

ABSTRACT

Data on changes in river levels can be used to identify potential flood hazards in an area. When water levels exceed thresholds, the potential of flooding in river basins increases. Data can be logged for use as a reference to identify areas prone to flooding. Currently, one of the instruments for measuring water levels in rivers is the Automatic Water Level Recorder (AWLR). However, the tool has the drawback that it does not have a measurement system documentation process that can be used as a reference for analyzing a system or for predicting flooding in the certain area. Therefore, it is urged in this study to develop a monitoring document based on robotic process automation for an autonomous air level measurement system (RPA). The RPA robot in this system will handle activities like data retrieval, processing, and transmission. Water level measurement data from the RPA robot are available on the PATRIOT-Net website. The data is then analyzed to create a monitoring document, which is then delivered by email and WhatsApp to the user. According to the test, the RPA robot can finish four of the test schemes with 100% accuracy in the data collection. The average percentage of incorrect data for the past seven days in position analysis is 14.16 %. The time needed to complete the manual document generating process is then 8 minutes 42 seconds, but the RPA robot uses 2 minutes 52 seconds less time.

Keyword: data, document, flood, Robotic Process Automation (RPA), water level