

CASE STUDY

LUBE PLANNER

OVERVIEW

Shell Oil, a global leader in the oil and gas industry, recognized the need to streamline and modernize its lubrication planning process within plant environments. The traditional method of manually recording equipment locations and maintenance schedules using pen and paper was inefficient and prone to errors. To address this challenge, Shell Oil engaged Curtis Consulting to develop a user-friendly and efficient solution named "Lube Planner."

Shell (Royal Dutch Shell)

Oil and Gas

BUSINESS PROBLEM

Shell Oil faced the critical business problem of optimizing its lubrication planning process within plant environments. The existing method relied on manual data collection, which was time-consuming, error-prone, and lacked real-time visibility into equipment maintenance schedules. Shell sought a digital solution that could quickly capture data, create route maps, and improve overall operational efficiency while ensuring safety in plant environments.



Curtis Consulting played a pivotal role as a UX Design subject matter expert and consultant for Shell Oil's Agile Hub. The firm operated both on-site and remotely, collaborating closely with Shell's teams to design and implement the initial iteration of the Lube Planner mobile application. Curtis Consulting's scope of work included:

Application Design

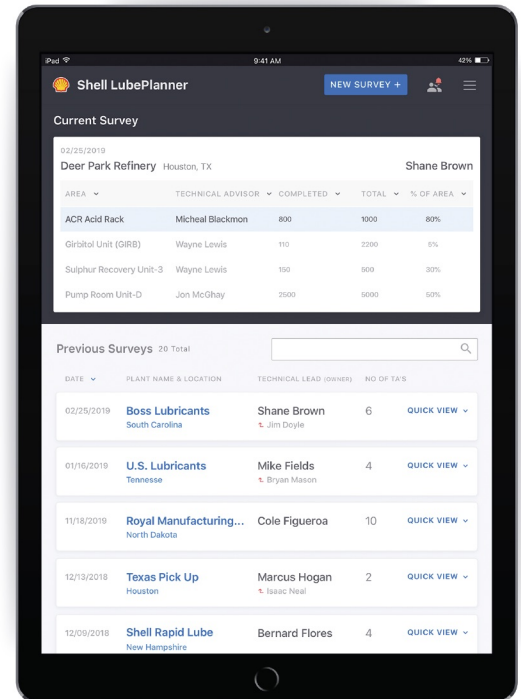
Designed the Lube Planner mobile application to map the locations of equipment requiring daily, weekly, monthly, and yearly service. The application aimed to modernize and replace the traditional method of manual data collection using pen and paper.

Service Design

Provided organizational and behavioral considerations in addition to designing the application. Conducted stakeholder interviews, analyzed data, and reported on user-centered design research to ensure alignment with Shell's operational requirements and user

Usability Testing

Conducted usability testing to gather feedback from end-users and stakeholders, ensuring that the Lube Planner application met usability and performance standards in real-world plant environments.



SOLUTION APPROACH

Curtis Consulting adopted a holistic approach to address Shell Oil's lubrication planning challenges, incorporating the following key elements into the Lube Planner solution:

- 1. User-Centered Design:** Prioritized user needs and workflows to ensure intuitive navigation and ease of use for plant personnel responsible for lubrication planning tasks.
- 2. Mobile Application Development:** Leveraged mobile technology to create a user-friendly and accessible platform for capturing data, generating route maps, and managing equipment maintenance schedules on the go.
- 3. Real-Time Data Capture:** Implemented features for real-time data capture, enabling plant personnel to update equipment status and maintenance schedules instantly, improving overall visibility and accuracy.
- 4. Safety Considerations:** Integrated safety protocols and alerts within the application to ensure compliance with industry safety standards and mitigate risks associated with equipment maintenance activities.



KEY FEATURES

- **Interactive Map Interface:** Provides a visual representation of plant layout and equipment locations, simplifying route planning and navigation.
- **Customizable Maintenance Schedules:** Enables users to define and manage customized maintenance schedules based on equipment type, usage, and criticality.
- **Task Prioritization:** Prioritizes maintenance tasks based on urgency, criticality, and operational priorities, optimizing resource allocation and workflow efficiency.
- **Audit Trail and Reporting:** Generates comprehensive audit trails and reports to track maintenance activities, monitor compliance, and facilitate continuous improvement initiatives.

OUTCOME

The collaborative efforts between Shell Oil and Curtis Consulting resulted in the successful development and implementation of the Lube Planner application. The digital solution revolutionized Shell's lubrication planning process, replacing manual methods with a streamlined, efficient, and safety-focused approach. By digitizing route mapping and equipment maintenance schedules, the Lube Planner application enhanced operational visibility to the leadership team, reduced downtime by 8%, and improved overall productivity within Shell's plant environments by 2 hours per day.

CONCLUSION

The Lube Planner project exemplifies the transformative impact of user-centered design and digital innovation in optimizing industrial processes and enhancing operational efficiency. Through close collaboration and iterative design, Shell Oil and Curtis Consulting successfully addressed the complexities of lubrication planning in plant environments, paving the way for safer, more efficient, and data-driven maintenance practices in the oil and gas industry.

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