

TURNING SUPPORT INTERACTIONS INTO A KNOWLEDGE SOURCE

**HOW EDUCATION INNOVATION & TECHNOLOGY USES AI TO RECLAIM
NEARLY 4 HOURS A WEEK BY AUTOMATING SUPPORT DOCUMENTATION**

**(i) If valuable information is trapped in emails, or manual effort
prevents it from becoming reusable knowledge, keep reading.**

AI IMPACT AT UH

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TURNING SUPPORT INTERACTIONS INTO A KNOWLEDGE RESOURCE

HOW EDUCATION INNOVATION & TECHNOLOGY (EIT) USES AI TO RECLAIM NEARLY 4 HOURS A WEEK BY AUTOMATING SUPPORT DOCUMENTATION

THE CHALLENGE

EIT receives 30 to 45 support emails daily.

Documenting resolved cases would require 30-45 minutes of manual review each day. This task was left undone due to the time commitment, leaving knowledge scattered across email folders rather than preserved for future use.

THE SOLUTION

A Copilot Studio agent automatically identifies resolved cases, summarizes the documented solutions, and removes sensitive information.

Power Automate delivers a daily report and stores results in SharePoint, transforming support interactions into a searchable knowledge resource.

HOW IT WORKS



EMAIL THREADS



AI REVIEW



DAILY SUMMARY



HUMAN REVIEW



SHAREPOINT

THE LESSONS



FOCUS ON KNOWLEDGE, NOT JUST EFFICIENCY

EIT can now document resolved cases consistently, creating a structured record of recurring issues and proven solutions that staff can reference over time.



DESIGN FOR PEAK DEMAND

The initial design worked well but struggled during high-volume periods. Testing against peak workloads revealed the need for more robust architecture to ensure important support knowledge was not missed.



LET DATA DRIVE DECISIONS

Workflow decisions were backed by real usage patterns rather than assumptions. Those findings directly informed the final workflow design.



BUILD GOVERNANCE IN EARLY

Privacy, review responsibilities, and handling of sensitive information were incorporated into the solution from the beginning. Governance was treated as a core requirement.

THE VALUE



“ This is also a case where I was NOT categorizing and recording before, due to the time commitment.

This will help us with training. ”

Donald Barnhart
AI Specialist
EIT

THE SHIFT

Staff did not spend time reviewing, categorizing, and documenting completed support cases. Now, with the new workflow automating these activities, this task is completed automatically providing **more consistent data capture** leading to insights and actions not before visible.

THE TAKEAWAY

Many university processes already contain useful information. When combined with automation and human oversight, **AI can help departments capture that information more consistently** and make it easier to apply in future work.

TURNING SUPPORT INTERACTIONS INTO A KNOWLEDGE RESOURCE

How Education Innovation & Technology (EIT) uses AI to streamline support operations while building a growing knowledge base of real-world instructional technology solutions.

Resolved support emails contain more than records of completed customer service interactions. They capture recurring challenges and proven solutions supported by staff expertise. For EIT, that knowledge already existed across thousands of support conversations, but documenting it consistently required more time than staff could regularly dedicate.

EIT partnered with the UIT AI Solutions (AIS) team to redesign that process. The result is an **AI-powered workflow that transforms resolved support conversations into structured, searchable knowledge, returning up to 3.75 hours of staff time each week** while continuously expanding a repository of reusable institutional expertise.

THE CHALLENGE

EIT supports faculty, staff, and students through three channels: Instructure Canvas vendor support, UH Canvas Administration, and Faculty and Departmental Instructional Support (FDIS). On a typical day, the department receives approximately 30 to 45 support-related emails, with many cases spanning multiple messages within the same conversation. **Peak days can top 200 emails.**

Capturing those solutions for future reference required staff to review each thread, determine whether the issue had been resolved, identify the problem and resolution, categorize the case, and record the results. EIT estimated **the process would require 30 to 45 minutes each day**. Because of that time commitment, valuable support knowledge was not being documented consistently. Resolved cases remained scattered across email folders rather than being preserved in a structured, reusable format, and the institutional knowledge captured in those conversations was never systematically extracted or made available for future reference.

THE SOLUTION

AIS worked with EIT personnel to map the existing process and define what the new workflow needed to produce by creating a Copilot Studio agent. The agent reviews completed email threads, identifies cases with a clearly documented resolution, and summarizes the problem and solution. Any cases that are unresolved or do not contain a documented solution are excluded.

To protect sensitive information, the **AI is instructed to remove names, student identification numbers, and phone numbers from the problem, solution, and summary**. It is also restricted to using only solutions explicitly documented in the email thread rather than generating or assuming a resolution.

Power Automate automatically **organizes the results into a consistent, branded report** and delivers it directly to the stakeholder inbox each day. The daily summary is intended to make completed solutions easier to review and reuse while maintaining human oversight; it serves as a reviewable resource rather than an unverified final record. All report findings are saved into a departmental SharePoint repository that can be referenced for future support inquiries.

HOW IT WORKS

Power Automate retrieves the previous day's emails from the designated Outlook folder and sends them to the Copilot Studio agent, which groups related messages by conversation and reviews each complete thread. Using defined contextual signals, **the agent identifies resolved cases and excludes those without an explicit solution**, then extracts the important information while omitting selected personal information from the report. Power Automate consolidates the results into a single formatted table and delivers the completed report to the department inbox.

THE IMPACT

The **daily documentation effort fell from an estimated 30 to 45 minutes of manual work to zero routine staff action**. During validation testing, EIT stakeholders confirmed **output accuracy at 90 percent**. After implementation, resolved cases began accumulating automatically in a standardized format each day, creating a knowledgebase for staff training and faculty documentation.

POST-LAUNCH ENHANCEMENTS

The first production version used a single AI agent to process the entire previous day's support emails in one call. It performed reliably on normal-volume days, but during high-traffic peak periods the agent reached its input capacity limit, and the daily summary was not delivered. For most, the instinctive response is to request additional token capacity, an approach that introduces recurring cost without resolving the underlying architectural challenge.

AI Solutions chose a different path; the redesigned architecture divides each day into **four six-hour windows, each processed simultaneously by a dedicated agent call**. Power Automate orchestrates the entire operation by retrieving emails by time window, routing each batch to the agent, and consolidating all results into a single report delivered every morning. **The department's experience remained unchanged** while the system behind it became significantly more resilient, at no additional cost.

What the team did not fully anticipate was that the change would also improve output quality. Focused four-window processing gave the agent a manageable set of conversations to evaluate in each call; case identification accuracy improved considerably as a result. Ninety days post-implementation, stakeholder feedback confirmed the system was handling peak-volume days without errors and delivering consistent output every morning.

LESSONS LEARNED

1. **Start with the knowledge being lost.** The strongest business case was not simply that staff could save time. It was that a valuable task was not being completed because the manual burden was too high.
2. **Test the peaks, not only the average.** Normal day success did not prove resilience. Historical high-volume testing exposed the limit, validated the redesigned architecture, and restored the missed knowledge records.
3. **Use evidence to shape architecture.** A two-window design looked reasonable until real data showed that 63 of 69 peak-day emails fell in one half of the day. The four-window model was chosen because operational data, not assumption, showed where the workload concentrated.
4. **Treat governance as part of the solution.** Access, ownership, PII handling, review responsibilities, and change control were documented as delivery requirements rather than deferred until after deployment.

THE TAKEAWAY

Many university processes generate valuable information that never becomes reusable knowledge because capturing it requires manual effort. Support tickets, project requests, committee feedback, audit documentation, consultations, and other recurring activities often contain lessons that could benefit future work. This project demonstrates how **AI can help organizations identify, organize, and preserve that information** so staff can spend less time documenting and more time applying what they have learned.