Intranets With Office 365: What You Need To Know

The Definitive Guide To Intranets With Office 365
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1. INTRODUCTION

There is a growing trend of organizations moving to Office 365 to meet their Intranet and portal needs. While many organizations are running their SharePoint portals or Intranets on-premise, in a private cloud, or on public cloud offerings like Azure – many have already started or made the move to Office 365 powered Intranet experiences.

The question for many companies is “should our Intranet be built with Office 365?” At the end of this whitepaper, we believe that you will agree that when possible your company should be building your Intranet and portal on Office 365.

In this whitepaper, we will explore the benefits Office 365 brings to an Intranet, why you should consider migrating your existing Intranet to Office 365, and when and how you may integrate Office 365 with your existing Intranet today. This whitepaper is a summary of our advice, guidance, and the feedback, and lessons learned from our team as well as the many organizations we support currently running their Intranets on Office 365.

NOTE: What happens when your users can’t decide what technology or feature to use? They use what they know, or what’s easy; even if better options exist. To help your users make better, more effective decisions on how they get work done be sure to read our When To Use What In Office 365 Whitepaper at http://WhenToUseWhat.com.
2. THE STATE OF THE INDUSTRY

Is your Intranet leveraging SharePoint today? For years, now many Intranets have been built on Microsoft SharePoint. In many surveys and research reports, SharePoint accounted for well over 50% of Intranet platforms and SharePoint was the platform used for nine (9) out of ten (10) of Nielsen Norman Group’s recent intranet awards.

With so many Intranets powered by SharePoint, and with over 40% of overall SharePoint licenses in Office 365 today and 60% of new licenses in SharePoint Online, more organizations have the option of using SharePoint Online and Office 365 to provide new experiences and improvements to their Intranet strategy today than ever before.

How popular is a SharePoint Intranet in Office 365?

The majority of customers who migrate to Office 365 do so with Exchange and OneDrive for Business as the first workloads they deploy in Office 365. Skype for Business (formerly called Lync Voice) follows rapidly (and closely) in third place. As the organization has a need for new team collaborative environments, they will leverage Office 365 Groups and SharePoint Team Sites. For organizations who are looking to empower their organizations with social engagement and collaboration they often will roll out and deploy Yammer – sometimes with a refresh of their Portal or Intranet.

It is rare however that an organization rolls out a new Office 365 intranet as one of the first initiatives with Office 365.

What’s interesting is that many organizations have not yet moved their Intranet to Office 365 nor have they connected or brought the powerful capabilities of Office 365 into their Intranets. In response to this discovery our team, at 2toLead, has pulled together a collection of key benefits, important differences, common concerns, and lessons learned that we believe will be helpful for any organization considering Office 365 powered Intranets. Whether you are looking to host your Intranet or looking to connect the innovation and experiences of Office 365 to your SharePoint Intranet; we hope this resource helps you.

NOTE: It is important to note that Office 365 is rapidly evolving and as such, the information should only be considered current as of the date of publication. We recommend discussing any specific issues with a trusted Office 365 expert to ensure you have the most accurate, and up-to-date information.
2.1. Intranet Trends Intranets That You Need To Know

After collectively helping customers implement more than 67 intranets over the years we have seen many trends impact Intranet design, development, and strategy. In this article, we wanted to share what we believe the top Intranet trends today based on research, interviews and engagements with customers over the past year. We also believe that effectively understanding, embracing and investing in these trends will help transform your Intranet into a more modern, higher performing and more successful Intranet.

2.1.1. Intranets Are Created Faster & Go Through More Rapid Iterations

One of the most significant trends we have seen in Intranets over the past year is an acceleration in how quickly new intranet iterations are designed and implemented.

New or improved Intranets are being created and delivered to users faster than ever before. Often we see Intranets being delivered not on yearly timescales, but instead in monthly timescales. Resulting in more iterations and improvements over time.

Why Is This Happening?

We have seen a steady rise in businesses expecting Intranet results faster and businesses making less large scale investments on technology platforms as those same platforms move to XaaS models (Software as a Service, Infrastructure as a Service, and even Platform as a Service).

Due to the lower cost up front of many of these new Intranet platforms, budgets don’t need to be as substantial as they have been, and more costs need to be allocated for ongoing expenses. This shift in the budgeting of Intranets means that many organizations are more open to spending that budget on ongoing improvements, more iterative development, or more engagement spending.

Intranets developed on SaaS systems like Office 365 (because an Office 365 powered intranet is more than just SharePoint) often don’t have heavy customization costs. This is in part because Office 365 doesn’t allow certain experiences to be customized, or highly discourages customization of certain experiences. Additionally, because new capabilities are being added to
Office 365 on an ongoing basis such as Office Delve, Office Video, and the upcoming codenamed “Infopedia” there is more interest in connecting, integrating, and engaging usage of these new capabilities in or with the Intranet. This focus on new Office 365 capabilities takes time and energy away from developing custom alternatives or creates hesitancy to invest in customizations that may become redundant in 6 months to a year’s time.

What Should We Do?

Embrace this trend. Evaluate your Intranet strategy, roadmap and plans. Are you accelerating and iterating more? If you aren’t then, you may be approaching this from a legacy mindset or could be missing out on many of the advantages that come with a more rapid approach.

This trend enables organizations to spend more energy understanding new platform capabilities and embracing those capabilities. It enables more time to incorporate and solicit feedback. Finally, and perhaps most importantly, it provides more time to learn the business needs as they emerge and change over time.

We see more companies (including our own) do agile development in sprints to produce improvements to the brand, components in the Intranet, or provide new experiences and business process support. The result is that this is leading to Intranet improvements getting to users more rapidly and having more impact.

Two notes of caution for these more iterative Intranets and taking an accelerated approach:

1. Some exercises shouldn’t be rushed. Make sure you are spending the right amount of time on design, search, and key business experiences that may take more planning or longer development cycles, but will be well worth it.

2. Core content, global navigation and other foundational elements of the Intranet should not change too frequently. Manage the change and ensure your Intranet iterations aren’t overwhelming users or are adding too much disruptive change.

2.1.2. Intranet Teams Continue To Grow And Involve More People

Intranet team size has continued to climb according to many analyst firms and surveys. Intranet teams now involve more stakeholders from the business (at least the successful ones do) and new champions, coaches and manager roles than they have historically.
Why Is This Happening?
This shouldn’t be surprising. Intranets have transitioned more and more from informational portals and directories to also support high-value collaboration activities and services. Due to the increased impact, scope and influence ‘Intranet work’ now has - the teams that influence the Intranet’s success have also grown.

What Should We Do?
Crowdsourcing ideas, solutions and answers as well as enabling employees to contribute more to company information channels leads to more employee engagement and a greater sense of shared Intranet ownership. Social and business process Intranet’s are having a huge impact here.

Often the network does a lot of the work regarding supporting, sometimes improving, and certainly in generating content for the Intranet. Additionally, Intranet teams can often involve community management and engagement activities – especially with the rise of social collaboration and communities in the workplace.

2.1.3. Social Continues To Impact And Influence Intranet Design And Intranet Interactions
It is rare for common intranet patterns like news and employee spotlights to not enable or allow for other users to comment, like or interact. Additionally, the social feed often is the main dynamic content on many pages for organizations that have embraced social.

2.1.4. Personalized And User Centric Intranets Are Commonplace. More And More Intranets Use Customer Experience Oriented Features And Approaches
Employees filling out their profiles is even more important to enable additional personalization and engagement opportunities. Employees should be able to decide what is important to him/her while the system knows the user’s profile and therefore preselects appropriate information.
2.1.5. Integration With Virtual, Collaborative And Work Technologies Like Telepresence, And Web-Enabled Integrated Application Suites Is Expected Today

More Intranets are querying multiple repositories and providing users with more search options that they are familiar with. However, it goes beyond just search integration. Intranets need to be integrated with IM, web conferencing, email, document management and business process applications. In newer Intranet related experiences like the ones Delve represents users have content being rolled up from multiple collaboration and communication systems.

Another common expectation is that users should have single sign on to relevant services and web-enabled applications. It’s not enough to simply have links to applications. With the rise of application single sign on portals, there are ways to integrate these into the Intranet experience itself. Office 365 can do this by using Azure Active Directory Premium, which can enable new applications to show up in the users app launcher itself.

2.1.6. Mobile Client Access And Ease Of External Access Are Important For Use Outside Of Work Hours Or Due To A Growing Flexible Workforce

Responsive design and targeted mobile apps should be leveraged to improve the mobile experience for users. Additionally, for collaborative focused Intranets, it is important to deploy an effective mobile device management solution.

An example of an effective Mobile Intranet app experience is Barclay’s MyZone, which works on iPads and mobile devices. Read more about it here. One of the reasons this is successful is that it connects employees, goes beyond pushing information and goes through rapid iteration and improvement.

Microsoft is embracing this trend with new mobile experience and apps for Office 365 and your SharePoint Intranet.
2.1.7. Intranets Become Less ‘Internal Only Focused.’

There is an expectation for more open, horizontal, and networked environments over time. More customers, partners & external integration, is expected.

There is a growing trend for enabling secure, responsible and encrypted sharing from where the content resides in the intranet versus forcing the user to copy the content to an extranet environment.

While this is still early on it does have an impact. Especially in the more traditional sense when organizations have multiple Intranets for key business groups but may share global people search experiences and other features based on the broader organization making investments in platforms like Office 365.

NOTE: We highly recommend downloading our External Sharing guidance whitepaper. Within it you will discover guidance and insights based on our experience working with hundreds of customers in a wide variety of industries and organization sizes. Find it at: http://Office365Extranets.com.

2.1.8. Intranet Search Goes Beyond Basic Search Experiences

Search is often used to drive dynamic, targeted and more interactive experiences around content discovery. Whether it is being leveraged to roll up appropriate information on the homepage or a subpage of the Intranet search remains a critical element of a successful Intranet strategy.

Feature wise search filters are common in Intranets enabling users to refine their results or narrow a result set based on descriptive keywords and taxonomy values. This is often represented in facets or refiners that change based on the search you made, or where you searched.

Search also provides more immediate results to help the user identify whether the result is correct, or provide access to an action right from the result - avoiding an additional click or step. There are a few ways this is represented from providing type ahead and one click results in the search box itself, to providing the rich previews often found in modern SharePoint search experiences.
2.1.9. Other Notable Trends

There are some additional trends that continue to be important when improving or implementing a successful Intranet. However, we believed they were not as significant as the ones listed above. Here are a few notable trends that aren’t as impactful as the ones above.

1. The growing use of megamenus which help users discover more content and more of the IA hierarchy from anywhere in the Intranet. Many of these megamenus are becoming more dynamic and allowing personalization or rolling up stories/relevant content to provide continual value as users navigate around the Intranet.

2. More intranets are using carousels, parallax and sometimes even video backgrounds to make the Intranet seem more modern and to improve the experience.

3. Many intranets are integrating video or providing video portal experiences. This has been accelerated by the popularity and ease of deploying an Office 365 Video Portal, which provides organizations with an easy way to capture, share, and consume video through a blend of Azure services and Office 365. Many organizations that have adopted Office 365 are also embedding video on key pages since the Office 365 team released that capability.
3. THE OPPORTUNITY & BENEFITS WITH OFFICE 365

When you are building or improving your Intranet on Office 365, you have options available to you that you may not have had in a traditional SharePoint Intranet or an on-premises world. There are also some benefits you realize from basing it on Office 365 or powering it by leveraging Office 365.

The top 3 opportunities for an Office 365 intranet are:

- Cost Savings & More Value For Your Investment
- Unique & Continued Innovation
- Connected & Improved Experiences

What follows in this section is further details on each of the opportunities listed above.

3.1. Cost Savings & More Value For Your Investment

There are many reasons running or powering your Intranet on Office 365 saves money and delivers more value for your investment. Here are a few of the most significant reasons.

3.1.1. Infrastructure Cost Savings

There are significant costs to maintaining a highly available SharePoint farm for your Intranet on premises. Especially when hardware investments are necessary. It also requires a team with knowledge and specialized skills to maintain the infrastructure and application.

3.1.2. No More Upgrades

Once you are effectively leveraging Office 365 and SharePoint Online, there are no significant upgrade costs or cycles. Your portal can use new features and updates as they are released. That doesn’t mean there isn’t a cost every few years as you look to optimize your Portal and Knowledge Management experiences across the organization, but it does mean that your investments will be focused on activities that drive more value instead of infrastructure or technical upgrades.

Some examples of how you might be able to drive more value with additional resources or investment?

- Improve and guide user adoption and engagement.
• Optimizing employee productivity with training and education.
• Enhancing user experiences and usability.
• Automating or optimizing business processes with forms, workflows, and apps.
• Providing better document and records management.

3.1.3. Pay Per User Per Month
Office 365 licensing plans are based on assigned active users. This enables you to pay based on usage of the platform and adjust your user count based on changes in your business.

3.1.4. Price Bundling & Pricing Innovation
Office 365 bundles the suggested capabilities you would leverage with an Office 365 powered Intranet in suite pricing that includes capabilities your organization most likely already has a need for such as Messaging & Calendaring (Exchange Online), Communication (Skype for Business) and Enterprise Social (Yammer).

3.1.5. More For Your Money
Office 365 provides additional capabilities like Ready To Go Portal experiences that are extremely valuable in the bundled suite pricing such as an Office 365 Video Portal as well as a series of emerging portal experiences like Office 365 Knowledge Management Portals (Codename: Infopedia), “People Experience Portals” (Delve), and Business Intelligence Portals (Power BI for Office 365).

What is included in the suite pricing continues to improve with more and more new capabilities being added that are critical to your organization and can augment other costs. An example of this might be Mobile Device Management being added to Office 365 (which it currently includes).

3.2. Continued Innovation
Beyond the financial and cost savings benefit of continued innovation, there are a few reasons why powering or running your Intranet on Office 365’s continued innovation is so important.

3.2.1. Cloud First Features
Cloud only features will be available only to organizations who leverage or connect/integrate Office 365 with their organization.
While innovation will be bundled with SharePoint 2016 for on-premises SharePoint environments, this upcoming SharePoint release is based on the innovation in SharePoint Online and Office 365.

Consider these cloud only innovations that may not come to on-premises or will require on-premises integration to be effectively leveraged based on how they use Azure enabled services like Streaming or Machine Learning.

- Office 365 Video Portals
- Office 365 People Experience & Content Portals (Delve)
- Office 365 Business Intelligence Portals (Power BI for Office 365)
- Office 365 SharePoint Framework (Knowledge Management Features & New Page Designs)

It’s not that this capability might not be available in a hybrid configuration or potentially some elements may be made available in feature packs in the future for SharePoint 2016, but this innovation is both cloud first and sometimes cloud only.

3.2.2. Rapid Scale & Improvement

Cloud innovation enables rapid scale and solution development. The amount of storage, improvements to encryption and security and new integration opportunities are delivered continually by the team based on customer and industry feedback. These aren’t just behind the scene improvements that enable new scenarios, but often can be represented in improvements (often significant) for end users who are using your Office 365 powered Intranet. It’s not just Office 365 improvements but also Azure improvements you are getting at incredible scale and with thorough quality assurance.

Example: Consider mobility support with an Intranet powered by Office 365 versus a traditional one. There will be far more app experiences for new Portals that you can connect and integrate with your company Intranet in Office 365 than could be developed by an on-premises Portal team. Not to mention that mobility from a management perspective is powered by Office 365’s MDM capabilities which are a subset of Intune (another Microsoft cloud service) innovation.

3.3. Connected & Improved Experiences

Since Office 365 is a connected suite of experiences and capabilities by building your Intranet with Office 365 you can take advantage of those experiences and integrate them to provide more usability and connectivity for your users.
3.3.1. Rapid Application Switching
Doing things like ensuring users can quickly switch between Outlook and OneDrive for Business from the Intranet is much easier when it’s powered or running on Office 365. Consider how easily a user can trigger an instant message via Skype for Business (formerly Lync) from anywhere in your Intranet where a person is referenced. Empowering not just email, but the ad-hoc discussion that can turn into recordings which can be exposed or connected to the Intranet in the Office 365 Video Portal.

3.3.2. Integrated Contextual Experiences
It also makes it much easier to integrate contextual experiences where they can add value based on where the user is interacting in the Intranet. As an example consider how referencing a document on your Intranet can expose the ‘Yammer Conversations’ capability. Enabling users to author and share comments socially while viewing a document in the Intranet can save time and empower more users to interact and engage in the Intranet through social.

3.3.3. Better Mobile Experiences
Not only are continued investments being placed into responsively designed pages (articles) and sites (microsites) but there is already an incredible wealth of mobile experiences that are targeted and work across platforms for Office 365 users. From the Skype for Business to OneNote apps to some of the new app experiences like Delve and Office 365 Groups. When your Intranet is powered by Office 365 many of these app and mobility experiences tie into how users can manage, author, or collaborate in an employee Intranet.
4. PLANNING FOR AN OFFICE 365 INTRANET

Almost every customer we work with has suffered from a few problems with their SharePoint and Office 365 Intranet or Portal. These are a few examples of the challenges we see (especially when customers haven’t built their Office 365 intranet with our guidance/advice):

- Trying to build a high-value and effective Intranet without sufficient SharePoint and Office 365 expertise or when architect and developer resources are scarce.
- Building an Intranet without sufficient or good requirements from the business.
- Not embracing or understanding Office 365 experiences or feature sets, leading to redundancy, conflicting experiences, or confusion.
  - Often an issue here is having insight into the Office 365 roadmap and what’s coming.
- Providing consistent and connected experiences across the distributed organization.
  - Primary issue areas are navigation, discovery, and integration.
- Effectively leveraging and maximizing social collaboration and communication.
  - Intranets should be interactive, personalized and dynamic.
- Driving and guiding adoption of Office 365 and the Office 365 Intranet.

The good news is that we help many customers with each of these challenges. What follows is a breakdown of other challenge areas and high-level recommendations.

4.1. Authentication & Identity

There are a number of significant benefits to leveraging Office 365 for your Intranet when it comes to authentication and identity. One of the biggest is that authentication can happen securely from anywhere at any time and any device.

4.1.1. Access Without A VPN

For many Intranets just being able to access the Intranet from home, remote offices, customer sites and on the road can be a big benefit. This is enabled with no additional effort.

4.1.1. Enabling Multi-Factor Authentication

Office 365 provides security and authentication features that many customers have not had available for previous iterations of their Intranet. This was often due to high cost or complexity of implementing them. As an example Office, 365 supports multi-factor authentication at no additional cost and is extremely easy to administer and implement.
To be clear, this is a feature that may not be necessary. But for some organizations, they implemented Office 365 Intranets without knowing it was available or sometimes have held off moving to Office 365 because they didn’t know this was possible (and easy).

Multi-factor authentication increases the security of user logins for cloud services above and beyond just a password. With Multi-Factor Authentication for Office 365, users are required to acknowledge a phone call, text message, or an app notification on their smartphone after correctly entering their password. Only after this second authentication factor has been satisfied can a user sign in.

After being enrolled for multi-factor authentication, the next time a user signs in, they see a message asking them to set up their second authentication factor.

Any of the following options may be used for the second factor of authentication.

- **Call my mobile phone.** The user receives a phone call that asks them to press the pound key. Once the pound key is pressed, the user is logged in.
- **Text code to my mobile phone.** The user receives a text message containing a six-digit code that they must enter into the portal.
- **Call my office phone.** This is the same as Call my mobile phone, but it enables the user to select a different phone if they do not have their mobile phone with them.
- **Notify me through the app.** The user configured a smartphone app, and they receive a notification in the app that they must confirm the login. Smartphone apps are available for Windows Phone, iPhone, and Android devices.
- **Show one-time code in the app.** The same smartphone app is used. Instead of receiving a notification, the user starts the app and enters the six-digit code from the app into the portal.

Once a user is signed in they can change their second factor of authentication.

### 4.1.2. Branding The Sign In Experience

You can customize the sign on experience so that when users are prompted for access you have an opportunity to share key messages and continue to re-enforce your brand.
When you spend so much time and energy on the branding for your Intranet it would be silly not to also implement this kind of improved experience that not only improves your Intranet sign in experience but all of the Office 365 sign in experiences (such as for OneDrive, Planner, Video, Delve and Outlook Online).

4.1.3. Planning For Secondary Users

When using SharePoint Online and Office 365, there may be additional planning needed around secondary users or users that are not part of the Intranet membership. As an example if you have a large enterprise it is entirely possible that you have multiple businesses within one Office 365 tenant.

If this is the case for your business, you will need to set the right expectations early that some experiences like people search (often considered part of intranet planning) may not necessarily be isolated to your business group from the broader organization. While you can create custom search pages and tailor search results to show only users from your organization we recommend caution here as there are many ‘global’ wide search experiences throughout the Office 365 apps that are connected to your Office 365 Intranet.

4.1.4. External Users & Extranets

Most Intranets don’t necessarily include a strategy for external users and external sharing. However, it is important to understand how you will handle and tackle external sharing and whether the entire Intranet collection will have external sharing disabled.
4.2. Availability & Outages

One concern people share is that they are concerned that there could be availability issues or outages that impact their organization. Considering the critical nature of an intranet, this is an important risk to evaluate.

Microsoft provides a commitment to delivering at least 99.9% uptime for Office 365. They have maintained that commitment. Microsoft also provides historic uptime tracking.

To date the world wide uptime for Office 365 can be found in the trust center and has been:

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
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4.2.1. How Does Microsoft Communicate Around An Outage?

During an outage Microsoft communication has significantly improved over the past few cycles. Microsoft communicates outages through seven channels today.

1. Via the Office 365 Service Health Dashboard
2. Via the Office 365 Message Center
3. Via the Office 365 Admin App
4. Via the Office 365 Service Communications API
5. Via the System Center Operations Management ‘Management Pack’ For Office 365
7. Via Microsoft Employees (Who Use Internal Tools/Systems)

Microsoft has also invested further into incident service communications.

They are working on making the communication even timelier:

- Red Alert monitoring & SHD automation.
• Closure Summary and Enhanced Post Incident Report (PIR) process.
• Increased listening systems: support “Big Red Button.”

They are working on making the communication even more targeted:

• Authenticated SHD
• Tenant level posts
• Critical Functionality Loss (CFL)

They are working on making the communication even more accurate:

• Provide more technical detail.
• Share new fields like:
  o Estimated time to restore.
  o User workaround.
  o Percent of users are impacted.
  o User experience.
  o Customer impact.

4.2.1. Can We Recover Intranet Content Or Back It Up?

For most Intranets the most relevant backup capabilities are out of the box capabilities such as versioning and recycle bins. This solves most concerns around backup and recovery when combined with Office 365’s high availability.

**Restoring Individual Pages, Lists, Libraries, Items, Or Documents**

When you delete an item from SharePoint team site library, or from a list, it isn’t immediately removed from SharePoint. Deleted items go into the recycle bin, where they stay until they’re automatically removed approximately 90 days later. Within that time, you can either restore the files to their original location or remove them to free up storage space.

When you delete an item from a site recycle bin it automatically goes into the Second-Stage Recycle Bin (Site Collection Recycling Bin) where it remains for a set period until it’s completely purged from SharePoint. This gives you greater control when users delete files, versions of files, list items, libraries, lists, and folders from a SharePoint site by providing a two-stage safety net before an item is permanently deleted from a site.

When an item is restored, it is restored to the same location that it was deleted from. If you restore an item that was originally located in a deleted folder, the folder is recreated in its original location, and the item is restored in that folder.
Behavior of items in the first-level (Site) Recycle Bin:

- Items in the Recycle Bin count against site quota.
- The site collection administrator can see all items deleted by any user from any site within the site collection.
- Non-administrator users can see the items they deleted from the site.
- Items in the Recycle Bin can be sent to the Second-Stage Recycle Bin by the user or the site collection administrator.
- All items re automatically deleted approximately 90 days after they were originally recycled.

Behavior of items in the Second-Stage Recycle Bin:

- Items in the Second-Stage Recycle Bin don’t count against site quota.
- Items in the Second-Stage Recycle Bin can only be seen by the site collection administrator.
- Items in the Second-Stage Recycle Bin can only be restored or deleted by the site collection administrator.
- All items are automatically deleted approximately 90 days after they were originally recycled.
- All items are automatically deleted when the total storage for the Second-Stage Recycle Bin exceeds 200% of your site collection quota.

Restoring Entire Site Collections

The Recycle Bin in SharePoint Online in Office 365 for business provides a safety net when an entire site collection is deleted. When a SharePoint Online administrator deletes a site collection, it is placed in the Recycle Bin, where it is kept for 30 days before it is automatically permanently deleted.

As a SharePoint Online administrator, you can view and manage deleted site collections from the SharePoint Online Administration Center Recycle Bin page. From this page, you can view site collections that are currently in the Recycle Bin, see how many days are left before the site collection is permanently deleted, and restore a deleted site collection without contacting Microsoft Support.
**Advanced Backup & Restore Options**

For the latest information on Microsoft’s backup and disaster recovery capabilities beyond recycle bins and versioning see the online service description.

Data protection services are provided to prevent the loss of SharePoint Online data. Backups are performed every 12 hours and retained for 14 days. This describes the data backup services as offered when SharePoint Online is available. You can recover components of Site or Site Collection.

SharePoint Online has set an RPO and RTO in the event of a disaster:

- **1 hour RPO**: Microsoft protects your SharePoint Online data and has a copy of that data that is equal to or less than 1 hour old.
- **6 hour RTO**: Organizations will be able to resume service within 6 hours after service disruption if a disaster incapacitates a hosting data center.

To restore from this method you need to contact the Office 365 support team.

**SharePoint Online 3rd Party Backup Options**

Lastly, for some special circumstances, you may want to evaluate third party tools. Many of these have offerings that extend to other areas of Office 365 providing advanced archiving and backup/recovery options. However, consider bandwidth and data transfer volume if you have larger sites depending on the third party option you are evaluating.

4.3. Performance

While uptime may be meeting expectations often, performance is much more complex.

4.3.1. Bandwidth & Connectivity

Planning for bandwidth is important for any Intranet that is accessed over the internet from employees at home, traveling, at customer sites, or from a remote office.

Microsoft has consolidated many suggestions to support planning in this article entitled “Plan for network devices that connect to Office 365 services”.

There are only a few ways to potentially improve the performance or make the performance more predictable for SharePoint Online (where an Office 365 Intranet would be hosted).

- Optimize Proxies, Firewall Devices, & Network Settings
Intranets With Office 365: What You Need To Know

- Purchase & Use WAN Accelerators
- Purchase & Use Azure ExpressRoute For Office 365

You can use hardware and software load-balancing devices to ensure availability of AD FS or Exchange in hybrid deployments and for SharePoint Online hybrid deployments, but that is more of availability than performance benefit.

While Microsoft Office 365 does use Content Delivery Networks already (you get the benefits from that), customers cannot use their CDNs to cache content on local networks (though that may change).

**Optimize Proxies, Firewall Devices, & Network Settings**

Ensure proxy and firewall devices are sized to handle the additional traffic. The additional traffic going to Office 365 results in an increase of outbound proxy connections as well as an increase in SSL traffic.

If you’re outbound proxies require user authentication you may experience slow connectivity or a loss of functionality. Bypassing the authentication requirement for the Office 365 domains can reduce this overhead.

If your filtering outbound connections from computers on your network, bypassing this filtering to the Office 365 domains will improve connectivity and performance.

Some customers find internal network settings may affect performance. Settings such as MTU sizes, network auto-negotiation or auto-detection, and sub-optimal routes to the internet are common places to look.

**WAN Accelerators**

Microsoft Office 365 does not require you to use WAN Optimization Controller devices (also known as WAN acceleration and caching devices) or traffic shaping/inspection devices (also known as packet shaping/inspection devices).

Customers may decide to use such devices to increase performance under conditions of high latency or low bandwidth for Microsoft Exchange Online and Microsoft SharePoint Online.

There are great WAN devices and options out there that work well with Office 365, but keep in mind that you may need to optimize your network device or devices to ensure that your users have a consistent experience when accessing Office 365. Confirm with the vendor or your
technical team if the device can handle appropriate traffic (such as how Office 365 services encrypt some Office 365 content and the TCP header information).

**Direct Connection Via Azure Express Route For Office 365**

You can add a direct network connection to Office 365 for selected Office 365 network traffic. Azure ExpressRoute offers a direct connection, predictable performance, and comes with an uptime SLA of 99.9% for the Microsoft networking components. An internet connection is still required for workloads that are not supported over Azure ExpressRoute.

In addition to internet connectivity, some customers may choose to route a subset of their Office 365 network traffic over a direct connection that offers predictability and a 99.9% uptime SLA for the Microsoft networking components. Azure ExpressRoute provides customers this dedicated network connection to Office 365 and other Microsoft cloud services.

Regardless of whether you have an existing MPLS WAN, ExpressRoute can be added to your network architecture in one of three ways, through a supported cloud exchange co-location provider, an Ethernet point-to-point connection provider, or through a MPLS connection provider. See what providers are available in your region. The direct ExpressRoute connection will enable connectivity to most Office 365 applications including SharePoint Online. Network traffic for all other applications and services will continue to traverse the internet.

### 4.3.2. Service Degradations

There have been service degradations for customers in Office 365. These are communicated via the Office 365 service health dashboard. They rarely impact your organization or users in a meaningful or notable way, but it is worth noting that these do happen from time to time.

When a service is noted as having service degradation, it means that it can be slow, sluggish or occasionally unresponsive for brief periods.
How might you experience this? We have seen situations where the search crawler is delayed on indexing new content, where site provisioning can be delayed, or where access or the managed metadata service might be unavailable.

### 4.4. Security

Office 365 reduces the burden of performing routine IT management tasks such as keeping security updates current and performing back-end upgrades. So naturally an Intranet on Office 365 may be more secure with less overhead from an IT management perspective.

It’s important to understand continually improving security management and security enhancing features that are delivered to Office 365.

#### 4.4.1. Dynamic Group Membership & Rule Based Security

One very common requirement in SharePoint and other Intranet solutions is to have the ability to target content to a dynamic audience of users and similarly secure information based on dynamic rules.

Traditionally we have done content targeting with Audiences in SharePoint. An Audience is a dynamic set of users that is compiled, usually once a day, and at compile time, the rules of the Audience are evaluated. A SharePoint Audience is used to target information, but cannot be used to protect content. Office 365 Groups are powered by Azure Active Directory and support something called Dynamic Membership.

This enables group membership and content or collections within the Intranet to be secured based on dynamic rules and not just based on traditional group membership. A powerful innovation and pattern for security that is enabled based on the integration between Office 365 and Azure Active Directory.

To learn more about this feature be sure to read this article on using attributes to create advanced rules.

### 4.5. Support & Escalation

Microsoft provides support for Office 365. There are also premier support options for Office 365. Lastly, you can pay vendors (like 2toLead – that’s us!) to provide additional support and troubleshooting and issue resolution around Office 365 issues.
An initial support request can be done in two ways. Save time by starting your service request online in the Office 365 admin center or call in. Get the support phone number for your country or region.

The initial support path will connect you with a support engineer who can assist callers with basic end-user features and admin scenarios. It is highly probable that you may need to escalate your support request some times until you get a sufficiently senior engineer.

What we have found is that these senior-level engineers are quite capable. They have been open to communicating directly which has often helped us rapidly build an understanding of customer specific issues and the best solution(s).

When you are interacting with a support engineer, note that there are a few ways to expedite support escalation to get you a senior-level engineer.

- You can use premier support options for Office 365.
- You can work with a partner (like 2toLead) who has access to escalated support paths.
- You can ask the engineer to escalate you. One technique for this is to request a business impact statement when you have a critical impact on your business (as this leads rapidly to the escalation of an issue).

### 4.6. Privacy & Regulatory Issues

There are some privacy-related sub-topics that can be relevant when planning an Office 365 Intranet. The legal and regulatory needs of an organization can be complex and often vary based on organizational needs.

As you are probably aware of, the strict requirements of North American and international data protection laws and their national implementations are difficult to reconcile with several aspects of Cloud computing. Particularly problematic aspects relate to:

- the cross-border transfer of personal data;
- the very broad definition of personal data and the potentially very wide definition of sensitive personal data;
- the reduced level of control that can be exercised by customers, due to the decentralized approach and the dependency on the service provider;

There are some things you will want to consider when exploring Office 365 with your organization for powering your Intranet. Keep in mind that even in a Hybrid state with
Intranets With Office 365: What You Need To Know

SharePoint 2013 or SharePoint 2016 that if you are unifying the index then, your content will be contained within Microsoft Office 365 datacenter(s).

Most of these considerations are part of a broader analysis of privacy in Office 365. Looking at this from an intranet perspective should help simplify the conversation as many issues get more complex when dealing with mail/Exchange.

You will want to work with Microsoft and reliable expert to answer questions like:

- How might you migrate to a different provider or back on premises?
  - This isn’t your first choice, but having the ability is important.
  - There are some great options here depending on the content/technology you are looking at migrating. For an Intranet, this is something that while extremely rare is done with relative ease using proven third party tools that have relatively low costs.
- Who owns the data? Who is liable in the case of data loss?
- How is termination of the contract handled? What happens to the data?
  - Keep in mind that SharePoint online provides encryption of the data. Additionally, Microsoft has disclosed that they intend to provide customers the ability to ‘bring their key’ which enables more options around who can 'effectively see the data.'
- What laws are different based on different jurisdictions on access to data for your organization?
- How are the data centers secured? What policies are in place?
- What compliance auditing does Microsoft support?
- How would server seizure be handled and what are the implications for all parties involved?

4.7.1. Microsoft Compliance & Privacy Policies

Office 365 is a multi-tenant service (meaning your data is present on some of the same infrastructures as other Microsoft customers). Office 365 is verified to meet requirements specified in ISO 27001, EU Model clauses, HIPAA BAA, and FISMA. All of those have privacy rules that Microsoft must follow and indicate that Microsoft is making a considerable investment on a continuous basis in compliance and privacy. For a comprehensive view of the privacy policies Office 365 follows you should review the [Office 365 trust center](#) and request the latest audit reports as needed from your Microsoft team.
In short Microsoft provides an extremely strong privacy policy and at last count there are actually over 300 people focused on data privacy, including Software Engineers, Scientists, IT Pros, Marketing and Lawyers at Microsoft. So they probably have better privacy protection than many organizations concerned with privacy regulations and rules. There is a significant benefit gained from Microsoft taking on the auditing and compliance costs as they relate to some of these kinds of challenges.

4.7.2. Encryption & Bring Your Key

While your data is encrypted at rest automatically in Office 365, you can further encrypt content with Rights Management Services (RMS).

What follows is not a hard and fast way to guarantee improved privacy, but encryption and content level encryption with key control should improve data privacy and security.

The general approach with Bring Your Own Key in its purest form means that your organization would potentially have one more reason they might need to be notified of a request for the data or at least may be more involved due to the control of the encryption key itself.

If you had the key for encryption in essence when Microsoft is subpoenaed through a legal channel they could share the encrypted data but the party (let’s say the NSA) would not be able to review or read the data without your encryption key. In theory, this would suggest you would need to be notified based on ownership and access to the key.
Intranets With Office 365: What You Need To Know

Today there is a continued strategy to roll out new BYOK features. One approach can be to use Azure RMS with BYOK (Bring Your Key) for all IRM functionality in SharePoint Online and OneDrive for Business (where our Intranet content would almost certainly be stored), but there are special considerations and additional planning needed for Exchange Online – Azure RMS BYOK is not yet compatible with Exchange Online. It’s also not available for Yammer which could be an impact on a socially driven Intranet experience based on Office 365.

Remember that through the use of techniques like SharePoint Data Loss Prevention (DLP) and its existing Information Rights Protection capabilities you could automate the discovery of key privacy data and encrypt it with Rights Protection enabling deeper levels of security and protection beyond the encryption and protection offered at the container level (site, library, tenant level).

4.7.3. Data Residency

You should understand whether Office 365 is available in the region you plan to host your tenant from. As an example, Microsoft has 30 regions for Azure and Office 365 around the world (twice as many regions than that of Google and AWS combined). For Canadian customers, there are Datacenters that will go publically live in 2016 located in Canada and for many other places around the world, there are existing regional datacenters that support improved privacy based on the location of the datacenter.

Privacy may be more complicated and involve a deeper discussion. As an example, many organizations have concerns about the fact that Microsoft is an organization headquartered within the United States and whether Microsoft can notify people/businesses if the US government searches their property. Microsoft is in a current legal dispute over this issue (Suing over the right to tell its customers when a federal agency is looking at their emails. April 2016).

It should be noted that there is existing mutual legal assistance treaties (MLAT) in existence already between the United States and many countries with enables them to gather and exchange information to enforce public laws or criminal laws.
4.8. Search

Search matters. Search is an integral part of any Intranet or Employee Portal. In many cases, the search experiences are more robust when you build your Intranet with Office 365 because you have access to Delve and the latest discovery and integrated search options available.

4.8.1. Usage Of The Content Search Web Part

Throughout many Intranets content dynamically displays based on search. To do this often, the Content Search Web Part (CSWP) is leveraged which works extremely well in Office 365. This is the cornerstone of many Intranet design patterns and pages.

When visitors browse to a page that contains a CSWP, the Web Part automatically issues a query. The search results are displayed within the CSWP. In most cases, visitors won’t even know that search technology is being used to display the content they’re viewing. To them, it’ll look and feel like any other web page.

By configuring a query in a CSWP, you can define which content visitors will see when they browse to a page that contains a CSWP. By default, the query in the CSWP is configured to show the three most recently changed items on the site. By configuring the query, you can change the number of items that are shown in the CSWP and which content is shown. For example, you can configure the query so that the CSWP will show nine list items from a particular list, or the last six documents the visitor created in a document library.
SharePoint Online Search Limitations

If you are using the Content Search Web Part heavily in your Intranet design, it is important to understand whether immediate results or items being added to the index will have an impact on user expectations or the design itself. In Office 365 content can take anywhere from 15 minutes to 6 hours (in extreme circumstances) to show recently updated data based on search.

While this may not be an issue for some components within the Intranet for things like news or announcements urgency may be more important, and a REST API call may be recommended over using search.

It is important to understand that Microsoft controls the Office 365 crawl schedules, and you have limited control or influence beyond options they have enabled. Microsoft has continuously crawling enabled on each tenant. This means that content is continually being added to the index.

The default interval for continuous crawls is every 15 minutes. Unlike a SharePoint on-premises environment, the interval of continuous crawls cannot be reduced within the SharePoint online environment. This doesn’t guarantee that content will be indexed and available in search results within 15 minutes as the volume of tenant data may also play a factor as will usage volume/patterns.

Search crawls occur continuously to make sure that content changes are available through search results as soon as possible. Recently uploaded documents may not immediately be displayed in search results because of the time that’s required to process them. SharePoint Online targets between 15 minutes and an hour for the time between upload and availability in search results (also known as index freshness). In cases of heavy environment use, this time, can increase to six hours.

Beyond the timing of crawls, it may be important to understand other search limitations that are different from SharePoint on-premises or that can have an impact on your Intranet planning.
4.8.2. SharePoint Hybrid Search

If you are looking at a Hybrid scenario with SharePoint on-premises and your Intranet in the cloud, you can unify the search index for Office 365 and SharePoint on-premises by using something called the Search Service Application. This provides ways to leverage Delve and the Intranet search along with any legacy or highly customized content on premises.

4.9. Navigation

In Office 365 Intranet's act as portals to many key areas of interest within the business. The navigation should be personalized and dynamic for the Intranet to improve relevancy and usage.

In SharePoint Online just like in SharePoint Server environments, you can choose between two OOTB navigation methods: structural navigation or managed navigation. Structural navigation is based on site structure. Managed navigation is based on term sets.

There is also a third method for managing navigation where navigation is based on search.

While the global or top navigation is often the main discussion point for an Intranet, often sub menus and navigation components will exist (such as tools or apps). Be careful not to develop some navigation capabilities that Office 365 already provides out of the box.

4.9.1. Structural Navigation

Patterns of designing the top navigation to follow the organizational hierarchy of the business often suggest that not enough time or energy may have been placed in planning the usability and efficacy of this navigation key component. This is rarely done, instead often navigation may be patterned based on the Intranet’s structure itself.

When using this approach to Navigation, it is important to understand its shortcomings. While easy to train and understand since it mimics the structure of the SharePoint site and often automatically shows content as it is created it often is difficult to modify without the creation or modification of the underlying structure.
4.9.2. Using Managed Term-Driven Navigation

In some scenarios, you may wish to design your navigation to be driven by terms or topics rather than by the structure of your site. The managed navigation feature allows you to keep up with changes and trends in your organization and provide great navigation around important business concepts, all without changing the structure of your site.

Managed navigation lets you define and maintain your site navigation by using term sets. With managed navigation, it’s not the location of your content that defines where in the navigation your content will appear, but how you tag your content with terms from a term set. For example, in previous versions of SharePoint, if you wanted to add a new page under "About our company," you had to add that page under the "About our company" branch within your content. With managed navigation, you can add a page to the branch that makes the most sense to you. By tagging that page with a term, and using Search Web Parts, it will appear in the correct place in the navigation.

You still have to organize content in SharePoint in the same way we have for years (based on site structures) but with metadata driven navigation you, in essence, can create a layer that sits on top of the site structure that enables users to go directly to content or content categories that would have been buried deep in the site structure.

Lastly managed navigation creates friendly URLs. In previous versions of SharePoint, the URL to a page contained a reference to the Pages library and any folders within that library, for example, http://www.contoso.com/pages/products/cameras/camera-accessories.aspx. With managed navigation, URLs are based on the terms in the term set that drives your site navigation, for example, http://www.contoso.com/cameras/camera-accessories. These friendly URLs are much easier for users to recognize and remember.

4.9.3. Search Based Navigation (Custom)

One pattern we have found that can work well is to develop a custom navigation that is powered by search. If your navigation items often do not need to appear immediately this approach could enable the flexibility of navigation that is always growing, can be easily personalized and one that can be enhanced in a variety of ways to improve the user
experience. Since Office 365 is always crawling new content the only downside is the potential delay of content or navigation items displaying upon creation or modification (awaiting re-indexing which can be immediate or can take quite a few minutes (with highs of hours depending on the tenant usage patterns at play).

**NOTE:** It is important to have a site and page creation process that establishes key metadata for each site or page to improve search results and to allow for personalization and targeting of sharing the site or page. A search based navigation is dependant on controlling the site provisioning process or page creation process and ensuring sites and pages are tagged appropriately to show up in various locations within the global or top navigation.

Since many Intranets customize their global or top navigation by enabling it to function like a multi mega drop down menu empowering this experience with search requires less effort. While common navigation elements like locations/offices, divisions, departments, and others rarely change some elements of the navigation may frequently change like tools or sites. Since sites themselves can be across the broader organization, it may be important to provide things like recent sites, favorite sites or other ways to navigate site structures.

### 4.9.4. Incorporate The App Launcher

There are common components built into Intranets. One such component is to create a bunch of tool links for common applications users need to access. This makes it easier for users to find the relevant sites, apps, and resources to do their job. While there are still situations where it may be necessary to have a custom component or roll up of tool links it bares careful consideration in Office 365. Consider how some of these needs can be potentially met through the use of the Office 365 app launcher. The app launcher (unlike a tools/links component on the Intranet) is available throughout Office 365. Whether the user is viewing another user profile in Delve, or reading an email in Outlook Online. It is always one click away for the user.

The app launcher contains tiles for apps that have been promoted or pinned, from the My Apps Page. The My Apps page includes all of the apps you get with Office 365 as well as custom apps that you add from the SharePoint Store or Azure AD. Each user can personalize
this app launcher by selecting what is pinned within the app launcher and can even resize the app tiles.

In addition to adding tiles to the app launcher, users can add app launcher tiles to the Office 365 suite navigation bar. This is done by right-clicking on a tile and selecting "Pin to nav bar". When this is done, the tile is available to the user no matter what Office 365 page they are on and will avoid the additional click needed to display the app launcher.

The app launcher can be used to not only provide users with access to key suite capabilities in Office 365 but can also be setup to include access to 3rd party SaaS solutions or key applications that Azure AD has been set up to provide single sign-on access to.

Lastly, administrators can create custom tiles that users can pin to their app launchers. These custom tiles can point to SharePoint sites, external sites, legacy apps, and more. In the example, a custom tile called "Contoso Portal" is used to access an organization's Intranet.

While the feature to pin this for users automatically is in queue/processing from Microsoft this is unfortunately not yet possible or implemented (as of April 2016). So you are limited to being able to create custom tiles and making custom tiles available on users my apps screen to be able to be pinned, but cannot automatically pin it for users. This last feature gap is one of the main reasons you may still need a custom tools component.
4.9.4. Incorporate The Sites/SharePoint Homepage

The new SharePoint home creates a space for SharePoint on the web within Office 365 that allows you to quickly find and create sites. And just like the SharePoint mobile app, the SharePoint home web experience enables you to easily find and discover the places, information, and people you need to be productive.

Users simply click the SharePoint tile from the Office 365 app launcher—formally the Sites tile but with the same logo—to launch a redesigned, modern and responsive user experience with intelligence and site activities front and center.

Once in your SharePoint home, you’ll see the sites and portals you are most active in alongside recommended sites per the Office Graph and company-wide sites promoted by your company, the entire intranet of an organization.

This gives you unified access to all of your sites—online and on-premises—and lets you navigate seamlessly through your intranet, as well as catch up with activity across your sites with just a glance.

The most important thing to understand with the sites/SharePoint page is to understand how this will work with any Intranet site directory or site listing you may have been considering building. Since this is constantly being updated with new features, it makes sense to integrate and leverage this to support site navigation throughout the Intranet and broader digital workplace.

4.10. New Site & New Page Provisioning

Often there is a need for users to quickly and rapidly build new Intranet subsites or pages.
Creating new pages and having those pages have a consistent feel, look, and edit experience is something that is easily attained with SharePoint Online. This is done through the use of page layouts and could even be potentially done without customization.

Within Office, 365 new Intranet subsite provisioning can be more complicated than when done on SharePoint Server. Here are some reasons provisioning can (and will) be more complicated:

- You cannot reliably use site templates or web templates. There are many reasons at play here. Since these would cause significant maintenance challenges due to complete replacement of the out of the box site definition, wouldn’t be usable when certain features are enabled, and is generally not an effective way to provision sites in SharePoint Online. If you are going to use one then maybe use web templates, but this also has a poor site collection creation story so it won’t scale as effectively.
- You cannot use feature stapling, server side provisioning, or custom site definitions, mainly because they aren’t supported in Office 365.
- You can take a manual approach and create the site and then run PowerShell or manually activate features and configure the site.
- The only option for reliably automating the site creation process is to use a technique called remote provisioning. This requires having code running outside of SharePoint Online that handles queue management and the site creation and configuration process.

4.10.1. Manual Approach

You can still provision sites using the manual approach in Office 365. By using the out of the box interface to provision a site and then apply a template (you can create sites without a template) or you can create a site directly based on an existing Microsoft template. You can even automate this to a limited degree by using PowerShell to accelerate the speed of your provisioning. However often PowerShell scripts that provision sites, configure sites, and provision appropriate site assets need to be regularly maintained.

4.10.2. Remote Provisioning

Intranets are often contained in a single SharePoint site collection (except search centers). As a result, you can use an approach where you override the out of the box sub site creation process or experience and take ownership of the site provisioning.

https://github.com/OfficeDev/PnP/tree/master/Samples/Provisioning.SubSiteCreationApp
You can extend this technique by using CSOM to provision site collections.

https://github.com/OfficeDev/PnP/tree/master/Samples/Provisioning.SiteCollectionCreation

You can also use an approach where you get a template from an existing site, save the template using an XML provider, load the saved model and apply it to an existing site. Using this technique people can update the template sites that are used in the provisioning process giving more control to the business.

Additionally, you can queue requests or use other advanced techniques to improve the site provisioning process.


There are more advanced approaches that you may wish to leverage, and this is an area of continued investment from Microsoft. With the new SharePoint framework a new site creation experience is one of the investments Microsoft is making that may help meet some organization site provisioning needs, or act as a great base for your custom site provisioning approach/process.

4.11. Branding & Design

When planning effective branding and design in Office 365, there are a few things we believe must be taken into account.

- Responsive design is a must.
- Leave the Office 365 suite bar alone.
- Branding the personal site (especially with Delve people profiles) is challenging and often not recommended if it can be avoided.
- Avoid site templates unless you are actively updating them over time.
- Navigation should use best practices like managed metadata (performance impact).
- Keep in mind that branding often must be provisioned across many site collections to provide a unified design experience so the provisioning process is also important.

4.11.1. Responsive Design Is Not Optional

Office 365 is meant to be available anywhere, at anytime, and from any device. Your Intranet should also be relevant and accessible from mobile or touch-based devices.
4.11.3. Leave The Office 365 Suite Bar Alone

The Office 365 Suite Bar should be incorporated into your Intranet design. This also means understanding that customizing the Office 365 Suite Bar is not recommended.

One of the common customizations is to reposition the company logo to be left aligned when viewing the page on a laptop or desktop browser. If this minor customization is done when you navigate to other areas within Office 365 where you cannot customize the suite bar you will see the logo of the company shift back to the center position. This also has an impact on the responsive design since the suite bar has been designed to adjust and is regularly updated by Microsoft.

4.11.4. Incorporate The Delve User Profile Experience

By building your Intranet on or with Office 365, it means that you are embracing the Delve user profiles that are continually being improved by Microsoft.

What are some of the great features you get in Office 365 profile pages today?

- The profile contains the rich fields you may already be familiar with if you have built or used an Intranet based on SharePoint.
- Many fields are interactive:
  - The phone number field can be selected to dial out to the individual using Skype for Business.
  - The email address is enabled with a mailto: to make it easy to start an email with the user.
- Profiles contain recent documents from the individual, and documents trending around them.
These profile pages in Office 365 cannot be customized. One of the common design and development patterns for Intranets is to customize the look, feel, and content of user profile pages. In Office 365 instead, you can only configure minor things today.

You can add user profile properties which can be a great way to improve the people search experience and the profile experience for users. Each user can theme their profile by changing the cover photo, and there are more customization options that are coming.

4.11.5. Embrace The New SharePoint Page/Framework Experience

Office 365 is rolling out an entirely new set of pages based on responsive and modern web patterns. These pages, articles, and blogs make the editing experience easier and consistent whether you are on a tablet or a computer.

Today (May 2016) you can modify and view a variant of these pages within Delve. They are the new engine being used for Delve Blogs today.

What’s important is to design your articles, news, and content experience to have consistency with this new pattern. Using a hero image at the top of each of your article or page designs will be a good practice to connect the experience, as will using a column layout to improve responsive fluidity and flow.
4.12. Mobility & Intranet Apps

Microsoft has had mobile views and ways to interact with SharePoint on mobile devices for years. However, in Office 365 the mobile experience is even better.

4.12.1. The SharePoint Mobile App (Intranet In Your Pocket)

There is a SharePoint mobile app that enables your users to stay connected to important content, sites, portals and people from your intranet while they are on the go.

This new app is infused with intelligence from the Office Graph to help users navigate more quickly to content and people that matter to them the most.

- The Sites tab takes users to their Sites, Recent sites, and Followed sites, where they can keep up with site activity, navigate using quick launch or see recent files.
- The Links tab takes users to sites and portals programmed for everyone in the company.
- The People tab gives users access to the people they work with and visibility into what they are working on.
- Search is available throughout with clean results filtered by sites, files, and people.

In the near future in addition to the capabilities listed above company news and announcements will be brought to user’s devices. Delivering on the promise of a true Intranet app experience in your pocket. An app experience that isn’t just about the Intranet but integrated with the broader digital workplace your company is embracing.
4.13. Social Integration

Every modern and engaging Intranet needs to embrace social collaboration and social networking. How your organization integrates social into your Intranet experience on Office 365 is up to your organization.

We have many recommendations here as we have been a long-standing social collaboration and networking services partner.

The absolute most important thing is to embrace a social platform. If you are embracing Office 365, you may already be aware that Office 365 includes an industry leading enterprise social platform called Yammer.

When you integrate this into your Intranet experience it doesn’t just mean embedding Yammer into key pages, it means planning carefully for the right patterns and taking full advantage of the platforms capabilities. As one example consider using the following or a specific topic/hashtag when embedding Yammer on the Intranet homepage. By using a topic/hashtag like #YourIntranetName it allows users to self-curate the key posts they want to display on the site. Do not under any circumstance just slap/embed the all company feed on the Intranet homepage.

As another example in the image shown here, you can see a Yammer feed embedded within an Intranet page. This feed has a poll which is something Yammer natively supports. This is the kind of advanced social interaction that Yammer supports beyond a flat news feed.

4.13. Development & Debugging

Every Intranet we have ever helped customers with has had some custom development (even if that was just scripts to help configure or set things up). So be sure to understand the best practices and patterns for developing in Office 365.

Development patterns in Office 365 use a few approaches:
The SharePoint app model (Provider & SharePoint Hosted)
- Client-Side Object Model (CSOM) and REST APIs
- Office 365 APIs
- CSOM API via PowerShell or C#
- TypeScript
- WebPacks
- Webhooks
- Client-side web parts
- Custom sites on the SharePoint Framework

The development follows a better model in Office 365. It’s more scalable, sustainable, and easier to support.

Debugging and troubleshooting issues when developing customizations for Office 365 may be done with developing capabilities into what is delivered as well as using what Office 365 provides.

In special circumstances, it may require an on-premise development environment, but this should be avoided as a cost when possible. This is sometimes needed when you want to do richer diagnostic and logging to test customizations in Office 365 in a ‘similar’ environment on premise.

We could easily create an entire whitepaper on development methods, so hopefully, this will help as a starting point for many organizations looking to improve upon what Office 365 provides out of the box.

4.14. Migrating To Office 365

There are three approaches we often see taken with Intranets.

1. The first approach is to take the Intranet that has already been built on a similar platform like SharePoint Server and migrate it to SharePoint Online and Office 365 for some of the benefits mentioned throughout this whitepaper. In this model the site structure, site assets, as well as the content of the Intranet may need to be migrated.

2. The second approach is to migrate a considerable amount of content from source systems to the new Office 365 Intranet. In this model the sites and structure in SharePoint Online must be prepared and then the content (documents, files, and key articles/page content) will be migrated into the new structure.
3. The last approach is one where the Intranet is a new experience, and most articles and page content is re-written for the new environment. The only thing that needs to be migrated in this scenario is some source content where the modified, created dates, and other key metadata or permissions are meant to be retained from the source system(s).

4.14.1. Migrating Articles & Page Content

For migrating articles and page content, some organizations re-write it or do a more manually intensive copy/paste model. The reason for this is that it ensures that the content is read and provides an opportunity for minor formatting changes or improvements.

If you want to automate the migration, there are options available to you. However, most require customization or the use of a 3rd party product depending on where you are migrating from.

4.13.1. Migrating Documents & Files

The good news here is that the migration pattern of an Intranet migration of documents and files is the same pattern we use for migrating from any other store or collection to SharePoint Online, OneDrive for Business, or Office 365 Groups. We need to determine if a tool is needed and then plan out the migration.

**Do we need a 3rd party tool to support migration?**

First off this is the absolute easiest decision in the migration process. Unless you have very little content, and you don’t care about metadata (like originating author, or created date, etc.), then you will use a migration tool at some point. The only ways to natively migrate at this point are via mapped network drives or the explorer interface. You may offset the migration tool costs if you are migrating from previous versions of SharePoint, or you might offset costs on migrating content from another source system by supplementing with lower cost methods, but you always use a tool to help in the migration process (trust us it’s worth it). If you are in an extremely unlucky scenario where there is no product offering that supports migration from your source system – then you will need to build migration tooling yourself or with the support of a partner.
5. INTRANET METRICS & ANALYTICS
This section contains useful material around Intranet metrics and analytics.

5.1. Key Intranet Questions
What follows are questions that should regularly be asked and suggested ways in which the answers could be measured.

5.1.1. Which features of the intranet are most important?
Knowing which pages are most used can help to prioritize which pages should be improved or developed. You can also see which business units are the biggest intranet users and which business unit’s content is used the most.

Measure this by looking at...
Visits Reports, Unique Users Reports, Page Views & Item View Reports & Time On-Page/Site

5.1.2. Which features are not being used?
If certain pages have low usage numbers, it is an indication that either the page is not very popular, and therefore should be a lower priority to develop, or that people are just not aware of its existence (which might be a communications or "promotion" problem).

Measure this by looking at...
Page Views & Item View Reports & Document Downloads

5.1.3. Is the site navigation effective?
A high number of hits on a page that is not easily accessible from the main page indicate that the popular page should be moved up in the hierarchy.

Search results for no hits present opportunities to both promote content and search suggestions.

Measure this by looking at...
Page Views & Item View Reports
5.1.4. Which Intranet pages/sites should be archived or deleted?
Sites and pages that have not been accessed in the past 12 months might be candidates for archival or deletion if the content is no longer useful. By reducing these unused sites, it can improve navigation, search, and improve the perception of content being more current/fresh.

*Measure this by looking at...*
Visits Reports, Page Views & Item View Reports

5.1.5. What are the peak/low usage times?
Monitoring usage trends may help identify patterns or problems and potentially can alert the owners and administrators of an Intranet or site of potential user or performance issues. Ideally, before they become a problem. In Office 365 this becomes less relevant or important because performance optimization is typically handled by the platform dynamically based on usage.

*Measure this by looking at...*
Visits Reports

5.1.6. How is usage trending?
It is important to understand how usage is trending over time. Consider comparing against previous year results if you have multi-year detailed trend analysis available.

*Measure this by looking at...*
Visits Reports, Unique Users Reports, Page Views & Item View Reports & Time On-Page/Site

5.2. Key Intranet Metrics
Analytics have the ability to give intranet stakeholders amazing insights into their internal activity, but often it’s not obvious what metrics are most critical. The wealth of intranet information that analytics solutions provide can be overwhelming. There are a handful of metrics you can begin using immediately to analyze, engage, and enhance your intranet portal. Here are the basic ones you should be reviewing, sharing and acting upon.
5.2.1. Unique Users Reports
The total number of individual users who visit a site during a specific period, not counting repeat visits by the same individual.

*How is this used?*
Unique user data shows if your content is successfully driving users to the intended sites. An upward trend over time is indicative of a useful intranet to users. If your unique user count is stagnant, you may need to reassess your intranet strategy or perhaps offer to train to users with lower adoption rates.

5.2.2. Visits Reports
This shows the number of times your visitors have been to your site (unique sessions initiated by all your visitors).

*How is this used?*
Gaining access to the number of times a user accesses a site is an indication of how much traffic a specific site is attaining.

5.2.3. Page Views & Item View Reports
Displays the number of page views for a specific intranet site or item.

*How is this used?*
Utilize Page Views reports to understand which pages in the portal are attracting users, and what content is most popular. If you’re trying to drive users to a specific site/page, and you see they’re not accessing it, a new strategy should be implemented.

5.2.4. Unused Content Reports
Displays the content that has not been viewed within a specific period (make sure your reporting tool can provide data on content with 0 page views).

*How is this used?*
Once you understand which content is not being used, you can take action! If the content is not needed delete or archive it. If it’s needed and users don’t know how to access it, make sure you have linked to this content from your home page or other main pages.
5.2.5. Recently Viewed Reports
This report lets you see the recently viewed SharePoint pages or documents.

_How is this used?_
Recently Viewed Reports are useful for understanding what areas of the portal are most relevant to users in the most recent period. If you see that many people are visiting a specific document, create a button for it on the homepage to assist your users in their portal experience.

5.2.6. Search Reports
The top search phrases entered within the portal.

_How is this used?_
Maximizing the effectiveness of your search engine is critical for enhancing the overall performance of your intranet. This report shows you exactly what users are searching for within the portal. Understanding the most common search terms can help you determine what content people are usually looking for and perhaps can’t find in an easy way. Leverage these insights to create navigation paths and easy ways for users to access popular content. Linking popular content from the intranet home page can save your users time.

5.2.7. Failed Search Reports
The number of times a term was searched and retrieved 0 results.

_How is this used?_
The failed searches report uncovers search terms that retrieve no results or so many that people are wasting lots of time browsing through hundreds of results. Once you can identify what searches are retrieving 0 results, you can optimize the search for these phrases. You may notice that searches return far too many results which may lead to selecting an option after scrolling through several pages. For these situations you can modify the results to make sure the popular or key ones appear on the first page of search results and help save user’s time.

5.3. Intranet Reporting In Office 365
There are a considerable number of ways to report on data within Office 365. Since almost all actions within Office 365 are audited and tracked you can export the data for rich reporting,
use third party tools or customize reports based on the APIs available, or use the OOTB reporting options available.

It’s important to understand that the reporting capabilities in Office 365 continue to undergo improvements. One of our favorite features coming is the display of site statistics and the continued exposure of document popularity in the new site contents page.

### 5.3.1. Office 365 Reports

This section outlines capabilities that exist in Office 365 for reporting and sharing data about usage.

Within the Protection Center site, you can view user activity reports such as sign-ins for SharePoint Online, Exchange Online, and Azure Active Directory.

Some potential reports that are actionable when sharing the impact and value of Office 365 are the Auditing Reports contained within the Protection Center.

**Office 365 Audit Log Report**

You can search the Office 365 audit log for user and admin activity in your Office 365 organization. The report contains entries user and admin activity in Exchange Online, SharePoint Online, OneDrive for Business, and Azure Active Directory, which is the directory service for Office 365.
Need to find if a user viewed a specific document or purged an item from their mailbox? If so, you can use the Office 365 Protection Center to search the unified audit log to view user and administrator activity in your Office 365 organization. Why a unified audit log? Because you can search for the following types of user and admin activity in Office 365:

- **User activity in SharePoint Online and OneDrive for Business**
- User activity in Exchange Online (Exchange mailbox audit logging)
- **Admin activity in SharePoint Online**
- Admin activity in Azure Active Directory (the directory service for Office 365)
- Admin activity in Exchange Online ([Exchange admin audit logging](#))

You can search the Office 365 audit log for activities that were performed within the last 90 days.

**File And Folder Activities**
The following table describes the file and folder activities in SharePoint Online and OneDrive for Business.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessed file</td>
<td>User or system account accesses a file. When a user or the system performs an operation on a file, the file has to be located and accessed. This event indicates that retrieval action. Note that many file and folder related events will have one or more corresponding Accessed file entries.</td>
</tr>
<tr>
<td>Checked in file</td>
<td>User checks in a document that they checked out from a document library.</td>
</tr>
<tr>
<td>Checked out file</td>
<td>User checks out a document located in a document library. Users can check out and make changes to documents that have been shared with them.</td>
</tr>
<tr>
<td>Copied file</td>
<td>User copies a document from a site. The copied file can be saved to another folder on the site.</td>
</tr>
<tr>
<td>Deleted file</td>
<td>User deletes a document from a site.</td>
</tr>
<tr>
<td>Discarded file checkout</td>
<td>User discards (or undos) a checked out file. That means any changes they made to the file when it was checked out are discarded, and not saved to the version of the document in the document library.</td>
</tr>
</tbody>
</table>
### Sharing Activities

The following table describes the user sharing activities in SharePoint Online and OneDrive for Business.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Created sharing link</strong></td>
<td>User creates a link to a shared file in SharePoint or OneDrive for Business. This link can be sent to other people to give them access to the file. A user can create two types of links: a link that allows a user to view and edit the shared file, or a link that allows the user to just view the file.</td>
</tr>
<tr>
<td><strong>Disabled sharing link</strong></td>
<td>User disables (permanently) a link that was created to share a file.</td>
</tr>
<tr>
<td><strong>Shared file or folder</strong></td>
<td>User shares a file or folder located in SharePoint or OneDrive for Business with another user inside their organization.</td>
</tr>
<tr>
<td><strong>Unshared file or folder</strong></td>
<td>User unshares a file or folder that was previously shared with other users. This event is logged when a user stops sharing a file with other users.</td>
</tr>
</tbody>
</table>
**Invitation And Access Request Activities**

The following table describes the activities when users share content by sending or requesting access invitations in SharePoint Online and OneDrive for Business.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepted invitation</td>
<td>The recipient of an invitation to view or edit a shared file (or folder) has accessed the shared file by clicking the link in the invitation.</td>
</tr>
<tr>
<td>Access request expired</td>
<td>If a site administrator or owner doesn’t accept or reject a request by a user to access a site or document, the request will expire after 7 days.</td>
</tr>
<tr>
<td>Approved access request</td>
<td>The site administrator or owner of a site or document approves a user request to access the site or document.</td>
</tr>
<tr>
<td>Created access request</td>
<td>User requests access to a site or document that they don’t have permission to access.</td>
</tr>
<tr>
<td>Created invitation</td>
<td>User sends an invitation to another person (inside or outside their organization) to view or edit a shared file or folder on a site. The details of the event entry identifies the name of the file that was shared, the user the invitation was sent to, and the type of the sharing permission selected by the person who sent the invitation.</td>
</tr>
<tr>
<td>Declined access request</td>
<td>The site administrator or owner of a site or document declines a user request to access the site or document.</td>
</tr>
<tr>
<td>Expired invitation</td>
<td>An invitation sent to an external user expires. By default, an invitation sent to a user outside your organization expires after 7 days if the invitation isn't accepted.</td>
</tr>
<tr>
<td>Re-sent invitation</td>
<td>The user who created and sent an invitation to another person to view or edit a shared file (or folder) on a site resends the invitation.</td>
</tr>
<tr>
<td>Withdrew invitation</td>
<td>The site administrator or owner of a site or document withdraws an invitation that was sent to a user outside your organization. An invitation can be withdrawn only before it’s accepted.</td>
</tr>
</tbody>
</table>
### Synchronization activities

The following table lists file synchronization activities in SharePoint Online and OneDrive for Business.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Allowed computer to sync files</strong></td>
<td>User successfully establishes a sync relationship with a site. The sync relationship is successful because the user's computer is a member of a domain that's been added to the list of domains (called the safe recipients list) that can access document libraries in your organization. For more information about this feature, see <a href="#">Use Windows PowerShell cmdlets to enable OneDrive sync for domains that are on the safe recipients list</a>.</td>
</tr>
<tr>
<td><strong>Blocked computer from syncing files</strong></td>
<td>User tries to establish a sync relationship with a site from a computer that isn’t a member of your organization’s domain or is a member of a domain that hasn’t been added to the list of domains (called the safe recipients list) that can access document libraries in your organization. The sync relationship is not allowed, and the user’s computer is blocked from syncing, downloading, or uploading files on a document library. For information about this feature, see <a href="#">Use Windows PowerShell cmdlets to enable OneDrive sync for domains that are on the safe recipients list</a>.</td>
</tr>
<tr>
<td><strong>Downloaded file changes to computer</strong></td>
<td>User successfully downloads any changes to files from a document library. This activity indicates that any changes that were made to files in the document library were downloaded to the user’s computer. Only changes were downloaded because the document library was previously downloaded by the user (as indicated by the Downloaded files to computer activity).</td>
</tr>
<tr>
<td><strong>Downloaded files to computer</strong></td>
<td>User establishes a sync relationship and successfully downloads files for the first time to their computer from a document library.</td>
</tr>
<tr>
<td><strong>Uploaded file changes to document library</strong></td>
<td>User successfully uploads changes to files on a document library. This event indicates that any changes made to the local version of a file from a document library are successfully uploaded to the document library.</td>
</tr>
</tbody>
</table>
library. Only changes are unloaded because those files were previously uploaded by the user (as indicated by the Uploaded files to document library activity).

| Uploaded files to document library | User establishes a sync relationship and successfully uploads files for the first time from their computer to a document library. |

### 5.3.2. SharePoint Metrics & Analytics

This section contains useful material around SharePoint metrics and analytics.

SharePoint has quite a few analytics that can be leveraged for planning, improving, and measuring how it is being used.

**If you are going the custom solution route...**

Though it is rare, we recommend investing in customized analytics solutions. Analytics should be built into custom solutions implemented in your environment (by the development team involved). However, the amount of effort required to develop an effective analytics solution for SharePoint Online is too prohibitive, especially considering the low priced alternatives and continued investment coming from Microsoft in this space.

**If you are going the 3rd party route...**

There are some great reasons you might invest in 3rd party analytics and reporting.

**Webtrends Analytics for SharePoint**

Webtrends for SharePoint is developed as a unique data collection process for SharePoint that ensures that the right data is captured, enabling comprehensive reporting with little effort, including SharePoint-specific reporting on web parts, authenticated users, onsite search, breadcrumbs, and more.

With the Webtrends Analytics for SharePoint offering, organizations will be able to:

- Effectively understand SharePoint site usage
- Pinpoint areas for optimization, from system navigation and usability to content effectiveness and onsite search behavior
- Facilitate collaboration and optimize communications.

**Further Reading:**
IntLock
CardioLog Analytics is designed for SharePoint (versions 2013, 2010, 2007 and 2003) and SharePoint Online. It enables to improve the usability of your intranet, drive portal collaboration, boost your ROI and enhance the overall productivity of your business. Features are:

- **Built for SharePoint:** CardioLog Analytics is designed specifically for use with Microsoft SharePoint sites - including intranet portals, extranet, and websites.
- **On-premises and on-demand solution:** Can be used for on premise and for SharePoint Online taking advantage of cloud-based resources.
- **Custom dashboards:** User-friendly dashboards display summaries of reports in the form of widgets on a single page, allowing user to track various metrics at once
- **Content drill down:** Drill deep into a specific section or sub-section of a site, even down to the level of single pages and documents, for a richly detailed analysis.
- **Integration with Active Directory and SharePoint user profiles:** CardioLog Analytics automatically imports information on the employees and partners who use intranet portal from the data stored in Active Directory and SharePoint user profiles. This enables you to filter easily and control the scope of your reports and to create visitor segments that can be used to deliver personalized content.

Further Reading:


**Pricing:**
Free trial offering available to all enterprise organizations.

For more information, please check out their website, email contact@statinsight.com, or try the free trial product available on their website.

**DocAve Report Center**
DocAve Report Center for Microsoft SharePoint presents administrators, business stakeholders, and content owners a comprehensive understanding of their SharePoint platform or site's
usage, topology, performance, and storage trends while generating customizable reports and alerts. These are the tools administrators need to obtain the knowledge vital for delivering optimal platform performance and successful strategic planning.

DocAve Report Center simplifies administrative and management procedures to enables more proactive and intelligent decisions by:

- Reporting on SharePoint sites, users, storage, and activity in real-time or on a scheduled basis
- Producing actionable reports on SharePoint users, security, and content
- Enabling administrators to configure customizable, proactive alerts to be notified immediately if activity, storage, or network usage thresholds are met
- Monitoring access to, and usage of, SharePoint and its content, delivering vital compliance intelligence based on enterprise governance policies

Further Reading:


Metalogix

ShareGate

**Breakdown Of SharePoint Metrics**

What follows are key metrics used in SharePoint and where applicable some basic guidance around those metrics.

**SharePoint Usage & Search Reporting**

SharePoint 2013 and SharePoint Online generate usage reports through Excel queries. Each report shows historical data on hits and unique users. It’s possible to view this data at a site collection and site scope. It is also possible to view this data for a specific document or page.

Accessing this data for the site collection and site is done through the site settings page.
For a specific page, you can access the popularity trends through the ribbon, under the “Share & Track group:

Finally, it is possible to view reports via the SharePoint Admin Center (for SharePoint Online customers):

1. Sign into the Office 365 Admin Center as a search administrator.
2. Choose Admin > SharePoint. You’re now in the SharePoint admin center.
3. Choose search.
4. Choose View Usage Reports.
5. Click a link on the page to retrieve a report. The report opens in an Excel spreadsheet or in another program that you can find online.
SharePoint Reporting Options

Usage analytics alone do not directly measure business value, but they can be especially useful in providing guidance to where users are getting value and to help spot content problems, risks, or areas for improvement.

The following are the available reports for SharePoint.

- **Usage**: This report shows historical usage information about the site collection, such as the number of views and unique users. Use this report to identify usage trends and to determine times of high and low activity.
  - **Number Of Unique Users**: This metric provides a proxy for adoption, which is a loose proxy for value. Initially, you will want to see the number of unique users go up each month after a launch. If you know the target audience size, you can compare this number with the total number of employees who should use the site to get an approximation of your success in visitor and participant diversity (typically expressed as a percentage of the total target).
  - **Most Viewed Pages/Sites**: This metric provides a proxy or indication for what content is most valuable. Sites/pages not being used help identify content that might either need to be promoted or deleted.

- **Number of Queries**: This report shows the number of search queries performed. Use this report to identify search query volume trends and to determine times of high and low search activity.

- **Top Queries by Day**: This report shows the most popular search queries. Use this report to understand what types of information visitors are seeking. This often identified “trending” content. Searches with good results suggest value for users and indicate adoption. Successful searches indicate that the portal is delivering content users need. These queries can also provide insights about what content should be promoted to the home page or a more visible location.

- **Top Queries by Month**: This report shows the most popular search queries. Use this report to understand what types of information visitors are seeking. This often identified “trending” content. Searches with good results suggest value for users and indicate adoption. Successful searches indicate that the portal is delivering content users need. These queries can also provide insights about what content should be promoted to the home page or a more visible location.

- **Abandoned Queries by Day**: This report shows popular search queries that received low click-through. Use this report to identify search queries that might create user dissatisfaction and to improve the discoverability of content. Then, consider using query
rules to improve the query's results. This can also identify emerging business terms or concepts.

- **Abandoned Queries by Month**: This report shows popular search queries that received low click-through. Use this report to identify search queries that might create user dissatisfaction and to improve the discoverability of content. Then, consider using query rules to improve the query’s results. This can also identify emerging business terms or concepts.

- **No Result Queries by Day**: This report shows popular search queries that returned no results. Use this report to identify search queries that might create user dissatisfaction and to improve the discoverability of content. Then, consider using query rules to improve the query’s results. This can also identify emerging business terms or concepts.

- **No Result Queries by Month**: This report shows popular search queries that returned no results. Use this report to identify search queries that might create user dissatisfaction and to improve the discoverability of content. Then, consider using query rules to improve the query’s results. This can also identify emerging business terms or concepts.

- **Query Rule Usage by Day**: This report shows how often query rules trigger, how many dictionary terms they use, and how often users click their promoted results. Use this report to see how useful your query rules and promoted results are to users.

- **Query Rule Usage by Month**: This report shows how often query rules trigger, how many dictionary terms they use, and how often users click their promoted results. Use this report to see how useful your query rules and promoted results are to users.

**Most Popular Items**
To identify usage trends and find out at what times activity is high or low, you can view Popularity Trends reports for a site or a site collection. The reports show historical usage information, such as number of views (hits) and unique users per day or month. Popularity Trends for a page or an item in a library show how many views the page or item has had recently.

You can also view the Most Popular Items in a library. You’ll see which items have the most views, either recently or ever (from the first time the item became available.)

To access this functionality within a document library, click the “Most Popular Items” button in the ribbon:
Once you click this button, you'll get search results for the document library which you can view by:

- **Most Viewed:** Which displays the results sorted by the number of times they have been viewed. This can be a proxy for helping identify the most valuable content.
- **Most Viewed By Unique Users:** This adjusts the sort order count to only count a user view once.
- **Most Recommendation Clicks (Based on Usage Patterns):** This counts recommendations clicked (when a search returns a result) instead of just counting the views of content.

### 5.3.3. Yammer Metrics & Analytics

This section contains useful material around Yammer metrics and analytics.

**Yammer Analytics Recommendations**

Currently, Yammer Analytics and Leaderboards are being deprecated and will no longer be an investment area in their current form from Microsoft. Instead, Microsoft is investing in the new Office 365 Analytics Dashboard, which will contain many of these analytics and more.
In the new Office 365 Analytics Dashboard, Office 365 admins can select a customizable date range and track usage from across each workload. For those interested specifically in Yammer, they can find reports detailing total public and private messages, activity trends, top users, and more.

Since reporting is limited (as of January 20, 2016) on Office 365 for Yammer we encourage using either 3rd party solutions or implementing your own Power BI based solution.

**If going the custom solution route...**

Yammer has high-level metrics, the ability to export data, and APIs that provide you with all the reporting you could need. To effectively use this many administrators may want to look at taking the standard data export of Yammer and add additional detail/reporting. Richard diZerega has written a sample export utility that can be hosted in Azure to export and provide additional details in a format more readily supported by Power BI and Excel. He also created a sample Yammer Power BI workbook that should help your IT team get started.

*Read about how to get advanced Yammer Analytics data with Power BI from Richard*

*Download the pre-built YammerPowerBI.xlsx workbook*

*Download the code for the Yammer Export Processor as a Visual Studio solution*

*If interested, we can work with your IT teams to implement a solution like this.*

However, it may be difficult to implement this solution as it requires advanced development techniques and the code will need to change as Yammer APIs undergo continued updates.

For many customers, it may be better to use 3rd party tools for this reason.

**If going the 3rd party route...**

Microsoft works closely with the following partners to provide additional reporting and insight. StatInsight, Tryane, and tyGraph to fill the reporting void and give Yammer champions the granular metrics they've been so patiently waiting for. All three are available to begin using for free today in the Yammer App Directory.
**StatInsight**

StatInsight's Freemium offering -- *Stat* -- gives all users in your network an intuitive and interactive dashboard out of the box. In case users from across your company need to capture Yammer metrics, regardless of if they are a Yammer admin or not, *Stat* makes it easy to get network and group level data across any device. *Stat* also provides basic analytics such as leaderboards and top groups, as well as rich data such as group activity and adoption and engagement rates. Finally, StatInsight supports custom reports and can provide consultative support to successfully grow your network.

**Pricing:**
Freemium offering available to all users. For granular metrics regarding group activity and more, a premium package is required.

For more information, please check out their [website](#), email [contact@statinsight.com](mailto:contact@statinsight.com), @mention Kaushal Doshi in the Office 365 Network, or try the freemium product available in the Yammer App Directory today.

**Tryane**

Tryane's analytics solution lets Yammer admins get more insights on their social activity. Unique to Tryane is the ability to easily grant access to community managers who will be able to analyze their groups’ key facts in depth. Using its proprietary algorithms Tryane allows you to identify your true influencers based on their impact on other members rather than just their number of posts.

With Tryane, you will be able to assess adoption rates across departments, identify social champions, discover trending topics, get extensive group-level KPIs and much more. To help evaluate engagement across roles, Tryane also allows users to import their org models and benchmark users on any key performance indicator (KPI).

**Pricing:**
Tryane provides Verified Admins access to all essentials KPIs. For deeper analytics, users need to upgrade to the premium version.

To get started check out their [website](#), email [contact@tryane.com](mailto:contact@tryane.com), join the [Tryane customer network](#), @mention Nicolas Saliba in the Office 365 network, or try the freemium product available in the Yammer App Directory today.
tyGraph

tyGraph’s proprietary Measure of Active Engagement (MAE Score) gives network admins a comprehensive understanding of network and group engagement. tyGraph also provides the option to combine your Yammer data with other data sets to provide more meaningful metrics (e.g. compare the engagement of EMEA's leadership team with APAC's). tyGraph is available as a hosted solution or as a private cloud. Lastly, tyGraph gives you the option to create custom reports so admins can design reports that matter most to them.

Pricing:

Any Yammer Verified Admin can use the full version of tyGraph free for 15 days. To learn more please visit their website, email tygraph@unlimitedviz.com, mention Dean Swann in the Office 365 Network, or try the freemium product available in the Yammer App Directory today. For a short video, please click here.

Smarsh

Smarsh enables a unified compliance and e-discovery workflow across all content types within an organization. Many organizations would like to take advantage of the increased cross-department collaboration and employee engagement that Yammer brings, but risk management considerations have loomed as too large of an adoption barrier. Smarsh enables organizations to archive and produce Yammer files and communications in support of e-discovery, compliance, and recordkeeping initiatives.

Through a direct relationship with Microsoft, Yammer content is ingested in its native format. Smarsh preserves and indexes each unique element or related object of a messaging type, rather than flattening or shoehorning non-email messages into the body of an email. By ingesting data intelligently, Smarsh introduces a series of advantages to the search and review process. The Archiving Platform also provides a contextual view – meaning users can view the full context of the conversation including comments and files added subsequently to the original post.

Pricing:

Smarsh offers a free demo that can be requested from their website. To learn more, please visit their website which includes a breakdown of pricing and features in the features and services matrix.
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Feedcop
Feedcop offers security, compliance, and controls for your Yammer network. Feedcop discovers, manages and protects your enterprise's confidential data through always-on monitoring and policy enforcement for Yammer. Feedcop makes it easy to gain visibility into public or private conversations and files through round-the-clock monitoring which analyzes all Yammer traffic. Create policies that can automatically notify users, delete, flag or hashtag messages and files which match a pattern or keywords. Automatically route conversations to internal teams, delete content that is against policy, add hashtags to messages or manage the use of Yammer files. Helps you demonstrate compliance with regulations by removing or flagging Yammer content that is against policy.

Pricing:
Feedcop offers a free demo that can be requested from their website. To learn more, please visit their website which includes a breakdown of pricing and features.

Breakdown Of Yammer Metrics
What follows are key metrics used in Yammer and where applicable some basic guidance around those metrics.

Important On May 14, 2015, Microsoft announced that Yammer will be retiring the Yammer Analytics Dashboard and Leaderboards. These features will be replaced with the Office 365 Analytics dashboard and some third-party applications. To learn more about this change, read the announcement on the Office 365 Network.

The Analytics Dashboard App (Yammer)
The Yammer dashboard allows you to see a set of analytics over the past 7 or 28 days.

The following sections are included in the dashboard:
- **Overview:** This displays a quick overview of the network. It will show how much your network has grown by regarding the Likes, Members, Messages, Files and Notes added to your network.

- **Members:** This shows basic member engagement. Engagement is measured as any form of network activity, including posts, replies, likes, expanding a post or viewing group feed. A graph and a comparison to the previous period is included so you can determine if you are trending in the right direction. New members and total members (all time) are also listed.

- **Messages:** This shows the number of messages posted on the network. Information about private, group and total (all time) messages are also displayed and available for viewing by filtering the chart displayed.

- **Groups:** This section displays the number of active groups with a graph to show this over time. Additional information about new groups, public, private and total number of groups (all time) is included.

- **Top Public Groups:** This was a listing of the top 5 groups based on the messages posted. Displays the messages and number of people creating these posts.

- **Files:** This was a way to view the number of files uploaded in this period, with a graph to show the change over time. Also lists the number of file views and total files uploaded.

- **Notes:** This was a way to view the number of notes created in this period and the graph for the visual. Notes edited, viewed and total are also broken out.

- **Access:** Within this section there are bar graphs and pie charts showing how your Yammer network is accessed and what applications they use to post messages. You can also view a pie chart of the types of mobile clients accessing the network.
The Leaderboard App (Yammer)

The leaderboard is a Yammer application that gives users access to statistics about their network over a range of time spans. This report displays a list of sections showing the top 3 people for some network engagement related measures and can be expanded to show up to 10 members. Each measure can be selected to display results for the last 24 hours, seven days, 28 days, or All Time. The measures included in the leaderboard report are listed below.

- **Most Liked Members**: Top 10 users whose messages have received the most "Likes".
- **Most Replied to Members**: Top 10 users whose messages have received the most replies.
- **Members with the Most Posts**: Top 10 users who have the most public messages posted.
- **Most Replied to Conversations**: Top 10 threads that have the most replies.
- **Conversations with the Most Participants**: Top 10 threads that have the most participants.

Additional Yammer Metrics Available Via Custom or 3rd Party Solutions

Due to the discontinued nature of Yammer Analytics Dashboard & Leaderboards and until capabilities are richer within Office 365 Analytics it may be needed (and is recommended) to utilize 3rd party products or to use the data from an export to get additional insight into your Yammer network.

What can you do beyond what is described in the Yammer Apps above?

These are just examples of the many things possible when you go beyond OOTB capabilities provided by Yammer and Microsoft. By extending them with exports and Power BI or 3rd party apps you can:

- **Yammer data can be reviewed over longer periods of time.**
  - This can also include more trending information.
  - Example: Are the number of messages per user or threads per user increasing or decreasing over the course of months or a year?
- **Tag mention counts can be represented in a variety of ways.**
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- This can help identify popular #tags that are used within Yammer.
- It is a critical metric when supporting campaigns, contests and other activities that use #tagging as a way to document successes, completion, or key activities/requests.

**Count of Yammer likes and the ability to correlate this data.**
- While a weak engagement metric, it can indicate a volume of participation that is indicative of how much interaction might be going on in your Yammer environment. Many lurkers like content, but don’t necessary post a reply. This data is more useful when it can be determined based on a group, topic correlation, or based on the number of likes in total a user gets for their topics.

**Yammer Group activity details that are invaluable for Group Admins such as:**
- The number of members of a Group.
- The number of posts within a Group.
  - Yammer posts by location (geographic distribution).
  - Yammer post response times.
    - By showing the number of minutes, hours or days, it takes to reply it can help indicate the level of responsiveness for the Yammer network, group or about a monitored tag (like #Help).
    - Advanced analysis may also be possible helping outline message volume impact on time to respond.
- The number of replies within a Group.
  - Advanced analysis can also show how long replies take based on some correlations.
- The number of likes within a Group.
- The number of shares within a Group.
- The number of attachments within a Group.
- Identification of groups that are inactive.

**Yammer user details that greatly help understand user growth/investment such as:**
- Yammer user praise count which can help identify the most praised users within a specific time frame.
- Yammer user follower counts to help determine which users are most influential.
  - Understanding who is following a user can also be useful information. By looking at users who are following and being followed additional insight can be provided such as common topics/subjects that they are liking or common users they praise and follow.
- Total likes by username which can indicate how often this user reads or consumes other Yammer content.
Total shares by username which can indicate the amount that a user curates or shares posts/content with other groups or users.

- The number of times a user is mentioned in Yammer posts.
  - This can help identify users who are engaged more or are individuals who could use additional support around Yammer.

**Yammer content details such as:**

- Content growth and contributions count.
  - Keeping in mind that Yammer is great for “Official” content that will not need to change this can help understand whether additional guidance should be provided to encourage users to use collaborative platforms like SharePoint for content that undergoes more changes.

- Content’s follower and share count which can be used to help determine what content may be the most influential.

**External Networks Activity as OOTB this is not as robust.**

**Sentiment analysis of posts and content.**

- Potentially (if sentiment analysis is also used) it can also provide sentiment information based on Yammer posts. This can help share whether sentiment overall is positive, or sentiment is positive based on specific tags/groups.

**Recommended Yammer User Types**

Example breakdown of Yammer recommended user reporting:

- **Inactive User:** Inactive users are important as they are users who may need additional awareness support for Yammer. It is possible to identify a user as inactive if they have performed no new posts, liked, or visited Yammer in the last month.

- **Lurker:** Lurkers may be important users as they visit and consume Yammer content but do not contribute actively to it. A lurker may be identified as a user who has visited Yammer within the last month but who has contributed nothing in the form of Yammer posts, likes, or content.

- **Active User:** These users are important to track and encourage more participation. Active users contribute at least one message or have liked at least one thing in the past month. In some organizations, a further breakdown of Active User types is identified to better measure growth and the social network’s impact.

- **Very Active Users/Champions:** These users are much more active and tend to be regular contributors. They make great champion or influencer targets. These users typically contribute more than ‘Active Users’. The amount or identifier for these users can vary but as a baseline, they should contribute more than ten times in the last month.
6. RECOMMENDED NEXT STEPS

Many organizations are shifting towards a more connected, engaged and innovative workforce. This is made possible by investing in and enabling your workforce with digital workplace technologies and a modern Intranet experience.

Some businesses have a plan to enable this through various enterprise technology investments and organizational initiatives. However, engaging the workforce can take years and may be seen as a future initiative for some organizations. When so many organizations are firefighting or reactively responding to employee needs it can be difficult to provide employees with the kind of Intranet experience that enables that workforce to be successful.

As an example see the diagram below which might be a high-level representation of an organization's workforce goals for upcoming years.

One of the primary benefits of Office 365 as a proven digital workplace technology is that it can help accelerate and enable (with relatively low cost) the kind of digital experiences that modern users need. Instead of engagement and innovation being future goals for the business we have found that the deployment and adoption of Office 365 and a modern Intranet can shift the above timeline to months or quarters instead of taking entire years to accomplish many of the key technology changes and user behavior transformations needed.

The intranet is at the epicenter of many organizations, as the place where employees can get company news and information, plus search for people and content.
Together we can make the intranet a more personalized experience, one that is where users need it when users need it. Spanning on-premises and Office 365, the mobile and intelligent intranet brings together the productivity of SharePoint team sites, the broadcast reach of publishing sites and portals, and the mission criticality of your most important business applications. All of this is done while being accessible from your desktop to your mobile phone. Lastly Office 365 powered Intranets are powered by the Office Graph, so information finds your users, instead of your users having to find information.

Meeting modern workforce needs today is challenging. Keeping up with the demand and the needs of your future workforce is often seen as impossible.

An Intranet that is powered by Office 365, or that is implemented on Office 365 allows you to take advantage of the many related digital workplace enhancements Microsoft continually rolls out.

It’s not just that you have a cloud powered Intranet. It’s that you have an Intranet that leverages, integrates and uses as much of what Microsoft provides as possible so that your Intranet remains continually up to date and able to take advantage of the continued innovation Microsoft produces.

Not only is it possible to embrace Intranets on Office 365, but with the guidance in this document or a trusted partner you should be able to do it in less time, and with less effort than almost any previously successful Intranet initiative you have undertaken.

The timing couldn’t be better for your organization to begin the shift, or further embrace Office 365.

**NOTE:** We tried throughout this Whitepaper to not highlight our services, but this is a subject we are passionate about and help hundreds of organizations with (and have won awards for). Please do not hesitate to give us a shout at Hello@2toLead.com if you are interested in getting some additional advice or assistance from our team of experts. It never hurts to ask.
7. RESOURCES

In the writing of this whitepaper many additional pages were written but were broken out to help reduce the length. There is always more content out there, what follows are some examples and resources that compliment what is written within this whitepaper.

7.1. Our Whitepapers & Related Resources

A few of our popular (and comprehensive) whitepapers:

- **“When To Use What” In Office 365** – This 70+ page whitepaper is a guide around providing the right kind of enterprise user guidance for Office 365.
- **External Sharing With Office 365: What You Need To Know** – This 30+ page whitepaper outlines all of the key decisions and how to make them when it comes to enabling external sharing in Office 365, and when/where you may want to configure or extend those capabilities.
- **Measuring The Business Impact & ROI Of Office 365** – This 60+ page whitepaper outlines many key considerations around how to measure the impact Office 365 has on a business, while also outlining the ways Office 365 provides effective reporting capabilities today.
- **Driving Office 365 Adoption & Usage: What You Need To Know** – This 70+ page whitepaper outlines all of the key considerations when planning and improving Office 365 technology and end user adoption.

Many other great resources and samples can be found and are regularly posted on our resource site at [http://Office365Resources.com](http://Office365Resources.com).

7.2. Recommended Industry Perspectives

There are great reports and articles on what’s new in Intranets, what is innovative, and what makes for an award-winning Intranet. Looking for more interesting perspectives on what makes a good Intranet? Be sure to check out the latest trends in popular annual reports like [Nielsen Norman report on Intranet design for 2015](http://NielsenNorman.com), or it’s [2016 report](http://NielsenNorman.com) and [Step Two’s report on Intranet Innovations](http://StepTwo.com), which is well worth a read.

7.3. Recommended Technology Reading

What follows are technical references and resources that we suggest reading more about:
• Site Provisioning
  o Use the Remote Provisioning technique to deploy your artifacts and IA to SharePoint (https://msdn.microsoft.com/en-us/pnp_articles/pnp-remote-provisioning)
  o Implement the PnP Partner Pack for a basic Site Provisioning sample (https://github.com/OfficeDev/PnP-Partner-Pack)

• Customize UI of your SharePoint site
  o Use modern techniques to change the look & feel of your sites
    ▪ Use AlternateCssUrl for CSS (https://github.com/OfficeDev/PnP/tree/master/Samples/Branding.InjectResponsiveCSS)
  o Use Responsive Design to be available on any platform
    ▪ You can use the basic Responsive Framework of the PnP Partner Pack (https://github.com/OfficeDev/PnP-Tools/tree/master/Solutions/SharePoint.UI.Responsive)
    ▪ Responsive design is supported in the new SharePoint Framework and will incorporate in the SharePoint App (iOS, Android, Windows Phone)

• Jobs and Long running processes
  o Go Asynchronous and manage your long running processes from Azure using components such as :
    ▪ WebJob
    ▪ Queues
    ▪ Can be used to enforce Governance rules. Here are a few examples:
      • 2 Administrators for every Site Collection
      • Enforce global branding
      • Mange site lifecycle policies
  o Instead of using the classic Remote Event Receivers that are triggered on list events, please start looking at the new webhooks that leverage a modern approach to this problem (https://github.com/SharePoint/sp-dev-samples/tree/master/Samples/WebHooks.List)
• Search
  o Use search to do content roll ups to get better (https://msdn.microsoft.com/en-us/pnp_articles/search-customizations-for-sharepoint)
    ▪ Performance
    ▪ Maintenance
    ▪ Supportability by Microsoft
  o Leverage the search Community Display Templates framework for content roll ups (https://github.com/SPCSR/DisplayTemplates/tree/master/Search%20Display%20Templates)
• Apps / Add-Ins
  o To inject your app in the context of a SharePoint page, start leveraging the SharePoint Framework (https://github.com/SharePoint/sp-dev-docs)
  o Use Provider-Hosted apps hosted in Azure for anything else that would need more “power” (https://msdn.microsoft.com/en-us/pnp_articles/move-o365api-project-from-dev-to-prod)
• Manage your user profiles
  o Keep your Hi-Def profile pictures in sync with CSOM to ensure the best quality possible in your SharePoint User Profile (https://msdn.microsoft.com/en-us/pnp_articles/upload-user-profile-pictures-sample-app-for-sharepoint)
  o On your way to Office 365, migrate your profiles with he built-in APIs (https://msdn.microsoft.com/en-us/pnp_articles/migrate-user-profile-properties-sample-app-for-sharepoint)
• Guidance
  o Do not use anything related to Sandbox solutions, especially anything with code. This was deprecated and will not work. Use the transformation guidance to move your code from Sandbox to the appropriate Office 365 solution (https://msdn.microsoft.com/en-us/pnp_articles/sandbox-solution-transformation-guidance) and ensure to grab all your sandbox solutions from your tenant (https://github.com/OfficeDev/PnP-Tools/tree/master/Scripts/SharePoint.Sandbox.ListSolutionsFromTenant)
  o The feature framework is being deprecated. Please use the Remote Provisioning techniques to publish your artifacts and use the PnP provisioning format (https://msdn.microsoft.com/en-us/pnp_articles/pnp-provisioning-schema)
8. ABOUT 2TOLEAD

2toLead has been labelled as a generous Microsoft consulting company by its clients and employees. 2toLead employs trusted, passionate and experienced consultants who work hard to solve the most challenging business and technology problems that face our clients.

The Top 3 Ways 2toLead Helps Customers:

1. **INCREASE ADOPTION** by going far beyond just deploying things right and ensure your organization is being pro-active in getting the maximum value out of your technology investments.

2. **LEVERAGE THE CLOUD** to reduce costs, improve business agility and capabilities inside and outside of your organization by leveraging cloud technology like Office 365 and Azure.

3. **IMPROVE EXPERIENCES & ENGAGEMENT** by understanding where, how, and why users interact with your business while building world-class portals, social networks and websites that your customers, partners and users love.

The reason 2toLead is called a generous consulting company is that when we hire employees, it is extremely important to us that they are both passionate about technology and generous people. The generosity of our employees is a critical reason for why we are so successful. Most of our customers hire us to ‘give advice’ and we believe the give portion of that statement is just as important as the advice portion.

For more information:

- Visit our website at [www.2toLead.com](http://www.2toLead.com)
- Follow us on [LinkedIn](https://www.linkedin.com)
- Like us on [Facebook](https://www.facebook.com)
- Follow us on Twitter [@2toLead](https://twitter.com/2toLead)
Kanwal Khipple

Kanwal, Founder & CEO of 2toLead, is a leading User Experience expert within the SharePoint industry, with experience in building award-winning portals and solutions that take advantage of Microsoft’s Cloud platform (SharePoint, Office 365 & Azure). Kanwal’s drive for success as the Creative and Technical Lead on projects has garnered him as a recipient of the Neilson Norman award for Top 10 Intranets (2014 & 2015).

Kanwal’s passion lies in continuing to push for user experience innovation when redesigning intranets for the majority of the largest brands in the world. He continues to preach on the importance of designing with usability as the primary focus. Kanwal’s thirst to share knowledge has made him a prominent figure within the SharePoint community. Because of his passion and his involvement in many community driven events including launching successful user groups in Canada and the USA, Kanwal has been recognized as a SharePoint MVP by Microsoft (2009 to 2013) and most recently as an Office 365 MVP (2014-2016). He’s also co-authored a book on Pro SharePoint 2013 and Responsive Web Development

http://amzn.to/sp2013rwd

Feel free to reach out to him if you’d like to discuss your project, want to run an idea by him or just want to reach out to a friendly technologist.

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Richard is the Chief Technology Officer and an owner at 2toLead. Richard works as a trusted advisor with hundreds of organizations, helping them understand their current needs, their future needs, and what actions they should take to grow and achieve their bold ambitions.

Richard remains hands-on in his work and has led, architected, and implemented hundreds of business and technology solutions that have helped organizations transform both digitally and organizationally. Richard has a passion for helping organizations achieve more; whether it is helping an organization build beautiful websites to support great content and social strategy, or helping an organization leverage emerging cloud and mobile technology to service better their members or the communities that they serve.

Richard is an author and an internationally recognized expert in Microsoft technology, marketing, and professional services. As a sought-after speaker, Richard has often had the opportunity to share his insights, experiences, and advice on branding, partner management, social networking, collaboration, ROI, technology/process adoption, and business development at numerous industry events in around the globe. When not speaking at industry events, Richard works with Microsoft, partners, and customers as an advisor to business and technology, and serves on multiple committees, leads user groups, and is a Board Member of the Microsoft Community Leadership Board.

[Links to social media and contact information]