OptiRoute Solutions

Digital Discovery Workshop | Post-workshop report

This fictional example reflects the level of depth, prioritization, and strategic clarity Michigan Software Labs delivers.

Executive summary

The Digital Discovery Workshop with OptiRoute Solutions brought together stakeholders from operations, technology, and customer service to assess current challenges and uncover strategic opportunities.

The session surfaced three urgent needs:

1. Integrate fragmented systems to create a single source of truth and reduce inefficiencies.
2. Enable real-time operational visibility to support proactive decision-making.
3. Lay the foundation for scalable, AI-powered capabilities to fuel future growth.

OptiRoute is at an inflection point. Outdated tools are slowing progress, but a unified digital strategy can unlock efficiency, strengthen customer relationships, and accelerate growth.

Workshop objectives

- Assess current workflows and digital infrastructure.
- Identify inefficiencies caused by legacy systems and siloed tools.
- Explore how modern technology and AI can streamline operations and enhance customer experience.
- Prioritize initiatives with the greatest impact and feasibility.

Detailed discussion and findings

The workshop combined open discussions, stakeholder interviews, and collaborative exercises. Findings were grouped into pain points and opportunities, which shaped the themes and recommendations outlined later.

Pain points

Fragmented systems & data silos
Information is scattered across multiple legacy systems—custom-built dispatch software, a separate warehouse CRM, and manual accounting tools—resulting in duplication, inconsistent records, and frequent reconciliation errors. There is no single source of truth, which slows decision-making and makes it difficult to analyze operations holistically.

Limited real-time visibility
Managers and executives lack access to up-to-the-minute operational data. Questions like "Where is this shipment?" or "Which fleet assets are underutilized?" require manual digging across different systems. This reactive posture prevents proactive intervention when disruptions occur.

Manual & repetitive processes
Core processes, including route planning, order processing, and invoice generation, still rely on human entry. This increases error rates, slows throughput, and consumes significant staff time that could be reallocated to higher-value tasks.

Scalability constraints
Current infrastructure was not built to handle the data volume and complexity required for OptiRoute's expansion plans. Without modernization, new service offerings and increased transaction volumes will quickly overwhelm existing systems.

Suboptimal customer experience
Due to inconsistent data and slow processes, customers often receive delayed or inaccurate shipment updates. Service representatives spend significant time reconciling information, impacting both satisfaction and retention.

Barriers to technology adoption
The rigid, undocumented nature of legacy systems makes it extremely difficult to integrate new tools, such as IoT sensors or AI-based predictive analytics. This technical debt slows innovation and puts OptiRoute at a disadvantage against competitors.

Opportunities

Unified digital platform development

By consolidating data, workflows, and applications across fleet, warehouse, finance, and customer service, OptiRoute can eliminate silos and improve collaboration. A single, integrated platform ensures every department works from the same information.

AI-powered predictive analytics

Implementing machine learning models enables forecasting of demand, optimized routing, and early identification of maintenance needs. This proactive capability would reduce disruptions and improve efficiency across the logistics chain.

Automated workflow orchestration

Automation of tasks such as dispatching, invoicing, and order processing would significantly reduce manual work. Automation also minimizes human error and ensures consistency in operations.

IoT integration for enhanced monitoring

Deploying IoT sensors across fleet vehicles and warehouses would generate real-time asset data—location, condition, and environmental metrics—that feed directly into the unified platform for more informed decision-making.

Mobile-first solutions for field teams

Custom mobile applications for drivers and warehouse staff would simplify status updates, improve communication, and provide access to critical information in the field, even in low-connectivity environments.

Enhanced reporting & business intelligence

Robust dashboards with actionable insights empower leaders to identify cost-saving opportunities, monitor KPIs, and make data-driven decisions more quickly.

Phased modernization & API strategy

Rather than replacing everything at once, a phased strategy supported by modern APIs would allow OptiRoute to integrate legacy systems step-by-step. This approach minimizes risk while steadily moving toward a fully modernized architecture.

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What we heard

- "We spend too much time just finding the data, not using it." –Ops Manager
- "Every new tool we try hits a wall because the old systems won't talk to it." –IT Lead
- "Customers ask where their shipment is, and we have to scramble for answers." –Customer Service Lead

Strategic themes

From the findings, three strategic themes emerged:

1. **Operational excellence**: Streamline data flow, automate processes, and gain real-time visibility.
2. **Growth enablement**: Build scalable infrastructure and leverage predictive capabilities for market differentiation.
3. **Team empowerment**: Equip staff with modern tools, reduce tech frustrations, and ensure easy access to reliable information.

Prioritization results

Through a dot-voting exercise, participants ranked opportunities by impact and feasibility. The top priorities:

- **Unified data platform & core system integration**: Establish a single source of truth.
- **Real-time operational dashboard**: Give leaders instant visibility into operations.
- **Automated Dispatch & Route Optimization**: Reduce manual effort and improve efficiency.

Recommendations

The primary recommendation is to develop a unified operational intelligence platform as the foundation for OptiRoute's modernization. This platform will integrate systems, automate workflows, and enable predictive analytics.

We further recommend a phased approach:

- Begin with core integrations and a real-time dashboard to deliver early wins.
- Expand into AI, IoT, and advanced automation as adoption grows.
- Continuously refine based on user feedback and evolving business needs.

Next steps

Phase 1: Build the foundation

- **API layer development**: Connect fleet, warehouse, and CRM systems.
- **Executive dashboard**: Provide leadership with real-time operational insight.
- **Automated dispatch pilot**: Demonstrate immediate efficiency gains.

Phase 2: Expand capabilities

- Roll out predictive analytics and IoT integration.
- Extend automation to additional workflows.

Phase 3: Continuous improvement

- Gather user feedback, refine tools, and scale capabilities to match growth.