

**ANALISIS PROSES BISNIS PENGELOLAAN DATA PRESTASI DAN
BEASISWA MAHASISWA MENGGUNAKAN *BUSINESS PROCESS
IMPROVEMENT (BPI)***

STUDI KASUS: UNIVERSITAS PENDIDIKAN GANESHA

Oleh

Gusti Ayu Putu Setiari, NIM 1815091007

Program Studi Sistem Informasi

Jurusan Teknik Informatika

Fakultas Teknik dan Kejuruan

Universitas Pendidikan Ganesha

Email: ayu.setiari@undiksha.ac.id

ABSTRAK

Data prestasi dan beasiswa mahasiswa diperlukan dalam berbagai hal seperti akreditasi, pendataan SIMKATMAWA, SKPI, pengambilan keputusan, dan lain-lain. Saat ini, proses bisnis pengelolaan data prestasi dan beasiswa mahasiswa di Universitas Pendidikan Ganesha (Undiksha) sudah berjalan dengan baik, namun perlu dilakukan analisis lebih lanjut guna meningkatkan kinerja proses bisnis dengan melakukan analisis proses bisnis. Penelitian ini bertujuan untuk memodelkan dan mengevaluasi proses bisnis saat ini (*as is*), memperbaiki proses bisnis dan memodelkan proses bisnis rekomendasi (*to be*), serta melakukan simulasi untuk mengetahui perbandingan proses bisnis *as is* dengan *to be*. Penelitian ini dilakukan dengan menggunakan metode *Business Process Improvement (BPI)* dan pemodelan proses bisnis dilakukan dengan membuat diagram alir menggunakan *Business Process Model and Notation (BPMN)*. Proses evaluasi dilakukan dengan memanfaatkan metode *Failure Mode and Effects Analysis (FMEA)* serta *5 Why's Analysis* untuk menemukan akar permasalahannya. Nantinya proses perbaikan akan menggunakan *tools streamlining* pada BPI dan hasilnya akan dimodelkan kembali menggunakan BPMN. Simulasi proses bisnis dilakukan dengan menggunakan *simulation tools* dari *Bizagi Modeler* dengan hasil sebagai berikut: 1) Proses bisnis *as is* dan *to be* dikatakan *valid* karena nilai *input* dan *output* memperoleh nilai yang sama pada indikator *process validation*; 2) Terjadi peningkatan perbandingan proses bisnis *as is* dan *to be* dengan nilai persentase rata-rata 44,85% pada indikator *time analysis*; 3) Pada indikator *resource analysis* diperoleh hasil pemanfaatan *resource* yang lebih efisien dan efektif berkat penambahan *resource* baru yaitu sistem SSO Undiksha serta penyesuaian *job desk* masing-masing *stakeholder*.

Kata-kata kunci: analisis proses bisnis, prestasi, beasiswa, BPMN, BPI, evaluasi, simulasi

***BUSINESS PROCESS ANALYSIS OF STUDENT ACHIEVEMENT AND
SCHOLARSHIP DATA MANAGEMENT USING BUSINESS PROCESS
IMPROVEMENT (BPI)***

CASE STUDY: GANESHA UNIVERSITY OF EDUCATION

By

Gusti Ayu Putu Setiari

Study Program in Information System

Major in Informatics Engineering

Faculty of Engineering and Vocational

Ganesha University of Education

Email: ayu.setiari@undiksha.ac.id

ABSTRACT

Student achievement and scholarships data are needed in various ways such as accreditation, SIMKATMAWA data collection, SKPI, decision making, etc. Currently, the business process of managing student achievement data and scholarships at Ganesha Education University (Undiksha) has been going well, but further analysis is needed to improve business process performance by doing business process analysis. This study aimed to model and evaluate the current business processes (as is), improve business processes and modeling the recommendation for business processes (to be), and also do simulations to compare the current business processes with the recommendation. This research was conducted using the Business Process Improvement (BPI) method and business process modeling was carried out by making a flowchart using the Business Process Model and Notation (BPMN). The evaluation process is carried out by using the Failure Mode and Effects Analysis (FMEA) and 5 Why's Analysis methods to find the root of the problem. Later the repair process will use the streaming tools at BPI and the results will be modeled again using BPMN. Simulation of business processes is carried out using simulation tools from Bizagi Modeler with the following results: 1) As is and to be business processes are said to be valid because the input and output values get the same value on the process validation indicator; 2) There is an increase in the comparison of business processes as is and to be with an average percentage value of 44.85% on the time analysis indicator; 3) In the resource analysis indicator, the results of resource utilization are more efficient and effective due to the addition of a new resource, named Undiksha SSO system and job desk adjustments for each stakeholder.

Keywords: *business process analysis, achievements, scholarships, BPMN, BPI, evaluation, simulation*