

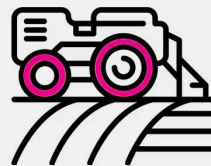
DESIGN CRITIQUE LAB

Nexus Robotics Usability and Design Audit

Engagement Overview

Nexus Robotics developed a unique robotic weeding system that utilizes AI and video imaging to distinguish between weeds and viable crops, specifically targeting lettuce.

[Read More](#)



The primary objective of the design audit was to **enhance the usability** of their internal operations dashboard and develop a Grower's Dashboard for their clients. This improvement aimed to facilitate Nexus Robotics' transition from a rental model to a sales model by providing a more **user-friendly and data-rich experience for farmers** and internal operators alike.

Approach, Methodology, and Tools Used

The approach involved a comprehensive usability and design audit, focusing on the following:

[Read More](#)

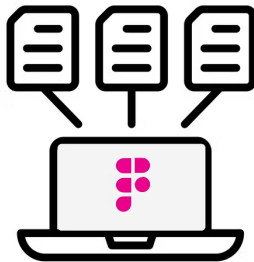
01

Research and Analysis

1. Conducted research into best practices for dashboard design, distinguishing between operational and analytical dashboards.
2. Performed desk research on regenerative agriculture, adaptive management, and yield prediction to align the dashboard features with farmer needs.
3. Executed competitive analyses on similar dashboards and website communications from leading companies like Intellinair, EOS Data Analytics, Flytnow, and Plantix.



02



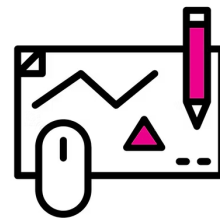
Usability Testing and Feedback

1. Gathered feedback from internal users and potential external clients to understand their pain points and needs.
2. Critiqued visual mockups and Figma prototypes of the Grower's Dashboard for layout and data visualization best practices.

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Design and Recommendations

1. Provided detailed recommendations to reduce clutter, enhance visual salience, and ensure smooth transitions between primary and secondary information.
2. Suggested the use of flexible pathways, progressive disclosure, and data brushing to add meaningful context to live data.



Measurable Outcomes

Enhanced User Experience:
The recommendations led to a more intuitive and



visually appealing dashboard, improving user satisfaction and operational efficiency.

Increased Client Engagement:

The improved Grower's Dashboard demonstrated the value of robotic weeding, potentially increasing adoption among farms interested in sustainable practices.

Market Differentiation:

By addressing usability and incorporating best practices in data visualization, Nexus Robotics positioned itself competitively in the ag-tech market.

Our Recommendations

There were 13 recommendations that were presented as process outcomes. The key deliverables are highlighted based on high customer satisfaction

01

Streamlining data management

Competitive analysis reports and strategic recommendation documents detailing the features and enhancements implemented in Nexus Robotics' dashboards.



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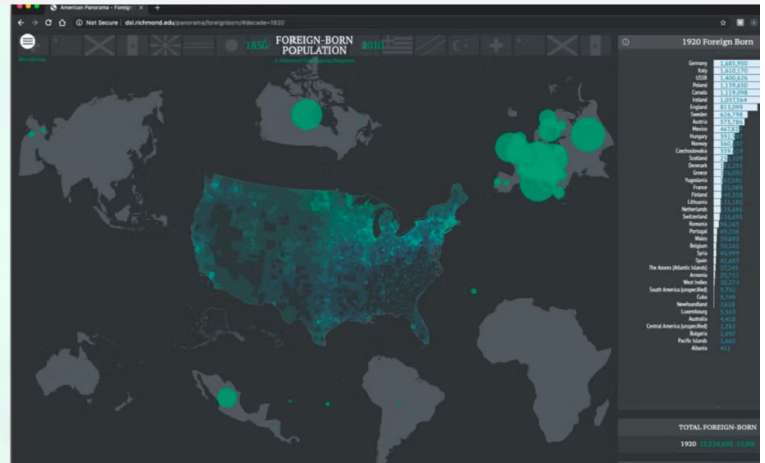
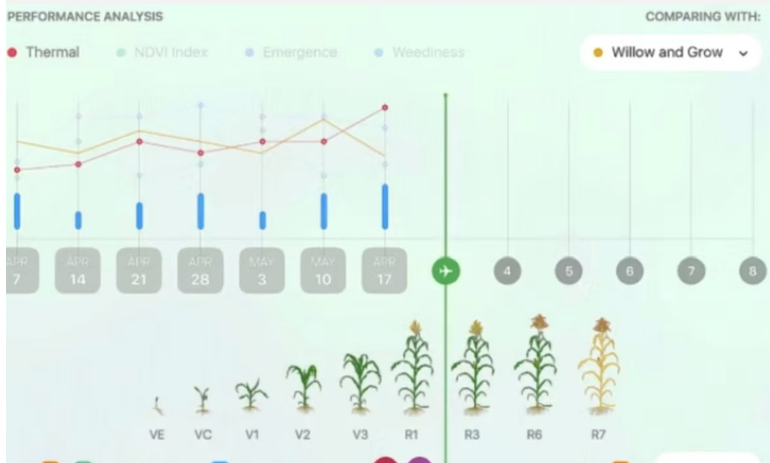
Adaptive Management

Visual mockups and revised prototypes of the Grower's Dashboard with implemented recommendations on data visualization and usability.

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User-Interface Design

Enhanced data visual recommendations for effective user navigation and experience.



Engagement

Competitive Analysis and Strategy Development for Nexus Robotics



This engagement focused on providing Nexus Robotics with strategic insights to refine their market positioning and product offerings.



The objective was to assess how competitors in the ag-tech space utilize data to enhance crop management and yield prediction, and to identify gaps and opportunities for Nexus Robotics.

Approach, Methodology, and Tools Used

01

Competitive Analysis

1. Conducted a thorough analysis of competitor dashboards and tools, including those from Intellinair, EOS Data Analytics, Flytnow, and Plantix.
2. Evaluated the effectiveness of competitors' data visualizations, user interfaces, and overall user experience

02

Insights

1. Provided recommendations to incorporate advanced features such as interactive weather strips, pest mitigation strategies, and what-if analysis for yield prediction.
2. Suggested the use of minimal, consistent color schemes and effective use of visual elements to enhance clarity and user engagement.

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Implications & Opportunities

1. Insights will highlight blind spots where your offering might be creating a barrier for your customers. Implications and opportunities will show the impact of the barriers and highlight the opportunity to improve the user experience.

Measurable Outcomes



Improved Product Features



Enhanced Market Competitiveness

Nexus Robotics incorporated several suggested features, such as the interactive weather strip and pest mitigation strategies, which enhanced the functionality of their dashboards.

The strategic insights helped Nexus Robotics to better position their product in the market, highlighting unique features that differentiate them from competitors.



Nexus Robotics

