STØP
FAKE
FOOD

ENJOY FOOD, NOT LIES

Be part of the global food authenticity solution

DO WE KNOW WHAT WE EAT?

This question plagues our contemporary society.

SFF is on a mission to create a solution to fight food crimes for Governments, Laboratories, Companies and the General Public of food lovers.

FOOD CRIME IS GLOBAL

Global food crime is estimated to stand at around $300 billion annually

Food crime is a vast area of activities that can range from seemingly innocuous regulatory non-compliance to organized crime operating industrial scale international cartels.

It can happen at any stage:

Production

Processing

Distribution

Retail

Here are some examples:

Olive oil more profitable than cocaine

Italian extra virgin olive oil is highly sought-after in the US market with olive oil counterfeiting being held at the hands of mafia clans. Italian extra virgin olive oil can sell for $50 a gallon, but a fake product costs only around $7 to make.

Asian fish on formalin

A 2005 study done by Indonesian authorities found that. out of 161 tested samples of seafood, 64 were found positive in containing formalin. 2011 researches in Bangladesh found almost 50% of local fish samples contain formalin. The most recent scandal of lacing fish with formalin was in Chennai (South India) in June 2018 and caused a crash of the local fish market.

Chinese milk scandal

The 2008 Chinese milk scandal is one of the biggest food safety crises of the past decades. 300.000 babies were affected due to consumption of products laced with toxic additives.

Horse and pork in burgers

One of the biggest frauds was the 2013 horse meat scandal in Europe. Investigations carried out in Ireland and the UK, and later in 13 other European countries, found many instances of processed beef products sold in major supermarket chains containing undeclared horse meat and traces of pork.

5

EUROPOL-INTERPOL

Operation OPSON is an annual joint Europol-INTERPOL operation targeting counterfeit and substandard food and drinks, mostly in the EU market. The 2017 operation alone resulted in the seizure of 9800 tons, over 26.4 million liters, and 13 million units of food products and beverages.

The 2017 operation resulted in food and beverage seizure of:

9800
Tons

26.4
Million liters

13
Million units

The total worth:

€230
millions

WHY DOES IT MATTER?

IMPACT TO SOCIETY

Health hazards

We are consuming food with various toxins, lethal carcinogens and unlabled allergens. Consuming unknown meat ingredients (ex. rat meat or horse meat) has is a high risk of foodborne diseases as it is unclear how animals were treated and what was the cause of their death (ex. parasites, infections, viruses, etc.)

Business losses

Food counterfeighting causes food and beverage manufacturers around the world to losse revenue, with low quality fakes damaging brands

Religious and Ethical diets

Numerous scandals where personal dietary choices were infringed - pork in Halal and Kosher processed food, beef in Indian dishes, meat traces in vegan and vegetarian products.

Consumer expectations

Counterfeit gourmet foods and beverages cheat consumers of their money and expectations.

CURRENT SOLUTIONS

Food crime is very difficult to prevent. It can take many forms and occur at various stages of food production, processing, logistics and retail – the tampering possibilities are vast. Besides active law enforcement measures, two main approaches are currently being applied to tackle food crime – analyzing the products themselves or trying to track their logistics networks.

The best way to identify counterfeit, substandard or potentially harmful food products is to look at their content – conduct thorough research and analysis in a specialized laboratory. An approximate 1500 private and state-run laboratories worldwide are currently fully or partially specialized in performing research on food product safety, quality and authenticity.

INTRODUCTION OF CONCEPT

SFF takes on a completely new approach to tackle food crime and creates a solution that combines the newest scientific achievements and technical innovations in Raman Spectroscopy, Artificial Intelligence and Blockchain.

SOLUTION OVERVIEW

SFF solution is the combination of three pillars:

- **Vast database** of food samples (samples, reference data, metadata)
- **Neural Network** (machine learning models and their customization)
- **Hardware network** (raman spectroscopy devices, nodes and data sharing facilities)

To ensure solid growth and sustainable scaling of SFF to a global level.

We see DLT (**Distributed Ledger Technology**) as the perfect solution and decided to develop an infrastructure, custom made for the requirements of the project.

SFF main **target markets at launch are institutional and B2B clients**. The primary goals of SFF is developing an infrastructure capable to scale and self-sustain, **providing a solid base for third-party developers** to create and distribute consumer solutions.

Based on these premises, we are developing the SFF Chain.

SFF ECOSYSTEM

The SFF Chain is a permissioned Blockchain, based on a PoA and PoS mixed consensus mechanism. The SFF Chain is built on these pillars:

- **Blockchain/DLT**
- **Network of Nodes**
- **Virtual Machine** (implemented via shared computing capacities of SFF Node Network)
- **Cryptocurrency based economy**
- **Self sustainable ecosystem**

SFF Chain is designed to be highly customizable and consists of several layers to ensure continued scaling of capacities and capabilities of the SFF Platform:

- **Data storage**
  SFF Chain acts as a distributed data storage facility for samples and reference data

- **SFF OPEN Market**
  SFF creates a solution for service providers to offer their services via the SFF Open Market

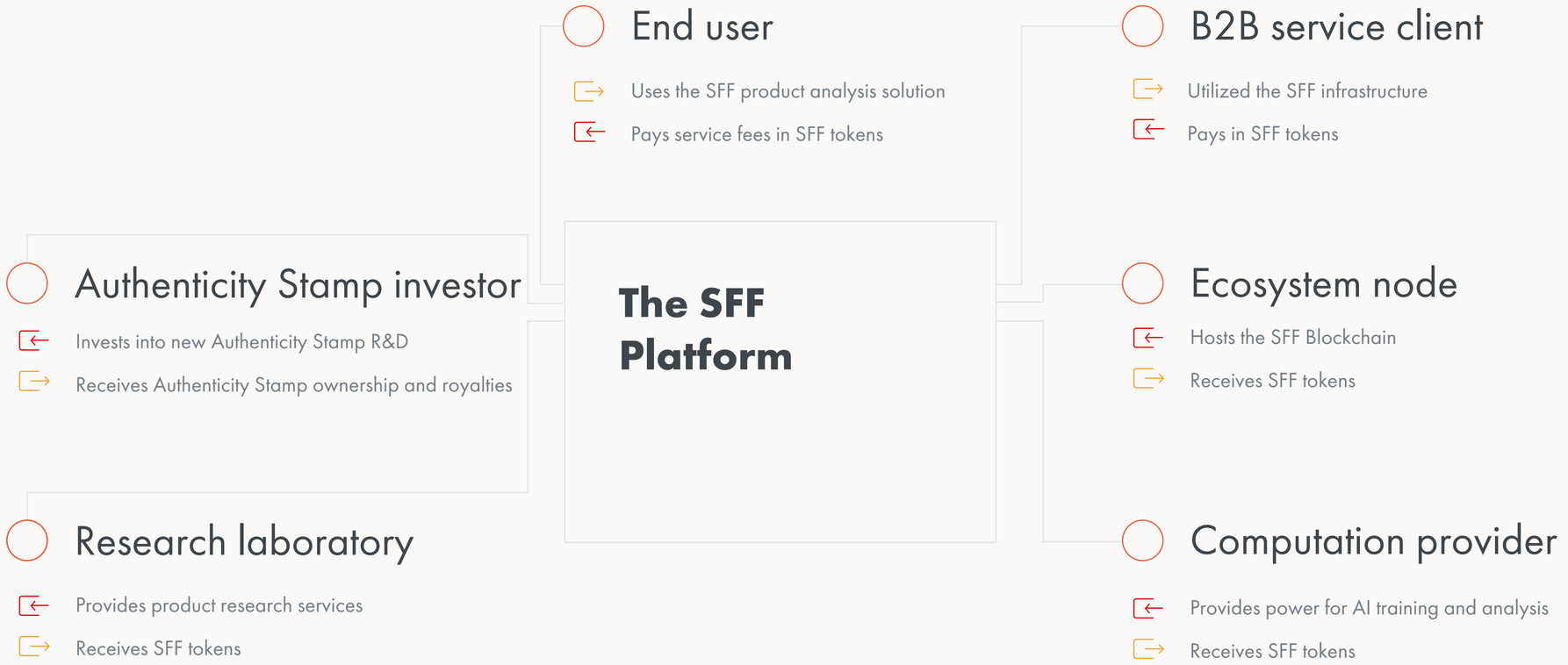
- **Data Harvesting Campaign**
  Any laboratory can continuously upload reference data in exchange for SFF tokens

- **Blockchain/DLT**
  Allows storage and mapping of SFF data to perform the necessary operations and transactions in a transparent and immutable yet private manner

- **Scalable, community-driven Neural Network**
  The capacity of NN solutions is endless - it can solve complex inquiries, analyse data by sets of different parameters and be customised according to the needs or availability of resources.

- **VM / Service Orchestration**
  To develop new services on top of existing infrastructure. It allows public (on-chain) or enterprise (off-chain) use.

ECOSYSTEM MODEL SCHEME



SFF KEY FEATURES

The result is an easy to use, viable and reliable solution, non invasive testing.

Fast 

While laboratory research takes days or weeks, SFF provides reliable on-the-spot results in a matter of minutes

Cost-disruptive 

Disruptive efficiency with more than 80% cost reduction when compared to conventional methods

Non-invasive 

No product sampling needed as SFF can work through many types of glass, plastic or paper packaging

Scalable 

Global expansion facilitated by distributed infrastructure and an incentive-based business model

When compared to current approaches, SFF stands out as a truely disruptive solution

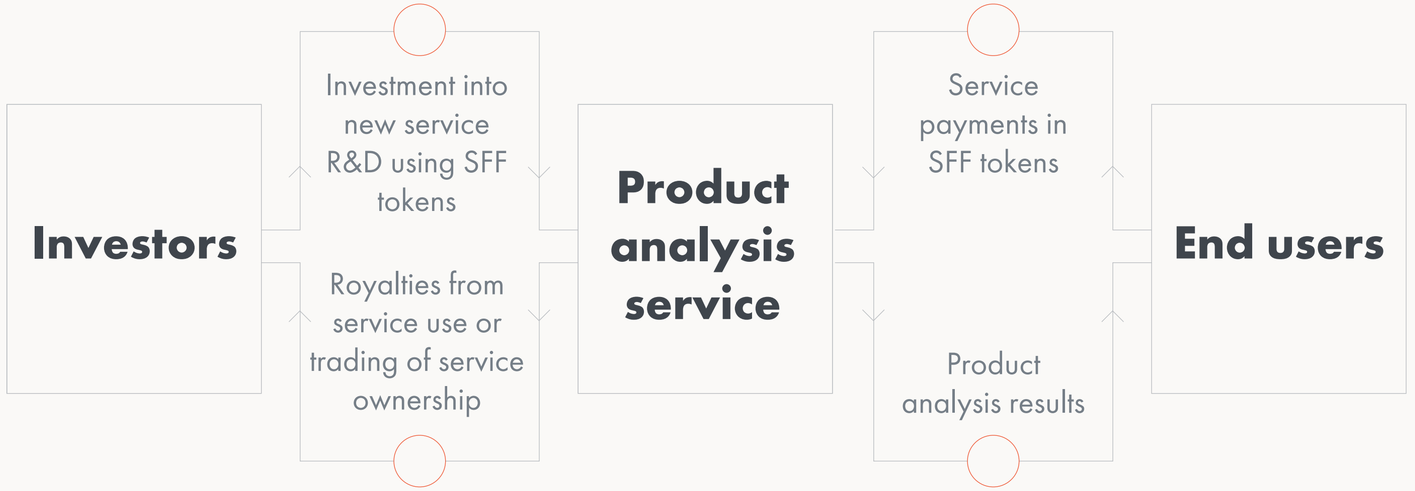
	Various laboratory research methods	Spectroscopic methods in a laboratory	The SFF product analysis solution
Duration	1-10 work days	5-10 work days	5-15 min. at any time
Location	Laboratory conditions	Laboratory conditions	Potentially anywhere, on-the-spot
Result reliability	Very high	High	High
Estimated service price	30-1000 USD	50-250 USD	10 USD
Scalability potential	Very low	Low	Very high

AUTHENTICITY CHECK

1. Any type of Raman spectrometer can be used to test food sample. Due to laser technology, no sampling or directly invasive procedures are required.

2. User uploads collected Raman spectra into the SFF Platform for immediate data analysis through SFF Neural Network.

3. Once the analysis is done, the user receives a comprehensive report on the content of the analyzed product. SFF can identify product type, check key food safety parameters and compliance with existing standards, examine the composition of ingredients and perform a thorough all-round analysis.



AREAS OF APPLICATION

- Identification of dangerous substances – analysing products for substances that are toxic for consumption or pose long-term danger to consumer health (e.g. carcinogens, pesticides, antibiotics, heavy metals, etc.);
- Foodborne disease prevention – identifying various parasites, bacteria, viruses or other biological traces that could cause illnesses upon consumption of infected products;
- Procedural efficiency and scaling – using the SFF product to allow scalability of procedures related to food safety and increase regulatory efficiency.

- Fighting product counterfeiting – a means for various interested parties to check on product authenticity in order to fight counterfeiting, reduce financial loss incurred by producers and protect brand integrity;
- Licencing and quality control – ensuring that products or their ingredients that are produced by several producers are in line with industry requirements, brand standards or franchise agreements;
- Complementing existing solutions – integrating the SFF Platform with existing B2B services (such as logistics and supply chain tracking blockchains) to provide complete and all-rounded business solutions.

- Consumer assurance – proving that the product is truly what it is presented to be (e.g. Italian extra virgin olive oil instead of cheap oil, or high-end Bordeaux wine instead of a knock-off);
- Packaging information accuracy – verifying the accuracy of ingredients stated on the packaging, determining non-specified allergens, GMOs or other substances that could be unsuitable for some consumers;
- Religious or ethical diets – assuring that the product is suitable for consumers that follow religious practices (such as halal or kosher diets), are concerned about ethical issues (such as vegans) or have other specific personal or cultural dietary preferences.

GO TO MARKET STRATEGY

B2G

Synergy with laboratories

Creating an initial client base by equipping 1000 laboratories around the world with Raman Spectroscopes (10 mln. USD net worth and a market of 58.5 mln. USD in business revenue).

Methodology certification

To be achieved within 2019, allowing SFF participation in public procurement in EU, US and Asia

B2B

Strategic partnerships

With food manufacturers and supply chains interested in ensuring the authenticity, safety and security of their products.

Custom implementations

Creating off-chain, custom built food authentication solution for particular business clients (business proof-of-concept).

B2C

Open development

Open access to third-parties to build their consumer-oriented services using the SFF infrastructure.

In the hands of the consumer

Long-term vision of enabling SFF product analysis to be done on a consumer level.

SFF VALUE

Assets in SFF Chain:

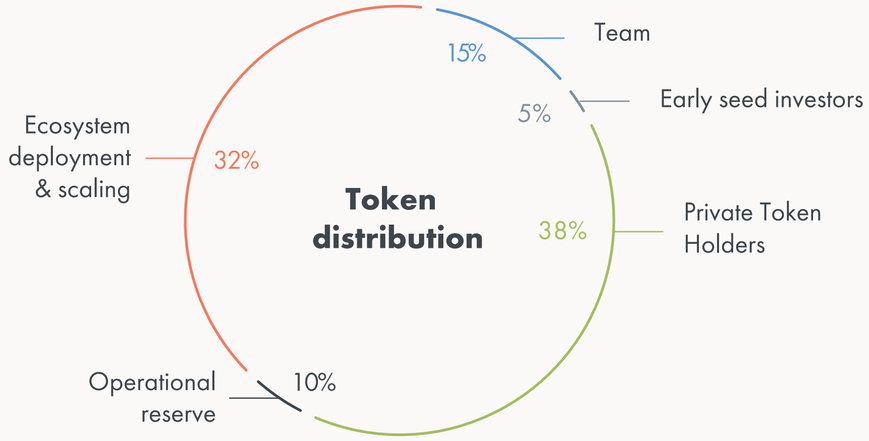
- Reference data – analysed data linked with metadata, generated through the process of testing, comparing and linking to different meta tags. Used to create Authenticity Stamps.
- Authenticity Stamps – neural network models that are machine learning algorithms based on the reference data, used to analyse Raman spectra and to produce one type of result
- SFF token – medium for value transfers, stacking and incentivisation
- Node – host of the SFF Chain.

The Authenticity Stamps are the most prominent expression of the SFF Database and the key element to answer to the Authenticity Enquiries of the SFF end users. The ownership of each Authenticity stamp provides its owner with a revenue stream, proportional to its use on Authenticity Enquiries on SFF.
Because of their relevance, Authenticity stamps are created by analysing a large amount of samples and data, that is later cross checked and confirmed by external and independent laboratories. This process ensures the sharp accuracy and legitimacy of each single Authenticity Stamp.
Each Node represents a revenue stream to its owner for providing other necessary resources that make the authenticity result possible, such as computational power, storage capacity etc...
SFF owns the data held on the SFF database. This information can be sold to external entities for research or other purposes, and represents an additional source of revenue.
SFF works together with a network of laboratories providing them with Raman Spectrometers and a Node ownership. We see this investment as reassurance of quality of the database, expansion and capacity of the physical network. This physical infrastructure and network of laboratories producing valid work for our ecosystem, represents a great value for SFF.

SFF TOKEN

The SFF token is a native token of the Stop Fake Food Ecosystem. It is the exclusive medium of value transfer in the SFF Chain and plays an essential role in:

- Smart contract based automated payments;
- Nano-payments and transactions;
- Incentives to maintain a self-sustainable ecosystem;
- Providing a value stake by Ecosystem Nodes through token locking;
- Investment into new Authenticity Stamp or service R&D.



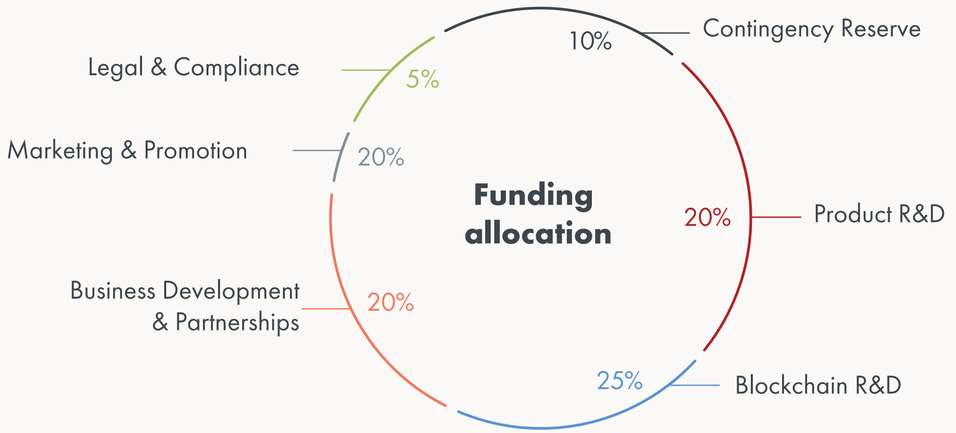
TOKEN SALE

Total amount: 1 billion SFF tokens
(0,05 USD per token)

Ticker: SFF **Decimals: 9**

Distribution:

- **Sale: 38%** dedicated for private sale during the TGE;
- **Eco system deployment and scaling: 32%**
  10% - used for private nodes incentivisation (issued during the second stage of the project, distribution be based and adjusted to the network load and capacity);
  10% - for SFF Data Harvesting Campaign;
  6% - for staking for Nodes installed in governmental or licenced institutions;
  6% - business development and marketing needs;
- **Team: 15%** with 18 months vesting and quarterly payouts;
- **Operational reserve: 10%** for liquidity reserve, partnerships, exchange gateways;
- **Early investors: 5%** for capital already raised.

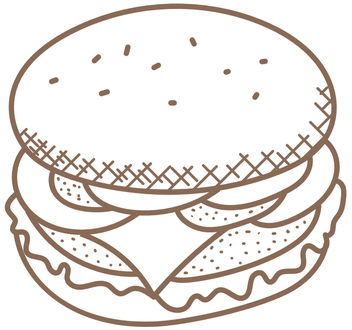


SFF FUNDRAISING AND INVESTMENT OPPORTUNITY

Seed financing

1.1 mln. USD already invested by shareholders (since 2017), resulting in:

- Technology research and development
- Building a specialized quality team
- Functional product MVP



Early financing round

Current fundraising round for up to 1.9 mln USD (since September 2018):

- Investment through convertible token agreement (0.05 USD per SFF token + 150% bonus)
- Investment through equity acquisition (on a company evaluation of 7 mln USD)
- Additional investment options – Authenticity Stamp or early SFF Block chain Node acquisition

Main financing round

Up to 17.1 mln. USD expected to be raised during the Token Generation Event in 2019

COMPANY, JURISDICTION AND IPR

Spectrolab GmbH

Holding company

Incorporated in Zug (Switzerland) since 2018-09-11
Address Baarerstrasse 82, 6300 Zug, Switzerland
Intellectual Property Rights holder

Spektrolabas Ltd

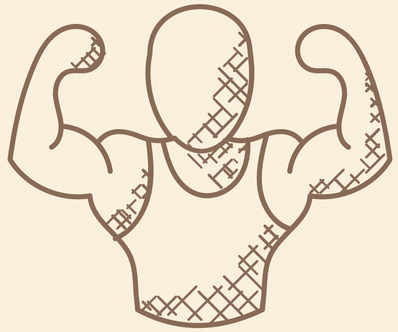
R&D branch

Incorporated in Vilnius (Lithuania) since 2017-08-30
Address Mokslininku str. 2A, 08412 Vilnius, Lithuania
Wholly owned by Spectrolab GmbH

IPR management

Main IPR object – food product spectrometric data analysis methodology using machine learning and neural networks, as well as the library of food scans and already developed Authenticity Stamps.

Patent application preparations ongoing and to be disclosed after submission to Patent Bureaus.



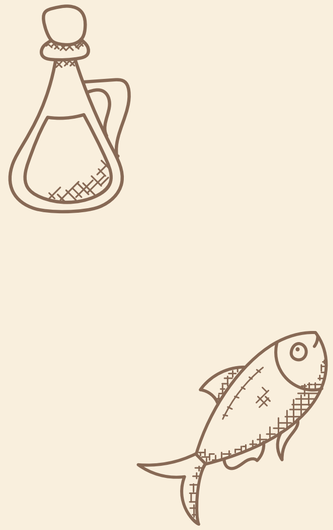
SFF financial projections

Main assumptions		2019	2020	2021	2022	2023	2024	2025
Cumulative amount of provided Ramans	[#]	50	250	500	550	605	666	732
Clients orders for creating authenticity stamps	[#]	5	7	10	15	18	14	11
SFF-owned Authenticity stamps	[#]	3	5	7	11	12	10	8
Cummulative Authenticity stamps	[#]	8	19	36	62	92	117	136
Scans from investors Authenticity stamps	[k#]			534	1,005	1,645	2,284	2,930
Scans from SFF Authenticity stamps	[k#]			1,247	2,346	3,267	4,197	5,148
Total Scans per Year	[k#]			1,781	3,352	4,912	6,481	8,078
PnL								
Gross Revenue	[kUSD]	600	900	19,341	35,876	51,230	66,755	86,624
Revenue Distribution to Partners	[%]	83%	83%	31%	30%	31%	32%	32%
Net Revenue	[kUSD]	102	153	13,405	25,136	35,236	45,444	55,878
Depreciation	[kUSD]	-440	-1,460	-2,363	-2,534	-2,713	-2,460	-1,636
Platform Operations	[kUSD]	-6	-9	-193	-359	-512	-668	-826
Operating Income	[kUSD]	-344	-1,316	10,850	22,243	32,011	42,316	53,416
Total SG&A	[kUSD]	-5,064	-5,593	-7,859	-12,209	-15,005	-17,758	-19,407
EBT	[kUSD]	-5,408	-6,909	2,991	10,034	17,006	24,559	34,009
Net income	[kUSD]	-5,408	-6,909	2,632	8,830	14,965	21,612	29,928
Net income accumulated	[kUSD]	-5,408	-12,317	-9,685	-855	14,111	35,722	65,650
EBITDA	[kUSD]	-4,884	-5,239	5,752	13,251	20,583	27,944	36,560
EBITDA accumulated	[kUSD]	-4,884	-10,123	-4,371	8,880	29,464	57,408	93,968
Cash Flow Statement								
Cash Flow from Operations	[kUSD]	-4,884	-5,239	5,393	12,047	18,542	24,997	32,479
Cash Flow for Investing	[kUSD]	-2,620	-5,730	-5,458	-2,275	-1,803	-1,662	-1,559
Cash Flow from Financing	[kUSD]	9,500	9,500	0	0	0	0	0
Total Cash Flow	[kUSD]	1,996	-1,469	-64	9,772	16,739	23,335	30,920
Total Cash Flow accumulated	[kUSD]	1,996	527	463	10,235	26,974	50,309	81,229

EPILOGUE

In the near future, everyone will have more confidence in what they eat. They will be able to simply scan food products and beverages with a comfortable scanner integrated in their mobile devices. This is the vision of our team. SFF is more than a business - it's as a disruptive solution with meaningful social impact that will ease one concern of living in today's world.

Will you be a part in the building of this future?
Enjoy food, not lies.



TEAM

Business operations

Augustas Alesiunas
Founder & CEO
Business angel and founder in FoodTech and AgTech industries for 10+ years.

Darius Montvila
Chairman of the Board
Senior Executive with 30+ years of high-tech industry experience in C-level and Board Member roles.

Donatas Černiauskas
COO
Business management professional with 15+ years ofexperience at C-level Executive roles

Evaldas Balkys, CFA, FRM
CFO
10+ years of experience in multinational corporate and financial institutions

Linas Didžiulevičius
Project manager
Former sergeant at NATO army forces, SATCOM engineer and section head

João Alberto Martins
CMO
VP at Birdchain and 10+ years in Business development and communication

Darius Mockevičius
Lead Business developer
Established business partnerships with 10+ Forbes Global 2000 companies

Science and Tech

Dr. Laurynas Jukna
CSO
PhD in Physical Sciences, Senior Lecturer and scientist at Vilnius University

Dr. Justinas Čeponkus
Lead Raman Spectroscopy Researcher
Associate Professor at Vilnius University, author and co-author of 50+ scientific papers

Kristina Šermukšnyte-Alešiunienė
Lead project manager
CSPO at ART21 Ltd. with 10+ years of experience as Senior Product Development Manager

Dr. (HP) Valdas Šablinskas
Raman Spectroscopy advisor
Academic with 30+ years of experience in Raman and infrared spectroscopy

Martynas Velička
Raman Spectroscopy Researcher
PhD student at Vilnius University. Awarded for the best master thesis of physical sciences

Blockchain and Development

Justas Gribovskis
CIO
More than 15 years in business development, c-level roles and IT infrastructure projects

Dmitrij Radin
Strategic Blockchain advisor
CTO and Co-Founder of ORCA Alliance and Crypto Evangelist

Mindaugas Kelpša
Concept advisor
Lecturer at Vilnius University, innovation concept advisor and developer

Suwan Bamunu
Tokenomics and Blockchain Advisor
Founder of GForce Investing and strategy advisor

Tomas Žeimys
Lead developer
16 years of experience in software development. CEO and CFO in multiple projects

STØP FAKE FOOD

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