

Semi-Automated Analysis Program for Overall Equipment Effectiveness

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1. PROBLEM STATEMENT

- Pratt & Whitney Canada's Halifax plant produces turbine blades for aircraft engines.
- To track overall equipment effectiveness (OEE), a weekly report is generated in excel through time-consuming manual data entry.
- Improvements to automation is a major goal for Pratt & Whitney Canada

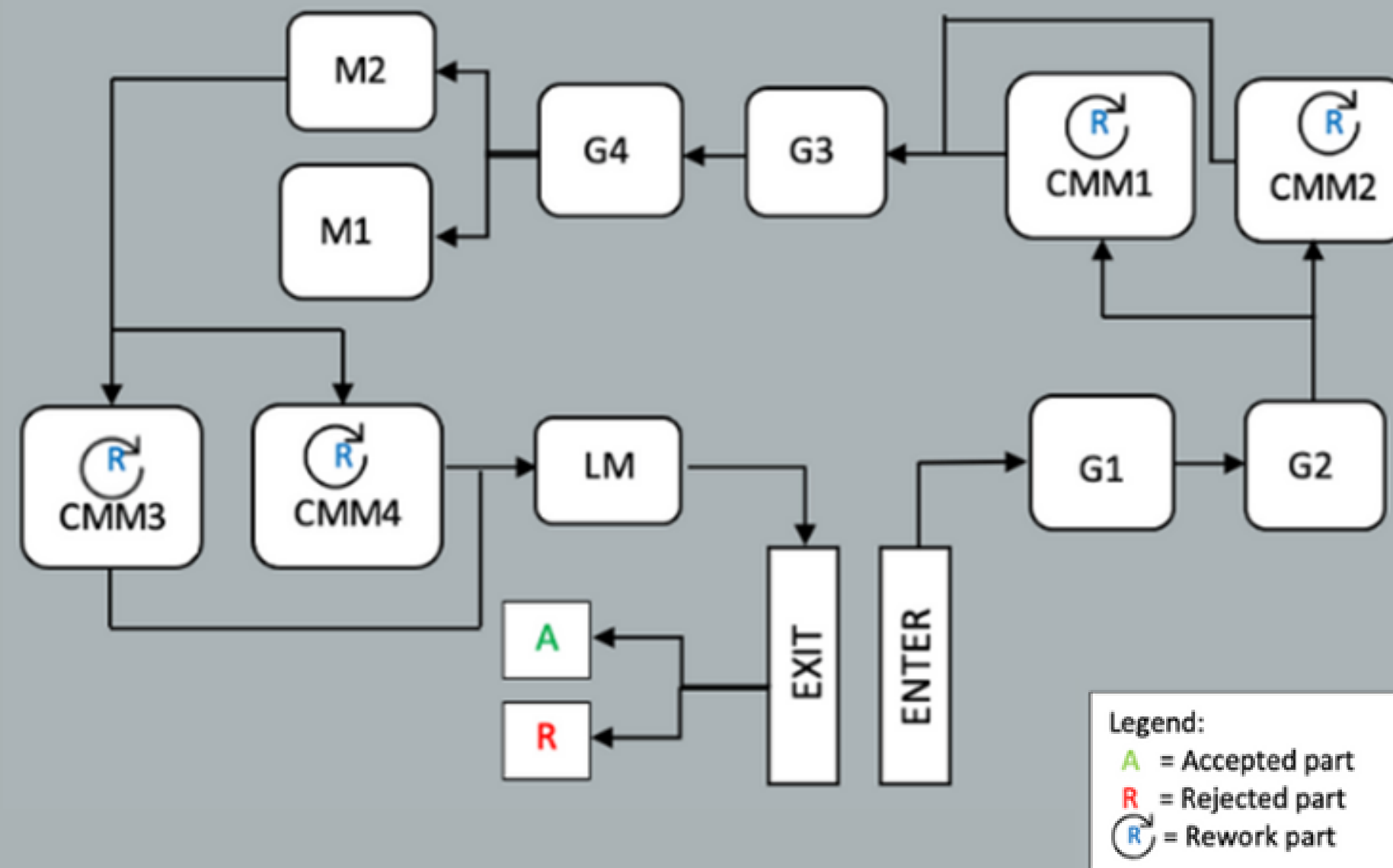
2. OBJECTIVES

- Automate data importation using VBA and SQL.
- Create an interface to minimize user inputs.
- Write a manual to guide users.

3. METHODS

- Determined required sources of data.
- Connected to databases and imported data using VBA code.
- Filtered data using SQL queries.
- Entered data on reporting tool's sheets using VBA.

PROCESS MAP - TBAMC LINE



4. IMPLEMENTATION

- Validated data accuracy against manually entered samples.
- Created interface for user inputs.
- Wrote user manual to guide new users.
- Maintained data security by using read-only database access and passwords.

5. FUTURE DEVELOPMENT

- Expand use in other production areas by adjusting queries and reports.
- Improve automation of reporting process by IT department with embedded charts on the plant's website.

FINAL OEE PROGRAM PROCESS MAP

