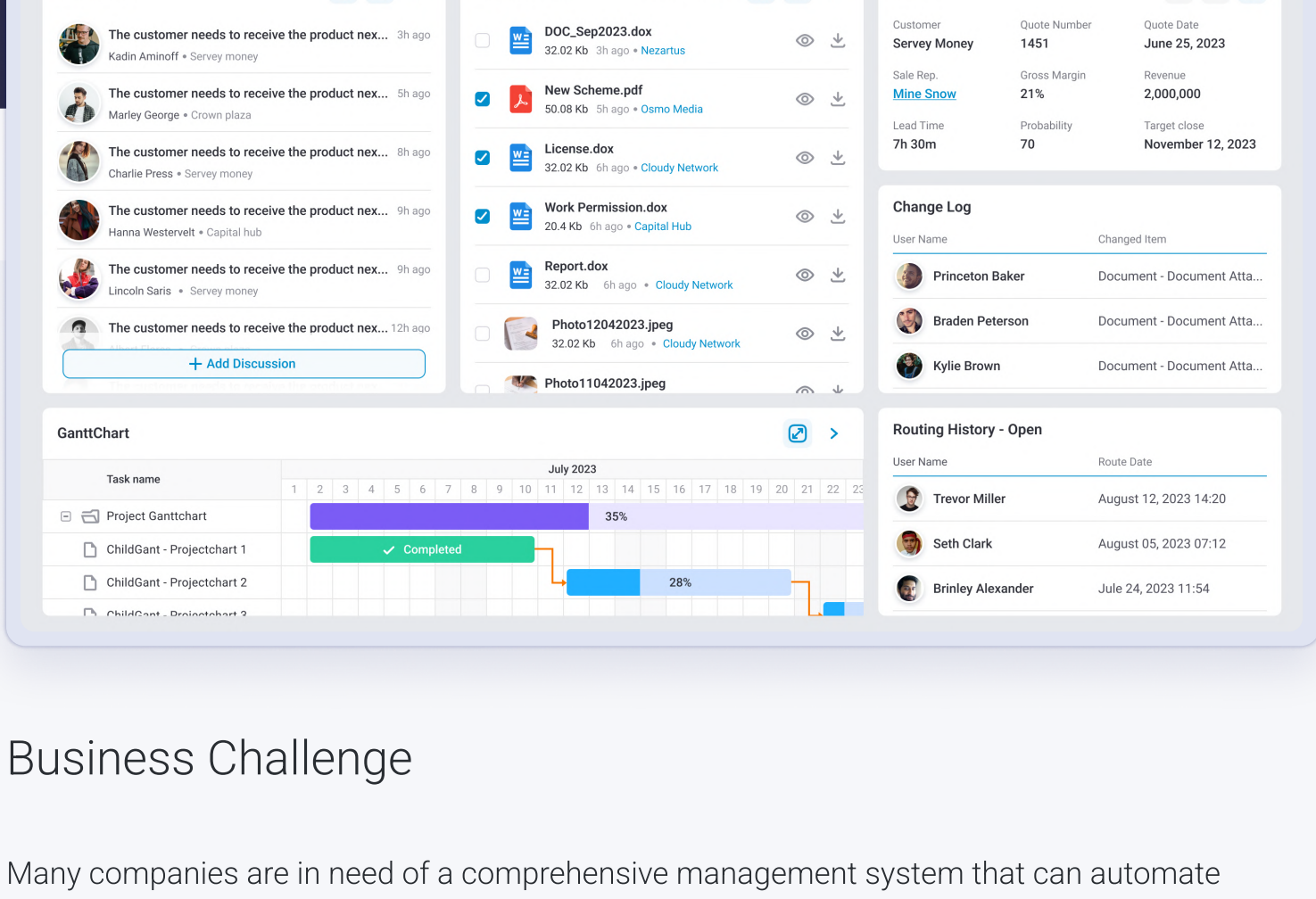


Workflow Automation Software Case study

A SaaS application developed for organizations to automate business processes. It improves process tracking, accountability, and real-time management. The application combines the features of a small SAP solution, providing the capability to effectively manage workflows, visualize the processes with Gantt chart, and improve interactions between different departments.



Business Challenge

Many companies are in need of a comprehensive management system that can automate manual handling of huge amounts of data and visualize ever-changing business processes throughout the organization. It can be really hard to keep track of all information and quickly manage workflows. The applied tools, like emails, files sharing systems, to-do lists, and document storages are not always effective and may decrease collaboration efficiency. Moreover, security and accessibility issues also need to be tackled.

In this case, a company needs a solution to cover these needs. That is why a client asked us to develop an automated workflow software to help their business to reduce manual processes and improve document management.

Solution

After a deep analysis of client's needs and their business processes, we have decided to use our experience in applying [cloud technologies](#) and create a **SaaS app** that allows fast access to data from anywhere at any time. To ensure data security and reliability, we integrated the system with the latest Amazon Web Services and followed the OWASP recommendations. Besides that, the customer requested to create a **mobile version** of the application.

We have worked out a cost-effective cloud-based workflow system with [an intuitive user interface](#). By default, it has many **pre-installed templates** organized in a tree. We've included the ability to create their own highly customizable templates that simplify the management of a variety of company processes, including projects, resources, orders, documents, emails, tasks, appointments, reports, and more. Everything a company needs to handle is gathered in one place to make it automated.

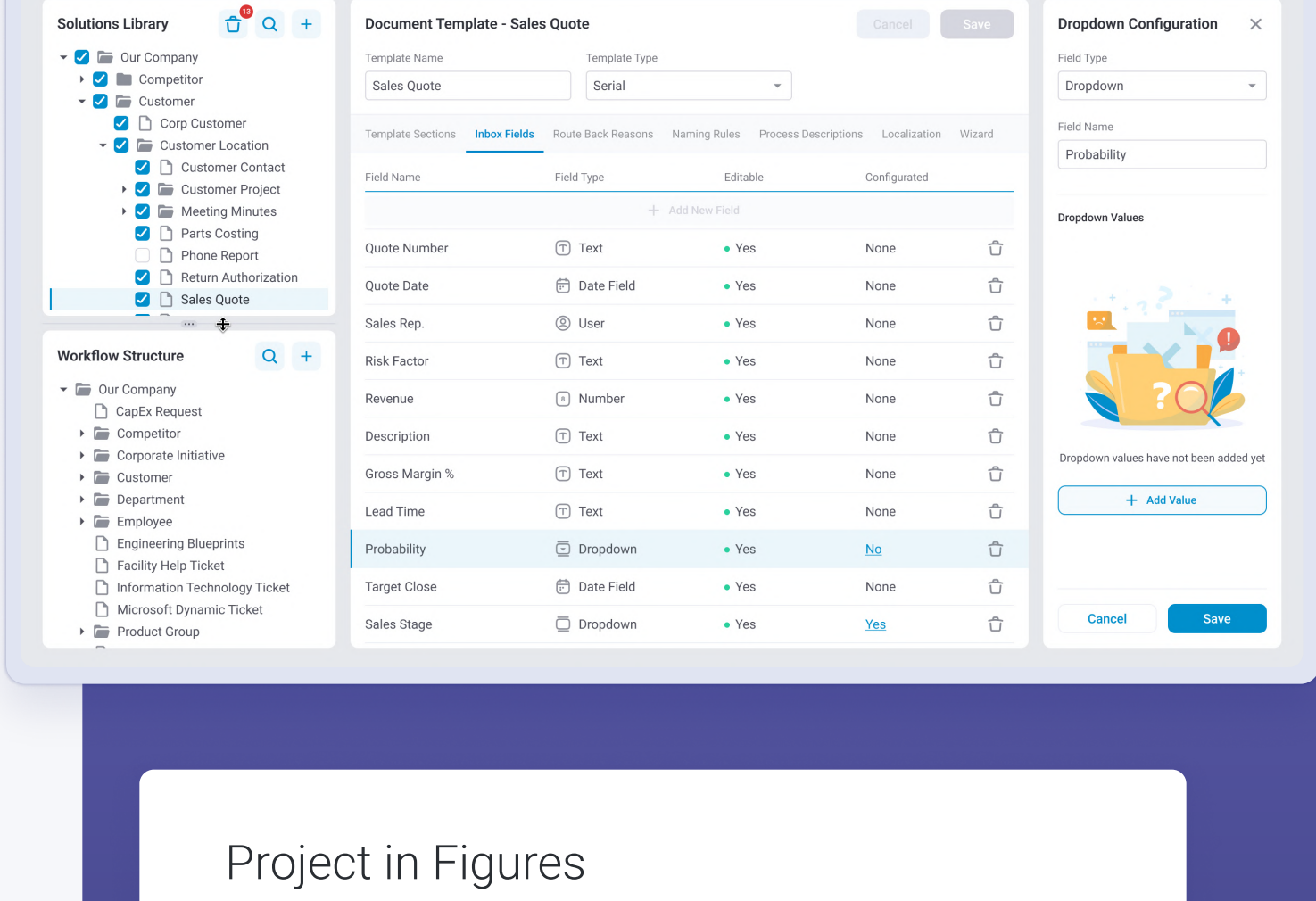
Basically, the system has a **constructor** where each task and/or created document from any selected template is displayed as a separate workflow, specifying the individual or group responsible for each step. Conditions can be set at each step to ensure that the document can't progress to the next stage without meeting these requirements.

Each template includes simple **fields**, which allow our client to add and store the information about a process, and complex fields that display the results of an operation performed on other fields within the process or on parent processes. Additionally, the templates contain **sections** that show uploaded documents, text areas, spreadsheets, document history, charts, discussions, schedulers, etc. The starting of a process can be initiated by a user or triggered automatically from a parent process.

We also added the **history** of changes, process **attributes**, and **user permissions** per process into the workflow automation software. Also, our web developers integrated the app with the Braintree **payment system**, Mailchimp mail service, and SugarCRM. The integration with Google Translate added the possibility of fast text translation into the required language. The application can also be fully localized.

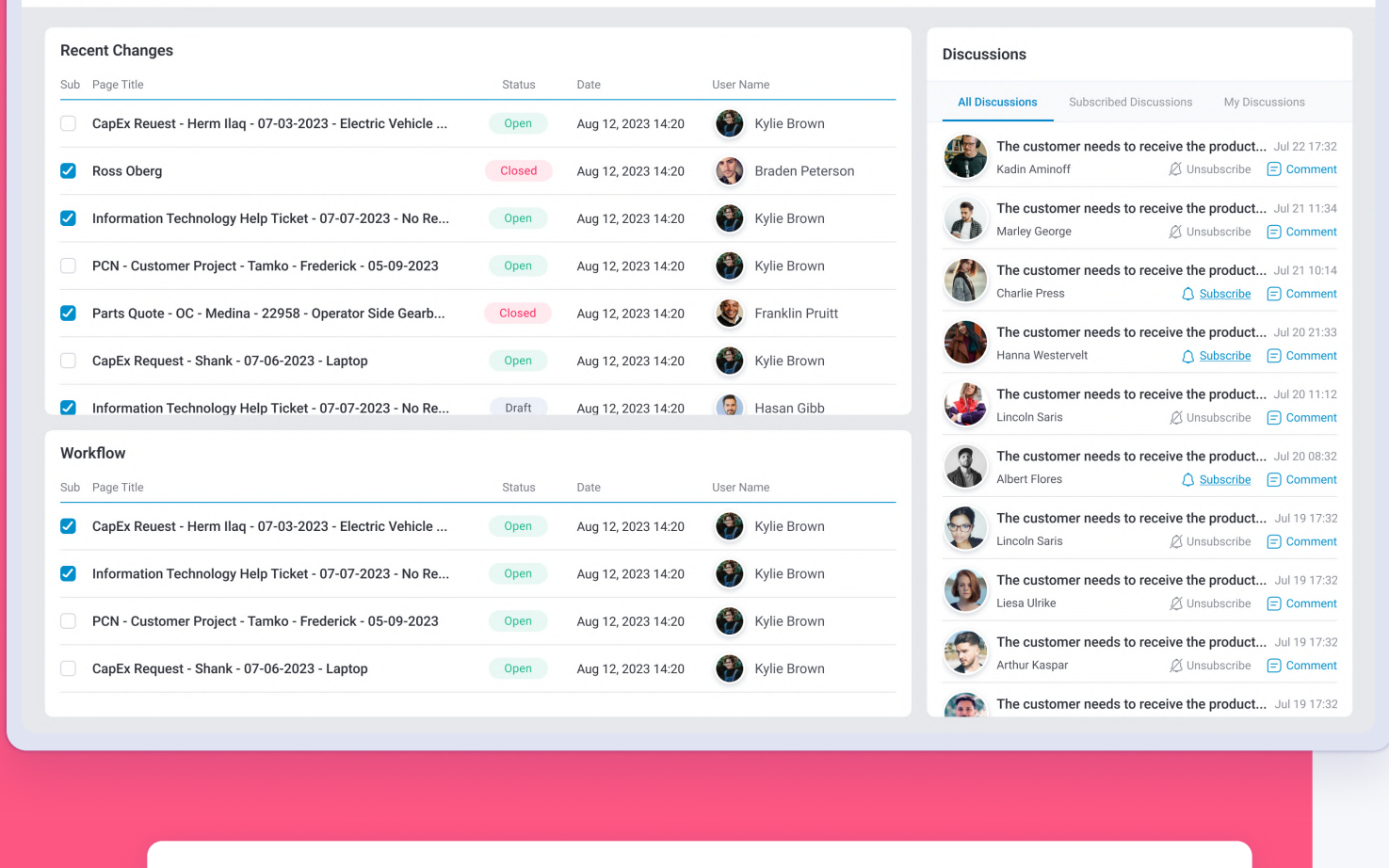
Implemented Components

In order to enhance the user experience and simplify the workflow automation system, we have integrated a variety of customizable [DHTMLX widgets](#) into templates. It became possible to keep track of all the processes in the company and use different field types and sections by implementing our own ready-made and customizable widgets, such as grids, spreadsheets, text areas, Gantt charts, tables, etc. For example, we have implemented [DHTMLX JavaScript Gantt](#), which is a Gantt chart library that helps to manage projects, tasks, documents, employees, and facilities easier and faster. The customer can adjust and schedule any assignment accurately and automatically. Its adoption improved tasks management and provided our customer with better timesheet management for time tracking and to-do list progress points. Our development team also included [DHTMLX Scheduler](#), which is a JavaScript scheduling calendar that helps to create different events. All the events are displayed the way that our client can easily check them and change if needed. Besides that, the [DHTMLX Spreadsheet](#) was added into the software. This highly customizable JavaScript component allows the whole company to work with multiple sheets and drop-down lists, use predefined formulas, and more.



Project in Figures

12 Months Duration **16 000+** Estimated man-hours



Applied Technologies



Result

The application has become a critical tool for the automation of complex business processes for simplicity and achievement of digital transformation. This cloud workflow software helps our client's company to:

- ✓ Increase service quality and delivery;
- ✓ Enhance the efficiency of workflows;
- ✓ Gain time;
- ✓ And reduce costs.

As a result, the customer really liked the application and decided to start providing workflow services with its help. Considering that it became possible to customize the application for each company due to the components that we used, it became our client's one of the best decisions.

Your questions and requests are always welcome!