

CHAPTER IV

SUMMARY

3.6. Conclusion

Based on the comprehensive design and development process of the *Kalana Commerce* user interface, the following conclusions can be drawn regarding the success of the UI/UX strategy:

1. **Effective Visualization of Sustainability Data:** The interface successfully addresses the problem of "inventory blindness" by translating complex AI data into intuitive visual cues. Features such as the **Visual Freshness Index** and **Smart Cart** allow users to understand product quality instantly without cognitive overload, directly supporting the goal of reducing household food waste.
2. **Validation of Minimalist User Experience:** The adoption of a "Clean, Modern, and Lightweight" aesthetic proved highly effective in enhancing task efficiency. Usability testing results demonstrated a high success rate (**100% completion on critical flows**), confirming that the minimalist layout reduces distraction and facilitates rapid navigation from product discovery to checkout.
3. **High-Fidelity Implementation Accuracy:** The transition from Figma designs to the final Android application was executed with high precision. The use of **Jetpack Compose** served effectively as an implementation tool, ensuring that the designed interactions, animations, and responsive layouts were realized faithfully in the final high-fidelity prototype.
4. **Proven Impact and Relevance:** The UI/UX design's focus on empathy and user-centric problem solving was externally validated by achieving the **1st Place Winner** title at the *Refactory x Amikom Hackathon 2025*. This recognition confirms that the interface not only functions well

technically but also delivers a compelling and valuable user experience in the context of modern e-commerce.

3.7. Suggestion

To further elevate the User Experience (UX) and Interface Quality (UI) in future iterations, the following improvements are recommended:

1. **Refinement of Interaction Areas:** Based on the high misclick rates observed during testing (specifically in the Checkout flow), it is recommended to optimize the **Touch Target Size** of primary action buttons and increase the white space between interactive elements to prevent user errors.
2. **Enhanced Micro-Interactions:** To make the shopping experience more engaging, future development should incorporate more meaningful **micro-interactions** (e.g., animated feedback when adding items to the cart or haptic feedback upon successful payment) to provide a more tangible sense of system status.
3. **Advanced Personalization UI:** The *Kalana Assistant* interface can be further developed to support richer media responses (such as recipe cards or video snippets) within the chat view, transforming the text-based interaction into a more immersive visual consultation.
4. **Inclusive Accessibility Testing:** Future usability evaluations should rigorously apply **WCAG (Web Content Accessibility Guidelines)** standards, testing the interface with screen readers and color-blind modes to ensure the application is inclusive and accessible to a wider range of users.