

CUSTOM APPLICATION DEVELOPMENT AND MAINTENANCE



The client is a leading online credentialing solutions organization in the logistics industry in the USA.



The challenge

- ✓ For the past 7-years, the client had desktop software built on Angular 5 and Ionic for the front-end and Dot Net and MongoDB for the backend server
- ✓ Adding new features within the software and maintaining the software was getting problematic and time-consuming due to the complexities of the application
- ✓ The team faced a critical challenge with the application performance as it was getting slow
- ✓ The UI/UX maintenance was becoming a problem for the team as the software had old non-scalable technologies
- ✓ The team was looking for customized enterprise software that is agile, scalable, can work on any device, and is SaaS-friendly



Calpion's plan of action

The client reached out to Calpion and explained their situation. They wanted a **Custom application development** solution implemented within 6-months to stop the loss in operation costs. Calpion analyzed the challenges and drafted a new Custom web application development software design to build an agile and scalable application that incorporates existing functional features while incorporating new technologies and features. Based on a redesigned technical infrastructure that employs hierarchy, user interface adaptable design, and a content management system approach.

- ✓ Calpion immediately set up a team of developers, and designers backed them up with a world-class Project Management Office (PMO) team
- ✓ The PMO team prepared the business requirement definition (BRD) documents in collaboration with the client and passed them on to the development and design teams

- ✔ The PMO team monitored the deliverables through the Project Management tool to track the deadlines
- ✔ The design team designed the visual designs and app functions and collaborated with the client for approvals. Once approved, the designs were forwarded to the development team to create the software as per the guidelines
- ✔ The PMO team collaborated with the client from time to time to provide the latest update and feedback about the progress
- ✔ Calpion utilized the AWS platform to maintain backend and front-end application infrastructure and make the software agile and scalable
- ✔ With the help of the latest cutting-edge technologies, Calpion added new features and made the application more performant and easier to use with great UI/UX



Technologies implemented

Calpion's certified professionals used their immense experience in Custom application development services and the following technologies to provide results:

Front-end technologies:

- ✔ Angular 13, PrimeNG UI, SASS, AWS Amplify, Figma

Backend technologies:

- ✔ NodeJS, Nestjs Micro-services, AWS Lambda, MySQL DB, AWS Cognito, AWS Code Build, AWS S3, AWS SQS, AWS SES
- ✔ Figma for the UI/UX of the apps to implement a faster feedback process
- ✔ Opted for micro-services architecture for backend services to decouple APIs to make the applications run faster without affecting other backend operations



Quality assurance and testing

Calpion used multiple test optimization tools to maximize the speed and accuracy of the testing processes Application development case study. Calpion always uses these types of testing before handing over the software to our clients:

- ✔ Functional Testing
- ✔ Performance Testing
- ✔ Security Testing



Results

- ✔ The client was satisfied with the software navigation and accessibility
- ✔ Calpion created a detailed documentation guideline for the software and learning paths based on the team requirements
- ✔ With the scalable architecture for the front and back end, the client can easily add new features without affecting other components



Benefits of client

- ✔ A customized scalable, dependable and secure software that can run on any device and anywhere
- ✔ Options for a wide range of plugins across the platform to make the software flexible and agile
- ✔ Simple to deploy, maintain, and scope for future upgradation
- ✔ In short, a tailor-made software application to resolve the challenges

FEEDBACK FROM CLIENT

"You have previously assisted us with several projects and have consistently demonstrated professionalism. We faced the challenging task of deciding between managing our past data in the old application or building a new application and losing previous data. You helped us by building an application that not just helped us make the right decision but also increased our user experience in the new 2.0 version. Your software is helping us to generate faster results without affecting other backend operations, which was our main challenge. Your team made it look so easy! We are incredibly thankful for your contribution."



Delivery Head

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15+ Year old, logistics industry

Calpion is a Dallas, Texas based technology consulting company with offices across US and India. We have been working with organizations that have been striving for digital excellence. We provide technology solutions for various industries like, Healthcare, Biotechnology, Logistics and Supply Chain, Manufacturing and Retail, etc.

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