



INTISARI

Pengembangan *website* menjadi tren yang populer bagi organisasi di seluruh dunia. Laboratorium Desain dan Pengembangan Produk merupakan salah satu Laboratorium unggulan yang ada di Departemen Teknik Mesin dan Industri (DTMI) Universitas Gadjah Mada (UGM), namun Laboratorium ini belum memiliki *website* resmi yang bisa diakses. Penelitian ini dilakukan untuk mendesain *website* dari Laboratorium Desain dan Pengembangan Produk. Metode yang digunakan adalah *user-centered design*, selain itu digunakan panduan dari *Department of Health and Human Services* (HHS) dalam membuat solusi desain. Sehingga desain *website* Laboratorium Desain dan Pengembangan Produk yang dirancang dapat memiliki tingkat usabilitas yang baik.

Responden yang mengikuti proses desain ini terdiri dari 3 kategori yaitu mahasiswa Teknik Industri UGM yang memiliki kriteria pernah melakukan penelitian di Laboratorium Desain dan Pengembangan Produk sebanyak 4 orang, belum pernah mengambil mata kuliah maupun praktikum Desain dan Pengembangan Produk sebanyak 4 orang, dan dosen maupun peneliti yang ahli di Bidang Desain Produk sebanyak 4 orang. Wawancara dengan pengguna menghasilkan persona yang dijadikan sebagai dasar untuk menganalisis kebutuhan pengguna. Hasil *prototype* dari desain *website* kemudian diuji tingkat usabilitasnya menggunakan metode *performance measurement*, *System Usability Scale* (SUS), dan *thinking out loud*.

Hasil penelitian menunjukkan desain *website* yang dirancang memiliki tingkat usabilitas yang baik jika dilihat dari tiga faktor yaitu efektivitas, efisiensi, dan kepuasan pengguna. Nilai rata-rata efektivitas sebesar 0,55 dimana tingkat keberhasilan lebih banyak dibandingkan kesalahan. Efisiensi *website* cukup baik karena tidak ada perbedaan efisiensi antara responden dengan keahlian dan responden pemula. Kepuasan pengguna diukur dari skor SUS yaitu 82,5 termasuk dalam kategori *good* dalam *adjective ratings* dengan *grade scale* B. Terdapat beberapa saran yang diungkapkan pengguna saat melakukan *thinking out loud* yang bisa dijadikan acuan untuk pengembangan berikutnya.

Kata kunci: *user-centered design*, panduan HHS, pengujian usabilitas, *user requirement analysis*



ABSTRACT

Website development is becoming a popular trend for organizations all over the world. Product Design and Development Laboratory is one of the leading laboratories in the Department of Mechanical and Industrial Engineering (DTMI) Universitas Gadjah Mada (UGM), but this laboratory does not yet have an official website that can be accessed. This research was conducted to design the website of the Product Design and Development Laboratory. The method used is a user-centered design, in addition to using guidelines from the Department of Health and Human Services (HHS) in making design solutions. So that the Product Design and Development Laboratory website design that will be designed has a good level of usability.

Respondents who took part in this design process consisted of 3 categories, namely Industrial Engineering UGM students who had the criteria of having conducted research at the Product Design and Development Laboratory as many as 4 people, had never taken Product Design and Development lectures or practicums as many as 4 people, and expert lecturer or researcher in Product Design field. Interviews with users produce personas to be used as the basis for analyzing user needs. The prototype results from the website design are then tested for usability using performance measurement methods, System Usability Scale (SUS), and thinking out loud.

The results showed that the website design that was designed had a good level of usability when viewed from three factors, namely effectiveness, efficiency, and user satisfaction. The average value of effectiveness is 0,55 where the success rate is more than the error. The efficiency of the website is quite good because there is no difference in efficiency between respondents with expertise and beginners. User satisfaction are measured from the SUS score of 82,5 which is included in the good category in adjective ratings with a grade scale B. There are several suggestions that users give when thinking out loud that can be used as a reference for further development.

Keywords: user-centered design, HHS guidelines, usability testing, user requirement analysis