

Process Mining as an Ecosystem Platform to Mitigate a Deficiency of Processes Modelling

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Abstract : The teaching staff is a distinct group whose impact is on the educational process and which plays an important role in enhancing the quality of the academic education process. To improve the management effectiveness of the academy, the Teaching Staff Management System (TSMS) proposes that all teacher processes be digitized. Since the BPMN approach can accurately describe the processes, it lacks a clear picture of the process flow map, something that the process mining approach has, which is extracting information from event logs for discovery, monitoring, and model enhancement. Therefore, these two methodologies were combined to create the most accurate representation of system operations, the ability to extract data records and mining processes, recreate them in the form of a Petri net, and then generate them in a BPMN model for a more in-depth view of process flow. Additionally, the TSMS processes will be orchestrated to handle all requests in a guaranteed small-time manner thanks to the integration of the Google Cloud Platform (GCP), the BPM engine, and allowing business owners to take part throughout the entire TSMS project development lifecycle.

Keywords : process mining, BPM, business process model and notation, Petri net, teaching staff, Google Cloud Platform

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