Go with the Flow: An Automated Proposal Intake Process Built in Office 365

1. INTAKE

INTRODUCTION

This poster maps the proposal intake process in the Health Colleges Research Services office at Michigan State University. The process automates many tasks in preaward management and allows for extensive reporting options.

This process requires the Microsoft 365 platform and utilizes:

- 1. Microsoft Forms
- 2. Power Automate
- 3. SharePoint Lists
- 4. OneDrive
- 5. Power Bl
- 6. Microsoft Teams

An automated process was needed to reduce the effort and time needed to record, log, and track proposals, as well as reduce email traffic for both faculty and administrators.

After a proposal intake form is submitted, a **Power Automate** flow runs to create an item in a SharePoint List. The flow maps the data fields in the form to the columns in the list.

Using a Parse JSON step, the attachments are saved in a **OneDrive** folder and attached to the SharePoint List entry associated with the form submission. This allows HCRS team members to access attachment(s) in the list entry and more quickly respond to a proposal notification.

Use the QR code above to view more details about the Power Automate flow that creates the SharePoint List item. This supplemental material includes step-by- step details for the entire flow process.

1.0 INTAKE

The proposal intake process begins when an investigator submits the Proposal Intake Form.



The intake form is built in **Microsoft Forms** and includes fields for basic proposal details such as title, deadline, key personnel, human subjects, vertebrate animals, etc. Some questions are conditional and will not appear if not applicable to the proposal. Users can upload attachments such as a sponsor solicitation, letter of intent, program officer communication, or other related proposal materials.

We use the information from the intake form to initiate the proposal in Kuali Research, an S2S technology solution.

Use the QR code above to view a sample intake form with additional notes and comments.

Health Colleges Research Services Proposal Intake Form	
Hi, Theresa. When you submit this form, the owner will see your name and email address.	
* Required	
Contact Information	□.
1. MSU PI Name	
Last Name, First Name	
Enter your answer	
2. MSU PI Email * 대 To add multiple email addresses for correspondence, please separate address with a semicolon.	

Proposal Intake Form landing page

2.0 NOTIFY

Notification emails are next triggered using **Power Automate**. This includes:

Use the QR code above in section 1.1 for more about the automated notifications as part of the proposal intake flow.

Theresa Couch, Research Administration Manager, Health Colleges Research Services, Michigan State University

2. NOTIFY

1.1 AUTOMATED LIST ITEM



nse is submitted		····		
	Get response details 2		?	
	Create item		?	
	<i>Parse JSON</i>		?	•••

Power Automate flow creating SharePoint List item

HCRS Office Notification: Email with basic proposal details, alerting manager to new intake form.

2. <u>College/Department-Specific Notification</u>: Email triggered based on college/department selected on the intake form. This notification will flow to the designated college/department contact(s) and includes the basic proposal details.

3. <u>Human Subjects Notification</u>: Email with human subjectsspecific details from the intake form sent to the Human Research Protection Program (HRPP) office. The HRPP office will contact the Principal Investigator, if needed.

3.0 REVIEW

The HCRS Manager or delegate reviews the intake form in the **SharePoint List** to determine difficulty level and project parameters to appropriately assign the proposal to a team member. This review also takes into consideration current assignments and difficulty level, performance goals, scheduled time off, etc.

The HCRS difficulty scale ranges from 1 to 4 with additional difficulty added for international components, multiple subawards, sponsor, or other proposal considerations. Additionally, HCRS utilizes a responsibility matrix based on job level and years of experience. These documents are part of the HCRS standard operating procedures and are available for all team members to review.

The Manager manually enters the difficulty level and activity code/proposal type in the list entry, which are used later in reporting. Finally, the team member is selected from a dropdown menu in the SharePoint list.

Use the QR code above to view the HCRS matrix used when making proposal assignments.

⊘ Activity Code
R01
① Diff Score
2
Data fields entered by Manager or delegate

3.1 ASSIGNMENT NOTICE

A **Power Automate** flow emails both the PI and HCRS team member of a proposal assignment. The team member will then work directly with the PI to prepare the proposal. We commit to responding to a new assignment within two business days. The PI can also reach out directly to the team member with questions.

Use the QR code above to view the detailed Power Automate flow and sample email notification.

Thank you for submitting a proposal intake form. Theresa Couch will assist you and will contact you within two business days.
Proposal resources are available online, including:
 <u>Proposal timeline</u> <u>Kuali Research</u> (KR), requires multi-factor log in <u>KR training and job aids</u> <u>Budget development</u>
Please contact Theresa if you have additional questions.
Assignment notification email









Team member assignment drop-down menu





4.0 LOG

Proposal Management

Preaward tracking and effort is subsequently managed in the **SharePoint List**.

Team members log their activities, such as final budget, proposal submission date, and submission status according to the MSU deadline policy (right).

Date Submitted 09/01/2023 Submission Status On Time

Logged activities

List Management

The **SharePoint List** is conditionally formatted so proposals are color-coded according to team member. This allows for quick visual reference.

The data fields, which were mapped from the intake form, are also conditionally formatted and highlighted to indicate if human subjects, animals, international activities, and other compliance items are applicable (below). This allows team members to easily and quickly make note of proposal parameters and necessary compliance requirements.

Some fields on the intake form are not required, so if proposal questionnaires are not entered, the HCRS team member will need to follow up with the investigator to get confirmation.

Does the project involve human subjects?
Yes
Does this research proposal include domestic external sites engaged in conducting non-exempt human research?
No

Conditionally formatted data in SharePoint

View Management

HCRS uses filtered, public list views in the **SharePoint List** to show current proposals, closed proposals, and all proposals. Team members can also create and filter private views to show only "my proposals," for easier workload management.

SharePoint supports several view options including calendars, galleries, boards, and expanded or compacted lists. HCRS mostly uses expanded lists for public views.

Use the QR code above to view more about how HCRS uses the SharePoint List for preaward management.







Data from the SharePoint List can be reported on using Power BI. The HCRS data set is refreshed 8 times daily from SharePoint, so the reports provide nearly real-time data.

HCRS team members and colleagues have access to reports through **Microsoft Teams** or online. Sharing Power BI reports requires both the owner and the viewer to have Power BI Pro licenses.



SUMMARY

This proposal intake flow automates much of the more manual aspects of the initial preaward process. A summary of benefits includes: streamlined proposal data collection, automated notifications requiring no additional time or effort, transparency of workload and progress among team members, PI satisfaction, and extensive reporting capabilities.

In addition to the proposal intake process, HCRS utilizes a similar flow for Just In Time (JIT) requests. The JIT log uses a lookup field to pull data from the proposal intake list, minimizing repetitive manual entries. Similar automated emails and flows are designed for the JIT process.

