

Project Title: USING PROCESS MINING IN ORGANIZATION – A CASE STUDY

Abstract

Process mining techniques enable to produce information from event logs. The audit trails / logs of a workflow management system / enterprise resource planning system can be used to discover models of processes, organizations, and products. Furthermore, process mining can be used to observe deviations in business processes.

The primary goal of process mining is to extract knowledge from these logs and use it for a detailed analysis of the real world [1].

Process mining techniques can be used to support redesign and diagnosis phases by analyzing the processes as they are being executed. It requires the availability of detailed event logs. Fortunately, event logs are widely available today and the total number of events being recorded is growing fast. [1]. Process mining addresses the problem that most of process owners have partial information about what is truly happening. Actually, there is often a significant gap between what is prescribed or supposed to happen, and what actually happens.

This paper (project) presents a case study of a business process at an armament defense company. the logs were extracted from ERP system and the business process was enrolment to a training class (including a workflow approval process). Often we find ourselves developing solutions without knowing how they are really being used, do they work as the designed model and if not, how far is the reality from the plan (conformance check)? Do we have problems that indicate of a redesign that should be made to a process, are there any workarounds? Why? How can we do better to minimize those workarounds, are there any problems with the data and can we use process mining techniques to discover those problems?. By working on this project, we intended to gain some of this knowledge about the specific business process using process mining and according to the insights we will get from it, consider using process mining in more processes across the organization.

The goal of this paper is to represent the research questions, objectives, motivation and provide an overview of studies within this field which relate to the context of this work, what kind of concepts have been explored, what the main findings are, and what research methods are used.

The rest of the paper includes: background and motivation, research question, related work, results, construction methods and evaluation of a selected case study and finally, discussion.

Keywords: Process mining, Users' Workarounds , Workflow acceptance mining, Disco