Ubiquitous Digital Engagement

"You want me to log on to my tractor?"

JOHN DEERE & COMPANY

Role: UX Lead Designer; Digital Customer Experience

Challenge: Connect every farmer to the digital platform, regardless of technical comfort level

Ubiquitous Digital Engagement

John Deere & Company

OVERVIEW

A farm is often a dynamic place...
But technology is changing everything because of the value it brings.

Some farmers run almost everything from their phone. Others don't even have email.

But for legacy and business reasons, the experience was fragmented, and critical information and data-sharing agreements had to be realized for customer success.

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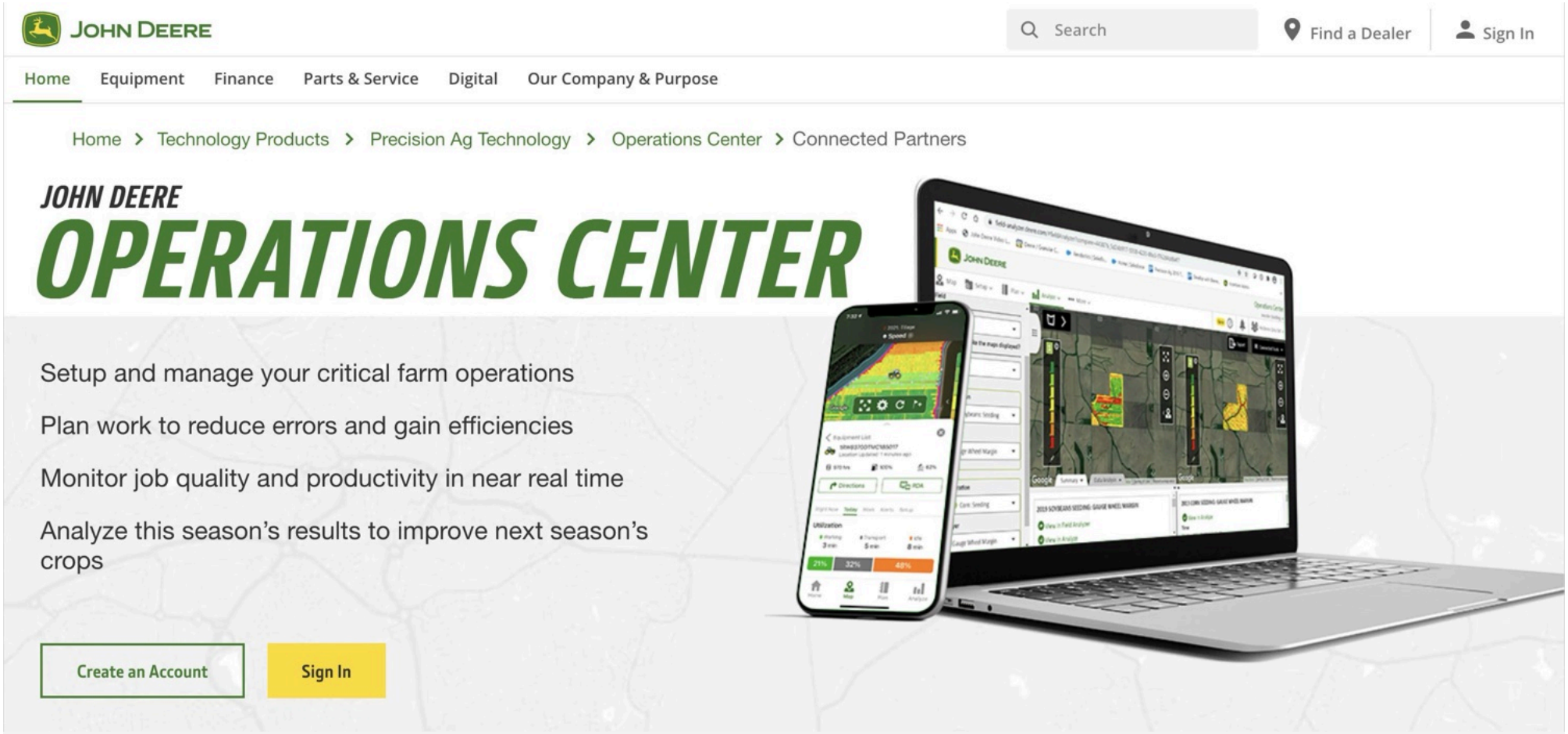

OVERVIEW

Operations Center is the central hub for all farm data. Its utility is directly related to the size of the farm network connected to it. Tractor and farmer need to be connected. The platform enables farmers to manage operations, track equipment performance, and make data-driven decisions.

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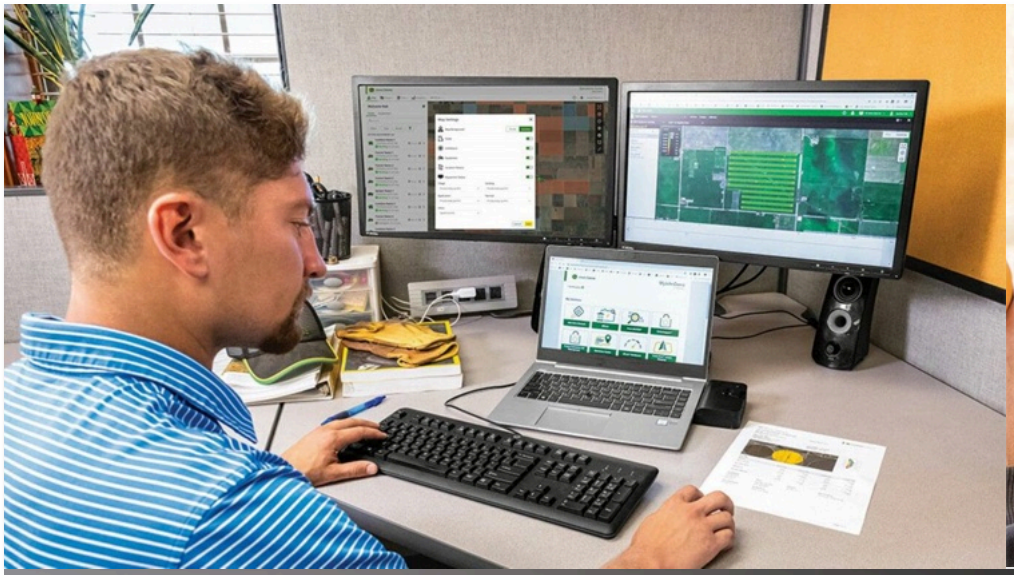

OVERVIEW

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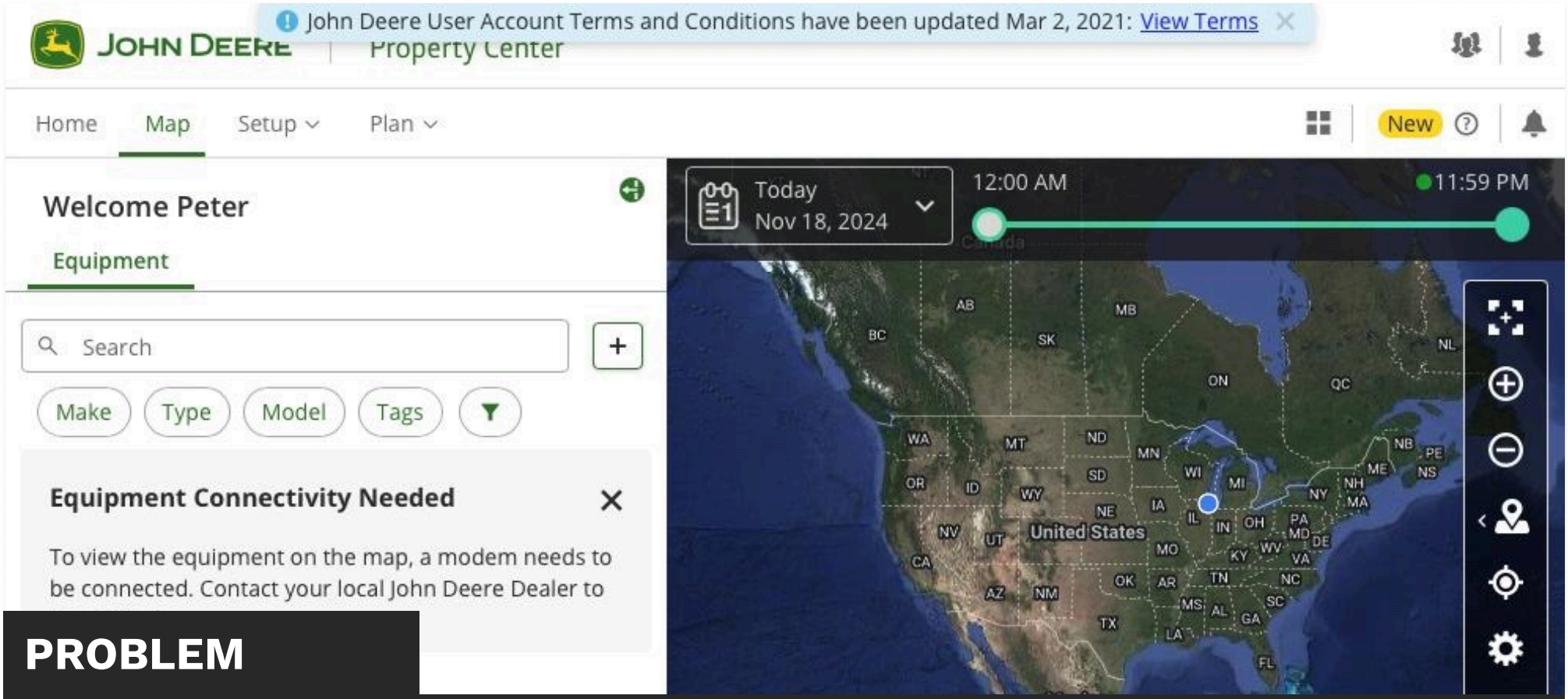

PROBLEM

The platform wasn't universally accessible.

For a variety of legacy and business reasons, the experience was fragmented.

Critical information and data-sharing agreements had to be realized for customer success, but the existing onboarding flow didn't capture what we needed from users.

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CHALLENGE

How do you get every user, from tech-savvy operators running autonomous equipment to traditional farmers who avoid digital tools, to complete a complex profile expansion and agree to new data licensing terms?

The platform's value proposition depends on network effects. An isolated farmer with one connected tractor gets minimal value. A farmer whose entire operation (plus their dealer, agronomist, and equipment operators) is connected gets exponential value.

We needed ubiquitous engagement.

REQUIREMENTS

Every user needed to expand their account profile and agree to new data and licensing terms.

This wasn't optional. The platform couldn't deliver its core value without this information. We needed from each user four different things:

1. Self-identification of their need and goals
What are you trying to accomplish? What's your operation type? This helps us surface relevant features and educational content.

2. Agreement to and creation of an Organization
Farms aren't solo operations. Data needs to be shared with operators, agronomists, dealers. Users had to create or join an organizational structure to enable this collaboration.

3. Exact details of their equipment
What machines do you have? What model years? What technology packages? As best as they could provide. This determines which features are available and enables proper machine-to-platform communication.

4. Their preferred John Deere Dealer
Which dealer do you work with? This connects users to their local support network and enables dealers to provide proactive service.

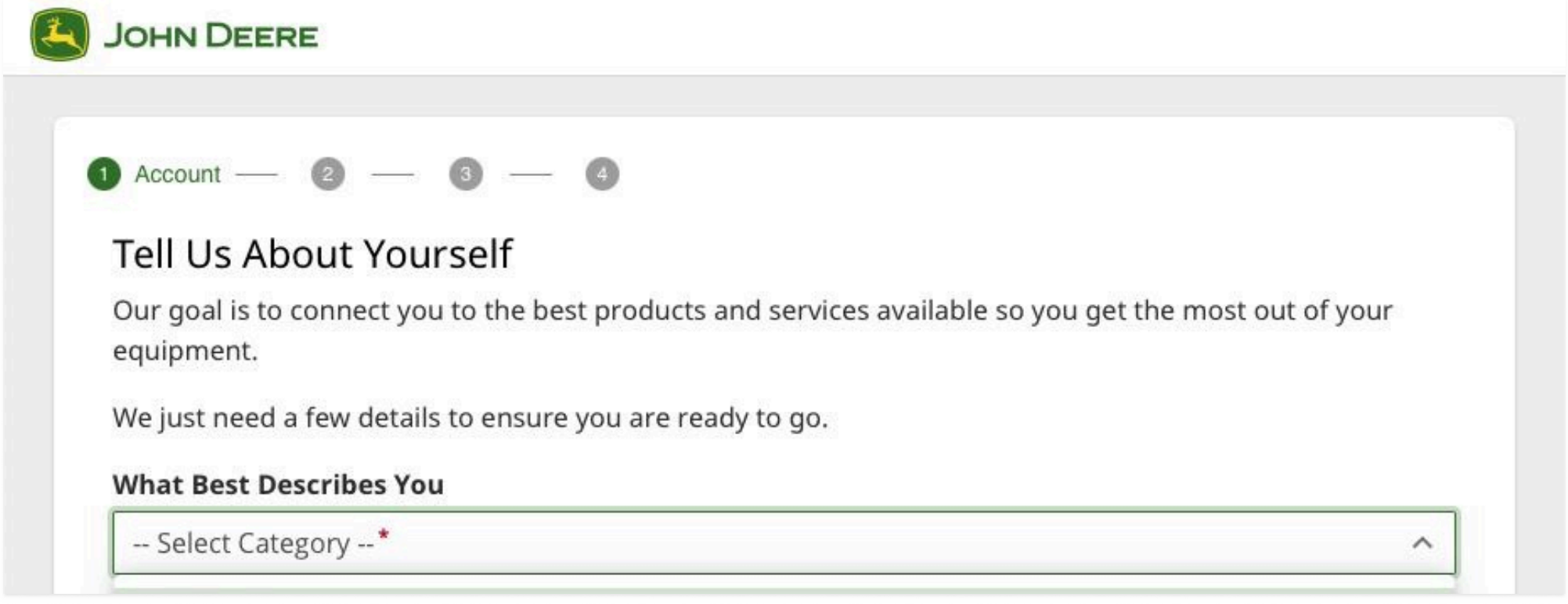
CONSTRAINTS

The user base ranged from:

- Tech-forward farmers managing fleets via mobile apps
- Traditional operators who prefer phone calls to emails
- Multi-generational operations where some embrace technology and others resist it

We couldn't assume:

- Email usage (many customers don't use email)
- Smartphone ownership (some still use flip phones)
- Digital literacy (agricultural expertise doesn't correlate with tech comfort)
- English fluency (agricultural communities are diverse)

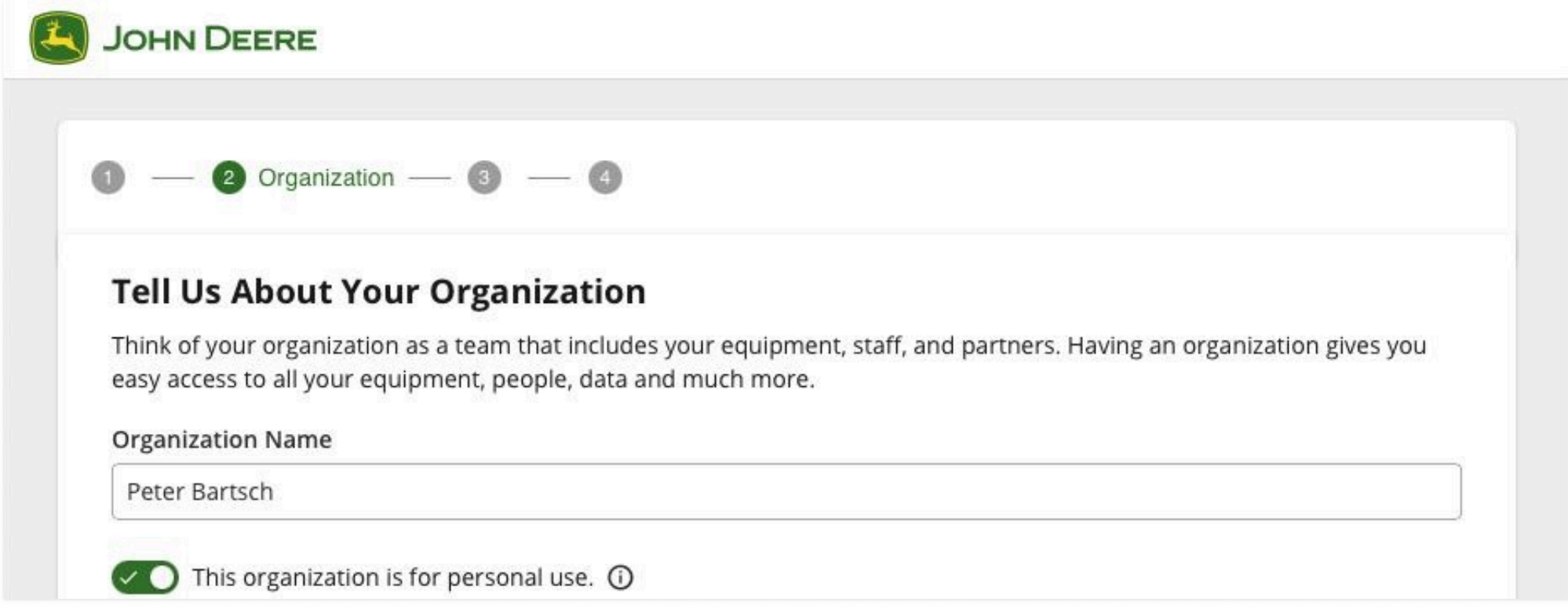


CONSTRAINTS

We had to deliver:

- Value immediately (couldn't ask for data without showing why it matters)
- Flexibility in completion (couldn't force everyone through one rigid flow)
- Support for offline users (not everyone has reliable connectivity in rural areas)

Business Constraint:
This wasn't a "nice to have" gradual migration. We needed this information from the existing user base within a defined timeframe to meet business and compliance requirements.



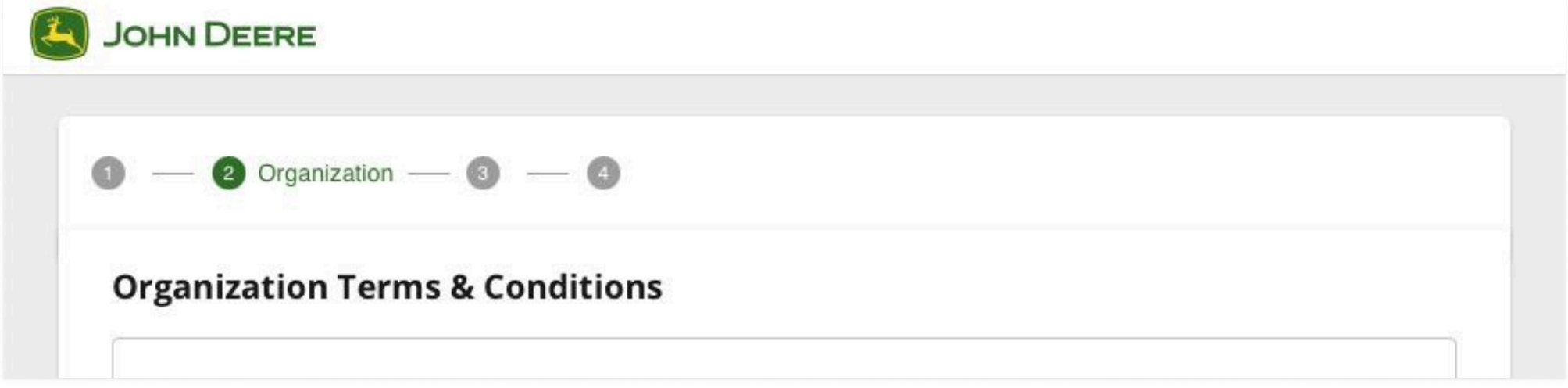
PROCESS

Designing for forced adoption without alienating users.
The challenge was getting required information while making users feel empowered, not coerced. Here's how we approached it:

Research & Discovery
I started by understanding the spectrum of users:

Interviews with farmers (n=15)
- Mix of operation sizes (small family farms to large commercial operations)
- Different technology adoption levels
- Different business structures (sole proprietors, partnerships, corporations)

Dealer interviews (n=8)
Dealers are the trusted intermediaries. They understand their customers' technical comfort levels and business needs. Their insights were critical for designing support pathways.



KEY FINDINGS

Data analysis
We analyzed existing user behavior to understand:

- What percentage of users had email addresses on file?
- How many had completed equipment registration?
- What were common drop-off points in existing flows?

Finding 1: Trust is everything
Farmers are skeptical of data collection (with good reason given agricultural data privacy concerns). Any ask
for information had to clearly explain why it was needed and how it would be used.

Finding 2: Dealer relationships matter more than brand
Many farmers are loyal to their local dealer first, John Deere second. Leveraging this relationship was key to
adoption.

Finding 3: "Show me the value first" mentality
Farmers are pragmatic. They needed to see concrete benefits before investing time in profile completion.

DESIGN STRATEGY

Developed a progressive disclosure approach that balanced business requirements with user needs:

Phase 1: Awareness & Value Proposition
Before asking for anything, show what's possible. Dashboard previews, case studies from similar operations, dealer testimonials.

Phase 2: Guided Data Collection
Break the four requirements into digestible steps. Explain each ask with concrete benefits. "Adding your equipment details lets us alert you to software updates and recall notices."

Phase 3: Organizational Setup
This was the most complex requirement. I designed a flow that accommodated:

- Solo operators (simplified path, skip organizational complexity)
- Small operations (quick setup, minimal roles)
- Large operations (full organizational hierarchy with roles and permissions)

Phase 4: Dealer Connection
Made dealer selection searchable and visual (photos, locations, contact info). Emphasized this as enabling better service, not surveillance.

PROCESS

Interaction Design Decisions

Decision 1: Forced but not hostile
Users had to complete this, but we gave them control over timing. "Complete now" or "Remind me in 3 days" options. After three reminders, we gated access to new features but didn't break existing functionality.

Decision 2: Save progress automatically
Given connectivity issues in rural areas, we couldn't require completion in one session. Auto-save meant users could stop and resume without losing work.

Decision 3: Smart defaults and suggestions
Pre-filled what we could based on existing data. For equipment details, offered visual selection (photos of tractors, not model numbers). For dealers, sorted by proximity to registered address.

Decision 4: Multiple completion paths
Digital-savvy users got streamlined web/mobile flows. Traditional users could complete via phone with dealer support. Dealer reps had tools to complete registration on behalf of customers during in-person visits.

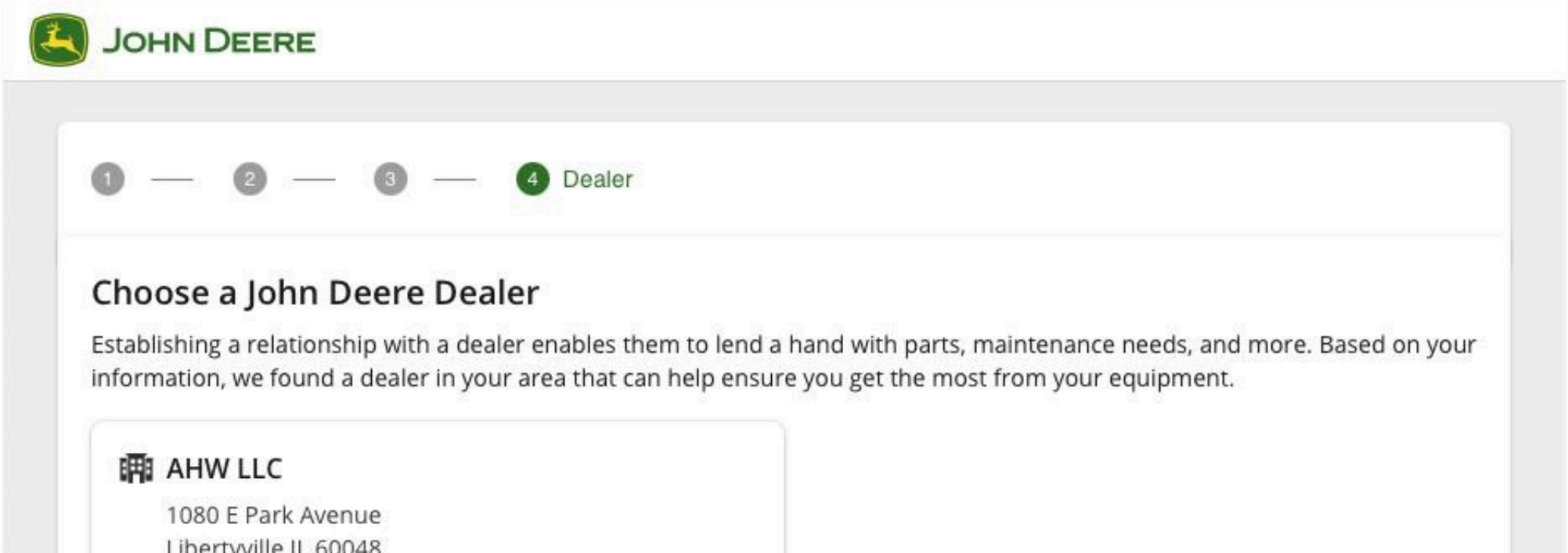
Decision 5: Immediate value unlock
Each completed section immediately unlocked relevant features. Added equipment details? Now see personalized maintenance schedules. Selected dealer? Now see local parts inventory.

PROCESS

Content Strategy
The language had to work for both audiences:

For tech-forward users:
"Connect your fleet to unlock real-time monitoring, predictive maintenance alerts, and remote diagnostics."

For traditional users:
"Register your equipment so we can help you keep it running."
Same outcome, different framing.



OUTCOME

Forcing all users to add this data over a short time raised awareness and captured the required information.

The approach worked because we balanced business requirements with user respect:

- Made the "why" clear before the "what"
- Offered multiple paths to completion
- Unlocked value progressively, not all at once
- Supported users through their trusted dealer relationships

Critical Success Factor:
Customers who don't use email could keep doing so but could still reap the value of their data. By enabling phone-based completion and dealer-assisted registration, we achieved ubiquitous engagement without forcing digital literacy.

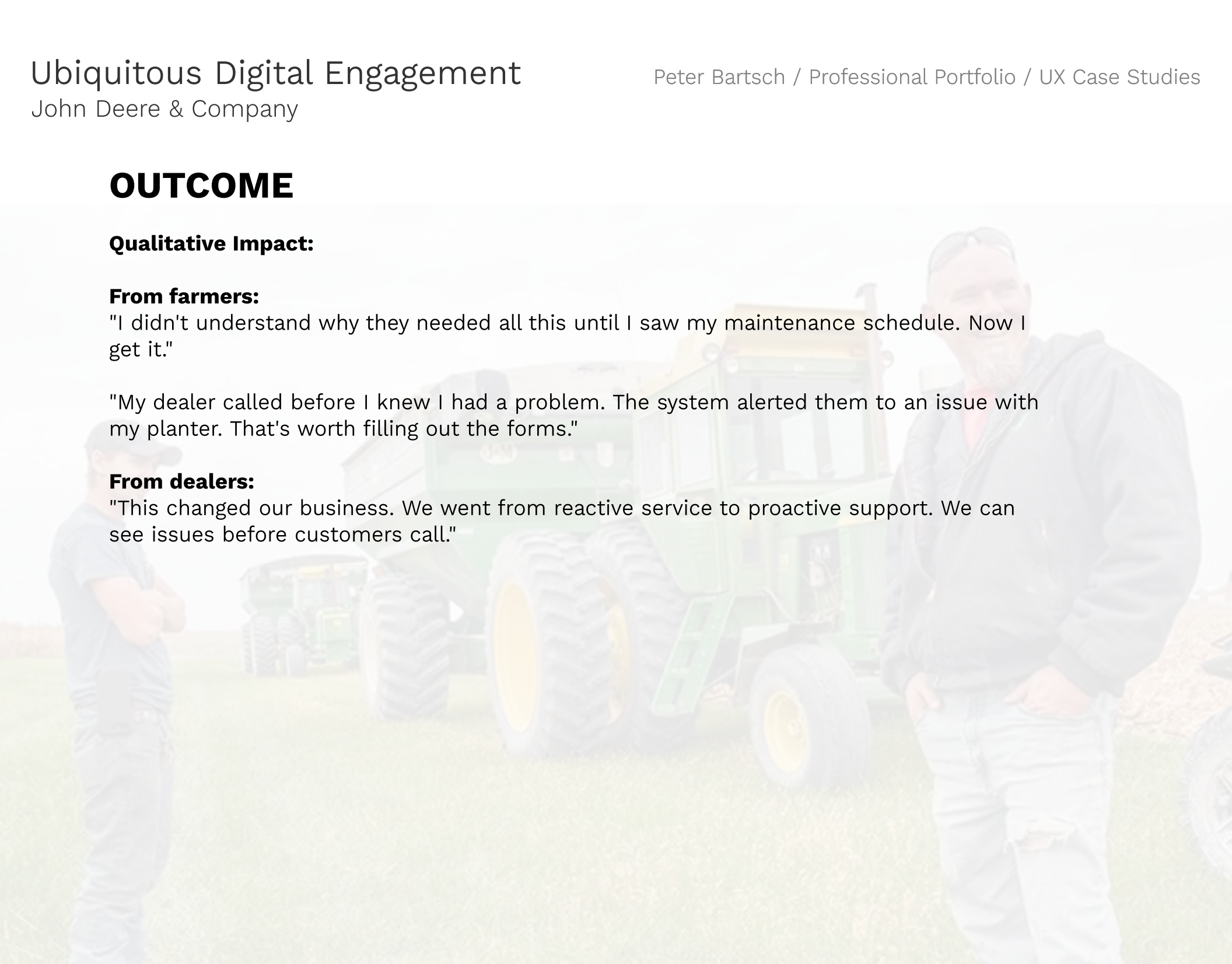
OUTCOME

Qualitative Impact:

From farmers:
"I didn't understand why they needed all this until I saw my maintenance schedule. Now I get it."

"My dealer called before I knew I had a problem. The system alerted them to an issue with my planter. That's worth filling out the forms."

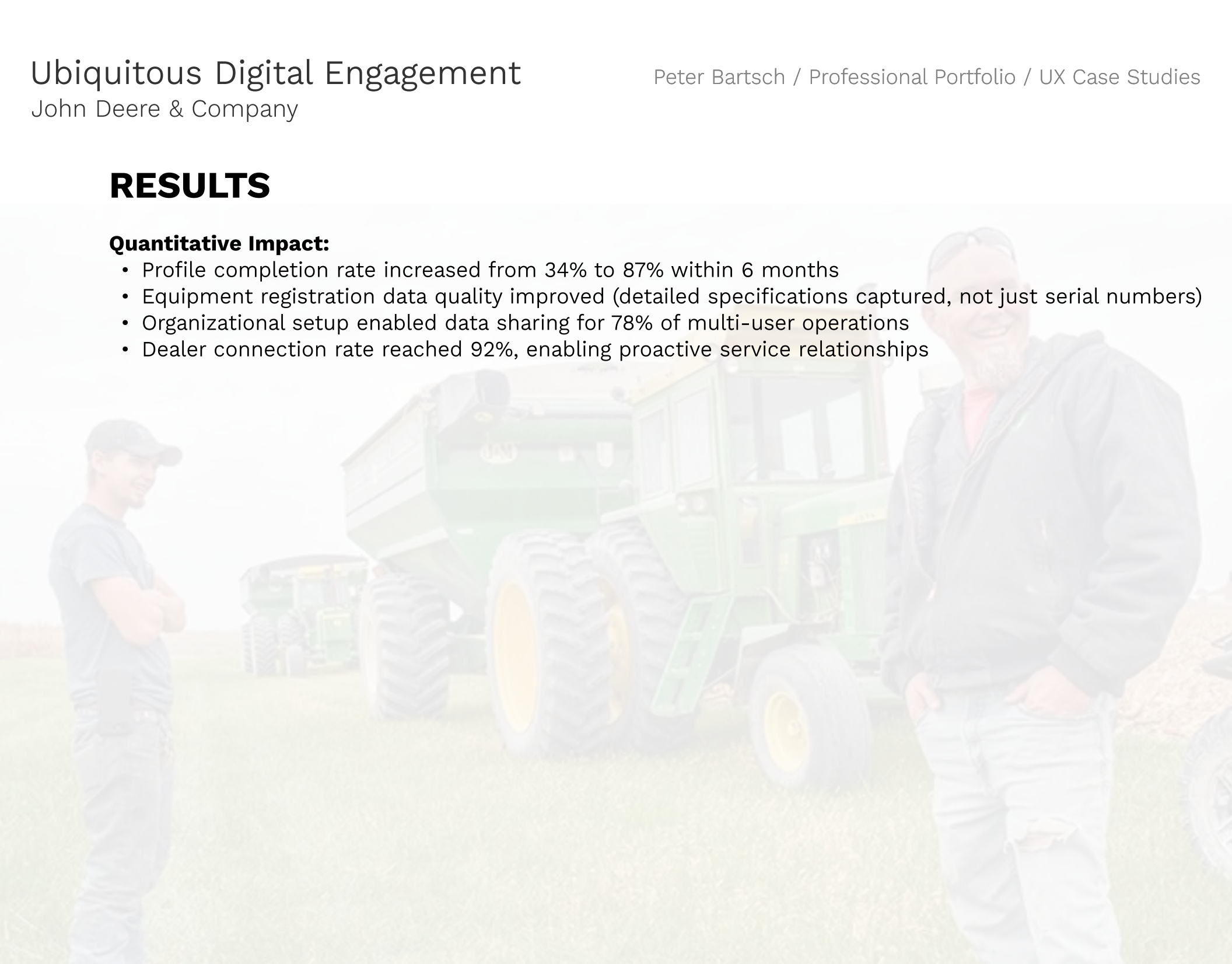
From dealers:
"This changed our business. We went from reactive service to proactive support. We can see issues before customers call."



RESULTS

Quantitative Impact:

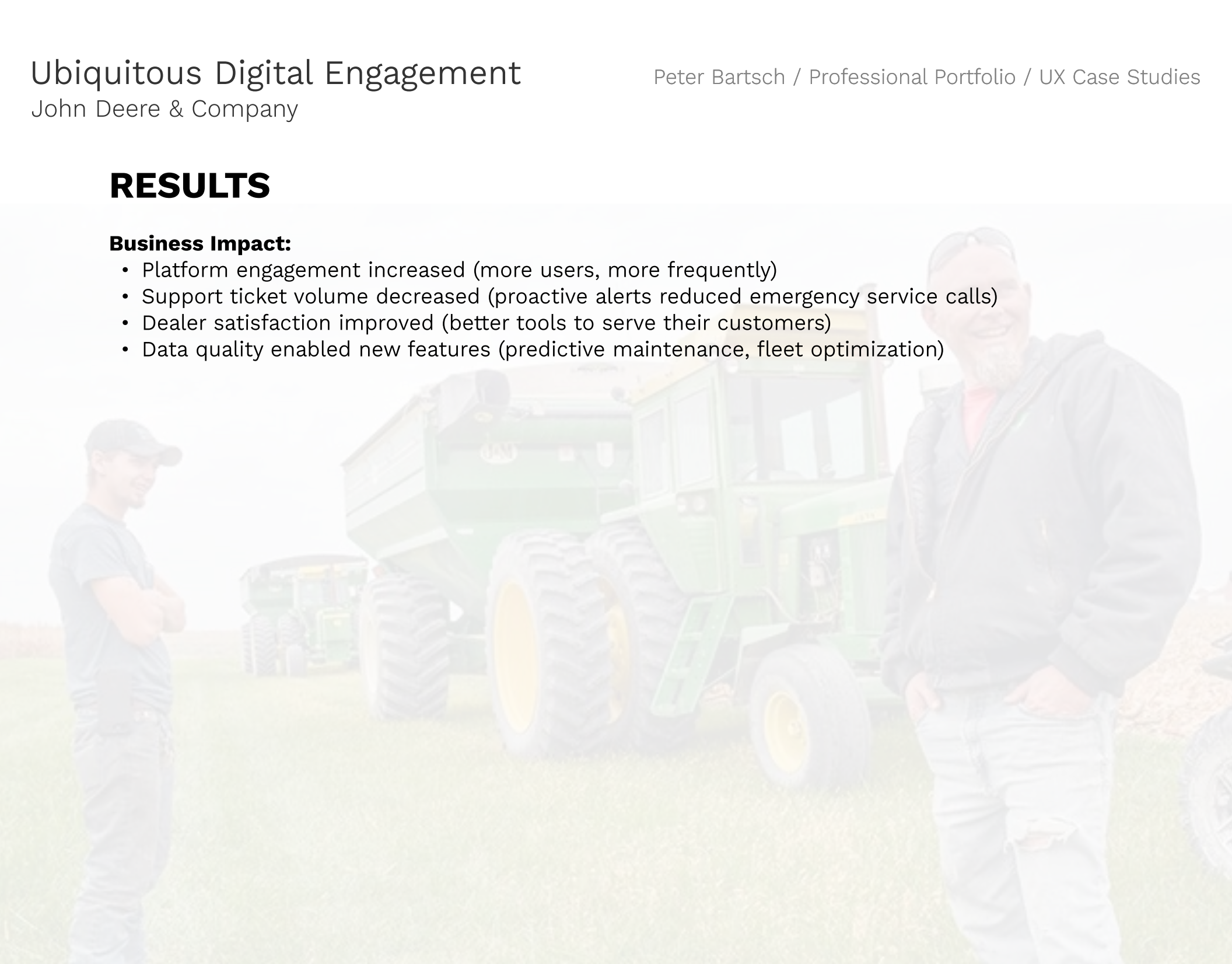
- Profile completion rate increased from 34% to 87% within 6 months
- Equipment registration data quality improved (detailed specifications captured, not just serial numbers)
- Organizational setup enabled data sharing for 78% of multi-user operations
- Dealer connection rate reached 92%, enabling proactive service relationships



RESULTS

Business Impact:

- Platform engagement increased (more users, more frequently)
- Support ticket volume decreased (proactive alerts reduced emergency service calls)
- Dealer satisfaction improved (better tools to serve their customers)
- Data quality enabled new features (predictive maintenance, fleet optimization)



WHAT WORKED

Respecting user diversity
Not forcing everyone through one digital flow was critical. Phone-based and dealer-assisted paths made this accessible to users who would have churned.

Progressive value unlock
Showing immediate benefits for each completed section maintained momentum. Users saw the point, not just bureaucratic requirements.

Leveraging trust relationships
Dealers were the key. They had customer trust and could explain value in ways that resonated with their specific clientele.

Clear communication
Explaining why we needed information (and how it would be used) reduced resistance. Transparency built trust.

WHAT I'D DO DIFFERENTLY

Test earlier with low-tech users
Initial prototypes skewed toward digital-first design. Testing with traditional farmers earlier would have surfaced accessibility issues sooner.

Simplify organizational setup
This remained the most confusing part of the flow. I'd invest more in visual hierarchy and role-based guidance.

More granular analytics
We measured completion rates but should have tracked partial completions and abandonment points more precisely to iterate faster.

Better dealer training materials
Dealers needed to explain this to customers. We created materials but could have done more video-based training for different customer types.

WHAT THIS TAUGHT ME ABOUT ENTERPRISE UX

Forced adoption can work if done respectfully
Sometimes you do need everyone to do something. The key is balancing business requirements with user autonomy and showing clear value.

Accessibility isn't just disability accommodation
It's designing for the full spectrum of technical comfort, connectivity constraints, and interaction preferences. Phone support isn't a fallback; it's a primary channel for some users.

Trust is infrastructure
In B2B, trust relationships (like dealer networks) are as important as technical infrastructure. Design should leverage, not bypass, these relationships.

Data collection requires data value
You can't just ask for information. You have to show what users get in return. Make it concrete and immediate.

CAPABILITIES DEMONSTRATED

1. **Enterprise UX for diverse user bases**: Designing for extreme technical diversity
2. **Forced adoption patterns**: Balancing business requirements with user experience
3. **Multi-channel experience design**: Web, mobile, phone, and in-person pathways
4. **B2B relationship dynamics**: Leveraging dealer networks as design assets
5. **Progressive disclosure**: Breaking complex requirements into manageable steps
6. **Content strategy for technical diversity**: Same features, different framing
7. **Accessibility beyond disability**: Designing for connectivity, literacy, and tech comfort variations