D1.6: Beneficiaries dataset - 1st call

10/2020

Work Package	WP1 - Coordination
Document Reference	BS-WP1-D1.6-Beneficiaries-dataset-1st-call
Document Type	Other
Author	BRPX
Contributor(s)	CIVT, F6S
Delivery Date (DoA)	31/10/2020
Actual Delivery Date	01/11/2020
Abstract	Open Dataset containing the list of beneficiaries, project description and funds. Updates after the execution of each call.

Document Revision History			
Date	**Version**	**Contributor(s)**	**Description**
27/10/2020	v1.0	BRPX	First version
30/10/2020	v1.1	CIVT, F6S	Second version including CIVT and F6S inputs
01/11/2020	Final	BRPX	Final version including review by BRPX

Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the EC Services)	
RE	Restricted to a group specified by the consortium (including the EC Services)	
CO	Confidential, only for members of the consortium (including the EC)	

BlockStart Consortium			
Participant Number	**Participant Organisation Name**	**Short Name**	**Country**
1	Bright Development Studio, S.A.	BRPX	PT
2	UAB CIVITTA	CIVT	LT
3	F6S Network Limited	F6S	UK

LEGAL NOTICE

The information and views set out in this application form are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

Table of contents

1. Introduction

This report compiles the Open Dataset containing the list of beneficiaries, project description and funds of BlockStart's open call #1 (Ideation Kick-off, Prototype and Pilot stages), which took place from March until October 2020.

All profiles of the 20 DLT Developers who participated in Ideation Kick-off (10 of them also participated in Prototype stage, and 5 of them took part in Pilot stage) are included on this section of BlockStart's website: www.blockstart.eu/our-startups/

All profiles of the 25 SME Adopters who participated in BlockStart open call #1 (10 in the Ideation Kick-off, and 18 took part in Pilot stage - with 3 participating in both the Ideation Kick-off and the Pilot stage: Eldro Technologie, Latitudo40 and Vawlt) are included on this section of BlockStart's website: www.blockstart.eu/our-adopters/

2. DLT Developers

2.1 2bSMART

2.1.1 Company

2bSmart supports organizations in understanding and applying IoT sensor, blockchain and smart contracts technology. It does this by offering interactive workshop simulations. These simulations show a business process of monitoring and settlement of performance using smart contracts, sensor data and blockchain.

These simulations can be used in businesses for training and awareness but are also a starting point for a pilot project using smart contracts. The company customizes these blockchain simulations to make it applicable for any business sector. Its workshop simulations are also very suitable for educational purposes at universities and professional trainings.

2.1.2 Prototype solution

2bSmart, with three companies from the Facility Management business in the Netherlands have developed a prototype to monitor and control the indoor office climate. It uses IoT sensor technology combined with blockchain smart contract technology to create an additional layer of trust. The sensor data will be stored on the Blockchain for verification and the smart contract will issue certificates and provide access to the rooms based on the sensor measurements and pre-set conditions.

The prototype is build based on existing Smartys Simulation IT building blocks. The prototype location is the head office of Facility Management Consultancy company DWA in Gouda (NL). There we are using existing sensors and sensor data, connected to our Smartys IT Building Blocks, including the smart contact.

As an important part of this pilot, 2bSmart has designed a protocol to ensure the integrity of the sensor data. It is called SSDI, Smartys Sensor Data Integrity protocol. The key reason for this is to ensure that the users of the proposition can trust that the data that is used to action the smart contract, is validated, from the right sensor and is not tampered with.

2.1.3 Technical development during Prototype stage

During the development of smartys, the following technical developments has taken place:

- Connect to the real local sensors in the building
- Build on the Meteor/React Smartys platform
- Add data storage security requirements because info on buildings can be sensitive
- Replace temperature with air quality in smart contract
- DWA to add sensor data analysis and aggregation to the pilot
- Use traffic light systems, in pilot with raspberry pi
- Connect solution with Digital Twin of the Gouda building
- Data protocol for connection sensor data – smart contract tested. MQTT adjusted
- Sensor registration process tested and adjusted

- Design and testing of the air quality norms to be used, including frequency of data sending and storage
- Sensor data connection retested with Smartys
- UTP network used and tested for the pilot

2.1.4 Business development during Prototype stage

A number of workshops have taken place with the companies in the prototype development. 2bSmart has also engaged with potential customers, being companies renting office spaces. Very positive feedback was received. A very solid business case has been developed.

If the pilot is successful, the 4 companies involved intend to form a JV to further develop and market the product in the Netherlands and Europe.

2.1.5 Pilot stage implementation

Here is a video summarizing 2bSMART's pilot implementation: www.youtube.com/watch?v=Y28EotDfKfM&t=1s

In BlockStart, 2bSmart implemented its "SMARTYS" product in 2 SME adopters:

Pilot no. 1 with DWA:

Corona Proof Office

An end-end system to measure, monitor and control a Corona proof indoor climate.

Tested setup with 2 types of rooms (automatic and manual headcount).

Pilot no. 2 with BR Controls:

Corona Proof Office

An end-end system to measure, monitor and control a Corona proof indoor climate.

Tested setup with 2 types of rooms (automatic and manual headcount).

2.1.6 Testimonial

"In the first iteration of the BlockStart programme we concluded that there was a potential match between some SME's in the programme and a product gap that we wanted to address: Integrity of sensor data. We developed a Smartys Data Sensor Integrity protocol for this. We engaged three SME's into the programme which enabled us to validate this product-market proposition. As a next step we defined a specific application for this proposition for the engaged SME's: Monitoring safety conditions in meeting rooms for Corona proof buildings."

Robert Rongen, CTO, 2bSmart

2.1.7 Funding

Total funding received under BlockStart: €20,000 (€1,000 for Ideation Kick-off, €15,000 for Prototype stage and €4,000 for Pilot stage)

2.1.8 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/2bsmart/

2.2 Aicertifi

Sometimes AI makes decisions behind the scenes, where the procedures used are opaque – especially for non-experts. In mission critical cases AI must be open to inspection. This is true in public forums, medical procedures, logistics, and custodial care. Our aim is a definitive format to record decisions (and the procedures and variables that were utilized). This can be accomplished by creating a timestamped block-chain or DLT event. These can be made to create trust so that human error and machine error may be understood. AI reliability must be carefully tested and sand-boxed prior to use. However, after the AI is put into service this solution offers security, operational certainty, and a chain of custody. Sentiment analysis is a straightforward application of Natural Language processing that has been largely standardized. This makes a limited project suitable for this funding. Our black box is like an AI flight recorder rather than a hidden mysterious process.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/aicertifi/

2.3 ARATOS

Aratos.Net provides smart mobile applications for satellite data processing, healthcare and assisted living solutions, public safety solutions, mobility and location-based value-added services using different innovative technologies. The use of NFC, RFID, Beacons and our broad experience in integrated systems' design and database management systems make Aratos.Net leading in the relevant market. The company carries out Research and Development activities using space and satellite technologies with a vision to make them available and accessible for end-users, with value-added services in the areas of Disaster Management, Environmental protection, Agricultural Monitoring, Land Use and Urban Planning.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/aratos/

2.4 b-cube.ai

The purpose of b-cube.ai is to make trading in cryptocurrencies easier & more profitable, in order to bring efficient financial products for everyone, with an institutional-grade trading platform, which were until then available only to high net worth investors.

The platform generate trading signals in real-time through an AI/ML Engine making use of Technical Analysis, Sentiment Analysis along with unique mathematical models backed up by the latest scientific research in Quantitative Finance. The bots based on the signals trade automatically on the existing accounts of the clients using the exchanges API.

The Business Model is to take 3% entry fees + 20% profit sharing, handled throug a Smart Contract based on Ethereum blockchain.

The mission of b-cube.ai is to bring back the trust in crypto asset management industry, inaugurate a new era for asset management backed up by blockchain which can bring prosperity for everyone.

The MVP for trading signals has been released on 03/11/2019 with excellent track records and the automatic trading bots have entered beta phase with selected clients since 01/04/2020.

The startup has won several awards :

– Centrale Numérique Competition 2019

– Startuplive Budapest 2019

– BlockStart Budapest 2019

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/b-cube/

2.5 Bright Habitat

2.5.1 Company

Bright Habitat is VizLore Labs Foundation spinoff, with the mission to lead regional ICT technology related innovation and seed entrepreneurship culture. Bright Habitat promotes a wider usage of

cryptocurrencies with its AI based cryptocurrency trading solution and lowers the blockchain technology adoption bar by providing ChainRider Blockchain as a Service solution for simplified, user-friendly and fast blockchain development.

2.5.2 Prototype solution

ChainRider Blockchain as a Service:

There is a scarcity of blockchain developers, and building internal competencies is expensive and time consuming. The process of building blockchain based prototypes and MVPs usually lasts a couple of months. Existing blockchain solutions are either too generic or self-centered, incomplete, and hard to integrate with existing systems.

In order to overcome these issues, we provide ChainRider Blockchain as a service solution. ChainRider BaaS drives wider adoption of blockchain technology by offering fast prototyping (minutes instead of months) and easy to use blockchain service for fintech. Through simple web forms, the end user is able to configure and deploy a blockchain solution and with a web developer knowledge integrate it with existing business workflows and applications. ChainRider comprises three main services: 1. Blockchain network generator which makes setting up a permissioned Hyperledger Fabric blockchain easier than ever before. Users can choose to deploy their network on local infrastructure or use our click-to-deploy feature to deploy the blockchain network on Google, Amazon AWS or Microsoft Azure cloud in less than 15 minutes. 2. The Smart Contract Generator service allows for the creation of Hyperledger Fabric NodeJs smart contract to be built and deployed in less than a minute. 3. Blockchain marketplace comprising advanced smart contracts and blockchain network templates which help users add more sophisticated features to their networks and build MVPs even faster.

ChainRider AI-based cryptocurrency trading:

Reports indicate that more than 95% of traders are losing money. The average individual investor underperforms a market index by 1.5% per year; and active traders underperforms by 6.5% annually. Among all day traders, nearly 40% trade for only one month. 80% of day traders quit within the first two years.

Relaying on individual financial indicators alone is not enough for successful trading. Manual order execution is unfavourable as it requires strict discipline, emotional distancing and often leads to errors.

In order to solve the cryptocurrency trading challenges experienced by 95% of traders, Bright Habitat has applied concepts such as artificial intelligence (AI), data analytics and automation. Its solution is based on its real-time growing data set, which currently counts close to 1 billion data points of executed trades. In order to capitalize on this data, the company employs AI which uses deep reinforcement learning to generate trading signals for 5 cryptocurrencies: Bitcoin, Ethereum, Bitcoin Cash, Litecoin and Dash. Deep reinforcement learning field of research has been able to solve a wide range of complex decision-making tasks that were previously out of reach for a machine. It is a category of machine learning where intelligent machines/agents can learn from their actions similar to the way humans learn from experience. This concept is at the core of Bright Habitat's trading solution and it yields significant return of investment, by detecting correlation between more than 30

financial features simultaneously. The company's solution enables automated execution of trades in customers' accounts with its order execution engine, driven by AI-generated trading signals. Its current machine learning models provide return of investment which ranges from 0.82% to 1.95% per closed trade, depending on the portfolio spread (selected cryptocurrencies). On average, the return of investment for the first 5 months of 2020 was 101% (with included exchange trading fees of 0.15%).

2.5.3 Technical development during Prototype stage

ChainRider Blockchain as a Service:

Through BlockStart, ChainRider BaaS has been expanded with a service named ChainRider Marketplace. The marketplace is a space for publishing templates of more sophisticated and use-case specific Hyperledger Fabric smart contract and blockchain networks. The prototype phase enabling the marketplace has included the following development milestones:

- UX & UI design of the marketplace, dashboards, user management, corporate registration and new pricing model
- ChainRider Python3 and NodeJS backend applications have been expanded to support marketplace workflows, dashboard, user management and corporate onboarding. This included REST APIs for: resource usage for dashboards, payments and plan management, user management and invitations, registration of corporate entities, publishing of smart contract and blockchain networks on the marketplace, creating, generating and deployment of blockchain networks for corporate users
- The aforementioned features and services were also implemented on the ChainRider frontend application in Angular 8 in line with the UX and UI wireframes
- 19 smart contracts have been added to ChainRider marketplace, showcasing: CRUD operations, bulk CRUD operations, communication with 3rd party APIS from smart contracts, contract-to-contract communication, private-to-public blockchain interoperability, etc.
- Our 1-year product roadmap:
  - Migration to Hyperledger Fabric 2.0 (Oct 2020)
  - Support for fully managed blockchain as a service solution (Dec 2020)
  - Vault management of cryptographic material (currently part of the configuration archive) (March 2021)
  - Opening marketplace for contributions by ChainRider users (June 2021)

ChainRider AI-based cryptocurrency trading:

With BlockStart, Bright Habitat has been able to optimize its deep reinforcement learning models used for generating trading signals, by adding four new financial features:

- Stochastic oscillator
- Moving Average Convergence Divergence (MACD)
- Hull Moving Average (HMA)
- Ichimoku Cloud

The architectures of the neural network models have been changed accordingly: updated number of layers, neurons and dropout. In conclusion, the optimized models' return of investment is on average 30-40% better than the previous models.

An automated trading service (bot) has been implemented for different exchanges and trading strategies:

- An automated trading service (bot) for CoinBase Pro exchange has been implemented to trade with BTC, LTC, BCH and ETH. CoinBase Pro offers industry-grade, safe and secure APIs for order execution and dynamic fee structure
- A combined trading bot capable of trading multiple cryptocurrencies from one account has been implemented for CoinBase Pro exchange. This enables trading with multiple cryptocurrencies based on one trading signal, for example: the bot tracks the trading signals generated for ETH, but reacts by trading ETH, BCH and LTC
- An automated margin trading service (bot) for Bitmex exchange has been implemented to trade with ETH and XBT. The bots working on the Bitmex exchange have been optimized for short positions

The following product roadmap is envisioned for ChainRider AI based trading solution:

- Implementation of trading bots for new exchanges (Binance, BitFinex, Houbi) (Sept 2020)
- High responsive trading signal generation (from 1h to 5 minute) (Nov 2020)
- Optimized models with new financial features combining LSTM and DRL (Dec 2020)
- Building a web/cloud platform and providing AI trading solution to end users – B2C business model. (Feb 2021)
- Order routing support (March 2021)
- Automated service for strategic spreading of portfolio for high volume transactions (May 2021)

2.5.4 Business development during Prototype stage

ChainRider Blockchain as a Service:

- Bright Habitat's pay per use business model with individual accounts was not well received by larger companies looking to have collaborative environment for their blockchain development teams and to be able to more precisely plan the budget for their blockchain projects. In order to solve the challenge, the company upgraded the ChainRider BaaS solution to support registration of companies with multiple team members with different access rights. It has also updated the payment model for registered organizations by providing multiple tiers with monthly plans depending on the amount of resources available for blockchain network hosting, thus allowing solution adapters to properly plan the budget for their blockchain projects. An administrator of the registered organization can invite other users to join the organization on ChainRider, thus sharing the organization's resources. There are two pricing plans, Academic and Corporate, each offering multiple tears enabling flexibility of resource usage. In general, the tiers are formed based on the amount of resources available for hosting blockchain solutions on ChainRider platform, but each tier also include access to specific set of tools and services available on the platform as well as technical support

- Bright Habitat has compiled a business brochure for ChainRider Baas and collected information about 90 companies in Hyperledger Fabric business domain. 66 invitations have been sent on LinkedIn. 35 invitations were accepted, and multiple follow-ups have been performed with them. With 4 of the invitees the company has organized a teleconference call and presented the solution. In addition to LinkedIn campaign, a cold email campaign has been run using the aforementioned business brochure for the initial contact.
- Bright Habitat has acquired 2 paying customers during the project and 3 declarations of commitment from SMEs interested in participating in the pilot stage. It had 9 commercial presentations of ChainRider BaaS service. At the end of the Prototype phase, they plan to hire a sales and marketing associate.
- Multiple blockchain networks (10+), mapped to specific use cases were deployed as part of the live demo performed for potential adopters of the ChainRider BaaS solution. Bright Habitat has also published video learning materials accompanying implemented blockchain marketplace templates and included them within the ChainRider knowledge base.

ChainRider AI-based cryptocurrency trading:

- As part of AI-based cryptocurrency trading service, Bright Habitat differentiates two business models (depending on who handles the order execution):
    - It provides trading signals and customers handle order execution: This includes signing a Revenue Share Agreement with a 20% performance fee (20% of the generated profit) charged on a quarterly basis.
    - Customers set up an account on the desired exchange (currently CoinBase and Bitmex exchanges are supported) and the company execute orders based on its trading signals. Customers decide on the portfolio distribution and share API keys that enable trading with Bright Habitat. The company sets up ML models, bots and start order execution in less than 24 hours. This includes a 2% AUM fee (annualized) and a 20% performance fee is charged on a quarterly basis.
- Its trading service requires minimum of 200k USD initial portfolio for period of 6 months. The minimal portfolio is derived from the expected profit margin, the effort and cloud resources required to set up the AI based trading solution for a particular client. The initial portfolio from Bright Habitat's experience is usually 2 to 5 times larger than the minimum requirement. The performance fee provided above is negotiable for portfolios larger than 1 million USD
- As part of Bright Habitat's business development efforts, the company has compiled a promotional video which has been made publicly available. Next, it has compiled a brochure which has been used for contacting SME adopters and potential clients. The company has collected information about 137 funds and OTC trading desks .99 invitations and 5 InMail messages have been sent on LinkedIn. 30 invitations were accepted, and of those 28 were followed up with a message or email. 26 invitees received the promotional video as part of the follow-up communication. With 6 of the invitees, the company has organized a teleconference call. In addition to LinkedIn campaign, a cold email campaign has been run. For this campaign, the aforementioned brochure has been used
- Bright Habitat has acquired one USA-based customer (cryptocurrency fund) which was not able to sign BlockStart's declaration of commitment as it is a non-EU based company. It is also in the negotiation phase with a premium cryptocurrency investment fund also from the USA. The company has had 6 teleconference calls during which it presented the solution to its

potential clients. The company has attended the online ANNON Summit 2020, the largest online blockchain conference in the CET time zone

- As a result of the project, and in line with Bright Habitat's exploitation strategy, the company has founded a new company VizLore Digital Asset Management DOO, which will primarily be focused on providing B2C solution for AI-based cryptocurrency trading.

2.5.5 Testimonial

"We had a great time working with the BlockStart team, and we owe great thanks to our mentor Mr. Ugnius Ramanauskas. Feedback received from mentoring sessions helped us to better position our service with respect to the market and improve market visibility. The Prototype phase was quite challenging as we had to simultaneously develop two MVPs and bring them to the level of Minimum Saleable Products though active lead generation, business development and customer acquisition."

Ognjen Ikovic, CEO, Bright Habitat

2.5.6 Funding

Total funding received under BlockStart: €16,000 (€1,000 for Ideation Kick-off and €15,000 for Prototype stage)

2.5.7 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/bright-habitat/

2.6 BrikkApp

BrikkApp builds a property crowdfunding investments aggregator. it compares the best real estate investments worldwide to allow individual investors to find the best investment opportunities from as little as 100 EUR.

BrikkApp gives the investors access to the independent market data and cooperate with individual platforms to bring transparency to the market. To date, BrikkApp's database contains the data from more than 200 real estate crowdfunding platforms worldwide.

BrikkApp mission is to make online property investing easier for everyone and to bring users a complex overview of the industry. Users can make better investment decisions and manage their investment portfolio from one smart dashboard.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/brikkapp/

2.7 Charity Wall

Charity Wall is a Social Marketplace that, through the BlockChain, traces and certifies the use of donations and allows donating in total security and monitoring, commenting and constantly verifying the development of each specific social project.

The word Social is because it is oriented to serve the charity sector, and because it allows donors and receivers to create a story around the various social projects that any registered user can view and comment on.

Donations can be money and Charity Wall traces the contribution from the donor to the receiver and how it is spent. Goods can also be donated; in this case, Charity Wall traces the fund-raising, the purchase, donation of goods and receipt by the non-profit organization and their use.

Our aim is to ensure that, through a system of transparency and traceability, the trust of donors in the charity sector can increase, favoring donations to social impact projects that guarantee transparency and ensuring that donations actually reach those who need them.

Charity Wall wants to trace through BlockChain and make public all the documentation related to the activity of NPOs and also to trace and convey in complete way donations flows among the various stakeholders.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/charity-wall/

2.8 CROPT

2.8.1 Company

Humanity is in need of innovative solutions to provide healthy food for its growing population. Cropt was founded with a clear vision to change agriculture, one of the most conservative and least digitised areas of industry. It believes that using big data and state-of-the-art machine learning algorithms, agriculture can become greener and more profitable at the same time, for the welfare of farmers, companies, our society and our planet.

2.8.2 Prototype solution

ALLIANCE was formed as an acronym of AgricuLturaL InsurANCE, but it is much more than that. It is a product that uses data and blockchain to ALLY the often conflicted sides, farmers and insurance companies.

ALLIANCE is a data-driven plug-and-play crop insurance product that automatically detects drought on the field and issues a payout through smart contracts, thus a) eliminating the need for large teams of loss adjusters and large numbers of on-site visits for claim verification b) cutting the operational and administrative costs for the insurance company and ensuring objectivity and transparency through designing more accurate and personalized contracts c) securing trust between farmers and the insurance company, which is the most hindering factor for the uptake of crop insurance.

The system is based on blockchain technology, remote sensing and big data analytics. Namely, processed climate and satellite data indicate the existence of drought-induced damages in maize and the percentage of the damage is calculated. Based on the machine-learning-driven yield prediction model, the difference between the actual yield and the yield that would have been achieved if there had not been any damages, is calculated and this difference is paid out to the farmer, through blockchain-enabled smart contracts. This system was developed as a user-friendly, crop insurance product and deployed to alliance.crop.ag. It is envisioned as a plug-and-play product, where the only integration that will be required is that with the company's client database.

2.8.3 Technical development during Prototype stage

The technology developed within BlockStart is a prototype for a plug-and-play product for digital crop insurance. The prototype focuses on one peril, one region and one crop (drought/Serbia/maize). With a planted area of ~1.2Mha, maize is by far the most significant crop, with the country being in the top 10 list of global maize exporters. In the next phase of development, the system will be scaled to other perils, other regions and other crops. The year that was analysed is 2017, the last year in which drought was present.

Drought detection was based on two sets of parameters:

- Climate triggers: low precipitation and high temperature are the initial triggers for considering the drought in the region.
- Satellites triggers: Low NDWI (Normalised Difference Water Index) and EVI (Enhanced Vegetation Index) values. NDWI was developed with this particular purpose, to detect the absence of water in a field (threshold <0.2), while EVI is a general vegetation index that reflects the overall crop status (threshold <0.4).

Based on the satellite thresholds, segmentation of the satellite images was performed and regions that suffered drought stress were detected.

Cropt's plan for the next 12 months is to incorporate other sources of risk in the system and to do a pan-European scale-up, where the product could be used anywhere in the EU without the need for additional calibrations.

The company already had negotiations with several agricultural and insurance companies and it plans to test the system with both its clients (insurance companies) and the final end-users (farmers). This will validate both the business model and the technical approach.

2.8.4 Business development during Prototype stage

- The business model and the potential for adoption were thoroughly analysed, and a series of talks with potential clients (insurance companies) and end-users of the technology (farmers) were held. This was extremely helpful in defining the business model, as well as fine-tuning the product-market fit. Talks included other companies as well, for side business models and project scalability. The primary business model is generating the revenues through franchise and directly targets the insurance companies. Our innovation will come in the form of a software product that can be integrated into the insurance company's IT system. The two following business models were drawn in collaboration with an interviewed stakeholder, a C-level representative of an insurance company, who wished to remain anonymous. Firstly, the product will be offered to farmers via insurance companies, which will deal with customer acquisition and revenue collection. A percentage of the revenue (e.g. 10%) will be diverted to Cropt as the franchise fee and for the system maintenance. The secondary business model targets the insurance companies indirectly, via reinsurers. Insurance companies typically transfer a certain amount of the premiums (e.g. 80%) to reinsurance companies, which collect premiums from a number of companies, thus diversifying their portfolio and lowering the risk of the system as a whole. It is in their interest to include as many insurance companies in their system as possible, and collect as much premium funding as they can. For this reason, they are offering new product lines to insurance companies, which are expected to acquire new customers and increase their own earnings, thus subsequently increasing the earnings of the reinsurance company.
- Cropt had 11 meetings in total, with:
  - Insurance companies. This is the company's primary group of clients and the discussions were very fruitful, as they helped Cropt to better understand the problems with crop insurance they are facing in their daily activities
  - These meetings helped the company understand the problem from the conflicting point of view and get to know what kind of insurance schemes would satisfy the end-users
  - IT companies. Cropt spoke with the fellow IT companies that are also engaged in blockchain driven insurance in other sectors than agri-food, to get acquainted with the obstacles they faced and the lessons learnt
  - Other potential adopters. With them, the company developed alternative business strategies for secondary business models that would support the primary one and generate additional revenues.
  - Investors – for taking the startup to a higher level.
- For the Alliance project, Cropt hired 2 additional people, one data scientist, who led the development of the drought index and satellite processing pipeline and 1 developer, who led the development of Alliance platform and integrated blockchain, satellite image processing and other services into a single system. The company's plan in the next 6 months is to hire an

additional business expert, who would help Cropt present its product adequately, ensure traction and acquire additional investors and clients.

2.8.5 Testimonial

"BlockStart allowed us to step into the world of blockchain-driven crop insurance, a futuristic concept that we always wanted to exploit, but never had the resources and appropriate support."

Oskar Marko, CEO, Cropt

2.8.6 Funding

Total funding received under BlockStart: €16,000 (€1,000 for Ideation Kick-off and €15,000 for Prototype stage)

2.8.7 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/cropt/

2.9 Datarella

2.9.1 Company

Datarella is an established provider of Industrial Blockchain Solutions and develops Blockchain-based innovations for and with their clients and partners with a strong emphasis on the supply chain and ICT sector. The company's clients come from a variety of sectors: aid, insurance, automotive, manufacturing, finance, media, and politics. Key customers include the United Nations/WFP/UNW, UK Department for International Development ("DFID"), Siemens and BMW.

2.9.2 Prototype solution

Datarella has developed a unique blockchain-based solution "Track & Trust" for supply chain tracking. This product allows the tracking of goods globally. "Track & Trust" provides immutability, trust and reliability through the use of a blockchain ledger. While initially developed to support the tracking of humanitarian goods, "Track & Trust" can be adapted relatively quickly to support any SME that wants to digitize their supply chain tracking. Datarella has deep experience making such adaptations.

Organizations can create an event and request sending of goods from warehouses or manufacturers to a defined location in or close to a disaster zone. The entire steps in this process, such as shipment creation, handovers, or the final delivery, are stored on the blockchain. The information is visualized over a web application.

2.9.3 Technical development during Prototype stage

In BlockStart, Datarella improved its "Track & Trust" product from its earlier MVP stage closer to market-readiness. For the MVP, many components and processes were simplified or mocked and very static in order to show that the actual technology can perform as desired. Therefore, it defined three main KPIs for BlockStart:

- In the first KPI, Datarella focused on a self-registration process for users. In the MVP, it pre-registered profiles and generated Keystore files and passcodes by themselves and sent it to the parties that were participating in the system. To give the users more freedom to register, a self-registration process was necessary. It implemented a user-management backend to store key information that needs to be linked to a specific public key from the user. It further created visible and self-manageable profiles in the profile-view of the web application.
- The second KPI had the goal of enabling multi-tenancy in the system. For the MVP, Datarella didn't have logic implemented to show different content for different users. This led to the result that anyone could see anything in the system, which is far from being favourable in a real-world system. Therefore, it wanted to achieve multi-tenancy to restrict access to specific data only for the authorized parties. As one big milestone, it defined and implemented a role- and permissions-matrix for the system. Roles are now tied to a set of different tasks in the system associated with a profile.
- The third and last KPI was to enable mobile signing of transactions. Until now, the users need to upload the Keystore file and enter the passcode in each session to sign a transaction. Since this is a very user-unfriendly process, Datarella replaced this process with mobile signing. A user downloads the "Track and Trust" wallet that on initiation creates a private- and a public key. This key is linked to the profile. To sign a transaction, the user scans a QR code that contains the shipment information and confirms the transaction on the wallet by swiping. This intuitive and quick process improves the usability of "Track and Trust" significantly.

2.9.4 Business development during Prototype stage

Business model:

For Datarella's "Track & Trust" service, the company will target the market for supply chain management tools which offer last-mile tracking functions. In the last years the humanitarian aid and, therefore, the disaster relief has expanded a lot. This is mainly caused by the increasing number of disasters and the increasing population on earth. This trend is very likely to continue. In 2018, total revenues of global track and trace solutions amounted to some EUR 1.56 billion worldwide, with forecasts predicting that it will increase to around USD 6 billion by 2027 (The Insight Partners, 2019). Datarella's first target segment is the market for medical aid in countries with United Nations Emergency Telecommunications Cluster (UN ETC) Deployments. The company's initially targeted primary market is Yemen which has a EUR 1.4 billion market for supply chain management expeditors

Target customers:

Datarella is targeting the downstream SMEs who participate in the supply chains of large humanitarian organizations for involvement in adoption and testing. One example of an EU SME in this area is the French firm, Atlas Logistique which is one of Handicap International's operational units that specializes in logistics services and supply chain management during humanitarian crises. The company is thus targeting the humanitarian organizations themselves as its core customers. Further, it is targeting organizations with use cases for a trackable supply chain solution with the potential to increase usability, transparency and the effect it has for the stakeholders

Market analysis:

"Track & Trust" distinguishes itself from competitor products in three crucial aspects:

- Through this blockchain solution, Datarella provides the stakeholders in the supply chain a tamper-resistant single point of truth. This will allow the parties, which often distrust one another, to collaborate
- Datarella has extensive experience with the governance of such consortium blockchains and can provide a tailored governance framework
- The unique ability to offer blockchain-based tracking in the most difficult part of the supply chain, the last-mile, even without an internet connection, sets "Track & Trust" apart from its competitors. This is enabled using satellite connections and long-range radio nodes (LoRa) as well as integration with next-generation 4/5G decentralized networks. Datarella's long-term product roadmap and business plan integrates these functionalities

Go-to-market strategy:

To identify and evaluate potential entry markets for Datarella's envisaged system, the company evaluated the counties the United Nations Emergency Telecommunications Cluster (UN ETC) operates. The UN ETC is a global network of organizations working together to provide shared communication services in humanitarian emergencies. Datarella plans to piggyback on ETC logistics shipments to get its hardware into the countries, so it makes sense to base our market analysis theaters of operation where they are present

2.9.5 Pilot stage implementation

Here is a video summarizing Datarella's pilot implementation:

www.youtube.com/watch?v=_3RskvDwXC0

In BlockStart, Datarella implemented its "Track & Trust" product in 3 SME adopters:

Pilot no. 1 with Zelena Tocka Trans:

Together with Zelena Tocka Trans, Datarella performed a test run in its track and trust system. Hereby, the entire process from the registration until the simulated final handover was performed. As a result, its solution is considered valuable for the process of local food tracking.

The main KPI – simulating a test shipment – was successfully performed. Using the system was simple and intuitive. Datarella also defined changes to the UI for the context of Zelena Tocka Trans.

Pilot no. 2 with Go Limpets:

Together with Go Limpets, Datarella performed a test run in its track and trust system. Hereby, the entire process from the registration until the simulated final handover was performed. As a result, its solution is considered valuable for the process of shipment of limpets and other sea food.

The main KPI – simulating a test shipment – was successfully performed. Using the system was simple and intuitive. Datarella also defined changes to the UI for the context of Go Limpets.

Pilot no. 3 with Albicchiere:

Together with Albicchiere, Datarella performed a test run in its track and trust system. Hereby, the entire process from the registration until the simulated final handover was performed. As a result, its solution is considered valuable for the process of shipment of wine dispensers and wine.

The main KPI – simulating a test shipment – was successfully performed. Using the system was simple and intuitive. Datarella also defined changes to the UI for the context of Albicchiere.

2.9.6 Testimonial

"Even though BlockStart was entirely remotely due to Corona, this program was a big success for Datarella. Starting from the Ideation Kick-Off, we could already identify potential adopters that also participated in the program, and eventually might work together with one in the pilot stage. The potential adopters helped us seeing our "Track & Trust" product from the perspective of stakeholders differently from our intended customers. During the development stage, we managed to improve our product from an MVP-stage close to market-readiness. The KPI definition and frequent calls with our mentor made it easier to focus on the important aspects of our product and held us accountable."

Martin Schäffner, Blockchain Architect, Datarella

2.9.7 Funding

Total funding received under BlockStart: €20,000 (€1,000 for Ideation Kick-off, €15,000 for Prototype stage and €4,000 for Pilot stage)

2.9.8 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/datarella/

2.10 DIGIOTOUCH

Digiotouch is an SME providing sustainable and secure Digital Transformation of customers' legacy business processes, operations, and assets using two products – Cloud based, secure Paradise IoT Platform and Digiotouch Edge. The Platform has been utilized by six organizations from the USA, UK, India, and Malaysia. On the technical front, Digiotouch is pioneering "Digital-First" strategies which are broadly based on Open Data, ICT Standards, Machine Learning, Intelligent Cloud & Edge, Mobile Apps, Blockchain, and Cybersecurity. Digiotouch was one of the winners of the EU Datathon 2018 competition and has received funding from several EU H2020 Project Open Calls – Triangle 5G, StandICT.eu, Fed4FIRE+, ACTIVAGE, Logistics for Manufacturing SMEs (L4MS), Block.IS, and ORCA. The company has also been accepted in the EIT Health Living Labs and Test Beds Programme for 2019. Digiotouch is currently developing a Blockchain based solution, BlockTrace, to provide end-to-end traceability of consumer goods in supply chain and detect counterfeit products.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/digiotouch/

2.11 Euroledger

2.11.1 Company

Euroledger is building a user activation tool for marketplaces, enhancing trust between their users by facilitating transfer of their reputational data from other platforms in a verified way.

2.11.2 Prototype solution

The user credentials, related to the users' accounts on platforms B, C and D, are stored in the user's wallet with identifiers and schemes sitting in the Verifiable Data Registry. The credentials are transferred from the wallet to platform A on demand and upon permission from the user. Platform A verifies identifiers and schemas with the Registry. Digital Identity is using a custom build blockchain system – Aries technology (built on Hyperledger Indy).

The solution is pluggable to any software architecture – the plugin is a generic, light-touch component. From the regulatory perspective, the solution is GDPR compliant and adheres to the W3C standard (Verifiable Credentials Data Model).

2.11.3 Technical development during Prototype stage

The prototype was fully built and tested in a controlled environment during BlockStart. Here is a video of a demo showing this prototype in action: www.youtube.com/watch?v=vnaCwqGZrWg&feature=emb_title

2.11.4 Business development during Prototype stage

During BlockStart, the commercial product was developed, and the size of the market was estimated. Four-year detailed financial model was built. Business development was started and resulted in acquiring 5 prospective adopters from an initial pool of 65 potential customers.

2.11.5 Testimonial

"Euroledger's journey with Blockstart was about building a prototype and a business model. Blockstart added value by checking for inconsistencies, typos and other irregularities in the reports and presentations, providing feedback of general nature and advising on specific Horizon 2020 rules and procedures."

Geomina Richardson, CEO and Business Analyst, EuroLedger Solutions

2.11.6 Funding

Total funding received under BlockStart: €16,000 (€1,000 for Ideation Kick-off and €15,000 for Prototype stage)

2.11.7 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/euroledger/

2.12 Infidia

2.12.1 Company

Infidia's mission is to support small, both ethical and fast-growing businesses, providing them seamless financing.

The company believes that financing should be accessible to every ethical company, regardless of its current size. To do so, Infidia creates value for SMEs (liquidity and growth) and financial institutions

(risk-free and scalable fees). Since it chooses only ethical and sustainable businesses as its clients, it helps companies that do good for the world.

2.12.2 Prototype solution

Infidia is the unique blockchain-based solution that keeps records of the business process preceding invoice creation. In both web and mobile apps, Infidia verifies invoices for invoice financing, otherwise not available for small businesses, unable to solve liquidity and (or) fund

their growth.

Due to the previous work experience, and a history of selling into this industry, the company beachhead

market consists of small manufacturing and distribution businesses. For these companies, it offers a productivity app that tracks business processes. While using these tools in everyday activities, users create hard and soft proofs that, by utilizing blockchain, serve as indisputable proof for invoice financing. In the sales productivity app, all features come from sales reps' recommendations and testing. In this case, Infidia offers an added value in process automatization while the primary benefit is in the invoice financing "on demand."

Moreover, Infidia is perfect for invoice financing for small transactions, otherwise unprofitable for banks. Due to its scalability, Infidia is tapping into the large portion of the 2,65 trillion-euro market of available invoices.

Infidia has a chance to support ethical and sustainable businesses, doing good for the world and the economy.

Here is a video explaining Infidia's solution: https://vimeo.com/397695388

2.12.3 Technical development during Prototype stage

- The main technical milestone was building a blockchain backend (one of the co-founders is R3 Corda certified developer), which covers the current and future technological needs of Infidia. Due to its model of tracking the complete business process, Infidia targeted companies with complex operations (manufacturers, producers, & distributors). From the technical point of view of interactions with its users, Infidia's key challenge is that many clients already use specific accounting tools to create invoices and order management tools. Infidia has decided to solve this by creating an interoperability feature to connect its solution to their existing tools, to extract the data it needs to get the 360-degree data inputs necessary to get the invoice financing. Infidia concluded that the most scalable model to achieve this was to use the sales productivity software. Thus, the Infidia prototype consists of both a mobile and web app that verifies that the invoice was created between two parties. By getting data from software in this way, the company ensures that the invoice that has been created is valid and timestamped before sending it to the financial institution. Also, this approach is setting the risk of doing double spending to the minimal value.
- In the next 12 months, the company will fine-tuning Infidia (modular APIs connections and it plans to improve the identity and business process management based on SSIF Enabler and

implementing Trusted Negotiations Enabler). From the crucial building fundamental grounds, the company is envisioning Infidia to be a fully quantum-resistant blockchain solution. R3 Corda is one of the most agile "cryptographically" full solutions that is offering SPHINCS-256, which is a quantum-resistant algorithm, with constriction and security based on hash functions.

● Other features that should be implemented are novel machine learning algorithms that will help Infidia for additional data insights and predictions that will benefit both SMEs and financial institutions.

2.12.4 Business development during Prototype stage

● Since the very beginning, the idea was that Infidia's primary revenue comes from the invoice financing fees. During the past six months, its business model was evolving in phases to capture more value in the long run.
  ○ Freemium Model – the service is free for a specified period while charging the company's sales productivity tool customization
  ○ Subscription Model – a monthly subscription model for companies with a high volume of invoices (three packages in the pricing)
  ○ Funding Transaction Fee Model – a fee as a percentage of the financing approved

During the prototype phase and mentoring sessions, Infida developed two additional revenue models (one is a specific marketplace) that go hand in hand with invoice financing. These models are part of the business plan and the material provided for the company's future investors.

● To approach investors during the prototype stage, Infidia also created a pitch deck, RASD, and a budget. Besides the costs of running the business, the company included the future salaries of its core team members who provided their services in the past few months. The team is ten people strong (2 co-founders, four team members, two part-time, and two consultants), and it plans to hire one more software developer, one social media, and three sales associates. The company outreached to 1.800+ potential SME adopters, with 80+ personalized proposals, and getting in discussion with almost half of that number. As a result, eight companies accepted to become Infidia's testers, while 6 of these companies applied for the BlockStart SME adopters pool. Besides adopters, Infidia met a large number of potential investors and companies that could become its partners or users. Since the company was selected to participate in the Creative Destruction Lab Blockchain BootCamp, it was among international Startups and Silicon Valley investors.

● The team also participated in the ReCap 2020, where a renowned expert had pitch mentorship and pitched in front of angel investors (continued communication via email). Moreover, it participated in multiple webinars (such as The Future of Data Startups in Europe), Hackathon (EUvsVirus). Furthermore, it had many warm introductions to potential investors. Finally, Infidia is targeted and addressed by many Startup programmes and accelerators.

2.12.5 Technical development during Pilot stage

During the Pilot, Infidia concluded that most of its new users don't use any invoicing software. For this reason, its goal is to provide them free solutions to enhance their sales productivity. In exchange, the company's users shared their experience with the factoring process, documentation, and workflow. As a result, Infidia is developing a system of notifications that facilitates the factoring process. It is the most valuable input of the Pilot stage, as it is both improvement in the experience and the speed of the process.

In the future, the company is fine-tuning Infidia (modular APIs connections and the improvement of identity and business process management based on SSIF Enabler and implementation of Trusted Negotiations Enabler). Furthermore, it will include novel machine learning algorithms for additional data insights, and predictions.

Finally, the company envisioned Infidia to be a fully quantum-resistant blockchain solution. R3 Corda, a platform that helped the company immensely, is one of the most agile "cryptographically" full solutions that is offering SPHINCS-256, which is a quantum-resistant algorithm with constriction and security based on hash functions.

2.12.6 Business development during Pilot stage

During the Pilot phase, Infidia tested its solution and gained feedback from 5 companies. Moreover, it immediately included some of their suggestions for the web app interface and functionalities in its product roadmap. Therefore, by its testers' recommendation, the Infidia web app now has additional features that improve scalability. For example, users can send a batch of invoices as invoice financing requests. Another improvement that Infidia is developing is a unique system of notifications for the factoring process. Derived from the factoring process's identified mistake, Infidia is improving this process for its ten clients (BlockStart KPI).

With these improvements, Infidia is tapping into a large portion of the 2,87 trillion-euro factoring market and opening another eight trillion-euro market of invoices not used for invoice financing.

At this stage, 10+ people are working on Infidia: two co-founders, four team members, freelancers, and two consultants. In October, one more financial professional joined the company-s ranks, making Infidia proud as it validates the potential of the team. Moreover, as highly motivated and enthusiastic, Infidia sets an example for its future team members, regardless of their expertise.

Finally, Infidia became a member of additional programs and accelerators. As part of the R3 Corda ecosystem and venture development, the company was invited as speaker at the most significant blockchain conference this year – CordaCon 2020 – as in on the process of being connected to the highest-ranking executives of leading banking institutions and blockchain-focused VC funds, that have shown an early interest in investing in Infidia.

2.12.7 Pilot stage implementation

Here is a video summarizing Infidia's pilot implementation:

www.youtube.com/watch?v=DeaAjGRO7vs

In BlockStart, Infidia implemented its Infidia app in 5 SME adopters:

Pilot no. 1 with Mlekara Petrov:

The use case of connection to their existing software for extracting the data to web app.

- Goals identified: business processes; communication model; invoicing process; business tools for integration.
- Goals defined: Detailed factoring process; steps to connect to their software (user & pass and API).
- Results: Real-time use of their existing software; Forwarded mails of the factoring process; Feedback on the use of the software.

Pilot no. 2 with Bizbaz (Beez & Toys):

Real example of the use of the Infidia Order in the retail stores.

- Goals identified: business processes; communication model; invoicing process; workflow.
- Goals defined: Use of Infidia Order app; use of the web app as a complete solution (no software to connect).
- Results: Real-time use mobile app; Information from the financial side; Feedback on the use of the software.

Pilot no. 3 with Leste:

Source of a game-changing idea of the system of notifications.

- Goals identified: business processes; communication model; invoicing process; workflow.
- Goals defined: Found the problem within detailed factoring process.
- Results: Notifications system as an outcome of the process; The main value of the Pilot phase comes from Leste as finding the specific area to improve and ability for factoring by factoring agency; Detailed documentation about the complete factoring process.

Pilot no. 4 with mBrainTrain:

Evaluation of the specific KPIs and the approach to the banks

- Goals identified: business processes; communication model; invoicing process; business tools for integration.
- Goals defined: Detailed factoring process; steps to connect to their software (accountant connection).
- Results: Specific KPIs as the great input and review; CFO's feedback on the use of the software.

Pilot no. 5 with Marsben:

Use case of the connection to the software solution used by many freelancers.

- Goals identified:business processes;communication model; invoicing process; business tools for integration.
- Goals defined: Steps to connect to their software (user data, screenshots and API).
- Results: Possible connection to the large number of users of the frame.io; Feedback on the use of the software.

2.12.8 Testimonial

"Infidia is a Startup built on a sound foundation, made of entrepreneurial literature but also from years of "trial and error" learning. Those who followed this path know how hard it is, and that can also lead astray. Especially those that use "Youtube recommendations" as the knowledge source make typical errors by being prone to the survival bias. BlockStart helped Infidia to overcome these reasons that are causing many startups to fail. Having KPIs to meet and a mentor that advises and oversees proved to be of the highest value for our type of endeavour. It is because an incentive to structure the product, and then move fast to acquire users to test and give feedback is the only way up. Therefore, besides support by funding, the added value of BlockStart is of immense importance when building a product."

Dimitar Anastasovski, CTO, Infidia

2.12.9 Funding

Total funding received under BlockStart: €20,000 (€1,000 for Ideation Kick-off, €15,000 for Prototype stage and €4,000 for Pilot stage)

2.12.10 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/infidia/

2.13 Inova DE

2.13.1 Company

Inova aims to solve issues of provenance, transparency, traceability and trust present in both agri-food and in logistics. IoT platforms for digitalization of agriculture production are readily available, as is transport data (routes and temperatures) related to food goods stored by logistic companies. The PlugThings platform will assist in the data integration and provide an added-value with printable reports of food traceability; from production to end-consumer delivery.

Inova's proposed solution will facilitate checking the conditions in which the fruits, vegetables and animal products are produced and supply this data as an Ethereum ledger. By implementing the right

APIs to leverage the authorized access to that data, the interested parties (such as producers, import customs, distributors, traders, buyers and regulators) can gain an unprecedented level of transparency that enables an effective traceability. The IoT data is kept verifiable safe and un-compromised, fostering trust in the value chain.

2.13.2 Prototype solution

Inova DE has developed an IoT platform for Industry 4.0, which has capacities for traceability for cross industries. One of the verticals it now applies this technology to is in agroofood. With IoT sensors from production, logistics, processing and delivery of food products, it can seamlessly generate traceability reports for different product lots. The Blockchain implementation facilitates the data exchange between Inova DE's platform and third-party platforms, as well as the secure and trusted access to lot data across the company's users.

2.13.3 Technical development during Prototype stage

Inova DE has implemented the smart contracts from its platform and validated the secure exchange of data between users. Now it is possible to generate reports from its own production and aggregate data from past producers.

2.13.4 Business development during Prototype stage

The company increased the knowledge about the competition and different approaches towards solving traceability. This helped them structure their go-to-market approach. For one, the presentation of Inova DE's platform in the different verticals is fundamental, as well as structuring public information about it. As it does not target a Platform-as-a-Service approach, but rather Traceability-as-a-Service, the company needs to change its approach before boarding the marketing efforts.

Inova DE met several potential adopters during this process and understood better their concerns and pain points: Usability is a key point.

It had no meetings with investors yet.

2.13.5 Testimonial

"The process was exciting, from pitching the concept to develop the solution we were engaged from beginning to the end. The expert considerations really helped to put focus on our strengths and to compensate for our weaknesses."

Vitor Vieira, Co-founder and head of office, Inova DE

2.13.6 Funding

Total funding received under BlockStart: €16,000 (€1,000 for Ideation Kick-off and €15,000 for Prototype stage)

2.13.7 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/inova/

2.14 Kedeon

2.14.1 Company

Kedeon makes grocery delivery more secure, transparent and trusted. It provides a solution that protects the brand image and reputation of the delivery services and helps to boost consumer trust and confidence. It helps to prevent the major health risks from food spoilage that are caused by cold chain temperature breaches during the last-mile delivery of perishable food products. The platform allows grocery delivery services to utilize purpose-built IoT sensors that enable real-time monitoring and alerts, as well as to provide transparent delivery information to consumers.

2.14.2 Prototype solution

Kedeon provides transparent monitoring of last-mile delivery for groceries and food. Utilizing easy to implement hardware IoT modules that require little to no changes in the existing operations and minimal training. It allows to protect the company and reassures end-consumers. Its purpose-built platform works with existing workflow of companies and delivery personnel. By also enabling end-consumers to see transparent information they are reassured about the safety of grocery delivery services and this can be used for the publicity and marketing of the service (standing out from the competition).

Moreover, blockchain recording ensures data verifiability and enables to better prove liability in the case of breaches.

2.14.3 Technical development during Prototype stage

During the BlockStart programme, Kedeon developed a prototype of the new hardware temperature sensor units for the requirements of last-mile delivery services.

This includes battery-powered operation, the possibility to include other sensors, LTE-M/NB-IoT internet connectivity, and seed generation on the device for immutable data recording, as well as the successful deployment of smart contracts on Ethereum testnet.

Moreover, a Web3.js-based dashboard was developed to the needs identified during customer interviews, as well as a prototype of the end-consumer verification platform.

2.14.4 Business development during Prototype stage

During the BlockStart programme, Kedeon reached out to more than 35 SMEs in Latvia, and as a result, started the on-boarding of 5 interested companies. Now, with the help of BlockStart, the team is looking to expand its operations to other European countries.

2.14.5 Pilot stage implementation

Here is a video summarizing Kedeon's pilot implementation:

www.youtube.com/watch?v=OL3O_f_4_bY

In BlockStart, Kedeon implemented its "Last-mile delivery monitoring" product in 5 SME adopters:

Pilot no. 1 with "A-birojs":

Monitoring of B2B food product deliveries and B2C grocery deliveries.

Courier app used by 2 couriers; Over 75 deliveries monitored; Provided feedback about dashboard functionality.

Pilot no. 2 with "Kaleda":

Monitoring of B2C grocery deliveries.

Courier app used by 3 couriers; Over 50 deliveries monitored; Provided feedback about HW functionality.

Pilot no. 3 with "BLUE CIRCLE":

Monitoring of fresh fish wholesale deliveries.

Provided feedback about changes to HW casing for use with fish deliveries.

Pilot no. 4 with "Adazu desu darbnica":

Monitoring of meat product storage and deliveries to stores.

Over 150h of monitoring; more than 5 deliveries monitored; Provided feedback about stationary use of sensors.

Pilot no. 5 with "Piegade69":

Monitoring of perishable and sensitive last-mile deliveries conducted for other companies.

Courier app used by 4 couriers; Over 100 deliveries monitored; Provided feedback about courier app UX.

2.14.6 Testimonial

"The BlockStart programme helped us to find the perfect target customer segment for our product, validate our technology, and test it with European SMEs. Our assigned mentor was a great help along the way, guiding us through all necessary documents and deliverables, making it a much more enjoyable experience."

Reinis Skorovs, Founder/CEO, Kedeon

2.14.7 Funding

Total funding received under BlockStart: €20,000 (€1,000 for Ideation Kick-off, €15,000 for Prototype stage and €4,000 for Pilot stage)

2.14.8 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/kedeon/

2.15 MLCrypt

Like the Internet, blockchain technology and cryptocurrencies will change and revolutionize entire industries, as they open up new possibilities for digitizing complex processes. Therefore, the blockchain technology can be used across all industries.

MLCrypt GmbH promotes the mass adaptation of the blockchain technology. From start-up to consortium they support the practical use of this future-oriented technology. In an interdisciplinary environment they develop trendsetting DLT solutions. This plays a major role in making the blockchain technology tangible and understandable to all those involved in a process. Their focus is on the professional development of individual blockchain applications. A further business area is consulting of companies regarding possible applications of DLT technologies.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/mlcrypt/

2.16 OssDev

A tremendous amount of web projects are the results of Open Source Software. Despite the values embraced, OSS development currently is centralized! Small groups own the project & make decisions which often are not in line with the beneficiaries of the project. This is because OSS is poorly incentivized & lacks governance mechanisms. Devs code only in their spare time & they cannot activate their full capacity. In some cases, coders get demotivated to even contribute due to opinionated leaders who discourage new engineers. Similarly, there is lack of long-term incentives for voluntary bug hunters, code reviewing, new phases to grow OSS. OSSdev is providing a protocol transforming OpenSource Software to Decentralized Autonomous Organizations which incentivise engineers to design novel OSS tech. We are utilising blockchain technology to offer a sustainable, decentralized OSS development governance toolkit to facilitate incubation, financing, and governance of Open Source Software Tech.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/ossdev/

2.17 REXS.IO

2.17.1 Company

Rexs.io is a data trust company offering a blockchain-based digital notarization service that creates a shield of trust for any data, including IoT streams, live video feeds, documents, images, and more. Organizations can benefit from the security and immutability of the distributed ledgers without their inherent bottlenecks and prohibitive storage costs. Rexs.io's core technology is scalable and affordable without compromising security.

Rexs.io goes beyond data security, and the user experience is back in focus. It abstracts the technical complexities and nuances of the DLT ecosystem with intuitive user interfaces. By design, Rexs.io is technology-agnostic and privacy-centric. We provide a framework with the freedom to choose and deploy the most suitable stack, rather than forcing a user to utilize a particular blockchain or a storage solution.

Here   is   a   video   presenting   REXS.IO:
https://www.youtube.com/watch?v=cmQtDV7ftlI&feature=emb_logo

2.17.2 Prototype solution

Rexs.io is a technology stack for DLT-based notarization of existing data and data ingestion streams with a clear decoupling of trust and persistence layers. Organizations can, therefore, benefit from the immutability and tamper-resistance of the distributed ledgers without data throughput limitations typical of permissionless DLTs.

Rexs.io has a modular architecture with standardized APIs between its core services. This simplifies the process of plugging in new components that can:

- provide interfaces to different storage systems,
- facilitate connectivity with different DLTs, and
- provide support for various data producers.

Rexs.io can be plugged into existing infrastructures without significant changes, limiting the time and cost of implementation.

Rexs.io abstracts the technical complexities and nuances of the DLT ecosystem in order to help with the onboarding of the rest of the world. The company's solution is built with intuitive user interfaces and an end-to-end chain of trust and scalability in mind. By design, Rexs.io is technology agnostic. It provides a framework with the freedom to choose and deploy the most suitable stack, rather than forcing a user to utilize a particular blockchain or a storage solution.

2.17.3 Technical development during Prototype stage

Rexs.io's prototype developed in BlockStart includes both software (SW) and hardware (HW) components:

1. SW components

- Control Center: The web-based frontend and administrative console for hardware provisioning, hardware pool management, service deployment/monitoring, and dashboards. Deployed as a SaaS solution.
- Secretary: Data proxy. It exposes an interface compatible with the existing target storage to serve as the new target for the data producer. Data sent to the Secretary is automatically hashed, the file is proxied to the storage system and the hash including file name is provided to the Notary component.
- Notary: DLT gateway. Notary interacts with the hardware wallet, signs the transactions, and sends the file name and file hash to the smart contract deployed on the blockchain to create the trust layer. The notary is accompanied by additional services facilitating robustness, high availability and cost effectiveness of our approach in a public DLT context. These include (a) secure message queue to mitigate data loss due to potential transaction backpressure from the network and (b) secure journal to balance the network cost in the context of potentially high velocity, high volume data traffic. Secure communication between components is supported by Public Key Infrastructure and TLS encryption.

2. HW components

Currently supported one is Infineon's Blockchain Security 2 Go smart card. It facilitates user-friendly and intuitive experience while interacting with a blockchain.

The prototype has been developed for CCTV camera live stream, however, it needs to be emphasized that it does not matter what kind of data input device will be connected. The company has decided to use the camera as an input device because it is easy to show that the stream is notarized live, almost parallelly to the video being recorded.

2.17.4 Business development during Prototype stage

The history of rexs.io goes back to March 2018, when the DAC team presented R&D results at the 2nd Productive4.0 Consortium Conference and Workshops in Budapest. The company has been working on DLT applications in Productive4.0 project, where 109 partners from 19 countries worked together to examine methods, concepts, and technologies for service-oriented architecture and electronic components for the Industrial Internet of Things. EUR 106 million is the total project budget. Almost half of it is funded, partly by the EU, partly by ECSEL Joint Undertaking and the national authorities of involved countries. The project ended at the end of April 2020. (Grant agreement No 737459.)

The Business Platform designed and implemented by Rexs.io's team was meant as an interoperability platform (technological stack) that can be used to support information sharing in the multi-stakeholder environment of the digital industry. The platform supported data provenance monitoring through external blockchain signatures.

Thanks to decoupling of data and trust facilitated by DLT based data notarization, all data packets fed by IoT devices are stored off-chain while the hash-value of a package is stored on a distributed ledger. The hash of data is, therefore, an immutable reference enabling identification of any changes in data stored in off-chain storage.

Diffusion 2019 was a two-day event focusing on the practical application of open-source distributed ledger technology, smart contracts, machine learning, and programmable tokens, to create a new data layer. Alongside hacking, contestants participated in workshops, panels, and expert-led fireside chats on the latest trends in enterprise & blockchain, token economics, interoperability, deep learning & AI, and more. Over five hundred programmers in 10 tracks competed against each other in the Diffusion 2019 hackathon. 45 teams made it through the weekend and presented their projects to judges on Sunday afternoon. It took our team 36h to build an award-winning application.

The goal was to create an intuitive, low-cost, non-intrusive demonstrator capable of efficiently tackling high velocity, high volume video and data stream, and storage inefficiency of the Ethereum Network. Rexs.io's team was awarded the first prize in 2 tracks:

- Web 2.5: onboarding the rest of the world to decentralized technology,
- Sharing in Consortia Networks: permissioned, tokenized data sharing with T-Labs, and Bronze Runner-Up prize in the general classification

In March 2020, rexs.io's team was accepted to Reno InNEVator Technology Accelerator in Nevada, US. The acceleration process focused on providing participants opportunities to present projects in front of American investors. The stay in the US also brought additional value, which was several contacts to companies potentially interested in blockchain adoption, however, the stage of project development was too early back then. Thanks to the BlockStart programme, the company was able to bring its

project to the next level as BlockStart helped Rexs.io with reaching potential clients and partners globally

Rexs.io was accepted to be part of the third cohort of Base Camp Virtual organized by Outlier Ventures. Along with a group of 10 companies (from Canada, Europe, Asia, Australia), the company will be working on boosting our business development

2.17.5 Pilot stage implementation

In BlockStart, Rexs.io implemented its blockchain-based solution in 3 SME adopters:

Pilot no. 1 with ELDRO TECHNOLOGIE:

Authentication tool for a road infrastructure maintenance

Pilot implementation: Work evidence authentication. With their mobile devices, maintenance crews can send images to document the servicing job. The images are sent directly to the infrastructure operator, and their hash is notarized on the blockchain. In case of a dispute, all involved parties will be able to validate the attachments.

Main goals and results: Rexs.io was plugged into a test pipeline processing image evidence submitted by Eldro Maintenance workers. Sample single data object was successfully notarized with Rexs.io on a Ethereum Testnet. Performance impact of data transfer with and without Rexs.io notarization is less than 10% (single large file). Performance impact of data transfer with and without Rexs.io notarization is less than 10% (multiple small files).

Pilot no. 2 with Latitudo40:

Image validation solution for insurance business

Pilot implementation: Space imagery authentication. With Distributed Ledger Technology, we add a trust layer on top of satellite imagery serving as input data for Latitudo40 product – EarthAlytics. Thanks to DLT implementation, platform users will always be able to verify if the information provided is generated from a sound and trustworthy source.

Main goals and results: Rexs.io was plugged into a test pipeline. Sample single data object successfully notarized with Rexs.io on a Ethereum Testnet. Performance impact of data transfer with and without Rexs.io notarization is less than 10% (single large file). Performance impact of data transfer with and without Rexs.io notarization is less than 10% (multiple small files).

Pilot no. 3 with Vawlt:

Cloud Storage Authentication for any business

Pilot implementation: A full integration of Rexs.io notarization technology with Vawlt secure multi-cloud storage. This integration creates a solution that ensures end-to-end data integrity, from the notarization process to the storage in multiple clouds.

Main goals and results: Rexs.io plugged into a test pipeline. Sample single data object successfully notarized with Rexs.io on a Ethereum Testnet. Performance impact of data transfer with and without Rexs.io notarization is less than 10% (single large file). Performance impact of data transfer with and without Rexs.io notarization is less than 10% (multiple small files).

2.17.6 Testimonial

"Our participation in BlockStart programme brings the opportunity to get feedback and insights from the European blockchain industry. We feel like we are getting one step closer to our potential customers, thanks to the programme."

Agata Kukwa, Head of Communications, Rexs.io

2.17.7 Funding

Total funding received under BlockStart: €20,000 (€1,000 for Ideation Kick-off, €15,000 for Prototype stage and €4,000 for Pilot stage)

2.17.8 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/rexsio/

2.18 Spin4Chain

Spin&Turn has 13 years of experience on embedded system development, hardware and software, and their integration on large scaled systems.

The last few years, company is running the Spin4Chain project aims to identify and trace raw materials in supply chain. It is important for the built IoT sensor, guarantee that what is measured is what is stored, and this is where recent solutions propose the use of blockchain. This is a good approach, but data from IoT sensors is not adapted to the blockchain format, and a frontend is required to translate between both worlds. Under this scenario, there is the risk that data be intercepted and adulterated before reaching the blockchain. The project aims to solve this problem. Our main objective is to guarantee that what it was measured by the sensor is, in fact, what is stored in the blockchain. The IoT sensor will not work as a wallet but, has similar concepts such as a unique address, unique private key and the ability to sign messages (classified messages). A blockchain interface layer, running on any IoT, will be implemented to avoid undue tampering with the transmitted and stored information.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/spin4chain/

2.19 StoreWise

Today, most businesses depend on data, either directly or indirectly. StoreWise enables enterprises to better protect, control and reliably access this critical data by leveraging decentralized blockchain technology. At our core, we create powerful S3-compatible storage infrastructure, delivering ultra-high availability (UHA) object data storage with a level of control/sovereignty that was formerly only attainable through on-premises solutions, but now with off-prem scalability and flexibility.

Total funding received under BlockStart: €1,000 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/storewise/

2.20 Xylene

2.20.1 Company

Xylene works with companies in the coffee, cocoa, timber, minerals and cotton industries that act as importers and producers, giving them transparency and control over their supply chain. This innovative approach combines supply chain management with satellite technology (SatNav and SatEO) and blockchain to create supply chain transparency.

This is achieved through supply chain visualisation and offers central companies an overview of where suppliers are located and where material is sourced from and allows for decisions based on risk assessment. Furthermore, physical products are labelled and tracked along the supply chain from the source to the consumer through our mobile application. Information connected to the product is passed between stakeholders and its authenticity is validated through satellite data and blockchain. Creating added value by being able to connect the journey of a product to the point of sale. The consumer will also be able to connect to the origin of the product, support sustainable projects, balance its carbon footprint and/or recycle the raw materials present in its product at the end of its life.

2.20.2 Prototype solution

Xylene is creating a transparent supply chain for SME adopters where essential steps of the material journey are tracked to deliver the best possible product to consumers. With the development, consumers will have the opportunity to experience the origin of the products themselves and connect to the community to interact with farmers in the country of origin. As part of the prototyping stage,

the company significantly developed its traceability app and tested it with SME adopters in the field. This helped them to validate the user experience and begin with software development to achieve the successful pilot testing with real products.

Xylene's solution works in three steps:

- Supply Chain Mapping & Risk Assessment through a web dashboard: visualising the supply chain offers central companies not only an overview of where suppliers are located and where material is sourced from, it also allows for decisions based on risk assessment.
- Product Flow Tracking through the mobile application: physical products are labelled and tracked along the supply chain from the source to the consumer. Information is connected to the product; it is passed between stakeholders using blockchain and its authenticity is validated through satellite data.
- Customer Engagement on the final product: being able to connect the journey of a product to the point of sales leads to added value of the final product. The consumer will also be able to connect to the origin of the product, support sustainable projects, balance its carbon footprint and/or recycle the raw materials present in its product at the end of its life.

2.20.3 Technical development during Prototype stage

For the prototyping phase of BlockStart Xylene set technical milestones around the product development by giving priority to the mobile application and the data layer component to enable traceability of product flows at SME adopters. For this it was critical to get a detailed understanding of the current structure of the supply chain at its SME adopter and the target which shall be achieved with the final implementation. Based on this, the development of the user experience was performed. As the mobile application is used by suppliers of SME adopters the user experience had to be intuitive and perform without disrupting current processes.

The early interaction of potential adopters, through short iterative testing cycles, was decisive in the successful development of both UX and UI for the mobile app.

In parallel, Xylene began the development of the backend structure including the blockchain. For this a simulation was created which stores transaction on a permissioned blockchain. User-friendliness and data privacy were key factors defining and measuring the success of this milestone.

Next steps in the development are the web dashboard and the fine tuning and integration of the blockchain layer in the final product. Furthermore, Xylene will continue conducting multiple pilot projects in order to collect more user requirements and most importantly identify features common to different targeted markets. Based on these requirements a standard scalable product ready for market uptake is planned to be achieved in the next 12 months.

2.20.4 Business development during Prototype stage

During the prototype phase of BlockStart business development efforts were mainly targeted towards strengthening the business and market strategy and creating an investment pipeline with a strong pitch.

Xylene created an in-depth competitive analysis and started initial efforts at developing a pricing strategy for the final SaaS product.

Together with the support of their mentor, the company performed a market positioning and began concentrated sales activities. During the prototype period it presented the pilot project to several potential customers in virtual meetings and managed to sign a pilot customer in the coffee industry, with two further SME's interested and signing commitment letters. During these customer presentations, Xylene used the opportunity to validate its market fit and get a strong feedback on the need of its customers.

As the company is targeting pre-seed investment, it has been very active pitching its startup to angel investors. Investment will enable them to hire additional team members for software development and sales to accelerate the development of the pilot projects.

2.20.5 Testimonial

"The BlockStart programme has been a great experience for us as a startup. The management has been very professional, and the organisation and communication has been very open and upfront. The prototype phase has given us the opportunity to develop our product and service in a customer-centric way while offering us expert support and guidance in the journey. From setting the targets for development and realisation to coordinating the approach for customer tests and investor pitches the mentoring has been at the highest level and with great enthusiasm. The virtual presentation and selection events have been engaging even though no personal meetings were possible. Overall, the prototype phase was a success for us, and we would recommend BlockStart to any Blockchain developer startup."

Christopher Edwards, Co-Founder / CEO, Xylene

2.20.6 Funding

Total funding received under BlockStart: €16,000 (€1,000 for Ideation Kick-off and €15,000 for Prototype stage)

2.20.7 Public profile

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/xylene/

3. SME Adopters

3.1 Albicchiere

AlBicchiere is Nespresso for wine. Thanks to our patented technology on fluid dispensing, we built a smart platform for wine that revolution the way people discover, buy, and enjoy wine.

AlBicchiere has tested, validated and adopted Datarella's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: We believe a solution based on distributed ledger technology is the only way to control a complex logistic chain with many different actors. Control of the logistic chain and accurate definition of events that may potential generate quality issues (such as thermal shocks and physical shocks) is very important for wine. Hence, the idea to integrate blockchain in the wine logistic process!

Added value of the solution to the company: We believe that the value added by distributed ledger in the control of logistic chain would incentivize consumers to purchase from us (as they would have complete transparency and control for whatever happened during transportation) and would also incentivize wine producer to use our system (for the same reason).

What has been done during BlockStart's pilot stage: Together with Datarella team we did a proof of concepts using their Track & Trace platform. This PoC and the discussion with Datarella helped us to clarify how distributed ledger could be integrated in the logistic chain for wine, and the test gave us a first-hand experience about the potential use case. This gave us more confidence in taking the next steps to integrate DLT in our business and how to get the different partners onboard in the process.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/albicchiere/

3.2 AZZUR Portugal

AZZUR PORTUGAL is a management consulting, accounting and advisory company.

With a young, dynamic, experienced and focused team their goal is to provide an efficient service within a concrete and acceptable time horizon, serving the customers with the outmost rigour and confidentiality, keeping them constantly informed of their business situation, respecting the requirements of tax administration in accordance with essential values: ethics, responsibility and competence.

Total funding received under BlockStart: €1,500 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

3.3 Beez & Toys

Beez & Toys believes that our children are the most important in the world and the company's wish is for our children to have a healthy development and to grow up in a supportive and clean environment.

Beez & Toys has tested, validated and adopted Infidia's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: The company was willing to adopt a blockchain-based solution from company Infidia because it thought that their solution could be important to the company in the future, and it liked the team.

Added value of the solution to the company: The company thinks that implementing the solution from company Infidia would bring added value because their solution will enable Beez & Toys to use some financial instruments that it would not be able to use. Those financial instruments could be crucial for the company's liquidity and growth.

What has been done during BlockStart's pilot stage:

- Very constructive meetings

- The company was introduced with solution and functions of the app

 Beez & Toys suggested some changes that were adopted

 Infildia team members explained to Beez & Toys how their solution works and how is connected with blockchain

The company explained its production and sales process that will be implemented in Infidia's solution

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/beez-e-toys/

3.4 Birojs

Birojs provides product delivery services in Latvia, incl. b2b delivery where it delivers to more than 6000 offices daily (birojs.lv) and it recently launched b2c brand (ertadzive.lv) where it deliver groceries and household items to end-consumers.

Birojs has tested, validated and adopted Kedeon's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Kedeon provides solutions that the company believes would help its daily operations. The company is also keen to play and test with technologies that will help its business, and blockchain technology has great potential.

Added value of the solution to the company: Birojs is especially interested in storing its delivery data in a way that will serve as proof both to customers and in the legal world, as well as provide this information to regulatory bodies.

What has been done during BlockStart's pilot stage: The company put Kedeon's sensor devices in its warehouses to monitor the conditions of products that are stored and delivered to Birojs. Additionally, Kedeon installed devices in two of the company's delivery trucks.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/birojs/

3.5 Blue Circle

Blue Circle's goal is to provide fresh and healthy fish to its b2c and b2b customers. The company ais using the latest technologies and it has the most modern fish growing facilities in the Baltic states.

Blue Circle has tested, validated and adopted Kedeon's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Blue Circle has built one of the most advanced fish growing facilities in the Baltic states. Its facilities have a lot of technology and the company is already utilizing IoT sensors to monitor its operations in the farm. After Kedeon approached the company and offered to test out their solution, Blue Circle immediately took an interest in testing, because it would help the company to keep a competitive edge in the market.

Added value of the solution to the company: Blue Circle is very interested in monitoring its deliveries, as it is planning to do exports to other countries and HoReCa industry players which would value transparency aspect.

What has been done during BlockStart's pilot stage: The company has monitored deliveries in the region of Latvia. It delivers twice a week.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/blue-circle/

3.6 BRControls

BRControls develops products and supplies web-based operating systems for technical installations. We do this entirely independently. Innovative, but never losing sight of functionality, as proven by more than 4000 installations that we have supplied to date.

BRControls' systems are set apart by their open, transparent nature and extremely user friendly, intuitive operation.

The three BRControls pillars that you can count on:

- Quality hardware for process and utility installations. We are experts in hardware development.

- Demand-driven software for energy efficiency. We are experts in software realization.

- Performance assurance for sustainable work. We are experts in data processing.

BRControls has tested, validated and adopted 2bSMART's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: A solution for ensuring that an office building is 'corona proof' from an air quality point of view.

Added value of the solution to the company: Brings a lot of knowledge on the application of smart contract.

What has been done during BlockStart's pilot stage: Specificy, develop, build and install sensor, delivery of data, attending evaluation meeting.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/br-controls

3.7 CAM Engineering

CAM Engineering (CE) is a company founded in 2011. in Novi Sad, Serbia. CE is dedicated to bringing automation solutions to industrial and nonindustrial business areas developing machines and software. CE has entered the ICT sector, developing software in automation, machines, robotic systems, banking, e-commerce, wireless sensor networks (WSN), ID technologies, mobile applications, etc. More recently developing software solutions for the agro-food sector, with projects in e-commerce and crop management with WSN.

Fields of operation:

Automation

Automation of industrial and non-industrial systems. A high level of expertise and vast experience of our employees allow efficient and effective implementation of all types of applications.

Engineering

The basis of any reliable system is well selected, installed and tested equipment. Preventative maintenance and training of system users are also very important factors of a reliable system. Therefore, to meet the requirements of various users and environments, CE is using only the best quality products and services.

ICT sector

CE has a dedicated team of software developers with experience in embedded systems, ID technologies (RFID, QR code, etc.), Internet of Things (IoT), database design, web development, and mobile applications, working to bring the best tailor-made solutions as well as market solutions.

Total funding received under BlockStart: €1,500 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/cam-engineering/

3.8 CopyRage

As a social trading platform CopyRage connects bloggers, professional stock traders, betters and novices in order to keep them constantly active via the rating system that motivates them to develop their personal accounts. All the transactions are being processed via the APIs at external platforms. As a result, CopyRage is absolutely secure and legal worldwide.

Lack of experience and trust are the major problems most of newbie and professional traders and betters experience nowadays. Solid and reliable platform acting according to the guidelines of fintech regulators and customer expectations is needed. CopyRage offers a better product by connecting customers without being involved in direct trades. Dedicated team and a clear set of values are the strong foundation of CopyRage, setting apart it from the competitors.

Total funding received under BlockStart: €1,500 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/copyrage/

3.9 Deliv

The company's goal is to provide fast, same-day delivery across the whole country.

Deliv has tested, validated and adopted Kedeon's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Deliv had heard something about this technology before but did not take any interest in it, because it was mostly used in the financial sector. After Kedeon told more about how this technology can be used in monitoring solutions, the company was excited to do some pilot project testing and see what value the solution can bring.

Added value of the solution to the company: Deliv recently launched its delivery service and is looking for ways to distinguish itself from the competition. Customer satisfaction is one of its focuses to build out a client base and this solution provides ways to improve trust in the company's services.

What has been done during BlockStart's pilot stage: Deliv tested 5 devices in both, short-range and long-range deliveries. The solution was used directly in deliveries where the company enabled end customers to view and verify historical information of the temperature in delivery. The company provided some feedback, helped to catch out some bugs and provided list of features that are needed to improve the solution.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/deliv/

3.10 DWA

DWA feels responsible for the world around us. Our consultants continue to devise smart, sustainable solutions for the buildings and areas of tomorrow.

Strategic issues are part of our daily routine. We uncouple entire housing estates from the gas distribution network, we design energy-efficient, comfortable offices in which people are more productive, and we reduce CO_2 emissions. Our engineers make the Netherlands sustainable. We don't waste time talking, we get on with it.

DWA has tested, validated and adopted 2bSMART's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: A solution for ensuring that an office building is 'corona proof' from an air quality point of view.

Added value of the solution to the company: Brings a lot of knowledge on the application of smart contract.

What has been done during BlockStart's pilot stage: Idea / design / data provider / provider of risk model indoor climate / pilot location / event organisation / inviting people / coordination of film.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/dwa/

3.11 Eldro Technologie

ELDRO TECHNOLOGIE is the company which executes and coordinates innovative technological projects and develops proprietary IT solutions for the technical infrastructure and services management.

ELDRO24 is the company's main product which is an innovative IT software for the road industry, created for the companies that are carrying out the infrastructure maintenance. It allows automatic monitoring of contracts, as well as provides the contractor a range of tools allowing optimisation of work and improvement of the economic efficiency.

ELDRO TECHNOLOGIE has tested, validated and adopted Rexs.io's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Critical and road infrastructure maintenance companies use platforms to track and manage the maintenance efforts which helps to reduce the costs of maintenance readiness. The real challenge is keeping up with the very demanding conditions of the Service Level Agreement. One of the main issues of those companies is control over their service workers and subcontractors fixing problems with the infrastructure when the malfunction is reported. Photo evidence is sometimes taken into consideration – the service worker takes pictures of completed work and sends it to their managers. However, this process is not automated and requires further authentication and engagement of several employees. A mobile app integrated with rexs.io would solve the problem of work evidence.

Added value of the solution to the company: Against common view not every aspect of road sector is open for digital solutions. One of them is infrastructure maintenance which is the field of ELDRO TECHNOLOGIE activity. The process of digitization this field is a novelty in itself. However, the company looks for ways to convince local governments and services companies about advantages of the implementation of its product. Security of data is one of the common fear. Consequently, ELDRO TECHNOLOGIE is looking for solutions, which could bring a competitive advantage and help its customers feel safer about their data.

What has been done during BlockStart's pilot stage: The goal of blockchain implementation in software ELDRO24 is securing data from IoT sensors. According to the company and its clients three aspects should be included:

The data which are sourcing and handling cannot be changed, removed or transferred without authorized permission.

Solutions should be easy to implement on different IT infrastructures as our customers often use their own servers, databases, etc.

The blockchain-based security system should be easily accessible from anywhere in the world.

According to the company, Rexs.io did not only deeply understood its needs, problems, but also proposed some solutions, noticed other advantages and disadvantages associated with specific issues. Therefore, in full awareness ELDRO TECHNOLOGIE can confirm the partnership with Rexs.io was satisfying for both sides.

Total funding received under BlockStart: €4,500 (€1,500 for Ideation Kick-off and €3,000 for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/eldro/

3.12 Go Limpets

Go Limpets specializes in the investigation of the life cycle of limpets and its production. The two species of limpet (Patella aspera and Patella candei) are part of the gastronomic identity of the Macaronesian islands and are at risk.

To preserve these species from overfishing, an ecological and sustainable production is necessary.

The company's mission fits in the Sustainable Development Objectives of the UN, specifically Objective 12: Responsible Consumption and Production and Objective 14: Life Under Water.

Go Limpets has tested, validated and adopted Datarella's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Go Limpets handles live food products, in which hygiene and security is always a must. Trust in its supply chain is fundamental, and the company wants to show this to its customers. According to Go Limpets, blockchain is a good toolkit to ensure this trust, but it's the reporting and timeline from origin to final recipient where this solution is desired.

Added value of the solution to the company: It would place Go Limpets in a unique position to demonstrate the quality of its products and service. Which is well received by both gastronomy as well as end consumer of live seafood.

What has been done during BlockStart's pilot stage: Go Limpets deployed the Track and Trust as an example workflow. From the different roles it had: Sourcing, logistics operator (executed by us) and receiver. The company installed the software on the smartphone app and used the web platform to generate the acquisition request. It also explained the current workflow in the value chain, and how the current system is adaptable to it. Certain aspects (human-based) are hard to change in the existing workflow, and resistance from certain actors is expected. So, the company suggested several points of improvement and facilitation to overcome expected barriers in the agrofood industry. The Track and Trust solution was considered to work very well, and Go Limpets were happy with the on-line illustration of the value-chain history that can be generated. Its customers would be positively impressed, and the company would also be able to better control its suppliers.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/golimpets/

3.13 Janis Sauka

JS Meistardarbs aims to provide the best quality meat products for its customers. The company is proud of our vast offering of different meat and bakery products which are fresh and healthy.

Janis Sauka has tested, validated and adopted Kedeon's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Janis Sauka is not very familiar with technology because its business evolves around different industries. But according to the company, the team from Kedeon explained very nicely the possible impacts of this technology. One of the most important reasons for why the company chose to participate in the pilot-project is the offered complete solution and how it is put together for easy use.

Added value of the solution to the company: Janis Sauka is positioning itself as a brand that provides quality and fresh products. With the help from Kedeon, it belieaves it can improve its brand in customers eyes and provide transparency in its products.

What has been done during BlockStart's pilot stage: The company put devices in multiple locations to better understand its supply chain. It put devices in manufacturing facility, one device was put in delivery trucks and additional devices were put in shelfs where customers can see and check the temperature themselves.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/janis-sauka/

3.14 Latitudo40

EARTHALYTICS IS THE FASTEST AND EASIEST SOLUTION TO CREATE AND MANAGE GEOSPATIAL ANALYSIS APPLICATIONS.

For the first time in one platform all the features to automatically search, process and elaborate the images produced by Earth observation satellites and transform them into information to simplify business processes with powerful artificial intelligence and machine learning algorithms.

Latitudo40 has tested, validated and adopted Rexs.io's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: AgriAlytics allows to monitor the fields remotely, identifying any problem that may occur in your crop and the effects of treatments during the season. Thanks to our cloud platform your field information is constantly updated, acquiring data from in situ sensors or satellites that daily acquire images of our planet. The maps created with AgriAlytics are easy to read and understand, accessible from any device. Crop health, crop growth conditions, and major variations at field level are evident at a glance and many problems can be

avoided through our artificial intelligence algorithms. AgriAlitics allows you to create a digital model of your field (digital twin) to simulate through complex analysis algorithms the effects of production model changes (nutrient increase, water increase, etc.) and compare results through a time series.

Added value of the solution to the company: Blockstart is a great opportunity for our company to start implementing DLT solutions within our technology platform to make more secure and guaranteed the information transferred to our customers, certifying both the source of the data and the exact time when the image was purchased and processed. Using a DLT solution our users, especially in the field of urban planning (municipalities) and infrastructure monitoring (energy, water and railways) can have the guarantee that the information received is secure and has not changed, always going back to the source of the data before processing. In addition, participation in Blockstart would allow the company to maximise its media exposure in a European context of maximum innovation.

What has been done during BlockStart's pilot stage: EO data and information product integrity, traceability, automated certification and auditability. The use case includes organising, arranging and tracking distributed processing in the cloud, and building trust in algorithms and data processing chains, in particular the authentication of provenance and certification of data and processes. For the Latitudo40 Products Life Cycle this involves:

The use of blockchain data structures to validate EO data and metadata (data acquisition time/date etc.) provenance, by providing a trust anchor that any third party can use in case of a dispute

The use of blockchain data structures to verify the steps of processing, archiving and dissemination of the data from the Latitudo40 Core module to the end-users

We can imagine also a second use case Digital representation of assets for emerging DApps (Distributed Applications) services and Smart Contract execution. This use case is to demonstrate the role of EO in blockchain applications; in particular how EO can bridge and connect the physical environment to digital ledgers, and support the formulation of structured data flows in a variety of asset management, risk management, environmental management, logistics or insurance domains.

Total funding received under BlockStart: €4,500 (€1,500 for Ideation Kick-off and €3,000 for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/latitudo40/

3.15 Leste

Technology is continuously changing the way we live. New tech solutions give us possibilities to organize educational process as never before. LESTE wants to be part of that process. Actively working on big e-Learning projects in SEE and around the world.

Leste has tested, validated and adopted Infidia's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Leste was part of few conferences about blockchain and organized one of them, Blockchain Adria Meetup, a few years ago. For this reason, the company is quite familiar with blockchain and always willing to adopt blockchain solutions.

Added value of the solution to the company: Leste has already used factoring before, but it was very time-consuming. Also, it needed to exchange multiple emails and documents, with many human errors during the process. Infidia allows Leste to focus on its business, and the blockchain technology provides an additional layer of reliability for the lenders as it was discussed many of these models in its meetings.

What has been done during BlockStart's pilot stage: Leste had many meetings with Infidia explaining its business and sending examples of the factoring process. As mentioned, the company pointed out some mistakes in the process. Leste's feedback improved the Infidia web app as they followed the company's advice and served as a basis for developing the new feature of notifications of Infidia.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/leste/

3.16 Lift4Food

Recover surplus food to be part of delicious social dishes.

Total funding received under BlockStart: €1,500 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/lift4food/

3.17 Marsben

Marsben creates brand experiences that increase the perceived value of brands. Team that believes that there should be digital content that reflects the value of your business. Marsben is a creative studio creating commercials, video campaigns, photography, graphic and web design.

Marsben has tested, validated and adopted Infidia's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Blockchain technology is the future and Marsben wants to take part of that future. The company chose Infidia blockchain platform as something that it needs and will add value to its company.

Added value of the solution to the company:By adopting the Infidia blockchain platform, Marsben will be able to track its production process, create invoices, get data insights and get to finance in an easy manner. Getting to financial instruments in an automated and easy way will help the company in scaling and liquidity.

What has been done during BlockStart's pilot stage:

- Deep dive in blockchain technology and Infidia platform

- The company was introduced to the functional and non-functional capabilities of Infidia

- Very constructive meetings on a regular basis

- Suggesting additional features, reporting bags and problems

- Suggesting best merge with Marsben

- Explaining Marsben work and where it can add Infidia

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/marsben/

3.18 mBrain Train

mBrain Train strives to make EEG (method of brainwave recording) an invisible and seamless piece of technology that will ultimately blend into the lives of everyday people. Its strategy is to create tools that are intuitive. easy to use and fun, therefore enabling people to focus on what they know best and what they chose and love to do.

mBrain Train has tested, validated and adopted Infidia's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Almost eight years ago, mBrainTrain won first place in the competition for Serbia's best technological innovation, organized by the Ministry of Education, Science and Technological Development. However, the company is continually researching new technologies. One of these is blockchain, and mBrain Train was curious about what Infidia has to offer in this space. Also, the company's customer profile (institutes, universities) often means long payment delays. Infidia offered a way to solve this challenge.

Added value of the solution to the company: It is quite useful to have financing on-demand. Sometimes, mBrain Train can use its accounts receivables for paying small bills without the need to fill some complex documentation. However, in the company's feedback on the Infidia web app, it mentioned that a few additional sections wouldn't make a significant change to those that seek finance. In general, the company sees Infidia's as a cash-flow solution. Their platform seems to offer more, but this one is of particular interest to mBrainTrain.

What has been done during BlockStart's pilot stage: In the past months, mBrain Train engaged its COO&CFO in almost all meetings to provide structured feedback to Infidia. His feedback on the web app proved useful, as Infidia made most of the requested changes. In addition to following the KPIs set by Infidia, the company gave them a few more KPIs to think and present to regarding their banks' process. These are their responses that mBrain Train was examining in their meetings:

- Value in the verification of business transactions behind the invoice that provides the basis for invoice discounting

- Linking orders with invoices and various documents

- Reducing double-spending, fraudulent and invalid invoices

- How to create a pool of clients for banks that were non-eligible before Infidia

- Unlocking small invoices, otherwise non-cost-effective

- Enabling a bundle package and defining the level of risk

- The company also discussed their idea to accelerate the entire factoring process (or part of it) with notifications. With all of this in mind, mBrain Train feels that Infidia is on the right path.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/mbrain-train/

3.19 Mlekara Petrov

The mission of Mlekara Petrov is to provide quality organic food to each family table, fostering family relations, and the knowledge of what is good for us.

At the same time, our vision is to bring these families back to nature, creating a community of educated people living on sustainable organic farms improved by technological advancements.

Mlekara Petrov has tested, validated and adopted Infidia's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Like biodynamic agriculture and experience with different cultures, the company is interested in expanding its knowledge and finding out what the new technology has to offer. Its business is experiencing rapid growth, and it needs tools and finance to support it. With Infidia, Mlekara Petrov was willing to improve the factoring by expanding it to some of its clients that weren't eligible.

Added value of the solution to the company: The used factoring before, and it sent examples of the documentation process to Infidia, provided them access to its software, and tested their solution.

What has been done during BlockStart's pilot stage: The company provided to Infidia the documentation of the factoring process with one of its clients. They had many questions about the company's business, and Mlekara Petrov also provided them access credentials for the software it uses (for the previous year for the testing purpose). At meetings, Infidia explained how the process works, provided Mlekara Petrov with the contact of the software provider, and the company tested their solution.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/mlekara-petrov/

3.20 P.G. Vladimir Ciric

Traditional family farm "Poljoprivredno Gazdinstvo Vladimir Ciric" tends to become a modern farm that produce field crops (corn, wheat, barley and soybean) by using information technology, satellites and scientific knowledge. Such approach should lead to the higher yields and recognizable products with better quality. Business development should provide assets for the increase of the area of farm fields.

The mission of the farm is to produce grains of known origin with minimal environmental impact and use of the resources. Thus, family farm contributes to the improvement of the food quality on the market, human health and sustainable environment adding value to the community. The mission of the farm is to support concept of sustainable intensification of agriculture.

Total funding received under BlockStart: €1,500 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/vladimir-ciric/

3.21 Piegade69

Piegade69 wants to provide quality on-demand delivery services in all regions of Latvia.

Piegade69 has tested, validated and adopted Kedeon's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Kedeon invited Piegade69 to test out their solution which involves blockchain technology. After talking about potential use cases, the company was very interested in collecting proof about the quality of its delivery. As Piegad69 understands it, blockchain-based measurements will have legally binding power in the future, and because the company is a third party delivery service provider, it wants to collect trustworthy data and show this information to its b2b customers.

Added value of the solution to the company: Currently, the solution is in the development stage, but it has the potential to be very useful even without blockchain features. Devices are very mobile with long battery life and very easy to use. The blockchain technology layer will help Piegade69 to provide legitimate transparency in its operations.

What has been done during BlockStart's pilot stage: Piegade69 monitored almost 100 deliveries and provided feedback and list of updates that it would like to see in the platform. Piegade69 tested 5 devices with 4 couriers.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/piegade69/

3.22 Tickets4Good

Our mission is to make events more charitable and inclusive through tickets. We do this by providing a self service ticketing platform, like Eventbrite but with charity donations built in automatically.

Total funding received under BlockStart: €1,500 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/tickets4good/

3.23 Vawlt

Vawlt is a dynamic storage platform that simplifies the operation of multiple clouds, guarantees data security and privacy, and optimises storage resources.

Vawlt is a start-up from Lisbon, Portugal, founded by researchers from a very prolific R&D group – LASIGE – within the University of Lisbon. For the past decade, the team has been working in several technologies related to data security because Vawlt believes everyone is entitled to control and decide the destiny of their own data, and companies should be more responsible in handling such valuable and personal assets.

With a single login, and a single monthly bill Vawlt unlocks the potential of several storage media like on-prem, private cloud providers, and public cloud providers.

The product allows companies to reduce their maintenance and operational costs, by offering the capability to set up customised data storage volumes, according to specific needs like price, performance, location, or compliance. Such volumes can be accessed by the companies' various devices via "ready to use" interfaces aiming for a zero-disruption integration. The whole system is secure by design, where data is encrypted and signed at the users' devices with a zero-knowledge end-to-end protocol and several state-of-the-art encryption techniques.

Vawlt has tested, validated and adopted Rexs.io's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Vawlt's core value proposition revolves around privacy and transparency, which is much aligned with what is possible to build using blockchain technology.

Added value of the solution to the company: The company has always believed that integrating with one or more blockchain-based solutions would be very beneficial for its customers, and therefore for its business.

What has been done during BlockStart's pilot stage: Vawlt has created a full integration of Rexs.io notarization technology with Vawlt secure multi-cloud storage. This integration creates a solution that ensures end-to-end data integrity, from the notarization process to the storage in multiple clouds. The Rexs.io 's Agent and Notary services were provisioned and configured in Vawlt's infrastructure and used a Vawlt storage volume for storing the data in multiple clouds in a secure and reliable way. The Rexs.io solution was plugged into a test pipeline where the company successfully confirmed the correctness of the integrated solutions and that this integration is totally viable in terms of performance.

Total funding received under BlockStart: €4,500 (€1,500 for Ideation Kick-off and €3,000 for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/vawlt/

3.24 We Encourage

We Encourage works as a fundraising agent for NGOs and small-scale fundraisers empowering women and girls under oppression, honor-based violence and forced marriages. To accompany this We Encourage is building a conversational AI tool.

Hundreds of millions of girls and women are suffering from different forms of violence and oppression. Also, 12 million girls are forced into marriage every year, end of childhood, end of education. We Encourage believes that every girl has the right for education, equality and empowerment. Every woman has the right to live free from violence and oppression.

Globally, there are thousands of Non-profit organizations helping girls and women under oppression. However, for fundraising these organizations lack resources and tools, marketing know how, transparency, just to name but few. From the donor's side, research shows that donors value transparency, follow-up, communal feeling and connection.

Total funding received under BlockStart: €1,500 (for Ideation Kick-off)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/we-encourage/

3.25 Zelena Tocka

Zelena Tocka is a distribution center running the short food supply chain network with vegetables, fruits, and other local products. Since its establishment, its mission is to connect local farmers with end-consumers and offer them local, fresh, and healthy food. The company manages to cover end-customers from the entire region of Pomurje (North-Eastern part of Slovenia) and includes different public institutions (kindergartens, schools, hospitals, etc.) into the Short Food Supply Chain. Its vision is to share the company's approach and best practice within the SEE region.

Zelena Tocka has tested, validated and adopted Datarella's blockchain-based solution in the scope of BlockStart.

Why has the company decided to implement the solution: Short Food Supply Chains are traditionally small supply chains lacking knowledge, skills, and resources to implement advanced solutions into their systems. A cooperation under BlockStart project and with a company like Datarella having knowledge, skills, and support measures in place to support the company in digital transformation, was considered the right approach to make sure that the company's traceability system can be improved in future.

Added value of the solution to the company: The challenges in local food distribution are the following:

- Food fraud prevention in the sense of making sure that the source of products is local

- Lack of transparency through the entire SFSC

- Lack of product/producer information accessible to the customer

- Lack of verifiable digital identity of participants in SFSCs

- Accessibility of food certification information (integrated, ecological, protected geographical identity)

- Lack of knowledge and resources to equip SFSCs with IT systems

- To ensure transparency, traceability, and trust of the local food production, blockchain technology presents the natural technology fit in the so-called Short Food Supply Chain.

What has been done during BlockStart's pilot stage: Initial presentation meetings have focused on presenting the current process in Zelena Točka – starting with the farmers who are producing local food, continuing with logistics/storage operations, and finishing with all sales channels (physical stores, web-stores, gross sales). Focus was also to present current software solutions used and required to be integrated with the blockchain technology in implementation phase. Datarella GmbH solution "Track & Trust" was presented to the company, including different implementation scenarios and future development plans. Finally, actual testing of a showcase prepared by Datarella was executed including several persons taking different roles in the supply chain. The work was done remotely by using video conferencing tool and different mobile devices to simulate the digital identities confirming steps in the supply chain. The company's impressions after the Pilot testing are quite positive since it has had the chance to work with an actual solution and has identified some important features for its implementation in the future.

Total funding received under BlockStart: €3,000 (for Pilot stage)

This and further information is publicly available on the following webpage on BlockStart's website:

www.blockstart.eu/portfolio/zelena-tocka/