PERANCANGAN DESAIN SISTEM INFORMASI BEASISWA

SMA NEGERI 1 SINGARAJA DENGAN METODE

DESIGN THINKING* DAN *USABILITY TESTING

Oleh

Ni Putu Ely Suchahyani, NIM 1915091022

Program Studi Sistem Informasi

Jurusan Teknik Informatika

ABSTAK

Aktivitas beasiswa yang dilaksanakan pada SMA Negeri 1 Singaraja saat ini masih memakai metode konvensional. Penyebaran informasi beasiswa disampikan di kelas atau melalui grup *whatsapp*, berkas pendaftaran yang harus dicetak dan proses seleksi yang harus membandingkan berkas siswa satu per satu. Berdasarkan masalah tersebut melalui penelitian ini, dilaksanakan perancangan sistem informasi beasiswa (SI Beasiswa) berbasis *website* untuk mendukung proses aktivitas beasiswa menjadi lebih mudah, praktis dan lebih cepat. Perancangan sistem memakai metode *Design Thinking* dengan tahapan *Empathize, Define, Ideate, Prototype* dan *Test*. Pengujian sistem memakai metode *Usability Testing* dengan teknik *Think Aloud* dan *Performance Measurement* dengan berfokus pada 5 (lima) aspek yaitu efektivitas, efisiensi, *learnability*, *error* dan kepuasan. Kuesioner *Usability Metric for User Experience* (UMUX) juga dipakai untuk mengukur kepuasan. Hasil perbandingan pada pengujian menyimpulkan bahwa untuk aspek efektivitas siswa meningkat 17%, guru 2% dan pegawai meningkat 16%. Aspek efisiensi siswa meningkat 0,14 *goals/sec*, guru 0,03 *goals/sec* dan pegawai 0,04 *goals/sec*. Aspek *learnability* meningkat pada siswa 15% dan pegawai 2% sedangkan pada guru menurun 5%. Aspek *error* semua kategori responden menurun menjadi 0 yang menunjukkan bahwa tingkat *error* yang dilaksanakan menjadi sangat kecil atau tidak adanya kesalahan. Aspek kepuasan meningkat 4 poin sehingga desain SI Beasiswa dikatakan *acceptable* dengan *rating best imaginable* dan peringkat A.

Kata-kata kunci: SI Beasiswa; *Design Thinking*; *Usability Testing*; *Performance Measurment*; *Think Aloud*; Kuesioner *Usability Metric for User Experience*

SMAN 1 SINGARAJA SCHOLARSHIP INFORMATIOAN SYSTEM

DESIGN WITH DESIGN THINKING METHOD AND USABILITY TESTING

By

Ni Putu Ely Suchahyani, NIM 1915091022

Study Program of Information System

Department of Informatics Engineering

ABSTAK

The scholarship activities carried out at the 1st Imperial State High School are still using conventional methods. Distribution of scholarship information accompanied in the classroom or through WhatsApp groups, registration files to be printed, and selection processes to compare student files one by one. Based on these issues, through this research, the design of a web-based scholarship information system (SI Scholarships) to support the scholarly activity process is made easier, more practical, and faster. The system design uses the Design Thinking method with the stages Empathize, Define, Ideate, Prototype, and Test. The system testing uses the Usability Testing methodology with the Think Aloud and Performance Measurement techniques, focusing on the five (five) aspects of effectiveness, efficiency, learnability, error, and satisfaction. Usability Metric for User Experience (UMUX) questionnaires are also used to measure satisfaction. The results of the comparison on the test concluded that the aspect of student effectiveness increased by 17%, teacher effectiveness by 2%, and staff effectiveness by 16%. Student efficiency aspects increased by 0.14 goals/sec, teacher 0.03 goals/sec, and staff 0.04 goals/sec. The learning aspect increased in students by 15% and staff by 2%, whereas in teachers it decreased by 5%. Error aspects of all categories of respondents fell to 0, which indicates that the rate of error implemented was very small or no error. The satisfaction aspect increased by 4 points, so the scholarship's design was said to be acceptable with the best imaginable rating of A.

Kata-kata kunci: SI Beasiswa; *Design Thinking*; *Usability Testing*; *Performance Measurment*; *Think Aloud*; Questionnaire *Usability Metric for User Experience*