A Sustainable Approach to Knowledge Management With Microsoft 365

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Initiatives: Collaboration and End-User Technologies for Technical Professionals

Knowledge management is a desirable use case for Microsoft 365 but is difficult to achieve in a sustainable way. Application technical professionals should adopt a clear framework mapped to Microsoft 365 capabilities to achieve sustainable KM.

Overview

Key Findings

- While Microsoft 365 is not a knowledge management (KM) platform, recent developments that use graph, machine learning and search capabilities have made internal knowledge management achievable.

- Most organizations struggle to establish sustainable KM even with Microsoft 365 in place.

- The SECI Framework, consisting of socialization, externalization, combination and internalization, maps well to Microsoft 365 and provides a strong methodology for establishing and maintaining sustainable KM.

- Recently released Microsoft Viva products are useful to KM and will both simplify and enhance KM efforts, but are not necessary to establish an effective KM practice in Microsoft 365.

Recommendations

Application technical professionals leading knowledge management initiatives in Microsoft 365 should:

- Prioritize connecting people as sources of knowledge and expertise by cultivating rich profiles of staff, including LinkedIn data.
Problem Statement

As “Office 365” evolves into “Microsoft 365,” Microsoft is expanding the platform’s focus from individual user productivity to bolster the productivity of the enterprise as a whole. Knowledge management is a critical aspect of this broader view, especially in terms of connecting users to information and colleagues. A host of new or enhanced machine-learning-based, graph-driven functionality has oriented content and capabilities around the user’s current context and connections. Teams, Search, and most recently, Viva, are providing new ways to capture, surface and share information. As a result, Microsoft 365 is finally a viable solution for internal knowledge management.

At the same time, these capabilities introduce new complexities that can hinder knowledge capture and sharing if not properly managed. This is exacerbated by a lack of awareness that tools and platforms are secondary considerations in KM. Knowledge management is not a technology in and of itself. It is a technology-enabled practice.

Knowledge management is a business process that formalizes the management and use of an enterprise's intellectual assets. It promotes a collaborative and integrative approach to the creation, capture, organization, access and use of information assets, including the tacit, uncaptured knowledge of people.

— Gartner’s definition of knowledge management
This requires a holistic approach that manages both fundamental forms of knowledge:

- **Explicit** knowledge resources captured and documented in a knowledge base.
- **Tacit** knowledge that only exists in people's heads.

Organizations struggle to introduce and sustain an enterprise knowledge management program that accounts for both types of knowledge resources, even though tools like Microsoft 365 may be in place. This research provides technical professionals and their business colleagues with a framework to apply various aspects of Microsoft 365 to the full knowledge management life cycle.

**The Gartner Approach**

Every organization begins the KM process at a different place, with different priorities and a different culture. This makes establishing a common, universally applicable framework for knowledge management especially challenging and is a major reason why so many KM initiatives either fail outright or fizzle out over time. To address this challenge, Gartner builds on a foundational framework for KM called the "SECI" model (see Figure 1).

The SECI framework was first articulated by Ikujiro Nonaka and Hirotaka Takeuchi in the 1995 book “The Knowledge-Creating Company.” Their model of knowledge conversion is based on four basic principles that leverage the distinction between tacit and explicit knowledge.

- **Socialization**: The transfer of knowledge from person to person through communication including practice, mentoring and observation (tacit to tacit).
- **Externalization**: The codification and documentation of tacit knowledge in explicit, durable form (tacit to explicit).
- **Combination**: Compiling, synthesizing and organizing captured or documented knowledge. Combining existing knowledge to create new knowledge (explicit to explicit).
- **Internalization**: Interacting with explicit knowledge in order to understand and integrate it into your thinking. Internalization is a synonym for learning (explicit to tacit).
The knowledge cycle can begin at any stage and move in any direction depending on the situation at hand. As a result, the KM process is best thought of as a spiral rather than a sequence.

**Figure 1. The SECI Framework**

The SECI model addresses both tacit and explicit forms of knowledge while also accounting for the transitional stages in between. The most important aspect of SECI is that it is self-reinforcing. Knowledge creation is not a linear or even iterative process. It is continuous. If done well, it becomes a "virtuous cycle" in which past experience informs future understanding and action.

By mapping elements of the Microsoft 365 ecosystem to each quadrant of the SECI spiral, the gap between tools and process can be closed in a manageable and sustainable manner. Because the framework is continuous, it allows an organization to begin with whichever area is the highest priority or most achievable, and then expand into other areas until the full knowledge life cycle is established for the full scope of the initiative.
Finally, any approach to knowledge management must focus on the people involved as both the producers and consumers of knowledge assets. This invariably requires both a change to business processes and the organization's culture as a whole. Most organizations making their first forays into knowledge management are not prepared for the culture change necessary to make the “fundamental shift of mind” required to be successful.

Leveraging Microsoft 365 for internally facing KM helps to minimize the difficulty of both process and culture change. Most users in an organization that has adopted Microsoft 365 are already familiar with the environment. The ubiquity of the Office Suite and the popularity of Teams, Exchange and OneDrive makes new functionality more intuitive and less threatening. The embedded nature of these new capabilities enables users to access them without changing contexts and interrupting the flow of their work. Adoption and participation in KM will still not happen organically. The new processes will still need to be inculcated in the community through training and coaching. Doing so in a familiar environment will simply make it easier.

**The Guidance Framework**

The SECI model provides a useful framework for implementing and sustaining knowledge management, but it does not impose or even suggest an implementation order. This is by design and provides the flexibility necessary to be applicable to any organization. This guidance leverages that flexibility by using the reports and metrics available within Microsoft 365 to determine the best approach for each organization. How to make this determination is explained in the prework section below. The framework assumes the necessary Microsoft 365 functionality is deployed and available to support each quadrant of the SECI KM cycle (see Figure 2).
The recommended and most common approach to initially implementing the SECI framework is to proceed with each phase in the following order:

1. **Prework**: Gather baseline metrics, identify starting SECI quadrant, sequence implementation.

2. **Socialization**: Enable the discovery of expertise in the enterprise and facilitate knowledge sharing.

3. **Externalization**: Formalize the representation of knowledge and enable its capture.

4. **Combination**: Provide the means to combine, present and maintain knowledge assets in novel ways.

5. **Internalization**: Enable users to easily track and remain current on subjects of interest.
If the data and reports described in the prework are unavailable for any reason, or if the enterprise has priorities other than those indicated by the reports, the framework should be approached in the order presented.

Prework

Object: Determining the current state of KM and scope the initiative.

Basic application set: Microsoft 365 admin center.

Extended application set: Power BI, SharePoint Syntex.

Pitfalls: Insufficient reporting, un governed content environment.

To understand what knowledge resources are available, where to place your emphasis, and how to scope your knowledge management practice, complete the following tasks:

- Identify usage and collaboration patterns
- Identify most commonly accessed topics and resources
- Rank and prioritize knowledge areas

Identify Usage and Collaboration Patterns

Microsoft 365 admin center provides some basic analytics and reports on usage (see Figure 3). These can help you to understand how users are currently employing the various aspects of the platform both to access information and to collaborate on that information. Use the reports listed below to understand which Microsoft 365 applications are most commonly used by staff. If you have fewer than 2,000 users, basic sorting and filtering can be done within the report itself. Analyzing activity for more than 2,000 users requires exporting the data into Excel. Even with fewer than 2,000 users it can be useful to export the data to Excel for more flexibility and detail in analysis.

Microsoft 365 admin center reports:

- Email activity
- SharePoint site usage
- SharePoint activity
Take note of the types of users, departments and business functions that are most common to each tool. You are trying to identify and understand the preferred modes of information consumption and interaction across the enterprise. This will provide insight into how knowledge is currently shared, what is working but could be improved, and what is missing or fundamentally broken. These insights will form the basis of your initiative roadmap.

**Figure 3. SharePoint Usage Report**

These measures will also provide a quantitative baseline against which you can measure your progress. Take for example the goal of increasing Teams usage for information sharing while simultaneously reducing dependency on email. Periodically comparing the Teams activity and Email activity reports against this baseline will indicate if your strategies are working or need to be recalibrated. The information provided in these reports will also facilitate the ongoing governance and sustainability of your KM practice.

**Identify the Most Commonly Accessed Topics and Resources**
Just as you need to know where people look for information and where they share it, you must understand what knowledge and information they are after. Again, native Microsoft 365 reporting capabilities can provide some insight here, but it requires more effort than the basic usage reports described above.

Begin with the search activity reports to understand both the topics being queried and the language used in those searches (see Figure 4). Of particular interest are the “No Results Queries” and “Abandoned Queries.” These will identify clear needs that are going unmet. They will also help identify knowledge resources that may exist in the enterprise, but just can’t be found. In both cases, these topics should be made a top priority as the KM initiative is pursued.

Figure 4. Microsoft 365 Search Usage Report

Source: Adapted From Microsoft

If SharePoint sites and hubs are in use, the SharePoint usage report can also help identify areas of interest that warrant focus. If communication sites and hubs are organized topically, the activity on those sites will demonstrate the interest or lack thereof in those topics.
Finally, if the Managed Metadata Service is in use, (and if it's not, you should start using it), the Term Store analytics dashboard can provide insight into which terms and keywords are most frequently applied and retrieved. Unfortunately, these term store reports require a SharePoint Syntex license.

Rank and Prioritize Knowledge Areas

Counterintuitively, your knowledge management roadmap should not begin with a focus on the weakest aspects of the current state. Rather, begin with areas that are heavily used but could be improved. This will bring immediate benefit with the least disruption and resistance. It will also allow you to gently introduce new KM processes with a ready audience to provide feedback. For example, simply organizing disconnected but popular SharePoint sites into meaningful hubs could be a simple, low-risk starting point before commencing the more comprehensive solutions described in the guidance framework below.

Use the insights gained from analyzing the usage reports described above to prioritize and sequence the areas you will address in your KM initiative. The usage patterns you observe should be aligned with your objectives for your workplace and staff. Again, it is best to begin with those areas that already have resources in use. Improve them to where you want them to be using the methods described below. Progressively work toward the more difficult and neglected areas of your environment. Starting with fixing and fortifying rather than building from scratch will establish a strong foundation upon which to build the rest of the KM program.

Socialization

Object: Sharing knowledge and expertise (tacit to tacit)

Basic application set: People search, Teams

Extended application set: Stream, LinkedIn, Yammer

Pitfalls: Outmoded search behavior, Teams channel disorganization
Socialization is the process of sharing knowledge and experience. This is how tacit knowledge — the skill and expertise that only exists in someone's head — is transferred from one person to another. The most common example of this sort of knowledge transfer is a new hire “shadowing” a more experienced colleague to learn how to accomplish a task. Other examples include presentations and demonstrations, individual and group discussions, and even serendipitous “water cooler” conversations. These are often taken for granted, even though they are critical to the flow of knowledge across an enterprise.

Learning through observation, interaction and conversation are the primary means of knowledge transfer and retention in any organization

As remote work becomes increasingly common, workers become more and more isolated from their colleagues and peers. Opportunities for informal knowledge exchange will become rare unless intentionally facilitated and promoted. Provide frictionless channels that allow any employee to interact with others in the same way they would if everyone was in the same building. This means a staff member should be able to have a face-to-face conversation with any other employee or seek assistance and feedback from as many colleagues as desired (see Figure 5). This is not just collaboration. It is a primary means of knowledge transfer. Shadowing a colleague over a computer monitor, watching how they complete a task or use an application can provide mentoring and training opportunities not otherwise possible in remote work situations.
Barring other critical, time-sensitive priorities in the knowledge management initiative, begin with Socialization. Provide staff with guidance and training on how to use the tools and techniques explained below. Do not assume that employees will figure it out on their own and change long-entrenched behaviors and habits. A hands-off approach will guarantee poor adoption at best, and complete failure of the initiative at worst. Without proper monitoring and mentoring, it is impossible to achieve the full potential of the KM program in general, and the Socialization initiative in particular. Consequently, realizing ROI for Microsoft 365 will be severely impeded.

Addressing Socialization within the Microsoft 365 ecosystem consists of three steps:

1. Enhance people search with curated profiles and LinkedIn data
2. Expand usage of teams beyond standard meetings
3. Use yammer for broad community interaction

Enhance People Search With Curated Profiles
Learning a new skill from a teacher is much more effective and efficient than trying to figure it out on one's own. No one becomes a great pianist or chef by just reading a book. Even so, most organizations embarking on a KM initiative focus on knowledge capture — in essence, creating books — rather than enabling those with knowledge to connect with those who need it. This is a mistake.

Connecting people who need expertise with those who already have that expertise is the most critical function of any knowledge management program. It is also the most neglected. Most people must rely on their personal social and professional networks to identify who might have the expertise they need. This approach is hit or miss at best. Employees should be able to search for people as easily as they search for content. Although the search capabilities within Microsoft 365 have improved considerably in recent versions, the personnel information must be captured and maintained for that search to be effective for people and expertise.

“If only HP knew what HP knows, we would be three times as productive.”

— Former HP CEO Lew Platt

In Microsoft 365, this information is captured in profile cards (see Figure 6). At present, the information available on profile cards is rudimentary, though Microsoft has multiple additions on its published roadmap. In addition, recently announced graph connectors will enable more information about people to be drawn and maintained directly from the graph rather than just Azure Active Directory.
Figure 6. Profile Card in Microsoft 365
At present, the process for adding extended profile information is convoluted at best. Up to 13 custom properties can be added to profile cards. These will be added to every person profile across Microsoft 365. Unfortunately, although these custom elements are visible when viewing a profile, they are not searchable and so are not useful in finding a profile in the first place. These custom elements can be useful for basic information such as cost center or department ID but have limited utility for expertise location and knowledge management. They should not be used for these purposes.

The main mechanism for a user to add extended information to their own profile remains the About Me section of a Delve profile. Delve enables a user to add a considerable amount of useful profile information, including “Ask Me About,” which is an excellent tool for identifying subject matter experts (SMEs). Again, as with profile custom elements, none of the Delve profile information is searchable and so is of no use in locating users.

These shortcomings are largely due to architectural constraints created by the evolving and coalescing nature of Microsoft 365. Hopefully, they will be resolved as the exposure and integration of the graph matures. In the meantime, users should still be encouraged to use the Delve interface to expand their profiles both in terms of experience and interests. LinkedIn profiles should also be enabled for direct access from Microsoft 365 profiles. This will deepen the insight available into what the company knows beyond what is in official HR records.

Microsoft has signaled that profile information created via Delve will not be lost as the Microsoft 365 profile evolves. No explicit statement or guarantee to this effect has been offered, but it would be stunning, if not inexcusable, for that information and the capture effort it represents to be discarded.

At the 2021 Build conference, Microsoft announced Graph connectors that will enable developers to access graph data and expose graph content within the various channels of Microsoft 365. In addition, graph connectors now allow a Microsoft 365 administrator to directly enrich user profiles from human resources management systems like Workday or SAP SuccessFactors.

Exploiting emerging graph connectors is likely to be the most practical method to gather and expose profile information from all the various, disparate and disjointed sources currently provided, and ensure that they are consolidated and indexed. Cultivating this information now will prepare for such a consolidation and expose users to the notion of creating, maintaining and utilizing profile information.
Expand Usage of Teams Beyond Standard Meetings

When people can’t drop by each other’s desks for a chat, or linger in a conference room after a meeting, virtual meeting areas are essential. Teams is the Microsoft 365 solution to this issue. Teams provides both content-sharing and videoconferencing capabilities. Although both are pertinent to KM, videoconferencing is central to Socialization, especially in distributed work environments.

Most organizations that adopt Teams use it as a substitute for standard face-to-face meetings. Although this is a perfectly legitimate use of the tool, it should not be the only use. The videoconferencing capabilities of Teams should be used as the primary Socialization mechanism by enabling training, mentoring and co-working.

Onboarding new hires or training employees for a new task or responsibility are excellent opportunities to use Teams for knowledge transfer. Rather than just facilitating a simple conversation, use Teams to enable an employee to watch the task being performed. This goes beyond simple screen sharing. A webcam or mobile phone can be focused on a machine or work surface as easily as it can focus on a face. An expert can demonstrate the task, explaining each step, as many times as necessary. The trainee can then execute that same task with the mentor observing, commenting, and correcting as required. When necessary, this process can happen asynchronously with each party recording and sharing their part as appropriate.

Video capture and streaming dramatically enhances Microsoft Teams as a knowledge management mechanism.

Using video capture and streaming will dramatically enhance the utility and value of Teams as a knowledge management channel. To facilitate this, add a Microsoft Stream channel or video as a tab in Teams. This will allow users to create, share and consume video content without leaving their primary collaboration environment. Using Stream for Socialization also supports the externalization process, discussed later. By storing knowledge transfer videos and automatically generating transcripts, a video-driven knowledge library can be developed over time.
Broad adoption of video for knowledge capture and transfer will not happen organically. Introduce and normalize the practice by creating a series of basic videos that are relevant to broad swaths of the enterprise. Demonstrating how to log vacation time, reimbursement requests, or other simple common tasks are excellent opportunities to introduce video-based knowledge transfer. These videos should be somewhat informal and not over-produced. If the videos are overly polished, you will set too high of a standard and will discourage content creation from the average staff member.

**Use Yammer for Broad Community Interaction**

Although Teams is well-suited to conversations and knowledge exchange within well-defined groups, it does not fare as well with very large and diverse audiences. Despite its 10,000-participant capacity, Teams channels can become overwhelmed with comments and replies that make it difficult for participants to follow a thread. Gartner recommends that any organization with more than 5,000 users, and the need for conversation beyond targeted groups, should adopt Yammer for these interactions.

When knowledge must be broadcast across the organization or a “call for help” with a particular issue needs to cast as wide a net as possible, use Yammer rather than email or even Teams. This will ensure a consistent message and comment thread for all recipients. Email blasts tend to fragment into numerous respond-and-forward chains that quickly result in different segments of the organization receiving different messages. A Yammer community automatically includes a Stream channel for that community. This provides an additional opportunity to introduce and normalize video-based knowledge Socialization.

**Externalization**

**Object:** Articulating, capturing, and publishing knowledge (tacit to explicit)

**Basic application set:** SharePoint, Teams

**Extended application set:** Stream

**Pitfalls:** Time constraints, knowledge-hoarding culture
Externalization takes the knowledge and expertise in someone’s head, interprets and organizes it, and captures it in some external, persistent form. This process should not be a dedicated activity separate from the normal flow of work. Most organizations approach knowledge capture as an isolated activity. An expert is tasked with writing down everything they know about a given topic. Often this must be done quickly because the expert is about to leave the organization, voluntarily or otherwise. This inevitably leads to omissions, oversights and errors. Even in the rare case that this approach yields a quality knowledge resource, it quickly becomes outdated as there is no process to refresh the content. Externalization should occur as an integral part of normal business processes. Rather than attempt to capture and formalize everything about a given topic at a single go, knowledge should be initially captured in an informal, iterative manner. When a topic is deemed to be of sufficient value and relevance, it can be periodically structured, revised and enhanced as a formal knowledge resource. This approach is central to the knowledge-centered service (KCS) methodology used by most modern contact centers. The core ideas of KCS are readily adaptable to SECI and Externalization in Microsoft 365 (see Figure 7).

**Figure 7. Externalization in Microsoft 365**
At the heart of KCS is a “double-loop process.” These two loops, labelled as “Solve” and “Evolve” in Figure 7, are interdependent and mutually reinforcing. The Solve loop consists of the tasks and responsibilities of the solution providers or SMEs when they are resolving an issue. The Evolve loop contains the responsibilities of knowledge management leadership and organization-level processes. The double-loop process provides a well-documented methodology for sustainable knowledge capture in general, and with Microsoft 365 in particular.

Implementing this approach requires three steps:

1. Create “knowledge capture” and “lessons learned” channels in Teams.
2. Introduce “harvester” and “topic owner” roles for collaboration channels.
3. Create knowledge-capture guidelines and templates.

See Improve Customer Self-Service and Self-Solve With Knowledge-Centered Service for a full discussion of knowledge-centered service

Create “Knowledge Capture” and “Lessons Learned” Channels in Teams

In the KCS Evolve loop, knowledge is captured as it is used to solve a given issue or answer a particular question. Capturing information contemporaneously with working out an issue preserves context and prevents both duplicated work and redundant information gathering. This real-time, capture-in-the-moment approach is not the place for eloquence or verbosity. KCS advocates increasing the “capturability” and readability of content by making it short and succinct: “complete thoughts or short phrases as opposed to complete sentences.”

Blockquote

For initial knowledge capture, complete thoughts are more important than complete sentences.
The informal notes staff often write for themselves are a sufficient starting point. Even “doodles” of a particular environment or flow of events can be useful grist to the knowledge mill. Rather than writing these in a personal notebook or scratchpad, these notes should be captured in a “work in progress” note or running document in a Teams “Knowledge Capture” channel (see Figure 8). As more information is discovered or developed about the topic or issue, it should be added to the associated work in progress. This provides a convenient, common location for team members to quickly capture knowledge without having to leave their current context or task.

**Figure 8. Knowledge Capture in Microsoft Teams**

The content of the knowledge capture channel should be reviewed periodically to identify content of ongoing value to the team or department. Once such content is identified, the relevant SME, most often the initial creator or main contributor on the subject, should determine if there is enough definitive content to promote it to become a formal knowledge resource for the team. This is the essence of the KCS Evolve loop.

The Evolve loop takes a “big picture” view of the knowledge environment, whether that be scoped to a particular team or the enterprise as a whole. In the context of Externalization within Microsoft Teams, this means taking the raw work-in-progress notes captured in the Knowledge Capture channel and consolidating it into a succinct, well-structured, definitive knowledge article in the Lessons Learned channel.
The information created in a Lessons Learned channel should be considered authoritative and a potential source for enterprise-level knowledge resources. As such, and in contrast to the work-in-progress notes in the Knowledge Capture channel, Lessons Learned content must be of very high quality and confidence. This should be community driven, with both contributors and consumers identifying and correcting errors. Ultimately, a SME should own and oversee the final product. Both elements of content quality are critical if the content is to be exposed beyond the team in which it originated.

**Introduce “Harvester” Roles and Topic Tags Across Collaboration Channels**

Throughout the Socialization and Externalization processes, knowledge will be created and captured that is relevant to audiences beyond the team in which it originates. Any participant in a Teams channel, Yammer group, or community of practice should be able to flag content as a candidate for broader consumption. This content would then be reviewed, refined and published as part of the Evolve loop. Unfortunately, Microsoft 365 does not currently provide a simple or consistent way to accomplish this.

In Teams channels, users can be tagged in content with an @mention that will alert the named user. If an assigned topic owner or known SME exists, they should be tagged, as in @Scott.Summers or @Jean.Grey, when relevant content is added to the “Lessons Learned” channel. If profile cards and people search has been implemented properly, as described in the socialization phase above, the appropriate SME should be readily discoverable. When adding an SME, set their Teams channel notification preferences to “mentions and replies.” This will prevent them from receiving irrelevant notifications every time a change is made.

Create a “Harvester” tag as a way to identify any content that should be reviewed for inclusion in the Lessons Learned channel or promoted to a topic page (see Figure 9). Whomever is assigned to this role should be tasked with reviewing the suggested content. They should either prepare it for inclusion in the Lessons Learned channel, or identify the appropriate SME or topic owner for wider publication as described below in the Combination phase of this guidance. In most cases, it is best to assign this role within a team on a rotating basis, with each team member taking a recurring turn. This has the double advantage of avoiding overburdening any one team member while also exposing all team members to a broader range of topics than they would normally encounter.
Create a new tag

You can notify a group of people all at once by @mentioning tags.

Tag name
Harvester

Add people
Stewart, Darin

Source: Adapted From Microsoft

See A User-Driven Roadmap for Microsoft Teams Channels Adoption for a full discussion of how to best deploy Teams.

Yammer communities also allow you to tag specific users with @mentions, but also provide the more direct approach of assigning a topic tag. When posting to Yammer, any user can assign a tag with the “Add Tags” option (see Figure 10). As the user types, matching existing topic tags are presented as suggestions. If the topic does not exist, it is added as an option for future posts. This is convenient but also holds the potential for out-of-control lists of topics and terms as users are free to add whatever topic they want whenever they like. In addition, Yammer topic tags are not related to the Microsoft 365 Managed Metadata Service (MMS) in any way so there is no way to impose restrictions on terms.
As formal SharePoint topic pages emerge, as described in the Combination phase of this guidance, Yammer and Teams topic tags will need to be reconciled with those used in SharePoint. This task should be the responsibility of the SME and topic page owner, which in most cases will be the same person.

Deleting existing tags is remarkably cumbersome in Yammer. The most effective way to accomplish reconciliation is by designating the preferred term as the official topic tag and managing the rest as synonyms in the MMS once the content is published to a topic site. Periodically notifying or reminding the relevant communities which terms are preferred is a good, if slightly annoying, practice.

Create Knowledge Capture Guidelines and Templates

To ensure consistency as well as to simplify the evolve process, create a simple template for knowledge articles created for the Lessons Learned channel. The template should identify the appropriate elements and the order in which they should occur.

For example, a basic structure adapted from KCS could include:

- Issue: A clear and searchable title of the topic or issue being addressed. This should use the words and terms originally used to describe the issue rather than some artificial, formal terminology. This will help preserve the context of the issue and make it easier to locate in the future.
Imposing a structure for Yammer posts may seem counter to the informal nature of the platform. Even so, a bit of strategically applied structure will make knowledge more readily findable and will simplify the knowledge harvesting process. The simplest way to accomplish this is to default Yammer communities to use the “Q&A” post type for new posts. Users are free to select a different format as they post, but the Q&A format will help organize the content in a manner conducive to knowledge capture. Once the community has responded and a particular answer receives the most “likes,” mark it as “best” and pin to the top of the conversation (see Figure 11). Tag the post with a topic tag and when appropriate, use the “harvester” tag as well.
Figure 11. Q&A Posts and Best Answers in Yammer

Use Video for Externalization

Video is increasingly becoming a preferred medium for both knowledge capture and consumption. Someone who is uncomfortable with writing involved explanations, or simply does not have the time to do so, may find it easier and more convenient to just explain things to a webcam. This should be supported and encouraged as an additional Externalization option. Microsoft Stream will simplify both sides of this option for Microsoft 365 users. Again, basic guidelines should be provided to the community as to length, tagging and other administrative concerns. In addition, recommendations that relate to organizing content and presentation should also be provided both as training, instruction and reference examples. These should not be mandatory, but presented as optional aids. The main appeal of video as a capture medium is its simplicity. Too much formality or expectation of high production values will discourage adoption.

Source: Adapted From Microsoft 751285_C
Combination

Object: Organizing, integrating and repurposing knowledge (explicit to explicit)

Basic application set: SharePoint topic pages, SharePoint communication hubs

Extended application set: Viva topics

Pitfalls: Resourcing, licensing

Within the SECI framework, Combination “is a process of systematizing concepts into a knowledge system.” In practical terms for Microsoft 365, this usually means organizing information into easily findable and understandable SharePoint sites and pages. This does not mean document libraries. Users looking for knowledge should not have to hunt for a document and scan its contents in the hope of finding what they need. This sort of “document diving” is one of the biggest impediments to self-service knowledge acquisition. Critical knowledge should be gathered, organized, and presented on the page so users can internalize it with minimal effort.

Don’t make users “document dive” to find the information they need.

In addition to its standard content, collaboration and productivity functions, Microsoft 365 in general and SharePoint in particular should effectively become a knowledge base for the enterprise. Creating and maintaining such a knowledge base requires bringing knowledge resources together in a systematic way. Microsoft provides two ways to approach this exercise, manually with standard functionality and semi-automated using the recently introduced Viva Topics.

Microsoft describes Viva Topics as “a knowledge management system that connects, manages, and protects knowledge and expertise from your organization.” Viva Topics uses Microsoft Graph, Search and Machine learning to identify and connect knowledge across Microsoft 365. It does not automate knowledge management. It only assists in the KM process. Although it still requires human curation, Viva Topics can, however, jump-start the SECI Combination process and make it easier to sustain.
Whether approaching Combination manually or with Viva Topics, creating and maintaining a Microsoft 365 knowledge base requires three human-dependent activities:

1. Designate and resource topic curators
2. Create topic sites and hubs
3. Gather and evolve content from harvesters

**Designate and Resource Topic Curators**

SMEs are critical nodes within knowledge networks. They not only provide core expertise but can ensure the quality and accuracy of knowledge contributed by others in their domain. These people should be tapped as topic owners and curators for the Microsoft 365 knowledge ecosystem.

A topic owner maintains a particular topic page in SharePoint. The topic page is the primary repository of knowledge on a particular subject in the enterprise (see Figure 12). They are the primary contributor but also review, consolidate, and publish content suggested by the harvester roles across the various channels previously discussed. They may delegate some of these tasks to other trusted experts but have ultimate responsibility for what is published to their topic page.

Everyone is busy. Few more so than SMEs. Topic owners should be formally designated and their duties should be an incentivized part of the job description. While different topics will require different levels of curation effort, it is unreasonable to add any substantial topic-curation responsibilities to an already busy person's duties without compensation, reward or at the very least recognition. Doing so will undermine participation and reduce the quality of any content that is contributed.

The time commitment does not need to be exorbitant, and will fall substantially after a given topic page is established. In most cases, topic owner duties can be fulfilled in less time than is devoted to email each week. Even so, formalizing the assignment will legitimize responsibilities and the effort required to fulfill them. The topic owner's burden can be reduced by establishing templates for topic pages. If Viva Topics is adopted, topic page creation can be partially automated.

**Create Topic Sites and Hubs**
Topic sites serve as the repository of shared knowledge on any given subject. They should be focused on a single, well-defined and properly scoped subject. This will make them much easier to maintain than sprawling, comprehensive treatises covering all aspects of a subject. SharePoint hubs should be used to group related topic pages into a comprehensive group of topics (which could be considered sub-topics) of a top-level page. For example, topic pages on Azure Active Directory, VPN and permissions could roll up to a single “Access Control” hub site.

Topic pages should be functional rather than fancy. They are intended to make both curating and consuming knowledge as efficient as possible. To this end, topic pages should have a consistent, simple structure and format. This will help users to know intuitively where to look on a site for the information they are after. Although specific elements and components may be tailored to the needs of a particular subject a basic structure along the lines of the following will serve as a good foundation and starting point:

- **Topic title**: The keyword, term or phrase that best identifies the topic. This should be what users are most likely to use in a search query when looking for information on the topic.

- **Description**: A brief definition or summary of the topic. This should be no more than a paragraph that will enable the user to ascertain if they have found the correct topic for the information they need.

- **Key information**: This is the heart of the page and will require the most curation. Avoid long blocks of text by using descriptive headings. New content gleaned from the harvester roles, as described below, should be incorporated here. This section will inevitably grow over time, so it is critical that it be kept current. Outdated information should be removed. If enough information accrues on a particular aspect of the topic that it becomes cumbersome to navigate the page, spin off those elements to a separate subtopic page.

- **People**: Key stakeholders for the topic should be listed and their profiles linked here.

- **Resources**: The topic page is not intended to reproduce all information available on the subject at hand. Provide links to relevant resources wherever they may reside.
This basic structure is very similar to that generated by Viva Topics when it identifies a topic of sufficient interest among the content and activity in Microsoft 365. That machine-generated page is only a stub or starting point for a fully-fledged knowledge resource. The description will likely need to be refined and key information will still need to be added manually. In addition, Viva Topics requires a minimum of 20,000 documents to begin identifying relevant topics and many, many more to achieve optimal performance.

Even so, Viva Topics is a very practical way to bootstrap a KM initiative within Microsoft 365. It provides topic owners with a foundation to build upon rather than requiring them to start from scratch. Viva will also recommend and add new content as it is created and discovered, further reducing the curation burden. This significantly increases the likelihood the knowledge initiative will launch successfully and be sustainable.

Gather and Evolve Content from Harvesters

Collecting and curating knowledge from across the enterprise is without doubt the most difficult aspect of KM and often the least sustainable. This is what necessitates the harvester roles and common knowledge flags described in the Externalization phase above. It is impractical, if not impossible, for a topic owner or SME to monitor every possible channel in which relevant knowledge may emerge. Nor is it possible for that topic owner to identify, harvest and refine for publication knowledge from those diverse sources. The harvester roles, @mentions and common knowledge tags distribute this burden among stakeholders and make curation manageable and sustainable for the topic owner.

Collecting and curating knowledge from across the enterprise is the most difficult aspect of knowledge management.

When a team harvester is mentioned in a Teams channel or Yammer community, they determine if the flagged content has ongoing value for the team. If it does, they clean it up, format it according to the appropriate template, and add it to the “Lessons Learned” tab in Teams. This will make it “publication ready” if it is suggested for general consumption by @mentioning the topic owner. A bit more work may be necessary for content flagged in Yammer, but even in that context the appropriate template will simplify the process as described earlier in the Externalization phase.
Once the topic owner is notified that content has been recommended for the topic page, they review the content and, if deemed valuable, publish it to the key information section of the topic page (see Figure 12). The new content may need some refinement to conform to any topic-page-specific requirements, but necessary revisions should be minimal in most cases.

**Figure 12. Harvesting Knowledge From Multiple Channels Manually and With Viva Topics**

![Harvesting Knowledge From Multiple Channels Manually and With Viva Topics](source: Adapted From Microsoft 351285_C)

Discovery and publication of new content is another area in which Viva Topics can be useful by sharing the Topic Page maintenance burden. Once Viva has identified a topic and generated a topic page stub, it automatically links to relevant content on an ongoing basis. A human curator still needs to extract content from kinked resources for publication to the key information section of the page, but the Viva links simplify identification of candidate content. Again, the accuracy and effectiveness of this process depend on the amount of topic related content hosted in Microsoft 365. This may hamper the usefulness of Viva in new Microsoft 365 deployments, but as content and usage grows in the enterprise Viva performance should continuously improve.
Internalization

Object: Receiving, comprehending and applying knowledge (explicit to tacit)

Basic action: SharePoint topic pages, SharePoint communication hubs

Extended application set: Viva Topics knowledge center

Pitfalls: Resourcing, licensing

At its heart, Internalization is nothing more than getting knowledge out of the repository or off of the page and into someone’s head. If every other phase of the SECI framework is implemented and maintained properly, Internalization is mainly providing time to absorb and opportunity to apply. As obvious as this may seem, it is usually overlooked in KM initiatives. It is assumed that staff will look for the knowledge they need when they need it, and will “find the time” to skill up if and when they wish to broaden their portfolio.

This approach is short-sighted and ineffective. When users are only able to internalize knowledge to solve an immediate issue, the expertise gained is shallow, limited to the application at hand, and usually soon forgotten. “Expertise on demand” is necessary, but should not be the primary focus of KM. This dynamic is reinforced if users are expected to work knowledge acquisition and skill enhancement into already overtaxed workloads. The message to staff is “just get your work done and become a more valuable employee on your own time.” This obstructs the self-reinforcing, virtuous cycle enabled by the SECI knowledge framework.

Internalization must be intentional on the part of both the employee and the organization. This can be accomplished in many ways, but the two most practical in Microsoft 365 are:

- Build knowledge transfer and skill acquisition into project plans and career paths.
- Promote usage of Viva Topics Knowledge Center and Web Part.

Build Knowledge Transfer and Skill Acquisition Into Project Plans and Career Paths

Blocking time on one’s calendar for knowledge acquisition and skill expansion should become standard practice. The amount of time blocked will vary based on a person’s role and commitments, but it should be formalized. In addition to promoting the Internalization process, this simple provision improves employee engagement and satisfaction. Even an hour per week of protected personal development time sends a strong message that the company values its employees and is investing in their development.
Staff should be encouraged to block the allotted time on their Exchange calendars and to use it for knowledge acquisition. Managers can and should periodically inquire about how that time is being used to show engagement, but also to set the expectation that the time be used wisely. The Viva Insights tool can be applied to this but is not strictly necessary. Viva Insights can provide the manager with an overview of their staff’s Internalization activities as well as providing each employee with prompts and reminders to take advantage of this time.

Internalization time specific to any given project should be built into the project’s plans. This includes time to learn new platforms and tools, as well as any new skills that must be developed or acquired by the team. This is especially important in professional services agreements. If a vendor or system integrator is to be engaged, build knowledge transfer time into the contract. This will result in a few more billable hours initially, but will ultimately save engagement hours by making the organization less dependent on the vendor or service provider to maintain or extend the solution.

**Promote Usage of Viva Topics Knowledge Center and Web Part**

Even with time set aside for Internalization, it can be difficult for users to keep track of all the topics they depend on or have an interest in. Newsfeeds, blog aggregators and mailing lists are all employed to help a knowledge worker keep up, but do little to help someone stay on top of all the constantly shifting content and activity across Microsoft 365. Here, the machine learning capabilities of Viva Topics can be particularly useful.

When Viva Topics is configured, a Knowledge Center is created that provides a personalized topic portal for all licensed users. Viva monitors activities, connections, and behaviors and uses that data to predict what topics are of interest to that particular user and presents them in the portal. The user either confirms or rejects the suggested topics and is free to add more topics not suggested by Viva (see Figure 13). From that point forward, new content and activity associated with that topic will be presented to the user each time they visit the Knowledge Center page. The Knowledge Center is also a web part that can be included in any SharePoint page enabling the user to track topics in the flow of work without the need to visit a dedicated destination.
This functionality does require a Viva license for each user leveraging the knowledge center. For a large organization, this can be a significant expense. For core knowledge workers, and those with broad responsibilities or rapidly changing domains, the expense is more than offset by gained efficiencies in Internalization.

Knowledge workers spend roughly a third of their time looking for the information they need to do their jobs. By proactively tracking, gathering and presenting relevant information, the Viva Knowledge Center has the potential to dramatically reduce that search time. This reclaimed time can be reallocated to focused Internalization, replacing lost time with productive engagement. Key personnel should be licensed with Viva Topics and encouraged to take full advantage of the Knowledge Center.

**Recommended by the Author**
For initial knowledge capture, complete thoughts are more important than complete sentences.