Sensing Exchange Capital

Sense2Earn (S2E) *Crypto App for your Mobile device*

WHITEPAPER

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Introduction

The cryptocurrency market and blockchain technologies are growing sectors with a huge potential for future applications, platforms and use cases. Data is also considered a highly valuable asset for digital platforms and services, often considered also as the "*New Oil*" resource, leveraged by emerging technologies like IoT, Big Data, Ontology, Artificial Intelligence and Machine Learning. These technologies enable the data-collection, -analysis, -inspection and data-visualization on scalable computing resources to facilitate the analysis and access to big amounts of data. The amount of data available is constantly growing and creates new possibilities to capitalize data collected and shared. Demand for data will increase.

EVERYONE who produces in some form valuable DATA, should be able to asses full OWNERSHIP on it and also have the possibility to SELL it, if they want
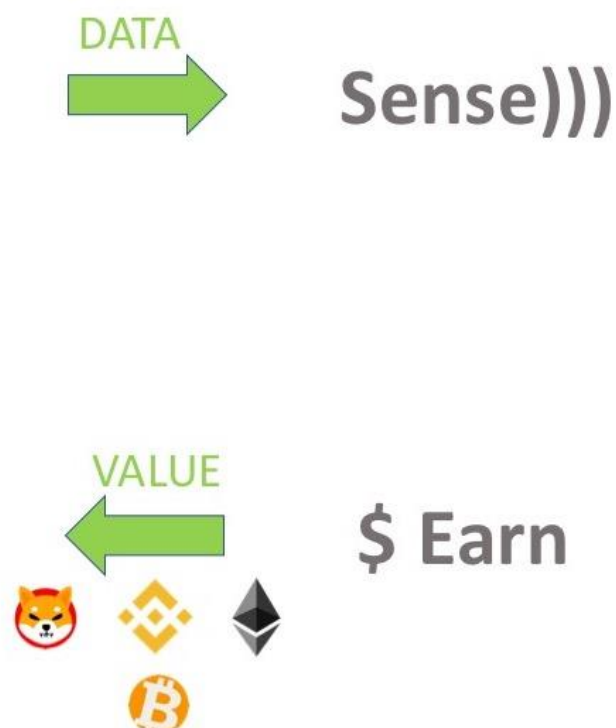
The *Sensing Exchange Capital* platform introduces the concept of ***Sense2Earn*** (*S2E*) that allow users (Data-producers) to collect and *mine* sensed data with their mobile device with the S2E approach by using the **S2E Mobile App** and get paid in form of popular cryptocurrencies for the data collected. Data-consumers instead can discover and buy the data via a decentralized *Data Exchange Market* (DEM) by using cryptocurrency as exchange method that is than rewarded to the user (data-producer) that *mined* the data. The appetite for data is growing in every sector.

The **S2E Mobile App** will turn your mobile device in a little **Cash Cow**!!!

The platform introduces two native Tokens, the ***SEC Crowd Token (SECC)*** which will boost the data mining rate in the **S2E Mobile App** and increase the generated value**,** and the ***SEC Data Token (SECD)*** which will be an extra reward to users *mining* data with the **S2E Mobile App.** The Token will be listed and traded on popular cryptocurrency exchanges.
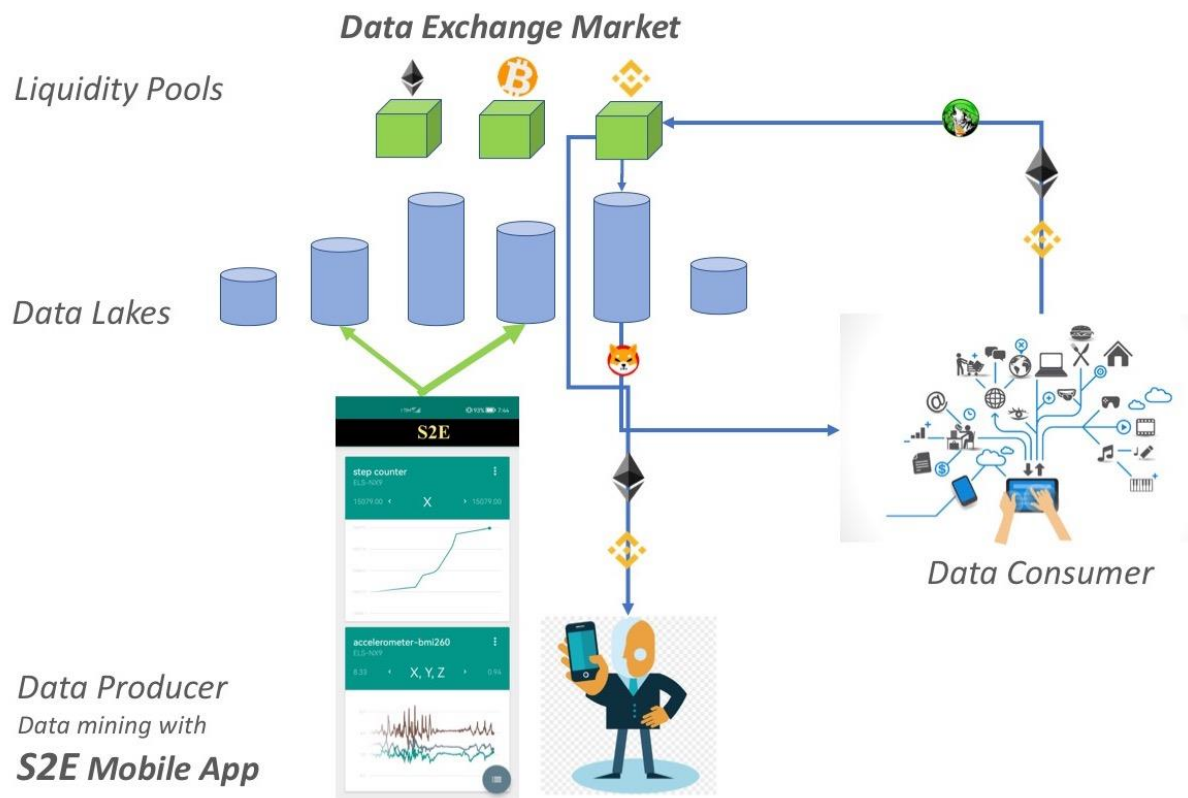

S2E Mobile App

The *Sensing Exchange Capital* platform provides a platform and sensor enabled applications (**S2E Mobile App**) to create intrinsic value for data collected and *mined* with a mobile device or sensor platform by combing sensing data with blockchain technologies in order to guarantee privacy, security, quality and value transferable ownership of data.

Data-producers (Users) can collect and *mine* data with the **S2E Mobile App**, the data will then be listed on the *Data Exchange Market* (DEM). Data-consumers can discover and buy third party data listed on the *Data Exchange Market* (DEM) for creating further value-added products and services that can be further capitalized. Data is anonymous, securely encrypted, stored in a distributed filesystem and intrinsically bound to value in form of cryptocurrency.

Similar to the Bitcoin *mining* process, on the *Sensing Exchange Capital* platform the data will be *mined* (quality checked, validated and aggregated) and the *mining* rate will decrease as the number of users and the amount of data grows, giving early users an incentive to *mine* data and earn higher rewards.

DATA has VALUE that can be MINED

Concept

In an increasingly digitalized world, data is becoming more and more available being a de-facto driver for many different sectors like finance, agriculture, medical, industry, manufacturing, aerospace and diversified services and social media platforms. Data from a variety of sensors available on a mobile device (Mobile Phone, Smart Watch) are collected on a daily by millions of individuals worldwide.
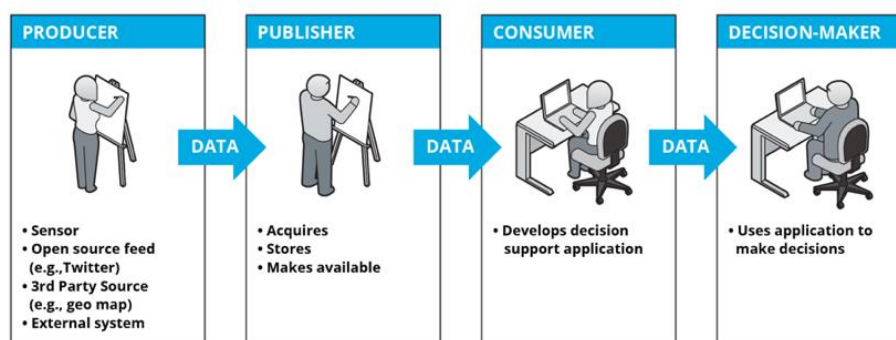
Think of how for example anonymous data collected by an individual with a common mobile phone (*sensors: GPS, orientation, accelerometer, step counter etc.)* may be used to predict traffic congestions. How for example data collected in the field of precision agriculture (soil moisture, temperature, satellite imagery, etc.), may be used for predicting droughts or even for mining valuable data for trend predictions in the finance sector.

Raw data as delivered by a given sensor application can be further mined and blueprinted with methodologies like data mining, ontology and AI (Artificial Intelligence) for creating innovative added-value data products and services, that can again be capitalized on the *Sensing Exchange Platform.*

The *Sensing Exchange Capital* platform aims at creating intrinsic value for data by binding it to *Smart Contracts* (SC) with associated *Liquidity Pools* (LP) that hold cryptocurrency. An *Automated Market Maker* (AMM) that runs on blockchain technologies will enable data ownership and value transfers.

The *Sensing Exchange Capital* platform is targeting the following Users:

- *Data producers* (DP)
- *Data consumers* (DC)

Data producers:

Can choose which data to collect, *mine*, store and trade on the decentralized *Data Exchange Market* (DEM) by using the **S2E Mobile App** or sensor enabled platforms. Typical data-producers may be individual users, organizations or corporations that collect valuable data with the *S2E (Sense to Earn)* approach by using their mobile device or sensor application.

For the data-producer the data privacy (anonymous) and security is always guaranteed, and he can decide when, how often and when not to mine selected datasets on the **S2E Mobile App**.

Data consumers:

Can discover available datasets on the *Data Exchange Market* (DEM) and acquire ownership on the data. Typical data consumers are organizations or corporations interested to further capitalize a given dataset and create added value products and services.

Data

The Data exchanged on the *Sensing Exchange Capital* platform can be of various kind and nature.

Nowadays with the small embedded systems, Mobile Devices and IoT (Internet of Things) platforms enable cheap, low power consumption and functional sensor systems to be deployed for specific applications (i.e. agriculture, product tracking, air-quality etc..).

Example of variety of sensors available on a new generation Mobile Device:

Most data from these sensors may seemingly have little concrete use cases, but in reality, all of these sensors deliver data that can be extremely valuable in various fields where technology and knowledge play important roles.

A concrete use-case example is the information about location (GPS), a picture (snapshot that point towards the sky) done with the mobile phone camera and the luminosity sensor information. Corporations and research organization that work with satellite data may be well interested in this information because it can be useful to improve the validation of satellite imagery, for example to determine the sky clearness for assessing atmospheric attenuation of the image signals (i.e cloudy sky or clean sky).

In order to collect and *mine* datasets on enabled sensor platforms (Mobile Devices, IoT) the *Sensing Exchange Capital* platform provides applications (**S2E Mobile App**) and sensors for collecting, *mining* and storing the data in an anonymous and secure (encrypted) way. This information can then be exchanged as a regular value transaction between data-producers and data-consumers using common cryptocurrency tokens.

How it works

A user (data-producer) uses the **S2E Mobile App** or sensor platform to collect and *mine* selected types of data in anonymous and secure way. In selected time intervals the data will be *mined* in chunks of data defined as *Data Quantum's* (DQ) on the platform by interacting with specific *Smart Contracts* that publish the data on the *Data Exchange Market* (DEM) where it can be acquired by data-consumers.

The datasets collected and *mined* by data-producers will be measured in *Data Quantum's* (DQ), are organized in different *Data Lakes* (DL*)* and have multiple *Liquidity Pools* associated holding cryptocurrency.

As the amount of data grows inside the *Data Exchange Market* (DEM) it becomes more and more valuable for entities (data-consumers) in research and industry sectors. Data-consumers have the possibility to buy the data available on the *Data Exchange Market* (DEM). Once the dataset has been acquired, the *Liquidity Pool* associated with the dataset grows. The price of the data will be defined by demand and supply of a given dataset related to the timeline (Time) with the following formula:

Price: (*Liquitity Poo*) divided by (*Nr. of datasets in Data Lake in Time)*)

Smart Contracts are allocated for each specific dataset organized as single *Data Lakes* (DL*)*, where an *Automated Market Maker* (AMM) defines the current price according to the *Liquidity Pool* (LP) associated with a particular dataset.

Data-consumers can acquire the data with cryptocurrency tokens that will fill the *Liquidity Pools* which will then be available to the data- producers based on the stake proportional to the amount of data *mined*. The price of a given dataset, is inversely proportional to the amount of data mined in a specific *Data Lake* in Time*.* In addition, the user will receive rewards in form of SEC Data Token (SECD) that will be tradeable on popular crypto exchanges. Like in the Bitcoin mining process, on the *Sensing Exchange Capital* platform the data mining rate decreases as the number of users and the amount of data grow. This means that early *mined* data receive higher rewards, whereas the more data is *mined*, data will become a bit more affordable also for data-consumers.

The *Automated Market Maker* (AMM) will balance the amount of *Data Quantum's* (DQ) and prices in an optimal way for both parties, considering supply, demand, quantity of data present in a given *Data Lake (in Time)* and the associated *Liquidity Pool* (LP) available for a particular dataset. The more a given dataset is acquired by data-consumers, and therefore more *Liquidity* is provided, the more value a given data-producer may receive for the data *mined*. This is a key factor that will incentive data collection and data acquisition from the beginning and will accommodate larger data consumptions as the amount of data grows.

Platform

The *Sensing Exchange Capital* platform provides applications (**S2E Mobile App**) and software components for sensor enabled platforms, as well as web3 platforms and tailored Smart Contracts running on blockchain technology to enable users, both data-producers and data-consumers, to collect, *mine*, capitalize, share, discover and trade sensed data. The platform comonents are:

- Applications (*S2E Mobile App*, *Software components*) for collecting and mining data on different sensor enabled platforms (Mobile Phone, wearables like Smart Watches, IoT platforms etc.)
- *Data Exchange Marketplace* (DEM) for trading and exchanging mined data
- **Market Place** for hardware Sensor Platforms
- Utility Token *SEC* **Crowd Token (SECC)** for enhanced user experience and application performance, and Token **SEC Data Token (SECD)** for extra reward system (to be listed on Exchanges)

Tokenomics

The *Sensing Exchange Capital* platform introduces the Utility Token **SEC Crowd Token (SECC)** that enables users to *mine* data with an enhanced mining rate with the *S2E* approach, receiving higher rewards. For the *mined* data, the user receives and extra reward in form of the **SEC Data Token (SECD)** that are generated by the mining process. The Token will be listed on popular crypto Exchanges and will be tradeable.

Early contributors and holders of *SEC Crowd Token* (*SECC*) will have access to beta releases of the **S2E Mobile App** and will benefit from early data *mining* and an enhanced user experience and application performance to boost the data *mining* rate which will be proportional to the amount of *SECC* tokens the user holds. A higher data mining rate will increase also the rewards in form of **SEC Data Token (SECC).**

Example: 6 SECC Tokens will increase the data mining rate by 1 %, 60 SECC Tokens by 10 %, 600 SECC Tokens by 100 %, 660 SECC Tokens by 110%, etc. until a maximum of 600% is reached. The SECC Tokens can be used on multiple devices.

Token Name:	SEC Crowd Token
Symbol:	SECC
Supply:	1000000
Token Price:	1 SECC == 0.00166 BNB (approx. 0.5 $)
Blockchain:	Binance Smart Chain (BSC)

Token (to import in your Wallet**):**
    0x68e06c00e280f4db688859dc335da488609bb7ef
Bscscan URL:
    https://bscscan.com/address/0x68e06c00e280f4db688859dc335da488609bb7ef

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BUY SEC Crowd Token (*SECC*) Contract Address

Send BNB (eg. 0.1) to the address below with your MetaMask wallet and you'll receive your *SECC* Tokens

0x65F40187F46C32579118670f92425A71e2514743

Roadmap

June 2022	→Release of **LITEPAPER** and **Multimedia** (Logo, videos)
August 2022	→ Release of a detailed **Platform Description**
August 2022	→ Official **Website** published
October 2022	→ **Marketing** campaigns
November 2022	→ Release of **S2E Mobile App** (beta version)
January 2023	→ **Project Meetup** and **Hackathon**
February 2023	→ **Marketing** campaign and **Stakeholder** involvement
April 2023	→ Release of **Data Exchange Marketplace** (DEM) platform
May 2023	→ **Final Release of S2E Mobile App** (version 1.0)
May 2023	→ **SEC Data Token (SECD)** listed on Exchanges

Links

WHITEPAPER:
http://www.seesolutions.it/documents/SensingExchangeCapital_WHITEPAPER.pdf

Facebook:
https://www.facebook.com/seesolutions.it

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https://twitter.com/SEESolutions

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https://www.youtube.com/channel/UC4PuShsXW-eDIHu96I8wQXA