

**USER INTERFACE REDESIGN TO IMPROVE USER
EXPERIENCE ON DISDAGKOPUM LIMA PULUH KOTA
REGENCY WEBSITE**

FINAL PROJECT REPORT

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**DEPARTMENT OF INDUSTRIAL ENGINEERING
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PADANG
2022**

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*A final project report submitted in fulfillment of the requirement for the award of
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Alifeony Mutiara Diarsya

ABSTRACT

The Indonesian government has made a policy to utilize information and communication technology in an integrated e-government sector, from the local government to the central government. One of the local governments that have started to implement e-government is the Lima Puluh Kota Regency. One of the Lima Puluh Kota Regency websites that are already running is the website of the Department of Trade, Cooperatives, and SMEs (Disdagkopum). In the early of the study, the Webqual modifier and IPA methods are used to find out the shortcomings of the website. There are several dimensions assessed, namely interaction quality, service quality, usability and user interface quality. Based on the results of observations, interviews, Webqual process and IPA, there are several deficiency that need to be improved, namely the website has unattractive design, website pages are not optimally arranged, some of the website's pages still not exist (such as a special page for the SMEs profile) the website does not use appropriate colors, the website does not make it easy to communicate with the organization, the website does not have a structured and consistent layout, and the website does not provide timely information. After knowing some of the weaknesses of the website, then the website is redesigned using a design thinking approach. This approach was chosen because this approach involves the user in the process in each process. By involving the user, the results produced will be close to the wishes of the user. The design thinking process in question consists of empathizing, defining, ideating, prototyping, and testing. The empathize step was done by using the UX research method, namely interview with the Head of Service and the head of the General and Personnel Subdivision of the Cooperative Trade Service and SMEs and conducting survey. The survey is conducted in adopting the statement of the webqual method. The survey result was then analyzed to define the problem by creating pain points, affinity diagram and a user persona. Then, the user persona was used as a guide to ideate the solution for target users by creating user flow and low-fidelity prototyping. User flow was then used to identify which page was needed to create the medium-fidelity prototype and high-fidelity prototype. After the prototype was done, usability testing was conducted by using Maze and System Usability Scale (SUS). The score of usability testing was 82 which fell into the high range. the System Usability Scale (SUS) with a score of 90,56 which fell into the Grade A and acceptable category. Therefore, the new prototype can answer the problem and is easy to use by stakeholders and users.

Keyword: Webqual, IPA, Design Thinking, User Interface, and User Experience.

ABSTRAK

Pemerintah Indonesia telah membuat kebijakan untuk memanfaatkan teknologi informasi dan komunikasi dalam sektor e-government yang terintegrasi, mulai dari pemerintah daerah hingga pemerintah pusat. Salah satu pemerintah daerah yang sudah mulai menerapkan e-government adalah Kabupaten Lima Puluh Kota. Salah satu website Kabupaten Lima Puluh Kota yang sudah berjalan adalah website Dinas Perdagangan, Koperasi, dan UKM (Disdagkopum). Pada awal penelitian digunakan metode Webqual modifier dan IPA untuk mengetahui kekurangan website. Ada beberapa dimensi yang dinilai, yaitu kualitas interaksi, kualitas layanan, kegunaan (usability) dan kualitas antarmuka pengguna. Berdasarkan hasil observasi, wawancara, proses Webqual dan IPA, terdapat beberapa kekurangan yang perlu diperbaiki yaitu website memiliki desain yang kurang menarik, halaman website yang belum tertata secara maksimal, beberapa halaman website masih belum ada (seperti halaman profil UKM) situs web tidak menggunakan warna yang sesuai, situs web tidak memudahkan untuk berkomunikasi dengan organisasi, situs web tidak memiliki tata letak yang terstruktur dan konsisten, dan situs web tidak memberikan informasi yang tepat waktu. Setelah mengetahui beberapa kelemahan website, maka website tersebut didesain ulang dengan menggunakan pendekatan design thinking. Pendekatan ini dipilih karena pendekatan ini melibatkan pengguna dalam proses di setiap proses. Dengan melibatkan pengguna maka hasil yang dihasilkan akan mendekati keinginan pengguna. Proses design thinking yang dimaksud terdiri dari empathizing, define, ideating, prototyping, dan testing. Langkah empati dilakukan dengan menggunakan metode UX Research yaitu wawancara dengan Kabag Dinas dan Kasubag Umum dan Kepegawaian dari Dinas Perdagangan, Koperasi dan UKM serta melakukan survey. Survey dilakukan dengan mengadopsi pernyataan metode webqual. Hasil survei kemudian dianalisis untuk mendefinisikan masalah dengan membuat titik nyeri, diagram afinitas, dan persona pengguna. Kemudian, persona pengguna digunakan sebagai panduan untuk menemukan solusi bagi pengguna target dengan membuat alur pengguna dan pembuatan prototipe dengan fidelitas rendah. Alur pengguna kemudian digunakan untuk mengidentifikasi halaman mana yang diperlukan untuk membuat prototipe fidelitas menengah dan prototipe fidelitas tinggi. Setelah prototipe selesai dibuat, dilakukan pengujian usability dengan menggunakan Maze dan System Usability Scale (SUS). Skor usability testing adalah 82 yang termasuk dalam rentang tinggi. System Usability Scale (SUS) dengan skor 90,56 yang masuk dalam kategori Grade A dan Acceptable. Oleh karena itu, prototipe baru dapat menjawab masalah dan mudah digunakan oleh pemangku kepentingan dan pengguna.

Kata Kunci: Webqual, IPA, Design Thinking, User Interface, dan User Experience.