TE-FOOD

Making business profit by solving social problems

WHITE PAPER

TE-FOOD, the world's largest publicly accessible, farm-to-table food traceability system is moving to blockchain.

TE-FOOD is a successful food traceability solution, used by 6,000+ companies, managing more than 400,000 transactions each day, reaching 30 million people.

We are dedicated to improve food safety, fight off corruption, support fair trade, and build trust between the food supply chain companies, consumers, and authorities in the emerging markets.

We believe that building a sustainable business on food safety is much more efficient to make difference than any type of aid.

1. EXECUTIVE SUMMARY

What is TE-FOOD

TE-FOOD is a successful **farm-to-table livestock and fresh food traceability solution**, **focusing on emerging markets**. Since 2016, TE-FOOD has been implemented in Vietnam. As a farm-to-table solution, TE-FOOD tracks the items through the whole supply chain (farm, slaughterhouse, wholesaler, retailer) and provides tools to consumers, supply chain companies, and authorities to gain food history and food quality insights.

TE-FOOD has grown to over **6000+ business customers**, tracking 12,000 pigs, 200,000 chickens, and 2.5 million eggs daily. In 2018, it will be extended to track cattle, fish & seafood, and fruits & vegetables.

Market

Foodborne diseases around the world are accountable for the **hospitalization of 700 million people** and **400,000 deaths annually**. The global food traceability solution market will reach **$15.1 Billion** by 2021. Compound Annual Growth Rate is highest in Asia-Pacific (**CAGR: 16.7%**) vs. rest of the world (5.5-8.7%). Effects of traceability are medical (fewer foodborne illnesses and deaths), social (consumer demand, need for trust), and economical (decreased product recall costs, supporting export, transparency, increased VAT revenue).

Products

TE-FOOD provides **physical identification tools, mobile and web based software solutions** in a PPP model (low or no upfront fee, and long term contract). TE-FOOD charges for the identification tools, the data transactions made in the system, and custom services. Our customers are **governments, private companies, and professional organizations**.

TE-FOOD is optimized for emerging markets. Despite it uses modern technology, it's the **cheapest solution** available, with **no need for special equipment**. The business model fits emerging countries, making it a profitable business. Our detailed, **practical implementation guide** ensures scalability in other countries.

Company

TE-FOOD is a joint project of a Hungarian and a Vietnamese company, currently employing 30 people. For international expansion, all rights and activities will be incorporated into a new single company: **TE-FOOD International Ltd**. Leaders of the new company have over **20 years of business and IT experience**.

Token sale

To pre-sell tokens which can be exchanged for services within the system. Our main plan for 2018 is **international market expansion**. We have detailed roadmap to launch TE-FOOD in **17 countries within 5 years**. Blockchain provides transparent trust based solution for international operation. Tokenization with smart contracts eliminates volatility as a unified financial transaction ledger solution.

TFOOD: issued as a utility token by TE-FOOD.

Total coins issued: 1,000,000,000 (100%)
Sold in token sale: 400,000,000 (40%)
Token sale volume: US$16,000,000

Token sale **starts on February 22, 2018**.
Early contributors can get **discounts up to 30%.**

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2. CURRENT NUMBERS OF TE-FOOD

Current traceability volume of TE-FOOD

12,000
pigs / day

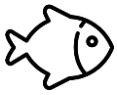
200,000
chickens / day

2,500,000
eggs / day

Planned extensions:

Cattle

Fruits, vegetables, and arable crops



Fish and seafood

Animal antibiotics

TE-FOOD is used by

- 3,100 farms
- 3,400 livestock agents
- 70 slaughterhouses
- 35 food producers
- 25 veterinary companies
- 30 wholesale markets
- 190 wholesale distributors
- 2,600 retailers and markets

Achievements

More than
6,000 business customers

More than
10,000 people
trained in one year

Serving
30 million people
with fresh food traceability information

3. MISSION

Since 2015, we have been developing TE-FOOD as a centralized traceability solution. As we had been working with companies of the food supply chain, we had to realize that the trust among consumers, supply chain companies and authorities is completely lost.

The industry is so full with debates, lawsuits, corruption, and scams, that even data coming from a third party like existing traceability system seems suspicious to the participants.

We started to think how to solve this problem, to bring back trust in food related information. We needed a technology which ensures that the food related data can not be corrupted or modified in any way.

This led us to blockchain.

TE-FOOD is introducing a utility token called TFOOD, blockchain protocol, and smart contracts that creates a trusted transaction ledger to integrate consumers, supply chain participants and authorities in one ecosystem.

TE-FOOD's mission is

- to make food industry more transparent
- to democratize the access to food related information as a common property
- to enable technology to become the „authority"
- to reduce the scale and effect of epidemics and food frauds in emerging countries all around the world
- to educate people through incentivizing conscious consumer behavior
- to help small farms to be more competitive

4. SOCIAL PROBLEMS TO SOLVE

Food safety

- 1 in 10 people gets ill each year from foodborne diseases.
- Lack of food safety processes result in the death of 400,000 people, mostly children under age 5.

Antimicrobial resistance, overuse of antibiotic drugs

- Common overuse of animal antibiotics caused the emergence of antibiotic-resistant infections, which totals $20 billion in health care costs each year only in the U.S.
- By 2050, antimicrobial resistance (AMR) can cause low-income, developing countries to lose more than 5% of their GDP and push up to 28 million people into poverty.

Economic inequality

- Food sector is the most affected industry by economic inequality.
- Employees in agriculture among lowest earners.

Migration caused by climate change

- Climate change has the biggest negative impact on the agricultural sector.
- Migration caused by climate change is a growing threat to a lot of emerging countries, which has serious global impacts.

Food frauds, mistrustful supply chains

- Public sector corruption takes out $1.5 trillion to $2 trillion annually from the global economy in the form of bribes and costs far more in stunted economic growth, lost tax revenues and sustained poverty.
- Food frauds have serious economical impact of $55B.

Low VAT revenue, high VAT rates

- In a lot of developing countries it is very hard to follow the real quantity of retail transactions, which results in high VAT rates on legal trading to compensate the loss.

Read more about the social problems and TE-FOOD's solutions

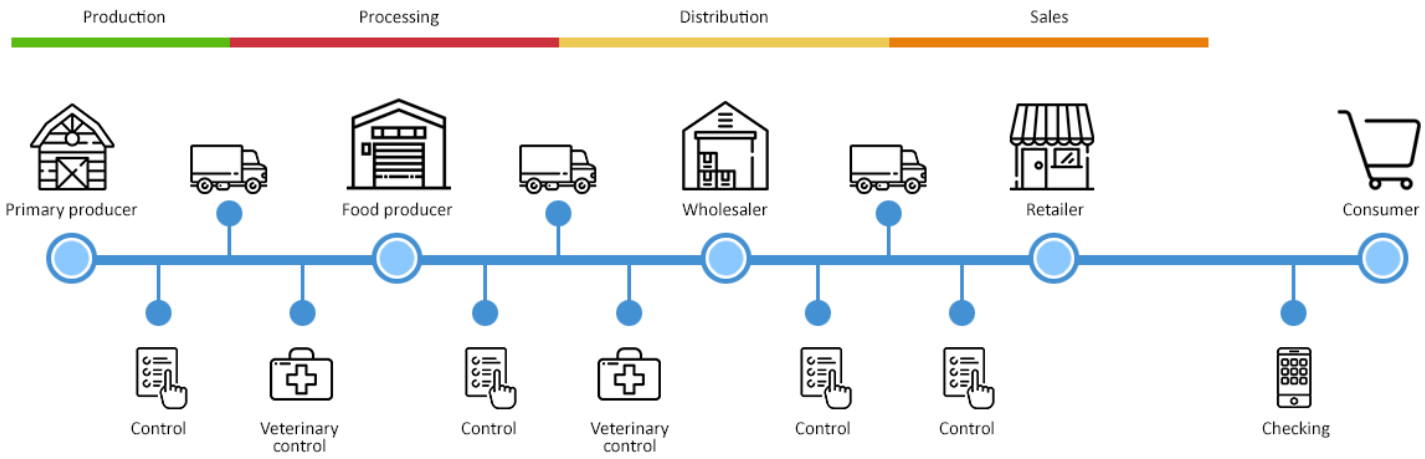
Implementing a modern, cost effective food traceability solution can make the difference, but it's a road full with obstacles and pitfalls. To successfully implement such a system needs commitment, determination, cutting edge technology, and tremendous competence.

Read more about the challenges

5. CURRENT STATUS OF TE-FOOD

TE-FOOD is a livestock and fresh food traceability solution, currently implemented in Vietnam, the third largest country in Southeast Asia with 94.5M people.

TE-FOOD enables all companies of the fresh food supply chain to manage logistics and food safety related data in their operations. Identification tools of various technologies are applied to livestock, transports, and fresh food packages to follow the items throughout the whole supply chain. Fresh food products in retail can be traced back to their origins together with food safety related information.



The basic process of the fresh food supply chain can be decomposed to a series of activities. The roles, activities, and their input / output data can vary in different categories, and in different countries. TE-FOOD's modular structure enables us to easily customize the process flow, and its data requirements according to the requirements.

This diagram shows the process flow for pigs, but in TE-FOOD each food category has its customized process. Authority control can be embedded to any part of the process.

Connecting the physical and digital goes by reading the QR codes with the TE-FOOD mobile app, to read/write/update data about a tracked item.

Additional features:

Food safety alerts
Food safety alerts are built into the whole process, and can be triggered by certain events. E.g. if a livestock transport takes longer than the average, can trigger an alert to the veterinary at the receiving side to check the transport as it can be suspicious.

Reputation system
An internal reputation scoring system helps supply chain participants to rate their connected suppliers through their common business transactions.

Supporting conscious consumer behavior
TE-FOOD provides a mobile app for consumers to check the history and food quality information of food products, and provides incentives to use it frequently.

5.1 Traceability tools

Status: ready for pig, chicken, and egg (cattle is under development)

5.1.1 Identification tools

TE-FOOD provides cost effective 1D/2D and RFID identification tools for the supply chain.

Plastic security seals (1D/2D barcodes)

Sunshine and water resistant printing, non-toxic material. Security seals are used to identify livestock, transport trucks, and fresh food packages.

Label stickers (2D barcodes)

QR codes combined with easily recognizable color codes (colorgram) for easier visual validity check. Label stickers are applied to individual food packages in retail.

RFID tags

High quality RFID ear tags for specific animals and easier reading. Planned implementation for cattles.

Printed paper bags (2D barcodes)

We supply recyclable paper bags with pre-printed TE-FOOD QR code.

TE-FOOD scale labels (2D barcodes)

TE-FOOD is integrated to smart scales, to print scale labels with the TE-FOOD QR code on it. Reading the QR code shows the history of the fresh food product.

Read more about the identification tools

5.1.2 B2B mobile app

TE-FOOD provides a multilingual mobile admin app, optimized for low-end phones.

Using the app is role based, each role (e.g. farm, slaughterhouse, etc.) has its own processes, menus, functions. The functions focus on

- Logistics transactions - sending and receiving transports, verifying information provided by the previous step
- Food safety information - providing weight, feeding, vaccination, etc. information
- Identification tool management – inventory and ordering of identification tools and transactions
- Authority tools – functions of the supply chain enforcement for the authority (e.g. governmental veterinaries, police)

The mobile app uses the phone's camera to read 1D/2D barcodes to identify items (livestock, transport, food product) as part of processes.

5.1.3 Back office tools

Standard interfaces

TE-FOOD is open towards companies with third-party logistics or traceability solutions. Traceability information can be sent to the system through standard interfaces. Supply chain companies which have their own identification tools, can request identification serials through an API.

Reporting tools

Supply chain participants automatically get daily, weekly, monthly reports with tables and charts about their activities.

5.2 Retail and consumer tools

Status: ready

5.2.1 B2C consumer mobile app

Beside supply chain members and the authority, TE-FOOD is transparent towards the consumers as well.

A B2C consumer mobile app enables consumers to read the QR codes, and view the history and characteristics of the fresh food they intend to buy.

- Read and verify QR code
- Read product history
- Learn more about the suppliers

The mobile app is available for Android and IOS.

Available on the App Store

ANDROID APP ON Google play

Read more about the consumer app

5.2.2 Digital signage

For further customer convenience, TE-FOOD provides solutions for retails to display traceability information. A self service terminal solution helps consumers without mobile phone to read the QR codes on the product and display food history.

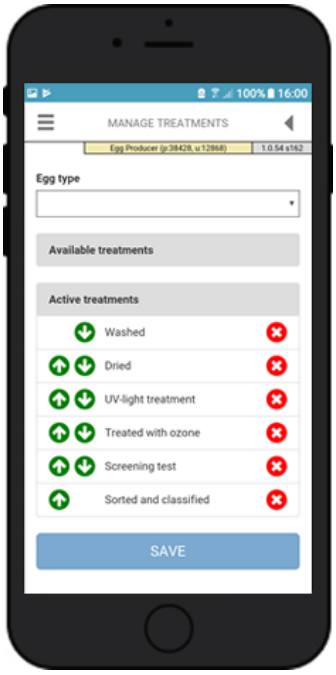
Read more about the digital signage solution

5.2.3 Zalo.me integration

Our smart QR codes can be read by Zalo.me, the most popular messenger platform in Vietnam, which enables 60 million Zalo users to view product history through the Zalo mobile app.

5.3 Farm management tools

Status: partly ready (working modules: inventory, feeding, vaccination)



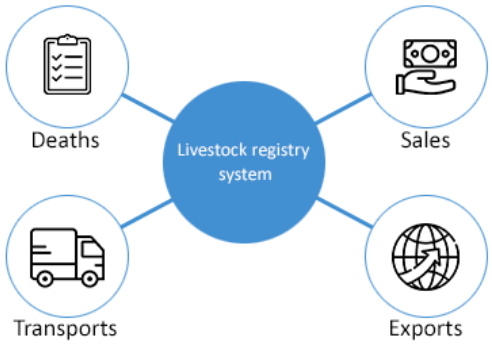
To help improving the competitiveness of smaller farms, we provide an easy to use, mobile app based farm management application, which is integrated into the TE-FOOD B2B app.

Currently the farm management tools consist of the core modules (inventory, feeding, vaccination), which also help providing food safety data in the traceability process.

We plan to broaden the functionality of this app to reinforce the engagement of farms, and help them operating a more sustainable business.

5.4 Livestock registry

Status: under development, release at Q4, 2017

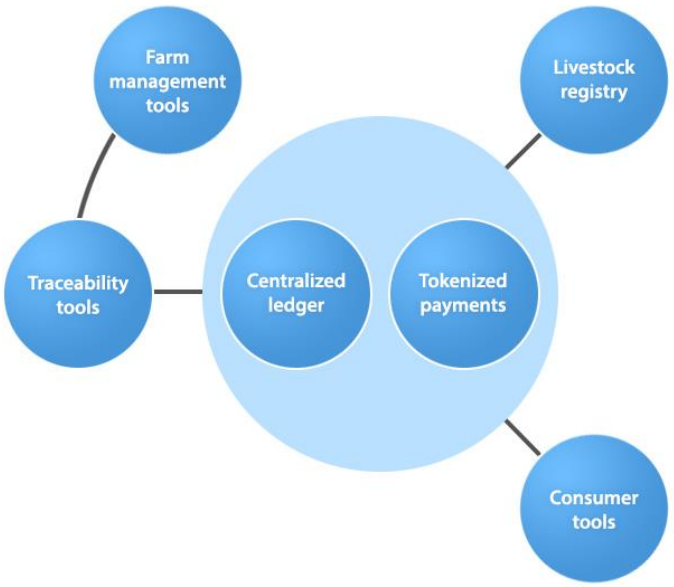


As part of the food safety tools provided to authorities, our livestock registry and management solution enables national or local authorities to get certain regular status reports from farms. From basic livestock inventory information to sales and export reports, the system provides wide range of information. To provide the necessary data, farms need to download an easy to use mobile app, or connect their systems to our API.

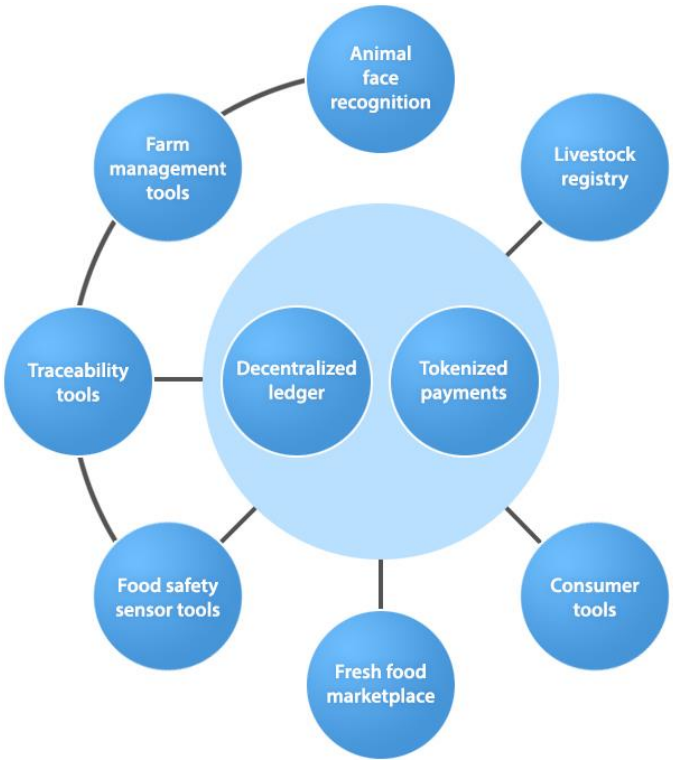
In the 2nd phase, the system will be extended with AI based smart pandemic forecasting and alarming modules, to provide authorities tools to prepare for, and to limit the effects of potential outbreaks.

6. OUR PLANNED SOLUTION

Current status



Planned developments



Please note that TE-FOOD is a ready solution with tokenized transactions. The planned developments are here to provide information on the project for potential users.

We plan to replace the current, decentralized transaction ledger with a blockchain based structure. We also plan to extend the current functionality of the system, which will have great impact of the sales possibilities of TE-FOOD:

Decentralized transaction ledger	Gain additional credibility by a blockchain based transaction and food information ledger.
Food safety sensor tools	Mitigating supply chain debates by measuring and logging the environmental conditions of transported livestock and food.
Marketplace	Gaining new markets and improve engagement by providing B2B livestock and fresh food trading possibility for the supply chain.
Extended food categories	Gaining new markets by extending TE-FOOD to track and trace cattles, fish/seafood, fruits/vegetables, and animal antibiotics.

Animal face recognition	Gaining new markets by enabling the identification of cattles without any physical identification tool.

6.1 Blockchain utilization

Status: tokenization is ready, blockchain transaction ledger is planned

6.1.1 Why TE-FOOD needs blockchain?

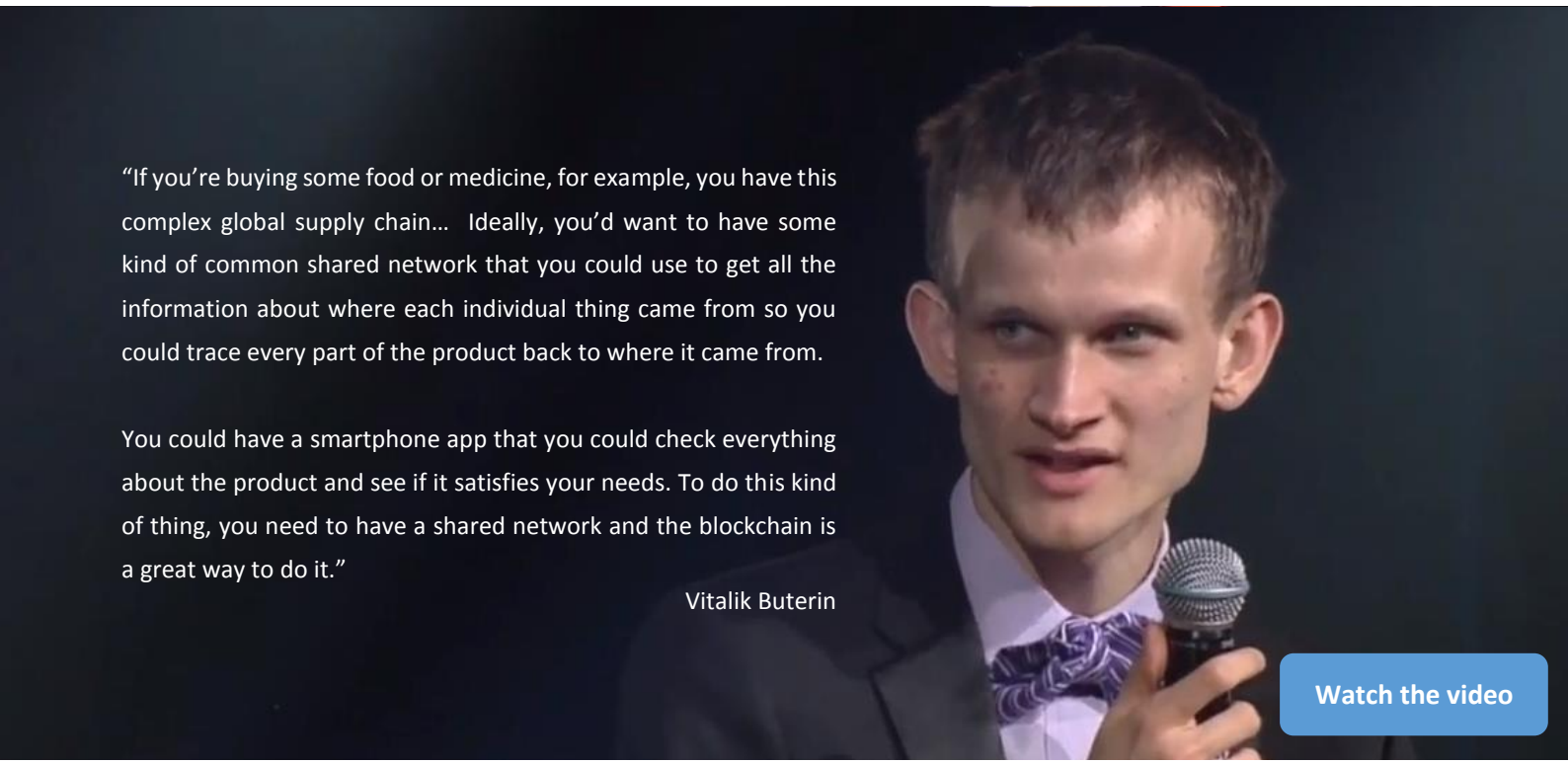
- Because the data provided by the supply chain participants must be **unmodifiable**. Due to the significant distrust and suspiciousness among consumers, supply chain companies, and authorities (caused by several food frauds and corruption), only **technically unalterable** logistics and food quality data can provide credibility.

- Because the data in the system is a **common property** of all participants. It must be stored in a **shared, distributed ledger** to provide transparency.

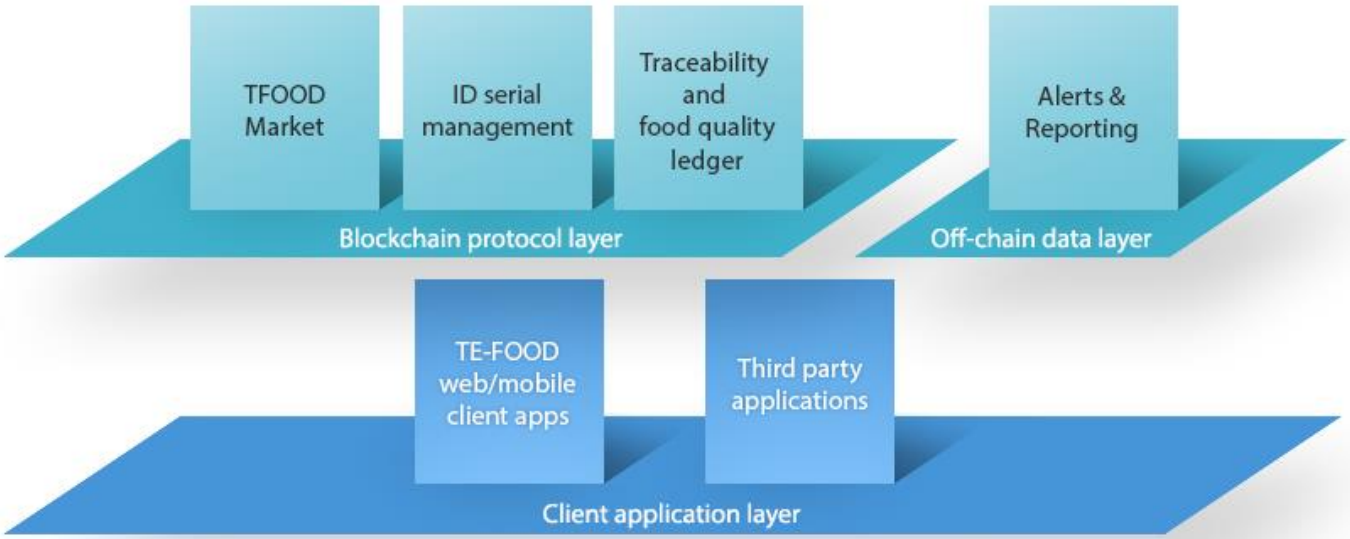
- Because the food safety related data all over the world is a property of all us, and data accessibility must be **public and democratic**.

- Because the economic inequality is one of the largest social problems and we need a technology which helps to create a **fair access to data**, know-how, and income.

- Because corruption is a global economic problem, and the food sector in emerging countries is one of the most affected sectors. Incorruptible food history information leads to **transparent** food supply chains, which can make a difference in public health, and literally save lives.

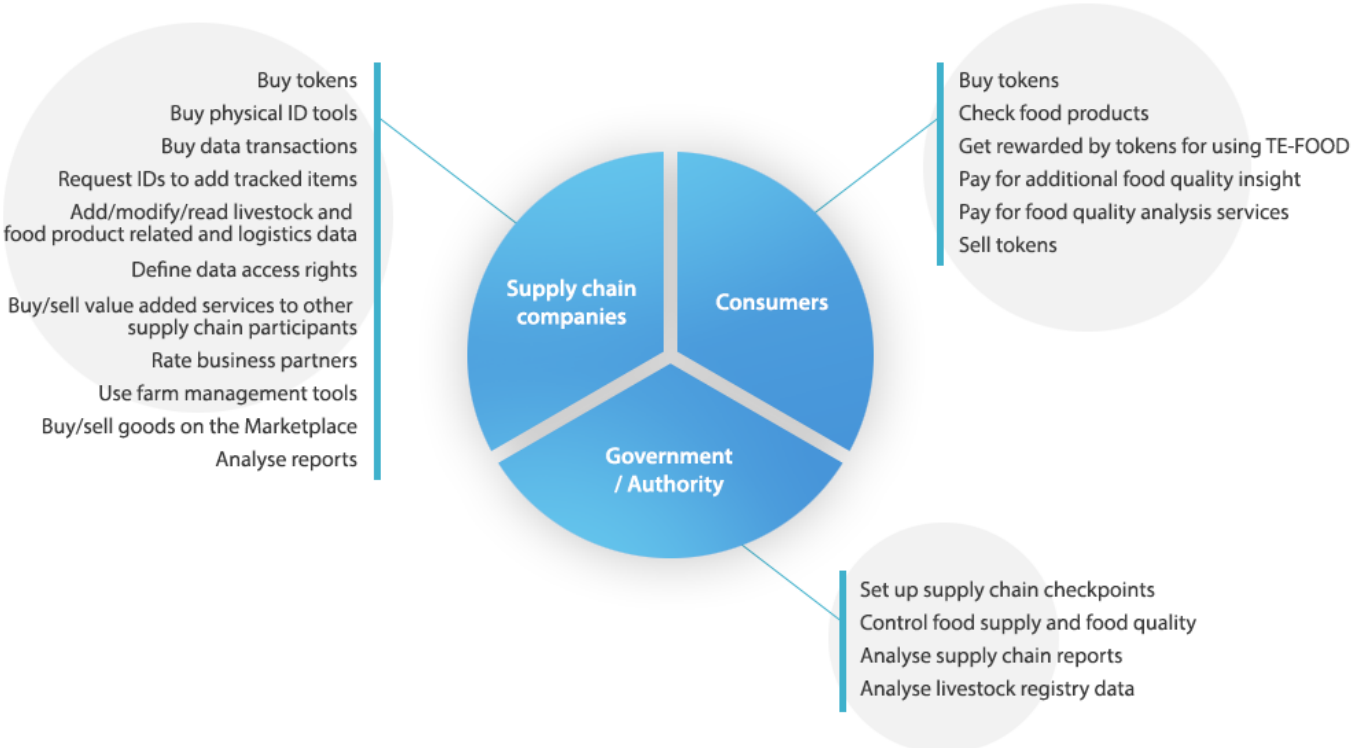


6.1.2 Ecosystem structure



6.1.3 Integrating all participants

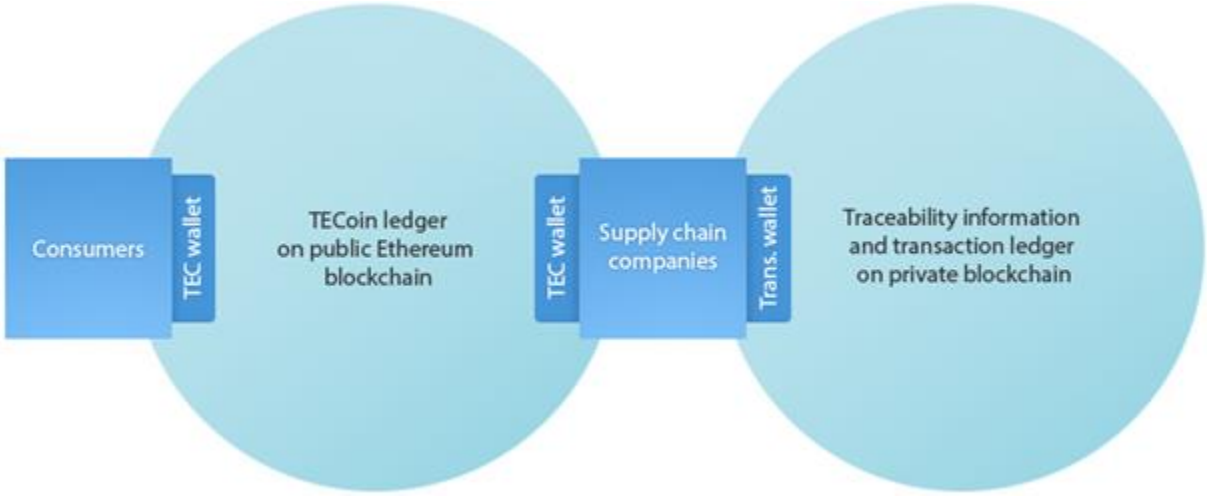
TE-FOOD, with the tokenized financial transactions will enable us to equally integrate supply chain participants, authorities, and consumers into the process.



6.1.4 Blockchain structure

Blockchain will be implemented for two purposes:

- **Token transaction ledger**
  The token payment solution will be implemented on a public network using TFOOD, an ERC20 token.
- **Traceability transaction ledger**
  Transactional and food related information will be stored on a private blockchain, and will be driven by an internal technical token: the Transaction token.



Supply chain companies will have

- a TFOOD wallet on the public network, which can be accessed directly or through the TE-FOOD mobile app
- a Transaction wallet on the private network, which can be accessed by the TE-FOOD B2C mobile app.

6.1.5 Utility token

According to the utility token types by William Mougayar, TFOOD will have more utility types:

- **Toll:** To use TE-FOOD's blockchain traceability ledger, supply chain participants will need to pay for transactions using the token.

- **Value exchange:** There is a lot of information provided by certain type of supply chain companies, which is valuable for other supply chain companies. (Example: if and when a calf was treated with vaccines or antibiotics is a valuable information for the cattle farms which buy the calf. Normally they don't have this information, and they needlessly treat the animals with vaccines and antibiotics. This can lead to overuse of antibiotics. If they can get this information for a cheap price, the cattle farm can avoid the redundant activity, thus saving money. This income goes to the information provider (the calf farm).)

- **Value exchange:** Consumers get tokens as reward for using the TE-FOOD consumer mobile app in retail, reading the QR code and viewing the food history, this way, the system incentives conscious consumer behavior.

- **Value exchange:** Consumers can use the tokens to order food analysis services. They package a part of the food product and send it to TE-FOOD, and they got the results of the food analysis in electronic format.

- **Right:** Token holders can rate supply chain companies with which they are in connection, so the system can maintain a supply chain company scoring system.

6.1.6 Token supply

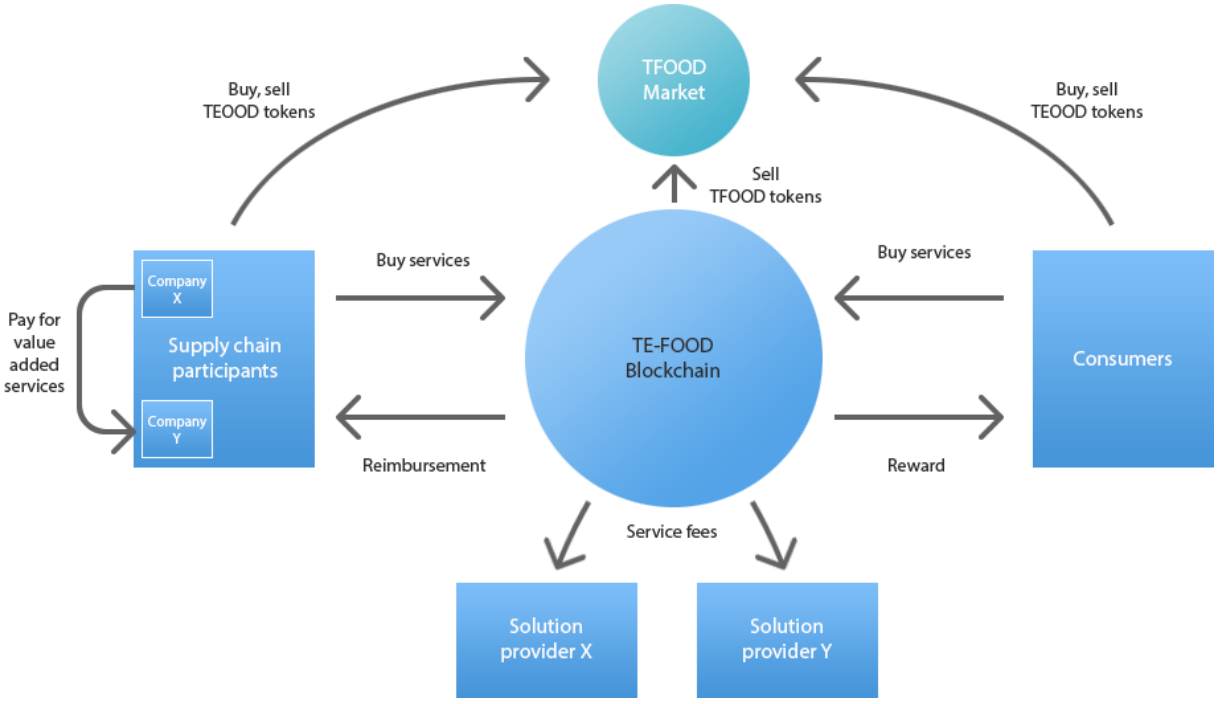
Before the token sale, 1 billion tokens will be generated.

- Public token pool: 500 million tokens will be in the public token circulation (400 million offered in the public sale, 100 million to marketing, proof-of-care, advisors, cafeteria pool).
- General reserve: All remaining 500 million TFOODs will be held in a General reserve.

As the number of TE-FOOD customers grow, they will require more transactions, thus, more tokens. At the same time, certain participants of the ecosystem will staking tokens, and some wallets are lost or forgotten, which will limit the supply.

TE-FOOD doesn't want to endanger the core activities of TE-FOOD, that's why in certain times, we maintain the right to release tokens to the market from the General reserve beyond the 500 million limit. However, the released excess amount will be justified by the need for the tokens in the circulation. Finally, when TE-FOOD grows further, all 1 billion tokens will be on the market, which we believe will be sufficient for long time operation.

6.1.7 Token economy



Buying traceability transactions

1. Supply chain participants indicate the number of transactions they want to buy in the TE-FOOD B2B app.
2. To cover the cost of the desired number of transactions, they can buy TFOODs for fiat money or ETH on the Exchange, and store it in their TFOOD wallet.
3. The smart contract automatically
    a. deducts 10% of the TFOOD tokens, and
        - 9% is exchanged to transactions on a fixed exchange rate for supply chain reimbursement (See the **Reimbursements** process),
        - transfers 1% to the TE-FOOD Consumer Rewards wallet,
    b. exchanges the tokens to transactions on a fixed exchange rate,
    c. the remaining tokens are distributed to the solution provider.
4. On the private blockchain, TE-FOOD deposits the purchased transactions to the supply chain participant's Transaction wallet.

Reimbursements

1. Each time a supply chain participant buys transactions, 9% is exchanged to transactions on a fixed exchange rate for supply chain reimbursement.
2. Daily once, an algorithm selects the supply chain companies to share the tokens.
3. On the private blockchain, TE-FOOD automatically deposits the transactions to the selected supply chain members' transaction wallet.

Paying for value added information

1. Supply chain companies (value providers) can set a price / item on specific food related data they provide.
2. If other supply chain companies (the buyers of the value providers) want to obtain those information, a smart contract
    a. deducts the total price (value added information price multiplied by the actual number of the received tracked goods) from their TFOOD wallet,
    b. transfers the TFOODs to the value provider's TFOOD wallet.

Rewarding conscious consumers

1. Consumers check the TE-FOOD tracked food product's QR code using the B2C mobile app.
2. A smart contract automatically transfers a pre-specified amount of TFOOD tokens from the TE-FOOD Consumer Reward wallet to the Consumer's TFOOD wallet as reward.

Selling tokens

1. Supply chain participants and consumers can sell their excess tokens on the Exchange for a desired rate. It creates a selling offer on the Market.
2. Buyers can buy tokens on a desired rate, when they match, the deal is written in a smart contract.
3. The seller's TFOODs are transferred to the buyer's TFOOD wallet.

6.1.8 Transaction ledger

Due to the fact, that data stored in a country-wide food traceability system is extremely sensible from a governmental viewpoint, we assume in most cases, storing transactional data on a public blockchain network will not be acceptable for governmental customers.

The blockchain layout differs from the traditional public ledger network model, for the planned solution is heterogeneous based on real world business logic. The protocol will route it's mesh network not on traditional IPv4 or IPv6 methods like kademilla, but use existing business logic called "contract routing". Rhyno Technologies is by default part of this contract routing as per the EULA, and additional partners interacting with the smart-contract framework can find other partners based on this mesh network.

While self-marketing takes place with known blockchain paradigms, business logic requires private information retrieval that will be implemented using quantum safe lattice cryptography and zero-knowledge transactions as seen in EIP207 and EIP760.

Having a heavily USD-backed marked, interpolability with the utility token is a must, which will happen transparently for end-users, putting the exchange mechanism under the same consensus model for the USD market as seen for the token itself.

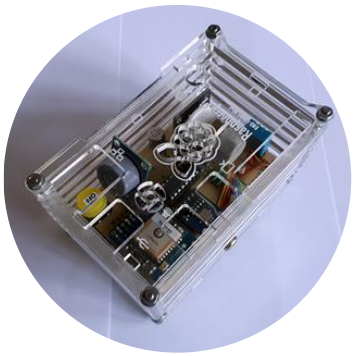
Data storage shall make use of decentralized storage to mitigate redundancy, where nodes can only store hashes known to not fall into their contract scope using bloom filters. This way we remove interest in unpinning sensitive data for doing so will ruin business reputation outside of the consensus model too.

Instant transactions for existing industry solutions where fee handling and block time acceptance is not an option, we offer a lightning network/tumblebit solution for instant off chain transactions, while preserving all guarantees of the network.

6.2 Other planned developments

6.2.1 Food safety sensor tools

Status: prototype is ready



For fresh food, the environmental conditions of transportation are crucial for food safety.

We plan to develop a special hardware product, which can be built in transportation vehicles and transportation boxes to measure these environmental parameters (temperature, humidity, time interval, geolocation), log them directly to blockchain, and build an analyzer layer to send alerts when pre-set conditions are violated.

This tool provides proof if the food is kept in appropriate conditions during transportation.

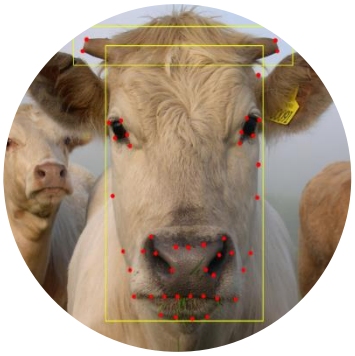
6.2.2 Marketplace

Status: planned

TE-FOOD already covers all logistical and food safety aspects of the supply chain. To broaden the possibilities of companies, we plan to extend it with trading related data (e.g. pricing, inventory, contractual conditions), to create a virtual livestock and fresh food marketplace which enables easier matching of buyers and sellers as well as wizard based contracting with automated conditioning (e.g. quality or transporting conditions), and escrow based payment.

6.2.3 Animal facial recognition

Status: planned



Physical tags for animal identification are the most popular tools in traceability. However, their procurement and application on the livestock mean a continuous cost for the farmers. But until now, there was no other solution.

The radical improvements in artificial intelligence driven image recognition during the last years, and the availability of cheap, but good quality cameras created an opportunity for a new identification approach.

In cooperation with Meat and Livestock Australia, we will develop a face recognition system to identify cattles from a digital photo.

7. IMPLEMENTATION IN VIETNAM

Launch
TE-FOOD launched in 12.16.2016 for pig and pork tracking in HCMC region.

Extension
In 09.01.2017 poultry traceability was launched.

Registry
In Q4, 2017, the pilot of National Livestock Registry is launched in several provinces.

Roll out
From 2018, four additional provinces join to use TE-FOOD traceability.

The implementation of the system was done by TE Ltd., a Vietnamese company as contracting partner of the government of Ho Chi Minh City. The system combines mobile technology and a cloud based central system with cost effective identification tools.

TE-FOOD's implementation in Vietnam was all over the news.

View TE-FOOD's media coverage

View our photo gallery

Some of our customers

Click on the logos to view their web site.

7.1 Advantages of TE-FOOD

Credibility
Introducing blockchain to provide an incorruptible, unalterable ledger, combined with a smart food safety alert system creates trust among consumers, authorities, and supply chain companies..

Cost effectiveness
To keep costs down, TE-FOOD doesn't require to use costly equipment, or enterprise integration. The cost of tracking an item (e.g. a pig) can be as low as $1 throughout the whole chain.

Methodology
We have a top-to-bottom implementation roadmap for emerging markets, which describes how to organize, train, communicate such implementation.

Consumer involvement
We provide a mobile app, and a token based motivation system to consumers to act more consciously when shopping for fresh food.

Pragmatism
Changing processes of the supply chains need time. TE-FOOD doesn't require to disrupt current contracting or payment methods. It extends them with trusted technologies.

Reimbursement
Supply chain participants can get reimbursements for providing more food safety information. This is important to make farms committed to provide proper traceability data.

Interoperability
Whole-chain approach and general standards (GS1) provide interoperability beyond borders, and the opportunity for participants to mitigate common redundant actions (e.g. double vaccination)

Customized approach
TE-FOOD can be used as a full-scale tracking solution as well as a transaction ledger on top of an existing traceability or ERP system. In each case, we configure the system to follow the custom elements of the customer's processes.

Flexible business models
TE-FOOD can be implemented by a government or institution in a B2G model, or by companies (e.g. food producer) in a B2B model.

Flexible financing models
TE-FOOD is implemented in a PPP (Public Private Partnership) model, which requires minimal investment.

8. TEAM

8.1 Team members

8.1.1 Management

Dr. Trung Dao Ha (52)
CEO
Entrepreneur, president of the High Tech Association of HCMC. 20 years of strategic leadership, marketing and sales experience in Asia and Europe.

Erik Arokszallasi (50)
CEO
Entrepreneur, co-founder and leader of two successful corporate IT development companies in Hungary (Erba 96 Ltd., Flexsys Ltd.).
23 years of leadership, and IT project management experience.

Marton Ven (43)
CMO
Entrepreneur, co-founder and marketing leader of two successful corporate IT development companies (Erba 96 Ltd., Flexsys Ltd.). 21 years of marketing, sales and project management experience.

Gergely Koves (45)
PM
Former Ernst & Young consultant, and long term manager of environmentally conscious projects.

8.1.2 Food industry experts

Katalin Vereczkey
Food safety expert

Master in Plant Protection, 18 years at Syngenta in several managerial position for diverse portfolio & agriculture technologies in broad geographical areas. Experienced in Digital Agriculture at different companies.

Dr. Gabor Pajor
Food safety expert

Veterinary - Informatics. 20+ year experiences in data analysis, data science, data mining. Digital Agriculture expert in the Big4 environment, founder of the Hungarian Precision Agriculture Association.

8.1.3 Blockchain experts

Blockchain implementation is provided by Rhyno Technologies.

Gabor Nagymajtenyi
BDO Leader

Founder and owner of successful corporate IT development companies in Hungary. 20 years of leading edge technologies, security and scalable architectures.

Abraham Endre (Silur)
Chief Architect

Cryptographer and programmer. One of the authors of cSploit and contributor to known security frameworks, member of Ethereum Foundation's ewasm and research team.
https://github.com/Silur

Istvan Szukacs
DevOps

Over 15 years of experience with various Fortune 500 companies and startups. He has managed changes in large scale infrastructures without downtime while customers were actively using the system. Besides engineering István has experience in managing onshore & offshore software teams delivering mission critical systems.

Daniel Csendes
Blockchain technology consultant

An economist, investor and entrepreneur with fare share of experience at multinational companies and startups. Blockchain and cryptorcurrency expert.

Attila Szabo
Lead Developer

Over 12 years of experience in software engineering, focusing on large scale systems in the financial, chemical, big data space. 6 years experience in part time lecturing in computer science (ADA, Java, TDD, Parallel programming).

8.1.4 Software developers

Tamas Biro
Mobile app developer

10 years of software development experience with corporate, mission critical systems.

Miklos Csaszar
Senior sotware engineer

11 years of software development experience. Server side back end professional.

Gergely Mate
Software developer

5 years of software development experience. Specialist of AI algorithms.

Zoltan Vadovics
Software developer

13 years of software development experience.

Laszlo Szentmiklosi
Hardware/software developer

14 years of hardware and embedded software development experience.

Bence Kadar
Database specialist

6 years of database administration experience.

8.1.5 Infrastructure experts

Gyorgy Varga
Senior IT infrastrucutre engineer

17 years of Linux system administration experience.

Jozsef Tatar
IT infrastrucutre engineer

11 years of system administration experience.

8.1.6 Advisors

Endre Jobbagy
Blockchain and business consultant

Founder and CEO of Interticket, a traditional software company operating globally. Co-founder of Blockchain Competence Center, a European management consulting and professional service company specialized in the Blockchain industry.

Dr. Michael Patching
Independent Animal Welfare and Husbandry Advisor

Australian Veterinarian with a Masters in International Animal Welfare Ethics and Law and 13 years experience as a large animal veterinarian. Michael is the current Vietnam Livestock Services Manager for Meat and Livestock Australia (MLA is the Australian red meat industry service body).

8.2 IT background

Some former projects of Erba 96 Ltd., the company which developed TE-FOOD's system:

Utility cheque payment solution

Hardware and software development of utility cheque payment terminals and central settlement back office for the Hungarian Post. Three different types of terminal for self service and retail cashier managed payment of utility bills.

Complete hardware-software development with unique hardware elements.

Airport Fast Track payment solution

Budapest Airport FastTrack terminals with cash and credit card payment, and back office application.

Complete hardware-software development.

Road tolling solution

E-vignette based road tolling system with complete sales, enforcement and penalty management for the Hungarian National Toll Payment Services PLC. The system fulfills 200,000 transactions each day, and sells 19 million e-vignettes yearly.

Loyalty card solution

Back office system and retail terminals for the largest Hungarian loyalty card system (2,5 million card holders), SuperShop with daily 1.4 million transaction volume.

Complete hardware-software development.

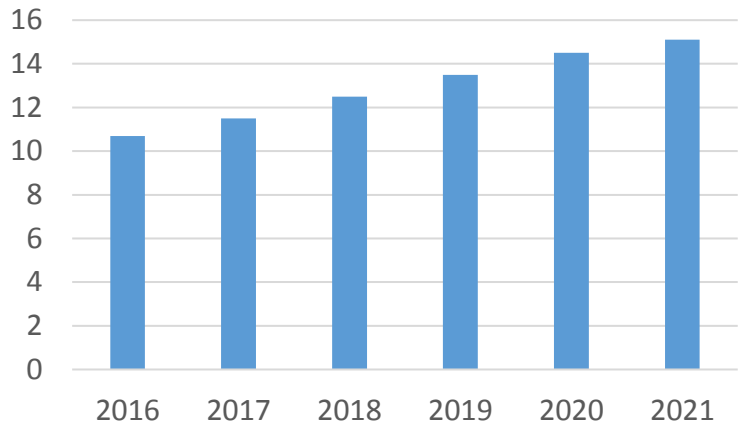
9. BUSINESS PLAN

Detailing the business plan serves informational purposes only, and intended to ensure token sale contributors that the company will be able to provide the services they buy for a long term.

9.1 Market

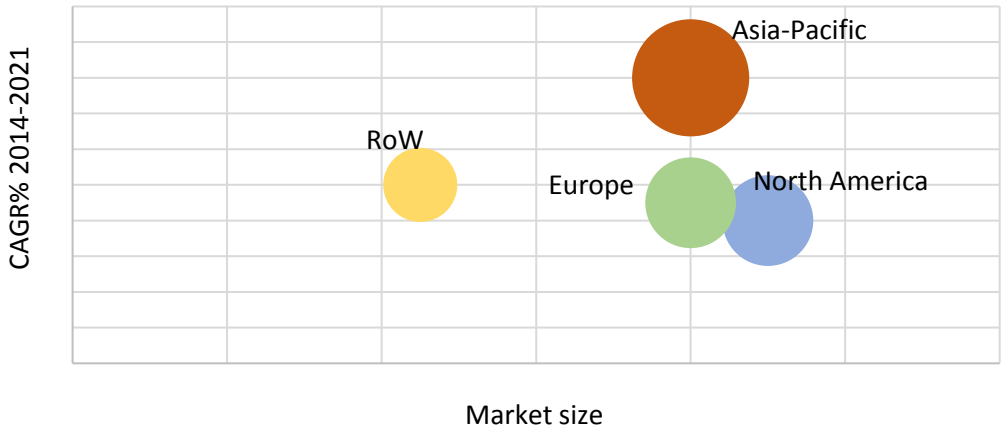
9.1.1 Market size

Global food traceability market will reach $15.1 Billion by 2021 (Allied Market Research).



9.1.2 Growth rate

Compound Annual Growth Rate of food traceability is the highest in Asia-Pacific (16.7%) compared to the rest of the world (5.5-8.7%). (Allied Market Research)



9.1.3 Target markets

TE-FOOD's primary target markets are the emerging countries. The reasons:

- 65% of the food frauds, foodborne illnesses and deaths happen in the emerging countries
- In many emerging countries, corruption is very strongly present in food supply chains, and is a major obstacle in making supply chains transparent. However, there is a strong will in governments to make this industry cleaner, which gives a strong regulatory background.
- Supply chains in emerging countries lack any form of a traceability system. But they have the opportunity to skip several stages of technological advancement. They simply leave out DOS based applications or Excel, and jump from paper based transaction register directly to blockchain based, mobile app driven operation using QR codes.
- Growing middle-class in emerging countries, and increasing awareness among population drives growing demand for consumer level product history insight. Our technology and implementation methodology fits perfectly in the needs of emerging countries.
- Emerging countries represent 60% of the world's population and 45% of its GDP.

9.2 Market analysis

9.2.1 Difficulties of the food traceability market

Difficulty	Solution
Long implementation time (6-12 months)	The funds raised on the token sale shall provide liquidity during implementation.

Face-to-face trainings require a lot of resource and organization	We have large experience in building training teams, and organizing their work efficiently.
Authorities need a lot of consultations	We will provide a written guidebook and efficient consultation services to help authorities in their implementation tasks.
Finding local leaders in target countries is a tough task	We will put huge effort into the recruitment of the leaders in the target countries, and offer them convincing incentives to motivate them.

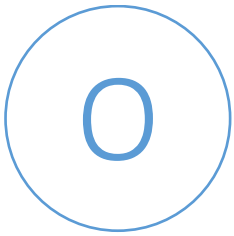
9.2.2 SWOT analysis of TE-FOOD

Strengths

- One of the largest traction
- Whole-chain approach
- Cost-effectiveness, as TE-FOOD is the cheapest solution on the market
- Practical implementation methodology through experience
- TE-FOOD ecosystem with a wide range of synergistic tools and applications

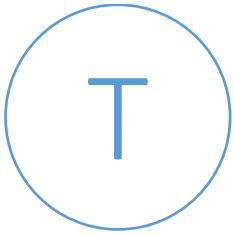
Weaknesses

- Lack of international awareness
- Lack of funds for expansion, because our business model needs 1-2 years for ROI
- Few existing sales channels in the emerging countries
- Distance between the company leaders



Opportunities

- Food safety becomes an important development area in emerging countries
- Growing middle-class in emerging countries, and increasing awareness among population drives growing demand for consumer level product history insight
- Food scandals became well publicized, which drives authorities to tighten regulations



Threats

- Government dependency (in governmental implementation)
- Lot of conflicting interest (because of frauds and corruption) can affect implementations
- Technological issues, and lack of best practices regarding blockchain cause uncertainty
- Cryptocurrency regulations (or the lack of regulations) can affect target markets

9.2.3 How we plan to overcome the weaknesses

Lack of international awareness	We are planning yearly 10-12 exhibition presence, 20 conference attendances, and for the first 3 years, a lot of targeted B2B and B2A marketing activities. We already exhibited on three trade fairs and our experience shows that government and media representatives are open to the topic of food safety, and accept our practical arguments.
Lack of funds for expansion, because our business model needs 1-2 years for ROI	Our main goal with the token sale is to raise funds to finance the international expansion of TE-FOOD. The funds will provide the necessary liquidity to implement the systems in the PPP model.
Few existing sales channels in the emerging countries	We will aggressively look for local and international partners to find channels to the governments and supply chain participants. We have convincing arguments, we just need to find the leads.
Distance between the company leaders	The co-founders know each other for 20 years. Daily 5-6 calls, personal meetings in every two months proved to be efficient to work together.

9.3 Marketing and sales strategy

9.3.1 Market expansion

In most cases, food traceability is a buyer/authority driven market. According to this, the potential target customers/partners list are (from the most important to less important):

- Food safety authorities
- Trade and export authorities
- Food producer and export organisations
- Retail chains
- Food safety NGOs
- Food producers
- Other food supply chain participants

Drivers of traceability implementation

Governments

- Improving food safety and public health
- Improving exports – an important aspect if an important export target country (like China in Southeast Asia) requires traceability when importing livestock and food products
- Improving transparency in the food industry to fight grey markets, to gain more Value Added tax in the long term
- Mitigating multiple use of antibiotics

Professional organisations

- Defending represented brands from counterfeiting
- Improving exports

Food supply chain companies

- Avoiding large scale recalls
- Improving exports
- Defending their brand from counterfeiting
- Improving Public Relations through credibility
- Avoiding redundant activities (e.g. double vaccination)

For both governmental and private implementation of TE-FOOD, we give priority to target countries:

- which export to markets which require (or prefer) tracked livestock and fresh food
- where those multinational companies are present, which are already our customers
- where food fraud scandals get large publicity
- where most of the food sector is dominated by small companies, which don't have the funds for expensive traceability solutions

Current status of market expansion

Our implementation in Vietnam got large publicity in the ASEAN region, and we had the opportunity to participate in some exhibitions. As a result, we have ongoing negotiations with potential franchise partners and representatives in:

- Laos (Population: 7M)
- Malaysia (Population: 32M)
- Cambodia (Population: 16M)
- South-Africa (Population: 55M)

There is a great chance that the next implementation will happen in one of these countries.

9.3.2 Local representation

Selling and implementing a traceability system is not possible without a strong and active presence on the target market. We follow two roadmaps to acquire new markets:

- Direct presence
- Presence through a partner (franchise)

Regarding the most important target countries, where the government is committed to improve food safety, and the size of the market requires huge efforts in the implementation, we will have direct presence, through a daughter company, a local staff.

In other countries, and where we can acquire reliable and motivated partner company with strong local networks, we will work along a franchise contract to represent TE-FOOD.

9.3.3 Increasing sales in our existing markets

According to our experience, after implementing a traceability system, the number of food fraud cases increases. This paradox happens because a well designed traceability system like TE-FOOD helps authorities to notify fraudulent activities, which earlier went unnoticed.

When a food fraud scandal gets publicity, governments tend to tighten regulations, by broadening the types of animals to be tracked, the territory of traceability, the obligation of traceability use, etc.

This gives us opportunities for market growth in countries in which we are already present. Our product line is built (and planned) to help this process by providing synergistic tools for an improved food quality control.

At the same time, larger retail chains value the PR advantages of traceability, and are at the forefront of wide scale roll out after they already use it.

In practice, this means that even a pilot project in a narrow food segment or region can lead to a much wider roll out within 1-3 years.

9.3.4 TE-FOOD is scalable

Implementing traceability systems is 40% technology, and 60% implementation methodology. Having a scalable, modern software system is far from enough, a reliable, feasible implementation roadmap is the key of success.

We implemented TE-FOOD at more than 6,000 companies, and trained over 10,000 people within one year. To reinforce our international growth, we collected all of our experiences, potential problems and threats, successful tactics and strategies to an implementation guidebook. This guidebook provides a methodology which can be used and improved while implementing TE-FOOD in other countries.

We will train our local representatives how to

- help authorities in regulation, enforcement, sanctioning,
- communicate the advantages of blockchain and tokenization to gain support,
- analyze supply chain processes, and find the way to align them with TE-FOOD's approach,
- communicate and gain support from professional organisations, NGOs, and the local media,
- realize successful pilot projects, which lead to program roll out,
- organize and perform the trainings for thousands of companies,
- organize and manage the logistics of identification tools,
- monitor the commitment of supply chain companies, and act if there is a glitch,
- fine tune built-in food safety alerting and forecasting mechanisms to get the best results.

Our technology, experience, and this practical guidebook are all keys to an internationally scalable solution.

9.3.5 Sales model

Governmental implementation

Authorities or governmental organizations implement traceability for a group of companies. The scope can be geographical, or industry category related (e.g. pig, fish). Participation can be voluntary or mandatory.

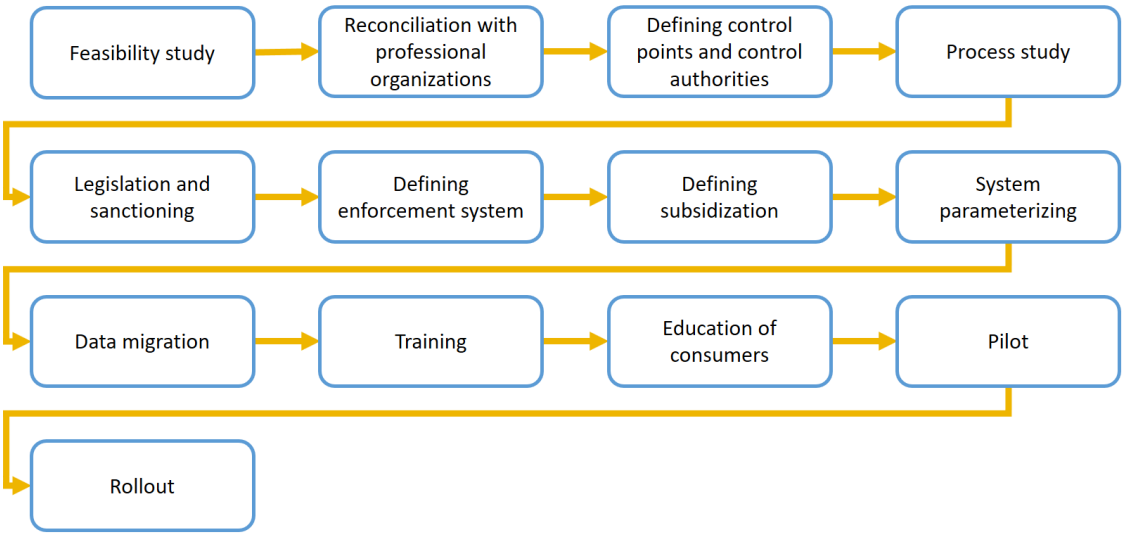
For governmental implementations, our sales model is based on the PPP (Public-Private-Partnership) model, which means

- No implementation cost (except creating the feasibility study and customizations)
- No training cost
- Long-term contract
- Identification tool and transactional costs
- Optional consultancy and project management services

In this model, the organizer of the implementation is a government of a region or country, to which TE-FOOD provides consultation on how to implement the system (legislation, enforcement, communication, etc.). The implementation, training costs are covered by TE-FOOD.

In return of TE-FOOD's active contribution, the parties sign a long term exclusive contract. The customers of the system are the companies of the food supply chain. TE-FOOD provides identification materials, software applications, optional hardware, and transaction storage for certain fees.

Steps of implementation:



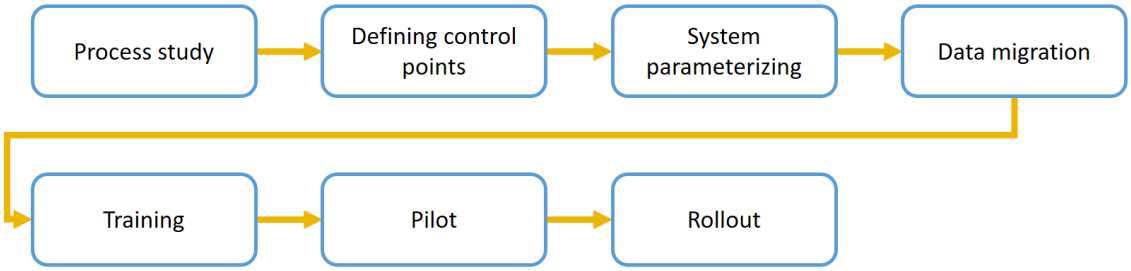
Private implementation

In this model, private companies (e.g. farms, food producers, retail chains), or professional organizations of the supply chain implement traceability for their (or their members') processes. They may require from their suppliers to provide data to the system by using it, or interfacing to it.

For private implementations, as the potential traceability revenue is limited to the customer's operation capacity, we charge additional fees:

- Training
- Development – optional, in case of system integration, migration, customization
- Consultancy – optional
- Project management - optional

Steps of implementation:



9.4 Pricing strategy

9.4.1 Basics of TE-FOOD pricing

Pricing is based on

- physical identification tools
  - QR code/RFID based security seals/tags – to identify tracked items, lots, cases, transports
  - QR code based label stickers, paper bags – to identify food products in retail
- transactions
  - each smart contract entry and update on blockchain generates transactions

As our primary target markets are emerging countries, the cost effective pricing is the main goal. In general practice, this means the total traceability **cost of a tracked item can not be more than US$1.**

Tracked item means:

- In case of high price animals/items (e.g. pig, cattle, some fish, larger crabs) it's one animal, with all the meat/food products sourced to it
- In case of medium price animals/items (poultry, fish, eggs, fruits, vegetables) it's a lot/case of animals/items, with all the meat/food products sourced to it.

For example, **one pig** has the following direct traceability costs attached (the exact numbers depend on the operation structures):

2 security seals (one on each rear leg)

1/20th transport security seal (20 pigs in one transport truck)

1/10th wholesale package security seal (pork from 10 animals in one package)

~80 label stickers/paper bags for the pork meat

5-10 transaction entries throughout the supply chain (depends on the structure)

All these together can't cost more than US$1.

Supply chain companies can either pre-pay or post-pay their transactions, depending on the contractual structure.

9.5 Competition / alternatives

Since we could not find other solutions, which provide

- farm-to-table traceability
- focus on livestock and fresh food
- focus on the requirements and the possibilities of emerging markets
- integrate supply chain companies, consumers, and authorities as well,

so we lowered the barriers of comparison to the main characteristics.

9.5.1 Direct competitors

We consider those solutions as direct competitors which provide farm to fork food traceability, regardless if they have a centralized or decentralized structure, and which provide tools for supply chain companies and consumers as well.

PROVENANCE

Characteristics:
Provenance is a blockchain based general traceability solution, which provides a mobile application to follow the products from farm to fork. It seems they have a more generalist approach, by not customizing the process for animal categories and roles in the supply chain, and it seems they are focusing on the logistics side. They have some implementations at private companies. However, we could not find their mobile app on app stores, so maybe they don't provide a general consumer app, but white label apps under their customers' name.

Comparison:
TE-FOOD has custom processes for each food categories, and supply chain roles. TE-FOOD is open towards authorities as well. TE-FOOD provides physical identification materials as well, connecting the physical and digital sides at all stages.
Towards supply chain companies and consumers, we provide general mobile apps to use in their processes. TE-FOOD also focuses on fair cost sharing within the supply chain.

Ambrosus

Characteristics:
Ambrosus will provide a general food and pharmaceutical traceability platform on blockchain to track the history, and check the quality of food. Their solution is still under development.

Comparison:
Ambrosus provides sensor hardware and blockchain protocol solution. TE-FOOD provides B2B client applications as well.
TE-FOOD is focused on specific areas: livestock and fresh-food traceability, and emerging countries as potential markets. While their solution is planned to be operating with cutting edge technology, TE-FOOD is probably more cost effective solution, which is important for emerging countries.
TE-FOOD also focuses on fair cost sharing within the supply chain.

Read a deeper comparison

9.5.2 Indirect competitors

We consider those solutions as indirect competition, which provide food traceability for supply chain

Characteristics:
Wabi provides product genuineness verification combined with a retail payment solution and loyalty system.
Wabi is a B2C solution for baby food products, cosmetics, alcohol, pharmaneuticals.

Comparison:
TE-FOOD covers the whole chain from farm-to-table, providing tools for supply chain companies, consumers, and autorities as well.

Read a deeper comparison

Characteristics:
FoodLogiQ provides whole chain traceability for food producers and retailers / hospitality companies. They can integrate their suppliers and follow the logistics and food control processes throughout the supply chain. As far as we know, it's a B2B solution, so consumers and authority are not involved.

Comparison:
TE-FOOD's solution also integrates consumers and authorities, as they have specific purposes to access food supply data.
TE-FOOD covers custom processes for each food category and supply chain role.
TE-FOOD focuses on fair cost sharing within the supply chain.

Characteristics:
HarvestMark tracks pre-packaged fruits and vegetables, and their main focus is to provide information to consumers at the retail.

Comparison:
TE-FOOD covers the whole supply chain as a B2B, B2C, and B2A solution in one.

Characteristics:
IBM's planned Hyperledger based blockchain traceability solution for WalMart seems to be more a general, logistical data based solution. As far as we know, the solution is in development/piloting phase.

Comparison:
IBM provides only the blockchain protocol, while TE-FOOD is a top to bottom solution with ledger, back office, and client apps. TE-FOOD's primary focus is livestock and fresh-food traceability, emerging countries as potential markets, and beside logistics data, TE-FOOD focuses on food quality data as well.
In this regard, IBM is not a competitor, but a potential partner.

9.5.3 Alternatives

Internal traceability through logistics or ERP systems	**Characteristics:** A lot of supply chain companies (mostly in developed countries) track their items within their premises. They know from whom they bought it, and to whom they sold it. For a lot of companies, this information is enough. **Comparison:** TE-FOOD's solution provides a new level in traceability with the whole chain approach. These companies can be partners as well through interfacing their solution to TE-FOOD to exchange logistical and food quality data.
Paper or Excel based traceability	**Characteristics:** In the emerging countries, a lot of food supply chain companies don't use modern technology to track and trace their items. **Comparison:** It's not possible to mitigate the current drawbacks of the food industry with these outdated technologies. The results which can be achieved by TE-FOOD is superior to these solutions.

9.6 Roadmap

Q2, 2015

Start

Development of TE-FOOD started by TE Ltd., Vietnam, in cooperation with Erba Ltd. Hungary.

Q2, 2016

Agreement

Agreement is reached with the government of Ho Chi Minh City to implement TE-FOOD. Preparations of the implementation started immediately.

Q4, 2016

Launch

TE-FOOD launched in 12.16.2016 for pig and pork tracking in HCMC region.

Q2, 2017

Trainings

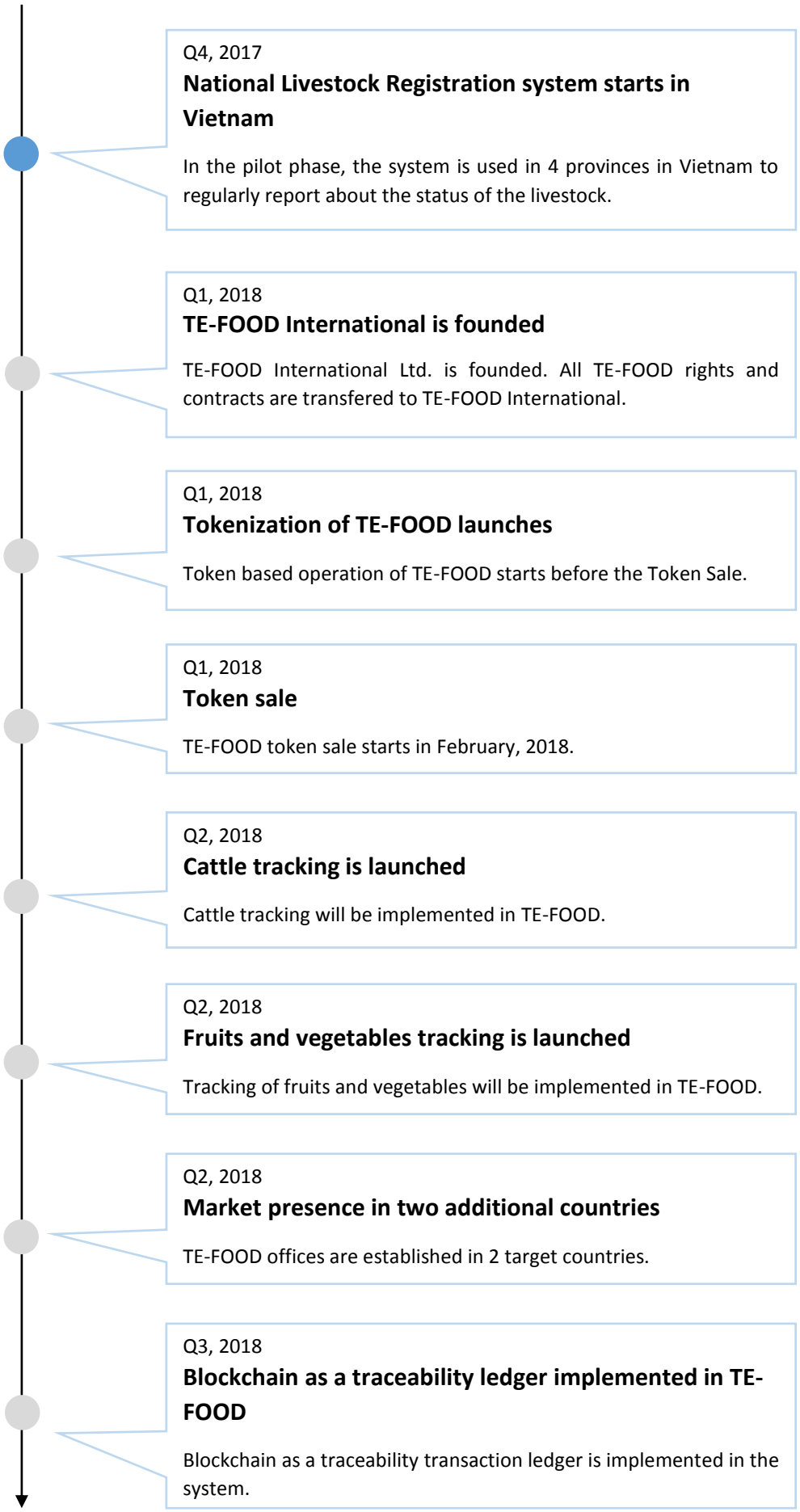
Training of chicken farms and egg producers starts. In total, more than 10,000 people is trained.

Q3, 2017

Chicken and egg tracking starts

On 01.09.2017, chicken and egg traceability started in 22 vietnamese regions.

National livestock registry contract is signed with the Ministry of Agriculture in Vietnam, Livestock Production Department.



Q4, 2017

National Livestock Registration system starts in Vietnam

In the pilot phase, the system is used in 4 provinces in Vietnam to regularly report about the status of the livestock.

Q1, 2018

TE-FOOD International is founded

TE-FOOD International Ltd. is founded. All TE-FOOD rights and contracts are transfered to TE-FOOD International.

Q1, 2018

Tokenization of TE-FOOD launches

Token based operation of TE-FOOD starts before the Token Sale.

Q1, 2018

Token sale

TE-FOOD token sale starts in February, 2018.

Q2, 2018

Cattle tracking is launched

Cattle tracking will be implemented in TE-FOOD.

Q2, 2018

Fruits and vegetables tracking is launched

Tracking of fruits and vegetables will be implemented in TE-FOOD.

Q2, 2018

Market presence in two additional countries

TE-FOOD offices are established in 2 target countries.

Q3, 2018

Blockchain as a traceability ledger implemented in TE-FOOD

Blockchain as a traceability transaction ledger is implemented in the system.

Q3, 2018

Fish and seafood tracking is launched

Fish and seafood tracking will be implemented in TE-FOOD.

Q3, 2018

New developments are launched

- Animal antibiotics traceability
- AI based smart pandemic forecasting and alarm modules for the National Livestock Registration system

Q4, 2018

Marketplace is launched

TE-FOOD Marketplace extends logistical and food safety data, with trading possibilities with conditional smart contracting possibility.

Q1, 2019

Food safety sensor tools are ready

The sensor equipped tools log directly to blockchain, and contain smart locks which can be opened only by specific users, and log their status.

Q1, 2019

Extended farm management tools ready

Extending the existing functions (inventory, feeding, vaccination), new modules are available, according to the G.A.P. standards.

Q2, 2019

Animal face recognition is ready

Identification tools are extended by a facial recognition system for cattles. The R&D project starts in Q1, 2018.

Q2, 2019

Market presence in 4 countries

Two new TE-FOOD offices are opened in target countries.

9.7 Financial plan

To provide transparency in our future operations, we publish our financial plan for the next 5 years. Please note, that the Business Plan is provided only for informational purposes, which can be changed if the market conditions change.

In 2017, we have revenues around $350,000.

9.7.1 Gross profit

In US$.

Basic indicators	2018	2019	2020	2021	2022
Average number of employees	60	116	154	190	224
No. of countries with own local office	2	5	7	9	11
No. of countries with franchise sales	1	3	6	9	12
Number of transactions	219 000 000	584 000 000	949 000 000	1 314 000 000	1 679 000 000

Costs	2018	2019	2020	2021	2022
Supply chain donations	400 000	1 000 000	1 200 000	1 100 000	1 000 000
Operational costs	1 053 800	930 900	1 174 200	1 322 000	1 453 600
Gross salaries	2 885 700	5 054 350	6 001 275	7 332 300	8 142 300
Total legal cost	155 000	87 500	117 500	120 000	120 000
Travels, exhibitions, conferences	450 000	600 000	624 000	624 000	624 000
Advertisement and marketing materials	712 000	516 000	234 000	258 000	258 000
Material costs	825 662	2 331 012	3 932 157	8 288 548	13 091 983
Total cost	**6 482 162**	**10 519 762**	**13 283 132**	**19 044 848**	**24 689 883**

Revenues	2018	2019	2020	2021	2022
Transaction fees + ID materials	2 476 985	6 404 580	8 895 250	16 736 755	26 740 490
Franchise revenue	0	411 919	2 030 854	5 690 223	8 774 822
Added service	68 357	172 429	368 286	792 000	1 349 214
Total revenue	**2 545 342**	**6 988 927**	**11 294 390**	**23 218 978**	**36 864 526**

Gross profit without taxation	**-3 936 820**	**-3 530 835**	**-1 988 742**	**4 174 130**	**12 174 643**

9.7.2 Cash flow

The cash flow plan calculates with the Token sale revenue. 90% of the revenue is planned to be used in Y1, while 10% remains to be used in Y2.

Please note that the plan doesn't calculate with VAT.

In US$.

	2018	2019	2020	2021	2022
Token sale revenue	14 400 000	1 600 000			
Operational revenues	2 545 342	6 988 927	11 294 390	23 218 978	36 864 526
Costs (COGS+OPEX)	6 482 162	10 519 762	13 283 132	19 044 848	24 689 883
Gross profit	10 463 180	-3 530 835	-1 988 742	4 174 130	12 174 643
Corporate income tax	1 464 845	0	0	584 378	1 704 450
Cash balance	8 998 335	7 067 501	5 078 759	8 668 510	19 138 703

9.8 Partners

GS1

GS1 is a not-for-profit organisation that develops and maintains global standards for business communication.
GS1 barcodes are scanned more than six billion times every day.
GS1 helps us to make TE-FOOD comply with the GS1 standards which are used all around the world.

Unisto

Unisto is a Switzerland based international manufacturer of security seals.
Unisto Malaysia manufactures TE-FOOD's high quality seals.

Zalo

Zalo is a free message and call mobile application. By 2017, the number of Zalo users reached 70 million.
TE-FOOD's QR codes can be read by the Zalo app, to view the food history.

View proof of our partnerships

9.9 Why participate in TE-FOOD's token sale?

1

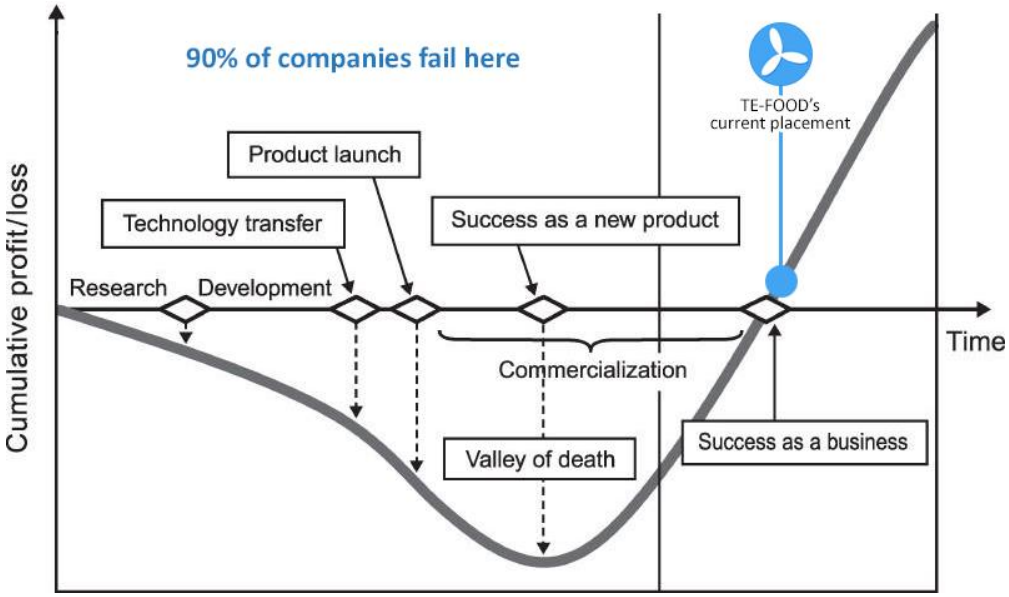
Safety

You don't have to wait for the development of the system and the tokenization. TE-FOOD as a traceability solution is ready, and payment for transactions is tokenized. You can use your token immediately.

2

Proven business model

90% of companies fail at the planning, development, and commercialization stages, but TE-FOOD is past these stages. There is a market for the product, it's working, scalable, and the company makes profit. The next step for us is growth.



3

Solution to bring a better world

TE-FOOD is more than just business. For us, it's a mission. We aim to expand the social impacts of TE-FOOD to billions of people in emerging countries.

10. TOKEN SALE

10.1 Fact sheet

Token name	TFOOD
Token symbol	TFOOD
Type	ERC20
Utility of token	TFOOD represents the identity and information data of tracked items. Supply chain members can pay with tokens for transactional fees, and value added item information. Consumers are paid for using the Consumer mobile app and read food product QR codes, and can buy quality analysis services.
Total token supply	1,000,000,000 TFOOD
Tokens for sale	512,000,000 TFOOD (51% of total)
List price of TE coin	1 TFOOD = $0,05
Token sale volume	$19,100,000
Token release	Tokens will be transferred during the public sale for contributors with successful KYC process. Tokens can be used in the TE-FOOD ecosystem immediately after release.

10.2 Public sale

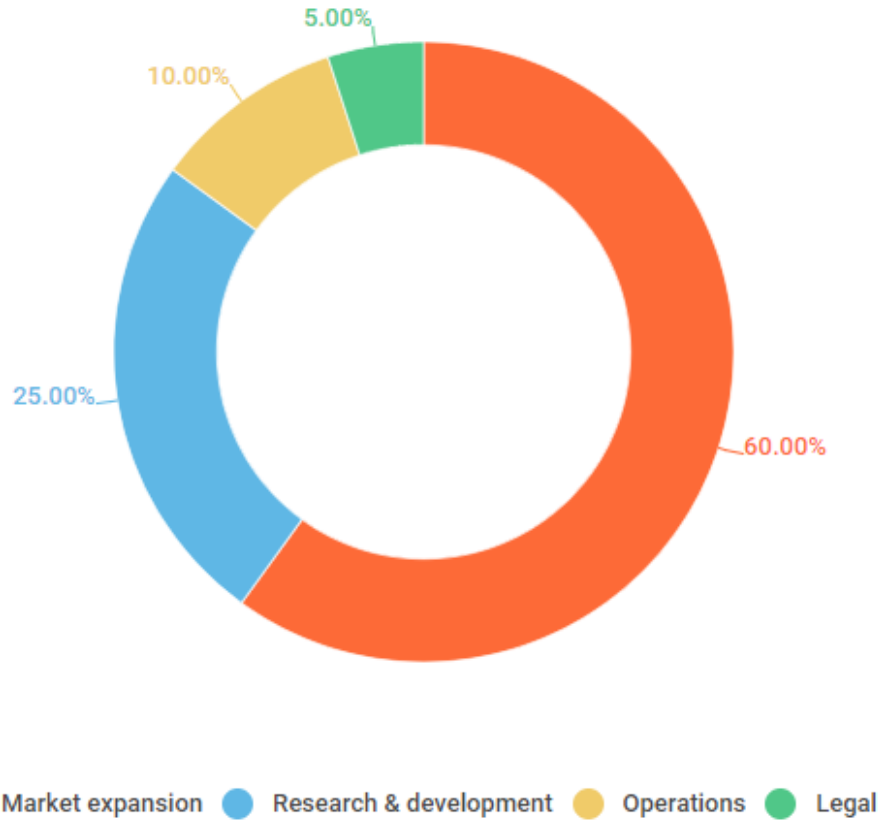
Start	22.02.2018
End	22.03.2018
Bonus	Bonus levels are based on time intervals:

1st week	15%
2nd week	12%
3rd week	10%
4th week	5%

Accepted payment options	ETH

10.3 Allocation of revenues

Detailing the allocation of revenues serves informational purposes only, and intended to ensure token sale contributors that the company will be sustainable, and able to provide the services they buy for a long term.



60% Market expansion

Since TE-FOOD as a traceability solution is ready and working, we use most of the revenues to acquire new markets. The sales and implementation of a whole-chain traceability system requires a number of professionals to work together for 8-12 months.

Our primary markets are emerging countries, which represent 60% of the world's population and 45% of its GDP. We already have ongoing negotiations with potential customers and implementation partners in Cambodia, Malaysia, Laos, and South-Africa.

According to the Financial Plan, the revenues cover the costs of expansion to several additional countries. To separate operational costs of the HQ and local companies in target countries, we counted all costs of local offices and teams to this package.

Market expansion costs contain marketing, sales, and implementation costs as well.

- Marketing: exhibitions, conferences, articles, targeted ads, marketing materials
- Sales: business trips to partners and potential clients
- Implementation: local presence in target countries

25% Research & development

We separate funds to realize our R&D roadmap with a wide spectrum of synergistic tools for a modern supply chain. It contains all technical costs (e.g. server rental) and salaries.

We calculated all technical costs (e.g. server rental) and salaries in this pool.

10% Operations

Operational costs of the HQ to enable all professionals to focus on their tasks.

- Office rental
- Overhead
- Communications
- Bookkeeping
- Supporting personnel salaries

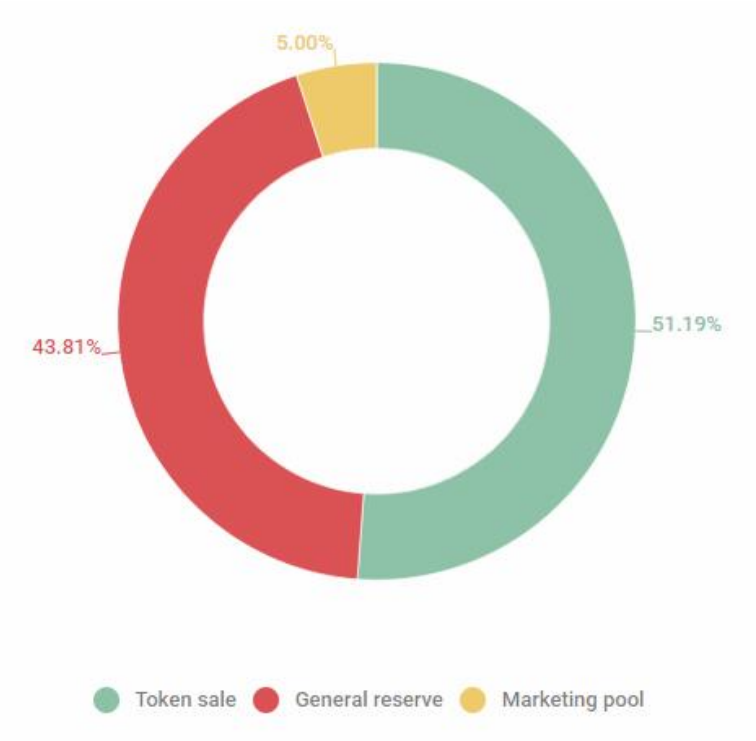
5% Legal

To comply with the regulations, our operation needs continuous legal help from professional lawyers.

10.3.1 Release of revenues

As a ready solution, TFOODs are immediately usable after the token sale to buy services on TE-FOOD. Therefore, token sale revenues are not held in multisignature escrow wallet, and immediately accessible for TE-FOOD International.

10.4 Token distribution



51% Token sale (public circulation)

51% of the tokens will be sold to the community during the public sale.

5% Marketing pool

We remunerate the proof-of-care, bounty, marketing campaign participants and partners with 5% of the tokens.
Lockout period: no lockout

44% General reserve

We allocate 44% of the tokens to a general reserve.

Lockout period: Two years lockout by releasing 25% after the first year.

Unsold tokens will be put into the general reserve and will be sold on the TFOOD Market or during a future token sale until Public token pool reaches 500 million tokens.