Accelerating Adoption of Renewable Energy With Technology

CASE STUDY

About the Client

Founded in 2008, the client is an A+ rated leading solar company based in the USA. They offer customized solar solutions to residential owners, helping them to go green and taking charge of their personal energy consumption expenditure. As they started to scale their operations, they were looking for a software to automate their processes in order to accurately build personalized sales proposals quickly.

Using Technology For Quick And Accurate Sales Proposals

Using Technology For Quick And Accurate Sales Proposals as the client was scaling their sales team, they needed the ability to generate accurate sales proposals consistently with detailed return on investment for their customers. Existing solutions either over or under promise the return on investment, too hard to use to build system designs, or simply not accurate.

After understanding the problem, we built a web-based solution that would download high-resolution rooftop imagery for a given house and using NREL's API, took the sunlight, weather data into consideration. The system also integrated with utility data and using SAM's models in C++, built an accurate system that would predict the system production. We also built a tool to allow a sales rep to quickly design a roof layout design with a click of a button. This helped them to remain accurate without getting bogged down into low-level details of system design.

The system generated a proposal explaining return on investment and savings over the next 25 years. Now, within 30 seconds, an accurate sales proposal can be generated for any new customer. Later on, we integrated battery and demand charges as well to help customers get a better return on their solar investment.

Financing Solar Systems with Just a Click

Once the sales associate would convince the customer to buy, the customer would often look for financing options. They wanted to see various financing options from multiple lenders. We integrated two leading solar financing banks into the workflow. Once the sales proposal was accepted by the customer, with a click of a button, the sales rep can initiate a credit check as well as a loan application for the solar system.

This increased the closure rate and improved customer experience. We also integrated e-signature solutions like DocuSign so customers can complete the process and sign all the contracts without leaving their computer. Buying solar became as simple as buying a thing from Amazon.

Easier Data Management and Navigation

As the number of solar installations increased, we worked with the operations team as well. We built a sync engine to sync all the data from the application to Zoho CRM as the operations team was largely on it. This allowed operations to adopt this system, gain efficiency without changing their habit.

Simplifying Sales Commission

The team would spend on an average ~1-2 days a week in order to calculate the sales commission for their sales, not to mention the custom commission calculations for various sales teams. Our engineers worked with the client to model their commissioning structure and built a tool to calculate the commissions on a weekly basis.

The system also generated a report that would be sent to the finance team once the commissions are approved and eventually got paid. As the number of deals started to increase, their customer support team started to get more calls to check on the status of solar installation. Solar installation typically can take 2-3 months and involves various steps. We built another product for end customers where they can log in to check at what stage solar installation is and the expected completion date. This involved working with various stakeholders and modeling their operations process.

Realtime Tracking of the Installation Progress

Solar installation is a process that takes 2-3 months as there are multiple steps involved. During the processing time, the client's customers were not able to get the reports about the overall progress being made. Our team came up with a product that made it easier for the customers to track the progress. We introduced real-time reporting mechanisms to the customer application that was developed by us previously.

Technologies Used

C++

Typescript

ReactJS

NodeJS

Digital Ocean

Contact Us

hello@jalantechnologies.com

+1-323-505-2526