

## RINGKASAN

Transformasi digital dalam tata kelola pemerintahan melalui Sistem Pemerintahan Berbasis Elektronik (SPBE) menjadi urgensi dalam meningkatkan efektivitas layanan publik. Kementerian Agama Republik Indonesia mengembangkan Aplikasi Sistem Informasi dan Administrasi Guru Agama (SIAGA) untuk mengelola data guru Pendidikan Agama Islam (PAI). Namun, penggunaan sistem ini di lapangan sering menghadapi kesenjangan antara rancangan ideal dengan realitas penggunaan, seperti kendala performa sistem dan ketidaksinkronan data. Penelitian ini bertujuan untuk menganalisis dan mendeskripsikan efektivitas Aplikasi SIAGA dalam administrasi guru PAI di Kementerian Agama Kabupaten Banyumas ditinjau dari aspek *performance, information, economy, control, efficiency, dan service* berdasarkan PIECES Framework. Penelitian ini menggunakan metode kualitatif dengan pendekatan deskriptif. Metode pengumpulan data dilakukan melalui beberapa teknik, yaitu observasi, wawancara dan dokumentasi. Analisis data dilakukan dengan pendekatan kualitatif mengacu pada model analisis yang dikemukakan oleh Miles, Huberman And Saldana meliputi reduksi data, penyajian data, serta penarikan kesimpulan dan verifikasi. Hasil penelitian menunjukkan bahwa implementasi SIAGA telah berjalan efektif pada enam aspek PIECES: 1) *Performance*: sistem mampu memproses data ribuan guru secara simultan dan memangkas waktu birokrasi dari hitungan minggu menjadi jam. 2) *Information*: akurasi data mencapai 99% melalui mekanisme *self-service* dan sinkronisasi otomatis dengan Dapodik. 3) *Economy*: terjadi penghematan biaya transportasi dan logistik melalui penghapusan dokumen fisik. 4) *Control*: keamanan data terjamin melalui sistem otentikasi ganda/*One-Time Password* (OTP) dan pembatasan hak akses. 5) *Efficiency*: otomatisasi sistem mengurangi beban kerja manual operator. 6) *Service*: transparansi proses verifikasi meningkatkan kepuasan pengguna dengan layanan akses setiap saat. Kesimpulan pada penelitian ini adalah implementasi Aplikasi SIAGA di Kementerian Agama Kabupaten Banyumas efektif dalam mendukung penguatan Sistem Pemerintahan Berbasis Elektronik dan mewujudkan tata kelola pemerintahan yang bersih serta transparan.

**Kata Kunci:** Efektivitas, Aplikasi SIAGA, PIECES Framework, Sistem Pemerintahan Berbasis Elektronik, Guru PAI.

## SUMMARY

*Digital transformation in government governance through the Electronic-Based Government System (SPBE) has become an urgent necessity to improve the effectiveness of public services. The Ministry of Religious Affairs of the Republic of Indonesia has developed the Information System and Administration for Islamic Education Teachers (SIAGA) application to manage data of Islamic Education (PAI) teachers. However, the implementation of this system in practice often encounters gaps between the ideal design and actual usage, such as system performance issues and data synchronization inconsistencies. This study aims to analyze and describe the effectiveness of the SIAGA application in the administration of PAI teachers at the Ministry of Religious Affairs in Banyumas Regency, viewed from the aspects of performance, information, economy, control, efficiency, and service based on the PIECES Framework. This research employs a qualitative method with a descriptive approach. Data collection techniques include observation, interviews, and documentation. Data analysis is conducted using a qualitative approach referring to the model proposed by Miles and Huberman, which includes data reduction, data display, and conclusion drawing and verification. The results of the study indicate that the implementation of SIAGA has been effective across the six PIECES aspects: (1) Performance: the system is capable of processing data of thousands of teachers simultaneously and reduces bureaucratic processing time from weeks to hours. (2) Information: data accuracy reaches 99% through a self-service mechanism and automatic synchronization with Dapodik. (3) Economy: cost savings are achieved by eliminating transportation and logistical expenses through the removal of physical documents. (4) Control: data security is ensured through a two-factor authentication system/One-Time Password (OTP) and access restrictions. (5) Efficiency: system automation reduces the manual workload of operators. (6) Service: transparency in the verification process enhances user satisfaction with every time service access. Thus, the conclusion of this study is that the implementation of the SIAGA application at the Ministry of Religious Affairs in Banyumas Regency is effective in supporting the strengthening of SPBE and realizing clean and transparent governance.*

**Keywords:** *Effectiveness, SIAGA Application, PIECES Framework, Electronic-Based Government System, Islamic Education Teachers.*