

## **Terra White Paper**

**WHY:**

Grocery stores and restaurants are paying too much fees to the banks when transacting. This is because they have to deal with the banks and other financial institutions when making transactions in the payment process. In addition, these restaurants and grocery stores do not have, and cannot afford the best technology for their businesses and therefore, they do not enjoy the best services and cannot have good products and procedures to support their businesses.

With the project FOOD we aim to bring grocery stores and restaurants to the blockchain. This will provide them easy access to the blockchain technology that they cannot afford individually. Moreover, the FOOD project will have an ICO thus no legal risk will be taken initially. The owner of the initiative, Terraa, will have no legal obligation to anyone thus indicating this will be a low risk project. The product in itself will be invested once all the fund requirements are met. This will be the first step into taking the FOOD project and Terraa, global.

**WHAT:****The Platform**

There will be a FOOD package that consists of Terraa's customers, merchants, shoppers and logistics apps. All these parties will be interacting on the food blockchain through various applications that support transacting groceries in exchange for food coins. In essence, Terraa is set to release a suite of apps as they were in Version 1.8 to any grocery or restaurant business globally. These apps will be constantly updated and improvements made to the tech and analytics features to make them more suitable to the various parties' needs.

**Food coin:**

The FOOD blockchain will be fuelled by the Food coin which will be the medium of exchange within the framework. It is expected that all transactions of the FOOD blockchain will be powered by the food coin. As such, all customers within the platform will require food coins to purchase groceries while miners will be able to mine these coins by verifying and recording transactions into blocks.

**Food coin's ICO:**

Terraa will hold a food coin ICO to raise funds needed to finance the project and vision. During the ICO, an agreed number of Food Coins will be released to investors at a pre agreed price. Out of the funds generated and based on the white paper of Basic Attention Token (Blockchain based Digital Advertising that raised 33 million dollars), the proposed budget allocation is as follows:

- Development Team: 56% of budget -This financing allows for the rollout of the FOOD platform, including the necessary adjustments to and development of the existing Terraa code.
- Administration: 10% of budget- Consists of DIVUM legal, security, accounting and other associated administration costs.
- Marketing: 12% of budget- Marketing will focus on expanding awareness and adoption of the FOOD project and the FOOD solution among users, publishers and advertisers. This also includes the growth and maintenance of the world-wide community.
- Contractors: 15% of budget- These funds will be directed at third-party providers offering engineering, marketing, growth-hacking, PR, partnerships, affiliate programs and more.
- Contingency: 7% of budget- This is a set-aside for unforeseen costs.

Terraa is confident of raising substantial amount to fund this project and sustain the vision in the foreseeable future. The concept of ICO's has garnered substantial attention with other similar projects having raised a lot of money in recent years. For instance, Adel, a distributed autonomous organization has recently raised \$1192820 while Exscudo which is a cryptocurrency exchange platform that has social media trading features and analytic tools raised \$6405879. One of the most successful ICO called MobileGo raised \$53069235. Based on this, it is therefore expected that Terraa will be able to meet its ICO funding targets comfortably due to the novelty of the idea and far reaching impact it has on the specific industry.

#### HOW:

Terraa has different options to implement the proposed solution with respect to technology. Terraa is currently in the process of porting the system onto blockchain technology. Alternatively, Terraa could also build DApps that run on the Ethereum blockchain. In this respect, the development of own blockchain is a more preferable and viable option for the FOOD project.

## **The solution**

The adopted solution will therefore, involve the development of own FOOD blockchain. Blockchain is an incorruptible digital ledger that allows economic transactions which can be programmed to record anything of value, not only financial transactions. Information on a blockchain exists as a database that is shared by many people and is reconciled continually. These records in this database are public and easily verifiable and can be accessed by any person in any location since they are not stored in a single location. In addition, there is no information that is available to be hacked or corrupted and is hosted by millions of computers simultaneously, with data that is accessible to anyone using the internet.

The blockchain technology cannot be controlled by a single entity and has no single point of failure because it stores blocks of information that are identical across the network. In addition, this ensures that there will be no human and machine errors during transactions, that no transactions are missed and that all exchanges made have consent from involved parties. Moreover, the blockchain ensures the validity of all transactions by recording them in a connected distributed system of registers that are connected through a secure validation process. Customers are able to access this register at their convenience and in cases of any misunderstanding, there will be proof from the register on what is right.

This blockchain network is also a state of consensus. This is to mean that it automatically checks in with itself after every ten minutes and reconciles every transaction that takes places within a ten-minute interval. Through this, there is transparency of the data such that everything in the system is public and all can view it and also there is no way that the information can be corrupted. Using the blockchain technology removes middlemen from the transactions. For this reason, the producers of the farm produce and the consumers are able to transact directly with each other and make payments without involving banks or other financial organizations.

Through the use of this technology, Terra eliminates the risk that organizations face when holding data in a central place. This is due to the internet security issues that rely on passwords and usernames in order to keep information, assets and identities protected online. Blockchain security does not rely on these passwords but uses encrypted technology. Terra, therefore eliminates the risk of being hacked and information about the customers and suppliers of fruits

and vegetables stolen or used in the wrong way. The company and all the customers and suppliers are safe from loss and inconvenience caused by internet problems.

The blockchain technology uses food coins as the transaction currency. This is a crypto-currency that is not controlled by any financial institution and is traded online. Food coins that are sent across the blockchain network are recorded to belong to the address that sent them using a private key that gives the owner access. Customers who order for their fruits and vegetables are able to make the transaction at any time of day or night and pay with ease, without any transaction fee being deducted from their accounts. The customer is also able to buy and sell their food coins through this blockchain technology to allow them to make their transactions with added ease.

Through this technology, peer-to-peer transactions are enabled, opening an avenue that promotes direct transactions between parties. Therefore, customers are able to deal directly with farmers and producers of the farm fruits and vegetables, without relying on any intermediaries. Choosing and deciding on the best or preferred supplier of the produce will be made available for the customer. Hence, the customer can be able to get the produce from farmers who are closer to them, saving on the transportation fee required in the initial transactions. The prices for the produce can consequently be lower for the customer and also higher for the farmer. The farmer stands to benefit through this direct interaction since they will gain more returns from their produce due to the elimination of middlemen.

Additionally, this technology enables companies to practice transparency and verifiability of assets, information, and equity such that the company can function better and make decisions that are worthwhile. In future when there are changes in management or operations, there will be easy handover and access of information so that the goals of the company can be easily achieved by any members in operation. Customers are also able to access the details about the company that enables them to make decisions on whether to transact with Terra and also provides for suggestions on areas where they feel that the operations are not professional or legal. In today's world, customers want to know that the ethical claims of companies about their products are real. Through this technology, therefore, it is able to know the genuine and false backstories of companies and their operations. Farmers can also advertise their goods in the process by stating the products and processes that they use to grow their farm fruits and vegetables so that

customers will know what is used in the production and growth process and the nutritional value of what they purchase.

### **Market landscape**

Grocery stores and restaurants pay a lot of fees when using their cards. These fees come in form of interchange fees and assessment fees. In addition, merchant service companies also have their own fees such as monthly payment gateway fees and statement fees. All these add up to the expenses that these restaurants and grocery stores have to pay in order to get groceries delivered to them. These fees can go up to 3% of the total sales or purchases. To top these expenses up, there are very few grocery stores and restaurants that have their own drivers hence they have to incur more transportation costs.

### **Proof of concept**

Terraa is an online end to end business that provides fresh fruit and vegetables with delivery to the customer's doorstep through collaboration with farmers. These are best quality farm produce and the transaction helps the farmers get an appropriate price and also the customers get the best quality fresh produce for reasonable prices. Terraa has built algorithms that facilitate adjust in time warehouse model that allows the produce to have the least time to move from the farm to the customers, reducing wastage and allowing the farmers to get better returns. This method of shopping eliminates the time that the fruits and vegetables spend in storage in supermarkets and other vendors which make them less healthy by the time customers can buy them.

Terraa allows customers to subscribe in order to get their products by choosing a sample basket and enrolling for the monthly subscription. The customer has a chance to create their own monthly basket or choose one that has already been filled out. Through this customization, a customer is able to choose the fruits and vegetables of their choice and can change any time before 48 hours from the scheduled delivery time. After this process, Terraa provides the customer with payment options that are easy such as Wallet, Online and Pay-As-You-Go, that are easy to make after the customization process. However, the customer also has the option of making one-time orders if they do not prefer the monthly subscriptions. These deliveries are made according to the preferences of the customer.

This system created by Terraas has a lot of benefits such as reducing the hassle that customers go through when queuing for long and billing and getting customers fresh fruits and vegetables straight from the farm which provide value for their money. The system is also easy to start, pause and reschedule for deliveries especially when one is traveling or is not able to be available for the deliveries. The priority for Terraas, therefore, is to provide the customers good health by providing them with farm fresh fruits and vegetables and also to give them an opportunity for a healthier world.

## SWOT ANALYSIS

### **Strengths:**

Strong Tech- Google has done a spotlight feature on Terraas tech which has raised the company's profile and boosted its reputation in the technology industry.

The FOOD project is highly scalable thus can accommodate multiple players and users

Terraas has a strong team across multiple departments such as legal, branding, marketing, PR, Tech/development. Additionally, there are willing and capable mentors and advisors providing support for the internal team to ensure the achievement of the set vision and goals.

Terraas has a working product sold online and therefore it can be easily transferred onto blockchain

First Mover Advantage in the grocery and food industry

Seed Funded Terraas investors

Minimum personnel required to run service

### **Weaknesses:**

Terraas is still small with a limited following and branding. This will require substantial marketing and promotion to raise awareness about the brand and FOOD product.

### **Opportunities:**

Worldwide brand for food/grocery delivery on blockchain with Divum having potential of making profits through transactional costs on a global level

Potential to make shift from brick and mortar services and in general B2C and going back to the founders area of strength, tech

With increased adoption, token value increases disproportionately while the system becomes self-sufficient after certain threshold

There is a shortage of companies organizing ICO's. Moreover those present are substandard and have no product. The investor community is desperate for a company with a working product and strong team. In this respect, the FOOD project which has a successful POC- Terra is expected to gain substantial backing from the investor community

Threats:

Low awareness of the cc in the marketplace

Hard to convince merchants to start using the system

Users need to have a delivery fleet

### **Value proposition**

The main value proposition and selling point is that any grocery or restaurant with a delivery fleet or access to one can get an end to end system for free that ensures maximum efficiency and brings in more customers. This means that sellers, whether grocers or restaurants can leverage the FOOD platform to gain access to global base of customers at much lower cost. This is further supported by Terra's aim to be a global brand where our design is uniform throughout and customers travelling to any country can easily find groceries and food at the best price instantly. Moreover, the users of the platform gain as Terra makes a small transaction fee at a global level while merchants and consumers save on bank fees and also benefit from rise in currency value.

The main value proposition for the investors is that the currency value increases with more transactions making it more suitable as the platform continually scales to incorporate more sellers and buyers. In addition to this, Terra seeks to set aside a part of the funds collected to be

used as public bounty- discounts available to every customer till the fund runs out. This will be beneficial to the merchants, customers and investors alike since the fund allocates half the discount to the customer while the merchant supplies the other half if needed. On the other hand, this will pull more customers to adopt the system thus benefiting the investors in the long run.

The value proposition for this decision by Terraas clearly shows that there will be more transparency in the system and an opportunity for the buyers to talk and deal with the sellers in a direct manner. For restaurants and individuals who order for a lot of fruits and vegetables, this network will highly be effective and cheap for them since they are able to get sellers closer to them, reducing the time they wait for deliveries and the transaction fee associated with the huge transactions. In addition, this network provides for accountability whereby the cases of confused and forgotten orders are eliminated since all information inputted in this network can be traced. The ability of the network to reconcile the transactions after every minute also enables Terraas to monitor all the communications taking place and the orders in process, enabling there to be a better flow of operations and reduction in lead time.

The monetary benefits of using blockchain are also immense for the producers and sellers since the transaction fee in this peer to peer transaction is reduced. In addition, this network will ensure that more people and organizations access to farm fresh fruits and vegetables since it can be used by any person in any location. The vision for Terraas therefore, shows that the company is aware of the modern practices and the needs of its customers. This is the need to transact without intermediaries and also the need to analyze the operations of a company and their processes, which show whether they adhere to environmental and legal regulations. Through this blockchain technology, Terraas seeks to reach more customers and ensure that they attain value for their money by getting access to farm fresh fruits and vegetables.

### **Unique selling proposition**

As aforementioned, Terraas already has a working product that can be easily moved into blockchain and scaled to achieve global success. In addition, the organisation has onboarding capabilities thus enhancing its ability to incorporate new services within the system. Moreover, the company's onboarding capabilities will help in engaging new employees and delivering the necessary skills, knowledge and expertise to improve the efficiencies of the FOOD project on

blockchain. This coupled with the existing team that has diverse skills set is expected to drive the company forward in delivering food on the blockchain. This means having tried and tested products, services and business model coupled with enhanced competencies and capabilities is expected to drive the company forward thus delivering ideal solutions to customers, merchants and producers alike. These are expected to drive the organisational vision of a truly global FOOD distribution platform and transforming the manner in which people shop for groceries.