

# **Desain dan Analisis Pengembangan Sistem Smart Payment Kampus Menggunakan *V-Model* di Universitas Pendidikan Ganesha**

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## **ABSTRAK**

Universitas Pendidikan Ganesha yang menyandang status sebagai Perguruan Tinggi Negeri dengan Pengelolaan Keuangan Badan Layanan Umum (PK-BLU) memiliki kewajiban untuk meningkatkan PNBPN dengan mengoptimalkan aset-aset yang ada baik sarana prasarana maupun sumber daya manusia. Dibutuhkan satu sistem yang mampu mengakomodasi dalam meningkatkan pendapatan atau generating income, sehingga penulis tertarik untuk menganalisis pembuatan desain dalam Pengembangan Sistem dan Smart Payment Kampus di Universitas Pendidikan Ganesha. Penelitian ini bertujuan untuk membangun Aplikasi Payment Kampus untuk memudahkan mahasiswa, dosen, pegawai maupun alumni dalam melakukan transaksi pembayaran terhadap layanan-layanan yang ada di Undiksha. Desain Dan Analisis Pengembangan Sistem Smart Payment Kampus di Undiksha menggunakan *V-Model*. Secara garis besar data diambil dengan teknik wawancara, observasi dan studi pustaka kemudian dianalisis menggunakan metode *V-Model*. Melalui penelitian ini dihasilkan sebuah model pengembangan sistem dalam bentuk desain dan prototype khususnya dalam pengembangan aplikasi bisnis di Universitas Pendidikan Ganesha yang baik dan berkelanjutan berbasis android yang bisa dimanfaatkan oleh semua stake holder mulai dari mahasiswa, dosen dan pegawai maupun masyarakat umum. *V-Model* yang dipilih dalam pengembangan Smart Payment Kampus mampu memberikan pengujian pada setiap tahapan langkah pengembangan sehingga aplikasi menjadi teruji dan aman digunakan.

Dengan Smart Payment Kampus selain memberikan kemudahan kepada stake holder sekaligus bisa menjadi ruang bisnis bagi Undiksha sehingga potensi-potensi penerimaan bisa masuk dalam satu system terintegrasi, seperti UKT, SPK, Sewa Kantin, Sewa Auditorium, Sewa Ruang Meeting, Sewa Asrama, Sewa Edutel, Sewa Lahan, Sewa GOR, Sewa Laboratorium, Tenaga Ahli, dan potensi penerimaan lainnya yang akan terus bisa bertambah sehingga mampu meningkatkan Penerimaan BLU/PNBPN. Selain penerimaan pengembangan desain smart payment kampus khususnya dilingkungan Universitas Pendidikan Ganesha ini juga sekaligus merancang proses pengeluaran khususnya dengan belanja honor.

**Kata kunci:** *PK-BLU, Smart Payment Kampus, V-Model*

# **Design and Analysis of the Development of a Campus Smart Payment System Using the V-Model at the Ganesha University of Education**

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## **ABSTRACT**

Ganesha University of Education, which holds the status of a State University with Public Service Agency (PK-BLU) Financial Management, has an obligation to increase PNBP by optimizing existing assets, both infrastructure and human resources. It takes a system that is able to accommodate increasing generating income, so the authors are interested in analyzing the design making in System Development and Campus Smart Payment at the Ganesha University of Education. This study aims to build a Campus Payment Application to make it easier for students, lecturers, employees and alumni to make payment transactions for services at the Ganesha University of Education. Design and Analysis of the Campus Smart Payment System Development at Ganesha University of Education using the V-Model. Broadly speaking, the data is taken by interviewing, observation and literature study techniques then analyzed using the V-Model method. Through this research a system development model was produced in the form of design and prototype, especially in the development of good and sustainable business applications at Ganesha University of Education based on Android which can be utilized by all stake holders starting from students, lecturers and staff as well as the general public. The V-Model chosen in the Smart Payment Campus development is able to provide testing at every stage of the development step so that the application is tested and safe to use.

With Smart Payment Campus, in addition to providing convenience to stake holders, it can also become a business space for Undiksha so that potential admissions can be included in one integrated system, such as UKT, SPK, Canteen Rentals, Auditorium Rentals, Meeting Room Rentals, Dormitory Rentals, Edutel Rentals, Land leases, GOR leases, laboratory leases, experts, and other potential revenues that will continue to increase so as to increase BLU/PNBP revenues. In addition to accepting the development of the campus smart payment design, especially in the Ganesha University of Education environment, it is also designing the expenditure process, especially with respect expenses.

**Kata kunci:** *PK-BLU, Smart Payment Kampus, V-Model*