

AI-Powered Innovation: Redefining Digital Form Creation with MoreApp

Streamlining Operations and Redefining
Efficiency in Large-Scale Operations Through
Intelligent Automation

Overview

The rise of AI presents great opportunities for enhanced productivity and growth. Embracing AI-powered solutions allows businesses to stay ahead in a rapidly evolving digital world. As part of a student-consultancy project for MoreApp, we developed a cutting-edge interactive prototype that reimagines how businesses manage forms, ensure compliance, and streamline workflows.

Our prototype focuses on integrating advanced AI features into MoreApp's form creation software, introducing guided assistance and natural language prompts for seamless form creation, a quality and compliance checker to ensure regulatory compliance while providing actionable feedback to enhance form quality and effectiveness, and real-time form editing for user-friendly customisation. These innovations simplify the process of creating forms, making it faster, more intuitive, highly customisable, and accessible to non-experts.



Background and Research Process

MoreApp is a Dutch SaaS scale-up that offers online forms to document and streamline field work, eliminating paperwork and making processes more efficient. They tasked our team with designing a comprehensive field task journey solution to streamline field work operations, from the moment an issue is reported to its resolution. While through our research and user interviews we did identify areas for improvement in MoreApp's software, there was limited interest from users in a comprehensive task management tool. Meanwhile, recent advancements in AI highlighted the significant impact this technology could have on digital form creation. After discussions with MoreApp's leadership, we have recommended exploring a completely different direction, focusing on experimenting with the potential of implementing AI within MoreApp's product.

The challenge was where to start. Discussions with MoreApp guided us to focus on the needs of larger companies, specifically on form creators. But to accurately assess the value of AI-powered features, we needed to focus on a real use case. Luckily, one of our team members, a previous sailor in a large container ship, could provide us with a real-life field task: painting a large surface in a ballast tank. This use case highlights the practical applications of our prototype's features, addressing complex regulations requirements while ensuring ease of use. The scenario provided a foundation to test and refine our AI features, ensuring they deliver tangible value.

Our solution

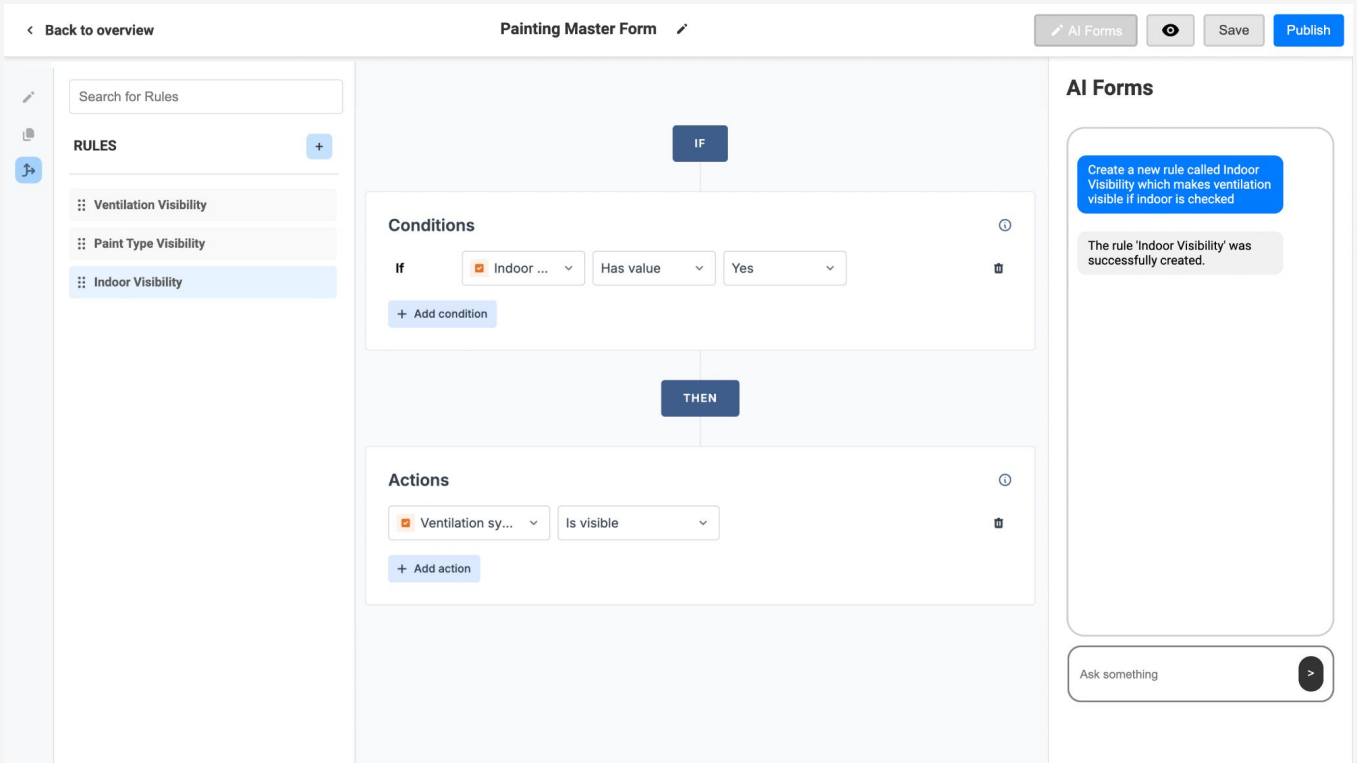
To define the core features, we first developed a Figma prototype to map out key AI-driven functionalities and refine the user experience. We then coded a working replica of MoreApp's platform and integrated a GPT-based API to simulate real interactions. Our interactive mock-up of MoreApp's platform showcases unique AI-driven features designed to redefine the user experience and push the boundaries of digital form solutions as AI technology evolves.

Key functionalities include:

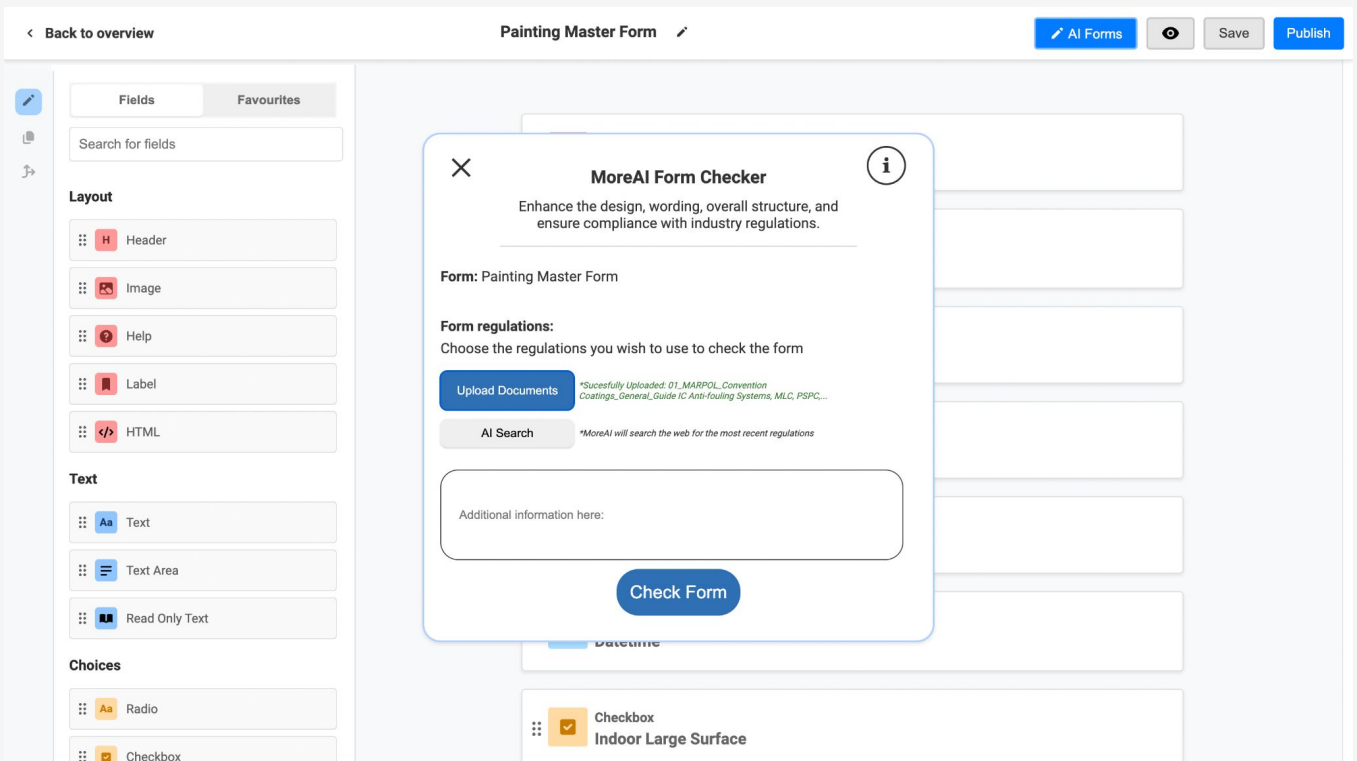
- **Guided Assistance:** This feature allows users to choose a form template and customise it interactively through an AI chat.
- **Write Your Own Prompt:** Users can create forms from scratch by describing their requirements in conversational language. The AI generates a draft form based on these inputs, tailored to the user's specifications.
- **Edit and Adjust:** Users can make adjustments manually or use the AI's suggestions, accepting or rejecting changes as needed.
- **Quality and Compliance Checker:** This tool analyses the usability of forms and evaluates them against attached regulations. It provides a score (e.g., fair, good) and offers actionable feedback to improve clarity, functionality, and compliance.

The screenshot displays the 'Painting Master Form' builder interface. On the left, there is a sidebar with 'Fields' and 'Favourites' tabs, a search bar, and categories for 'Layout', 'Text', and 'Choices'. The main workspace shows a form structure with fields like 'Paint Information' (textarea), 'Indoor Painting' (Header), 'Datetime' (Date Time), 'Describe Location' (Text), 'Describe Job' (Text), 'Name of Sailor' (Text), and another 'Datetime' (Date Time). On the right, the 'AI Forms' chat window shows a prompt: 'Create a field called Paint Information and give a fitting fieldtype'. A response box indicates: 'The field 'Paint Information' with type 'textarea' was successfully created.' Below the chat is an input field with the placeholder text 'Ask something' and a send button.


AI-Powered Field Creation: the system intelligently generates or edits form fields based on user input. In this example, the AI processes the prompt 'Create a field called Paint Information and give a fitting field type', automatically configuring the relevant field type to streamline form setup.



AI-Powered Rule Generation: the system generates or edits form rules based on user input. In this example, the AI processes the prompt 'Create a new rule called Indoor Visibility, which makes ventilation visible if indoor is checked,' automatically setting up the logic to ensure that the 'Ventilation' field appears when 'Indoor' is selected.



AI-Powered Quality & Compliance Checker: this tool evaluates the form usability and analyses it against selected regulations. This interface displays how users can upload their own regulatory documents,, enabling the AI to assess compliance with industry standards and provide actionable feedback.



By combining automation with flexibility, our solution redefines how forms are created and managed. The integration of guided assistance, natural language prompting, regulatory compliance validation, and customisation features provides a seamless and efficient user experience, setting a new standard for MoreApp's digital form solutions.

"I am truly impressed by the work of the students. Their research and proposal are of high quality. The suggestion to use AI for form creation and validation seems a game changer. And they validated it with our biggest customers. Can't wait to implement their work and I would recommend their projects to any SaaS company."

- Thom Bokelaar, CEO of MoreApp

Our experiment has not only demonstrated the potential of AI to enhance digital form creation and improve the user experience, but it has also laid the foundation for future AI advancements in the industry. As AI continues to evolve, having a highly flexible and adaptable software to emerging innovations will be key to maintaining a competitive advantage.

However, important questions remain, such as how to best protect user data and determine an optimal pricing model for this innovation. Addressing these challenges will be crucial in ensuring a successful integration of AI into MoreApp's platform.