

Tanaka Denki Website Redesign

Modernizing a Solar Maintenance Website for Better Communication and Business Growth in Japan

Project Overview

Tanaka Denki Service is a small solar maintenance company based in Ishikawa, Japan, providing inspection, cleaning, and repair services for commercial solar installations. Their website had not been updated in years and wasn't effectively communicating their credibility, expertise, or services. While they had access to make changes through WordPress, the dashboard was too overwhelming resulting in only one update in three years.

I partnered directly with the business owners to redesign the site as a modern, professional, and mobile-first platform that supports their business goals. I rebuilt the website using Nuxt 4, Tailwind CSS, and a fully integrated Contentful CMS, making it easier for non-technical staff to add blog updates and future content without external support.

Throughout the project, I led UX research, visual redesign, information architecture improvements, and full front-end development while navigating the unique expectations of Japanese business audiences. The result is a website that feels trustworthy, structured, and contemporary, positioning Tanaka Denki Service for stronger long-term credibility and engagement.

The Problem

The previous website was visually outdated, lacked a clear hierarchy, and did not represent the professionalism of the business. Text-heavy layouts, low contrast, and inconsistent styling made it difficult to quickly understand the company's services or why they should be trusted with solar maintenance.

From a business perspective, the website wasn't supporting communication or growth. Most inquiries came through phone calls rather than the website, and internal staff avoided updating content due to the complexity of WordPress. The result was a system that looked abandoned — negatively impacting trust with potential B2B clients such as universities, public institutions, and manufacturers.

To help the business grow, the website needed to:

- Clearly explain what the company does and what services they offer
- Improve trust and professionalism at first glance
- Support both desktop and mobile users with clean, scannable layouts
- Make content easy to maintain internally
- Drive more inquiries through clear CTAs and improved usability

The redesign became an opportunity to not only elevate the brand but also strengthen communication and support real business outcomes.

Research and Insights

To understand what was not working and how the redesign should better support the business, I reviewed the existing website, interviewed the business owners and two employees, and analyzed six competitor sites in the Japanese solar maintenance industry.

I learned two key things early on. The target audience is almost entirely B2B. Decision makers at universities, public institutions, and medium-sized businesses rely on trust, professionalism, and clarity more than anything else. The website must immediately communicate expertise and reliability. Second, although the company had a CMS, internal users were intimidated by the workflow. This confirmed that usability improvements were needed not only for visitors but also for the team managing the content.

Across competitors, there was a common trend. Japanese infrastructure websites often present large amounts of information at once. This can feel overwhelming, but it is an established expectation. My goal became finding a balance. I used clear hierarchy, consistent spacing, and visually structured content so the site could remain information rich without feeling cluttered.

Insights that guided the redesign:

- First impressions shape trust within seconds
- Clear navigation improves task completion and contact rates
- Modern visuals and accessibility are a necessary credibility signal
- Content management must feel safe and easy for internal users

These findings laid the foundation for both UX and business improvements.

Design Strategy

The redesign focused on three priorities:

1. Improve hierarchy to help visitors understand services quickly
2. Strengthen credibility through clean, consistent visual design
3. Create a system that supports business growth and content updates

I restructured the content around a clear path. Who the company is, what they offer, and how to contact them. The new homepage places service categories, trust signals, and contact actions in intuitive order. Pages that previously felt dense now use clear typography, divided sections, and contextual visuals.

To support credibility, I applied a refreshed brand style with professional blues and structured grids. The look now aligns with expectations for industrial and government clients in Japan. The design also speaks visually to solar maintenance as a modern field of infrastructure work.

Finally, I built a layout and component system that scales. Service cards, blog posts, and project highlights can grow in volume without breaking the design.

Visual Design System

I created a new visual identity that feels modern and reliable. Blues and soft neutrals guide the palette to reflect technical expertise and clean energy. Typography emphasizes clarity first. Japanese content can be more difficult to size and style than English, so I tested multiple font weights and spacing approaches to ensure readability.

Each page follows a consistent rhythm. Section headers are bold and scannable. Icons and contextual imagery add visual anchors that help users understand content at a glance. On mobile screens, layouts shift into a vertical flow that keeps text legible and interactions easy with thumb reach.

Every design decision supports the same goal. Feel professional. Communicate clearly. Remove visual friction.

Technical Execution

I developed the new site using Nuxt 4 and Tailwind CSS. This provided a strong foundation for performance, accessibility, and long-term maintainability. Components are modular and auto-imported for efficient structure. Pages are statically generated for fast loading and better SEO.

I integrated Contentful as a headless CMS so the company can easily update blogs and future content. The system resolves assets from Contentful and formats rich text with a clean global style. I also added Google Analytics for traffic insights and Netlify Forms for easy inquiry submissions.

Everything is built with scalability in mind. The client can grow their presence without relying on a developer for every update.

Final Solution

The result is a complete improvement in communication and usability across every page.

- Clear visual hierarchy that helps visitors quickly understand services
- A mobile-first design that feels clean and trustworthy in any context
- Stronger CTA visibility with a focus on direct phone contact
- Structured service and project sections with visual consistency
- A functional and lightweight blog that supports credibility over time
- A modern CMS workflow that removes confusion and enables routine updates

Before and after comparisons reveal the transformation in readability, brand consistency, and navigation clarity.

Outcomes and Business Impact

The new website positions Tanaka Denki Service as a professional and credible partner in the solar maintenance industry.

Expected outcomes include:

- Higher task completion on service pages
- Increased contact attempts from both mobile and desktop
- Improved confidence when sharing the site with prospective clients
- More active internal content updates since the platform is easy to manage

The project launches at the start of the year. I will continue monitoring analytics such as contact interactions and session flow to confirm the success of UX improvements. Based on early stakeholder feedback, the redesign already makes a strong impression and better supports business conversations.

Reflections and Takeaways

This project strengthened my skills in real client collaboration and communication. I presented designs and progress updates directly to stakeholders in Japanese and learned how to navigate the cultural expectations of Japanese UX. I also gained experience working with Japanese typography at scale, including balancing readability with limited white space.

On the technical side, this was my first time integrating Contentful with Nuxt and building a clean CMS workflow for non-technical users. It expanded my development foundation and gave me confidence building scalable systems that align with business goals.

Most importantly, this project reminded me that design is not only about visuals. Good UX is about enabling communication, improving trust, and removing barriers that prevent a business from growing.