General Magic

UX AUDIT REPORT

JULY 2023

High level expert review
Heuristic evaluation & user interviews

KyberSwap

In this report

INTRODUCTION

EXECUTIVE SUMMARY

In this comprehensive UX audit, we conducted an expert review of KyberSwap user experience based on Web3 usability guidelines and expert review checkpoints. The aim was to assess the platform's alignment with industry best practices, ensuring a seamless and user-centric experience for all users interacting with Web3 technologies.

Our review focused on evaluating critical aspects such as platform accessibility, navigation, search functionality, user education, error handling, and the integration of Web3 wallet functionalities. Through a meticulous assessment, we identified several areas that require immediate attention to enhance the overall user experience.

247 WEB USABILITY GUIDELINES

This review focused on evaluating critical aspects such as platform accessibility, navigation, search functionality, user education, error handling, etc. Through a meticulous assessment, we identified several areas that require immediate attention to enhance the overall user experience.

UX PRINCIPLES	COMPLIES	DOESN'T COMPLY	NOT APPLICABLE	COMPLIANCE RATE
Home Page	13 Criteria	None	None	100%
Task orientation	20 Criteria	1 Criteria	3 Criteria	95%
Navigation and IA	18 Criteria	1 Criteria	None	94%
Forms and data entry:	13 Criteria	None	3 Criteria	100%
Trust and credibility	8 Criteria	None	None	100%

UX PRINCIPLES	COMPLIES	DOESN'T COMPLY	NOT APPLICABLE	COMPLIANCE RATE
Writing and content quality	18 Criteria	None	1 Criteria	100%
Page layout and visual design:	33 Criteria	None	1 Criteria	100%
Search usability	10 Criteria	5 Criteria	1 Criteria	66%
Help, feedback and error tolerance	23 Criteria	1 Criteria	1 Criteria	95%
Total	156 Criteria	8 Criteria	10 Criteria	95%

REVIEW BASED ON WEB3 UX PRINCIPLES

By Beltran

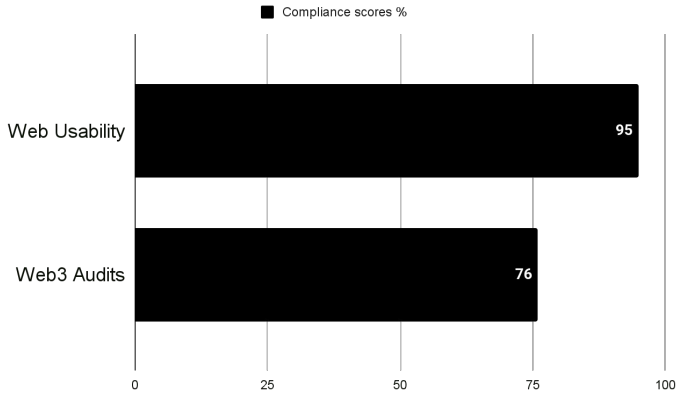
This review focused on evaluating critical aspects involved in the integration of Web3 wallet functionalities.

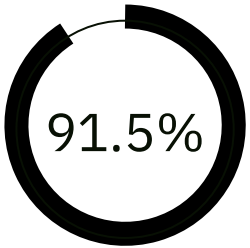
UX PRINCIPLES	COMPLIES	DOESN'T COMPLY	NOT APPLICABLE	COMPLIANCE RATE
Transparency of Data provenance	3 Criteria	1 Criteria	None	75%
Transparency of Transactions	5 Criteria	2 Criteria	1 Criteria	71%
Transparency of Smart Contract	2 Criteria	None	1 Criteria	100%
Transparent User interaction History	1 Criteria	2 Criteria	None	33%
Transparency of Code	4 Criteria	2 Criteria	1 Criteria	66%

UX PRINCIPLES	COMPLIES	DOESN'T COMPLY	NOT APPLICABLE	COMPLIANCE RATE
Human Readable Hashes Format	2 Criteria	1 Criteria	1 Criteria	66%
Time/Wait Management	2 Criteria	None	None	100%
Permanent Newbie Mode	3 Criteria	None	None	100%
Gas Price and Transaction Reversal	2 Criteria	1 Criteria	None	66%
Sense of Community	4 Criteria	None	None	100%
Total	29 Criteria	9 Criteria	4 Criteria	76%

USABILITY STATS

Overall Compliance percentage





Usability Score

EXCELLENT

This Platform provides an excellent user experience for users. Users should be able to complete all important tasks on the site or system.

Overall Compliance	Overall non compliance
185/202	**17/202**

PRODUCT OVERVIEW

KyberSwap allowed users to swap and trade a wide range of Ethereum-based tokens directly from their wallets without the need for an intermediary or centralized exchange. The platform leveraged the liquidity provided by the Kyber Network to offer competitive and real-time token exchange rates.

CONTEXT OF THE AUDIT

This study involved collecting a rich research database consisting of detailed observations and findings based on Nielsen's Heuristic Evaluation, Design Arnold Lund's 34 Usability Maxims, and Web3 Design Audit Checklist Based on Web3 Design Principles by Beltran
These valuable resources complement and support the findings presented in this report.

METHODOLOGY

METHODOLOGY

This report summarizes the findings of a comprehensive UX audit conducted on KyberSwap Finance platform.

The audit utilized a combination of renowned UX methodologies, including Nielsen's Heuristic Evaluation, Ben Shneiderman’s 'Eight Golden Rules of Interface Design, Arnold Lund's 34 Usability Maxims, Norman's Theory of Action, and the Web3 Design Audit Checklist Based on Web3 Design Principles by Beltran.

The purpose of the audit was to assess the user experience and identify areas for improvement to enhance usability and overall satisfaction

SEVERITY SCALE

Critical

Severely impairs the use of the product and cannot be overcome by users. It is necessary to fix this before releasing the product..

Serious

Occurs frequently and persistently, or users may not be able to resolve the issue or may not be aware of it. It's important to fix this, so give it a high priority..

Medium

May occur more often or be harder to overcome. Fixing this should be a low release priority.

Low

Can be easily overcome by the user or occurs very rarely. The release does not require repair unless additional time is available.

FINDINGS

BUSINESS GOALS

- **Decentralized Exchange**: KyberSwap aimed to be a leading decentralized exchange (DEX) that allowed users to trade a wide variety of ERC-20 tokens directly from their wallets without the need for intermediaries or centralized exchanges.
- **Liquidity Aggregation**: As a part of the Kyber Network ecosystem, KyberSwap contributed to aggregating liquidity from various sources, including Kyber's reserve managers and other liquidity providers. By pooling liquidity, KyberSwap aimed to ensure competitive rates and efficient trades for users.
- **User-Friendly Interface**: KyberSwap focused on delivering a user-friendly and intuitive platform that made it accessible to both cryptocurrency beginners and experienced traders.
- **Ecosystem Integration**: KyberSwap worked on integrating with various decentralized applications (dApps), wallets, and other platforms within the blockchain ecosystem.
- **Decentralized Finance (DeFi) Growth**: KyberSwap actively participated in the DeFi space and supported various DeFi projects and initiatives. By facilitating token swaps for DeFi tokens, KyberSwap aimed to contribute to the growth and adoption of DeFi applications and protocols.

CUSTOMER GOALS

Easy Token Swaps: Simplify the process of token swapping for customers by offering a user-friendly interface. KyberSwap aimed to make it quick and straightforward for users to exchange one ERC-20 token for another without the need for complex trading mechanisms.

Non-Custodial Security: Provide customers with a secure trading environment by being a non-custodial DEX. KyberSwap allowed users to connect their Ethereum wallets directly to the platform, ensuring that users retained full control of their private keys and funds throughout the trading process.

Access to a Wide Range of Tokens: Offer customers access to an extensive selection of ERC-20 tokens for trading. KyberSwap aimed to support popular tokens as well as emerging ones, ensuring that customers could easily swap their desired assets without needing to visit multiple exchanges.

Competitive Rates: Ensure competitive token exchange rates for customers by aggregating liquidity from various sources within the Kyber Network ecosystem. By having access to multiple liquidity providers, KyberSwap aimed to provide customers with optimal rates and minimize slippage.

Transparent and Instant Transactions: Deliver transparency and speed in token swaps. KyberSwap sought to provide real-time information about token prices and execute trades swiftly to enhance the customer experience.

FINDINGS

Heuristic Used

Select the appropriate heuristics principle that matches the usability issue you've identified.

Severity

From the severity scale, select the appropriate rating for the usability issue you've identified.

Issue and Recommendation

Describe the usability issue and spell out your recommendations for UX improvements.

TASK ORIENTATION AND SITE FUNCTIONALITY

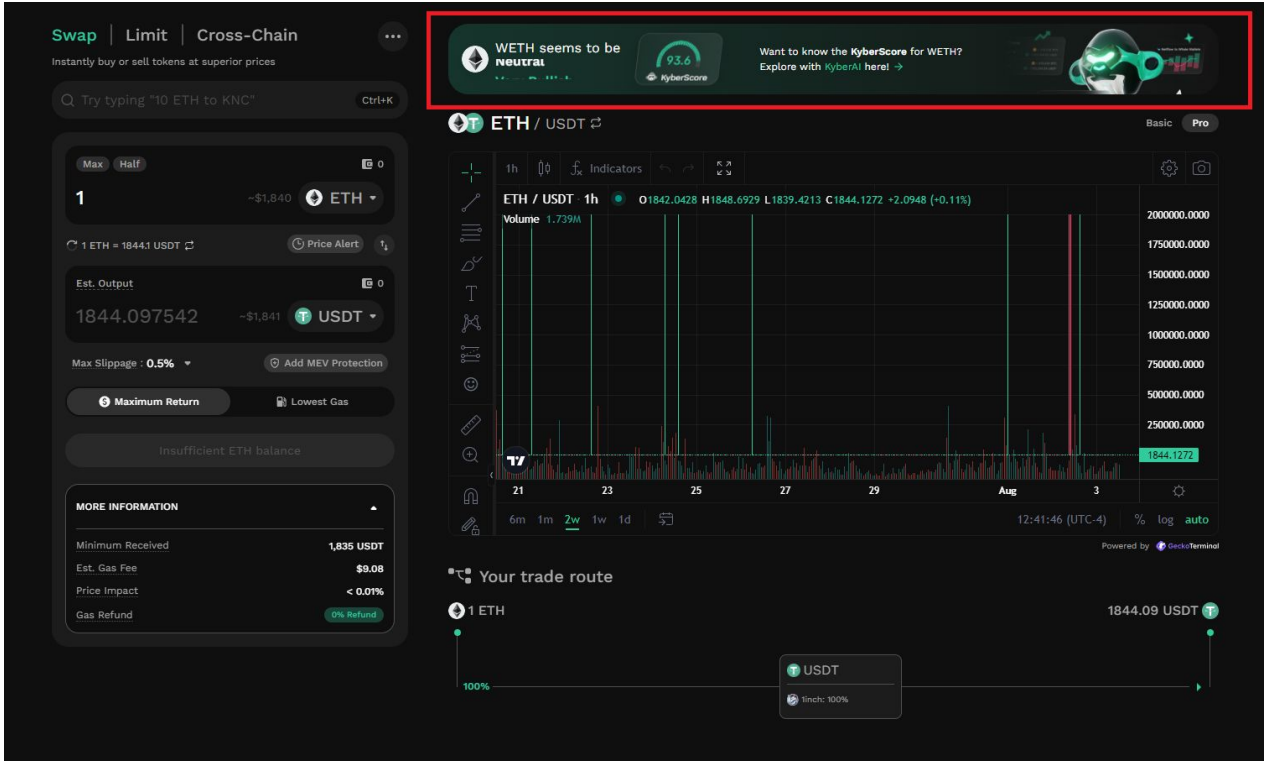
People go to web sites to achieve particular goals, not to look around and admire the design. This means web pages needs to support customer tasks. A site is task oriented when it supports users in the effective and efficient completion of their tasks.

Issue (LOW)

- The current platform fails to meet the crucial UX design principle of being free from irrelevant, unnecessary, and distracting information, which significantly hampers the overall user experience. The presence of extraneous content creates confusion, overwhelms users, and detracts from the platform's primary purpose, leading to a less effective and frustrating user journey

Recommendations

- Identify and remove any distracting elements, such as excessive animations, auto-playing videos, or irrelevant pop-ups. These distractions disrupt the user's focus and create a negative user experience.



Presence of extraneous content creates confusion, overwhelms users, and detracts from the platform's primary purpose,

NAVIGATION AND INFORMATION ARCHITECTURE

System or mechanism that allows users to move through different sections, pages, or features of a digital product. It includes menus, links, buttons, search bars, and other interactive elements that help users find and navigate to desired content or perform specific actions. Effective navigation design ensures that users can easily understand and access different areas of the product, enhancing usability and user satisfaction.

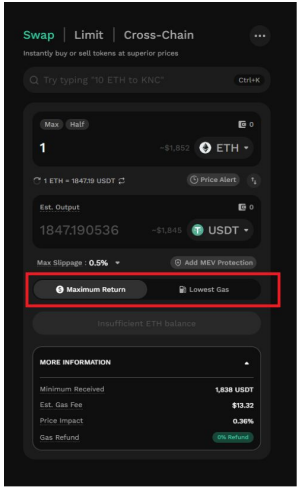
Information architecture (IA) involves the organization and structure of information within a digital product to facilitate efficient and intuitive access. It focuses on grouping and categorizing content in a logical and meaningful manner, ensuring that information is well-organized, easily discoverable, and understandable to users

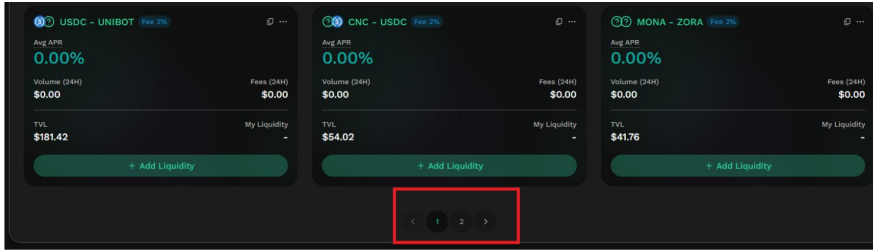
Issue (LOW)

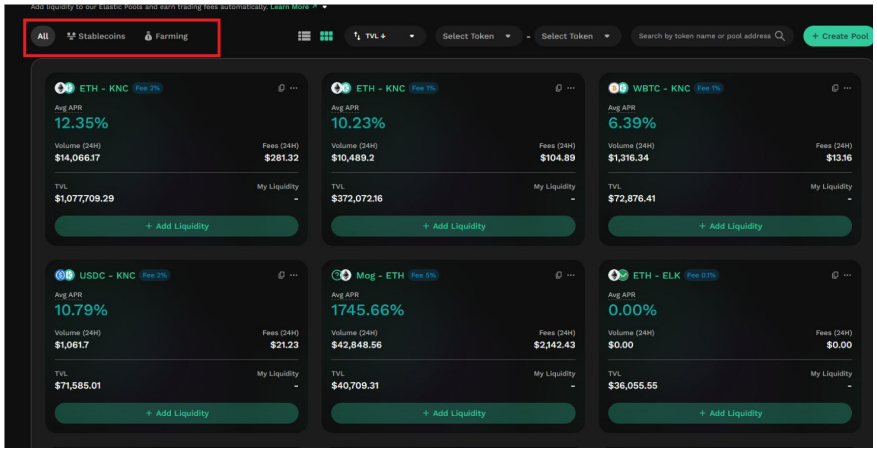
- This absence of visual feedback in “some” parts of the platform features creates confusion for users, making it difficult for them to identify interactive elements, resulting in a frustrating and unintuitive user experience.

Recommendations

- Apply hover states to “all” clickable elements such as buttons, links, and interactive components. When the mouse hovers over these elements, provide a clear visual change, such as color change, underline, or subtle animation, to indicate their interactive nature.
- Ensure that hover states are consistent across the platform. All clickable elements should exhibit a similar response when hovered over, creating a sense of familiarity and predictability for users.







Absence of visual feedback on hover in "some" parts of the platform features creates confusion for users, making it difficult for them to identify interactive elements asides from cursor changes.

SEARCH USABILITY

Search is one of the dominant ways that many customers interact with web sites. A good search engine needs to acknowledge the 'human' side of searching, which means dealing with spelling errors and synonyms (such as 'laptop' for 'notebook'). Google has set the standard for how search should look and behave, and many of these guidelines are based on this best practice

Issue (MEDIUM)

- The search results page does not clearly indicate the number of retrieved results. Providing the number of retrieved results enhances transparency and assists users in gauging the relevance of their search queries
- The current platform fails to provide a more powerful search interface to help users refine their searches effectively, which significantly impacts the overall user experience. The absence of a user-friendly "revise search" or "refine search" feature hinders users' ability to find specific and relevant content.

Recommendations

- Clearly indicate the number of retrieved results on the search results page to provide users with an understanding of the search result scope and quantity
- Introduce a prominent "revise search" or "refine search" feature that allows users to adjust and narrow down their search criteria. This advanced search option should be easily accessible from the search results page and offer a variety of filter options.

Issue (LOW)

- The current platform lacks the functionality to allow users to set up complex searches and save them for regular execution, significantly impacting the user experience. This absence of a feature to save and execute custom searches prevents users from staying up-to-date with dynamic content efficiently, leading to frustration and reduced user engagement.
- Users are unable to understand the boundaries of the search results, leading to confusion and frustration when attempting to find relevant information.

Recommendations

- Implement a user-friendly feature that allows users to create and save complex searches based on their specific criteria. This feature should enable users to define various search parameters and save them for future use.
- Clearly communicate the scope of the search on the search results page. Include information about the searched content, databases, or categories covered by the search to provide users with a clear understanding of what the results encompass.

TRANSPARENCY OF DATA PROVENANCE

- Does the application clearly indicate which data comes from the blockchain and which does not?
- Are the addresses of the contracts clearly stated?
- Are all blockchain data linked to independent blockchain explorers?
- Is it clear which data comes from oracles?

Issue (LOW)

- The platform does not provide clear indications regarding the origin of data from oracles.

Recommendations

- Enhance Oracle Data Transparency: Clearly disclose the sources of data obtained from oracle

TRANSPARENCY OF TRANSACTIONS

- Are irreversible actions clearly indicated?
- Are actions involving money or value clearly indicated?
- Are actions that could potentially lead to user identification clearly indicated?
- Are actions that generate new contracts in the user's name clearly indicated?
- Does the application clarify and confirm the new future state in advance?
- Is the data being used for a transaction shown in a human-readable format?
- Are suggested values for gas price clarified and how to overwrite the transaction?
- Is transaction wait time managed effectively

Issue (LOW)

- The platform does not provide clear indications for actions that are irreversible. Users are not adequately informed about the irreversible nature of certain actions, which can result in accidental or unintended actions that cannot be undone or reversed.
- Fails to clearly indicate actions that could potentially lead to user identification. This lack of clarity raises significant concerns regarding user privacy and data protection

Recommendations

- Improve User Identification Disclosure: Clearly indicate any actions or processes that may result in user identification, ensuring users are informed about the potential risks and implications
- Where feasible, offer options for users to undo or recover from irreversible actions. This can include providing an undo feature, a backup mechanism, or a recovery process that allows users to revert back to a previous state or restore lost data.

TRANSPARENCY AND ACCESSIBILITY OF USER'S INTERACTION HISTORY

- Does the application provide a history of all transactions from a given address?
- Is it clear where the history is stored (local or server)?
- Are tools provided to navigate, search, export, and delete the history cache?

Issue (MEDIUM)

- The platform does not provide clear indications of where the user's history is stored, whether it is stored locally on the user's device or on the server. This lack of clarity can lead to user confusion and concerns regarding data privacy, accessibility, and potential data loss.

Recommendations

- Clearly communicate to users whether their history is stored locally on their device or on the server. This can be achieved by providing explanatory text or tooltips that detail the storage location and the implications associated with it, such as data synchronization or potential limitations.

TRANSPARENCY OF CODE

- Is it clear which blockchain is being used?
- Are the addresses of the Smart Contracts used in read/write operations clarified?
- Is it clear which code is open source and where to find it?
- Is it clear where code is being run (local vs remote server)?
- Is the web3 provider / Blockchain node clarified?

Issue (LOW)

- The platform does not clearly indicate whether the code is being run locally on the user's device or on a remote server.
- The platform does not make it clear which data originates from oracles or has been influenced by oracles.

Recommendations

- Clearly communicate whether the code is executed locally or on a remote server, addressing concerns related to data privacy, security, and external dependencies.
- Clearly indicate when data is sourced from or influenced by oracles. This transparency will empower users to differentiate between data from different sources.

HUMAN READABLE HASHES FORMAT

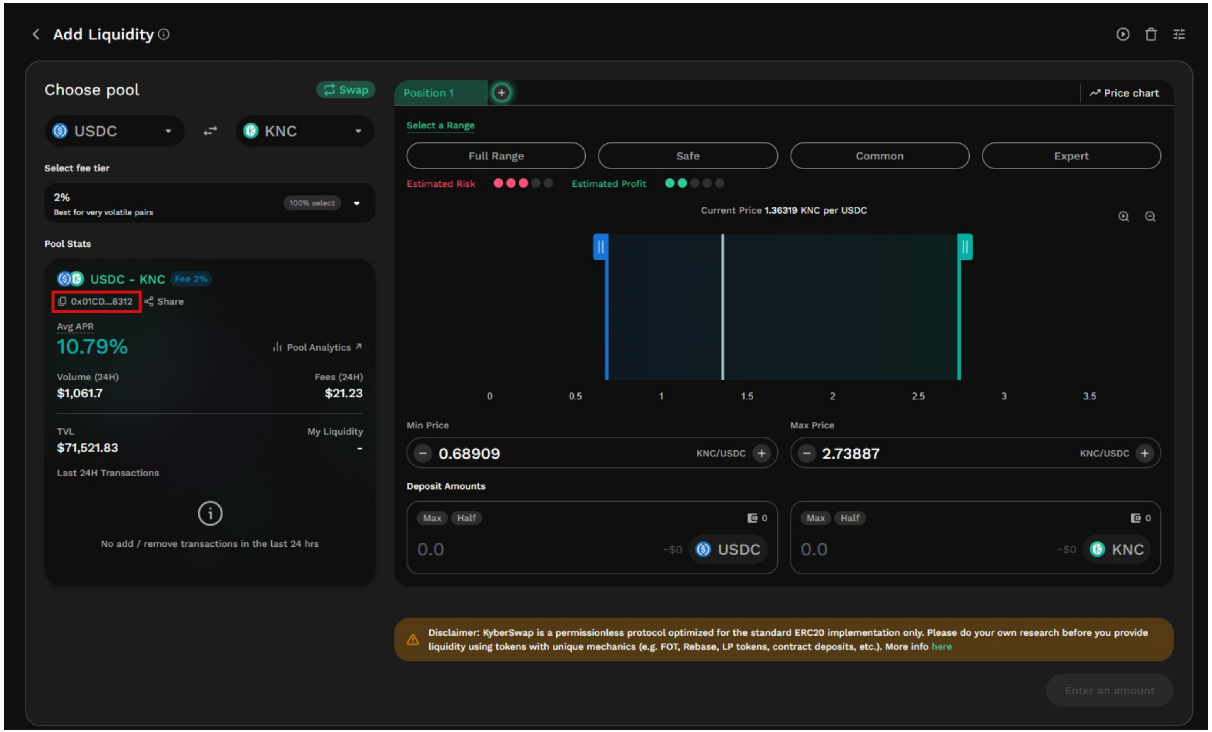
- Are compact versions of the hashes shown but always showing the initial and end parts?
- Are users allowed to expand the full address/hash?
- Can users easily copy it?
- Is a custom human readable name or text associated with the addresses and hashes?

Issue (MEDIUM)

- Kyber swap fails to provide users with the ability to expand the full address/hash. This limitation inhibits users from accessing and reviewing complete details.

Recommendations

- Expandable Address/Hash Display: Allow users to expand the full address/hash to view and copy the complete details. This feature will empower users to access the necessary information and ensure accuracy in their interactions.



Users should be able to expand and see full address.

GAS PRICE AND TRANSACTION REVERSAL

- Is what Gas and Gas price clarified?
- Are gas prices ranges suggested and time approximations for the upper and lower bounds clarified?
- Are transaction reversals allowed?

Issue (SERIOUS)

- Transaction Reversals: The platform does not allow for transaction reversals. This limitation can be problematic if users make unintended or erroneous transactions.

Recommendations

- Transaction Reversal Mechanism: Introduce a mechanism for transaction reversals, allowing users to undo unintended or erroneous transactions. This feature will enhance user control, reduce anxiety, and provide a safety net for potential mistakes.

USABILITY SCORE

185 /202

EXCELLENT

This Platform provides an excellent user experience for users. Users should be able to complete all important tasks on the site or system.

USABILITY SCORE

Ultimately, the usability score is a quantitative or qualitative representation of how usable and effective a product is in meeting user needs and goals. It helps evaluate the success of UX design and identify areas for improvement to enhance the overall user experience.

NEXT STEPS

NEXT STEPS

Suggestions to improve the Curve experience

#1

Implement Findings -

follow up the Implementation of the Research Findings on live platform.

RESOURCES

SOURCES

Explore attached Unabridged UX audit detailed findings on KyberSwap

- Expert Review Based On web Usability Guidelines Spreadsheet report
- Expert review based on Web3 UX Principles by Beltran Spreadsheet report
- Expert review collation and usability score report on Airtable spreadsheet Report

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