Streamlining SJVN’s e-tender process with a responsive website

Case Study

Industry: e-governance, energy & utilities
Technology: MVC, .NetCore, Cloud, SQL 2017
Country: India

Client Profile
Satluj Jal Vidyut Nigam Ltd (SJVN) is an ISO 9001:2015 certified company that generates and distributes clean electricity to various states of India like Himachal Pradesh, Uttarakhand, Bihar, Maharashtra, and Gujarat. On May 24, 1988, the company was incorporated as a joint venture of the Government of India (GOI) and the Government of Himachal Pradesh (GOHP). Apart from this, SJVN is supplying clean energy to neighboring countries such as Nepal and Bhutan. The company is generating energy through various techniques like thermal power generation, hydro-power generation, solar power generation, geothermal power generation, etc. Recently, SJVN has initiated e-tender program wherein, local vendors across the country can bid certain amount and leverage various benefits from the government.

Challenges
The client approached us with an idea to completely revamp the UI/UX of their old website and incorporate various cutting-edge features into it. We thoroughly analyzed the client’s old website and found several challenges in the system. The challenges ranged from information grouping, navigation, and a lot more. We also found that there were overall 230 pages and 30 admin modules on the website. Here are the challenges we inspected in the project:

- The earlier established system’s UI/UX was outdated and needed a complete revamp.
- The old system had an unorganized sitemap that can distract the site users.
- The old website had a poor structure of information
- The search facility in the older website was not giving 100% accurate results to the users
- The login facility in the older website needed an upgrade
- The old website lacked multiple login facility
- In old system, only a single user was granted access to make changes in the website
Solution

Team KCS conducted a deep analysis session on the client's current situation considering to upgrade the UI/UX of their older system completely. In the analysis phase, we found that Satluj Jal Vidhyut Nigam Ltd has the end-users which are mainly entrepreneurs, startups, or the ones connected with them. So, our main approach was to impress the end-users with a design that would look simple yet professional and in the meantime is user-friendly as well. Our experts redesigned the website using the latest technologies such as MVC, .Net Core, and more.

- We used the Model View Controller (MVC) to accomplish client's primary need to revamp the UI/UX of the website
- The MVC helped clients to give world-class UI experience to the end-users and enhanced the overall performance of the website
- In our solution, we upgraded the 'search' facility by integrating the latest search algorithm into the site.
- We also added 2-step verification facility to update the login facility of the website
- In our solution, we also added bilingual facility to the website. Users can now access the website in both Hindi as well as English languages.
- We assigned different roles to various departments so that anybody can make changes to the website easily.
- We used the latest SQL 2017 to give 360-degree security to the data
- The SQL 2017 integration helped the client to add graphs and chart in their website
- Besides, the SQL 2017 increased the overall data storage and retrieval process on the website

KCS Approach

We developed a content-rich and responsive website that streamlined the e-tender and bidding process on the site. While redesigning the client’s website, we used MVC to give seamless user-experience and maintaining the traffic flow on the website. The .NET Core 3.1 helped client in increasing the security on the website. The SQL 2017 integration completely changed the way the client managed the data. Also, it helped the client to get real-time updates about their various projects.

Impact

Our solution created a huge impact on the overall design of the website. The client’s primary need to upgrade the design of the website was resolved with MVC. An automated system helped the client to show real-time insights about various projects using graphs and pictorial representation. Using the latest technologies, users can now navigate through the entire website without any kind of distractions. Vendors can now apply for e-tenders by bidding a certain amount and leverage various benefits from the governments.