

# **LOCKHEED MARTIN WAREHOUSE ORDERING APP**

Built with SAP Build Apps

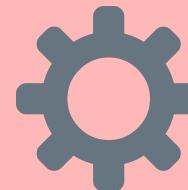
---

Streamlining component ordering and supplier selection through  
intelligent automation

Presented by: Dharm Patel, Naman Bhalla, Saurav Krishnakumar, Trupti Vijay Ahire (Group 5)

# THE CHALLENGE

## Manual Ordering Creates Bottlenecks



### Component Dependency

Handles thousands of critical aerospace components daily



### Fragmented Systems

Warehouse staff manage orders across disconnected systems



### Poor Visibility

Limited insight into delivery times and costs



### Supply delays

Critical supply chain delays may need quick fixes

# THE IMPACT

## Disconnected Systems Slow Operations

1

### Inconsistent Pricing

No single view of suppliers leads to varied costs across orders

⚠️ Impact: Warehouses overpay by 15-25% on average due to lack of price comparison

2

### Error-Prone Approvals

Manual approval processes introduce delays and mistakes

⚠️ Impact: 30% of orders require rework due to data entry errors and miscommunication

3

### Wasted Time

Procurement officers spend hours manually tracking orders

⌚ Impact: 8-12 hours per week per officer spent on manual order tracking and follow-ups

4

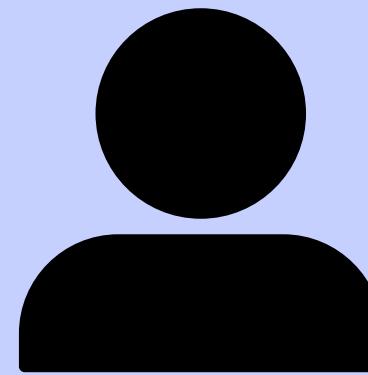
### Production Delays

Late component deliveries disrupt manufacturing timelines

🏭 Impact: Average 2-3 day production delays when critical parts arrive late

# MEET OUR PERSONAS

Who We're Building For



Marcus  
(Warehouse Manager)



## Role

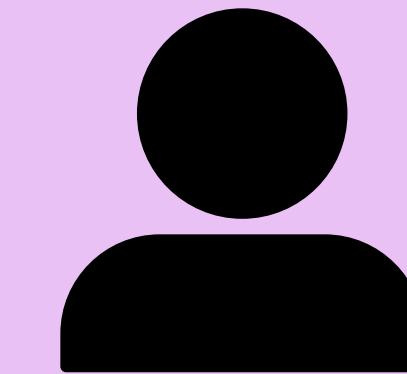
Manages inventory for 200+ critical components



## Pain Points

Spends 3+ hours daily chasing supplier information

No visibility into supplier performance history



Sarah  
(Procurement Officer)



## Role

Handles urgent component orders for F-35 program



## Pain Points

Can't quickly compare suppliers for best OTD

Lacks real-time order tracking

Misses expedite opportunities due to information delays

# HOW WE IDENTIFIED THE SOLUTION

Design Thinking in Action

## 1 EMPATHISE

- Conducted interviews with warehouse staff and procurement teams
- Observed manual ordering workflows
- Identified pain points: visibility, speed, supplier comparison

## 2 DEFINE

- Core problem: Disconnected systems prevent informed, fast decisions
- Key insight: Staff need unified supplier data at their fingertips

## 3 IDEATE

- Brainstormed 15+ solution concepts
- Prioritised: Mobile-first, real-time data, supplier information

## 4 PROTOTYPE

- Built SAP Build Apps solution
- Tested with personas

## USER EXPERIENCE HIGHLIGHTS



### Intuitive Navigation

Home icon and card-based interface



### Minimal Input

Fewer fields = fewer errors



### Mobile-Optimised

Works seamlessly on any device



### Branded Experience

Consistent Lockheed Martin theme

# THE SOLUTION

## Unified Warehouse Ordering Platform



### Smart Search

Unified interface using AI camera model to search, compare, and order parts instantly



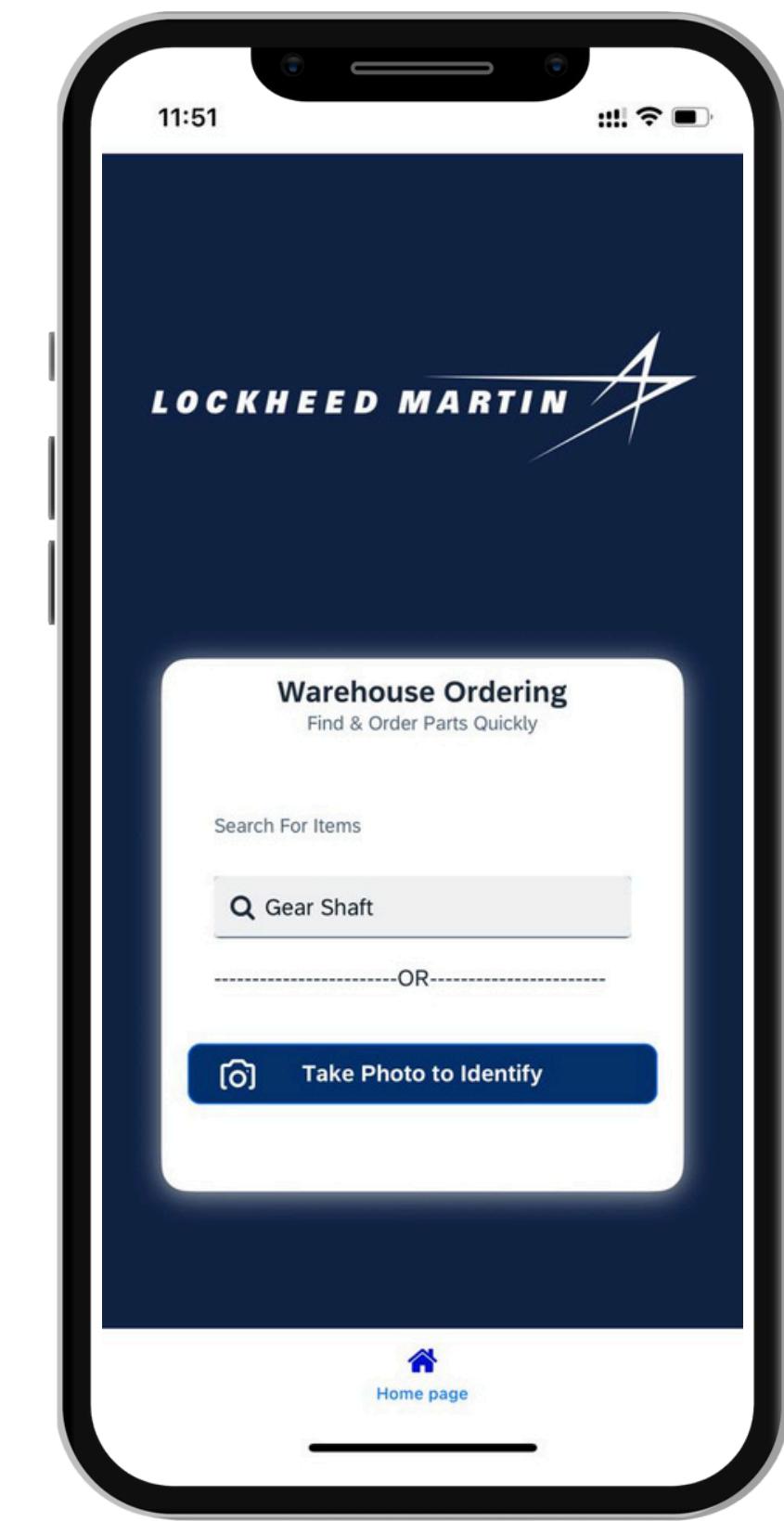
### Auto-Populated Data

Supplier data automatically loaded from Lockheed's past supplier dataset



### Real-Time Tracking

Instant order confirmation and status updates



# HOW IT WORKS

Simple 5-Step Process



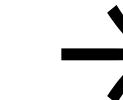
Search



Compare



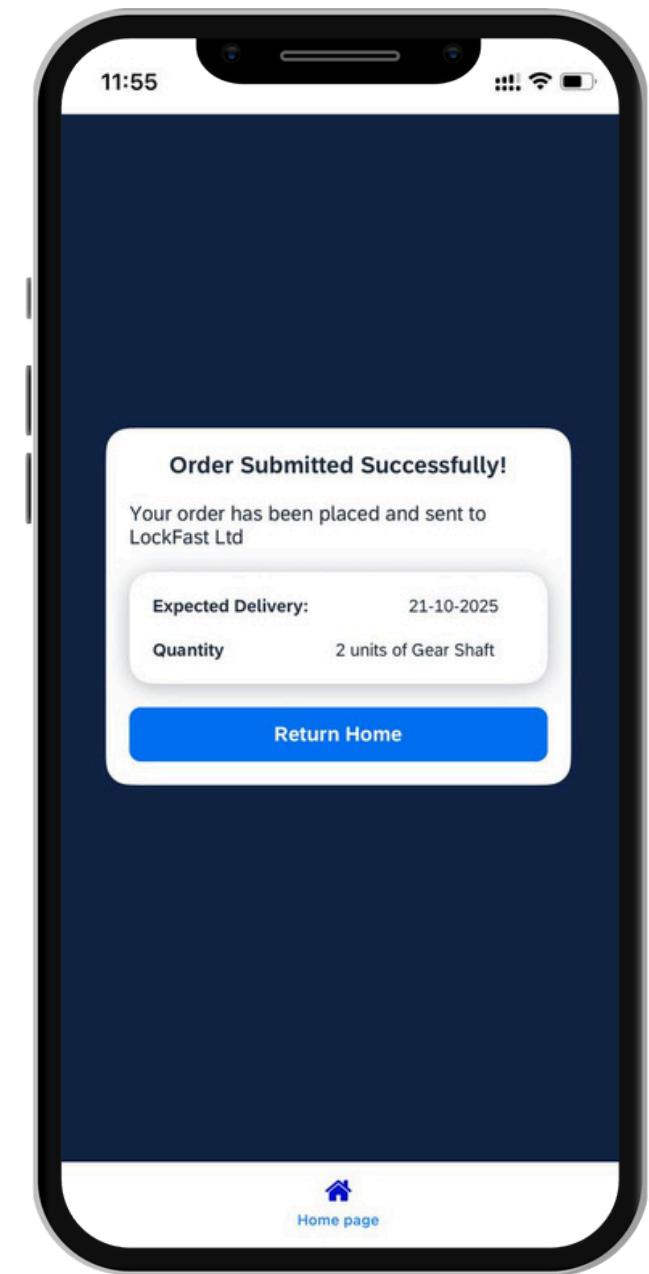
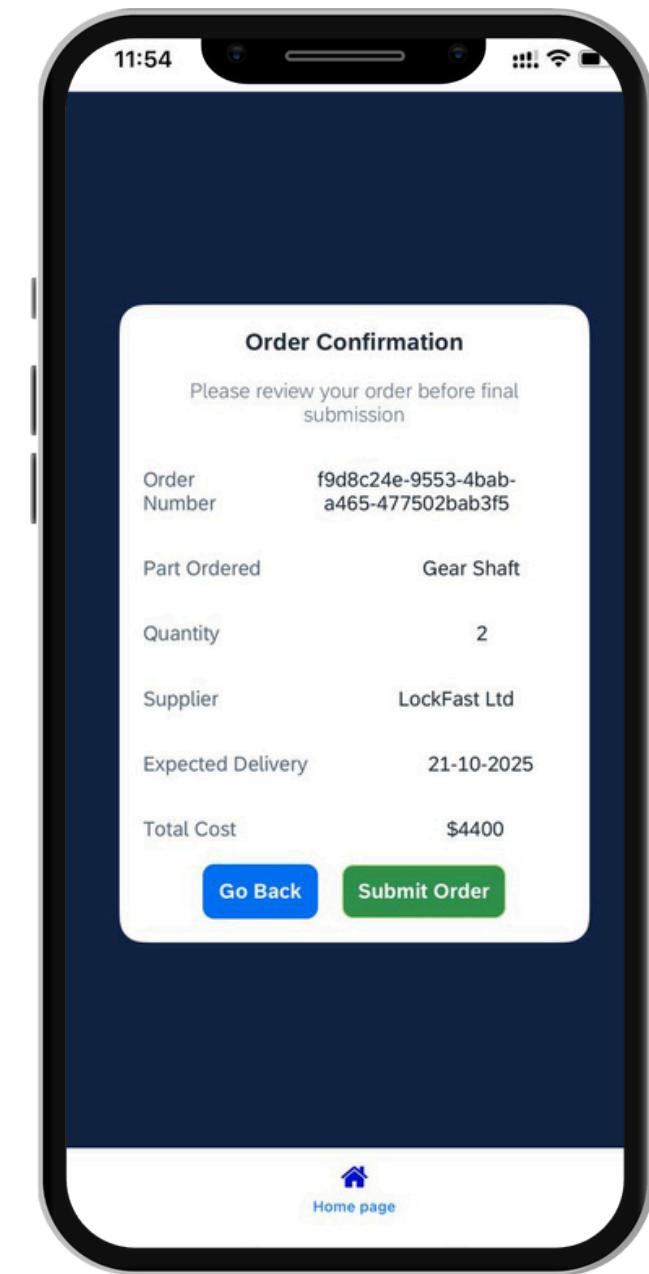
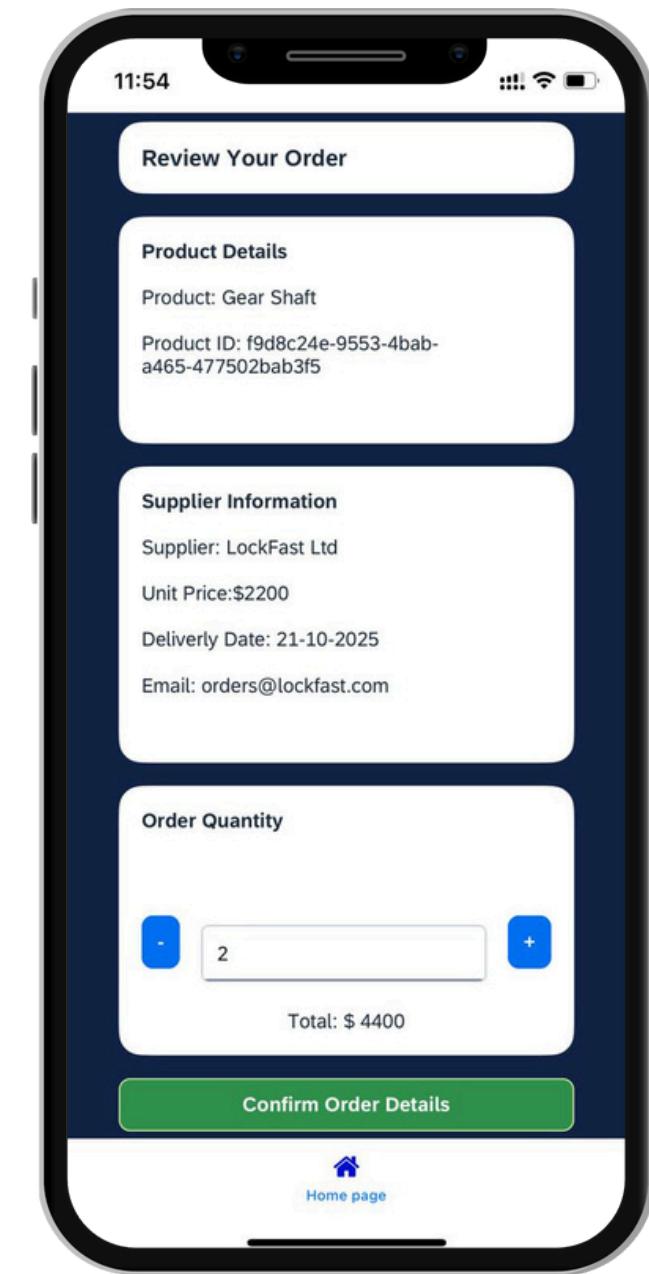
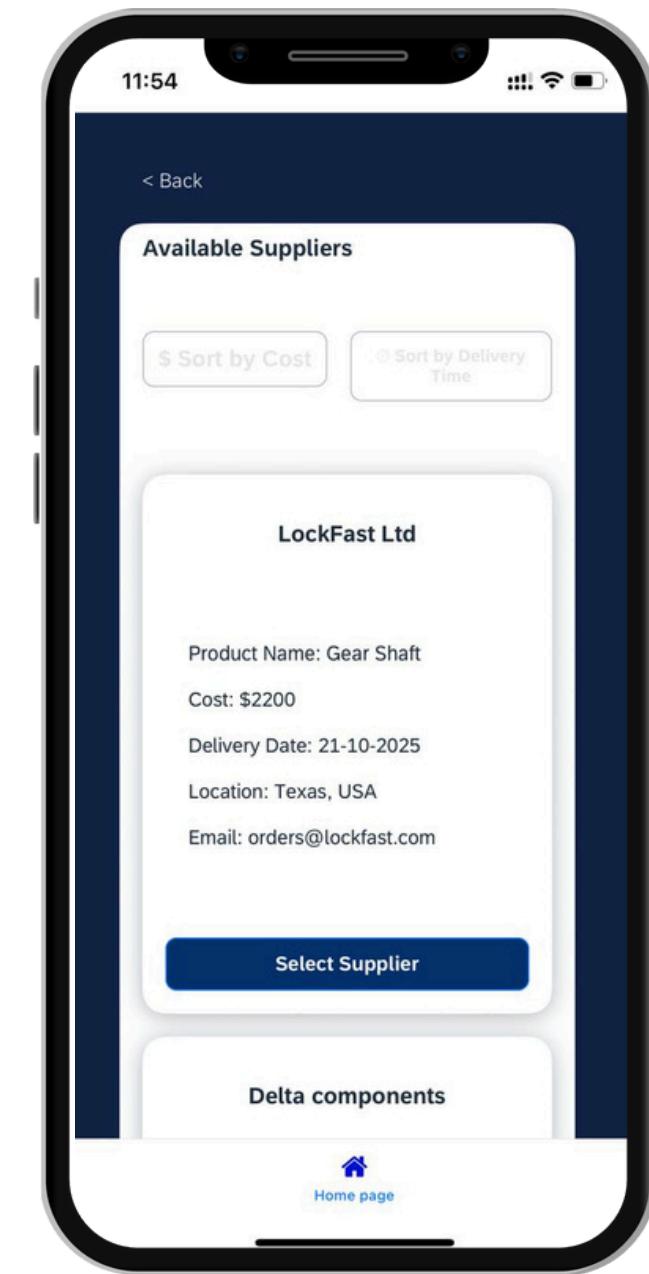
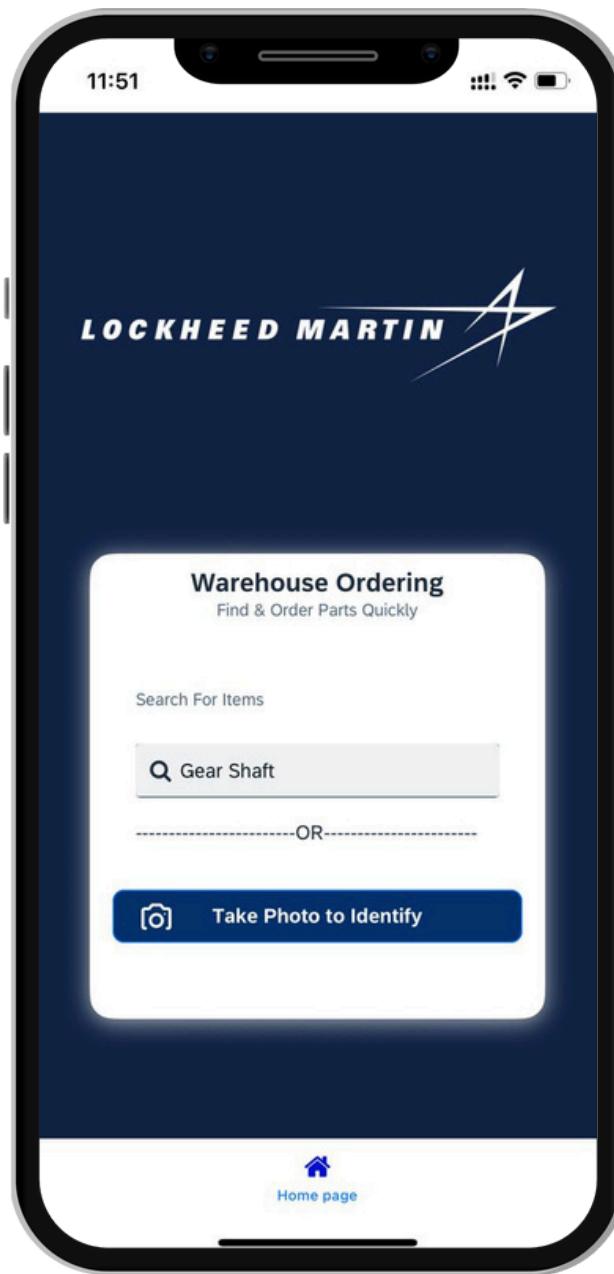
Review



Confirmation

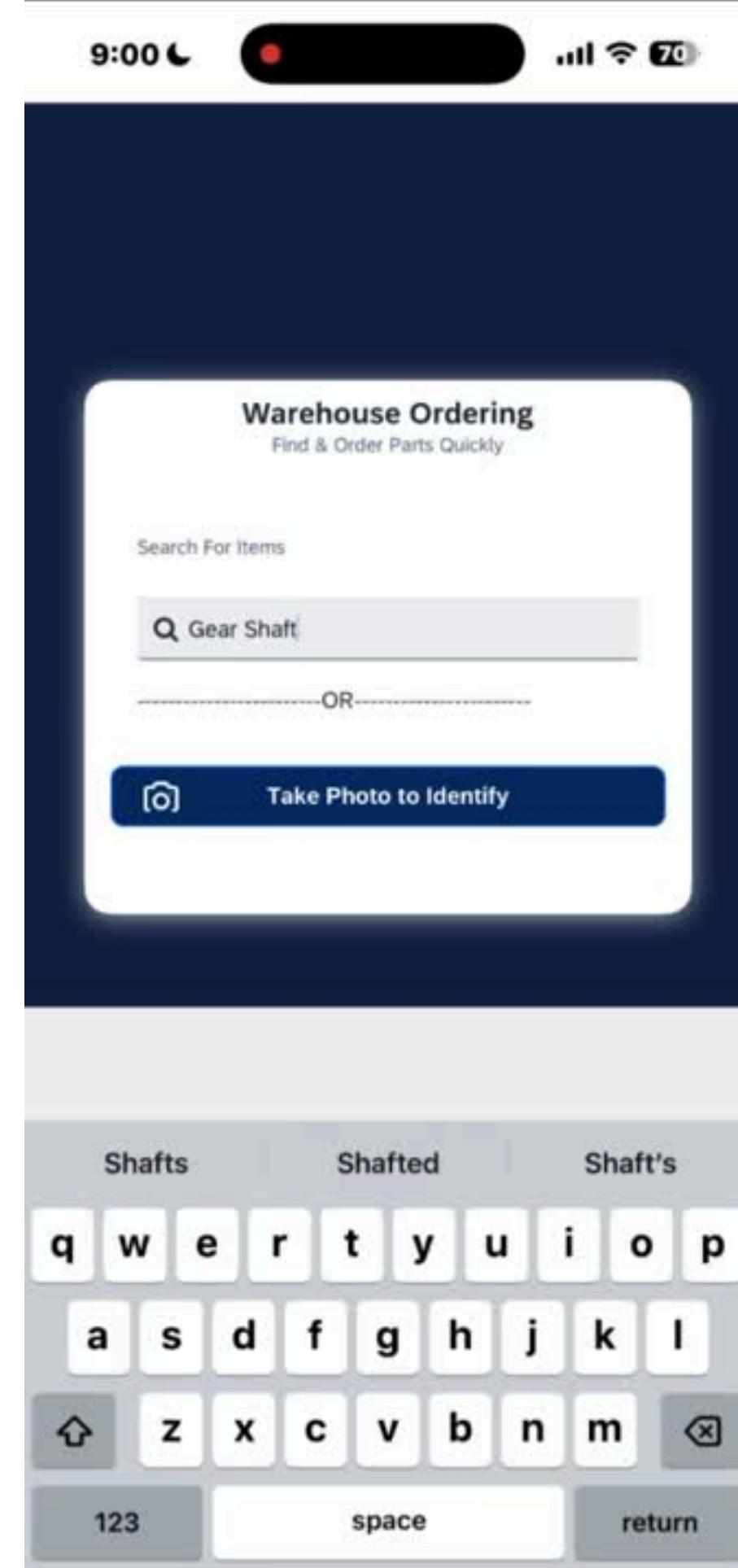


Submitted



# DEMO SLIDE

Live Demo



# PAIN POINTS SOLVED

Transforming the Warehouse Experience

## BEFORE

- ✗ 3+ hours searching supplier info
- ✗ No visibility into the supplier
- ✗ Manual emails and approvals cause delays
- ✗ 70% OTD rate

## AFTER

- ✓ 5-10 minutes to find and order parts
- ✓ Real-time supplier scorecards and OTD%
- ✓ Reduced expedite incidents
- ✓ Automated workflows and instant approvals

## EXPECTED IMPACT

**96% FASTER ORDERING • REAL-TIME VISIBILITY • 55% REDUCTION IN EXPEDITES • 15% OTD IMPROVEMENT**

# THANK YOU

## QUESTIONS & DISCUSSION

---

Vision: “Every part ordered on time, every time.”

Waipapa Taumata Rau University of Auckland

Presented by: Dharm Patel, Naman Bhalla, Saurav Krishnakumar, Trupti Vijay Ahire (Group 5)

# GROUP MEMBERS & CONTRIBUTION

All group members contributed to the conceptualization, development, and preparation of this application and presentation. The work presented is a collective effort of all team members.

GROUPMEMBER	NAME 1	NAME 2	NAME 3	NAME 4
UPI	nbha760	dpat356	skri486	tahi709
% CONTRIBUTION	25	25	25	25