetings.

# **Executive Summary**

The WPI team consisting of Ilya Chmykh, Chris Molineaux, and Michael Perruccio worked with Putnam Investments to create a Community page for the Defined Contributions Department on the Cisco service WebEx Social, the team also compiled a set of recommendations to improve the Putnam Corporate intranet as a whole.

To accomplish the first goal of creating a Community page for the Defined Contributions group we completed preliminary research of social media, specifically the use of social media in business, as well as gathered specific requirements from individual and group meeting with Defined Contribution employees. From this point, a proposal and timeline were developed which included three product prototypes. The prototype system allowed us to gain consistent feedback on the product, and split up development into three even sections. Once development was complete, we focused on the transition of all of the necessary documentation from the then current intranet site to the new Defined Contributions Community page.

The second project goal of compiling a set of recommendations on how to move forward with improving the current whole corporate intranet was accomplished by thorough research of case studies in which companies switched over to WebEx Social, specifically the methodology they used and benefits gained from the switch. We were also able to gain a lot of information on company culture, experience with the product, and recommendations from individual and group meetings where participants were encouraged to speak openly.

The project team was able to accomplish both of these tasks successfully. Through the process we learned about the corporate environment, gained invaluable project management experience, and advanced technically throughout development. We hope that Defined Contributions uses this product for many years to come.

# Table of Contents

Abstract	2
Executive Summary	3
Table of Contents	4
Table of Authorship	8
Acknowldegments	11
List of Figures	X
1.0 - Introduction	11
2.0 - Background	15
2.1 – Social Media	15
2.1.1 – Social Media History	15
2.1.2 – Personal Social Media Solutions	16
2.1.3 – Business Solutions	17
2.2 - Putnam, Defined Contribution Group	18
2.3 - WebEx Social	18
2.4 – WebEx Case Studies	20
3.0 – Methodology	23
3.1 – Requirements Gathering	23
3.1.1 – Individual Meetings	23
3.1.2 – Group Meetings	24
3.1.3 – Table of Meetings	26
3.1.4– Survey	27
3.1.5 – Background Research	27
3.1.6 – Observations	27
3.2 – Defined Contributions Prototype Development	28
3.3 – Recommendations for Putnam Corporate Intranet Transition	29
4.0 – Defined Contribution Requirement Analysis Results	30
4.1 – Defined Contribution: Putnam Intranet Page	30
4.2 – Individual and Group Meeting Analysis	31

4.3 – DC Survey Analysis	31
4.4 – Business Requirements	32
4.4.1- DC Community Page Prototype	32
4.5 – Use Cases	33
5.0 – Defined Contribution Implementation and Development Results	39
5.1 – Prototypes	39
5.2 – The Home Tab	39
5.3 – The Plans Tab	40
5.2.1 - Plans Pages	40
5.2.2 - Plans Tab Index	41
5.2.3 - API	42
5.2.4 - Web Scraping	42
5.2.5 - Parsing	43
5.2.6 - New Pages	43
5.2.7 - Output	43
5.3 – The Topics Tab	43
5.3.1 – Overview Sub-Tab	43
5.3.2 – Alphabetical Sub-Tab	44
5.3.3 – Regulatory Role Sub-Tab	45
5.3.4 - Relationship Manager	46
5.3.5 - Implementation	47
5.3.6 - Client Service Manager	48
5.3.7 - Participant Services	49
5.3.8 - Topic Page Transition	50
6.0 – Corporate Intranet Results	52
6.1 – Case Study Analysis	52
6.2 - Individual and Group Meetings	53
6.3 – Recommendations	54
6.3.1 – Suggestion 1	54
6.3.2 – Suggestion 2	54
6.3.3 – Suggestion 3	54

7.0 – Conclusion	55
7.1 – Defined Contributions	55
7.2 – Corporate Intranet	55
3.0 - References	57
Appendix	59
Appendix A – Individual Meeting Protocol & Questions	59
Appendix B – Group Meeting Protocol & Questions	62
Appendix C – Survey Questions	64
Invitation Letter	64
Survey Consent Form	64
Survey Questions	65
Appendix D – DC Group and Individual Meeting Summaries	68
DC Group Meeting A- DC Services Department – Andover Office	68
DC Group Meeting B – DC Services- Senior Employee Development Specialist, Cal Supervisor, Participant Services Representative, Administrative Assistant- Andover	Office
DC Individual Meeting A - Participant Services Representative – Andover Office	
DC Individual Meeting B – DC Operations Co-Op – Andover Office	
DC Individual Meeting C – Regulatory Service Consultant – Andover Office	
DC Individual Meeting E – Client Service Associate – Andover Office	
Corporate Group Meeting A – Head of Human Resources, Benefits Department Mar Benefits Analyst, Senior HR Manager – Boston Office	nager,
Corporate Individual Meeting B – Senior HR Manager – Boston Office	71
Corporate Individual Meeting C – Security Engineering Director – Boston Office	72
Corporate Individual Meeting D – Production Services Director – Boston Office	72
Corporate Individual Meeting E –Director of Applications, Social Media Director – Andover Office	73
Corporate Individual Meeting F –Sales and Marketing Center Director– Andover Of	fice 73
Corporate Individual Meeting G –ICom Project Leader– Andover Office	74

# Table of Authorship

Abstract	Ilya
Executive Summary	Ilya
Acknowledgements	Mike
1.0 – Introduction	Chris, Ilya, Mike
2.0 – Background	Chris, Ilya, Mike
2.1 – Social Media.	Mike
2.2 – Putnam, Defined Contributions Group	Ilya
2.3 – WebEx Social	Chris
2.4 – WebEx Case Studies	Chris
3.0 – Methodology	Chris, Ilya, Mike
3.1 – Requirements Gathering	Ilya
3.2 – Defined Contributions Prototype Development	Ilya, Mike
3.3 – Recommendations for Putnam Corporate Intranet Transition	Chris, Mike
4.0 – Defined Contribution Requirement Analysis	Chris, Ilya, Mike
4.1 – Defined Contribution: Putnam Intranet Page	Ilya
4.2 – Individual and Group Meeting Analysis	Ilya
4.3 – DC Survey Analysis	Ilya
4.4 – Business Requirements	Mike
4.5 – Use Cases	Chris, Ilya, Mike
5.0 – Defined Contribution Implementation and Development Results	Ilya, Mike
5.1 – Prototypes	Ilya
5.2 – Home Tab	Ilya
5.3 – Plans Tab	
5.4 – Topics Ta	Ilya
6.0 – Corporate Intranet Results	Chris
6.1 – Case Study Analysis	Chris
6.2 – Individual and Group Meetings	
6.3 – Recommendations	
7.0 – Conclusion	
7.1 – Defined Contribution	

# Acknowledgements

Our team would like to thank Putnam and WPI for the opportunity we were given to work on this project. We would like to thank our MQP advisors, Professor Tulu and Professor Strong, for the continued advice and support along the way.

Our completion of the project could not have been accomplished without the help of the project sponsors, Stephanie Clement and Angela Detzel. Angela provided our team with great technical advice and assistance. Our team also owes a great deal of appreciation to the defined contribution team put in place to assist with the transition, as well as Jamie Cabral the project lead. We would also like to thank all of the defined contribution community and corporate staff members who gave us their time during interviews and focus groups.

# List of Figures

Figure 1 – Table of Meetings	27
Figure 2 - Timeline for DC Community Page Development	30
Figure 3 - Timeline for Corporate Intranet Recommendation	30
Figure 4 – The Home Tab.	41
Figure 5 – Plans Page Collapsed.	42
Figure 6 – Plans Page Expanded.	42
Figure 7 – Plans Page Index	43
Figure 8 – Topics Tab Overview	45
Figure 9 – Topics Tab Alphabetical Sub-Tab.	46
Figure 10 – Topics Tab Regulatory	47
Figure 11 – Topics Tab Relationship Manager	48
Figure 12 – Topics Tab Implementation.	49
Figure 13 – Topics Tab Client Service Manger.	50
Figure 14 – Topics Tab Participant Services	51

# 1.0 - Introduction

Social Media is no longer just a personal way to connect with friends and family; organizations have started to utilize it in a professional setting to foster better communication, achieve transparency, and share resources effectively. The process to develop, or to purchase and modify, social media software can be challenging for organizations as a unit and departments within every organization having specific and differing functionality requirements.

At Putnam Investments, the current system for completing a company project from start to finish is affected by difficulties in communication and resource management. In this project we utilized WebEx Social, a Cisco developed internal social media system (Cisco WebEx, 2013), to address some of these difficulties.

A difficulty in communication was the silo mentality, the self-contained independent structures that thwart collaboration and the sharing of information. Departments that do not have the proper tools to communicate with one another cannot be truly effective or align themselves with the company's goals. This lack of communication and knowledge of company direction and policy is a contributing factor to a failing company culture and ultimately an unsuccessful company (Cufaude, 2009).

A more efficient company connects their silos into one collaborating structure. The departments align themselves with well-defined company goals while understanding the role that each branch has in helping the company succeed. WebEx Social changes the way that people work together by breaking down these boundaries and allowing easy access to every type of available information. It leads to an organizational culture that facilitates collaboration and eliminates the silo mentality to create a more efficient and successful corporation.

To move into specific problems that companies are experiencing, let us investigate the current process of assigning a project. The manager has to find a candidate with a suitable skill set and proper experience to lead the project. To do this, the manager must draft several emails to various employees that he thinks might be suitable, wait for responses, and then sift through the candidates and their messages in order to best determine the employee to lead the project. The manager has to put in all of this work with no guarantee of finding someone suitable out of the pool that they selected in their preliminary list of employees. If the manager does find a project leader, the leader must then choose a group of people to join the team. The email chain continues with the search and more time is spent. This lengthy process could be avoided in WebEx Social as a manager will have access to every employee's project history and areas of expertise, which allows a search for skills along with their current projects and assignments to determine availability.

As the team begins to work on the project, the issue of proper organization and documentation comes up. In our example, the project team's assignment is to draft a new plan for a customer. They begin with a rough draft with all members assigned a section. They meet

and discuss each of their sections and decide to come together next week to put the documentation together and finalize. Unfortunately, one of the members of the team has an unforeseen leave of absence and this leads to the team missing a section and ultimately missing the finished product until this employee comes back. This is detrimental to deadlines and productivity. An alternative scenario in which another project team is involved in updating that same plan at a later time can lead to several other issues, including: making sure that the version that is being updated is the latest version, and keeping track of changes made. This example illustrates how projects can become unorganized, and bogged down by inadequate communication and employee error. This seemingly unavoidable problem is however very repairable. The inefficiencies present in corporate communication are resolved through the effective use of a social intranet (Millen, Geyer, 2008). With WebEx Social, the team could stay organized and on task with the use of a project homepage which keeps files and discussions in order. All members of the project team could then spend more time on more important issues and become more productive. WebEx Social transforms these processes in order to make them more efficient, but WebEx Social is not only a problem solver, it also adds a variety of benefits.

WebEx Social is a resource for fixing common problems. Instead of users calling the IT help desk on every occasion that they experience a minor error, they can instead search WebEx Social for questions that users who have had similar problem have asked. This feature is made available to all employees within a department or the company, and if a response with a solution is available the employee could then follow that procedure for fixing it. Only errors that are too complicated for the typical user to fix will result in help desk calls. The implementation of social media software solves the problem quicker, gets the user back to work sooner, and also keeps IT hard at work on other company dealings.

WebEx Social transforms the culture of a company from email-centric to people-centric. Important knowledge is spread throughout every company. WebEx Social allows for it to be available to everyone. WebEx social takes this knowledge from remote folders, people's heads, and email and shares it through posts and libraries. It allows for flexibility in where and when employees can work and collaborate effectively by enabling a centralized location where everything is stored and allowing access from any device. With WebEx Social virtual teams can be effective, which is imperative to success in today's business environment.

While Putnam is currently a successful company, and the Defined Contributions department is at a high efficiency and operational level, with the motivation and problems stated earlier in mind, improvements can be made with the implementation of WebEx Social. We have defined two objectives and several sub-objectives that specify our project goals:

- Create a Community Page within WebEx Social for the Defined Contributions department
  - a. Engage with business users to develop use-cases and business requirements

- b. Design, construct, and implement the prototype community page in collaboration with DC group
- c. Transition all plan and topic documentation used by the Defined Contributions Department into WebEx Social
- 2) Provide a set of recommendations for improving the Corporate Intranet using WebEx Social
  - a. Research new trends in adoption of social intranets within organizations
  - b. Identify ways to improve employees ability to search and find information on the intranet by engaging with a larger population of users at Putnam
  - c. Identify process and product enhancements required to facilitate better communications through the Intranet

# 2.0 – Background

#### 2.1 – Social Media

Social Media is defined as "forms of electronic communication through which users create online communities to share information, ideas, personal messages, and other content" (Merriam-Webster, 2013). Social media can be classified into two groups, personal and business. Personal social media offers users a way to connect with friends, family, or new acquaintances in various ways. It can be used to organize events, send out invites, attract users, and much more. Personal social media is developed to be "personal" but offers many business type advantages such as collaboration and group organization. Inherently the line between personal and business media outlets is not black and white. Business social media can be labeled as social tools which allow workers to communicate with one another or via groups, provide information about workers and their skillset, post, edit, filter, and sort text and files. It is intended to increase efficiency across an organization and improve collaboration.

# 2.1.1 – Social Media History

The history of social media is relatively short and rich given that the first email was sent less than 50 years ago, and the majority of technologies on the market today have surfaced within the past 10 years. On February 16, 1978 the first example of rudimentary social media went live. It was a primitive bulletin board system (BBS) created by Chicago natives Ward Christensen and Randy Suess. The system created a stir among computer hobbyist and serves as the foundation for social media (Gilbertson, 2010).

A year later Usenet was utilized to connect students from Duke University and the University of North Carolina, by the early 1990's the World Wide Web (WWW) was developed and began catching on, and by 1997 the "Golden Age" of social media had begun. Blogs started popping up, AOL Instant messenger was created, SixDegrees.com, a website offering its users the ability to create profiles and add friends was started, and Blackboard, the online course management tool was founded. SixDegrees.com and other similar websites were quickly surpassed by newer more user-friendly social media outlets of the new millennia. A new website Friendster ousted SixDegrees.com by offering basically the same functionality with one addition, a circle of friends. The idea that rich online social interactions can only exist between users with common bonds began. In 2003, LinkedIn brought a professional feel to the social media market, linking professionals for hire, with their skills and experience, to corporations in need of skilled individuals. LinkedIn also gave users the ability to connect with other professionals in order to build a personal professional network. That same year MySpace was started which offered greater customization and a trendier feel than its competitors. MySpace quickly went from a startup to a social media giant. The same, however, can be said for its downfall, quick and sharp. MySpace was discarded for the new social media giants of today (Goble, 2012, Dr. Anthony, 2013).

#### 2.1.2 – Personal Social Media Solutions

Facebook was founded in February of 2004 by Mark Zuckerberg and several of his Harvard University classmates. Originally named "thefacebook" the project was started in an attempt to connect Harvard students with one another. Facebook is currently a well-known and highly successful social media giant netting revenue of over \$1.3 billion in 2012 alone. Facebook consists of timeline style posts where users can view all of their interactions over past weeks, months, and even years. Facebook has integrated location through IP address and cell phone GPS which adds business value in the right setting. A key feature of Facebook is groups. Users can join a group and are updated every time a change is made to that group (Carlson, 2013, Facebook, 2013).

Twitter is another successful social media giant. Its genius lies within its simplicity. Twitter allows users to update their friends with quick and effortless posts. Twitter has the ability to group all posts which have used the same keyword by simply adding a hash tag. This creates a neat searchable resource that is maintained by its users (Twitter, 2013).

Google joined the social media market with Google+, a multifunctional social media website. The unique feature of Google+ is the easy process for users to segment their "Circle" of friends into smaller closer groups, whereas Facebook and Twitter tend to leave the user with a mass of friends and followers. Google+ has also integrated the Google Suite which offers some amazing time saving and valuable business features (Google Plus, 2013).

Another interesting social media resource is Tumblr. This website gives its users the ability to create multimedia mini-blogs similar to the once popular social media network Myspace. Tumblr is a great outlet for people to express themselves. It also offers some business value because the service allows professionals to create their own mini-blogs with information pertinent to the company. These mini-blogs provide exciting possibilities for exposure, as Tumblr is a thriving community of activity that also ranks high on search engine results (Tumblr, 2013).

As these social media outlets have gained popularity over the last decade, many businesses and non-profits have utilized them to improve relations with the general public and to increase the popularity of the organization. Ninety percent of organizations maintain some kind of public social media profile. Social media involvement is no longer an option for a successful organization, as having a social media presence is essential to being successful in today's age of accessibility and free flow of information. Ninety three percent of social media users believe that every company should have some kind of social media presence, highlighting the importance of organizational use of personal social networks (Brunetto, 2013).

Nonprofit organizations have become accustomed to the advantages personal social media offers. Nonprofits are more successfully sharing their ideas to their stakeholders and potential donors with the increase in popularity of social networking. New social media outlets,

such as Facebook and Twitter, have internal templates that allow organizations to spread their ideas and foster interaction with their customers. For example, organizations are utilizing the micro-blogging features of social media to spark interest in their potential stakeholders and draw them in with the interactive content and information (Lovejoy, Saxton, 2012).

Businesses worldwide have taken a similar approach to social media with firms eager to profit from this growing trend. With 70 million tweets sent and ten million photos added on Facebook in an average day, one could see why taking advantage of social media could be very profitable. The Return On Investment (ROI) with social media is often much greater than that of a regular marketing scheme as social media focuses on qualified customers that are interested instead of a mass of customers that might not have the need for the product or service, thus providing higher quality leads at a lower price (Kaske, Kugler, Smolnik, 2012).

#### 2.1.3 – Business Solutions

Due to the great success that firms have seen using personal social media externally, vendors saw an opportunity to bring social media into the business setting. Vendors designed internal social media products with the goal of improving collaboration and increasing efficiency within an organization.

Microsoft SharePoint is the most popular internal social media tool used in professional settings. The software began as a simple content management and file sharing tool but has since emerged as the leader of organizational social media. Around 50% of companies have chosen Microsoft's tool for their organizational intranets. SharePoint utilizes user created webpages for new projects, and user blogs/profiles for each user. The blog allows users to find project members with specific skills and the webpage gives the project team a centralized location to manage files and discussions. Other project teams and users can then view the project to ask for help or lend a hand with the project. SharePoint has a proven track record of creating business value and improving teamwork (Microsoft SharePoint, 2013).

Another effective organizational social media tool is Jive. Jive delivers a Facebook like look with a variety of functionality. Jive is able to do the work of several other applications combined. It replaces an email client, an analytics tool, and presentation software. Jive instantly turns clumsy intranet into a mobile sales platform, however, the software is most renowned for its unified collaboration with a variety of other apps. Jive takes data from Outlook, Office, SharePoint, Salesforce, Box, Evernote, email and any web-based app and syncs it across the intranet. The latest version of any document becomes a click away (Jive, 2013).

A new and successful internal social media tool comes from the CRM giant Salesforce.com. Salesforce.com has a reputation for taking an idea and turning it into a hugely successful and effective product that is delivered to its users over the cloud. Salesforce.com's Chatterbox is no different; it delivers a user experience that significantly improves business efficiency. Chatterbox centralizes files, creates groups, and user profiles to connect the people,

ideas, and work that enables projects to succeed. Chatterbox also provides collaboration between groups, branches, and even companies. The cloud based application can connect any chatterbox user of any company. Chatterbox has a long list of Fortune 500 customers with very successful results (Salesforce.com, 2013).

# 2.2 - Putnam, Defined Contribution Group

The sponsor for the Building Social Intranets project is Putnam Investments. Putnam has had 75 years of experience in investment, and has been a beneficiary of a balanced approach with over \$137 billion in assets (as of 09/2013). Today, Putnam offers a range of equity, fixed-income, multi-asset and absolute return portfolios to suit a variety of investors with unique financial goals (Putnam Investments, 2013).

Putnam's employees believe in service excellence, the quality of their financial advice, and in putting the clients first, which is exhibited by their customer loyalty with over 5 million active shareholder accounts. One way that Putnam has nurtured its relationship with their investors is by establishing a broad social media presence on multiple channels. Putnam engages its advisors and investors with timely and relevant information through Facebook and Twitter.

While Putnam has been using innovative personal social media as an outlet for any useful announcements and updates, they have been static on the intranet side of social media for quite some time. With the recent purchase of the product Cisco WebEx Social, Putnam has begun the process of taking advantage of the modern social media technology that is available to improve efficiency and communication in the workplace.

As Putnam Investments begins its transition to WebEx Social, one of the first groups to shift to this social media platform is the Defined Contributions (DC) group. The DC mission is to "Consistently provide high quality and knowledgeable service in a manner that reinforces our brand and competitive advantage for both clients and Putnam." Overall, the main goal of DC is to provide members comfortable monthly income during retirement. DC has a positive and optimistic outlook on what WebEx Social can do to simplify its daily operations of quality daily support for their customers.

## 2.3 - WebEx Social

Cisco released its social collaboration platform Quad in the first quarter of the 2011 fiscal year (Gaudin, 2010). Quad set out to efficiently connect employees within larger corporations and uses a tabbed interface with customization options so that workers can configure their posts, communities and profiles. Quad's tabs include New Post, My View, My Profile, People, Community, and Library, among others (Dix, 2010).

Cisco announced the rebranding of social media platform Quad to WebEx Social in June of 2012. New enhancements were also introduced that allows enterprises to integrate with their current collaboration applications. These new features include the ability to implement WebEx

as a cloud solution, integrate with Microsoft Office and Outlook, advancements for iPhone and iPad users, high-definition, browser-based web conferencing, and new interfaces for mobile and current WebEx clients. More and more clients have been utilizing WebEx Social to customize their social collaboration applications to better suit their business needs (Lynn, 2012).

WebEx Social Unified Communications Integration provides and enables organizations to expand their business more efficiently and in a timelier manner with industry leading web based conferencing. Now enterprises can easily share ideas and business content without the hassle of global travel, substantially decreasing costs and increasing day-to-day productivity. Additionally, WebEx Social has simplified communications within companies in order to easily collaborate among in-house departments. Employees can instantly begin a live discussion with each other through voice, video, IM or web conferencing sessions with just a click of a button (Cisco Systems Inc., 2013a).

WebEx Social Unified Post keeps employees, from every level, connected and updated on important product developments, group work and everyday business news. WebEx Social's Unified Post presents a more flexible alternative to emails because users are able create and share posts simultaneously while limiting repetition of the same information by managing the post's feedback. Posts can be formatted by setting preferences on editing, commentary and forwarding (Cisco Systems Inc., 2013a).

WebEx Social Enterprise Social Networking allows employees to connect to one another and gain critical knowledge from experts within the company. Creation of a profile permits employees to share their contact information along with their specialties, interests and activities. WebEx Social lets staff members formulate communities by inviting other key members to cooperate with group work. Once members of the organization make their profiles, form communities and begin sharing information, WebEx Social's search function can quickly find the relevant information and people needed within the company (Cisco Systems Inc., 2013a).

WebEx Social Content Management Integration helps organizations share beneficial stored information. It enables documentation to become a part of the community work flow so that more employees can have the appropriate access. WebEx Social has the capability to connect with Microsoft SharePoint, EMC Documentum and other content management systems (CMS) (Cisco Systems Inc., 2013a).

WebEx Social Mobile Application allows employees to access and interact with WebEx Social on the go. The functionality of the mobile application remains true to the WebEx program itself so it is an easy transition from in-house to mobile use. The application utilizes all of the collaboration features while keeping the shared data safe and secure (Cisco Systems Inc., 2013a).

## 2.4 – WebEx Case Studies

A number of corporations have already begun the transition to a new social intranet using WebEx Social. Major enterprises are building these social platforms to make important company information available throughout multiple departments for more efficient collaboration. Interest by organizations in these social platforms has been characterized by three factors: the desire to capture and re-use knowledge, the need to maintain human connections across a disparate workforce and the pressure to modernize systems to meet new workforce demands (Koplowitz, 2011). The value that WebEx Social brings to a corporation can be seen almost instantaneously by the members involved.

General Electric has created an enterprise collaboration platform aptly named Colab. GE runs on innovation and with a workforce of 300,000, GE is always looking for new ways to keep their employees connected. When GE introduced WebEx Social they launched it with the minimal functionality, specifically to encourage users to develop Colab to their liking, and then developing the product further based off of the initial guidelines. As soon as employees began leaving their digital footprints within WebEx Social, GE's advanced services began layering the functionality on top by working directly with engineers and other essential users. One year after Colab's debut within GE, CIO Ron Utterbeck saw solutions being delivered faster without going through a trial and error period. By December 2012, 124,000 GE employees were using Colab and over 7,000 communities had been created for problem sharing and solving (Cisco Systems Inc., 2013a; King, 2012).

Virgin Media, the UK's leading entertainment and digital communications company, implemented Cisco Quad, Cisco WebEx Social and Cisco Unified Communications for its employees on February 13, 2012. As part of Virgin Media's Flexible Working Initiative, Cisco solutions allows staff members to work together with remote access to video calls and document sharing via PC, laptop, tablet and mobile phones. A quote from Elisa Nardi, chief people and services officer, highlights the value brought by Cisco's collaboration software. "Our people will be able to connect using video, chat and activity feeds from the office, when working from home and on the go. We're enabling a more flexible and collaborative work environment and will continue to develop our use of Cisco Quad and WebEx Social to deliver an outstanding experience to our people and, ultimately, a more agile and engaged workforce" (Cisco Systems, Inc., 2013b). Virgin Media transformed its business through accelerating responses to requests for proposal, enabled flexible working, easier navigation with keyword search capabilities, and removing duplication across the organization using WebEx Social (Cisco Systems, Inc., 2012a).

Persistent Systems, a global software-development firm based out of Pune, India, provides software products to a number of industries and has utilized Cisco's Quad and WebEx Social for its enterprise collaboration platform. Persistent's 6,700 employees work in nine development centers on three continents making effective collaboration essential for success. Persistent found that their employees and IT staff were burdened by working with multiple

applications and needed a solution that could connect all these tools under one interface. Initially Persistent launched Cisco WebEx Social exclusively to 200 employees who develop collaboration software and since has grown to 4,000 workers benefiting from team communication, accelerated formation of project teams, expertise identification and corporate event planning. Persistent inspired adoption of WebEx Social through creation of communities that would entice employees by adding entertainment content, requiring that WebEx Social be the sole source for certain content and sharing live video of focal announcements from their senior managers. Ajay Deshpande, chief architect for Persistent, stated "Cisco Quad aligns very well with Persistent's corporate culture. It provides a platform for people to express themselves and strengthen their sense of connection to the company. At the same time, it helps management seek out the wisdom of the crowds" (Cisco Systems, Inc., 2012b).

Sentara, a not-for-profit health system, was ranked top among most integrated healthcare systems in 2010. Operating more than 100 healthcare facilities, Sentara employees are qualified physicians, surgeons, and nurses scattered throughout their Virginia and North Carolina sites. To provide high-quality patient care, Sentara needed to facilitate collaboration and utilize all of its resources between departments. Sentara implemented Cisco's WebEx Social to all of its facilities where employees were able to begin reaping the benefits of the solution. Promotion of the new solution was essential and Sentara officials pushed workers to recognize its advantages, even in their daily lives. Officials distributed an electronic communication describing how to integrate audio, video, and web conferencing capabilities for remote meetings. Sentara officials also developed an internal website to offer general information about WebEx Social including a basic introduction and a guide for managing personal accounts which bestowed belief among employees in using the new product. Since the deployment of WebEx Social, employees were able to focus more on providing better care for patients and less time on administrative issues. Physicians now have the ability to show patients' lab work and medical history to relevant doctors to acquire their opinions on how to best serve patients. Betsy Meadows, director of Sentara Healthcare, stated "Sentara uses the WebEx Social solution clinically to enhance patient care, providing patients with multiple professional opinions without having to commute from one hospital to another" (Cisco Systems, Inc., 2010).

Pella Corporation, founded in 1925, offers a range of quality residential and commercial windows and doors for new construction and remodeling projects. In recent years, the IT team has introduced a number of collaboration applications to its employees and sought to simplify internal communication by consolidating through standardization. By implementing Cisco's WebEx Social, Pella was able to enhance team collaboration, customer collaboration and quality management, presence and instant messaging, mobility, and video surveillance. Immediate results were seen by the Pella Corporation in improved team performance with standardization of Cisco collaboration applications, increased quality of customer interactions, customer satisfaction through Cisco Unified Workforce Optimization tools, and simplified IT department tasks by increasing business agility with standardization of Cisco solutions to meet the ever

changing business demands. Lynn Starkey, network architect at Pella, noted, "We're a nimble company, and Cisco helps us stay that way because the solutions are easy to implement, the same size IT team has been able to support growth for seven years." (Cisco Systems, Inc., 2013c).

Minter Ellison, one of the largest law firms in Asia Pacific, employs 1,110 lawyers in 15 offices throughout Australia, New Zealand, Hong Kong, China, and the United Kingdom. Clients of Minter Ellison include Fortune 500 companies, global financial institutions, and government organizations. Minter Ellison's "one-firm" strategy enables virtual team assembly of its best-qualified lawyers for specific cases from any one of their many global offices. Minter Ellison wanted to build on its global collaboration strategy in order to help lawyers share information without the hassle and expense of travel. By implementing Cisco's WebEx Social solutions in all offices, Minter Ellison was able to improve client services and satisfaction, internal collaboration, training, and recruitment (Cisco Systems Inc., 2012c).

In summary, the case studies revealed different methods of implementing WebEx Social within major corporations to create a more flexible work environment for employees. The case studies also provided adoption strategies used by corporations to make the transition to WebEx Social more engaging to their users. In every case study, the main goal was to build a collaboration solution, using WebEx Social, which better facilitated internal communications to increase productivity and develop a more efficient workforce. The MQP project team utilized the information offered within the case studies to gain a better understanding of WebEx Social's capabilities and generated ideas of how Putnam could benefit from this enterprise collaboration tool.

# 3.0 - Methodology

The primary goals of this project were to create a WebEx Social Community for the Defined Contribution (DC) group and to provide a set of recommendations of how to integrate the Corporate Putnam Intranet and WebEx Social. To accomplish this we completed several sub-objectives.

To create Community Page within WebEx Social for Defined Contributions, we:

- Engaged with DC business users to develop use-cases
- Finalized business requirements
- Collaborated with DC group to design, construct, and implement the prototype
- Transitioned all current documentation used by the current DC intranet into WebEx Social

To develop a set of recommendations for the transition of the corporate intranet to WebEx Social, we:

- Engaged with Putnam business users to gather opinions on the current intranet and WebEx Social
- Researched new trends in adoption of social intranets within organizations
- Identified process and product enhancements required to facilitate transition by engaging with a larger population of users

In this section, we discuss the course of action we took to complete the project objectives.

# 3.1 – Requirements Gathering

The process for gathering business requirements was similar for both objectives. This section will give a broad understanding of how each method applied to both objectives, and then we will go into detail to describe how each method was utilized to gather important data.

## 3.1.1 – Individual Meetings

Individual meetings were used to gain better understanding of individual interactions with the current system. The meetings were always held with one individual, at least two members of the MQP team and our project sponsors. In the process of conducting these meetings for both objectives, we met individuals that are both very passionate about the current system, meaning that they do not see a clear reason to make at least some transition to WebEx Social, and individuals that recognize the benefits of the new system compared to the current. To gain a wide range of opinions we followed this process before every individual meeting.

- 1) We debriefed our project sponsors to better understand the personality of the person that we were to meet with and their experiences with both systems. This allowed us to:
  - a. Tailor follow up questions.
  - b. Put extra attention in making sure the participants of the meeting recognized that we valued their opinion even if they were resistant to change.
- 2) We always started the individual meeting with a set of prerequisite requirements.
  - a. We wanted to hear both the good and the bad about the employee's experience with both the old and the new system.
  - b. We made it clear that our goal was to make a change for the best when it came to the corporate intranet recommendation, not necessarily transition everything to WebEx Social.
- 3) Structured the individual meeting with one team member taking the lead to ask questions and two recorders.
  - a. Team member asking the questions was responsible for:
    - i. Asking all of the questions stated in Appendix A.
    - ii. Following up on anything that was not clear from an answer provided by the individual questioned.
  - b. Recorder was responsible for:
    - i. Taking notes of the individual meeting and sharing them with the rest of the group, both in minutes and summarized format.
    - ii. Following up with subjects at the end of the individual meeting if recorder had an impromptu follow-up question that was not covered initially.
- 4) The individual meeting was also started with a brief explanation from the project team to state our purpose and our objectives to insure that the employee was completely clear on what we wanted to focus on during the individual meeting.
- 5) Participation in the individual meeting was completely voluntary, employees could have chosen to not participate or answer any question that made them uncomfortable without a risk of negative consequences.
- 6) The protocol script and the individual meeting questions can be found in Appendix A.

## 3.1.2 – Group Meetings

A group meeting was a form of qualitative research in which a group of employees were questioned about their perceptions, opinions and beliefs with the project sponsors present. In this case the employees of Putnam Investments were questioned about their interaction with the current intranet system and their preliminary interaction with WebEx Social. Questions were asked in an interactive group setting where Putnam employees were free to talk with other employees regarding their opinions. Listening to others' verbalized experiences with the systems in question stimulated memories, ideas, and experiences in all participants which in turn revealed more about the participants' true interaction.

To begin the process of conducting a group meeting, our team followed this protocol:

- 1) Our project sponsors were present at all group meetings which we were a part of, we were designated a certain amount of time to ask questions of these groups.
- 2) We asked our sponsor to set up group meetings with employees of the same or similar professional stature. This ensured that everyone in the group meeting was comfortable in sharing their opinion.
- 3) We debriefed our project sponsors prior to the group meeting to better understand the personalities of the participants. This allowed us to:
  - a. Come prepared to deal with certain individuals which might have strong personalities.
  - b. Set the proper ground rules for the session.
- 4) We always started the meeting by setting the following expectations:
  - a. We wanted to hear both the good and the bad about the employees' experience with both the old (intranet) and the new system (WebEx Social).
  - b. Our goal for the corporate group meetings was to recommend a change for the best, not necessarily transition everything to the new system. This encouraged employees to state their true opinion.
- 5) If we were briefed that some or one of the participants were very vocal or passionate about their opinion we would ask the following:
  - a. That everyone should be respectful of everything that an individual has to say. You do not have to agree with everything, and constructive arguments are acceptable and welcome.
  - b. That every employee would only have a certain amount of time to speak per question in order for us to obtain the most information and use everyone's time effectively.
- 6) The structure of the group meeting was a Dual Moderator Meeting with two moderators and a recorder that is responsible for taking minutes in written note form.
  - a. The first moderator ensured that the session progresses smoothly.
    - i. Calmed any arguments
    - ii. Asked all participants to contribute
    - iii. Engaged employees to go further into detail about an answer that may have seemed unclear
  - b. Second moderator ensured that all topics were covered
    - i. Asked questions stated in Appendix B
    - ii. Asked any follow up questions that may have arisen
  - c. The recorder of the meeting
    - i. Took minutes
- 7) To begin the group meeting, the second moderator would state a brief explanation of our purpose and our objectives to insure that the employees were completely clear on what we wanted to focus on during the meeting.

- 8) Participation in the group meeting was completely voluntary, employees may have chosen to not participate or answer any question that made them uncomfortable, without any penalty.
- 9) The protocol script and the group meeting questions can be found in Appendix B.

# 3.1.3 – Table of Meetings

The following table shows all of the meetings the team conducted while completing the project.

Attendees	Date	Location
DC Services Department and Project Sponsors	9/4/2013	Andover Office
DC Services, Senior Employee Development Specialist, Call Center Supervisor, Participant Services Representative, Administrative Assistant	9/18/2013	Andover Office
Participant Services Representative	10/2/2013	Andover Office
DC Operations Co-Op	10/2/2013	Andover Office
Regulatory Service Consultant	11/13/2013	Andover Office
Client Service Associate	11/13/2013	Andover Office
Head of Human Resources, Benefits Department Manager, Benefits Analyst, Senior HR Manager	10/9/2013	Boston Office
Senior HR Manager	10/9/2013	Boston Office
Security Engineering Director	11/22/2013	Boston Office
Production Services Director	11/20/2013	Boston Office
Director of Applications, Social Media Director	11/25/2013	Andover Office
Sales and Marketing Center Director	11/27/2013	Andover Office
ICom Project Leader	11/29/2013	Andover Office

Figure 1 – Table of Meetings

#### 3.1.4– Survey

The purpose of the survey was to gather quantitative data on how the employees of the Defined Contributions (DC) Department interact with the current intranet and their initial experiences with the new system, WebEx Social. The quantitative data served as a supplement to the qualitative information gathered from individual and group meetings to help us understand every aspect of employee interaction with both systems, and eventually develop and improve the WebEx DC Community page based on the input.

The target population was the entire DC Department, consisting of roughly 100 people. A large percentage of survey responses painted an accurate picture of the wide variety of interaction with the current system and the satisfaction of those interactions.

We utilized Qualtrics, a web based tool for building surveys. WPI has recently purchased this tool to specifically offer a secure online survey software solution for WPI Students, Faculty, and Staff that allows users to collect, analyze and act on relevant data (WPI, 2013). An email with a link to a web-based survey was sent out to the Defined Contributions department from the email address of the Senior Employee Development Specialist. The content of the survey was approved by our project advisor and project sponsors prior to the distribution of the survey. The survey protocol and questions can be found in Appendix C.

## 3.1.5 – Background Research

Background research is an important aspect of any proposal and this process helped us understand the topic of social media thoroughly. We conducted research on the history of social media, the effect of external social media on corporations and non-profits, and also the emerging market for business social media. We utilized a variety of sources, including but not limited to: scholarly journal articles, social media sites, previous major qualifying projects and book excerpts.

#### 3.1.6 – Observations

Interaction with both the current intranet and WebEx Social were an integral part of understanding how Putnam employees currently utilize the system. It was also an integral indicator of how we could improve on WebEx Social's key functionalities to develop a system that meets all of the business requirements.

For the DC Community page, the process included extensive use of the DC Home page and every tab, as well as the different documentation that is stored in every tab. These observations were compared with individual and group meetings as well as survey results to verify the observations.

For the corporate intranet, the team analyzed the results from the individual and group meetings to create a set of use cases of experiences that the employees enjoyed and those that

were particularly frustrating. This was a particularly useful exercise to gain insight on how the employees interacted with the old system.

# 3.2 – Defined Contributions Prototype Development

The process of developing the prototype began with the development of As-Is and To-Be use cases. All of the necessary information was already gathered using the methods stated in the previous section. The project team will selected three to four specific scenarios, or use cases, where the same task is performed on the current system and on WebEx Social upon the completion of the prototype. The use cases highlight the change in process.

With the use cases completed, the project team began development using the prototype method. The team developed several iterations of the system, including new features at each release. Prototyping allowed the team to create a basic system that initially had a minimal set of features following the basics of analysis and design. Creating a basic prototype allowed the team to get early feedback on the system. The responses were used to refine the next iteration of the prototype. This allowed for maximum interaction between the MQP team and the DC Department during development.

The first prototype (November  $6^{th}$ ), included the Tabs system that the current intranet system utilizes. The purpose of creating a similar layout was that users are eased into the new system and the new features. The second prototype (November  $20^{th}$ ) included the alphabetical navigation feature, the search feature, and the Plans Tab documentation transitioned to the new system. The third prototype (December  $4^{th}$ ), included the necessary templates for employees to create and update all documentation.

The project team tested the DC community page before the release of each of the prototypes to the DC Department. The MQP team used the white-box method to analyze all internal functionalities of the community page and the black box method to test actual functionality. Once the preliminary round of tests was completed, the team asked a select group of DC employees, decided by DC executives, to test the prototype. After receiving feedback from DC, the team made proper modifications on the released prototype while working on the coming iteration. After the last iteration, all of the functionalities were released and tested. We then made final modifications and deployed the DC Community page to the members of DC.

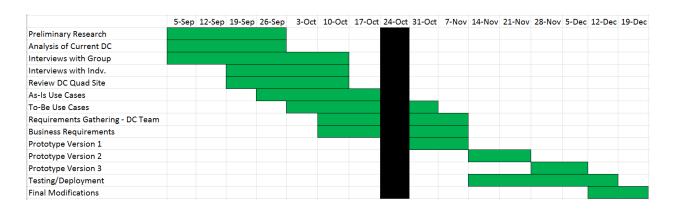


Figure 2 - Timeline for DC Community Page Development

# 3.3 – Recommendations for Putnam Corporate Intranet Transition

The MQP team analyzed the background research, case studies, and individual and group meeting results to determine a set of recommendations to provide to Putnam to facilitate the corporate intranet transition to WebEx Social.

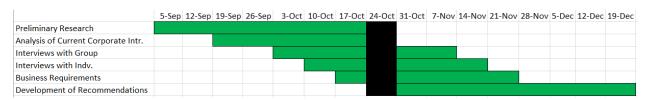


Figure 3 - Timeline for Corporate Intranet Recommendation

# 4.0 – Defined Contribution Requirement Analysis Results

# 4.1 – Defined Contribution: Putnam Intranet Page

Currently, the information that the DC team utilizes on a daily basis is located on the DC Intranet Site. There are four separate tabs that house all of the information: the Home Tab, the Plans Tab, the Topics Tab, and the DC Sales Tab. The Home Tab has a DC Toolbox with a variety of resources, both external and internal to the DC Intranet Site, a Glossary, and an Internal Directory for members of the Site. The Plans Tab includes plan specific information that is queried by a drop down menu from an alphabetical listing. The Topics Tab includes Compliance, De-conversion, Implementation, Mergers, Reference, and Plan Design information as well as Participant Communications. Finally, the DC Sales Tab includes Sales resources, Investment only information, as well as Firms, Consultants and IO partners. The DC Sales Tab is not used by the Defined Contributions team, and thus will be not be transitioned to the DC WebEx community page. All of this information is only accessible by manual navigation on the intranet website, and is at times very difficult to find.

In an initial meeting with several representatives from the DC group (9/4/2013), the project team was introduced to several key users of the current intranet system. These included the Relationship Manager, Retirement Education Consultant, and Regulatory Service Consultant.

The Home Tab is used by all of the DC employees. The current issues that they face all stem from the navigation system and the lack of a searching ability. This tab includes a Top Stories section which is updated manually with relevant information for employees, a phonebook feature, the Employee of the Month, a nonfunctional Google Custom search box and the DC Toolbox. The toolbox has a list of hyperlinked commonly used resources, both internal and external, and also has two drop downs for DC Plans and DC Topics that include all of the available resources in those tabs. Some of these resources are extremely vital to daily operations and should be included on the homepage while others are irrelevant. Several individual meetings were conducted and a survey was sent out to determine the key features. This analysis is available later in the report.

The Topics Tab includes links that list the document procedures for topics relevant to all employees in the Putnam DC department. The tab has 18 headings, with a varying amount of links below them. The links are all in alphabetical order, which makes them easy to find if a user is familiar with the associated heading, but difficult if the user was just given a name of a procedure without its heading. There is no available search feature.

The Plan Tab is a list of Plans that are in alphabetical order. The alphabet is listed at the top of the page so that the user has the option to link to the list of plans beginning with a certain letter. The Plan Tab also has a drop-down option with the same functionality as the DC Toolbox mentioned above, having all the available plans listed. While this is a functional method,

efficiency could be improved with a search option that searches both titles and descriptions of the plans.

Once the user opens a plan they are faced with a standard layout that is used for every plan. The layout consists of drop-down categories such as Beneficiaries, Contact Information, Conversion, etc. These drop-downs also have standard sets of data fields, with specific information applying to the selected plan. This makes the transition of the plans to WebEx Social possible with the use of an API. The plan has Expand All and Contract All features if the user wants to view all of the information at once or hide all at once.

The Putnam's Premium Services (PPS) Tab has a variety of uses for the DC department, with the links included listing the document procedures for topics relevant to Putnam's Premium Services platform. Under each heading, for example, Operations Policies and Procedures, there is a list of policies and procedures, but they are not in alphabetic order. This makes it exceptionally difficult to locate resources quickly and effectively in this tab. (Putnam Intranet, 2006)

# 4.2 – Individual and Group Meeting Analysis

This section will describe how the individual and group meetings helped us to understand the current DC process with the intranet system, and helped us to envision and develop a DC Community Page on WebEx that satisfied all previous requirements and improved on the process.

In the beginning we held these meetings on an individual basis with DC Team members on site with our sponsors present. We gathered specific requirements which we address in the Use Cases and development. Once we got these basic requirements, these meetings were held on a weekly basis. We reported on progress with development and they gave us constant helpful feedback on each of our three prototypes.

We also held phone conference meetings on a daily basis with our sponsors, Stephanie and Angela. During these meetings we gave them updates on our weekly and daily deliverables, asked questions, and asked for advice on how to move forward with the project. They were a great help towards guiding us to a successful culmination of our project.

# 4.3 – DC Survey Analysis

The MQP team created and disseminated a survey to the DC group to gain a quantitative understanding of the feedback. This section describes how each of the mentioned results influenced our design decisions in the development of the Defined Contributions DC Toolbox. The DC Toolbox being the side panel on every index page of topics which is made up of useful links specific to that index page. With 84 surveys taken out of a possible 110 employees in the DC department we felt that we got a significant amount of responses to draw conclusions.

The first question asked was which role the system user identified with. This allowed us to determine which set of links each type of DC user utilized on the old system. Once we had this

data we presented it to our sponsors and received an excel sheet with which links to include in each DC Toolbox to guide the development for each role. Please see the appendix for a list of the survey questions, survey protocol, and survey results.

Along with the qualitative results that allowed the sponsors to determine which links to include on each role specific topic index page, we also asked the users about their general experience with the old system, as well as their experience with WebEx Social, as Defined Contributions had been getting familiar with WebEx Social for approximately six months at the time we started the project.

We gathered suggestions for development of the Home page, the Topics pages, and the Plans pages. Some suggestions that we took as development guidelines with the approval of our sponsors was a cleaner design for the home page, the organization of the topics pages by role, as well as the search feature on the plans and topics pages.

# 4.4 – Business Requirements

# 4.4.1- DC Community Page Prototype

Listed below are the summary of business requirements specified during group meetings held on September 4/2013 and September 18/2013 and individual meetings held on October 2/2013 and October 16/2013 with members of Defined Contributions Department. These requirements will be exhibited within the three iterations of the prototype for the DC Community page in WebEx Social.

Requirement	Requirement Description
Document Transfer and Storage	The system will store documentation, including minutes from meetings and analysis. There are multiple file types like PDF, MS Office Documents, HTML, etc., within the Plan tab and Topics tab of the current DC Services intranet.
Improved Navigation	The system will allow users within the DC Group to navigate though out the DC Community page with a tabbed interface akin to the current intranet page to give a sense of familiarity.
Document Search Functionality	The system shall have the capability to search for documents within the Plan tab and Topics tab of the DC Community page for easier document retrieval.
Categorizing Documentation	The system will allow DC Group users to view a filtered list of documents within the Plan tab and Topics tab of the DC Community page sorted alphabetically by title and by content within the document.

Documentation Management	The system will permit authenticated DC Group users to
	make updates and edit content of Plan tab and Topics tab
	documents utilizing templates within WebEx Social.

# 4.5 – Use Cases

Model		
Defined Contributions (M1)		
Actors		
DC Sales (A1)		
DC Participant Services Phone Rep (A2)		
DC Operations (A3)		
DC Customer Services Manager (A4)		
Use Cases		
As Is Update Intranet Page (UC1)		
To Be Update Intranet (UC2)		
As Is Search For Plan (Participant Services Representative) (UC3)		
To Be Search For Plan (Participant Services Representative) (UC4)		
As Is Search For Plan (PSR) (UC5)		
To Be Search For Plan (PSR) (UC6)		
Packages		
Corporate (P1)		

Use Case: As-Is Update of the Intranet Page (UC1)	
Pre-Condition	Page is out of date
Post-Condition	Page is up to date
Trigger Event	External
Trigger Description	User has relevant data to update page
Active Actors	DC Sales, DC Participant Services Phone Rep,
	DC Operations, DC Customer Services
	Manager
Details	
Priority	1
Level	Summary
Complexity	Low
Status	Created
Implementation	Scheduled
Open Issues	
1	Complex resolution to simple issue
2	Levels of approval take time to be processed
3	Only select user have Microsoft DreamWeaver
	software and skills to use it
Flow of Events	
1	User receives information that requires a page

	update
1.A	User saves information to new file on local
	disk
2	User opens content manager
3	User selects page to update in Microsoft
	DreamWeaver
3.A	User uploads external file to content manager
4	User copies or keys updated or new
	information or link into DreamWeaver's html
	editing tool
5	User formats the information to intranet
	standards
6	User uploads the edited page to staging to gain
	feedback from manager group
7	User makes final changes to the page based on
	feedback
8	User updates the new page on the intranet
	using content manager

Use Case: To-Be Update of the Intranet Page (UC2)	
Pre-Condition	Page is out of date
Post-Condition	Page is up to date
Trigger Event	External
Trigger Description	User has relevant data to update page
Active Actors	DC Sales, DC Participant Services Phone Rep,
	DC Operations, DC Customer Services
	Manager
Details	
Priority	1
Level	Summary
Complexity	Low
Status	Created
Implementation	Scheduled
Flow of Events	
1	User receives information that requires a web
	page update
1.A	User saves information to new file on local
	disk
2	User selects Post that houses page content or
	creates new post
3	User opens the Edit option

3.A	User uploads file to desired Quad library
4	User opens necessary template to base update
5	User copies or keys updated or new
	information into Edit screen
5	User shares page with select group of
	managers for feedback and approval
6	Feedback can be given as comments on the
	post or as direct edits to the post
7	User updates the page by making the content
	viewable to Community

These use cases describe the process of creating a new page in the desired intranet community. This applies to all community resources that have been moved from the html based intranet to Quads social intranet. The data flows from the initial requirement directly to a new page or file on Quad. This leverages Quads social aspect to its full extent alleviating much of the corporate lag associated with creating a new page or file.

Use Case: As-Is Search for Plan (UC3)	
Pre-Condition	HR is in need of information regarding a
	specific plan
Post-Condition	HR receives information regarding a specific
	plan
Trigger Event	External
Trigger Description	HR Representative contacts Customer Service
	Manager (CSM) in need of information
	regarding a specific plan
Active Actors	DC Customer Service Manager, HR
	Representative
Details	
Priority	1
Level	Summary
Complexity	Low
Status	Created
Implementation	Scheduled
Open	Issues
1	No functional search feature available
Flow of Events	
1	Human Resources Representative (HR)
	contacts Customer Service Manager (CSM) for
	information regarding a specific plan
2	CSM opens the DC Intranet page
3	CSM browses the Plans Tab and searches by
	one of three methods dependent on information
	provided by HR

3.A	Alphabetical if Plan Name provided
3.B	Plan Number if Plan Number provided
3.C	Cntrl-F if keyword provided
4	CSM returns plan information to HR

Use Case: To-Be Se	earch for Plan (UC4)
Pre-Condition	HR is in need of information regarding a
	specific plan
Post-Condition	HR receives information regarding a specific
	plan
Trigger Event	External
Trigger Description	HR Representative contacts Customer Service
	Manager (CSM) in need of information
	regarding a specific plan
Active Actors	DC Customer Service Manager, HR
	Representative
Details	
Priority	1
Level	Summary
Complexity	Low
Status	Created
Implementation	Scheduled
Flow of Events	
1	Human Resources Representative (HR)
	contacts Customer Service Manager (CSM) for
	information regarding a specific plan
2	CSM opens DC Community page
3	CSM searches the Plans and by any descriptor
	that is provided as all Plans are tagged with
	Plan Name, Plan Number, and key-words
4	CSM returns plan information to HR

This use case describes the process of searching for a plan on the old html based intranet as well as the new system on Quad. The working search feature gives users the ability to key in information about the plan (name, number, or key-word) and search. It also offers previous navigational search features such as alphabetical links. Quads effective search feature cuts down on the time it takes to find a plan and can be accessed not only from the search box created on the plan index page but from anywhere on Quad.

Use Case: As-Is Search for Plan – Participant Services Representative (UC5)		
Pre-Condition	Participant is in need of Plan Information	
Post-Condition	Participant is informed with the necessary plan	
	information	

Trigger Event	External	
Trigger Description	Participant contacts Participant Services Phone	
	Representative (PSR)	
Active Actors	DC PSR	
Details		
Priority	1	
Level	Summary	
Complexity	Low	
Status	Created	
Implementation	Scheduled	
Open Issues		
1	No functional search feature available	
Flow of Events		
1	Participant contacts PSR in need of plan	
	information	
2	PSR opens DC intranet page	
3	PSR browses the Plans Tab and searches by	
	one of three methods dependent on information	
	provided by HR using CSAS	
3.A	Alphabetical if Plan Name provided	
3.B	Plan Number if Plan Number provided	
3.C	Cntrl-F if keyword provided	
4	PSR returns specific plan information to the	
	participant	
4.A	PSR cannot locate the plan information	
4.A.1	PSR emails Client Services Manager (CSM) in	
	need of plan information	
4.A.2	CSM returns information to PSR	
4.A.3	PSR returns specific plan information to the	
	participant	

Use Case: To-Be Search for Plan – Participant Services Representative (UC6)	
Pre-Condition	Participant is in need of Plan Information
Post-Condition	Participant is informed with the necessary plan
	information
Trigger Event	External
Trigger Description	Participant contacts Participant Services Phone
	Representative (PSR)
Active Actors	DC PSR
Details	
Priority	1
Level	Summary
Complexity	Low

Status	Created
Implementation	Scheduled
Flow of Events	
1	Participant contacts PSR in need of plan
	information
2	PSR opens DC Community Page in WebEx
	Social
3	PSR searches either by plan name, number, or
	keywords. Has the option to navigate
	alphabetically. Should decrease need to contact
	Client Services Manager (CSM) drastically as
	all information should be readily available
4	PSR returns information to HR Representative
4.A	PSR cannot find plan information (highly
	unlikely)
4.A.1	PSR contacts CSM for plan information
4.A.2	CSM responds with plan specific information
4.A.3	PSR returns information to HR Representative

This use case describes the processes of informing a participant of its plan information. The new system improves on the ability for a PSR to find the plan reducing the time it takes for them to not only locate the plan but return that information to the customer. The data flows from the participant to the participant's representative directly back to the participant. The simplicity and effectiveness of the search feature reduces the occurrence of a PSR contacting a CSM in need of plan information they could not locate.

# 5.0 – Defined Contribution Implementation and Development Results

The group's main goal was improving the effectiveness of Putnam's defined contribution group's intranet. This was done by improving each feature the intranet offered by transferring it to Quads social platform as well as fine tuning its usability. The group transferred and improved the home tab, plans pages, and topics pages.

## 5.1 – Prototypes

The team decided to stagger development in order to gain detailed feedback for each set of features incorporated with each of the three prototypes. The first prototype was to create the framework of the community page. This included the home page, plans page, and topics page. The framework was defined as a creation of those pages within the DC community and example plans and topics were included. From the feedback on this first prototype we decided on the common theme which can be seen in the pictures with the descriptions of the home, plans, and topics pages. We also determined that there would need to be additional topics index pages other than the Overview page. Added also were the Alphabetical, Regulatory, Relationship Manager, Implementation, Client Services and Participant Services index pages.

In the second prototype, the team populated the index pages with empty links to posts that had yet to be created for the topics and the development of the API continued to suit the variety of ways that the plans pages were posted to facilitate the transition process. The search feature was also added to the Topics and Plans pages. The manual process of transitioning the topics pages was started, as well as the creation of the guides for the DC team to create plan and topic pages after our departure.

The third prototype was the API transition of all of the plans into WebEx Social with the approved format gathered from previous prototypes as well as the manual transition of more than 80 pages. This was the biggest challenge as it was the longest time commitment which the project team did not foresee, so the deliverable was not available for the marked date on the timeline. However, once we were finished, the finalized product was of a high quality and we were extremely proud of our work.

#### 5.2 – The Home Tab

The home page was designed based on the feedback that the MQP team received from the individual and group meetings and the survey. The Home page introduces the navigation to all available tabs including Plans, Topics, PPS and Library. This is also present throughout all tabs. The DC Toolbox was designed based on the survey results and discussion with DC which led to the selection of links exhibited below:

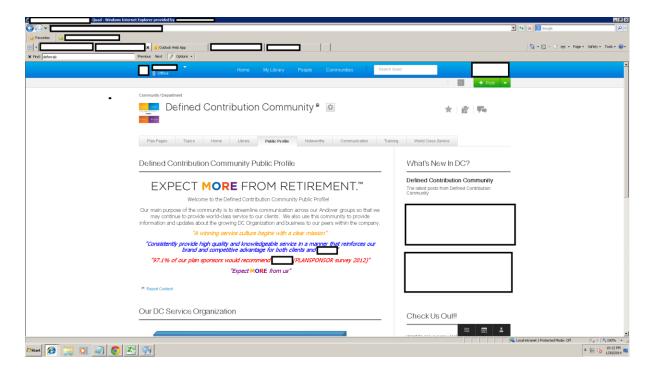


Figure 4 – The Home Tab

### 5.3 – The Plans Tab

The Plans Tab kept the same alphabetical navigational logic as well as the alphabetical anchor links. A search feature was added that searches all of the Plans pages that were tagged as a Plan. The user can now effectively search by name, description, and plan number.

The Plans pages were transferred with the help of Java API (described below 5.2.3). Initially all of the Plans pages on the intranet were manually updated to a consistent format, after which they were transferred into the DC Community Page.

## 5.2.1 - Plans Pages

An important task was transitioning the "Plans Pages" from the company's intranet. A plans page consists of important information about a defined contribution client, the employees tasked to that client, as well as relevant documentation. Plans pages are extremely important for defined contribution employees to quickly review information about a defined contribution plan. The intranet also contains an index which contains links to each individual plan page.

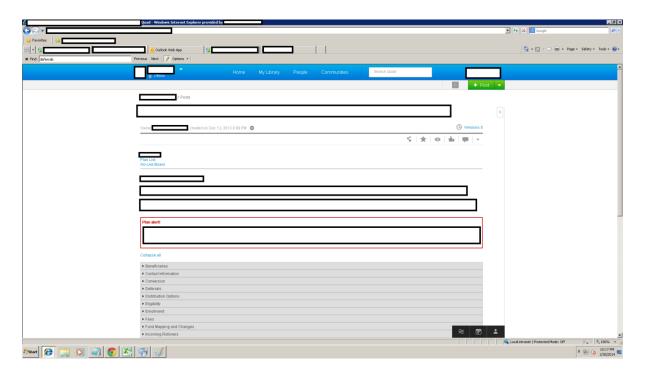


Figure 5 – Plans Page Collapsed

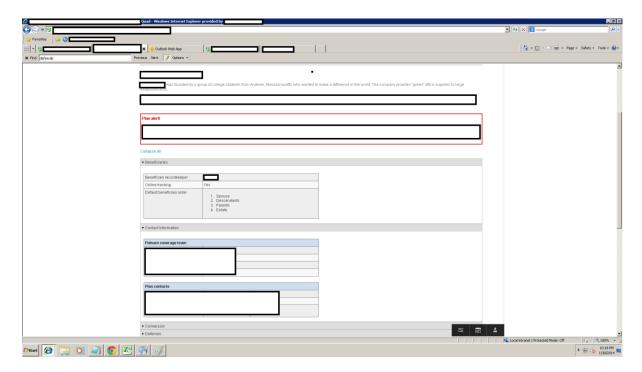


Figure 6 – Plans Page Expanded

## 5.2.2 - Plans Tab Index

The plans page index was vastly improved from the existing web page. A similar layout was used to develop the quad page including alphabetic sorting and filtering. The expand all and

collapse all function that the existing intranet page proved difficult to mimic using our limited resources however a collapse all was achieved. The collapse all actually linked to a quick page refresh which collapsed all accordion tabs.

The biggest improvement to the quad plans page index was the addition of a search feature. The search feature gives users the ability to simply search for a plan by its plan title, number, or content.

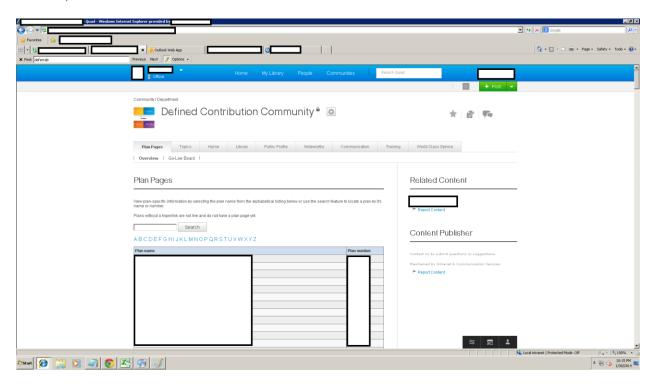


Figure 7 – Plans Page Index

#### 5.2.3 - API

The uniform format of the existing plans pages allowed for an automated transition to quad. To do this our team created a Java application programming interface (API). The API was utilized to transfer the entire plan page collection in a single turnover which lasted roughly 10 minutes. After the turnover minimal manual fixing finalized the plans pages.

#### 5.2.4 - Web Scraping

The first automated process of the API was scraping the content from the existing intranet pages which were formatted in HTML. To do this the JSOUP plugin was added to the Java environment. The original plan page index was also scraped to produce a list of links that the API could iterate through.

#### 5.2.5 - Parsing

Once the content was downloaded it needed to be parsed into an acceptable quad format. The first step in parsing this content was creating a template. Once the template was approved the API parsed scraped HTML into acceptably formatted quad page HTML. There were several aspects of the page that needed to be changed once downloaded into the API. First quad uses a simplified version of HTML limiting code in several aspects. Second changes were made to the page to maximize quads social aspects. An example of this is the employee information table which originally listed; employee position, name, phone number, and email address. The new page simply lists the employee's position and name. The name is a "hovercard" which allows a user to hover the mouse over and view all contact information about that person as well is click to contact them in various ways. Finally the code needed to format pages that weren't a completely identical format or contained errors.

## 5.2.6 - New Pages

Finally the API created new pages on quad. Once a page was created it was updated with the parsed HTML, as well as a title, and several tags.

### 5.2.7 - Output

The API also produced a single index page with live links to all of the newly created quad pages as well as an error log.

# 5.3 – The Topics Tab

This section will explain the development of the Topics tab and page index, all of the sub-categories, and the creation of the topics pages themselves. The topics are organized in several manners within the Topics tab. The Sub-tabs within include Overview, Alphabetical, Regulatory, Relationship Manager, Implementation, Client Service Manager, Participant Services, and Rollover.

#### 5.3.1 – Overview Sub-Tab

The Overview page includes the links to all of the topics pages as organized by subtopic as in the original intranet page. Each subtopic title is the name of a drop down accordion pane, of which there are eighteen. Upon clicking on the name of the subtopic that the user knows their required topic is under, the accordion will drop down to show all topics particular to that subtopic in alphabetical order. This provides experienced employees an efficient option of finding a necessary topic if they are familiar with the subtopic that it is listed under.

Also a part of the page is the DC Toolbox, located on the right of the page, which has all sponsor decided relevant links taken from the original intranet home page. The sponsor decisions were based off of experience and survey result analysis which we provided to management. This survey asked employees which links they utilized and how often each one was utilized, while also asking them their role within Defined Contributions to determine which roles interacted

with certain links. These links are categorized according to toolbox generalizations provided by the sponsor.

The Overview page also contains a search box, which searches all posts within WebEx that have been tagged with the tag 'dctopic.' After creating each topic we would tag them accordingly by 'dctopic', the topic name, and the topic's subtopic. This strategy provided the user with the ability to find their desired topic quickly even if they had limited information.

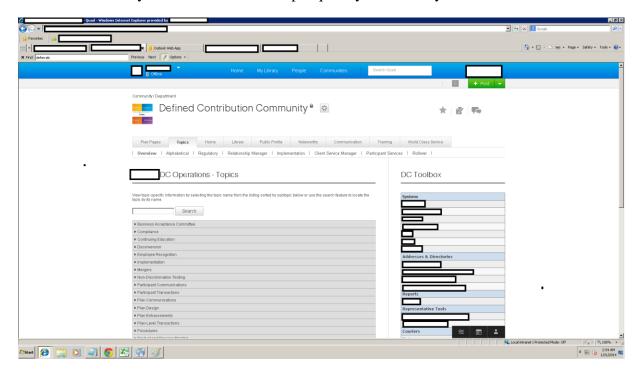


Figure 8 – Topics Tab Overview

## 5.3.2 – Alphabetical Sub-Tab

The Alphabetical page includes links to all of the topics pages organized in alphabetical order, this allows the user to find the topic that they need efficiently if they know the name and the letter with which the topic starts. There is also a hyperlinked alphabet on the top of the page which allows the user to drop down to their letter of choice to decrease scroll time. This page also contains all of the created topics.

The same model of the DC Toolbox is present as in the Overview page, this is made possible by a WebEx feature called content publisher, which allows the developer to post the same content in multiple places, the most convenient feature being the editing. If the developer makes a change in a content publisher of any tab, the linked content publishers that may be posted in other tabs also display those same changes.

The search box also functions in the same manner as the Overview page, searching all post on WebEx tagged with 'dctopic' by title.

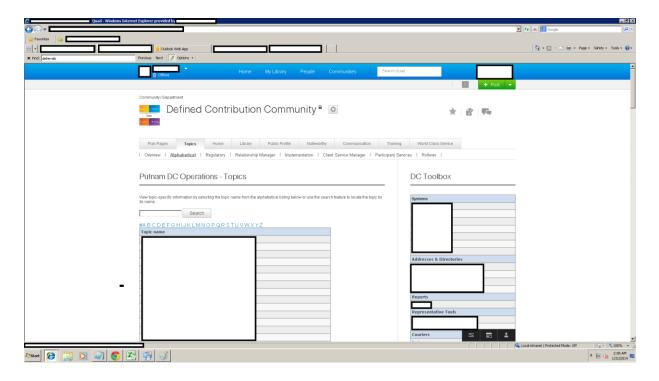


Figure 9 – Topics Tab Alphabetical Sub-Tab

## 5.3.3 – Regulatory Role Sub-Tab

The Regulatory Tab is comprised of Regulatory specific topics, meaning that the topics on the top of the page apply specifically to the Regulatory Role. These topics were specified by the sponsor. Also provided, is an alphabetical list of Common Topics which is published on every one of the following role sub-tabs with the help of the content publisher. The content publisher assures that all of the content is the same across all sub-tabs and allows for easy configuration if there is a situation where more common topics need to be added. The Regulatory Toolbox features the links from the DC Toolbox seen in the previous two pages which are only relevant to the Regulatory role.

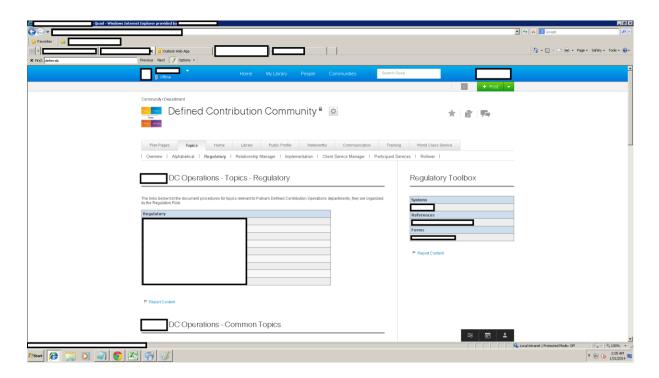


Figure 10 – Topics Tab Regulatory

## 5.3.4 - Relationship Manager

The Relationship Manager Tab is comprised of Relationship Manager specific topics. These Topics were specified by the sponsor. The list of Common topics is present in the content publisher below the list of Relationship Manager topics. The Relationship Manager Toolbox features the links from the DC Toolbox seen in the Overview and Alphabetic tabs which are only relevant to the Relationship Manager role.

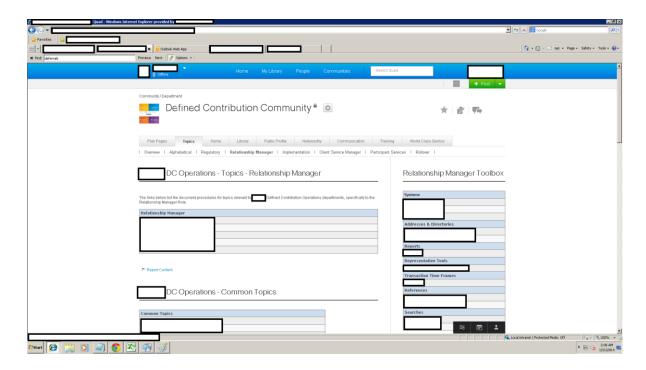


Figure 11 – Topics Tab Relationship Manager

## 5.3.5 - Implementation

The Implementation Tab is comprised of Implementation specific topics. These Topics were specified by the sponsor. There is a list of Common Topics, these Topics were decided to be relevant to every single role. The Implementation Toolbox features the links from the DC Toolbox seen in the Overview and Alphabetic tabs which are only relevant to the Implementation role.

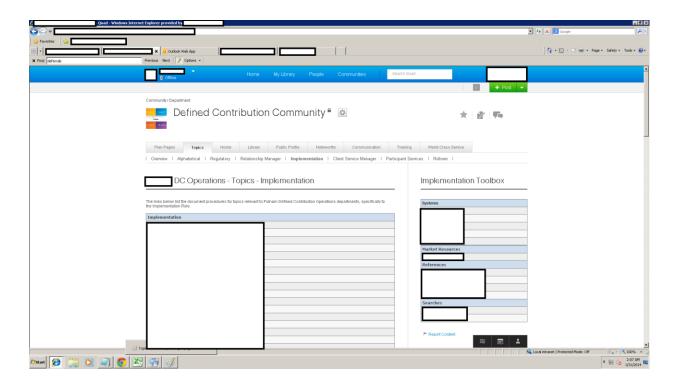


Figure 12 – Topics Tab Implementation

## 5.3.6 - Client Service Manager

The Client Service Manager Tab is comprised of Client Service Manager specific topics. These Topics were specified by the sponsor. There is a list of Common Topics, these Topics were decided to be relevant to every single role. The Client Service Manager Toolbox features the links from the DC Toolbox seen in the Overview and Alphabetic tabs which are only relevant to the Client Service Manager role.

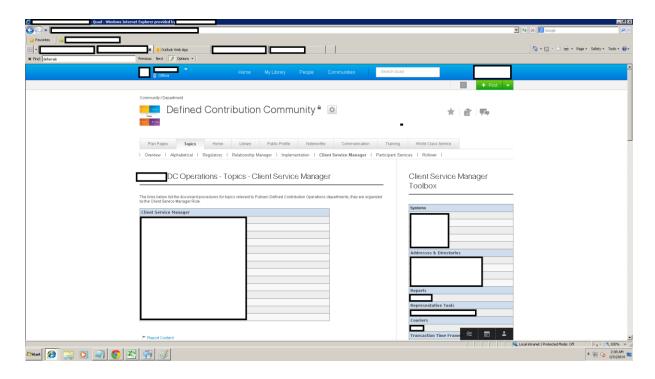


Figure 13 – Topics Tab Client Service Manger

## 5.3.7 - Participant Services

The Participant Services Tab is comprised of Participant Services specific topics. These Topics were specified by the sponsor. There is a list of Common Topics, these Topics were decided to be relevant to every single role. The Participant Services Toolbox features the links from the DC Toolbox seen in the Overview and Alphabetic tabs which are only relevant to the Participant Services role.

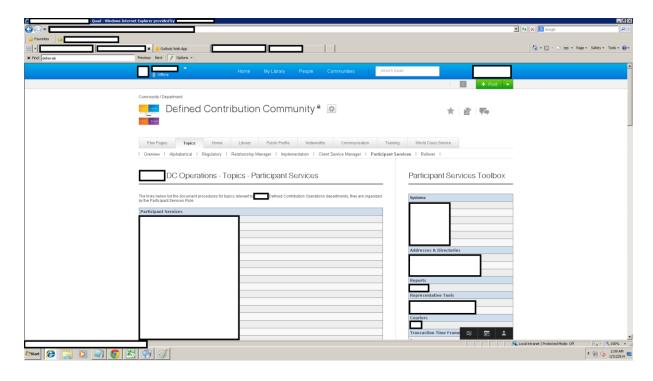


Figure 14 – Topics Tab Participant Services

### 5.3.8 - Topic Page Transition

Topic page development was significantly different from the Plan page development process. While each plan had a standardized layout, each topic page was fundamentally different. The sub-tabs described above were an assortment of ways to organize the links that led to topics. Some of these linked directly to a document, while other linked to pages that needed to be recreated in the WebEx Social environment.

The links that led directly to a document (doc, pdf, ppt, etc.) on the intranet page were downloaded to a local machine, and then re-uploaded to a WebEx Library into a folder corresponding to the organization by subtopic. The privacy settings were set to public so the document was viewable to the general public. The link from the location was then recorded and hyperlinked to the corresponding text on each Subtopic page. This allowed the user to click on the link and immediately have access to the document that they required.

The pages that link to another page contain an assortment of tables, accordions, and links to other topics and plans. These topic pages were created as posts, in other words, mini webpages. This allowed the page to be configured to look aesthetic and clean, while containing all of the necessary information, and allowed the page to be tagged and thus searched. There are two versions of the editor available in WebEx, one being a word editor with a variety of complex editing features, the other being a plain html editor. Both of these editors were used extensively in the manual creation of 74 pages. There was a variety of techniques that were used in the creation, all of which were documented in the created tutorials and templates left to Putnam.

# 6.0 – Corporate Intranet Results

This section will provide an analysis of previous adoptions of WebEx Social, the Putnam perspective on WebEx Social and its features, and the MQP Team's recommendations on how to move forward with the adoption of WebEx on a corporate scale.

# 6.1 – Case Study Analysis

Cisco's WebEx Social is a fairly well known product on the internal social media market. Companies using WebEx Social include General Electric, and many other small and large sized companies. In this section we will examine enterprise level intranet transitioning trends and adoption strategies.

Enterprises transitioning to WebEx Social stressed focus on strategic alignment of employee engagement and business practices. Through the development of comprehensive Use Cases that define business requirements and utilization of open APIs to integrate with other tools, enterprises were able to effectively transition their intranet sites. Many trends found within our case study research showed that companies would launch WebEx Social with basic functionality and then build off of their user's experiences to further develop the solution to attend to their business' needs. Collaborating with companies IT departments, users were then able to assist with the design to formulate effective usages of the tools offered and better explore WebEx Social's capabilities. Putnam's ISD department has provided a similar tactic for their users of WebEx Social. The ISD department has constructed a number of webinars that help their users better understand WebEx Social's tools and how to apply these tools to their everyday work practices. The ISD department also holds comprehensive training seminars which provide instruction on how WebEx Social's tools function and how to locate important information that is being shared.

The case studies offered a number of different adoption strategies used by corporations that attracted their users. Many companies promoted the new solution by building top-down support with executive participation and endorsements of WebEx Social. In many cases, we found that executives were making a strong push to engage users by sharing announcements and important business material on WebEx Social within posts and live video. Endorsement of the new solution pushed employees to recognize WebEx Social's advantages in their daily work activities and their daily lives as well. Some cases showed how companies developed a website for employees to offer general information and basic instruction for managing a users' personal account. Companies also engaged users' by creating communities and posts in WebEx Social where employees could share non-business related activities with each other which gave their users a more personal experience. Putnam has allowed their users' of WebEx Social to share content on a personal level as well. Tagging of posts for lunch-time activities, upcoming fundraisers and even sharing of recipes are a few examples of how Putnam has been trying to create the sense of a engaged workforce within and outside of the workplace. The most important aspect that was stressed in all adoption strategies was how much better communication between

users can increase productivity through problem sharing and solving. Once users become involved, WebEx Social provides the tools necessary for a more flexible and efficient work environment.

## 6.2 - Individual and Group Meetings

This section analyzes the meetings that the MQP project team had with employees from a variety of corporate Putnam departments including Human Resources, Marketing, etc. The purpose of these meetings was to understand how different Putnam departments and employees utilized the corporate intranet, their experiences with the old system, and their initial interaction with WebEx Social. We used this information to create a set of recommendations to transition the corporate intranet to WebEx Social. The project team followed the protocol stated in Appendix A for Individual Meetings and the protocol stated in Appendix B for Group Meetings.

The MQP project team was made aware of several issues with Putnam's current intranet site which exposed future development potentials. The site is static in regards to company updates, contains outdated documentation, and poses difficulty with navigation of the site itself. Employees find it challenging to determine what content is up-to-date and what content is still relevant or outdated.

The MQP project team discovered there were a number of issues and concerns with WebEx Social as the home for Putnam's corporate intranet. Employees felt that WebEx Social's user interface is difficult to comprehend which causes speculation of its versatility. WebEx Social's concurrent editing of documents was lacking in its inability to work simultaneously resulting in overwriting content. There was a perceived lack of security with the public nature of WebEx Social and constant sharing of secure information. Also, many employees current perception of WebEx Social has become blemished due to unfamiliarity with its functionality.

The MQP project team was also able to learn about the business value which WebEx Social has to offer. WebEx Social's employee profiles make it a more interactive alternative with the ability to share expertise and business activities. WebEx Social makes it easier for employees to prioritize the flow of information with its watch list and filtered activity streams. WebEx Social's customizable home pages and communities provide employees with the hands on capability to organize content more efficiently. WebEx Social's project tracking and record archiving enables employees to know what is up-to-date and when the last version was created.

During our research, the MQP project team learned that every department's business need and use for the corporate intranet site are significantly different. The main point to focus on, moving forward, is constructing detailed and departmental Use Case analysis by utilizing informative meetings with executives in each department to gain multiple perceptions of what the intranet site should include. Putnam can then develop and launch a 'pilot' corporate intranet site within WebEx Social in order to gather usage statistics and generate constructive feedback

from their employees. Multiple iterations of the 'pilot' site will be necessary in order to adhere to the business needs of all departments and to account for any revisions them deem appropriate.

#### 6.3 – Recommendations

The MQP project team recommends the following strategy to transition the corporate intranet to WebEx Social.

## 6.3.1 – Suggestion 1

The MQP project team recommends that Putnam perform detailed analysis of the corporate intranet site and department's current intranet sites including Interviews, Focus Groups and Surveys to reveal inefficiencies and opportunities for improvement utilizing WebEx Social.

## 6.3.2 – Suggestion 2

The MQP project team recommends that Putnam educates executives about the business value of WebEx Social to promote this business social media platform as a viable alternative to the current static corporate intranet site.

## 6.3.3 - Suggestion 3

The MQP project team recommends that Putnam develop a 'pilot' corporate intranet within WebEx Social to demonstrate the capabilities this business social media platform has to enhance the current corporate intranet site.

# 7.0 – Conclusion

#### 7.1 – Defined Contributions

Over A and B term, we worked with our sponsors and members of Defined Contribution to create a community page for the Defined Contributions team in WebEx Social to replace their then current intranet system. This process included gathering business requirements, creating a proposal, developing the system with constant feedback and adjustments, transferring all documentation, and creation of new pages. We were able to achieve this for the Defined Contribution team, because this system will allow them to be more efficient in their everyday work of customer support through a new search feature, and revamped organization of the necessary data.

Throughout this process, the team learned a tremendous amount about beginning and completing a project in the real world, as well as the pressures and expectations that come with it. Setting our own deadlines and reporting on them on a weekly and at times daily basis was a very educational experience. This MQP also taught us to take no task for granted as unexpected problems always seemed to come from the most undemanding tasks. On a technical note, everyone in the group became very proficient with html development due to the amount of pages that had to be created. Group members also got to learn and utilize JavaScript to create an autonomous method to transition the plans pages. Constantly throughout, we were challenged to make a User Interface that was both pleasant, clean, and consistent, which will also be extremely useful experience in almost any MIS project or job opportunity going forward.

# 7.2 – Corporate Intranet

Putnam's current intranet site is in dire need of reconstruction. The information presented has become outdated and the links provided no longer correspond with relevant business activities. Putnam's goal is to better align the intranet site with their business objectives while adding a social layer for employees to better facilitate communication within the organization.

During the end of A-term and throughout B-term we setup a number of meetings with members of different departments within Putnam. With the assistance of our sponsors, we interviewed individuals and groups of employees ranging from executives to entry-level to understand their interactions with Putnam's corporate intranet. We developed a protocol script and a list of questions for these meetings that allowed an open forum for employees to explain their experiences and what they felt could be improved upon. Based on the results of these meetings and analysis of case studies we developed a set of recommendations that will assist Putnam with their future construction and transition of their corporate intranet site.

The team learned that everyone at the corporate level has differing opinions about what is best for their individual departments and in turn what is best for the company as a whole. It was a difficult task to for the team to decide what the best course to follow with so many opinions, thoughts and ideas to work with. We found that the demands of such a high level corporation are

great and meeting every department's needs are greater. This MQP allowed us to see how the inner working of a major corporation sets and accomplishes its goals. It also showed us how to conduct ourselves in an appropriate manner at the corporate level and how to communicate with a company's top-tier executives which will be beneficial for our future business interactions.

## 8.0 - References

- Bharati, P., Chaubury, A., & Zhang, W. (2012). Building organizational knowledge quality: Investigating the role of social media and social capital. UMass Boston,
- Brunetto, S. (2013). Social media best practices for organizations. Marketing Daily,
- Carlson, N. (2010). At last -- the full story of how facebook was founded
- read more: Http://www.businessinsider.com/how-facebook-was-founded-2010-3?op=1#ixzz2gtbYBTJH. Retrieved 10/5, 2013, from <a href="http://www.businessinsider.com/how-facebook-was-founded-2010-3#we-can-talk-about-that-after-i-get-all-the-basic-functionality-up-tomorrow-night-1">http://www.businessinsider.com/how-facebook-was-founded-2010-3#we-can-talk-about-that-after-i-get-all-the-basic-functionality-up-tomorrow-night-1</a>
- Cisco Systems, Inc. (2013a). WebEx social features. Retrieved 9/4, 2013, from http://www.cisco.com/web/products/webexsocial/features.html
- Cisco Systems, Inc. (2013b). Virgin Media Enables Flexible Working with Cisco Quad Collaboration Software [Press Release]. Retrieved from <a href="http://newsroom.cisco.com/press-release-content?articleId=666430">http://newsroom.cisco.com/press-release-content?articleId=666430</a>
- Cisco Systems, Inc. (2013c). Manufacturer Unifies Workforce and Enhances Customer Interactions. Retrieved from http://www.cisco.com/en/US/solutions/ns1007/cs\_pella.html
- Cisco Systems, Inc. (2012a). Telecommunications and Digital Entertainment Provider Fosters Innovation Through Collaboration. Retrieved from <a href="http://www.cisco.com/en/US/solutions/ns1007/virgin\_case\_studies.html">http://www.cisco.com/en/US/solutions/ns1007/virgin\_case\_studies.html</a>
- Cisco Systems, Inc. (2012b). Software Developer Connects Global Workforce with Social Networking. Retrieved from <a href="http://www.cisco.com/en/US/prod/collateral/voicesw/ps6788/vcallcon/ps556/case\_study\_c36-707243\_ps10668\_Products\_Case\_Study.html">http://www.cisco.com/en/US/prod/collateral/voicesw/ps6788/vcallcon/ps556/case\_study\_c36-707243\_ps10668\_Products\_Case\_Study.html</a>
- Cisco Systems, Inc. (2012c). Law Firm Assigns Best Talent to Clients from Any Office.

  Retrieved from

  <a href="http://www.cisco.com/en/US/prod/collateral/voicesw/ps6788/vcallcon/ps556/case\_study\_c36-706800\_ps10668\_Products\_Case\_Study.html">http://www.cisco.com/en/US/prod/collateral/voicesw/ps6788/vcallcon/ps556/case\_study\_c36-706800\_ps10668\_Products\_Case\_Study.html</a>
- Cisco Systems, Inc. (2010). Integrated Healthcare Provider Improves Patient Care Using WebEx. Retrieved from <a href="http://www.cisco.com/en/US/prod/ps10352/webexcase/Sentara.html">http://www.cisco.com/en/US/prod/ps10352/webexcase/Sentara.html</a>
- Cufaude, J. (2009). Break out of the silo mentality.

- DiMicco, J., Millen, D., & Geyer, C. (2008). Motivations for social networking at work. CSCW 2008 conference proceedings (pp. 711)
- Dix, J. (2010). Cisco's social quad. Network World, Vol. 27 Issue 11, p5-5. 2/3p. Retrieved 9/4/2013 from EBSCOhost Research Database.
- Dr. Curtis, A. (2013). The brief history of social media. Retrieved 10/5, 2013, from http://www.uncp.edu/home/acurtis/NewMedia/SocialMedia/SocialMediaHistory.html
- Driving innovation with collaboration.[Video](n.d.). Retrieved from <a href="http://www.cisco.com/web/products/webexsocial/index.html">http://www.cisco.com/web/products/webexsocial/index.html</a>
- Facebook Inc. (2013). Facebook reports fourth quarter and full year 2012 results. Retrieved 9/11, 2013, from http://investor.fb.com/releasedetail.cfm?ReleaseID=736911
- Gaudin, S. (2010). Cisco quad set to ship before november. Computerworld. Retrieved 9/29/2013 from <a href="http://www.computerworld.com/s/article/9177967/Cisco Quad set to ship before November?taxonomyId=209&pageNumber=2">http://www.computerworld.com/s/article/9177967/Cisco Quad set to ship before November?taxonomyId=209&pageNumber=2</a>
- Gilbertson, S. (2010). Feb. 16, 1978: Bulletin board goes electronic. Retrieved 10/5, 2013, from http://www.wired.com/thisdayintech/2010/02/0216cbbs-first-bbs-bulletin-board/
- Goble, G. (2012). The history of social networking. Retrieved 10/5, 2013, from http://www.digitaltrends.com/features/the-history-of-social-networking/
- Jive. (2013). Retrieved 2013, 10/8, from jive.com
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! the challenges and opportunities of social media. Business Horizons, 53(1), 59-68. doi:http://dx.doi.org/10.1016/j.bushor.2009.093
- Kaske, F., Kugler, M., & Smolnik, S. (2012). Return on investment in social media--does the hype pay off? towards an assessment of the profitability of social media in organizations. Paper presented at the System Science (HICSS), 2012 45th Hawaii International Conference on, pp. 3898-3907. doi:10.1109/HICSS.2012.504
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? get serious! understanding the functional building blocks of social media. Business Horizons, 54(3), 241-251. doi:http://dx.doi.org.ezproxy.wpi.edu/10.1016/j.bushor.2011.01.005

- King, R. (2012). GE colab tool brings good 'peeps' to life [Web log comment]. Retrieved 9/12/2013 from <a href="http://blogs.wsj.com/cio/2012/12/03/ge-colab-tool-brings-good-peeps-to-life/">http://blogs.wsj.com/cio/2012/12/03/ge-colab-tool-brings-good-peeps-to-life/</a>
- Koplowitz, R. (2011). The Forrester Wave<sup>TM</sup>: Enterprise social platforms, Q3 2011.
- Leonardi, P. M., Huysman, M. & Steinfield, C. (2013). Enterprise social media. Retrieved 10/5, 2013, from http://comm.soc.northwestern.edu/leonardi/files/2013/07/enterprise.pdf
- Lovejoy, K., & Saxton, G. D. (2012). Information, community, and action: How nonprofit organizations use social media\*. Journal of Computer-Mediated Communication, 17(3), 337-353. doi:10.1111/j.1083-6101.2012.01576.x
- Lynn, S. (2012). Cisco Shifts quad Social platform to WebEx brand. PC Magazine. Article retrieved 9/4/2013 from EBSCOhost Research Database.
- Merriam-Webster.com. Social media. Retrieved 10/5, 2013, from http://www.merriam-webster.com/dictionary/social%20media
- Miller, R. (2013). Retrieved 10/2, 2013, from http://www.allthingsic.com/list/
- Murphy, G., & Salomone, S. (2013). Using social media to facilitate knowledge transfer in complex engineering environments: A primer for educators. European Journal of Engineering Education, 38(1), 70-84. doi:10.1080/03043797.2012.742871
- Putnam Retail Management. (2013). About putnam investments. Retrieved 09/4, 2013, from https://www.putnam.com/about-putnam/
- Tumblr. (2013). Retrieved 10/8, 2013, from tumblr.com
- Twitter. (2013). Retrieved 2013, 10/8, from twitter.com
- Waters, R. D., Burnett, E., Lamm, A., & Lucas, J. (2009). Engaging stakeholders through social networking: How nonprofit organizations are using facebook. Public Relations Review, 35(2), 102-106. doi:http://dx.doi.org/10.1016/j.pubrev.2009.01.006

# Appendix

# Appendix A – Individual Meeting Protocol & Questions

The following protocol script will be read prior to every Individual Meeting to inform the attendants of the process:

Good (morning/afternoon), we are a group of seniors from WPI who are conducting a project with Putnam to (create a Defined Contributions Community Page/ put together a set of recommendations for the transition of the corporate intranet to WebEx Social). My name is (Ilya Chmykh) and I will be asking questions today. These are my project partners, (Chris Molineaux) and (Mike Perruccio), who will be recording the minutes from the meeting. The purpose of this meeting is to understand your specific interactions with the current intranet system and your feelings about preliminary interactions with WebEx Social. In order to accomplish this we will ask you a series of questions about your interactions and experiences with both systems. We want to hear both the good and the bad about your experience with both the old and the new system. Our objective here is to make a change for the best, not necessarily transition everything to the new system. Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits. The project investigators retain the right to cancel or postpone the experimental procedures at any time they see fit. Do you have any questions before we start?

These individual meeting questions will explore the current corporate intranet and what the specific user's experience with that system is as well as their initial impression of WebEx Social. With the guidelines mentioned above followed, the team member responsible for asking the questions will begin the meeting with the following questions:

- 1) Could you please give a brief description of your job title and your primary responsibilities?
- 2) Please explain your daily interaction with:
  - a. Current intranet system
  - b. WebEx Social
- 3) How do you feel about the current intranet system?
  - a. If the answers are overwhelmingly positive
    - i. What are some things that bother you about the system?
  - b. If the answers are overwhelmingly negative
    - i. What are some things that you like about the current system?
- 4) Describe what your experience with the new system, WebEx Social, has been like.
  - a. If the answers are overwhelmingly positive
    - i. What are some things that bother you about the system?
  - b. If the answers are overwhelmingly negative
    - i. What are some things that you like about the system?
- 5) If not necessarily your concerns, what have you heard other people say about the WebEx Social?
  - a. Do you agree? Why?
  - b. Do you see a solution to this concern?

- 6) Is there anything else that we have not touched on, either with the current intranet or the WebEx Social system that you would like to talk about?
- 7) We have heard you mention the following issues and concerns with the current intranet, and WebEx Social. (List of concerns) How would you prioritize these issues?

# Appendix B – Group Meeting Protocol & Questions

The following protocol script will be read before every group meeting to inform the participants:

Good (morning/afternoon), we are a group of seniors from WPI who are conducting a project with Putnam to (create a Defined Contributions Community Page/put together a set of recommendations for the transition of the corporate intranet to WebEx Social.) My name is (Ilya Chmykh) and I will be facilitating this group meeting by asking questions. This is (Chris Molineaux) who will be moderating proceedings by asking follow up questions and keeping us on track, and (Mike Perruccio) will writing down the minutes from the meeting. The purpose of this group meeting is to understand your interactions with the current intranet system and your feelings about preliminary interactions with WebEx Social. In order to accomplish this we will ask you a series of questions about your interactions and experiences with both systems. We want to hear both the good and the bad about your experience with both the old and the new system. Our objective here is to make a change for the best, not necessarily transition everything to the new system. Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits. The project investigators retain the right to cancel or postpone the experimental procedures at any time they see fit. We will be limiting response time in order to hear from everyone in the fmeeting, and also because we want to use everyone's time effectively. Ideally this session will last for about 45 minutes to one hour. Do you have any questions before we start?

These group questions will explore the current corporate intranet and what the user experience with that system is as well as their initial impression of WebEx Social. With the guidelines mentioned above followed, the moderator that ensures that all topics are covered will begin the group meeting with the following questions:

- 1) Please describe how you feel about the current intranet system.
  - a. If the answers are overwhelmingly positive
    - i. What are some things that bother you about the system?
  - b. If the answers are overwhelmingly negative
    - i. What are some things that you like about the current system?
- 2) Specifically, what has your experience with the current intranet home page been?
  - a. Pull up the page on the projector to jog memory
    - i. What would you like to see improved?
    - ii. What aspects do you like about it?
- 3) Describe what your experience with the new system, WebEx Social, has been like.
  - a. If the answers are overwhelmingly positive
    - i. What are some things that bother you about the system?

- b. If the answers are overwhelmingly negative
  - i. What are some things that you like about the system?
- 4) Based off of the concerns in the previous question:
  - a. You are concerned about \_\_\_\_\_, if there is a solution in WebEx Social that addresses this specific concern, and addresses an issue that was mentioned with the current intranet, how would this affect effect your utilization of WebEx Social? Less likely, more likely, or about the same?
    - i. If the answer is short: Why?
  - b. If not, is there anything that we can do facilitate the transition to the WebEx Social?
    - i. Create a similar layout?
    - ii. Customizable interface?
- 5) Is there anything else that we missed that you would like to mention regarding the current intranet and the new system?
- 6) We have heard you mention the following issues and concerns with the current intranet, and WebEx Social. (List of concerns) How would you prioritize these issues?

# Appendix C – Survey Questions

#### **Invitation Letter**

Greetings DC employee,

We are a project team of seniors from Worcester Polytechnic Institute (WPI) who are working with the Defined Contributions department to design and develop a Community page within WebEx Social (Quad). We invite you to complete a survey.

This survey will provide us with a deep knowledge of the interaction with the current DC intranet page and business requirements for the new Community page within WebEx Social (Quad). The survey will allow the project team to construct the DC Community page according to departmental requirements.

Please take approximately five minutes of your time to fill out this survey. All of the questions are optional, but we strongly encourage you to answer all of them in order for us to gather the most accurate data.

Thank you,

WPI Team

Survey Consent Form

Investigator: WPI MQP Team - Ilya Chmykh, Michael Perruccio, Chris Molineaux

**Title of Research Study: Building Social Intranets – Defined Contributions Community Page** 

**Sponsor: Putnam Investments** 

#### Introduction

You are being asked to participate in a research study. Before you agree, however, you must be fully informed about the purpose of the study, the procedures to be followed, and any benefits, risks or discomfort that you may experience as a result of your participation. This form presents information about the study so that you may make a fully informed decision regarding your participation.

**Purpose of the study:** The purpose of this study is to design and develop a Community page within WebEx Social for the Defined Contributions department of Putnam Investments.

**Procedures to be followed:** We will be dispersing a survey to the Defined Contributions (DC) department to determine user experiences with the current DC page and gather information on preliminary interactions with WebEx Social.

**Risks to study participants:** There is no potential risk to the job security of the employee. All of the questions are optional. The question that specifies employee role and time at Putnam are going to be used only for internal analysis to determine the different kinds of users and their role and responsibilities in the current system

**Benefits to research participants and others:** The benefits of the study will be a deep knowledge of the current system interaction and business requirements for the new system, WebEx Social. This will allow the project team to construct the DC Community page according to departmental requirements.

**Record keeping and confidentiality:** The project team, and the project advisor, Professor Tulu, will have access to records, which will be stored on the survey provider, Qualtrics, and a confidential and password protected shared drive. There will be no records of your participation in this study that will identify you as an individual. The study investigators, the sponsor or it's designee and, under certain circumstances, the Worcester Polytechnic Institute Institutional Review Board (WPI IRB) will be able to inspect and have access to the data. Any publication or presentation of the data will not identify you.

**Compensation or treatment in the event of injury:** This research does not involve any medical injury or harm. You do not give up any of your legal rights by signing this statement.

For more information about this research or about the rights of research participants, or in case of research-related injury, contact: The contact information of the study investigators is included at the top of this document. In addition, you may contact the following WPI authorities: IRB Chair (Professor Kent Rissmiller, Tel. 508-831-5019, Email: kjr@wpi.edu) and the University Compliance Officer (Michael J. Curley, Tel. 508-831-6919, Email: mjcurley@wpi.edu).

Your participation in this research is voluntary. Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits. The project investigators retain the right to cancel or postpone the experimental procedures at any time they see fit.

By clicking "I Accept" below, you acknowledge that you have been informed about and consent to be a participant in the study described above. If you do not wish to participate in the study, please click "I Refuse" below.

#### **Survey Questions**

 Can you please select the position that best describes your role with the Defined Contributions (DC) Department? (Relationship Manager, Retirement Education Consultant, Regulatory Services Consultant, Implementation Project Manager, Client Service Manager, Participant Services Representative, Retirement Consultant)

- a. The purpose of this question is to understand how each of these groups of users specifically interacts with the system, what their concerns and priorities are, and how they feel about the transition to WebEx Social.
- 2) How long have you been working with the current intranet? (< 1 year, 1-3 years, 4-6 years, 7-9 years, 10 years > )
  - a. The purpose of this question is to understand the user's experience level with the current system in order to compare with the user satisfaction of the current system, what their concerns and priorities are, and how they feel about the transition to WebEx Social.
- 3) How long have you been working at Putnam? (< 1 year, 1-3 years, 4-6 years, 7-9 years, 10 years > )
  - a. The purpose of this question is to understand the company cuture.
- 4) On a scale of (1-5) how satisfied are you with the current intranet? (1 being least satisfied, 5 being completely satisfied)
  - a. The purpose of this question is to understand the user's satisfaction with the current system.
- 5) Which aspects of the DC Home Page do you utilize? Please mark all that apply. (Top Stories, Phone book, Operations Alerts, Market Watch, DC Toolbox)
  - a. The purpose of this question is to determine the relevance of sections of the homepage.
- 6) If you marked the DC Toolbox as something that you utilize, mark all sections that you utilize within Toolbox? (Open response)
  - a. The purpose of this question is to determine which links and features on the DC Toolbox are popular and which features are unknown or do not belong on the home page.
- 7) Please rank the following tabs by level of utilization, with 5 being the tab where the most time spent, to 1 being the least amount of time being spent. (Rank of each tab)
  - a. The purpose of this question is to understand where the user is spending the most of their time in order to weigh their suggestions and concerns.
  - b. Each of the following questions (6-8) will only appear if the user selects the corresponding tab to the question as one of the first two tabs that the most of their time is spent on.
- 8) (Only if marked in the top two in previous question) How do you feel specifically about the Plans Tab? If you have had any positive or negative experiences, suggestions, or comments please list them here. (Open response)
  - a. The purpose of this question is to understand the current issues with the Plans Tab.
- 9) (Only if marked in the top two in previous question) How do you feel specifically about the Topics Tab? If you have had any positive or negative experiences, suggestions, or comments please list them here. (Open response)

- a. The purpose of this question is to understand the current issues with the Topics Tab.
- 10) (Only if marked in the top two in previous question) How do you feel specifically about the PPS Tab? If you have had any positive or negative experiences, suggestions, or comments please list them here. (Open response)
  - a. The purpose of this question is to understand the current issues with the PPS Tab.
- 11) On a scale of (1-5) how satisfied are you with your preliminary interaction with WebEx Social, if applicable? (1 being least satisfied, 5 being completely satisfied, N/A)
  - a. The purpose of this question is to understand what the initial response has been to the introduction of the new system.
- 12) What is your biggest concern about switching over to the new system? (Learning to use the system effectively, the inability of the WebEx Social to match the functionality of the current system, Other: (Open response), N/A)
  - a. The purpose of this question is to gain an understanding which concern to prioritize as a sub-objective in creating buy-in for the DC Community page from the DC employees.

# Appendix D – DC Group and Individual Meeting Summaries

This section summarizes the meetings that the MQP project team had with members of the Defined Contributions (DC) department. The purpose of these meetings was to understand how the DC Department utilized the DC intranet page, how they interacted with WebEx Social within the first six months of introduction, their experiences with both systems, and their functionality requirements to aid with development. The project team followed the protocol stated in Appendix A for Individual Meetings and the protocol stated in Appendix B for Group Meetings unless stated otherwise.

# DC Group Meeting A- DC Services Department – Andover Office

The MQP team did not use any formal protocol for this Kickoff Meeting. The team met with members of the DC Services Department and project sponsors on September 4th. The meeting had a general session setting where we were able to introduce ourselves and our projects intentions. By receiving a Defined Contributions packet we were able to gain a better understanding of the DC Team's roles and responsibilities which assisted us in building our "As-Is" Use Cases. We acquired a good deal of information regarding what is stored on the intranet including Plan and Topics pages/tabs which are utilized everyday by DC employees. We were also able to gain insight into problems with the DC intranet, which a majority of the DC Team had been experiencing, and we decided that they needed to be addressed in more detail through individual and group meetings with DC personnel. Overall, the Kickoff Meeting initiated a great discussion of ideas, interests and concerns with the current intranet with suggestions for improved collaboration processes.

# DC Group Meeting B – DC Services- Senior Employee Development Specialist, Call Center Supervisor, Participant Services Representative, Administrative Assistant- Andover Office

The Project Team sat down with avid users of WebEx Social within the DC Department on September 18th to determine their interactions with the current system, both positive and negative, and discuss potential new features to the DC Community page in WebEx Social. After introduction of roles and responsibilities, we learned that every member of the DC department had been mandated to use the new Quad/WebEx Social site to familiarize themselves with it for daily usage. The members expressed their enthusiasm of using WebEx Social and how effective of a collaboration tool it can be, especially within the DC Department.

Community creation is a responsibility of the Senior Employee Development Specialist, and she noted that project team formation has become easier within WebEx Social. She also spoke about how the DC Department would like their current intranet to be integrated within WebEx Social so that users can have a centralized location for all departmental information. The Participant Service Representative brought up a number of valid concerns with the current intranet that suggested better organization and navigation of Plan and Topics pages would be a necessary improvement. He also stated that the process of editing and updating the pages is cumbersome. Other concerns touched upon how the creation of Communities has become

cluttered so much so that users activity feeds are becoming overwhelmed with useless posts not concerning their daily operations.

After listening to their concerns, we talked about how some of these issues could be solved using WebEx Social's current features and how we would research methods of resolution that other organizations have exploited. We were given a number of other DC Team contact information to setup individual meetings at a later date.

## DC Individual Meeting A - Participant Services Representative – Andover Office

The Project Team spoke with a Participant Service Representative (PSR) on October 2<sup>nd</sup>. The PSR utilizes WebEx Social and the current intranet page extensively. This individual handles a number of updates to content within the current intranet including Top Stories, Plan List in DC Toolbox, Employee of the Month changes, and Outstanding Client interactions. This role also manages the DC pages within the Plan and Topics tabs making updates and edits to content. Currently, the PSR has an extensive list of tasks before they can begin the editing process, logs onto WebEx Social, opens the plan pages in the DC intranet in a different page, and opens Content Center to begin the editing process. From there they click the HTML file then click edit which brings up the DreamWeaver software where actual editing of content begins. We learned that each subject has an issue with the process of editing content and that building a template for editing would be a potential solution to help ease the course of action.

The DCR also recommended that the Plan and Topics pages need more organization. At present, the Plan pages have an alphabetized drop down list which is a good feature but a search function by title and content would be ideal. This goes for the Topics pages as well as they are currently broken up into different sub-sections that confuse some employees. The current Google search bar within the DC intranet site does not operate correctly which is extremely frustrating and the subjects would very much enjoy the luxury of a capable search function besides CTRL-F.

## DC Individual Meeting B – DC Operations Co-Op – Andover Office

The Project Team spoke with the DC Operation Co-Op on October 2<sup>nd</sup> to understand their specific role with Defined Contributions and their interactions with the intranet page. He works beneath the Administrative Assistant and handles relaying memos from the company email into the DC Community in WebEx Social. Additionally, he updates the Plan and Topics tabs within the current intranet every Tuesday using DreamWeaver software. Many of the concerns with updating/editing mirror those of the Participant Services Representatives, especially navigation.

The DC Operation Co-Op also walked us through the layout of the intranet page, and briefly explained some basic scenarios of how each tab might be utilized. The Topics, Plans, and PPS Pages are used primarily by the DC department, while the Sales Tab is not nearly as utilized.

## DC Individual Meeting C – Regulatory Service Consultant – Andover Office

The MQP team met with the Regulatory Service Consultant (RSC) on November 13<sup>th</sup>. The RSC's responsibilities include drafting plan documentation, service agreements, and legal agreements, as well as facilitating plan adoption and creating notices for clients. The RSC works directly with the DC clients, making quick access to all types (Plans, Topics, PPS) of information extremely important.

The RSC was satisfied with the layout of the Plans page and the content itself, however, the Topics page was found to have a layout that did not follow consistent layout logic, and some of the content itself was outdated. This individual also found the layout of the DC Toolbox to be user friendly and not overcrowded.

The user found WebEx Social to be user friendly and thought that the open forum approach would be extremely beneficial to Putnam. There is redundancy between several communities of WebEx Social, with the same information getting posted several times, but the RSC believes that this will remedy itself naturally with a full transition to the new system.

## DC Individual Meeting E – Client Service Associate – Andover Office

The MQP team spoke with the Client Service Associate (CSA) on November 13<sup>th</sup>. The CSA's role includes supporting the Client Service Manager in all of their responsibilities, including the creation of reports, payroll, completing loans, and general analysis.

The CSA's use of the system includes the DC Toolbox and the Plans Page, the ability look up the plan by plan name and plan number is seen as a favorable feature, however the need to log in multiple times to find necessary information was a deterring factor. This user has not had the need to use WebEx Social for their job function, therefore did not have an opinion of the newer system.

# Appendix E – Corporate Group and Individual Meeting Summaries

This section summarizes the meetings that the MQP project team had with employees from a variety of corporate Putnam departments including Human Resources, Marketing, etc. The purpose of these meetings was to understand different Putnam departments and employees utilized the corporate intranet, their experiences with the old system, and their initial interaction with WebEx Social. We used this information to create a set of recommendations (5.0 - Corporate Results) to transition the corporate intranet to WebEx Social. The project team followed the protocol stated in Appendix A for Individual Meetings and the protocol stated in Appendix B for Group Meetings.

# Corporate Group Meeting A – Head of Human Resources, Benefits Department Manager, Benefits Analyst, Senior HR Manager – Boston Office

The MQP Team was included in a meeting between corporate managers; we were able to ask a series of questions regarding the current corporate intranet and WebEx Social. Some of the concerns that were brought up about the current intranet were difficulties with navigation, the lack of content refreshment, and lack of a search feature. Some of the positives that were mentioned were that the management tools were very intuitive, and that the managers had knowledge of where everything was located, although this was due to their extensive experience with the system.

The group meeting also yielded several responses to the question regarding the corporate transition to WebEx Social. A perceived lack of security and privacy, the relevance of social media in the workplace, and showing the user the business value of the product to create buy-in were some of the concerns that were stated. Some of the benefits that the managers saw were the ability to trace the progress of a project through working through versions of documents, the informative and interactive nature of posts, and the ability to customize the Community page to best fit the department that it was built for.

The general opinion of the group was that the product has great potential for Putnam and the functionality is currently good enough to transition some of the functionality of the current intranet to WebEx Social. However, there are some pages on the intranet that are currently secure and updated regularly by several departments that do not have to be switched over to WebEx Social.

#### Corporate Individual Meeting B – Senior HR Manager – Boston Office

The MQP Team sat down with the Senior HR Manager on October 9th. This individual is responsible for managing secure information pages of the HR department within the intranet. The Senior HR Manager expressed how the current intranet site is too static, outdated and needs better a directive. The HR Manager's department uses WebEx Social heavily for project collaboration and communication. The HR Manager created the HR Community within WebEx Social and has encouraged other groups within her department to utilize WebEx Social for better

communication. Other groups are hesitant to transition to WebEx Social due to fear of misuse of secure information and suggested that there needs to be a cultural shift towards WebEx Social.

## Corporate Individual Meeting C – Security Engineering Director – Boston Office

The MQP Team spoke with the Director of Security Engineering of Putnam Investments on November 22<sup>nd</sup> to better understand how Security Engineering currently utilizes both the corporate intranet and WebEx Social. Security Engineering is in charge of all things IT at Putnam.

Specifically for Security Engineering, the department utilizes Purchase Reports to order necessary hardware, as well as the Employee Handbook, the Code of Ethics and the Phone Book for general purposes. The director is used to the layout of the corporate page and likes the ability to access offsite functions without having to log in to the Putnam System. Some concerns that were brought up were that the corporate pages take too long to load, the news are rarely updated, important information isn't always shared or visible, the google custom search was not functioning, and there is no way to customize what a user seeing on their side navigation panels.

WebEx Social is utilized as a depository for security content. The director feels that there is a lot of functionality that WebEx Social has that most employees simply do not know about. The director suggested having tech tips on WebEx Social as a way to educate new WebEx users on the most useful and applicable features opposed to holding formal training sessions as information learned there is hard to retain unless put into practice. A concern was that the public nature of WebEx Social might create more problems for Security Engineering than solutions. For example, if a user posts a makeshift solution to an email problem, this might not be the correct method, and might create more problems than it solves. The Director of Security Engineering also stated that there are functionality improvements that Cisco could make to the current product to make the UI more modern and transparent, to basically eliminate the need for tutorials.

## Corporate Individual Meeting D – Production Services Director – Boston Office

The MQP Team spoke with the Production Services Director on November 20<sup>th</sup> regarding the corporate intranet. Production Services is responsible for all operational aspects of Putnam infrastructure. Their main goal is to combine their widget system which would allow users to order hardware seamlessly into WebEx to create a system which allows users to share information while at the same time being able to act on that information in the same place.

Production Services has an ISD intranet page that contains information relevant to their department such as Disaster Recovery, as well as Daily Feeds and Reports which are shared and reviewed on a constant basis. The page serves their purpose, but could have a more interactive layout and functionality.

When asked about WebEx Social, the Production Services Director had a balanced review of criticisms and compliments. WebEx Social was described as more engaging to users,

great for record keeping and archiving, as well as secure. Some of the criticisms were a lack of single sign on, inability to differentiate when to use email or WebEx, and while there is an ability to track a project, there is no ability to manage a project.

One of the biggest new pieces of information from this discussion was how WebEx Social was presented initially to Putnam management. The first impression that was given was that WebEx Social could solve every problem that Putnam was having, and while it does offer a solution to a great deal of problems and inefficiencies, the current product does not have the functionality to solve every problem. Instead, when the product is again considered, it should give a realistic set of goals and objectives that it can accomplish for Putnam.

# Corporate Individual Meeting E –Director of Applications, Social Media Director – Andover Office

The MQP Team spoke with the Director of Applications and the Social Media Director on November 25<sup>th</sup> regarding the corporate intranet. The Director of Applications oversees the web development and CRM teams at Putnam. The Social Media Director handles the strategy and implementation of marketing at Putnam.

When asked about WebEx Social, the Director of Applications noted that employee profiles are an easy way to follow people, ability to add comments/concerns with posts is a good tool for communication and the reporting structure function is helpful in some instances. Some criticisms were that the UI was non-intuitive and other social media platforms are being utilized efficiently within other departments with less distress. The Director of Applications also stated that WebEx Social had been socially rejected by a team after starting to use it as a message board for a project.

When asked about WebEx Social, the Social Media Director saw WebEx Social as a deficient tool. Criticized how there is a lack of integration with existing intranets and how the interface was non-intuitive. Also expressed the feeling that WebEx Social is being used in a small way by certain departments and how there hasn't been a move to let employees be aware of WebEx Social and its functions.

The feelings expressed by the Director of Applications and Social Media Director gave a perspective about WebEx Social in that it is an average solution at best. The overall thought of having a single solution is great in theory but different constituents have differing needs and several products will need to be utilized. The question of whether or not there is a solution out there to account for all business units and their sub units remains to be seen.

## Corporate Individual Meeting F – Sales and Marketing Center Director – Andover Office

The MQP Team spoke with the Sales and Marketing Center Director on November 27<sup>th</sup> regarding the corporate intranet. The Sales and Marketing Center Director is in charge of the internal wholesaler, the technology and marketing in retail business, and the recruiting, training development within retail.

When asked about WebEx Social, the Sales and Marketing Center Director stated that the department does not utilize WebEx Social but does use Salesforce as the home page. Criticisms of Salesforce were that the interface is not user-friendly, has been over engineered so they are not able to leverage resources or abilities, application utilization is lacking, and that upgrade are few and far between.

The general consensus from the Sales and Marketing Center Director was that using a social media platform like WebEx Social sounds like a great solution for certain departments and is open to the idea but trying to find a single solution that every department can utilize is somewhat farfetched. Each department has their own needs and finding a solution to meet all these needs is too demanding. Every solution is going to have its advantages and disadvantages, so finding the solution that works best for individual departments may be the best course of action going forward.

### Corporate Individual Meeting G –ICom Project Leader– Andover Office

The MQP Team spoke with the ICom Project Leader on November 29<sup>th</sup> regarding the corporate intranet. The ICom Project Leader is responsible for researching, writing and updating mission-critical online resources for the call center. Also handles the daily news that appears on the MFSS home page and in charge of several of the call center's most important topics (procedures).

The ICom Project Leader interacts with the MFSS Intranet site on a daily basis and uses CMS/DreamWeaver to update topics, post the news, and make miscellaneous updates throughout the day. Feels comfortable using CMS and DreamWeaver to update and create new content. There were some issues stated by the ICom Project Leader with the limitations of the content assembler when trying to create new styles and the inability to access the content assembler to try and debug issues.

When asked about WebEx Social, the ICom Project Leader noted how the search feature is a useful tool, emailing of posts is a great communication tool, and the ability to ask questions and receive timely feedback is very helpful. Criticisms were how WebEx Social does not always work "as expected" so explaining it to colleagues becomes difficult, document sharing and editing is frustrating because multiple members of a community can unknowingly be updating the same document and overwriting each other's content, more system flexibility for changing the overall look and feel of communities, and the amount of communities that are private should be limited so that information can be shared for more "discoverability".

The overall feeling from the ICom Project Leader was that employees would benefit the most from a combination of both the current Intranet system and a social layer integrated together. WebEx Social (or any other social solution) cannot completely replace the current Intranet but adding that social layer would greatly complement our current Intranet.