Report and User Stories

Product: AI Co Founder for E Commerce (ShopPilot)
Version: 3.0
Date: 28 September 2025

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1. Overview of Progress

This report shows the progress of the project across two sprints. The main aim was to design and build a prototype of an ethical AI assistant for e commerce. The target users are solo founders and small business owners.

In the first sprint the team studied the common structure of small online businesses. We identified pain points such as high cart abandonment, repetitive marketing tasks, and limited time for manual work. We explored how AI tools could help with these problems. We also reviewed ethical and legal concerns and planned which agents would be most valuable to develop first.

In the second sprint the team built a working prototype. We created MCP tools, designed workflows with n8n, and connected them to a simple dashboard. We focused on cart recovery because it has clear impact on revenue. We tested the prototype with fake data and showed that AI can recover part of the sales that would otherwise be lost.

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2. Achievements

- Defined the business model of solo e commerce entrepreneurs

- Designed the system with focus on cart recovery, email marketing, and content generation

- Built an MCP server and tools such as cart analysis and template generation

- Implemented workflows in n8n for sending recovery campaigns

- Designed a dashboard in React with Tailwind CSS

- Connected local LLMs through Ollama for safe content generation

- Added ethical safeguards such as human approval and audit logs

- Ran simulations with fake data to confirm the prototype works

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3. Ethical and Compliance Focus

The project placed strong attention on ethical AI. We considered privacy and fairness in every step. Customer data was kept anonymous in the prototype. The system required approvals before sending messages. The design followed the principles of GDPR.

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4. Next Steps

- Add more detailed dashboards for each agent

- Test integration with live Shopify and Klaviyo accounts

- Improve security and add role based access control

- Extend the system to handle inventory and paid ads

- Collect feedback from pilot users and refine the design

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5. User Stories and Acceptance Criteria

User Story 1: Dashboard Navigation

As a non technical e commerce business owner I want a modern dashboard interface with a sidebar and global elements so that I can move between features quickly and keep oversight of my workflows

Acceptance Criteria

- When the application loads the sidebar is always visible with links to Home Setup Cart Recovery Inventory Marketing SEO Content Settings Approvals and AI Chat

- When I click on a navigation item the sidebar stays open and the active page is highlighted clearly

- When the screen size is small such as on a mobile phone the sidebar changes into a menu button but still keeps all functions

- When I switch between pages my theme preference such as dark or light mode stays the same

- When the application is running a notification icon shows updates like "Promo sent to ten customers"

- The navigation bar also has a search like input where I can type commands such as "Send promo for abandoned carts"

User Story 2: Conversational AI

As a business owner I want to talk to the system using natural language so that I can manage my store and reduce the time spent on repetitive tasks

Acceptance Criteria

- The dashboard shows a chat button on every page

- When I click on it a chat window opens with an input box and send button like popular AI chats

- When I type a request the system understands and sends it to the right agent such as setup cart recovery inventory or marketing

- While the request is being processed the system shows progress messages and updates

- Responses from the AI include charts numbers or approval buttons that I can use directly

- The chat keeps the history of the conversation so that I can ask follow up questions with context

- The chat also suggests quick replies for common actions

- When I make an invalid request the system offers polite alternatives

- On each page there is also an Ask AI button that sends page context into the chat automatically

User Story 3: Home Dashboard

As a business owner I want a home page that gives me an overview of my business so that I can monitor progress and make quick decisions

Acceptance Criteria

- The page shows key performance indicators such as cart recovery between twenty and thirty percent revenue uplift above fifteen percent time savings around eight hours per week and the industry baseline of about seventy percent cart abandonment

- The dashboard includes charts that show revenue trends click through rates and conversion rates

- The page also includes a visual chart of the AI organization structure such as Founder to Orchestrator to Agent Pool

- Real time alerts appear when actions happen such as "ten emails sent two converted twenty dollars revenue added"

- Quick action buttons let me approve budgets or view pilot test data with one click

- Links on the page let me jump directly to other feature pages

- All data refreshes in real time without needing a full reload

User Story 4: Setup Wizard

As a new user I want an easy setup process with simple steps so that I can connect my store in minutes instead of spending days

Acceptance Criteria

- The first time I log in the system redirects me to a setup wizard

- The wizard shows one click buttons to connect Shopify Klaviyo Twilio and other platforms

- When I run the Setup Agent it configures the storefront webhooks and loads sample data from a Shopify developer store

- During setup I can choose brand tone discount ranges between five and twenty percent and communication channels

- The wizard can generate fake data such as carts with handmade soap items for testing

- The progress of the setup is shown with completion indicators and I can resume if I stop

- After the setup finishes the system redirects me to the home page with data already available

User Story 5: Cart Recovery Agent

As a business owner I want an agent that recovers abandoned carts so that I can turn lost opportunities into revenue

Acceptance Criteria

- When I open the cart recovery page the system shows a webhook trigger for carts abandoned after forty five minutes

- When a cart is abandoned the agent creates a personalized email or SMS with discount offers based on the cart data

- The campaign dashboard shows emails and SMS messages sent click through rates conversion rates revenue recovered and campaign identifiers

- I can turn the agent on or off choose between email and SMS and adjust the discount slider

- In demo mode the system creates ten to fifty fake carts from test data and shows messages such as "Promo sent to ten customers two converted"

- A diagram of the flow shows the steps from input to feedback including trigger fetch analyze generate execute and feedback

User Story 6: Inventory Agent

As a business owner I want an agent that helps me track and reorder inventory so that I can avoid out of stock situations

Acceptance Criteria

- The inventory page shows current stock levels by product with data from Shopify or test data

- Low stock alerts appear when items fall below a set threshold

- I can define automatic reorder rules and the system can trigger purchases when the threshold is reached

- The dashboard shows metrics such as stock turnover reorder history and predictions based on past sales

- I can approve or override reorders with one click

- In test mode the system shows sample products such as handmade soap with fake stock levels

- Inventory is linked to cart recovery so that promotions do not target items that are out of stock

User Story 7: Marketing Agent

As a business owner I want an agent that manages marketing campaigns so that I can spend less and reach more customers

Acceptance Criteria

- The marketing page allows me to set up campaigns for Google Ads or Facebook Ads with AI optimization

- Campaign metrics such as spend return on investment and engagement are shown in the dashboard

- I can launch or approve campaigns with one click and set budgets

- The agent uses cart recovery data to personalize campaigns and promotions

- In test mode the system shows mock social posts or email campaigns from sample data

- The agent links to the SEO Content agent for combined strategies

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User Story 8: SEO and Content Agent

As a business owner I want an agent that creates and optimizes content so that I can improve my visibility in search engines

Acceptance Criteria

- The SEO page provides tools to generate and optimize product descriptions and blog posts

- The system analyzes keywords and suggests backlinks

- The dashboard shows metrics such as ranking improvements and traffic growth

- I can publish content or run SEO audits with one click

- In test mode the system uses fake products to create content

- The agent links to the marketing page to combine strategies

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User Story 9: Settings and Approvals

As a business owner I want a settings page with approvals so that I can keep control of important actions

Acceptance Criteria

- The settings page shows approval workflows for actions such as budgets or ethical decisions

- I can manage API keys consent options and GDPR compliance flags

- The system records performance and latency metrics for observability

- Subscription details and payback period are visible in the settings page

- The settings icon is visible on all pages

User Story 10: Accessibility

As a user with accessibility needs I want the system to be fully usable so that I can access all features

Acceptance Criteria

- The application works with keyboard navigation and shows clear focus indicators

- The structure supports screen readers with proper labels

- High contrast modes and scalable text are available

- Forms display clear error messages

- GDPR compliance is ensured when personal data is processed

- Testing is carried out with real users to check accessibility

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User Story 11: Dark Mode

As a user I want to switch between light and dark themes so that I can work in different lighting conditions

Acceptance Criteria

- The system detects my theme preference automatically

- I can switch between light and dark smoothly

- Text remains readable in all themes

- My choice is saved for future sessions

User Story 12: Mobile Support

As a mobile user I want the system to work well on my phone so that I can manage my business anywhere

Acceptance Criteria

- The dashboard adapts to mobile and tablet screens

- Charts and tables can be scrolled or adjusted for small screens

- Gestures such as swipe and tap are supported

- The chat interface is optimized for touch

User Story 13: Performance

As a business owner I want the system to be fast and smooth so that I can use it efficiently

Acceptance Criteria

- The first page loads in less than three seconds

- Moving between pages is smooth and does not block the interface

- Large data sets use pagination or virtualization to keep performance high

- Visual feedback is immediate and animations run at sixty frames per second

- Real time updates such as notifications do not slow down the system

- The chat shows progress while requests are processed