CASE STUDIES: **OVERVIEW** 

This document highlights projects that show my range of skills and impact across design, leadership, and product strategy. Each summary below provides context, my role, and measurable outcomes.

#### Case Study 1: Modernization and Design System Leadership

### Unifying fragmented UI into a scalable system with accessibility at the core.

Led rebuild in Figma, defined patterns and states, created contextual guidance, partnered with engineering to set governance using tools like Dev Mode and Storybook.

- √ Faster design to dev handoffs by 30 to 40 percent
- ✓ Fewer duplicate builds across teams, clearer ownership
- ✓ Consistent, WCAG-aligned components across modules

### Case Study 2: Embedding Customer Voice into Strategy

#### Turning scattered feedback into a reliable input for roadmap decisions.

Created a standing Customer Feedback Group, ran discovery cycles and hands-on workflow workshops, coached PMs in evidence-based planning, introduced performance tracking.

- ✓ Regular cadence of 2 to 4 research touchpoints per month
- ✓ Stronger launch adoption, fewer "missed expectations" escalvations
- ✓ PMs planning features with clear success metrics and usage analytics

#### Case Study 3: Strategic Growth through Total Experience

#### Connecting UX, CX, EX, and PX to reduce friction and improve outcomes.

Revamped in-app onboarding with guided tours, paired product flows with training and documentation, captured tribal knowledge into internal guides, IoT roadmap alignment.

- ✓ Up to 90 percent training-related ticket reduction in key onboarding areas, MoM/YoY
- ✓ Shorter time to value, faster facility rollouts, stronger customer advocacy
- ✓ Employees equipped to solve problems with context, fewer handoffs, clearer ownership across teams

### Case Study 4: New Product 0→1 launch - Plex Industrial IoT Platform

# Designing a scalable IIoT platform to balanced data complexity, customizability, and workflow variability

Conducted onsite research, created personas and journey maps, designed dashboards and components that reflected physical environments, and evolved Plex's design system to support new themes and rebranding

- ✓ Prototypes grounded in real production data, creating stronger persona empathy and workflow accuracy
- ✓ Reduced user error through guided yet flexible workflows
- ✓ Increased customer trust by preventing costly missteps through early validation

# Case Study 5: Leading Product Discovery in AI - SafetyChain Conversational AI Tool for Audit Data

#### Refining an AI-powered form creation tool while preparing internal teams to support AI-assisted tools.

Structured the Alpha Program, designed onboarding and task-based scenarios, implemented unmoderated video testing, and led cross-functional retrospectives to align Product, Engineering, and Customer Enablement

- ✓ Over 30 high-impact improvements to logic, UI, and onboarding flows
- ✓ Increased confidence and readiness for Customer Enablement teams
- ✓ Standardized terminology and dependency handling to reduce user confusion
- ✓ Created alignment on what trustworthy embedded AI requires for successful adoption

CASE STUDY: MODERNIZATION & DESIGN SYSTEM LEADERSHIP - SafetyChain Software

#### THE CHALLENGE

At SafetyChain, the product suite had grown through years of iterative development without a cohesive design strategy. Even within a single platform, generational releases left product areas disconnected and often subject to the UI patterns available by default to developers across disconnected, offshore engineering teams. As a result, interfaces were inconsistent across modules, which confused customers and increased training and support needs. Internal teams struggled with design debt, duplicate work, and slow delivery velocity for development, QA, support, and product design processes without a standardized framework guiding solutions. The lack of a unified design system limited both product usability and company-wide efficiency.

#### THE APPROACH

The first step in achieving a consistent design system was defining what the system *should* be. Each product had grown on its own, with inconsistent styles and no shared foundation. Brand guidelines had shifted over time, and there was no unified sense of what "good" looked like. On top of that, accessibility had never been a priority, which meant that even the pieces we could salvage fell short of WCAG standards.

At the same time, we were moving from Adobe XD to Figma. Instead of porting over broken patterns, we decided to rebuild everything from the ground up. Every page, component structure, workflow, drop-down, and button family was re-imagined inside a brand-new Figma library. We designed with symbol and state variants, critiqued and tested as we went, and we deliberately broke patterns down and rebuilt them stronger. The result was a living library where each element included contextual guidance, use cases, written examples, and related content suggestions so any team could adopt it.

In parallel, we worked to connect this system with engineering practices. Development was divided across multiple groups that often overlapped but rarely coordinated. As a result, identical components were built and from scratch time and time again, each with different interpretations, live across the product. To address this, I partnered with engineering leadership to evaluate options for bridging the gap between design and development. We discussed best practices for globalized components and design acceptance stages. We also researched and tested tools like Figma Dev Mode, Storybook, and custom-built solutions to identify the best way to govern and share components across both functions. This created a structure where ownership was shared and efficiency improved for all teams.

# Contributions as Director of UX Research, Analytics, & Design:

#### ✓ Established a Scalable Design System

Defined core patterns, components, and accessibility standards. Balanced modernization with compatibility for existing product modules to minimize disruption.

#### √ Cross-Functional Alignment

Partnered with engineering and product management to ensure adoption. Built governance processes and contribution models so all teams could own and evolve the system.

#### ✓ Enablement and Training

Led workshops, created documentation, and mentored designers and engineers to embed design standards in daily work. Introduced tooling that improved design-to-dev handoffs.

#### √ Iterative Modernization

Phased rollout, beginning with high-impact modules, proving ROI early. Paired modernization efforts with customer-driven feature priorities to maintain trust and momentum.

#### THE IMPACT

- **▼** Faster design-to-development handoffs after component adoption
- Reduced duplicate builds across engineering teams working on overlapping modules
- ➤ Noticeable drop in usability-related support tickets in the first modernized areas
- All new components aligned with WCAG accessibility standards
- Higher satisfaction from both designers and engineers, captured through internal surveys

As the system rolled out, the improvements were clear for both external customers and internal teams. For customers, the product became more consistent and easier to use. Screens that once felt disconnected started to follow the same patterns, which made tasks faster to learn and less frustrating. Support teams began to see fewer tickets tied to usability issues, and onboarding sessions were smoother because new users could apply what they had already learned across different modules.

For internal teams, the benefits were just as clear. Designers no longer had to rebuild basic elements or argue over standards. They had time to focus on solving real problems instead of debating which button style to use. Developers could finally work from a shared library, which reduced duplicate builds and kept pages aligned across teams. With governance in place, both design and engineering had ownership, which made the system something they trusted and kept improving.

The result was a shared foundation that raised the quality of the product and improved how quickly teams could deliver. It was not just a set of components, but a way of working that improved clarity and accessibility, making product growth simple and purposeful.

#### **Key Takeaways**

- ✓ Building a design system starts with clarity
  - Defining patterns and aligning on accessibility standards is as important as the visual work itself. Creating an internal system for evaluation, acceptance, a maturation provides a framework for quality.
- ✓ Rebuilding from the ground up gave us both flexibility and granular control

Starting over in Figma gave us a chance to fix long-standing issues and create an organized library that included context, not just components. It also allowed us to leverage more sophisticated layers for data variables and atomic elements, strengthening existing patterns.

- ✓ Cross-department collaboration strengthened our efforts
  - Shared ownership of new processes between design engineering was critical, as was the communication with other teams like customer support, to zero in on over-looked issues. Governance and integration with development tools ensured the system stayed useful and trusted.
- ✓ Everyone benefits from clear processes and familiar patterns
  - The impact of modernization showed up in both customer experience and internal efficiency, from reduced usability issues to faster delivery and more consistent builds.

CASE STUDY: EMBEDDING CUSTOMER VOICE INTO STRATEGY

# **A COMMON CHALLENGE**

Across different companies I have worked with, the same issue has come up: product decisions were made without a reliable or structured way to bring in customer input. Feedback was scattered through support tickets, one-off conversations, or occasional surveys, but it was rarely organized into something teams could act on. Without a consistent pipeline, roadmap priorities often missed the mark. The result was frustrated customers, launches that fell short of expectations, and strained relationships with customer-facing teams who needed a way to show users their voices were being heard.

#### THE APPROACH

There are a number of tools that can be utilized to better understand potential customers, active users, and the patterns that lead to churn, and many of them offer quick, quantitative data that helps make fast decisions. When solving complex, data-heavy problems entrenched in regulatory obstacles for unpredictable personas, sometimes a more qualitative approach is necessary. Addressing the gap between product and customer ensures the product roadmap is aligned to innovation and value, not just band-aids.

To achieve this, I've launched customer feedback programs that create multiple customer voice touch points during the product design and development lifecycle, often starting with a roster of customers who volunteer to participate in regular discovery and product evaluation outreach. This user pool provides a flexible channel for insights like an email survey, concept testing, discovery and exploration discussions that take place to better understand the problem to be solved, and what delivery success looks like. These groups meet two to four times per month depending on need, and often include annual in-person sessions at the customer conference.

#### Contributions at unique companies solving a similar problem:

- ✓ At Datacor, we faced the task of combining two very different systems, once unique in function, but had grown into an overlapping product space requiring a cohesive rebuild. To get a feel for user preferences in our existing products, and to explore new ideas that didn't exist in either product, we ran a hands-on workshop where customers could build out their ideal workflows and information architecture. Using printed modules, assets, actions, and common app elements, participants designed the dashboards and processes that best fit their team sizes and environments. These sessions helped us see not just feature requests, but the deeper logic customers applied when structuring their work and how that fluctuated across different persona groups.
- ✓ At Plex Systems, the same approach helped address the tension between a legacy product and its new cloud successor, easing customer conversions. Many users resisted the new system because they preferred the familiar "classic" version. Giving them a structured space to share feedback helped surface what they valued in the old system, and gave product managers clear priorities for improving the new one. Just as importantly, it gave customers an outlet to feel heard, which helped rebuild trust. Later on, this established group had a massive impact on a new product launch that was nearing failure, but with the processes we had already baked into our PDDLC, we were able to turn it around and launch the product with great success. Less than one year after this launch, Plex Systems was acquired by Rockwell Automation.
- ✓ At SafetyChain, this foundation of ongoing discovery set the stage for deeper data-driven practices. Once the cadence was established, we introduced Pendo to track performance and adoption, turning qualitative insights into measurable product outcomes. I also held workshops on design thinking research methods, teaching product managers how to generate new ideas through conversations rather than simply validating their own expectations. Over time, we built catalogs of customer understanding across every area of the product, so discovery became a shared resource, not an occasional activity.

#### THE IMPACT

- x 2−4 structured customer research sessions per month, creating a steady cadence of discovery
- Annual hands-on workshops at customer conferences with 50+ participants shaping workflows, dashboards
- Improved adoption of new features, with fewer escalations tied to "missed expectations"
- Stronger alignment between Product and Customer Success, reducing churn risk and enabling expansions.
- ➤ Product managers began tracking success metrics for features in advance, shifting toward measurable, outcome-driven planning, and using these principles to prove value throughout the process
- Onboarding to Pendo enabled performance tracking, linking customer voice with usage analytics

The consistent thread was that customer voice was no longer treated as an "extra." It became a normal part of how product and design planned, prioritized, and measured success. This shift had clear results. Roadmap priorities were better aligned with actual customer needs, which improved adoption and reduced churn risk at launch. Customerfacing teams had a reliable way to bring user perspectives into planning, which strengthened relationships and reduced the feeling of disconnect. Product managers gained confidence in their ability to connect solutions to measurable outcomes, and leadership had greater trust that roadmap decisions were backed by evidence.

#### **Key Takeaways**

- ✓ Connecting the dots makes all the difference

  Customer voice is often scattered, and without structure it cannot guide roadmap decisions effectively.
- ✓ Qualitative and quantitative research matter

  Creating a standing customer feedback group provided a reliable channel for discovery, evaluation, and problem framing.
- ✓ Understanding the context of customer needs and challenges improves product accuracy
  Hands-on workshops and regular sessions uncovered not only feature requests but also deeper workflow logic and user priorities.
- ✓ Consistent outreach serves both sides of the screen

A steady research cadence built trust with customers, gave Customer Success a way to make users feel heard, and helped Product Managers plan with evidence instead of assumptions.

✓ Customers connect us all

Embedding this practice across companies set the stage for outcome-driven planning, performance tracking with tools like Pendo, and stronger alignment between teams.

CASE STUDY: STRATEGIC GROWTH THROUGH TOTAL EXPERIENCE - SafetyChain

#### THE CHALLENGE

In many SaaS companies, adoption, retention, and growth are treated as separate challenges. Product teams focus on building features, Customer Success handles training and renewals, and Support manages troubleshooting. Each team works hard, but customers still feel friction because these experiences are not connected. What is missing is a shared framework that treats all of these interactions as part of one system.

This is where Total Experience (TX) comes in. Popularized by Gartner, TX brings together four distinct areas of User Experience (UX), Customer Experience (CX), Employee Experience (EX), and Partner Experience (PX) and treats them as interdependent. A strong design decision improves usability for customers, makes training easier for employees, and creates consistency for partners. By connecting these pillars, organizations reduce silos and deliver outcomes that customers feel in real ways: smoother onboarding, more consistent support, and higher adoption.

#### THE APPROACH

I introduced this lens into product planning and growth strategy, using TX pillars to guide both daily work and long-term decisions. TX reshaped how we planned and executed growth efforts at SafetyChain, connecting multiple teams and surfacing actionable improvements.

### How we focused on each of the four pillars:

#### √ User Experience (UX):

We revamped the onboarding experience directly in the product, adding guided tours and contextual help to reduce friction. Support ticket data showed where customers were struggling most, and those areas became the first focus for new in-app tours. This dramatically reduced tickets in high-friction areas and gave customers uninterrupted progress without waiting on email or support responses.

#### ✓ Customer Experience (CX):

To shorten time-to-value, I partnered with Solution Engineering and Account Specialists to align onboarding across documentation, training materials, and in-app flows, and trained the team on the basics of Pendo, helping to create dashboards that tracked user progress. Customers could get productive faster, and account teams could track their progress with clearer metrics. This pairing of product and service created a seamless experience for new accounts.

#### ✓ Employee Experience (EX):

I organized cross-functional workshops that pulled individuals from across the company to define use cases and analyze workflows. These sessions served to share knowledge of strengths, weaknesses, opportunities, and threats, while also surfacing tribal knowledge that often stayed siloed, benefiting SafetyChainers company-wide. A side benefit was the creation of internal onboarding guides, giving any employee the ability to deep dive into a product area and understand its full range of capabilities and limitations.

#### ✓ Partner Experience (PX):

During planning for future areas of product expansion, I flagged concerns on our IoT roadmap. Having built IoT products before, I recognized the limitations and technical debt in the current outline. Instead of pushing forward with a risky build, I recommended realigning the project to focus on partnering with mature IoT providers. The new roadmap emphasized APIs and interfaces that allowed customers to integrate data while keeping the UI clean, intuitive, and consistent with our brand. This shift created stronger partner opportunities while avoiding costly missteps.

#### THE IMPACT

Applying a Total Experience strategy created measurable improvements across customer, employee, and organizational outcomes.

#### ✓ Support efficiency

In key onboarding areas, guided in-app tours reduced support tickets by up to 90 percent month over month by module and friction type. This not only meant fewer customer frustrations but also significantly reduced the burden on support engineers, who could now focus on higher-value issues instead of an overwhelming triage backlog. Faster resolution times followed naturally as ticket aging dropped.

#### ✓ Customer adoption and advocacy

By shortening time-to-value for new accounts, onboarding became a differentiator. Customers could roll out the product faster across their facilities, and early wins translated into stronger advocacy for expansion. This gave the company an edge against competitors whose change management processes created more friction.

#### √ Employee empowerment

Workshops and internal onboarding documentation did more than improve product knowledge. They gave employees across departments the confidence to step into customer conversations, solve problems quickly, and understand the context behind unique workflows. This reduced dependency on a handful of experts and built a culture where more people could represent the product effectively.

#### ✓ Internal knowledge alignment

Before this work, certain product areas were intentionally hidden from customers because issues were unresolved, and new employees only learned this informally through word of mouth. By capturing tribal knowledge, resolving gaps, and aligning processes, the organization eliminated high-risk blind spots.

### √ Strategic roadmap alignment

Raising flags early on the IoT roadmap prevented the company from investing heavily in an unsustainable path. Instead, the strategy shifted to partnerships and API development, creating cleaner integrations while maintaining an on-brand experience. This saved development resources and positioned the company for stronger markets.

#### **Key Takeaways**

- Total Experience is not abstract. By connecting user, customer, employee, and partner experiences, the company achieved tangible improvements in adoption, support efficiency, and product scalability.
- Reducing support tickets by 90 percent in some onboarding areas freed engineering resources and improved customer satisfaction simultaneously.
- ➤ Shorter time-to-value created a measurable advantage in the market, driving faster rollouts and positioning the product as easier to adopt than competitors.
- Empowering employees with contextual product knowledge built confidence, reduced silos, and ensured customers felt supported at every touchpoint.
- Capturing and documenting tribal knowledge eliminated failure points, making product onboarding consistent and reliable.
- ➤ Strategic intervention on the IoT roadmap demonstrated how an experience-led lens can prevent wasted investment and create new opportunities for growth.

CASE STUDY: **NEW PRODUCT 0→1 LAUNCH -** Plex Industrial IoT Platform

#### THE CHALLENGE

Plex Systems, known for its cloud-based ERP solutions for manufacturing, acquired an industrial IoT asset-tracking product with the goal of rebuilding it in-house. The vision was to transform this acquired IP into a brand-new, modern platform that integrated with Plex's ERP yet operated independently to support connected factory environments.

Industrial manufacturers faced significant challenges in managing real-time data from diverse machines and systems. Pain points included fragmented visibility into equipment health, downtime tracking, performance monitoring, and the sheer complexity of handling data at vastly different scales. The market demanded tools that could simplify this data, provide actionable insights, and support varied operational priorities across industries, facility sizes, and equipment types.

#### THE APPROACH

#### **Problem Framing**

Designing an Industrial IoT solution required balancing multiple layers of complexity. The system had to scale from monitoring a single asset to supporting entire facilities with thousands of devices, each producing high-volume data streams. Data complexity amplified the challenge: identifiers like OPC tags were often managed by third-party systems with little consistency, making mapping and visualization unreliable. Customers also required high levels of customizability, since different industries prioritized different metrics, dashboards, and analytics. Finally, even within the same manufacturing roles, workflows varied significantly across companies, demanding flexible and adaptable design solutions.

#### **Research and Discovery**

To address these risks, we invested heavily in discovery. Onsite interviews and production-floor observations allowed me to build subject-matter expertise in how operations function at a detailed level, understanding how chemicals are stored, how food is frozen in large freezer systems, and which components inside machinery present the greatest maintenance challenges. I studied how these systems were monitored with sensors and what "real" data looks like in context, rather than relying on placeholder values. Incorporating authentic data representations into prototypes made them more immersive, helping stakeholders empathize with personas and workflows while grounding design conversations in realistic scenarios.

We combined this with structured focus groups and concept reviews to validate product directions before engineering investment, supplemented by competitive analysis to benchmark functionality. Iterative design cycles and milestone feedback gave us opportunities to course-correct quickly. A pivotal moment came when a concept initially believed to be critical revealed major usability and adoption risks during testing. Because this surfaced early, we avoided costly engineering investment, pivoted rapidly, and reinforced customer trust in the process.

#### **Design Execution**

With clear insights, the design process moved from strategy into detailed execution. Personas and journey maps were created to reflect the diversity of operational contexts. Low-fidelity wireframes allowed quick exploration of workflows, while high-fidelity dashboards and prototypes emphasized layered visualizations where users could either monitor at a high level or drill into details as needed.

I designed components that created resonance between the data and the physical environments being monitored. Related data was structured in ways that reflected how assets existed in real space, strengthening the connection between workflows and system feedback. Interaction patterns gently nudged users through ordered steps for optimal workflows, but always allowed them to pause, depart, and rejoin guided paths as needed. This balance of structured guidance with flexible autonomy reflected real manufacturing demands where priorities shift constantly.

I also led the evolution of Plex's design system to support these experiences, extending it from a light theme to a dark theme and later a complete rebrand. These changes modernized tones, aligned with corporate guidelines, and ensured that visual consistency supported both the density of data displays and the flexibility of customerspecific adaptations.

# As Principal Product Designer, I led the end-to-end UX, UI, and research efforts for the Industrial IoT product. My responsibilities included:

- ✓ **Product Vision:** Defined the product vision and translated early-stage IP into a scalable, user-focused solution.
- ✓ **Contextual Research:** Conducted onsite interviews and observations at manufacturing facilities to capture realworld workflows and user needs.
- ✓ **Workflow Design:** Developed user flows, wireframes, and hi-fi designs for complex workflows and data visuals.
- ✓ **Usability Testing:** Led testing cycles and iterative design processes with milestone customer feedback sessions.
- ✓ **Customer Presentation:** Introduced the product at the annual customer conference, presenting in both large sessions and smaller breakout discussions
- ✓ Cross-Regional Collaboration: Partnered with a Lead Product Manager in Bengaluru and coordinated with development teams distributed between in-house staff and a team in Belarus.
- ✓ **Design System Expansion.** Extended Plex's UI from light to dark mode and led a rebranding effort to align with updated corporate palettes.

#### THE IMPACT

The Industrial IoT solution matured into a platform that could flex between simple asset monitoring and large-scale facility operations without losing usability. By grounding prototypes in real-world production data and workflows, we ensured that designs reflected authentic user needs rather than abstract placeholders. This made stakeholder reviews more meaningful and created stronger empathy across the product team.

Customer trust increased as early discovery efforts prevented costly missteps and demonstrated that their feedback shaped the product. The design system updates established a consistent, modern foundation that supported both dark and light themes, reinforcing accessibility and usability across data-dense dashboards.

Operationally, the balance between guided workflows and flexible autonomy reduced user error, supported faster onboarding, and gave teams confidence that they could complete tasks in a way that matched both their industry and their facility-specific demands. The structuring of data to mirror the physical environment improved how users navigated and interpreted information, aligning the product with the realities of complex manufacturing systems. Less than one year after this launch, Plex Systems was acquired by Rockwell Automation, with the Industrial IoT solution positioned as a core differentiator in the company's growth strategy.

#### **Key Takeaways**

- Embedding real data and authentic workflows into prototypes builds empathy and clarity during the design process, reduces risk, and increases adoption.
- Subject-matter expertise is critical; observing production environments at a granular level created insights that no abstract personas or placeholder data could capture.
- Balancing guided flows with flexible autonomy supports both efficiency and adaptability in high-variability industries.
- ➤ Structuring digital systems to reflect physical environments improves navigation, comprehension, and user confidence driving onboarding and and user self-discovery goals.
- A robust design system ensures that scalable, accessible, and modern interfaces can evolve alongside both customer needs and corporate brand shifts.

CASE STUDY: LEADING PRODUCT DISCOVERY IN AI - SafetyChain Conversational AI Tool for Audit Data

#### THE CHALLENGE

Building an AI-powered form creation tool for regulated manufacturing environments required addressing both technical and human factors. The system had to deliver accurate logic, dependency handling, and compliance support while remaining intuitive for users with varying levels of technical expertise.

#### The challenge was twofold:

- ➤ **Product readiness.** The AI Form Builder was an early-stage solution that needed validation of core workflows, terminology, and logic behaviors before moving toward broader release.
- ➤ **Organizational preparedness.** Customer Enablement teams would be responsible for supporting AI-assisted workflows, but had no existing playbook for teaching, troubleshooting, or scaling embedded AI.

Without a structured way to test usability, surface real behaviors, and build internal confidence, the product risked being misunderstood, underutilized, or creating support burdens. The Alpha Program was created to reduce these risks by turning research into both product improvements and organizational enablement.

#### THE APPROACH

The Alpha Program was intentionally structured as more than a feature test. It was designed as a research-driven environment where internal enablement and product strategy could evolve in parallel. My role spanned from upfront planning to daily execution, ensuring the program produced actionable insights while preparing the organization to support Al-driven workflows.

### Contributions as Director of UX Research, Analytics, & Design:

- ✓ **Program Structure.** Designed the Alpha to balance two critical objectives: onboarding Customer Enablement teams while also generating structured feedback from internal testers. Defined participant waves aligned with feature maturity, sequenced timelines for progressive exposure, and created task scenarios that reflected real manufacturing contexts.
- ✓ **Onboarding and Task Framing**. Developed task-based workflows that mirrored realistic form-building scenarios such as layering logic dependencies, configuring compliance fields, and adapting forms for audits. Built internal guides and contextual knowledge materials for Customer Enablement so they could build fluency and confidence in parallel with product evolution.
- ✓ **Unmoderated Video Testing.** Implemented unmoderated video testing where participants narrated their actions while completing tasks, revealing natural behaviors and expectations. Captured insights into first-click intent, confusion points, workflow breakdowns, and terminology gaps.
- ✓ **Thematic Synthesis.** Organized findings into categories such as navigation flow, interaction patterns, and sentiment. Prioritized using authentic data scenarios instead of placeholder content to create immersion, build empathy with personas, and surface workflow challenges in realistic terms.
- ✓ **Cross-Functional Alignment.** Facilitated retrospectives with Product, Engineering, and Customer Enablement to prioritize improvements, clarify ownership, and embed a shared understanding of what trustworthy embedded AI should deliver.
- ✓ **Enablement Integration.** Positioned the Alpha as a live training platform. Customer Enablement teams tested support scripts, built knowledge repositories, and identified potential customer struggles. This ensured that while the product matured, internal teams were already prepared to support it effectively. Related data was structured in ways that reflected how assets existed in real space, strengthening the connection between workflows and

system feedback. Interaction patterns gently nudged users through ordered steps for optimal workflows, but always allowed them to pause, depart, and rejoin guided paths as needed. This balance of structured guidance with flexible autonomy reflected real manufacturing demands where priorities shift constantly.

# **Methods and Tools**

- √ Unmoderated video testing
- √ Thematic feedback analysis
- ✓ Asynchronous enablement strategy
- √ UX retrospectives
- √ User-centered rollout planning

#### THE IMPACT

The Alpha Program uncovered more than 30 high-impact improvements across interface design, logic behavior, and onboarding support. By grounding tasks in realistic workflows and authentic data scenarios, the program revealed usability issues that would have remained hidden in abstract testing. Core changes included clearer dependency visibility, more consistent terminology, and redesigned onboarding flows that reduced friction for new users.

Equally important, Customer Enablement teams gained hands-on experience with AI-assisted workflows before general release. This accelerated their confidence and equipped them with the knowledge to anticipate customer challenges, reducing the risk of early adoption bottlenecks. Cross-functional retrospectives created alignment between Product, Engineering, and Enablement, ensuring improvements were not only delivered but also fully supported internally.

The program transformed a promising but untested AI feature into a teachable, scalable product while embedding organizational readiness to support it from day one.

#### Why It Matters

Embedded AI is only as effective as the experience that delivers it. This program demonstrated how intentional research, authentic observation, and early enablement can transform emerging technology into a product that is trusted, teachable, and scalable. My leadership ensured the Alpha Program delivered clear direction for development while equipping internal teams to scale customer success from day one.

#### **Key Takeaways**

- Early research programs have the opportunity to address both product validation and organizational enablement to ensure adoption success.
- Task-based testing with authentic data creates stronger persona empathy and reveals workflow gaps more effectively than placeholder content.
- Unmoderated video testing provides scalable, natural insight into user behavior and expectations.
- ➤ Integrating enablement teams early creates a multiplier effect: the product improves while internal support systems mature in parallel.
- ➤ Cross-functional retrospectives build shared accountability for embedded AI experiences, ensuring improvements are carried through design, development, and customer support.