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We **advance** and **innovate** your business with digital transformation

BLOCKCHAIN SOLUTION FOR ELECTRICITY PROVIDER

LITION

Lition is a digital marketplace connecting consumers directly with renewable energy producers – simple, fair and inexpensive.

Domain:
Energy

Expertise:
Blockchain

Duration:
~1 year

About the project

The objective war to implement a P2P trading platform for open and direct energy trading which is now available for more than 41 million German households.

Challenge

Lition approached instinctools with an idea of creating a platform for direct energy exchange within Lition Energy System. The goal of the project was to simplify the legal, operational and economic hurdles for green power producers and allow customers to buy truly green electricity at an affordable price.

Tasks

An initial consulting phase ensured clarification of customer needs and purpose of the product. It helped to determine the main tasks for the *instinctools team:

- trading platform development including backend, frontend and UI/UX design reflecting Lition corporate style
- blockchain-based solution development
- consulting and integration of project management methodology and configuration of project management processes

Solution

The final solution met all customer's requirements and expectations. Around 10 JavaScript frameworks were implemented to build reliable and functionally rich web application.

Key features

Well-organized development process from goals and needs decision to solution architecture allowed to create the product with the following features:

High performance and **usability**

Informative dashboard (with information about producers, types of energy, current rates, transactions and contract data)

Option to choose power plants and create several energy s upply contracts with Lition

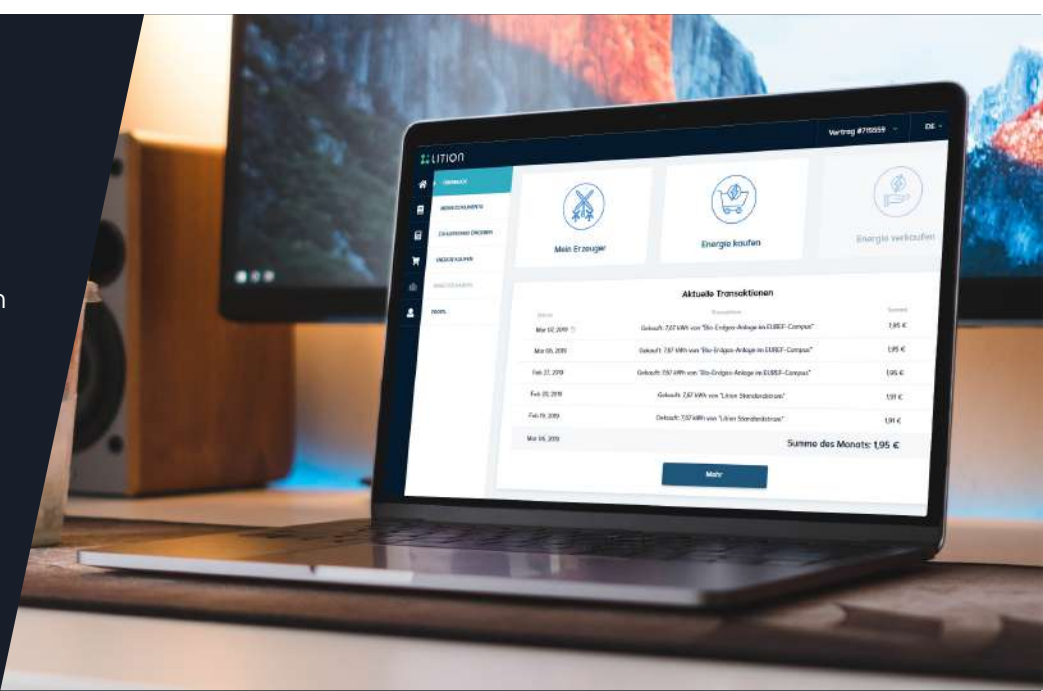Productive on **Ethereum** and proprietary **blockchain**

Access to energy market - the platform connects customers and producers to trade energy and receive mutual revenues

Possibility to try **live demo** and experience the trading platform interface

Result

The platform is currently the key product of the Lition and commercially available for 41 million households in Germany. Customers from more than 30 cities save up to 20% on their monthly energy bill, and producers generate up to 30% more profit. The solution gives users a possibility to support ecological energy plants and help to save the environment.

Technologies

SCRUM

FE:

- React
- Axios
- Async-validator
- Babel-polyfill
- Iban
- Lodash
- Pickmeup
- Plotly.js
- Prop-types
- Redux
- Swiper
- Web3 and others

BE:

- Node.js
- Async
- Babel
- Bcryptjs
- Bluebird
- Cookie-parser
- Cors
- Dotenv
- Express
- Handlebars
- Joi
- Knex
- Moment
- Mysql
- Needle
- Nodemailer
- Package.json
- Redis
- Redlock
- Soap
- Sqs-consumer
- Winston and others

Blockchain:

- Solidity
- Quorum
- Web3
- Truffle
- Node-fetch
- Enzyme
- Readline-sync and others
- Eslint
- Jest
- Prettier
- Supertest