



Microsoft's Project Cortex at a glance



Microsoft announced Project Cortex at the 2019 Ignite conference, which would be its first new Microsoft 365 cloud service since the launch of Teams in 2017. This new knowledge management service is meant to help businesses organize their content and help users to rapidly find information that is spread across multiple documents in Microsoft's various services. With Project Cortex, employees can search and find information within Microsoft products, like the Office apps, Outlook and Teams. However, there is still a lot of speculation around this new service. This article analyzes the major highlights, impact and future of Project Cortex.

[What is Project Cortex?](#)

Project Cortex uses AI to reason over content across teams and systems, recognizing content types, extracting important information, and automatically organizing content into shared topics like projects, products, processes and customers. Cortex creates a knowledge network that is based on relationships among topics, content and people.

Project Cortex aims to help organizations turn their business content into an interactive knowledge repository, through the below actions:

1. Smart content ingestion
2. Analyze documents and extract metadata to create sophisticated content models
3. Control machine learning (ML) better with machine teaching
4. Understand semi-structured content
5. Enable knowledge retrieval, making it easy for employees to access valuable information that's locked away in documents, conversations, meetings and videos

Project Cortex connects content across Microsoft 365 and external systems, enabling organizations to manage information and streamline processes with built-in security, compliance and workflow.

Impact of Project Cortex on Businesses and the Customer Experience

Project Cortex builds on intelligence from the Microsoft Graph, a variety of Microsoft AI technologies and the leading content services of SharePoint (which recently surpassed 100 million monthly active commercial users) as a part of Microsoft 365.

Benefits of Cortex

1. Enables organizations to connect external systems and repositories
2. Uses advanced AI to automate content capture, categorization and management
3. Protects information with intelligent security and compliance
4. Cortex can also connect to content third-party repositories and systems by using the new [Microsoft Search](#) These connectors already support:
 - Windows File Share
 - ServiceNow
 - SQL Database
 - Intranet Websites
 - MediaWiki
 - Azure Data Lake Gen2
 - Salesforce
 - third-party connectors through the ingestion API

Outcomes that Project Cortex can deliver to organizations utilizing AI

- Organize knowledge across your teams and systems
- Empower employees with knowledge and expertise “just-in-time,” in the apps you use every day
- Intelligently manage and protect your content with built-in security and workflow

New Features of Project Cortex

Project Cortex applies AI to automatically organize your content and delivers innovative experiences—topic cards, topic pages and knowledge centers—in Office, Outlook and Microsoft Teams.

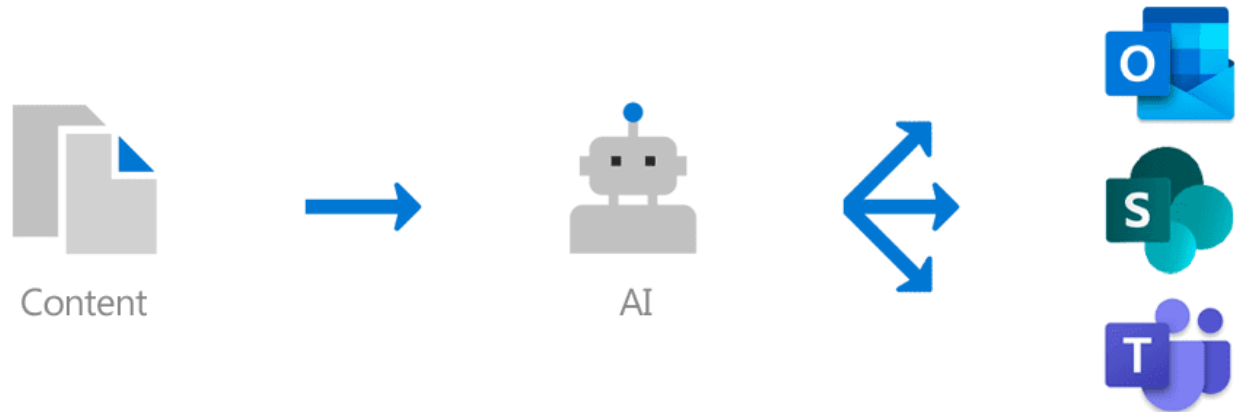


IMAGE 1

New topic pages and knowledge centers created and updated by AI, enable experts to curate and share knowledge through a simple and seamless method. It offers next-gen data management and sharing capabilities, and advanced cognitive services are responsible for capturing content, extracting information and automatically tagging content.

Image and Text Recognition

Identifies objects in scanned or uploaded images, based on an understanding of over 10,000 attributes, and extracts text from images and PDFs.

Forms Processing

Enables organizations to pinpoint important information in forms, and then extract that information as metadata. In the example shown below, one can establish a rule to automatically tag contract effective dates by analyzing the text of sample documents.

Select all Clear all 10 form fields selected Done

Purchase Orders form

Selected fields All fields

- DATE
- PO #
- VENDOR
- SHIP TO
- Phone (2)
- SUBTOTAL
- Comments or Special Inst...
- TAX
- SHIP/INS
- HANDLING
- TOTAL

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MAGE 2: Using AI to tag and organize information

Machine Teaching

Powered by [LUIS](#), experts are able to train AI to recognize information in unstructured documents (such as contracts, proposals or training materials), which might have varied content and formatting.

Project Cortex securely collects content that is created and shared every day in Microsoft 365—including files, conversations, recorded meetings and video—and categorizes the content based on its type, and then tags it with extracted metadata.

AI then applies advanced topic mining logic to check whether the content lies in Microsoft 365 or connected external systems to identify topics and relate content to those topics. Technically, AI is creating knowledge entities (a new object class) in the Microsoft Graph. The relationships between those topics or knowledge entities, and the experiences that connect this knowledge with people, create a knowledge network.

The metadata that’s applied to content by AI or by experts is managed in an updated Managed Metadata Service (MMS) that’s been extended to support tagging content across Microsoft 365. Managed metadata allows you to define common terms in a taxonomy, including synonyms and multilingual support, to allow precise tag definitions.

Topic Cards

Topic cards appear automatically in Outlook, Word, SharePoint, Microsoft Teams and in Microsoft Search results when a topic is detected, showing you a description, experts, resources and other information about the topic. When you search for a topic through Microsoft Search or Bing, you'll see a list of people who added the topic to their profile.

Topics will be shown prominently in cards across Microsoft 365, helping to easily identify who is working on what, within your organization. Additionally, Project Cortex will automatically prompt you to add topics, based on the work you're doing, to help keep your profile current.

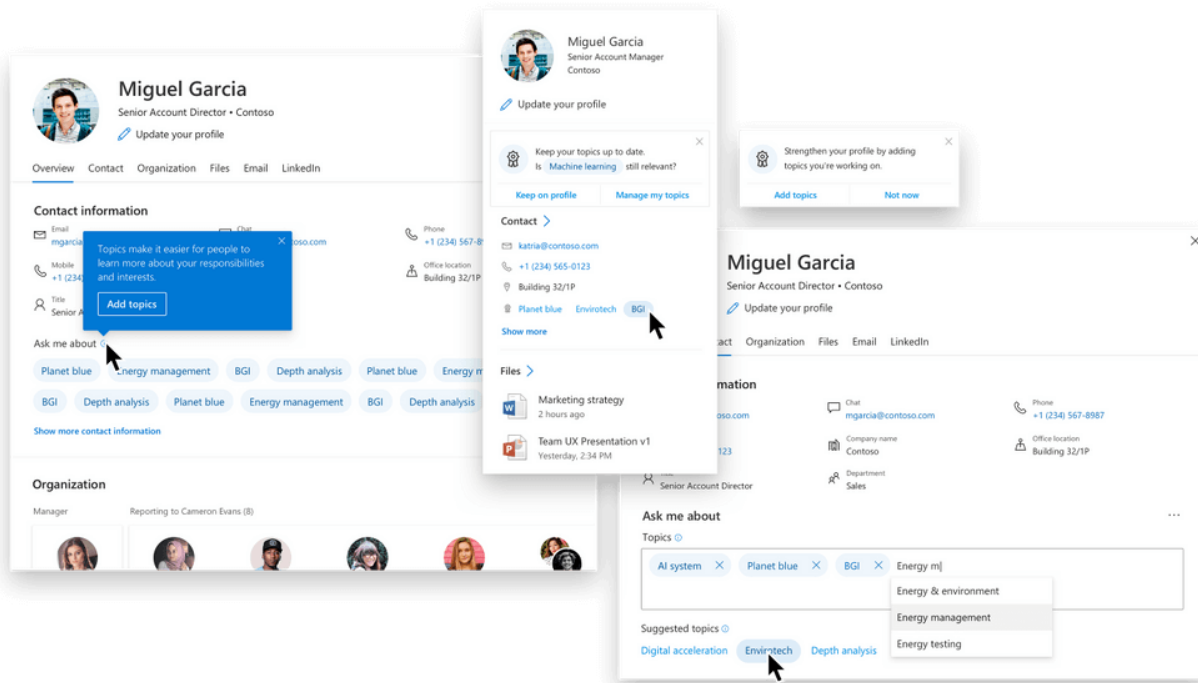


IMAGE 3: People cards in Microsoft 365

All this information can be explored in-depth on a topic page. Project Cortex builds topic pages automatically from your existing content using AI, and keeps your topic pages up-to-date alongside ongoing people-centric curation.

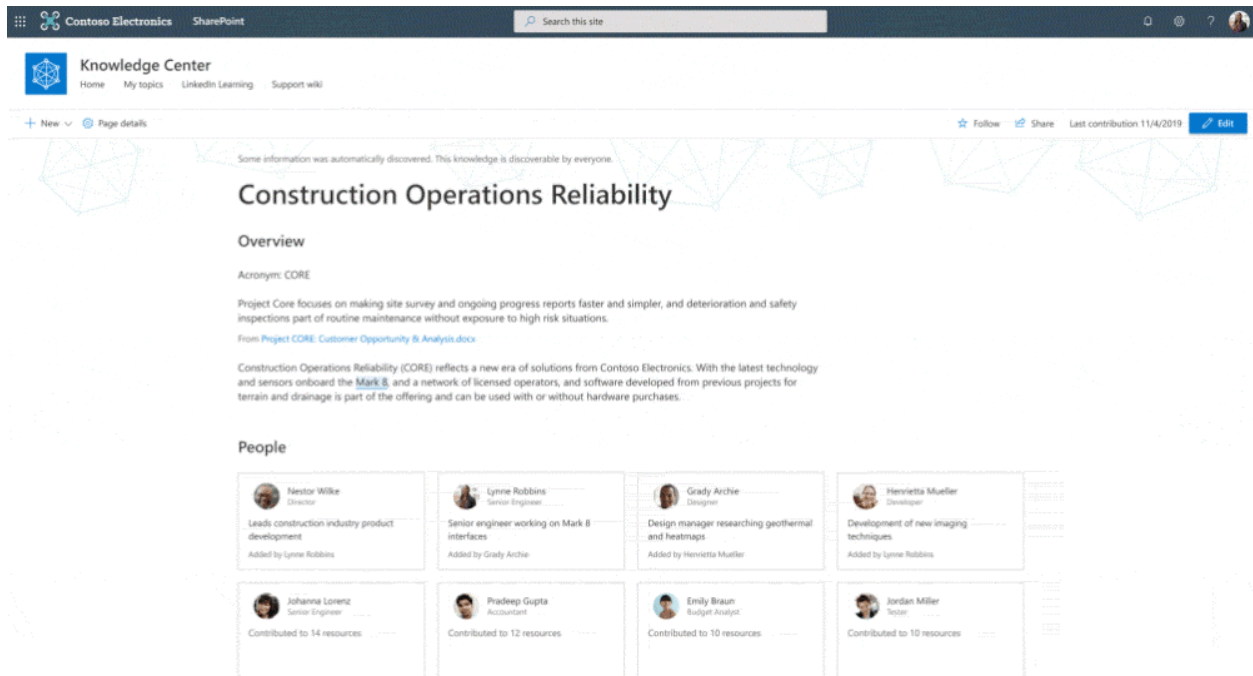


IMAGE 4: Topic page in Project Cortex

Topic pages roll up into your Knowledge Center enabling the following actions:

- Delivers a personalized view of relevant knowledge across your organization, including trending and relevant topics and open questions.
- Helps in the creation of additional, topic-specific knowledge centers—centers of excellence that support specific knowledge sharing scenarios within an organization, like by projects, products, policies and procedures or customers.
- Provisions additional web parts integrate knowledge and training from around your organization. These custom knowledge centers integrate seamlessly into the intelligent SharePoint intranet.

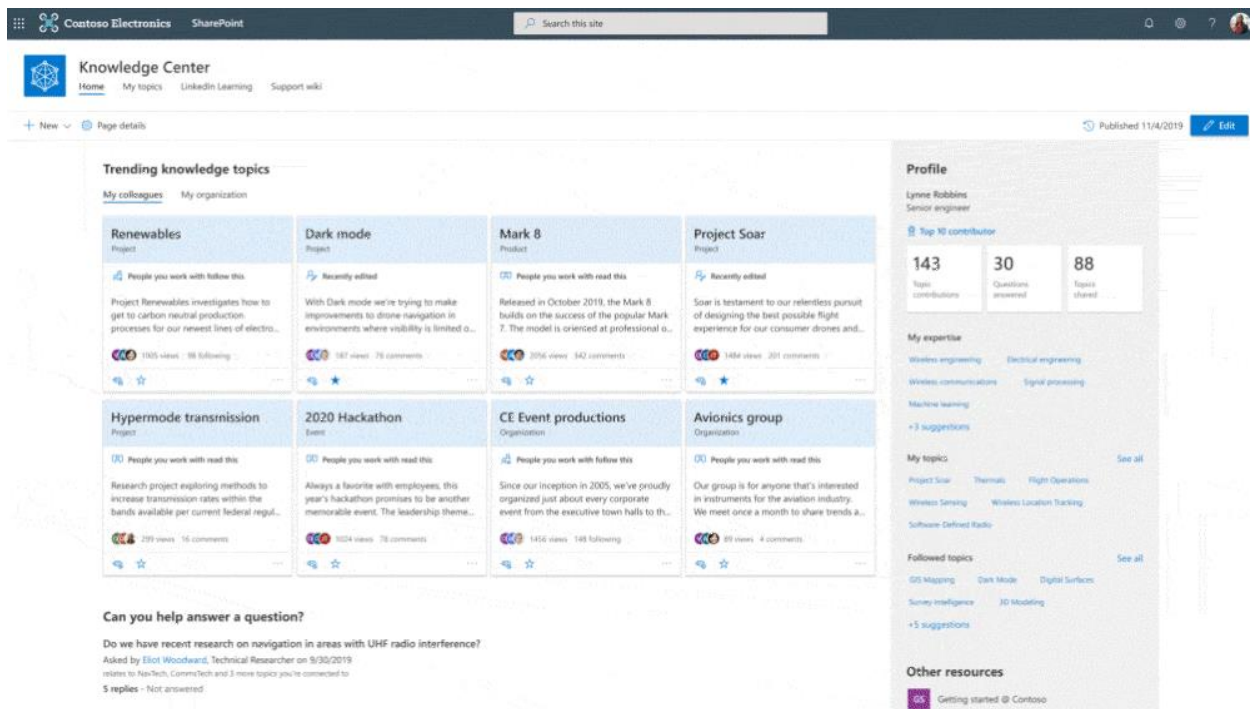


IMAGE 5: The knowledge center in Project Cortex

Enabling Project Cortex with Security and Compliance

Project Cortex enabled AI-powered capabilities that automate content capture and categorization will be available for all SharePoint libraries, as well as to new content centers. Content centers are libraries with superpowers—where you can run a report and analyze how content is being used. Content centers also enable you to create AI models for content processing, and to automate content-centric processes using AI Builder and Power Automate, which integrates with Cortex.

The boundary of a knowledge network is your organization. As it is built-in to Microsoft 365, it maintains the privacy, security and compliance you expect from Microsoft 365. For example, topics will be visible only to people with access to content and information related to a topic. The information one can see on a topic will reflect their access and permissions.

Administrator Control

1. Administrators can control which scopes of content are included in Cortex, by excluding sites or documents with certain classification labels.
2. Administrators will be able to control whether topics are published for broader visibility. There will be a blacklist to exclude specific topic names.

Project Cortex is currently available in private preview to select applicants and will become generally available by the first half of 2020. It enhances your security profile by automatically categorizing and tagging content with metadata, which can then be used by Microsoft Information Protection (MIP) to apply security and compliance policies.

This same automatic categorization and tagging can also be used to streamline business processes with Power Automate.

It helps in the integration of content from remote sources, such as file shares or third-party data sources. Cortex utilizes AI to automatically tag and organize the captured content. And content tagging can be used to drive automated security and retention policies enforced by Microsoft 365 data governance labels.