“MY EASY CHARGE” - A NEW DIMENSION OF PERSONALIZED CHARGING EXPERIENCE

COMBINING THE INTELLIGENCE OF AUTONOMOUS AGENTS WITH DLT AND P2P COMMUNICATION FOR SEAMLESS CHARGING

PROBLEM BEING SOLVED
Seamless and smart charging of electric vehicles is key for mass adoption but still a vision and not existent. Missing interoperability between charge points and electric vehicles is the major problem in today’s EV charging world leading to a bad user experience and very high process cost for charge point operator and mobility service provider companies.

SOLUTION BEING PROVIDED
The partners combined their capabilities to tackle this problem. My Easy Charge allows plug&charge at with reduced time and cost for end users and companies offering charging services. The solution, being integrated into the car, selects the best charge point according to your personal driver’s profile, secures automatic authentication between charge point and car and automates the whole payment and billing process.

TECHNOLOGY COMPONENTS
Share&Charge Connect and Payment solution comprising an OCPI based message broker and Ethereum based smart contracts (including a DAI atomic swap bridge) on top of the chain of Energy Web Foundation. Fetch.AI provides the economic framework for autonomous agents with a charge point agent. Bosch provides the user interface and the car agent for clever routing and negotiations. Most of these components are open source.

BUSINESS VALUE
Mobility Service providers are enabled to offer a better user experience (clever routing and plug&charge) to their customers and therewith differentiate themselves whilst reducing process cost due to the high level of automation in settlement.
MY EASY CHARGE PROTOTYPE
Overview customer journey and value propositions

Customer journey in current solution

- Registration
  - Create ID
  - Verify ID
  - Select preferences
  - Save preferences
  - Get "EUN on wallet" from MBP

- Search & Find
  - Open app within Jaguar
  - Query poles
  - Retrieve poles
  - Calculate route

- Authenticate
  - Plug in CER
  - Automated authentication
  - Verify ID and wallet balance

- Charging
  - Start charging
  - Progress report on charging
  - Stop charging
  - Deploy CER

- Settlement
  - Transfer tokens
  - Create invoice

Value proposition - your personalized charging experience

- Save time
- Save money
- Easy charging
- Save the planet

Technical architecture of our solution

- Implemented prototypes
- Developed extensions
- Potential extensions

BOSCH

- Car
- Economic agent
- In-Car Monitoring
- CEF1 connector

Share&Charge + Fetch.AI

- Charging Pole
- Fetch.AI
- Economic agent
- CEF1 connector
- Share&Charge
- Charging Pole Monitoring
- Decentralized Ledger Technology
- Decentralized Search
- Decentralized Auctions
- Settlement
- Share&Charge Contracting

Backend / Cloud

- Open Charge Point Interface (by any utility company)

1) Open Economic Framework (by Fetch.AI)

THESE PARTNERS CONTRIBUTED TO OUR SUCCESSFUL POC

SHARE CHARGE & FETCH

FOR MORE INFORMATION

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