

A decorative graphic consisting of a network of interconnected nodes and lines, rendered in shades of blue and orange, spanning across the middle of the page.

# CASE STUDY

DIGITAL TRANSFORMATION TO STREAMLINE  
CONSTRUCTION AUDITS

## CLIENT OVERVIEW:

Midwest based construction firm that designs and builds steel structures for construction of commercial office buildings, hospitals, schools, warehouses, and other similar building constructions.

## CLIENT PROFILE:



### LOCATION:

Indianapolis, IN



### EMPLOYEES:

50+



### INDUSTRY:

Construction



### SOLUTIONS:

- ◆ AWS S3 / Route53 / CloudFront
- ◆ AWS Cognito
- ◆ AWS API Gateway
- ◆ AWS Lambda Serverless
- ◆ AWS DynamoDB

## CASE STUDY: Digital Transformation to Streamline Construction Audits

### CHALLENGE:

Our client's business involves designing and constructing complex steel structures for commercial building projects. As part of the construction, technical specifications, documentation, and compliance materials must be assembled to satisfy audit requirements for state and local regulatory organizations. The process of assembling documentation and completing the required audits took as long as 3 months, causing the client to expend an unnecessary amount of time and expense. The required information was not centrally managed, but was instead stored on paper, email, and various other formats. This caused additional effort to locate required documentation and ensure the most recent revision was used.



The client desired a solution that would allow centrally managed documents and specifications while providing an audit workflow that would meet the unique needs of their operation for both construction workers and auditors.

### SOLUTION:

Our team was engaged to build a solution that would employ a digital workflow to enable paperless exchange of information and data with auditors. The new web-based application captured and organized audit-based documents into a single platform that was used both by office employees and workers in the field. Additionally, customer and project management information were captured to manage construction projects, client data, contact information, and associated construction implementation specifications. The platform was built to support a SaaS (Software as a Service) model, which would allow the client to offer the solution to other companies within the industry as a subscription service.

CleanSlate designed the client application as a 100% cloud native solution utilizing AWS services. The architecture was built leveraging a microservice design to ensure scalability and flexibility needed for product growth.

### RESULTS:

- ◆ Implementation of the new application was completed on time and on budget.
- ◆ Preparation for audits that previously took months to complete now is completed real time as part of the construction process.
- ◆ Errors resulting from missing documents and wrong document versions have been effectively eliminated.
- ◆ Additionally, the client has a potential new revenue stream offering the application as a SaaS based subscription product to the marketplace.

