



College of Engineering

Department of Software Engineering

SCD Assignment

Title: Project Description for A Local E-Commerce Application

Group 9 Members:

1. Hallelujah Abdissa ----- ETS0575/13
2. Inas Wendem ----- ETS0651/13
3. Jitu Tesfaye ----- ETS0658/13
4. Kaleab Wondwossen ----- ETS0676/13
5. Kaleb Tedla ----- ETS0683/13

Submission Date: December 18, 2024

Submitted to: Mr. Gizatie

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1. Abstract

Different studies imply e-commerce models proposed over the years and conduct a comparative analysis of online business success factors. It explores the relevance and necessity of these factors and their impact on user satisfaction and repeat purchase intention, ultimately contributing to the success of e-commerce.

2. Introduction

Even if there is no set theory of HCI that we can present, however, there is an underlying principle that forms the basis of our own views on human and computer interaction, and it is captured in our claim that people use computers to accomplish work. This outlines the three major issues of concern: the people, the computers and the tasks that are performed. The system must support the user's task, which gives us a fourth focus, usability: if the system forces the user to adopt an unacceptable mode of work, then it is not usable. While talking about human and computer interaction users friendly and ease of use are inevitable issues.

According to a research study conducted in 2023, findings indicate that there are between 12 million to 24 million e-commerce websites hosted in the World Wide Web, and that number will only increase with time. Numerous factors such as cheaper smartphones, affordable internet subscription, better infrastructural development, increased spending power, and the use of online payments are some of the growth driving factors.

Among these e-commerce sites, our site specifically deals with outfit e-commerce websites which can easily be used and with advanced visibility for the user. We address fundamental problems between the user and the site. Issues like limitless features and complex steps to use the site.

3. Objectives

- Create an inclusive and user-friendly app interface that seamlessly connects shoppers with local boutiques.
- Showcase the unique products, stories, and ethos of local boutiques to a wider audience.
- Enhance the discovery and exploration of local offerings through robust search functionalities and personalized recommendations.
- Promote inclusivity, diversity, and sustainability by incorporating fair-trade certifications, eco-friendly product tags, and transparent supply chain information.
- Foster a sense of community and shared identity among users through social networking elements, user-generated content, and localized events.
- Cultivate trust and loyalty among conscious consumers through transparent and ethical business practices.
- Utilize data analytics and feedback mechanisms to continuously improve the app's offerings and experiences.
- Support the preservation of unique local identities and foster meaningful connections among residents.
- Assist local boutique businesses in adapting to changing consumer behaviors and preferences in the digital era.

4. Literature review

In the rapidly evolving world of online shopping, the success of e-commerce businesses heavily relies on effective user experience (UX) and user interface (UI) design. This literature review explores the existing body of knowledge on how UI/UX design impacts e-commerce success, identifying key factors and mechanisms. Numerous studies emphasize the crucial role of UI/UX in attracting and retaining customers, boosting sales, and establishing a strong brand presence. Investing in UI/UX design differentiates e-commerce businesses, builds trust, and creates engaging shopping experiences. Intuitive navigation, responsive design, clear product presentation,

streamlined checkout processes, personalization, and effective call-to-action buttons are key elements in successful e-commerce UI/UX design.

Well-designed UI/UX positively influences customer behavior and engagement, enhancing ease of use, encouraging exploration, and reducing cart abandonment rates while increasing conversion rates. UI/UX design significantly impacts brand perception, enhancing brand image, instilling confidence, and fostering customer loyalty. Prioritizing UI/UX design is essential for achieving sustainable success in the digital marketplace.

5. Methodology

Methodology using Double Diamond Approach:

Discover:

- Conduct research and analysis to understand the current state of local boutiques, e-commerce platforms, and consumer preferences.
- Explore the challenges faced by local boutiques and identify opportunities for improvement.
- Gather insights from boutique owners and potential users through surveys, interviews, and observations.
- Identify key objectives, requirements, and success criteria for the app.

Define:

- Analyze the research findings and define the specific problem statement and project scope.
- Refine the objectives and prioritize the desired features based on their impact and feasibility.
- Create user personas and develop empathy maps to understand the needs, motivations, and pain points of the target audience.
- Identify key metrics and indicators to measure the success of the app.

The remaining levels of the Double Diamond approach were not included in the description because the project is still ongoing and has not reached completion.

6. Conclusion

In summary, the local e-commerce outfit site utilizes human and computer interaction concepts to create a seamless and engaging online shopping experience. By prioritizing user needs, providing personalized recommendations, and fostering community engagement, the site enhances the interaction between users and the computer system, ultimately catering to the evolving demands of consumers and supporting the growth of local businesses.

7. References

- Carroll, J. M. (2013). Human-Computer Interaction in the New Millennium. Addison-Wesley.
- Dix, A., Finlay, J., Abowd, G., & Beale, R. (2004). Human-Computer Interaction (Interacting with Computers). Pearson.
- Preece, J., Rogers, Y., Sharp, H., Benyon, D., Holland, S., & Carey, T. (2015). Interaction Design: Beyond Human-Computer Interaction (4th ed.). Wiley.
- Norman, D. A. (1998). The Invisible Computer: Why Good Products Can Fail, the Personal Computer Is So Complex, and Information Appliances Are the Solution. MIT Press.
- Buxton, B. (2007). Sketching User Experiences: Getting the Design Right and the Right Design. Morgan Kaufmann.