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Auditing SharePoint

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10.28.15**

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Risk & Business Consulting.
Internal Audit.

Today's Speaker

Michael Mask



Michael is a Director in Protiviti's IT Consulting group and leads the Chicago Enterprise Content Management and SharePoint Practice. Michael is a certified scrum product owner and has 20 years of experience in the field of IT Project Management, Internal Audit, and Software Product Management.

Michael started his career in Finance (IBM, Chicago Board of Trade) and began designing Internal Audit & work paper management systems for Arthur Andersen. He served as the leader of Protiviti's GRC Solutions and has worked with clients to ensure they are gaining the most value from SharePoint.

michael.mask@protiviti.com

Poll Question

What percentage of organizations utilize Microsoft SharePoint?

- A. 40%**
- B. 50%**
- C. 75%**
- D. 80%**

Does your organization include Microsoft SharePoint in the IT Audit Plan?

- A. Yes**
- B. No**
- C. Don't Know**

Overview

The majority of Fortune 500 companies use the Microsoft SharePoint platform for workforce collaboration and content management. Yet, few make regular assessments of the SharePoint environment part of their audit plan.



Over 80% of Fortune 500 companies use SharePoint (20,000 new users daily)



83% of companies are using SharePoint for document management

A SharePoint assessment allows organizations to:



Identify potential risks in their environment,



Optimize SharePoint configuration and performance and



Determine whether additional user training on the system and education about potential risks are needed.

Business Case for a SharePoint Assessment

Some of the biggest security breach stories the past few years are found in SharePoint, such as the Snowden/NSA leak

At a survey conducted at Microsoft's 2014 SharePoint Conference:

- 79% of those organizations stored sensitive data in a SharePoint environment
- 18% (only) said they prevented access through the use of technical controls
- 23% of users knowingly accessed others' sensitive data
- 36% of respondents said that their business had no SharePoint audits at all

According to InfoSecurity Magazine, in 2013:

- 67% of SharePoint users have no security policy
- 33% (only) of organizations with 25-5000 users have security policies
- 22% of organizations admitted that they don't have a security policy

Top Challenges

Some of the top challenges as documented in surveys such as AIIM's "ECM at the Crossroads", "The SharePoint Puzzle", and Gartner's "Magic Quadrant for Enterprise Content Management"

Findability

1

SharePoint users 'find' information stored in SharePoint by using 1 of 2 methods: they browse or they search. The success or failure of each method depends on how information is organized and classified. Simple adjustments such as adding "mega-menu" navigation, or creating synonyms and refining search scopes, can **dramatically improve a SharePoint users experience**. Unfortunately, finding information remains at the very top of nearly every "SharePoint Challenges" survey.

Security

2

Today's headlines are filled with reports of unauthorized employee access to confidential information. Every Executive wants to know, "**Is our SharePoint Environment Secure?**". Protiviti's SharePoint Experts, IT Auditors and Data Security & Privacy Consultants can answer this question directly via a broad range of assessment and testing including penetration tests, configuration audits, and policy reviews.

Adoption

3

In a recent AIIM study, when over 500 businesses were asked "what is your biggest business issue with SharePoint", **the top four results were related to adoption**. Respondents cited reasons such as "lack of expertise", "no strategic plans or direction", and "unwillingness to commit documents or share information". By identifying every issue, large or small, we can help any organization increase its SharePoint Adoption, and ultimately get more out of the overall investment in the SharePoint platform.



SCOPE CONSIDERATIONS

Assessment Areas

Governance Planning

Understanding how to govern SharePoint (i.e., ensure all legal, technical, operational and functional concerns are represented) using people, processes and policies.

Analyzing and optimizing SharePoint system performance.

Performance Health Check

Information Architecture Scorecard

Ensuring that information in SharePoint is presented intuitively and is easy for users to search and retrieve.

Engaging the user community to understand and identify opportunities for improved adoption of SharePoint in the organization.

Usability Review

Privacy and Security Overview

Validating that information and access risks are under control.

Aligning Risk and Assessment Areas

Drivers & Risks		Assessment Areas				
		Governance Planning	Performance Health Check	IA Scorecard	Usability Review	Privacy & Security Review
Findability	Ensuring that site performance is fast and efficient for use		✓	✓	✓	
Security	<u>Data Security</u> : Information is protected enabling only authorized users to interact with approved content	✓	✓			✓
	<u>Data Integrity</u> : Information is current, accurate, and complete	✓			✓	
	<u>User Access</u> : Individuals are able to get what they need, when they need	✓			✓	✓
Adoption	Users are satisfied and actively using SharePoint to collaborate, improve business processes and share knowledge	✓		✓	✓	

Poll Question

Does your organization have a governance plan in place for your Microsoft SharePoint platform?

- A. Yes**
- B. No**
- C. Don't Know**

Governance Planning

The purpose of this phase is to review how the people, process and policies are utilized to control SharePoint.

Topics	Activities	Outputs
<i>Roles and Responsibilities</i>	<ul style="list-style-type: none"> Review Administrator roles Understand Power User responsibilities Analyze Support Team Review governance & training alignment 	<ul style="list-style-type: none"> ✓ Define distinct roles and responsibilities
<i>Site Architecture</i>	<ul style="list-style-type: none"> Evaluate Site Development and Provisioning Examine Access and Permission settings Understand current Security Trimming practices 	<ul style="list-style-type: none"> ✓ Outline specific site development and provisioning policies and procedures
<i>Site Management</i>		<ul style="list-style-type: none"> ✓ Define practices regarding permissions and security trimming
<i>Content Structure</i>	<ul style="list-style-type: none"> Develop General Guidelines Understand current site creation process Examine current library structure Explore existing navigation and hyperlink practices Research content authoring process 	<ul style="list-style-type: none"> ✓ Create basic content management guidelines
<i>SharePoint Libraries</i>		<ul style="list-style-type: none"> ✓ Establish overall content policies including: <ul style="list-style-type: none"> – Naming conventions – Locations – Rules – approval, workflow, etc.
<i>Content Authoring</i>		
<i>Web Parts, Site Columns and Content Types</i>	<ul style="list-style-type: none"> Analyze the use of web parts Understand the use of Site columns Review current use of content types 	<ul style="list-style-type: none"> ✓ Clearly define the use of web parts, site columns and content types

Performance Health Check

The purpose of this phase is to analyze system performance, identify issues and fine tune the environment.

Topics	Activities	Outputs
<i>Farm Configuration</i>	<ul style="list-style-type: none"> • Review Farm topology • Review installed software 	<ul style="list-style-type: none"> ✓ Hardware recommendations
<i>Web Application Configuration</i>	<ul style="list-style-type: none"> • Review use of Service Accounts • Analyze existing web application configuration <ul style="list-style-type: none"> – Services – Alternate Access Mapping – URL Management 	<ul style="list-style-type: none"> ✓ Email configuration recommendations
<i>Site Collection Configuration</i>	<ul style="list-style-type: none"> • Analyze Site Collection architecture 	<ul style="list-style-type: none"> ✓ Recommended Service Account configuration(s)
<i>IIS Review</i>	<ul style="list-style-type: none"> • Validate IIS Compression process 	<ul style="list-style-type: none"> ✓ Anti Virus recommendations
<i>Caching</i>	<ul style="list-style-type: none"> • Analyze caching settings <ul style="list-style-type: none"> – Blob – Object – Output – Distributed, Configuration 	<ul style="list-style-type: none"> ✓ Cache setting recommendations
<i>Performance Tuning</i>	<ul style="list-style-type: none"> • Review Event Log Errors 	<ul style="list-style-type: none"> ✓ Event Log key error recommendations
<i>Database Configuration</i>	<ul style="list-style-type: none"> • Check Database Server settings <ul style="list-style-type: none"> – Memory – Connections – Maintenance 	<ul style="list-style-type: none"> ✓ Database recommendations ✓ Maintenance plan validation

Poll Question

Do you believe your organization has sensitive data stored on its Microsoft SharePoint platform?

- A. Yes**
- B. No**
- C. Don't Know**

Privacy and Data Security

The purpose of this phase is to validate that high-level risks information and access risks are properly controlled.

Topics	Activities	Outputs
<i>General Permission</i>	<ul style="list-style-type: none"> Review the following: <ul style="list-style-type: none"> Content Permissions Server Administrator Access Service Account Permission Farm Administration Web Application User Policy Site Collection Administration SQL Database 	<ul style="list-style-type: none"> ✓ Recommendations for permissions and access throughout SharePoint and SQL
<i>Access</i>	<ul style="list-style-type: none"> Analyze the following: <ul style="list-style-type: none"> Port Access to SharePoint Farm Authentication Method and Access Endpoints SQL Access and Endpoints SharePoint Endpoints 	<ul style="list-style-type: none"> ✓ Identify ways to improve security of data ✓ Define proper endpoint regulations ✓ Report security concerns ✓ Active Directory audit
<i>Active Directory</i>	<ul style="list-style-type: none"> Evaluation of the AD implementation Review security design and operating effectiveness 	

Information Architecture Scorecard

The purpose of this phase is to understand how content is assembled, presented and accessed.

Topics	Activities	Outputs
<i>Content Structure</i>	<ul style="list-style-type: none"> • Examine use of Content Types • Examine use of Site Columns • Review overall content topology • Validate use of Managed Metadata • Evaluate for proper use of data storage containers <ul style="list-style-type: none"> – Lists – Libraries 	<ul style="list-style-type: none"> ✓ Recommendations for content structure ✓ Naming convention recommendations
<i>Ability to Find Content</i>	<ul style="list-style-type: none"> • Evaluate Navigational Structure • Analyze Search Configuration <ul style="list-style-type: none"> – Search Reports/Logs – Scopes – Enhancements 	<ul style="list-style-type: none"> ✓ Mobile enhancement plan ✓ Recommended Content Types and Page Layouts ✓ Improvement ideas for navigation and increased intuitiveness
<i>Mobile Information Architecture</i>	<ul style="list-style-type: none"> • Analyze mobile access • Review content as it pertains to mobile devices 	<ul style="list-style-type: none"> ✓ Recommended metadata strategy

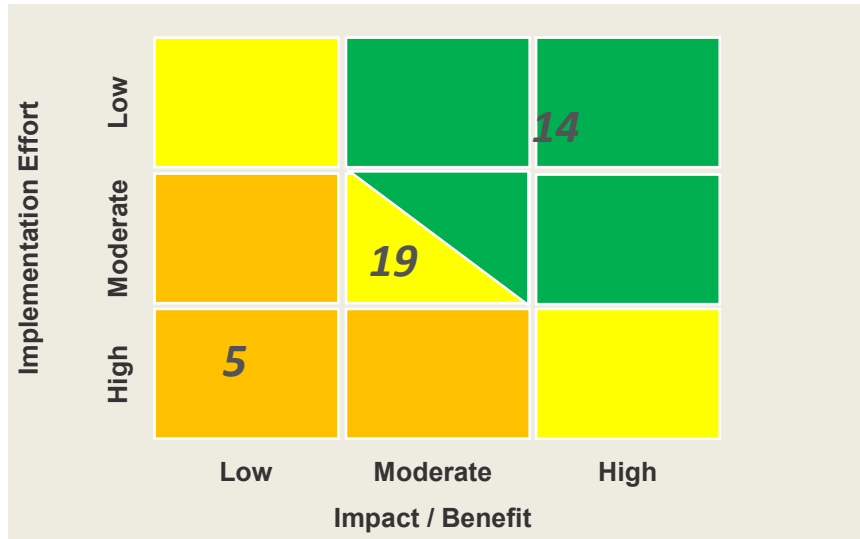
Usability Assessment

The purpose of this phase is to engage directly with the users to review their needs, usage patterns and potential challenges .

Topics	Activities	Outputs
<i>Metrics</i>	<ul style="list-style-type: none"> Review Web Analytics Review Search Queries 	
<i>Benchmarks</i>	<ul style="list-style-type: none"> Examine site based on Accessibility Review quantities/content of help desk tickets logged 	<ul style="list-style-type: none"> ✓ Site Map recommendations ✓ Interview/End user survey results
<i>Content Testing</i>	<ul style="list-style-type: none"> Use Tree-Testing scenarios to determine success and failure points in current/proposed site structures 	<ul style="list-style-type: none"> ✓ Identify ways to improve a users ability to find content ✓ Web Analytics feedback
<i>Content Analysis</i>	<ul style="list-style-type: none"> Review “True Intent” data to pinpoint critical content areas 	<ul style="list-style-type: none"> ✓ Accessibility Standards validation ✓ Testing data analysis
<i>User Feedback & Testing</i>	<ul style="list-style-type: none"> Interview/Electronic Survey of user community Conduct remote user testing via online software for 5-7 users per “persona” Analyze testing data 	

Sample Deliverable: Recommendation Dashboard

Overall recommendations were identified and grouped into themes, evaluated for impact, effort, timing priority and dependences. The recommendations are presented as an initial “backlog” which can serve as roadmap for implementation.



In the executive summary we have included the “Top 10” as well as a list of “Quick Wins”.

Theme	Priority		
	High	Med	Low
1. User Access	2	1	-
2. Performance	1	2	-
3. Logging	-	2	-
4. Metrics/Reporting	-	-	1
5. Caching	3	-	2
6. Search	3	1	-
7. User Adoption	1	1	1
8. Security	2	-	-
9. Data Management	-	2	-
10.Policies	-	2	-
11.Architecture	1	4	-
12.Hardware	-	2	1
13.People	1	2	-
Total	14	19	5

Sample Deliverables: IA Scorecard














An effective Information Architecture (IA) leverages metadata, navigation, content types and search.

The Information Architecture phase should identify weaknesses and provide concrete, practical recommendations to improve your site's IA to create an intuitive, user-friendly site for your users.

Scorecard:

- Display practical techniques to improve user experience via an easy to understand “scorecard” that highlights, on a per topic basis, the usability and performance risks.

Example Scorecard

Residual Risk	Information Architecture Assessment	Usability	Performance
	Site Columns	High	High
	Content Types	Low	Low
	Enterprise Keywords/Managed Metadata	Med	High
	Custom Lists/Libraries	Low	Med
	Search	High	High
	Navigation	High	High
	Governance Plans	Med	Med
	Strategy Document	Low	Low
	End User Focus	High	Low
	Mobile-friendly Display	Low	Low
	[Add-on] Web Analytics	Med	Low
	[Add-on] Accessibility Requirements	Low	Low
	[Add-on] SEO	Low	Low

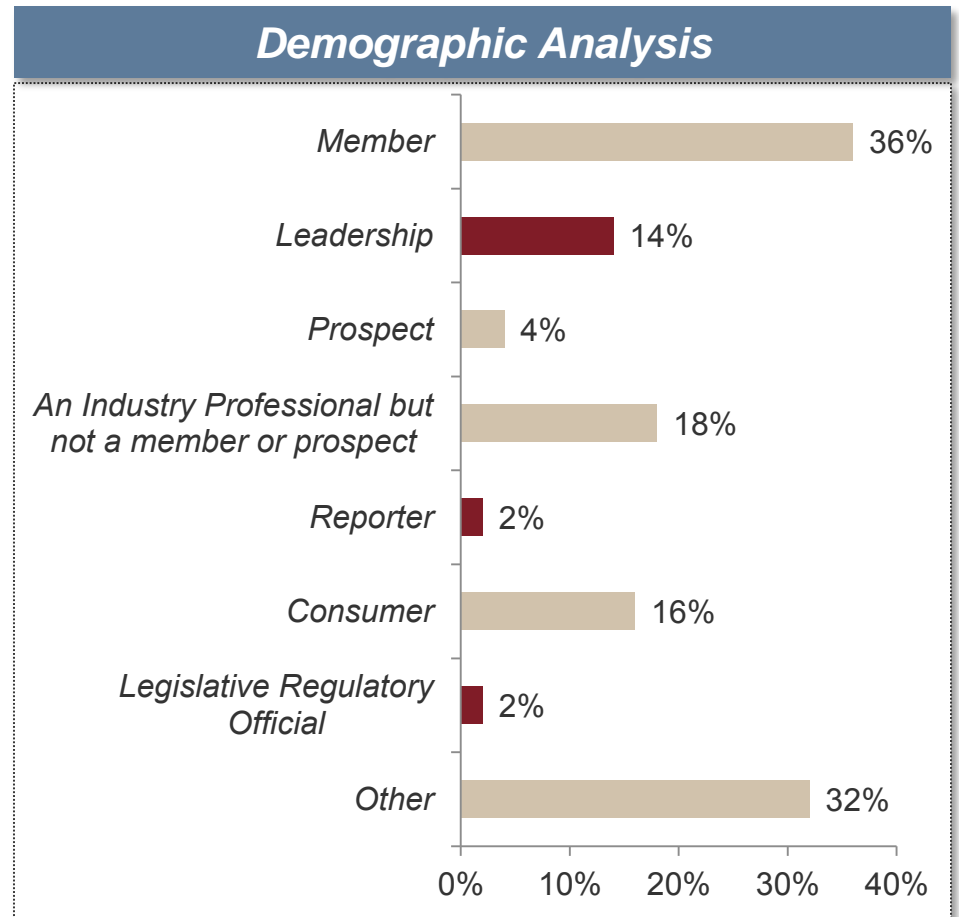
Sample Deliverables: Usability Review

Working with a targeted group of users that represent the major personas, conduct interviews or broad based surveys to determine the level of intuitiveness, perceived value and challenges related to SharePoint.

Questions asked and answered:

- What are users 'really' coming to the site for?
- Are they successful?
- How many clicks are required?
- When do users experience issues?
- Are they satisfied?
- Is support/training available and used?

Using techniques such as true intent studies, facilitated sessions, surveys and direct observation we are able to solicit candid insights and feedback.

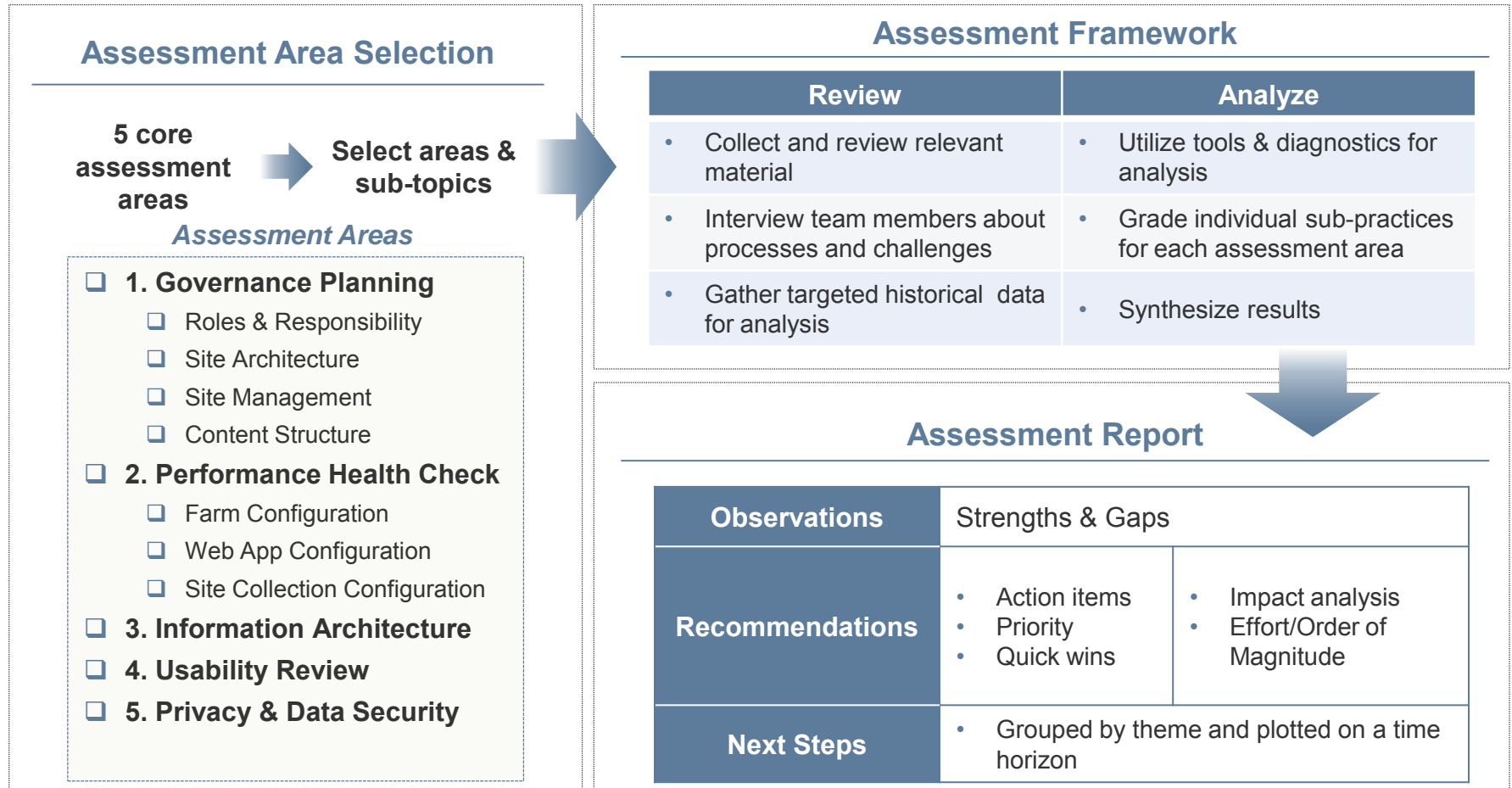


APPROACH



SharePoint Assessment Approach

Once assessment areas and sub-topics are chosen, the next steps are to review, analyze and synthesize results.



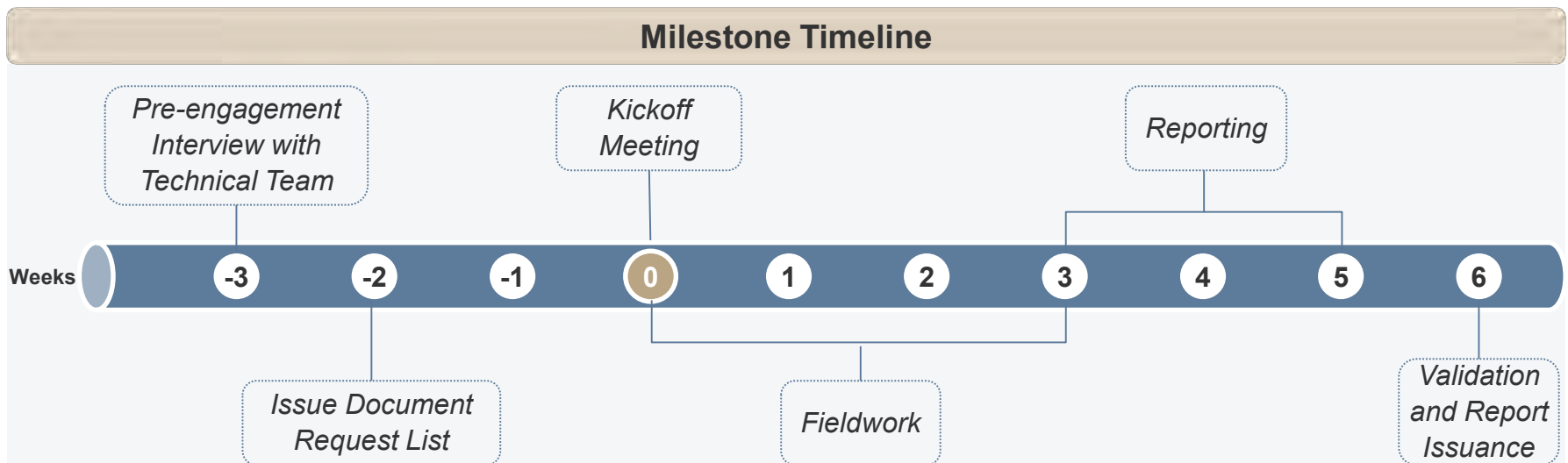
Typical Audit Timeline

The SharePoint Assessment is a flexible, comprehensive review targeted at select SharePoint topics. We collaborate with you to identify an appropriate scope for the assessment. An assessment report, complete with prioritized recommendations, is generated and delivered via a sponsor brief.

We estimate this project to be completed within 4 to 6 weeks depending on the number of assessment areas and topics selected.

Prior to fieldwork beginning, we typically send out a document request list to key stakeholders, as well as conduct a pre-engagement technical review with client SharePoint administrators. Questions asked during this phase include, but are not limited to:

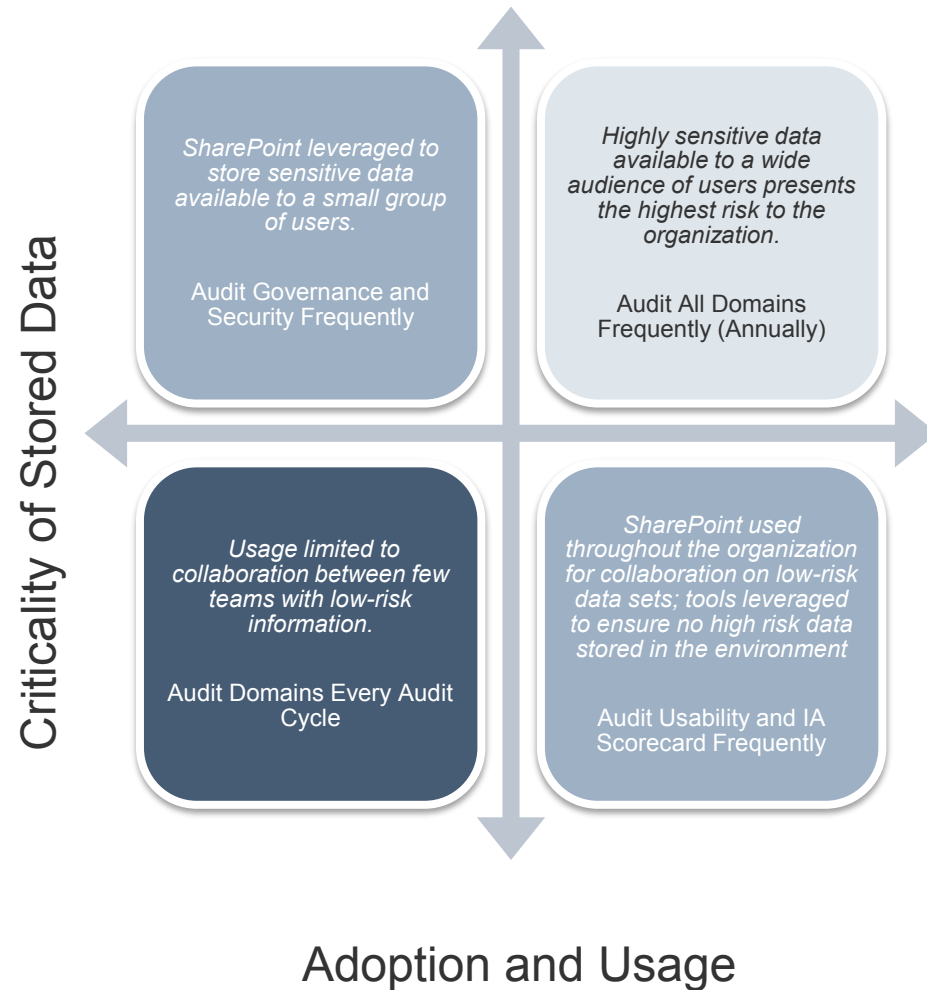
- Number of Farms
- Number of Site Collections
- Size of Farms In-Scope
- Degree of site customization
- Number of Users
- Third-Party Adapters
- Results of any prior assessments



- **Weekly status reporting starting at kickoff**
- **Continuous project governance**

SharePoint Assessment Frequency

Considering adoption, usage, and the criticality of the data stored, we take a risk-based approach to scoping the audit.



Q&A



THANK YOU

Michael J. Mask

Director



Phone: +1 312-476-6396

michael.mask@protiviti.com

Chicago, IL

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