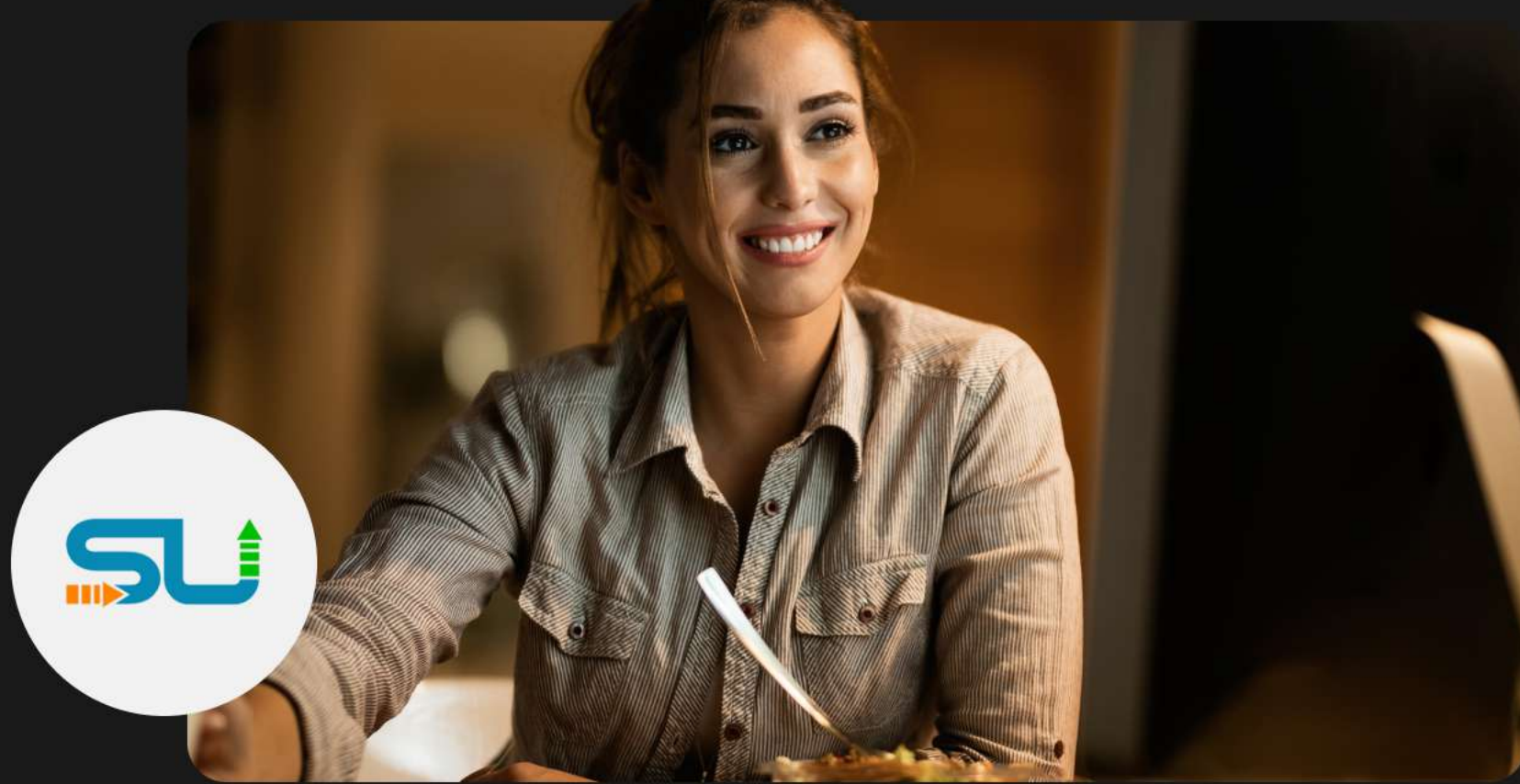


Overview

SwitchUrEnergy is a smart and efficient web platform developed to simplify how UK businesses compare energy plans and switch their gas or electricity providers. Built with a user-first approach and powered by real-time data integrations, the platform enables a seamless energy quoting and contract journey.

The system is developed using Umbraco CMS with MSSQL as the backend database. It is deployed on Microsoft Azure Web App Service and follows a structured CI/CD pipeline, enabling automated deployments, performance monitoring, and scalability.



Objectives

- Deliver an intuitive, step-by-step energy quote process for businesses.
- Use real-time APIs for data validation and tariff retrieval
- Enable secure, automated contract generation with digital signature support.
- Maintain a robust, cloud-native infrastructure for performance and scalability.

Technology Stack

- Umbraco CMS

for flexible content and portal management
- MSSQL Server

for backend data operations
- UDCORE API

for meter/address/tariff data
- Companies House & Charity Commission APIs

for validation and auto-fill
- DocuSign

for contract e-signatures
- Azure Web App Service

for hosting and scalability
- CI/CD Pipeline

for automated deployment, testing, and version control

User Journey & Workflow

- 1

Choose Quote Type
 - Electricity or Gas
- 2

Provide Contact Information
 - Full Name
 - Email
 - Contact Number
- 3

Business & Address Lookup
 - The user enters their business name and postcode
 - The system fetches associated addresses via the UDCORE Address Search API
 - The user selects the correct address from the returned list
- 4

Energy Consumption Details
 - The user enters annual consumption and relevant meter details
 - This input is crucial for generating accurate energy pricing
- 5

Submit the Quote
 - The data is submitted and stored securely
 - The user is notified that their pricing options are ready

Plan Viewing & Contract Generation

- ### Accessing Plans

 - View and compare real-time pricing plans retrieved via UDCORE API
 - Analyze details like unit rates, standing charges, terms, and annual cost
- ### Contract Finalization

 - The user is taken to the contract generation page
 - Business information is verified via Companies House or Charity Commission API
 - Contact and address fields are completed
 - The contract is either:
 - Downloaded as a PDF, or
 - Digitally signed via DocuSign
 - A confirmation email is sent, and the contract is archived for future access.

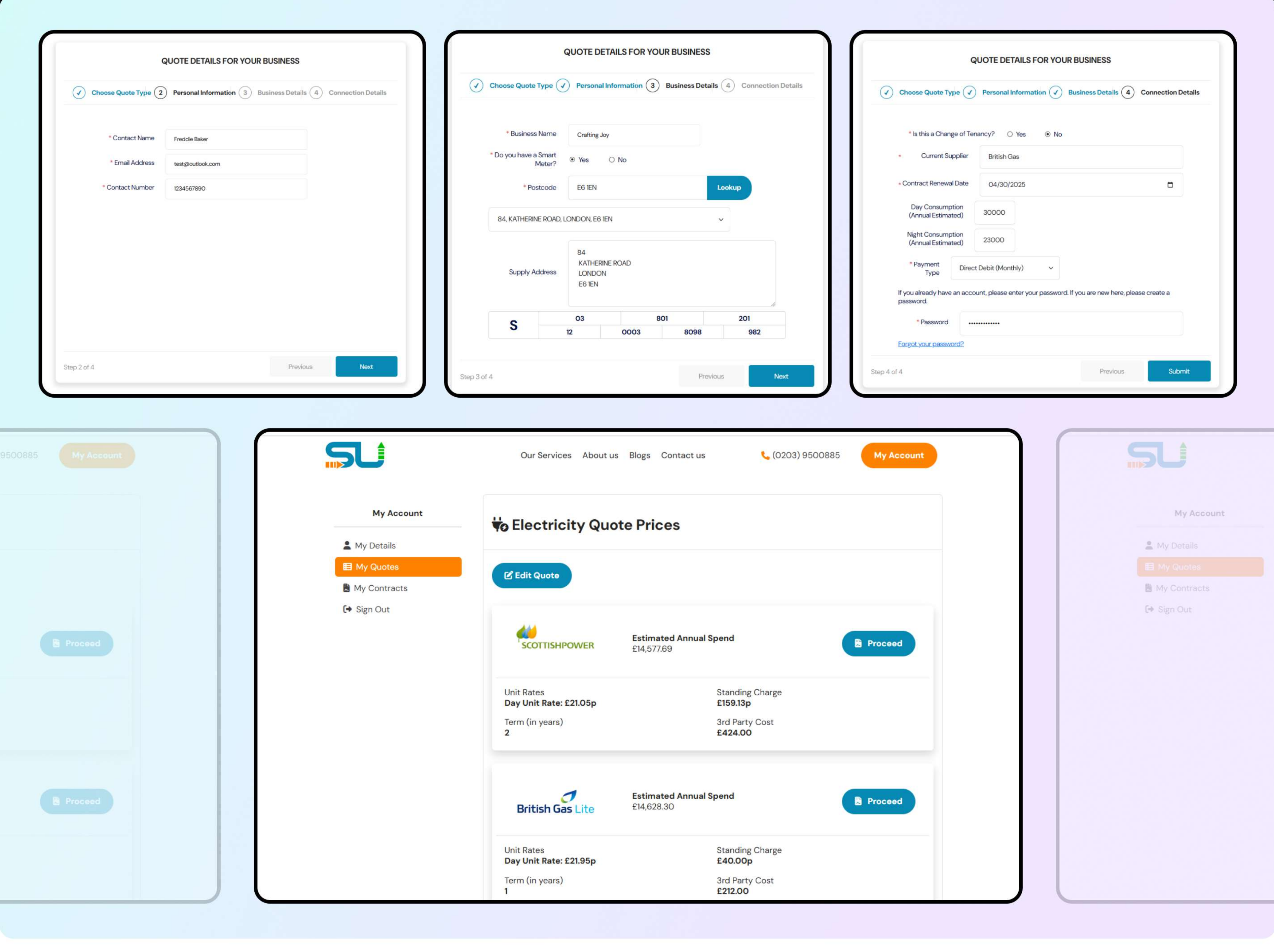
Cloud Infrastructure & DevOps

Hosted on Microsoft Azure Web App Service, ensuring

- High availability
- Scalability during peak traffic
- Integrated performance monitoring

CI/CD Pipeline Integration enables

- Continuous integration and automated testing
- Safe and repeatable production deployments
- Version control and rollback capability using Azure DevOps

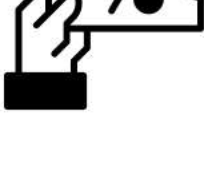


Why SwitchUrEnergy Stands Out

Unlike most energy portals, SwitchUrEnergy guides users through a structured journey, ensuring data accuracy before presenting quotes. This results in



Reduced abandonment rates



Cleaner, more relevant tariff matches



Better user engagement and satisfaction

From seamless API integrations to robust cloud infrastructure, every layer of SwitchUrEnergy is built for performance, flexibility, and business growth.

Conclusion

SwitchUrEnergy is a complete energy comparison and contracting solution for modern UK businesses. With a seamless quote workflow, trusted data sources, and a CI/CD-enabled Azure deployment, it's a forward-thinking platform designed to adapt to market needs—while delivering a top-tier digital experience to its users.

