

## ABSTRAK

Ikatan Pelajar dan Mahasiswa Dogiyai Yogyakarta dan Solo (IPMADO Jog-Lo) merupakan organisasi sosial yang berada di Yogyakarta untuk mengayomi seluruh pelajar dan mahasiswa Dogiyai. Membangun kebersamaan dalam satu wadah yaitu Ikatan Pelajar dan Mahasiswa Dogiyai Yogyakarta dan Solo untuk menggali potensi-potensi pelajar dan mahasiswa yang memiliki daya saing dalam semua bidang pendidikan dan keilmuan maupun minat serta bakat pelajar dan mahasiswa Dogiyai yang selama menjalani proses berpendidikan di Yogyakarta dan Solo. Dalam kegiatan sehari-hari ada beberapa kendala yang sering dihadapi oleh Badan Pengurus Harian (BPH IPMADO JOG-LO) seperti mendata aset organisasi, mengontrol peminjaman kas, pengembalian kas, peminjaman buku, pengembalian buku, pembayaran tunggakan, dan pendataan anggota akhir studi yang akan mendapatkan dana tugas akhir. Sebab semua kegiatan ini dilakukan secara manual. Untuk mengurangi kesenjangan tersebut, maka perlu adanya perbaikan *business process* serta perancangan teknologi sistem informasi seperti perancangan infrastruktur informasi (data), perancangan infrastruktur aplikasi, dan perancangan infrastruktur jaringan (teknologi) sehingga organisasi berkewajiban mengembangkan dan menerapkan serta memanfaatkan kemajuan teknologi informasi untuk meningkatkan kemampuan mengelolah data. Aplikasi yang dibangun ini menggunakan metode perancangan dan, metode pengumpulan data dilakukan dengan observasi dan wawancara. Sedangkan perancangan sistem menggunakan ERD (Entity Relational Diagram) dan DFD (Data Flow Diagram) serta bahasa pemrograman yang digunakan yaitu pascal dan SQL Server sebagai basis data dan aplikasi Embarcadero Delphi XE8. Untuk laporannya, menggunakan FastReport. Hasil dari penelitian ini dapat meminimalisir masalah yang dialami oleh (BPH IPMADO JOG-LO), sehingga dalam pencarian data maupun pelaporan, cepat, akurat dan, terkontrol dengan baik.

**Kata kunci :** Aplikasi, Sistem Terintegrasi, Administrasi

## **ABSTRACT**

The Yogyakarta and Solo Dogiyai Student and Student Association (IPMADO Jog-Lo) is a social organization located in Yogyakarta to protect all Dogiyai students and students. Building togetherness in one forum, namely the Yogyakarta and Solo Dogiyai Student and Student Associations to explore the potential of students who have competitiveness in all fields of education and science as well as the interests and talents of Dogiyai students and students who during the educational process in Yogyakarta and Solo. In daily activities there are several obstacles that are often faced by the Daily Management Board (BPH IPMADO JOG-LO) such as registering organizational assets, controlling cash borrowing, cash returns, borrowing books, returning books, paying arrears, and data collection of final members who will get final project funding. Because all of these activities are carried out manually. To reduce this gap, it is necessary to improve the business process and design information system technology such as designing information infrastructure (data), designing application infrastructure, and designing network infrastructure (technology) so that the organization is obliged to develop and implement information technology advances to improve management capabilities data. This application is built using the design method and, the method of data collection is done by observation and interviews. While the system design uses ERD (Entity Relational Diagram) and DFD (Data Flow Diagram) and the programming languages used are Pascal and SQL Server as the database and application of Embarcadero Delphi XE8. For the report, use FastReport. The results of this study can minimize the problems experienced by (BPH IPMADO JOG-LO), so that the search for data can be reporting, fast, accurate and, well-controlled.

**Keywords:** Application, Integrated System, Administration

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The Yogyakarta and Solo Dogiyai Student Association (IPMADO Jog-Lo) is a social organization located in Yogyakarta to protect all Dogiyai students and university students. Building togetherness in one forum, the Yogyakarta and Solo Dogiyai Student Associations aims to explore the potential of students who have competitiveness in all fields of education and science as well as the interests and talents of Dogiyai students during the educational process in Yogyakarta and Solo. In daily activities, there are several obstacles which are often faced by the Daily Management Board (BPH IPMADO JOG-LO) such as registering organizational assets, controlling cash borrowing, cash returns, borrowing books, returning books, paying arrears, and data collection of final members who will get final project

funding. Because all of these activities are carried out manually, to reduce this gap, it is necessary to improve the business process and design information system technology such as designing information infrastructure (data), designing application infrastructure, and designing network infrastructure (technology). Therefore, the organization is obliged to develop and implement information technology advances to improve management capabilities data. This application is built using the design method, while, the method of data collection is done by observation and interviews. While the system design uses ERD (Entity Relational Diagram) and DFD (Data Flow Diagram) and the programming languages used are Pascal and SQL Server as the database and application of Embarcadero Delphi XE8. For the report, it uses FastReport. The results of this study can minimize the problems experienced by (BPH IPMADO JOG-LO), thus, the search for data can be reporting, fast, accurate and, well-controlled

