Variation Receipt Automation

Streamlining processes for efficient document handling

Statement of the problem/Opportunity

Role of WHO PQP

WHO PQP ensures quality, safety, and efficacy during post-prequalification changes in medicines.

Problem

Current Manual Workflow

Variation submissions are manually received via email and logged into Excel, causing delays.

Manual Data Entry Risks

Manual processing is time-consuming, error-prone, and limits tracking and task assignment.

Staff Administrative Burden

Staff spend excessive time on administrative tasks reducing focus on core duties.

Lack of Automation

No real-time tracking or notifications cause delays and reduce process transparency.

Opportunities

- To enhance efficiency and productivity, it is proposed that the receipt and recording of variation applications including the assignment of reference numbers be automated using a workflow powered by Large Language Models (LLMs).

- Automation reduces manual workload, enhances data accuracy, and improves process efficiency.

- Frees up time of the staff to focus on core duties requiring technical expertise

Solution and Workflow

Automation Strategy Using MAKE and Prompt Flow

- *Workflow Automation Using MAKE and Prompt Flow*

- Use MAKE.com for orchestration and Prompt Flow for LLM-based parsing and validation.

- Automate email intake, data extraction, reference number generation, and spreadsheet updates.

Workflow Scope:

Email Monitoring and Parsing

- The system monitors specific email subjects and uses text parsing to extract structured data from unstructured content effectively. (**Gmail- Watch Emails, Text Parser- Match Pattern)**

Data Validation and Classification

- Extracted data fields such as applicant name and variation type are validated and classified for accuracy and organization. *(HTTP – Make a Request module)*
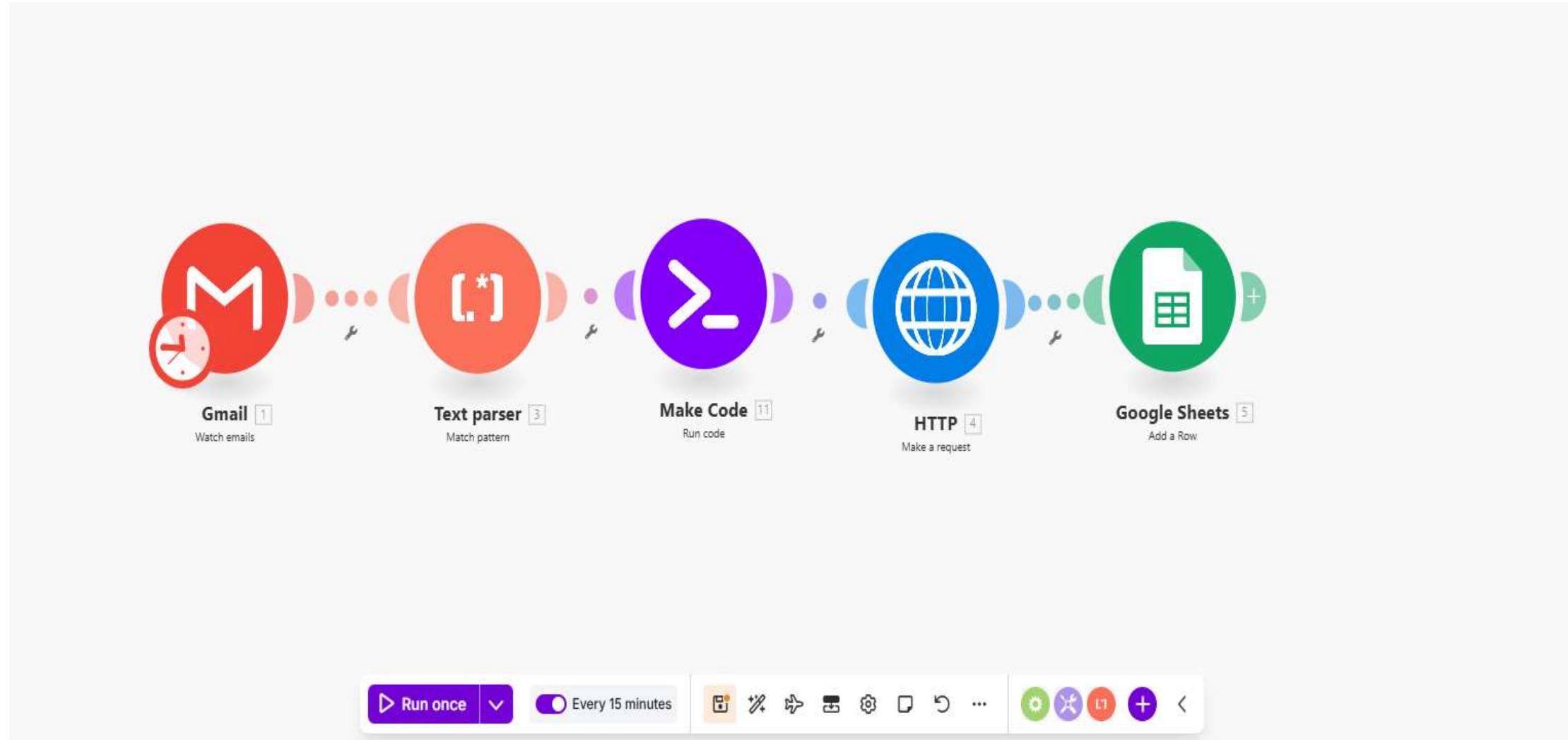
Reference Number Generation

- A sequential reference number generator assigns unique IDs to submissions to ensure traceability and organization. **(JavaScript Code module in MAKE)**

Spreadsheet Integration

- Parsed and validated data is appended to a Google Sheet for real-time

MAKE Workflow Snapshot

Key Features and AI Tools Used

MODULE	FUNCTION
Gmail – Watch Emails	Triggers workflow based on email subject
Text Parser (Match Pattern using Regex)	Extracts structured data using regex
JavaScript Code module in MAKE	To conditionally generate the reference number only if it's missing from the parsed data
HTTP – Make a Request	Sends data to Prompt Flow and receives JSON
Google Sheets – Add Row	Appends validated data to tracking sheet

Challenges Encountered in Setting Up Workflow Automation on MAKE

Text Parser Limitation

Text Parser supports only one regex pattern per module, complicating multiple field extraction from emails. A single regex with multiple capture groups was used.

OAuth 2.0 Setup

OAuth 2.0 setup (for secure API access) requires deep understanding of authentication flows and token management.

HTTP Module Configuration

HTTP module needs precise header, body, and query string setup for external API integration.

Current Limitations and Opportunities for Improvement

Future Implementation Steps

- ***Pilot and Scale***

- Conduct a 3-month pilot to test the automation.

- Measure success via:
  - Reduction in manual processing time
  - Accuracy of classification and reference assignment
  - User feedback

- Scale to other workflows based on pilot outcomes.

Conclusion

Automating the variation receipt workflow using MAKE and Prompt Flow offers a scalable, efficient, and secure solution to current operational challenges. With proper planning, training, and phased deployment, the PQT team can significantly enhance productivity and data integrity while reducing manual workload.