Love Food Hate Waste

WHITE PAPER

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ABSTRACT

First-of-its-kind Decentralized Global Food Network for Restaurants and Retail Food Chains powered by Artificial Intelligence and Blockchain

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EXECUTIVE SUMMARY

DECENTRALIZED GLOBAL FOOD NETWORK
WORLD'S ONLY SOLUTION TO FOOD WASTAGE

OUR VISION

Optimizing food utilization, eliminating food wastage by ensuring access and affordability of quality food for all.

FOOD ECOSYSTEMS AND SUSTAINABILITY

According to a recent article published by the Harvard Business Review, the global population has quadrupled over the last century. In a more recent estimate by the UN, we may reach 9.7 billion by 2050 and food demand is expected to increase from 59% as it is today, to 98% by 2050.While this is re-shaping the agricultural markets to increase crop production in unimaginable folds, there is an equal urgency to optimize and maximize food utilization.

Restaurateurs and food retailers worldwide are struggling to narrow the gap between supply and demand for food, so there is no surplus production of specifically perishable food on one hand, and unmet demand for the same on the other.

According to the National Restaurant Association:

Approximately 40% of food produced in the US ends up in landfills

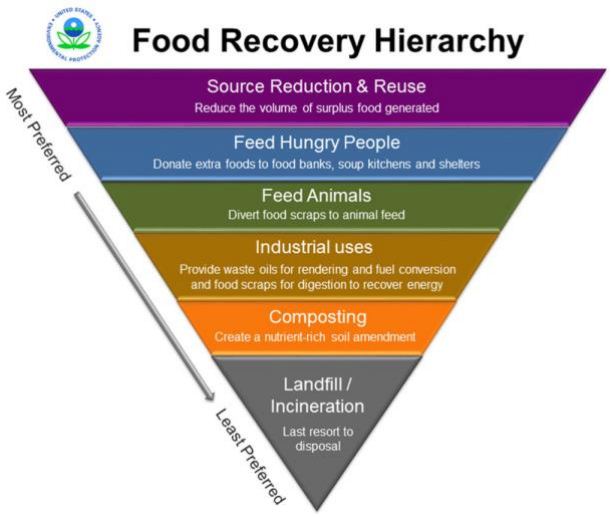
Food wastage is the largest component of municipal solid waste in the US

Billions of dollars are lost globally every year in producing food that is never consumed.

The biggest barriers to food recovery is the lack of technology infrastructure to manage supply and demand efficiency.

The Food Recovery Hierarchy prioritizes actions organizations can take to prevent and divert wasted food. Each tier of the Food Recovery Hierarchy focuses on different management strategies for wasted food and ways to enable them.

The top levels of the hierarchy are the best ways to prevent and divert wasted food because they create the most benefits for the environment, society and the economy

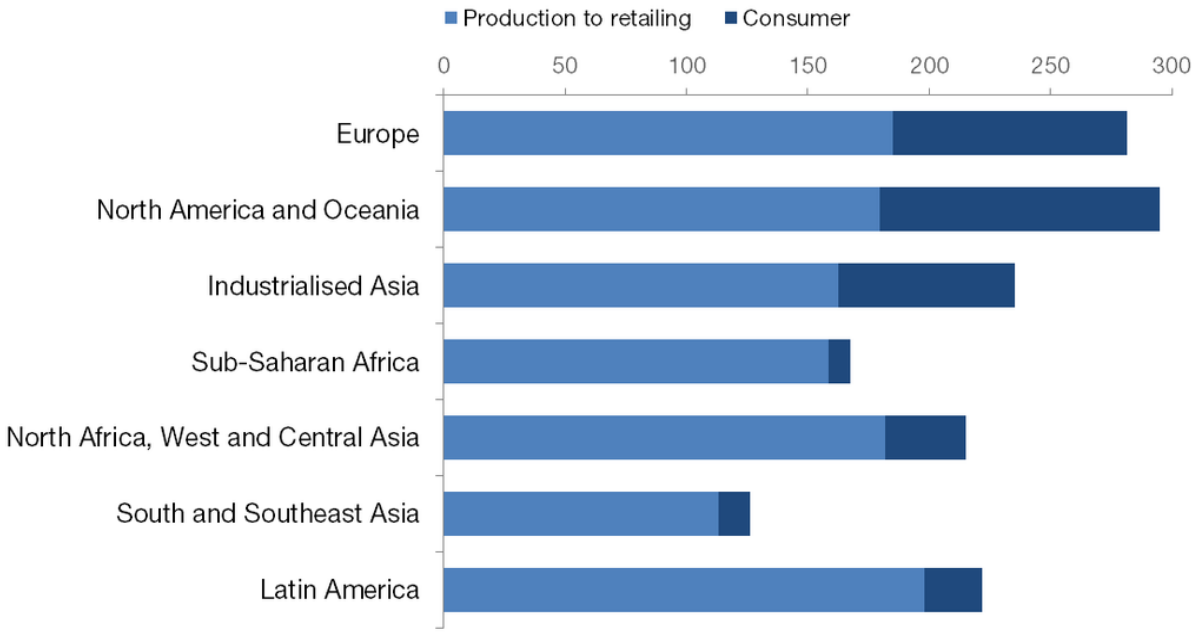


Pic Ref: EPA- United States Environmental Protection Agency

The Delicia approach focuses on strategies described in the first two tiers and seamlessly addresses both with a single robust solution.

WHY DO WE CARE?

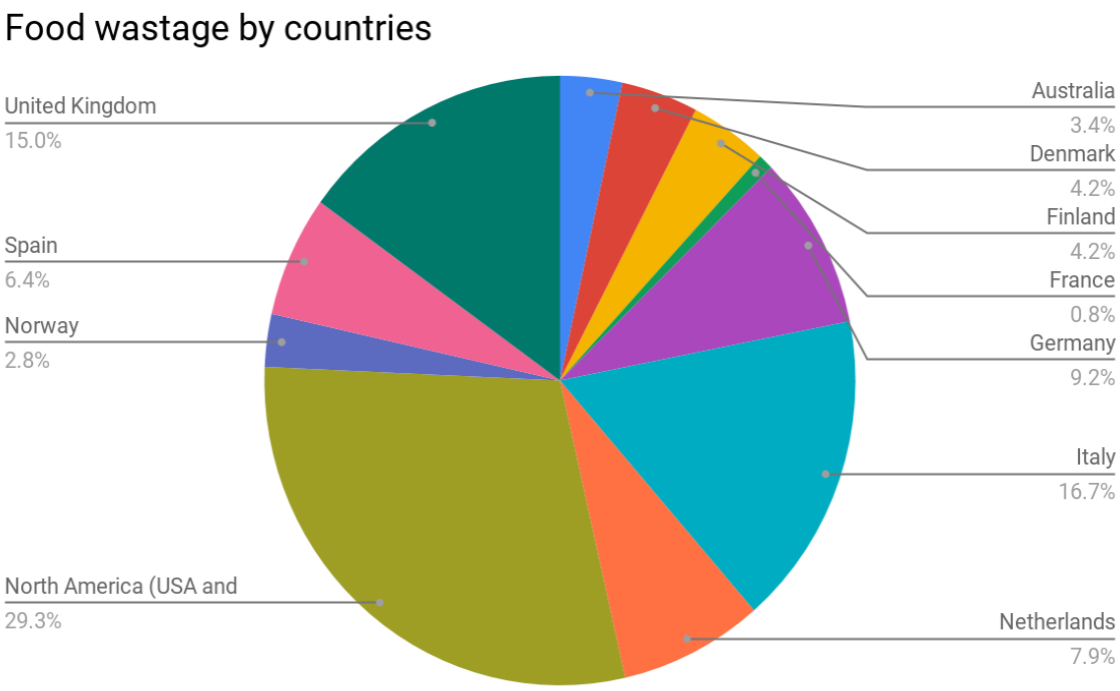
Food losses and waste amounts to roughly US$ 680 billion in industrialized countries and US$ 310 billion in developing countries. The World Economic Forum estimated the per capita food loss and wastage kg/year for 2018 as shown in the diagram below.



Source: The Food and Agriculture Organization of the United Nations (FAO)

GLOBAL FOOD WASTAGE

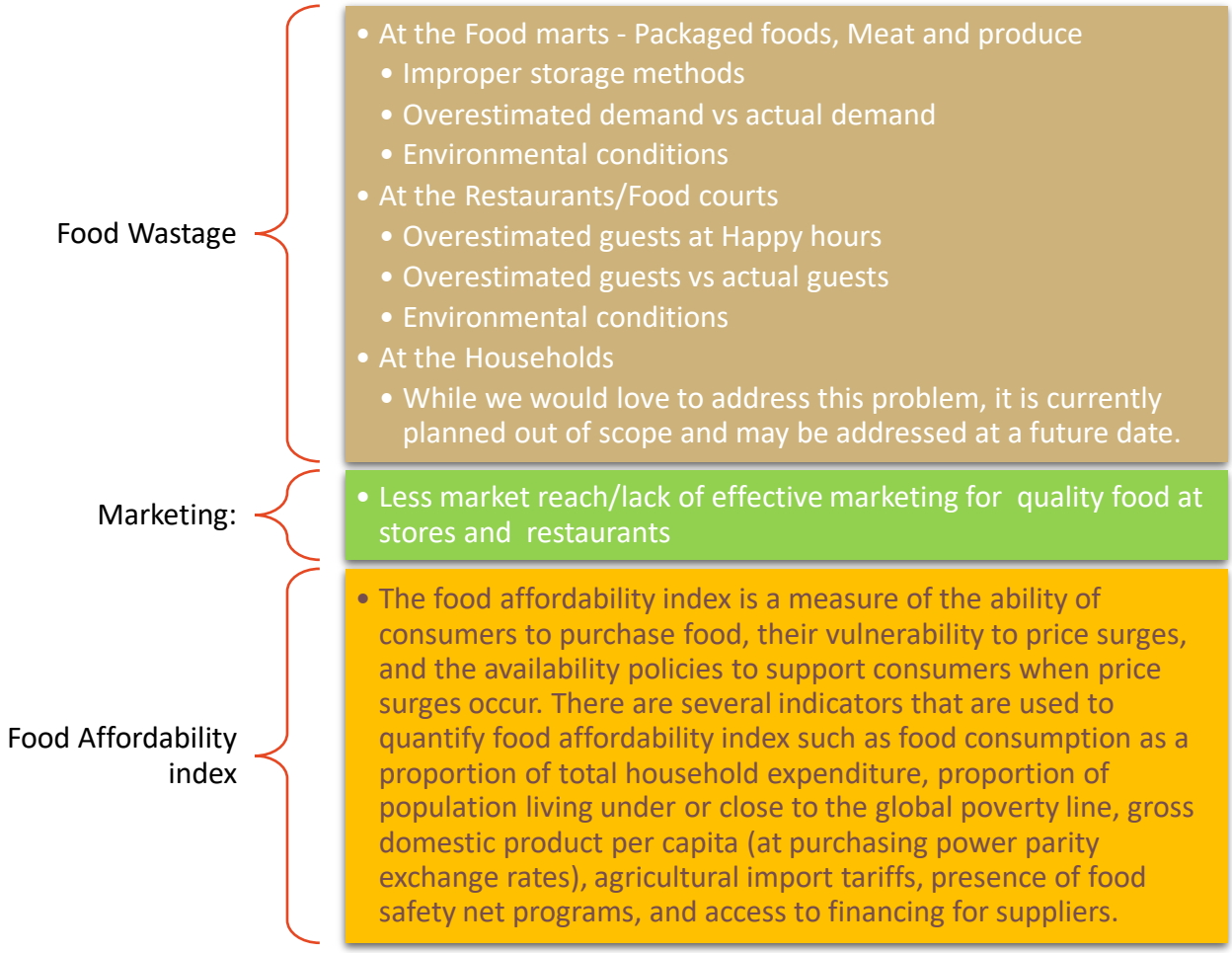
These countries food wastage is enough to feed our entire planet!



REASONS FOR FOOD WASTAGE

The causes for food wastage differ from location to location. The concept of food quality fit for consumption is more stringent in the developed world. However, in developing countries, it is poor food storage and infrastructure, illiteracy and other socio-cultural factors that play a key role.

The following are some of the common causes across all geographies:



OUR STRATEGY

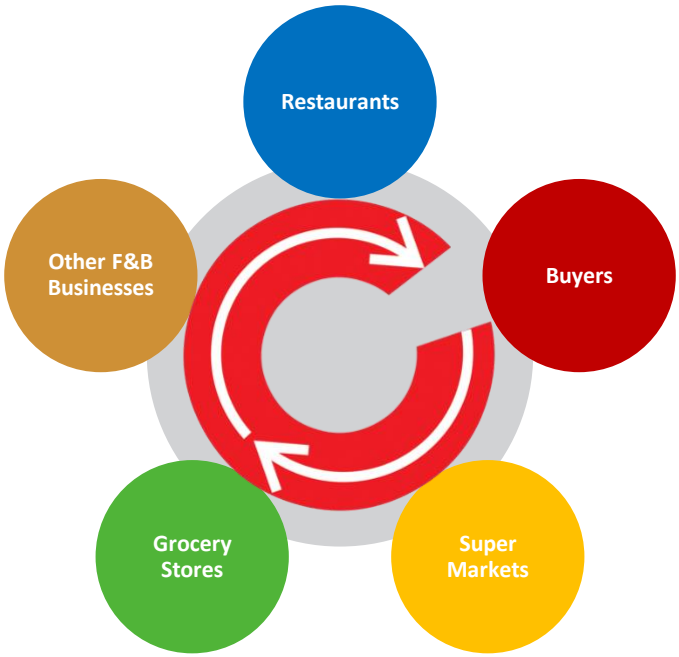
The Delicia team is creating a universal decentralized food network that will revolutionize the way restaurateurs and food retailers maximize food utilization and reduce wastage. It offers real-time search for excess food at restaurants, grocery & packaged food stores and helps route them at discounted prices to people who demand it.

The system provides ongoing trust and reputation accrual for sellers, as they route excess food to those who need it, while allowing quick access to affordable quality food.

This network will be powered by Blockchain with an App based on artificial intelligence back end to locate affordable quality food for customers worldwide specific to their own geo-location. Efforts are underway to tokenize this ecosystem with the Ethereum based blockchain technology with a multi-purpose utility token - DFT (Food Token).

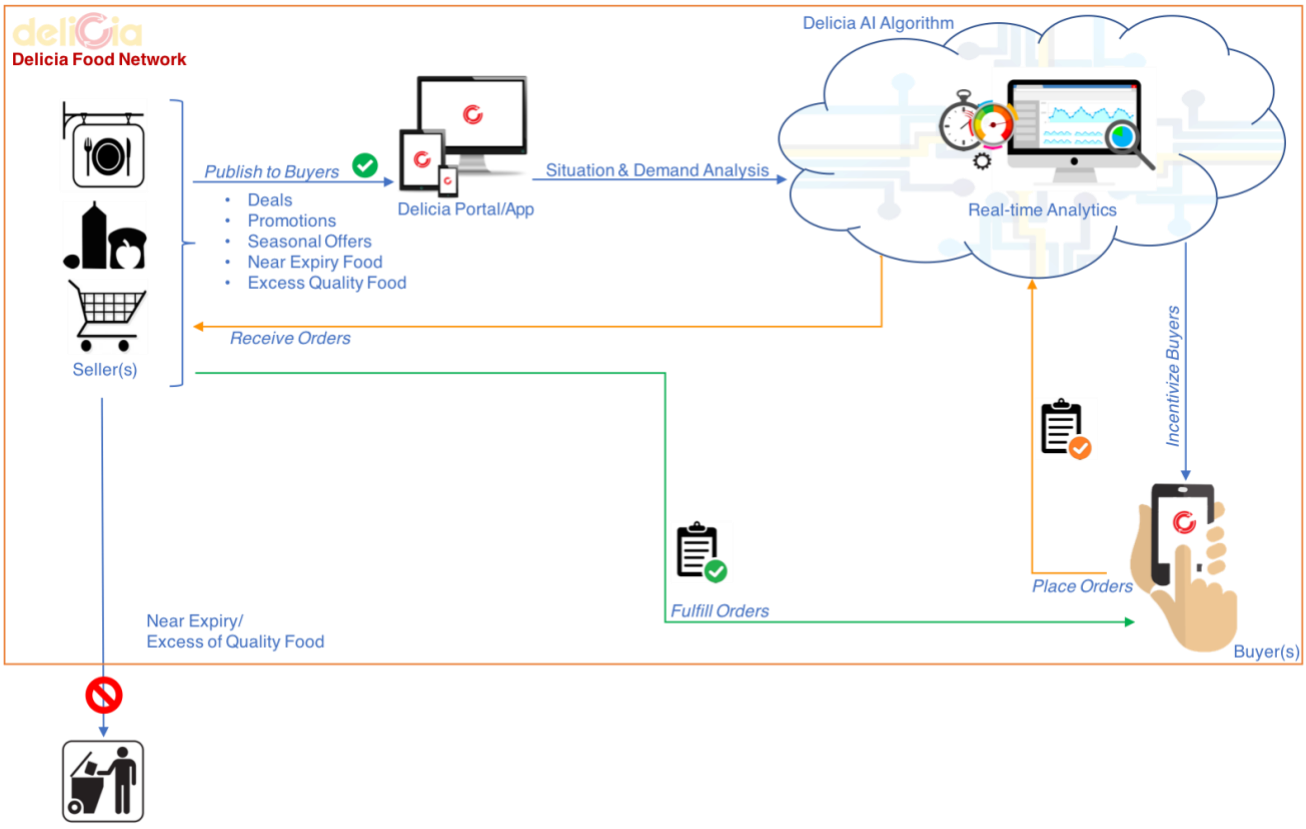
THE DELICIA GLOBAL FOOD NETWORK

PROPOSED SOLUTION



The Delicia food network provides affordable quality food to people at their own locations, while enabling restaurants and food retail outlets to aggressively reduce food wastage. It incentivizes food supply and aligns it to actual demand with no wastage, thus improving the overall food economy and security.

It brings together food sellers and buyers, on a common platform with no intervening people or processes, so they can securely share their inventory only with app users and plan appropriately how and where to route food to in case of a foreseen wastage.



HOW IT WORKS

The Delicia solution is powered by the Blockchain technology and uses multipurpose food tokens called "DFT". It revolutionizes a cashless ecosystem enabling customers to use their DFT tokens to pay the sellers at food marts, bars and restaurants using the free user friendly Delicia app. Sellers on the other hand, may use the app or the Delicia portal to login and publish available food items in stock or near expiry or surplus stocks as the case may be. The Delicia app allows both location-based search and a customized search for food, people and restaurants.

Potential buyers in the same location and/or neighborhood or city as the sellers who have registered for the service, will receive push notifications anytime a listing is published by the sellers. Buyer listings can be aligned too and prioritized based on their preference settings. The buyer can go to the seller and purchase the Items with our "DFT" tokens. Any buyer may then lookup the available items with different sellers and make a request to purchase. Since there will be no cash/card transaction involved, payment processing will be only made via "DFT" tokens.

The Blockchain ledger will track and hold all transactions and allow real-time lookup from both the buyer and seller ends. A minimum transaction fee in the form of "DFT" tokens from the Seller will be charged for every transaction.

Reiterating on the Delicia value, giving away excess food to those consumers who are in need is no longer just an act of goodwill, it is a requirement under a 2016 French law that bans grocery stores from throwing away edible food. Stores can be fined up to $4,500 for each infraction.

KEY PRODUCT FEATURES

The key product features of the Delicia Solution are explained below:

SELLER ORIENTED FEATURES


Dedicated Backend Office


Publish Food Inventory and Consumption


Determine Pricing Models


Analyze Food Demands


Build Seller Reputations


Utilize DFT Tokens

Publish On-Going Deals


Guest Estimates


Rate Buyers


Supply/Demand Decisions


Publish Marketing Campaigns


Scheduled Bill Reports

REGISTER AND SIGN UP TO THE DELICIA GLOBAL FOOD NETWORK

Potential Food Sellers / Restaurateurs (to be called “Sellers” henceforth), who have the potential to reduce food wastage in their businesses, can register and sign up to be part of the Delicia Global Food Network. They will be able to download the Delicia App via common App Stores or directly access as a Portal from an Internet Site. The user-friendly interface will capture basic seller information and instantaneously validate and sign them up to the Delicia Global Food Network.

PUBLISH FOOD SPECIALTY

Sellers will be able to publish foods they specialize in, along with additional attributes such as available timings, price and nutrition information. Such information may also be used to advertise themselves and all enable interested buyers to browse and subscribe. This information may also be used by Delicia analytics to make informed judgements of buyer choices, food quality and consumption metrics, required to optimize food routing and delivery.

PUBLISH FOOD INVENTORY AND CONSUMPTION METRICS

The system will allow sellers to publish food availability at their stores and outlets on any day and at any point of time. This data will further be continuously updated depending on real-time consumption. Following a stipulated period of time, depending on the quality and expiry of the product, if there is low demand for it at a given location the same will automatically be made available for buying at other nearby locations where demand exists.

ASSESS FOOD DEMAND ACROSS GEO LOCATIONS

Sellers will be able to use the Delicia system to assess food demand across a given location. Food demand is determined based on buyer preferences, previous buying patterns at the given location and proximity to the source. Sellers will use such information to determine where to publish their excess food to.

DETERMINE PRICING MODEL

Sellers will be able to use the Delicia system to determine the best pricing model for their products depending on the quality, quantity and its expiry at a given time. This will also allow using other tools such as discounts, rewards and money back to incentivize buyers.

PUBLISH DISCOUNTS/DEALS

Sellers will be able to publish suitable discounts for their customers. Discounts may vary across products and buyer groups. For Ex: A first time buyer may be delighted with a one-time discount over a specific range of products, while at the same time frequent buyers may be rewarded with additional discounts too.

BUILD SELLER REPUTATION

While the Delicia system is aimed at providing the technology infrastructure and working process to reduce food wastage, the fundamental value around which it is built is to change people's habits causing such wastages. It encourages them to continuously look for opportunities to sell food that may be potentially wasted and help build a sustaining community. This is possible through enabling a system of credit and reputation for every transaction well made. Sellers will have an associated "reputation score" depending on how well they are able to publish and sell their products without previous wastages including buyer feedback.

RESTAURANTS/STORES RATINGS

As a consolidation of Seller Reputation scores, buyers and sellers will be able to see the overall ratings for restaurants. As a standard practice buyer will be able to look up at a restaurant score including feedback provided by earlier buyers to determine their own buying choices.

USE DFT FOOD TOKENS FOR PERFORMING TRANSACTIONS

Sellers will be able to publish their products as a measure of Delicia's DFT food tokens. Buyers may purchase the products with "DFT" tokens. There will be no cash/card transactions involved, and payment processing will only be made via "DFT" tokens. A minimum transaction fee as a small percentage of "DFT" tokens will be charged to the Seller for every transaction they perform.

PUBLISH ON-GOING DEALS

Sellers will be able to use the Delicia system to publish ongoing food deals in the form of online coupon codes & discounts including Happy Hours and other offers. The Delicia analytics system may also be used to reposition pricing based on the deals to help profitability.

MAKE GUEST ESTIMATES FOR BOTH REGULAR AND HAPPY HOURS

Estimating demand and consumption is crucial to determining how much food a given restaurant or facility may need on a given day. While there are various prediction models a seller may use to arrive at a fair estimate, the Delicia system will help through analyzing historical data of both the restaurant and buyers in the location to suggest potential number of guests on a given day.

MAKE INTELLIGENT DECISIONS ON SUPPLY AND DEMAND

The Delicia system will leverage data available in a given region in the world and help ensure a healthier and more accessible supply of food. Its analytics powered by artificial intelligence will help Sellers make informed decisions on future supply and demand. Sellers will also be able to arrive at an optimized strategy and plan ultimately ensuring efficiency in food management and consumption.

RATE BUYERS

Like buyers, sellers will also be able to build a trust partnership with their buyers. They will be able to view buying patterns, rate their buyers and share comments.

PUBLISH MARKETING CAMPAIGNS

Sellers can list all the deal items in our user friendly portal with the deal prices. The buyers can take the advantage of the different items from the different sellers at discounted prices. All payments can be made via the mobile app with DFT tokens.

BUSINESS ANALYTICS

Individual restaurants will be able to use Delicia collected data to analyze and report on their sales performance, buyer behaviour, sales against discounts and use it to change future decisions. Above all, they will be able to understand their food efficiency and improvements on any wastages.

Delica will provide a set of canned reports that Sellers may be able to directly use on a recurring basis. They will also have the flexibility to build their own customized reports from the available Delicia datasets.

The company may plan to interface Delicia with third party systems, networks and data stores at a future date, but that will solely depend on its strategy and direction. Such features will be considered not in scope for this Whitepaper.

BUYER ORIENTED FEATURES

User Profiles

Find Food

Purchase Quality Food at Affordable Prices

View/Register to Seller Campaigns

Rate Sellers

Utilize DFT Tokens

REGISTER AND SIGN UP TO THE DELICIA GLOBAL FOOD NETWORK

A buyer of any type – individual or group can register and sign up to the Delicia food network. Such individuals can perform mining duties or be a simple user of the Delicia App. As part of the registration process, the system may capture additional details such as the location, food preferences and related details. This information may be used by the Delicia system to locate and retrieve restaurant, deals and food availability.

LOCATE AND BROWSE NEED-BASED MULTI CUISINE QUALITY FOOD VENDORS

The Delicia App will use location-based searches to retrieve quality food vendors in the vicinity of the buyer. Buyers will then be able to browse through restaurants, view their offers and place an order as intended. The initial list of restaurants and their offerings may be rendered to the buyer based on his preference settings in the Delicia App. But this may be overridden to view other options too. The browsing history of the buyer may be used to prioritize and display the list of restaurants and food to the buyer.

REQUEST QUALITY FOOD AT AFFORDABLE COST

Buyers may browse through restaurants, check food availability and place orders of their choice. They will be able to view deals and discounts and even request for additional bargains as the case may permit. They may request for a dine-in or take-out order directly through the Delicia App.

USE DFT TOKENS AT THE RESTAURANT / FOOD OUTLET OF CHOICE TO MAKE PAYMENTS

Buyers may place orders / make purchases directly using the Delicia “DFT” food tokens. There will be no cash/card transactions involved, and payment processing will only be made via “DFT” tokens.

VIEW HAPPY HOURS AND DEALS

Buyers may use the Delicia App to browse through restaurants and other food outlets. On choosing a specific restaurant or food outlet, they will be able to further browse through the list of deals & discounts offered by the Seller, including their happy hours. The buyer will be further be able to choose a schedule and deal and make reservations or requested orders as preferred.

SELLER RATING

Buyers will be presented the opportunity to rate the sellers after every transaction. Such ratings may be used by the system to showcase restaurant performance and quality including their effectiveness in contributing to our mission of minimizing food wastage. Buyers will be able to view all seller ratings including the comments and feedback previous buyers have provided them.

VIEW AND REGISTER TO SELLER CAMPAIGNS

A key aspect of the Delicia system will be the ability to allow Sellers to publish food campaigns from time to time. This may include inviting specific/group of buyers to attend such campaigns and take advantage of the offers associated with it.

TIP ENTITIES WHILE PERFORMING TRANSACTIONS AND MAKE REFERRALS

Apart from the general minimal transactional fees that apply to every transaction, buyers may choose to add an additional amount of DFT as tip to specific individuals. Such tokens will be routed via a separate workflow to the concerned person or teams. This will also provide a way for buyers to refer sellers across a community and provide feedback on their specialty.

MAKE GIFTING CHOICES

Using the Delicia systems, Sellers will have the opportunity to repackage their food as hampers, gourmet gifts, healthy snacks baskets etc. with unlimited creative ways to sell their food. Buyers on the other hand receive the flexibility to order such packages for themselves or directly request to gift them to others.

PRODUCT ARCHITECTURE

HIGH LEVEL DESIGN

THE ETHEREUM BLOCKCHAIN

At the core of the Delicia Global Food Network is the Ethereum based Blockchain. Put simply, Blockchain provides a way for transacting, storing and sharing information at real-time across a network of users in an open virtual space.

ARTIFICIAL INTELLIGENCE (AI) POWERED LOCATION MATCHING ALGORITHM & API

A key differentiator of the Delicia product and solution is the AI powered location look up technique. This matching tool studies buyer's restaurant and food search patterns, their preferences and location to optimize search and display of restaurant and food choices available to them and which closely match their liking. This AI engine is expected to work with the same ease and flexibility, across multiple languages and geo locations.

DELICIA SERVICE API

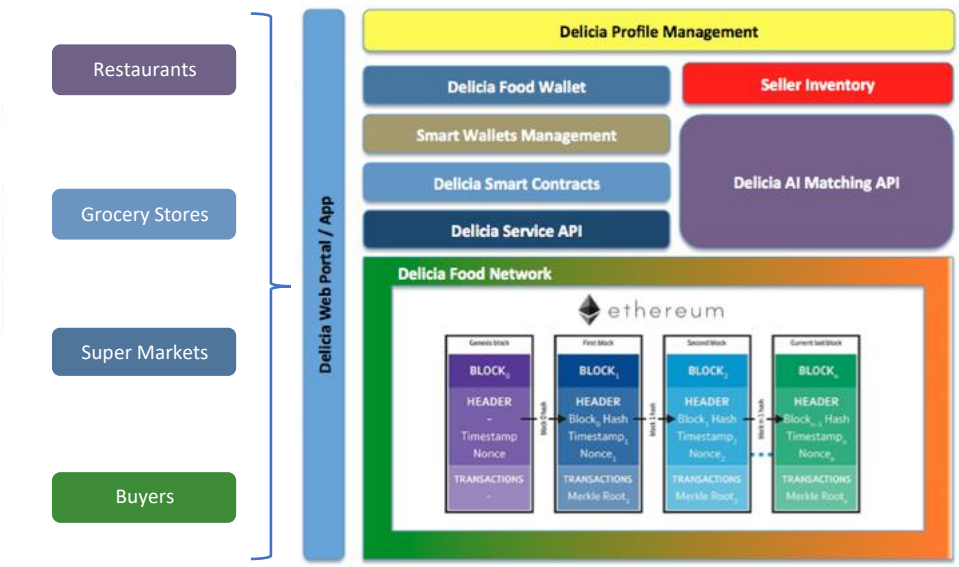
One of the other key aspect of the Delicia solution will be its ability to seamlessly integrate and transact with existing systems for optimized operations. Adopting Blockchain based transactions does not have to trigger several changes for external systems to connect with the Delicia network. The Delicia Service API provides an abstract gateway layer to keep out complexities on the underlying network and expose only the required endpoints to calling systems and workflows.

THE DELICIA USER INTERFACE

Users of the Delicia system namely buyers and sellers will be provided several ways to connect to the Delicia Global Food Network. A full-fledged Delicia portal will serve all functionalities of the system including administrative and backend data management features. Both buyers and sellers will be able to access the portal via a standard web URL over the internet.

For easy and flexibility, buyers and sellers may alternately use the Delicia mobile App which provide the same features of the main portal but with no administrative functions.

A high-level block diagram of the proposed solution is shown below:



SOLUTION DETAILS

WHY IS OUR SOLUTION THE FIRST-OF-ITS KIND?

Blockchain as a technology allows users to conduct business, store data and share information across a network in an open virtual space. It also allows users to look up transactions simultaneously and in real-time. Specifically, in the case of food, it allows retailers to look up suppliers and with whom they have performed transactions.

Here are the different ways our solution makes a difference:

Delicia will make food value chain more transparent at an entirely new level.

It also empowers all actors in the network to be more responsive to food quality, safety and wastages.

It provides a way to trace specific products in real-time and eliminate contamination and disasters while quality food can remain on the shelves and not be sent to landfills.

It facilitates data sharing and feedback in real-time between a variety of actors in the food value chain, and prevents potential fraudulent transactions.

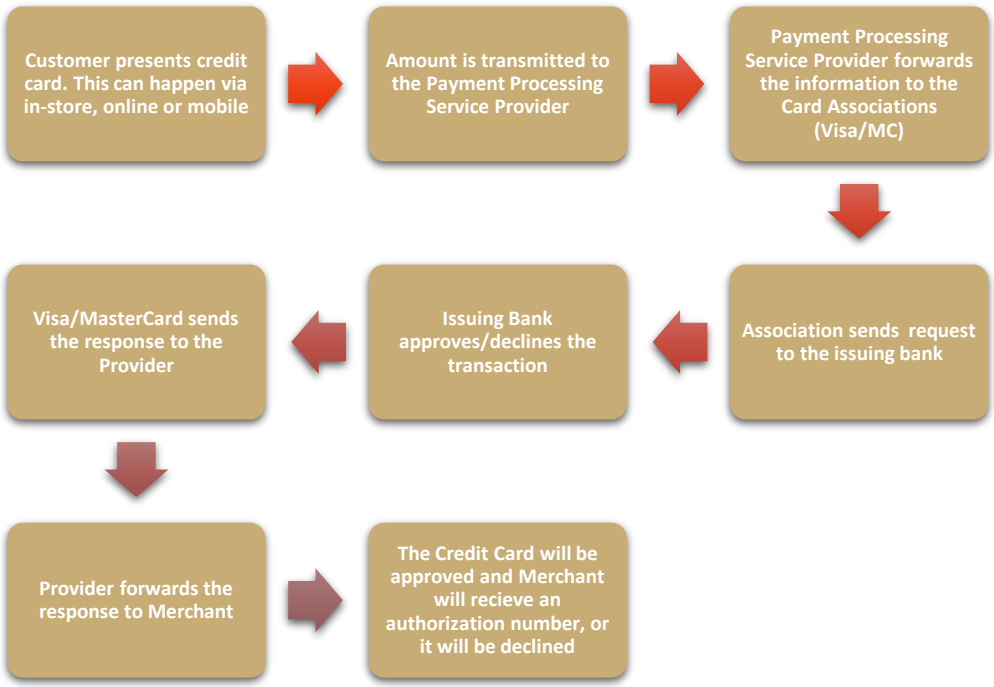
It allows faster and fairer payments and deals for both the buyers and sellers of food. It is set to "Uberize" food management through eliminating middlemen and longer waiting lines on perishable foods. This can lead to fairer pricing and provide a great way for the buyers reach quality food at affordable costs

SMART CONTRACTS AND WORKFLOWS

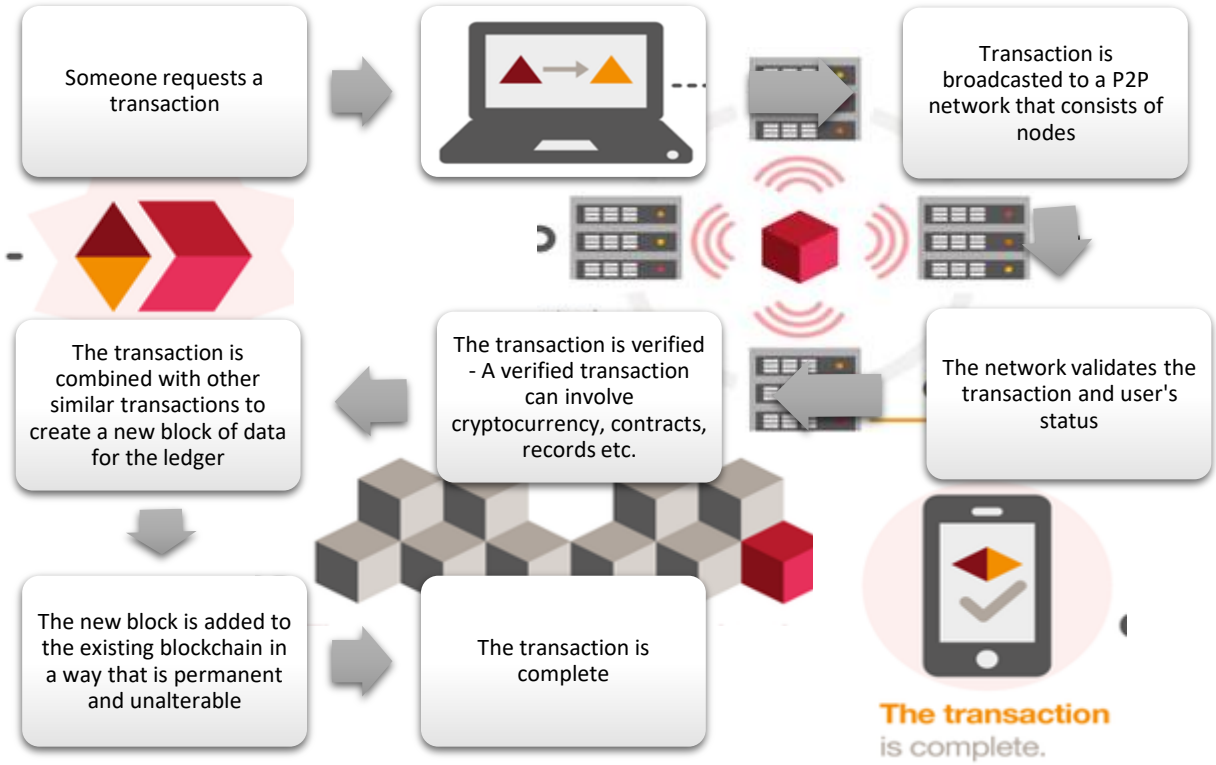
Due to the nascent and evolutionary state of Ethereum Smart Contracts, our team will make informed judgements on their use in the Delicia system and workflow. Smart Contracts may be used in the backend processing typically to perform actions that have no external interface or user impact. Also given that they are slow and may allow only 3 – 5 transactions per second, almost all buyer seller interactions will be based on direct wallet to wallet transfers of DFT in the Delicia Global Food Network. Further details will be provided in the Delicia Design Technical Papers for anyone interested in more information.

PAYMENTS USING DELICIA FOOD TOKENS

The current USD based payment process involves many steps for money to be transferred from the buyer to the seller's account and vice versa. The brief process is described in the diagram below.



Over the new system, the buyers can pick their items, add them to the cart and select to pay using the Delicia Food Tokens (DFT) instead of fiat options such as credit card or PayPal.



The amount to be paid is converted to the Delicia Food Tokens from traditional currency in real-time. For in-store purchases, the buyer may use a QR code that is generated which he can scan and send with Delicia app wallet on his mobile. The money transferred to the seller's smart contract wallet in real-time. In order to make offline transactions more feasible and faster, the buyer will also be provided with the simple clickable "Buy" option which will directly lead to making the payment.

PRODUCT BETA

Goal of Beta version of Delicia is to:

- Provide a platform for food sellers such as restaurant owners, supermarkets and grocery stores to sell their products in exchange for Ethereum-based DFT tokens.
- Include processes and workflows that will allow buyers and sellers to perform seamless transactions on a Blockchain based network.
- Include only one or more basic use cases as part of demonstration of the solution.

The Beta will be tested in the First Phase of the Product Development Roadmap, discussed later in this document.

The workflow will be a simple one that allows buyers to browse and pick items from a limited set of products published by a limited set of sellers. He/She will then add them to the cart and select to pay with DFT. The Delicia system will then generate a QR code with all the required order information and submit. Once the buyer scans the code with their mobile crypto wallet and submit, the transaction will be sent to the Delicia blockchain food network along with the purchase details.

Once the transaction has received several confirmations in coherence with the Ethereum blockchain technology, the client is notified that the transaction was successful.

Almost instantaneously, the seller to whom the transaction was made will receive the push notification indicating the order he received. The seller will also see the DFT food token arrive in his wallet. During further development phases, we will introduce Seller Smart Contract Wallet to enable rates, and automatic exchange to local currency including several complex business flows specific to the Delicia Global Food Network. We aim to integrate with Sellers in the early Beta product stage. This stage will also allow us to perform a limited set of field testing that may be needed to validate the working of our solution, obtain feedback and incorporate them as improve to the overall solution. It is hoped that the early participation of sellers and buyers will allow them to influence our features better and help us align to and address real world challenges of this implementation.

PRODUCT FEATURE MATRIX

Delicia product features will be based upon the below factors and use cases:

	Restaurants	Supermarkets	Grocery stores
Takeout orders	✓	✓	✗
Dine in orders	✓	✗	✗
Happy hours	✓	✗	✗
Deals	✓	✓	✓
Packaged foods	✗	✓	✓
Excess quality food	✓	✓	✓
Seller rating	✓	✓	✓
Buyer rating	✓	✓	✓
Seller market reach	✓	✓	✓
Buyer affordability	✓	✓	✓
Tip	✓	✗	✗
Gift	✓	✓	✓
Sponsor	✓	✓	✓
Referrals	✓	✓	✓

PRODUCT DEVELOPMENT ROADMAP

DELICIA PRODUCT ROADMAP

The Delicia solution and Product will be delivered in four distinct phases. While each phase is meant to develop and optimize features that will incrementally serve the following phases, the overall development process will follow an iterative and interactive approach with features prioritized based on user adoption, feedback and customer demand.

An elaboration of the features and outcome across each phase, including the technical implementation details will be out of scope for discussion in this Whitepaper.

MARKET OPPORTUNITY AND BUSINESS MODEL

The global food market size in 2016 was USD 1.7 trillion and is expected to rise to USD 3 trillion in 2020. At the same time, the global retail payments industry was worth USD 16 trillion in 2015. It is estimated to increase to USD 21 trillion in 2020. Most of the participants in the supply chain complain about the lack of transparency and trust by other participants.

Using the Delicia Blockchain food network, Restaurateurs can have a direct relationship with the ultimate consumers. The trend to provide more information about the food they serve (local, organic, free-range) will continue to increase. Added to this, online ordering and restaurant-specific Delicia smart-phone app will help further magnify the demand for food data. Buyers today are willing to pay significant premiums for food they know is good for them. Smart menus could be connected in real-time with the Blockchain of Food to provide the actual history of specific produce being used on a particular day in the store. This could lead to a potential “holy grail” of food personalization.

Today high-end restaurants certainly are going the farm-to-fork route, but they are probably too small, or have enough influence to “cause” large-scale adoption. The intermediate-sized, fast-growing chains like Sweetgreen, or Boloco and the numerous millennial-centric chains that pop up in major US urban centers are extracting a premium from their consumers for the quality and sustainability of their food, and sooner or later, they will be challenged in authenticating their claims that their food is better. This is what historically happened to Whole Foods.

The Delicia Food Blockchain is set to revolutionize the way we manage these interactions while also helping us resolve the major challenge of food wastage.

According to ReFED Executive Director Chris Cochran - "Food waste is an $18.2 billion opportunity for grocery retailers, there’s a business case here".

MARKETING STRATEGY

Our marketing strategy is focused on creating a food network effect that is built on trust and reputation. We will use the well-known bowling pin strategy that to find small, niche market segments where people are interconnected enough in a group (existing crypto community) small enough that broad adoption of a product is possible and then move to other niches and broader markets.

During the initial phase we will focus on the supply side of the network primarily food sellers and be accepted in as many locations as fast as possible through partnerships that enable instant scale. We will also partner with payment providers that can give us instant scale. We will educate our initial client base on the usage of crypto currency and its wider adoption.

In the following phases as we strengthen our product, we will focus on broader market adoption. Educating the general public on the impact of food wastages will sensitize them to slowly start adopting practices that reduce food wastage. This also will mean adoption of our platform to place orders for food while also leveraging the advantages of deals and faster outreach for perishable foods.

Once there are more people will be willing to join the network and also continue to leverage the trusted suppliers through continues feedback that Delicia enables.

Our principles will be based on the Metcalfe's Law that states the Total value of a network to its users grows as the square of the total number of its users. Thus, the ratio of value to cost of adding one more network user grows disproportionately as the network grows larger. Also called law of telecosm, it was proposed by Robert C. Metcalfe, co-inventor of the Ethernet.

As an example, the application of Metcalfe's law by Ethereum towards transaction, with a fairly strong correlation between the price of digital currencies and their transaction numbers was observed over many years. It was barely handling 20,000 transactions at the beginning of the year. Now it manages nearly 300,000 a day. Price has risen by 10x during the same time period.

The reason for this relationship is fairly intuitive. As more projects build on Ethereum, more users find it useful as there are more things they can do with it, which in turn makes Ethereum more useful for new projects as it allows them to tap into more users. Delicia is expected to leverage on this advantage.

MONETIZATION

Delicia will charge considerably lesser transaction fees from seller than the traditional payment gateways. The average traditional payment gateways charge approximately 1.5% - 3% as transaction fee.

CROWD SALE DETAILS

Delicia is strongly focused to put in place a system to avoid food waste and bring to people affordable food. With this new level of insight, we'll be able to make structural improvements to the food value chain to reduce food scarcity and food wastage across the world while sustaining the platform with a viable economic model. To achieve these objectives, we need to engage entities and citizens to these common efforts by allowing the implementation of the Delicia project under a token subscription. This token subscription will provide Delicia with the necessary capital to take all the needed actions and have the Project running for mutual benefit.

Issuer	delicia.io
DFT price	$0.01
Hard Cap	$ 33 MM USD
Maximum number of token supply	10 Billion
% of tokens generated to Crowd Sale participants	33%

The Delicia crowd sale and the corresponding token creation process will be issued by delicia.io and will be organized around smart wallets running on the Ethereum chain. Participants willing to support the development of the Delicia Project can do so by sending Ether and/or other ERC20 tokens to the designated address. By doing so, they are purchasing Delicia Tokens (DFT) at the rate of approximately 1 cent per 1 DFT token which will be sent instantly to their wallet.

The accepted currency during the ICO is ETH and/or other ERC20 compatible tokens.

There will be a "Soft Cap" of $5MM USD during the Token creation period and Product development will proceed upon continuous receipt of funding.

If the crowd sale campaign does not reach its minimum capital goal of $5MM USD all funds will be returned to the contributors at prevailing price or the historical price (at the time of contribution) whichever is lower. The relevant price for this refund is the price of the digital currency originally used for the contribution.

Token Creation has a hard cap: upon achieving this cap, token creation will stop, and no further contributions will be accepted. The hard cap amount is $33MM USD worth.

Tokens that are not sold during the Crowd sale will be burned by the smart contract.

DELICIA FOOD TOKENS

The Delicia food token will be an Ethereum-based token of value. The token is a digital asset, bearing value by itself based on its underlying assets, properties and/or associated rights. Ethereum-based tokens rely on a well-established Ethereum infrastructure, benefiting from several advantages:

- Security and predictability (as opposed to, for example, having to run an independent blockchain network).
- Use of robust and well-supported clients (Ethereum-based tokens can be managed with official Ethereum clients).
- High liquidity (interchangeable with other Ethereum-based tokens or Ether). Our Ethereum-based token contract complies with the ERC20 standard but may be extended to support other broader standards in the future.
- More detailed info about the ERC20 standard can be obtained from: https://github.com/ethereum/EIPs/issues/20

DFT TOKEN BENEFITS

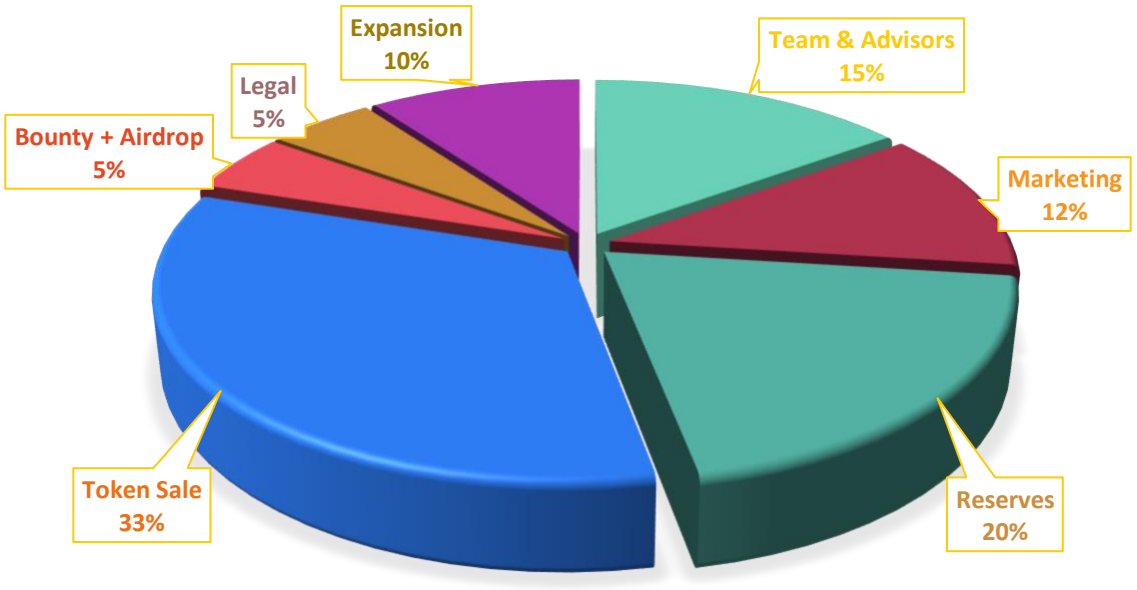
We believe in the future of digital currencies which will gain increased adoption in the next few years gradually replacing fiat currency. According to Marcus Schenck, co-head of investment banking at Deutsche Bank, personal bank accounts could become obsolete and digital wallets taking its place. So we are using DFT to future proof our solution and stay ahead of the game as we go through the wider adoption of digital currency.

There are several of the benefits using DFT tokens as listed below:

- Real Time transactions - Global usage.
- Early access to Delicia App
- Token Sale contributors will have exclusive access to the deals
- Contributors of 500,000 or more DFT tokens will get premium features predictive deals and discounts unlocked in the App
- DFT token holders will get Superior customer service
- Holders of various numbers of DFT tokens will see lower transaction fees

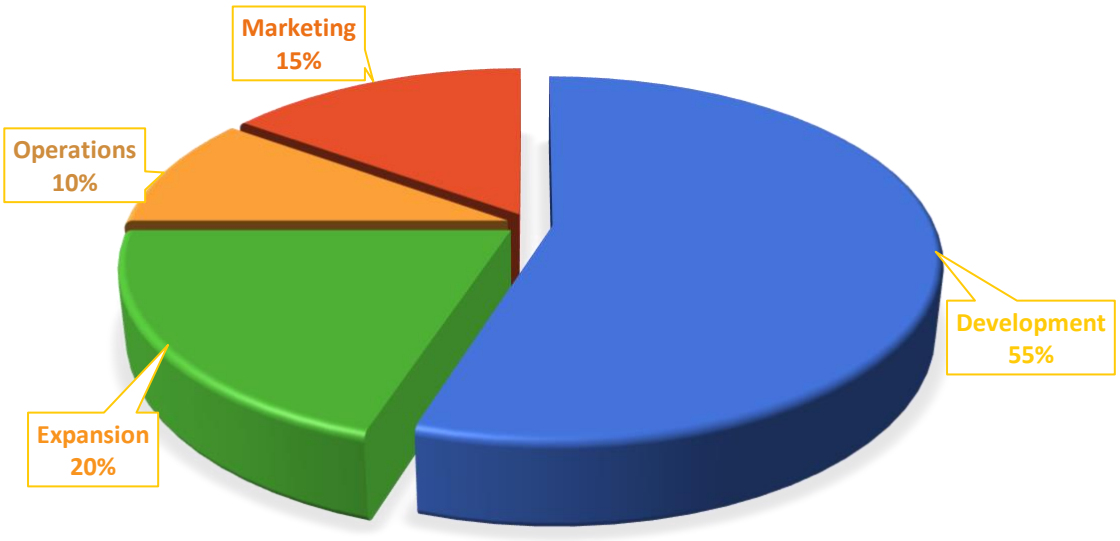
TOKEN ALLOCATION

The tokens will be allocated based on the below distribution:



FUNDS ALLOCATION

The expenditure of funds raised will be based on the following distribution:



LEGAL

GENERAL INFORMATION

The Delicia token does not have the legal qualification of a security, since it does not give any rights to dividends or interests. The sale of Delicia tokens is final and non-refundable. Delicia tokens are not shares and do not give any right to participate to the general meeting of Delicia. Delicia tokens cannot have a performance or a particular value outside the Delicia Platform. Delicia tokens shall therefore not be used or purchased for speculative or investment purposes. The purchaser of Delicia tokens is aware that national securities laws, which ensure that investors are sold investments that include all the proper disclosures and are subject to regulatory scrutiny for the investors' protection, are not applicable.

Anyone purchasing Delicia tokens expressly acknowledges and represents that she/he has carefully reviewed this white paper and fully understands the risks, costs and benefits associated with the purchase of Delicia.

KNOWLEDGE REQUIRED

The purchaser of Delicia tokens undertakes that she/he understands and has significant experience of cryptocurrencies, blockchain systems and services, and that she/he fully understands the risks associated with the crowd sale as well as the mechanism related to the use of cryptocurrencies (incl. storage).

Delicia shall not be responsible for any loss of Delicia tokens or situations making it impossible to access Delicia tokens, which may result from any actions or omissions of the user or any person undertaking to acquire Delicia tokens, as well as in case of hacker attacks.

RISKS

Acquiring Delicia tokens and storing them involves various risks, in particular the risk that Delicia may not be able to launch its operations and develop its blockchain and provide the services promised. Therefore, and prior to acquiring Delicia tokens, any user should carefully consider the risks, costs and benefits of acquiring Delicia tokens in the context of the crowd sale and, if necessary, obtain any independent advice in this regard. Any interested person who is not in the position to accept or to understand the risks associated with the activity (incl. the risks related to the non-development of the Delicia platform) or any other risks as indicated in the Terms & Conditions of the crowdsale should not acquire Delicia tokens.

DISCLAIMERS

This white paper shall not and cannot be considered as an invitation to enter into an investment. It does not constitute or relate in any way nor should it be considered as an offering of securities in any jurisdiction. This white paper does not include or contain any information or indication that might be considered as a recommendation or that might be used as a basis for any investment decision. Delicia tokens are just food tokens which can be used only on the Delicia Global food network and are not intended to be used as an investment.

The offering of Delicia food tokens on a trading platform is done in order to allow the use of the Delicia Global Food Network and not for speculative purposes. The offering of Delicia tokens on a trading platform does not change the legal qualification of the tokens, which remain a simple means for the use of the Delicia Global Food Network and are not a security.

Delicia Global Food Network OÜ is not to be considered as an advisor in any legal, tax or financial matters. Any information in the white paper is provided for general information purposes only and Delicia Global Food Network OÜ does not provide any warranty as to the accuracy and completeness of this information.

Delicia Global Food Network OÜ is not a financial intermediary, broker, dealer or similar and is not required to obtain any authorization for Anti Money Laundering purposes.

Delicia Global Food Network OÜ will collect relevant information from sellers and buyers following the principle “Know Your Client” and will maintain and update this information at its own discretion.

Acquiring Delicia food tokens shall not grant any right or influence over Delicia Global Food Network OÜ organization and governance to the purchasers. Regulatory authorities are carefully scrutinizing businesses and operations associated to cryptocurrencies in the world. In that respect, regulatory measures, investigations or actions may impact Delicia Estonia’s business and even limit or prevent it from developing its operations in the future.

Any person undertaking to acquire Delicia food tokens must be aware of the Delicia business model, the white paper or terms and conditions may change or need to be modified because of new regulatory and compliance requirements from any applicable laws in any jurisdictions. In such a case, purchasers and anyone undertaking to acquire Delicia food tokens acknowledge and understand that neither Delicia Global Food Network OÜ nor any of its affiliates shall be held liable for any direct or indirect loss or damage caused by such changes.

Delicia Global Food Network OÜ will do its utmost to launch its operations and develop the Delicia Global Food Network. Anyone undertaking to acquire Delicia food tokens acknowledges and understands that Delicia Global Food Network OÜ does not provide any guarantee that it will manage to achieve it. They acknowledge and understand therefore that Delicia Global Food Network OÜ (incl. its bodies and employees) assumes no liability or responsibility for any loss or damage that would result from or relate to the incapacity to use Delicia food tokens, except in case of intentional misconduct or gross negligence.

WARRANTIES AND REPRESENTATIONS

By participating in the crowd sale, the purchaser agrees to the above and in particular, they represent and warrant that they:

- have read carefully the terms and conditions attached to the white paper; agree to their full contents and accept to be legally bound by them;
- are authorized and have full power to purchase Delicia tokens according to the laws that apply in their jurisdiction of domicile;
- live in a jurisdiction which allows Delicia to sell Delicia tokens through a crowd sale without requiring any local authorization;
- are familiar with all related regulations in the specific jurisdiction in which they are based and that purchasing cryptographic tokens in that jurisdiction is not prohibited, restricted or subject to additional conditions of any kind;
- will not use the crowd sale for any illegal activity, including but not limited to money laundering and the financing of terrorism;
- have sufficient knowledge about the nature of the cryptographic tokens and have significant experience with, and functional understanding of, the usage and intricacies of dealing with cryptographic tokens and currencies and blockchain-based systems and services;
- purchase Delicia tokens because they wish to have access to the Delicia Food Network
- Are not purchasing Delicia tokens for speculative investment or usage.

GOVERNING LAWS AND ARBITRATIONS

Recently, an increased attention has been drawn to developers, businesses and individuals using cryptocurrency offerings, such as initial coin offerings (ICO) to raise capital. The structures of ICOs vary and they may be used to raise capital for different kinds of projects.

Cryptocurrency offerings can provide new opportunities for businesses to raise capital and for investors to access a broader range of investments. However, numerous questions have arisen about the legal framework to the offerings.

The Estonian Financial Supervisory Authority (EFSA) is of opinion that tokens in terms of the offerings mentioned above, depending on their structure, might be considered as securities according to the definition set forth in the current Securities Market Act (SMA) as well as in the Law of Obligations Act (LOA). In assessing whether or not securities laws apply, the EFSA states that substance should be considered over form.

Every ICO is unique and should be assessed on its own characteristics. The EFSA explains that tokens which give investors certain rights in the issuer company or whose value is tied to the future profits or success of a business are likely to be considered securities in the meaning of § 2 of the SMA. Therefore, the offering of such tokens may constitute as the issue of securities and, depending on its exact nature, be governed by the rules that of public offering as prescribed in § 12 of the SMA. That being the case, it is required to register a respective prospectus in the EFSA.

As regards to ICOs encompassing the offering of instruments qualified as securities, it is important to note that the entities facilitating such ICOs or secondary trading of such tokens may be considered as providing investment services as stipulated in § 43 of the SMA. In particular, by organizing such an offer or issuing tokens or bringing together the interests for acquisition and transfer of tokens under uniform conditions. The abovementioned services may be provided as a permanent activity only by authorised entities.

The EFSA notes that ICOs may also be governed by the Credit Institutions Act (CIA). This might be in the case where the main activity of the business is to provide loans on its own name and account and such activity is being financed through the repayable funds received from the public in the form of an ICO.

Regarding trading cryptocurrencies, it is important to mark that according to the judgement of the Estonian Supreme Court RKHKo 3-3-1-75-15, trading Bitcoins as business activity corresponds to the provision of services of alternative means of payment. This means that persons trading with virtual currencies in the course of their business activities may be considered to offer virtual currency services as provided in the Money Laundering and Terrorist Financing Prevention Act (MLTFPA) § 2 (1) points 10 and 11. Conclusively, the respective persons should apply for authorization pursuant to MLTFPA § 70 (1) point 4 or 5.

To conclude with, the EFSA states that although a new technology is involved, and what is being sold is referred to as a token instead of a share or equity, a token may still qualify as a security as set forth in the Estonian legislation.

Our token, as described above, does not fall into a security under Estonian Law since it only grants the access of a platform for the sale and purchase of food products and their derivatives.

THE DELICIA TEAM & ADVISERS

The Delicia Team and Advisory team combines individuals of long term industry experience in Information Technology along with distinct entrepreneurial mindset. At the core of the team's vision is user centricity and success in every feature that is incorporated in Delicia. With this skill set, Delicia can deliver food sustenance, innovation and financial value.

Naresh Mareedu – Founder & CEO - Ex-KPMG

Naresh is very passionate about solving world's food wastage problem and hence conceived the idea of Delicia,

He brings extensive knowledge on web-related technologies to his role as CEO of Delicia with proven experience in technical leadership roles for global companies.

He has played several technology leadership roles at companies like KPMG, Electronic Arts (EA) Inc., HP, Google-Motorola (Now a Lenovo company), ExxonMobil, and Alcatel Lucent. He is an expert Application Infrastructure Architect and has designed, developed and implemented several custom high availability and disaster recovery solutions.

Rahul Patil – Co-Founder & CTO - Ex-KPMG

Rahul brings in the valuable Silicon Valley "can do" approach to the team having co-authored a patent at FusionOps for secure and scalable cloud on-premise data integration.

Coming from a farming family background and closely seeing the food disparity between developed and developing countries, he is motivated to apply technology to this burning socio-economic problem.

He has been providing technology solutions, developing, deploying, and evaluating systems aimed at improving quality and efficiency for over fifteen years. He is recognized for managing all phases of technology projects, leading large and diverse project teams, delivering high quality scalable enterprise applications, meeting timelines and budgetary targets and adept at interfacing with internal and external customers. His notable past experience includes a brief stint at KPMG, working as Solutions Architect for their Global Organization. Prior to KPMG he gained startup experience at FusionOps (now Aera Technology) for over eight years wearing many hats to help succeed the company on many fronts. He had joined as Software Developer and rose up the ranks to serve as Senior Director, Cloud Infrastructure and Integration.

After completing his Masters in Chemical Engineering from Nagpur University, India, he began his career in IT working for Insurance CRM software development subsidiary of EZ-Data Inc. (now Ebix) and joined Citi after moving to US. Rahul has worked in various business domains like Insurance CRM, Supply Chain Analytics and Fintech.

Chandra Reddy P – Co-Founder & CFO

Chandra is eager to navigate the team to help deliver the groundbreaking solution with his deep financial industry background and knowledge,

He has around sixteen years of experience in the Investment Banking, Private Equity and Venture Capital funding. He has substantial work experience in capital markets covering Equity Derivatives, Fixed Income, Algorithmic Trading, SEC Regulations and on-boarding trading desk to meet Dodd-Frank & RegNMS regulations. In addition, his work also covers Public-Key Cryptography, Compliance Technologies such as AML Investigations and KYC across NAM, LATAM, EMEA and APAC.

Aleksandar Trifunovski – Backend Developer

Alex is excited to be part of the highly Delicia motivated team and apply the latest Blockchain technology to the age-old food wastage problem

He has been developing software solutions for over a decade. As an Oracle Certified Professional he brings in the strong backend technology knowledge to the team.

Abdullah Salim - Adviser and Marketing Strategist

12-year seasoned Brand and Digital Marketing Consultant, Abdullah Salim has helped brands of all sizes and startups create a significant digital footprint. He is a blockchain enthusiast and has been part of several cutting edge blockchain projects. Abdullah feels very strongly about Delicia's mission of eradicating food scarcity, eliminating wastage and making the Food value chain more efficient and equitable.

Nelson Duarte -Legal Advisor

www.novel-law.net

Director at Novel Law Consulting Ltd

Novel Law Consulting Ltd is an international legal boutique specialized in Commercial Law, International Law, IT and Startups.

The firm advises a wide range of organizations on establishing corporate structures, corporate governance, corporate management and compliance issues.

The firm has also advised on business usage of distributed ledger and smart contract technologies on how financial regulations apply to them, on blockchain technologies offerings, with special focus on initial coin offerings, token generation events and similar blockchain-enabled methods of raising funds.

Dr. Murtuza Jadliwala – Blockchain Advisor

Associate Professor, Department of Computer Science, UTSA, TX, USA

http://www.cs.utsa.edu/~jadliwala/
http://www.cs.wichita.edu/~jadliwala/CS898AT/cs898at.htm

Dr. Murtuza Jadliwala is currently an Assistant Professor in the Department of Computer Science at the University of Texas at San Antonio, USA. Prior to that, he was an Assistant Professor in the Department of Electrical Engineering and Computer Science at the Wichita State University, USA from 2012-2017 and a Post-doctoral Research Fellow in the Department of Computer and Communication Sciences at the Swiss Federal Institute of Technology in Lausanne (EPFL) from 2008-2011. He also served as a Summer Faculty Fellow at the US Air Force Research Lab - Information Institute in Rome, NY, USA from June-August 2015. His educational background includes a Bachelor's degree in Computer Engineering from Mumbai University, India and a Doctorate degree in Computer Science from the State University of New York at Buffalo, USA. His current research is focused towards overcoming security and privacy threats in networked computer and cyber-physical systems. His research has been supported by awards from the US National Science Foundation (NSF), Air Force Office of Scientific Research (AFOSR), Air Force Research Lab (AFRL) and Power Systems Engineering Research Center (PSERC).

With his experience and background of teaching Bitcoin and Cryptocurrency, the team is receiving valuable guidance from Dr. Jadliwala as it builds the Delicia Global Food Network.

Dr. Rajendra Boppana – Technical Advisor

Professor, Department of Computer Science, UTSA, TX, USA

http://www.cs.utsa.edu/faculty/boppana/

Dr. Rajendra Boppana is a professor and the chair of the Department of Computer Science at the University of Texas at San Antonio (UTSA). Dr. Boppana received his Ph.D. degree in computer engineering from the University of Southern California, Los Angeles, USA.

Dr. Boppana's current research interests include mobile ad hoc networks security and performance, software defined networks, high performance computing (HPC), performance and security of multi-tenant clouds. He has published 75 peer-reviewed conference papers and journal articles, in addition to several book chapters on these topics.

Dr. Boppana served as the principal investigator (PI) or co-PI for over 12 federally funded research grants and is the sole or lead inventor for three patents. Dr. Boppana's recently conlcuded project was on random number generators, funded by

a phase II STTR (small business technology transfer) grant from Army Research Office (ARO), to develop a robust software package that is capable of generating billions of streams of random numbers with low interstream correlations and suitable for very large scale HPC applications that run on the fastest supercomputers. Dr. Boppana is currently working on mitigation of denial of service attacks on software-defined networks.

Dr. Boppana taught a wide variety of course including computer architecture, parallel computing, computer networks, simulation techniques, performance evaluation, and cloud computing applications and performance. Dr. Boppana is a co-investigator of a grant from Department of Homeland Security to design and offer a certificate program on biological and digital pathogenic outbreak investigations that adapt advances in epidemiology and cybersecurity to mitigate airborne or food-based biological terrorism and cyberattacks.

Dr. Boppana directed the UTSA's Quantitative Literacy Program (QLP), which is a university-wide curriculum enhancement program, 2011-16. The goal of this program was to increase the quantitative literacy among students and enrich their learning experience. As part of QLP, Dr. Boppana and his staff trained and worked with faculty to redesign several courses in the common core curriculum and introduce quantitative data and analysis methods that are natural to the disciplines of the courses redesigned. Over 100 faculty members, 90 student academic advisors, and various other institutional offices and programs worked with QLP in redesigning over 27 different courses with more than 60,000 student enrollments in these courses.

REFERENCES

http://www.feedingamerica.org/about-us/partners/become-a-product-partner/protecting-our-food-partners.html

http://gambeal.com/

http://www.fao.org/save-food/resources/keyfindings/en/

https://blog.tableschairsbarstools.com/2017/10/30/food-waste-a-huge-deal-for-the-planet-and-your-restaurant/

https://blog.tableschairsbarstools.com/2017/10/30/food-waste-a-huge-deal-for-the-planet-and-your-restaurant/

https://www.huffingtonpost.com/selina-juul/the-fight-against-food-wa_b_14632156.html

https://www.katom.com/learning-center/sustainability-your-restaurant.html

https://www.ted.com/talks/tristram_stuart_the_global_food_waste_scandal/transcript?source=DC-06-11-E

https://www.thedailymeal.com/travel/these-countries-waste-enough-food-feed-planet-slideshow/slide-9

http://www.businessdictionary.com/definition/Metcalfe-s-Law.html

https://www.trustnodes.com/2017/06/25/bitcoin-ethereum-follow-metcalfes-law-network-effects-new-study-says

https://www.forbes.com/sites/themixingbowl/2017/10/23/the-blockchain-of-food/#2b3c0a0b775f

https://www.researchgate.net/publication/23512107_Consumer_demand_for_traceability

http://www.refed.com/downloads/Retail_Guide_Web.pdf#page=11

http://wbcsdpublications.org/global-food-security-index-measuring-food-affordability-availability-quality-and-safety-across-105-countries/

http://money.cnn.com/2018/02/23/news/kfc-apology-ad-shortage-chicken/

https://www.npr.org/sections/thesalt/2018/02/24/586579455/french-food-waste-law-changing-how-grocery-stores-approach-excess-food

https://www.ccn.com/cryptos-to-overtake-25-of-fiat-money-by-2030-says-futurist/

http://www.globaltrademag.com/global-logistics/one-network-delivers-new-one-chain-solution