reOrder Gateway: Retail Cryptocurrency Infrastructure

Fiat-To-Cryptocurrency Gateway

WHITE PAPER

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INTRODUCTION

reOrder Technologies Inc. is a company registered in Colorado, USA. Since 2016 our mission is to increase the economic efficiency of stores, bars, cafes and restaurants by using payment terminals and other instruments and devices, connected to same server. In 2017 we are introducing the blockchain technology and ability to use cryptocurrencies, which allows our clients to:

- Increase the sales and efficiency of retail enterprises such as stores, bars, restaurants, hotels, etc.
- Enhance the efficiency of staff and quality of services provided to the customers
- Speed up the service and, as a result, increase the number of customers served at the table per unit of time
- Collect data for analytical analysis and further improving of business performance

Integration of blockchain technologies and automation the work of staff, reduces transaction costs and generally enhances the quality of service. Our goals are to engage ordinary enterprises in blockchain technologies, provide them with complete industrial solution for daily use and ability to participate in the global process of transition from fiat to crypto currency.



The main goal of the Company for 2017 is to raise funds at the global blockchain community, form a professional team for the development of **reOrder** infrastructure and support the global growth of cryptocurrency user base. To this end, the Company issues smart contracts (tokens) which give its holder the right to participate in the **reOrder** infrastructure. Tokens may be interesting for the owners of restaurants, cafes, bars, stores, advertisers, sellers and waiters. The Company intends to place reCoin tokens on popular exchanges in order to ensure their free acquisition.



REVIEW

Analysis of the retail market and assessment of blockchain technology readiness has put the main goal for the Company - realization of convenient, affordable and easy-to-understand way of using cryptocurrencies. **reOrder** wants to provide everyone with a simple and understandable access to the world of cryptocurrency, despite their level of technical training.

Thereby the Company intends to deploy and maintain cryptocurrency payment infrastructure in retail industry, providing its popularity and mass character. **reOrder** offers the end user with an amusing and very convenient payment interface and ability to develop and promote useful services, providing discounts and accumulation points.

At the first stage the Company is primarily focused on the free installation of retail **reOrder** payment terminals in the following establishments:

- Catering enterprises:
 - Ethnic applicable to 98% as small cafes and restaurants, specialized in ethnic cuisine, are not yet automated
 - Fast food applicable to 70%; automation has began relatively recently
 - Fast casual applicable to 50-60% in the USA and up to 80-90% outside the USA
 - Casual dining applicable to 70%
 - Family style applicable to 50%
 - Fine dining self-service terminals are almost inapplicable, but hand-operated devices for waiters might be very useful
- Retail:
 - Supermarkets
 - Special shops
- Hotels, inns:
 - Lobby automation of the administrator's work
 - Rooms customer service
 - Express restaurants

Possible scenarios for the **reOrder** payment terminals usage:

<u>In the restaurant (on the table)</u>: A customer takes the table with the installed terminal, looks through the menu, orders the dishes and waits for the order. The formed order is sent to the receipt printer in the kitchen, where it is immediately processed. The cook informs the busboy that the order is ready and he completes the cycle by delivering the dishes to the customer. Once the meal is over, the customer pays for the order with a bank card and rates the quality of food and service using the internal rating system.

<u>In a common grocery store</u>: The customer approaches the entrance of the store equipped with the **reOrder** terminal and makes an order, by adding the groceries to the "cart". Once he pays with his credit or loyalty card and chooses the delivery type (home delivery or pickup), the



customer may return to his plans for the day. As soon as the order is ready, he will receive a message to his phone.

<u>In a hotel (room)</u>: The hotel guest may see all cafes, bars and restaurants nearby, equipped with the **reOrder** system - see their menu, order a delivery to the hotel room or book a table. Besides that, **reOrder** terminals will grant access to hotel invoices and hotel's additional services, such as taxi ordering, morning wake-up, room service, etc.

At the moment the development of the **reOrder** Gateway complex is fully complete. The terminal is ready for selling and further installation by the clients. The complex is presented in the form of integrated hardware and software, such as **reOrder** payment terminal, Cloud system with a client back office, financial module for acceptance and accounting of payments.

reOrder payment terminal is a mobile **reOrder** application, installed on the iPad, which is fixed in a special case with an integrated bank card reader. This terminal can be mounted on a stand (desktop version), on the rod (take-out orders), attached to the wall by a "mechanical arm" or other VESA-compatible devices.

Client-server architecture provides an automatic remote update of the terminal application once any changes appear in the database content (menu, advertisement, etc.), located on the Company's servers. We have also developed a Cloud-system especially for the restaurants' and stores' owners, which allows to make changes in the menu through browser and mobile applications and control financial flows of their establishments.

Our main advantages over competitors:

- FREE system for restaurant and store owners (no initial payment required)
- Quick, simple and transparent sales strategy without initial costs
- Favorable terms of cooperation with retailers
- Advanced technologies, superior to competitors in a number of functions
- Improved intuitive interface
- Unique monetization system
- Ensurance of the exponential growth of cryptocurrency users

MARKET PROBLEMS

Problem: Today only large restaurant and store networks and expensive establishments can offer high quality service at a reasonable prices. At the same time small shops, restaurants, coffee shops and bars are left behind and in order to maintain competition are forced to reduce operational costs on salaries and increased expectation of tips. Thus, the customer eventually receives a low quality service at high prices and the business owner loses the customers. (https://www.washingtonpost.com/news/wonk/wp/2017/04/24/minimum-wage-hikes-do-close-restaurants-just-not-the-ones-you-care-about/?utm_term=.5c04f54ad60f)



Reasons: Large networks have an opportunity to develop technology and save money using automation (for example: AppleBee's, Olive Garden, Chipotle use the Ziosk terminals). Small establishments can't afford this and eventually fail to compete and close their business. At the same time most rating services (yelp.com, zomato.com, miskapp.com, zagat.com, tripadvisor.com, foursquare.com, etc.) are focused on large networks' reputation as well, while small business is forced to lose money on expensive advertisements and play by their rules which require payments for the best ranking. (https://www.forbes.com/sites/jimhandy/2012/08/16/think-yelp-is-unbiased-think-again/#44cb3b3511d1)

Solution: Provide small business with the same powerful tool as large networks use. Create the possibility of competition by improving the quality of service and reducing its cost at the same time and offer this solution for free.

We can make this possible by using the power of global blockchain community in purchasing the necessary equipment, which will make this solution attractive to crypto-community, small business and their customers.

More than 2500 types of cryptocurrencies have been already issued on the basis of various blockchain technologies and their total capitalization already exceeded \$100 billion (500% growth in 2017). These cryptocurrencies are a kind of mutual settlement between the community members. They support the ideology of "we power" and "us not me", excluding the need for participation of financial and government structures in the interaction between the exchange participants.

OPPORTUNITIES IN THE reOrder BLOCKCHAIN INFRASTRUCTURE

After developing the **reOrder** application and full Cloud-solution, that provides the Enterprise level, controllability and synchronization of all terminals, the Company intends to take advantage of the blockchain community capabilities and at the same time expand its influence in real world. This will allow to use truly revolutionary opportunities with direct benefit both for the members of the **reOrder** infrastructure and for all cryptocurrency holders.

Our **reOrder** terminals will become the link between the world of cryptocurrency economy and the physical world of products and services, where:

- Business owner gets:
 - Free, ready-to-use technical solution, leading to instant increase of the establishment's competitiveness
 - Significant reduction of costs for user cryptocurrency transactions in the establishment or for online payments
 - Convenient and cheap method of payments for staff and suppliers



- Increasement of profits from every receipt and significant reduction of operating costs
- o Increase in the number of sales and quality of service
- The establishment customer gets:
 - Significant reduction of costs for restaurant food and services
 - Quick, convenient and cheaper way of payment
 - Comfortable and quality service in all establishments equipped by reOrder terminals
- Waiter and seller get:
 - Additional source of profit from sales made on the automated terminal
 - Ability to change the type of activity and become a distribution manager for blockchain and retail technologies
- Advertiser gets:
 - A global targeted advertising platform with an ability to choose language, demographics, income level, traffic volume and purchase speed for the advertising campaign
 - o Control over the advertising campaign and a guarantee of honest statistics
- Blockchain community gets:
 - Expansion of private and business users of cryptocurrency
 - Ability to improve the world through ethical, socially useful and beneficial automation technology
 - Opportunity to participate in the development of the global trade network by providing an access to and meeting the needs of markets on all continents
 - Portal in the cryptocurrency economy for the physical world (crypto-physical system)
- reOrder Company gets:
 - Growth of the customer base
 - Growth of the brand recognition as a provider of the crypto liquidity and payments
 - Expansion of the functional part of our automation solutions
 - Development and diversification of the network of terminals around the world
 - Operating profit from our activities and investments in the development of the reOrder terminal network infrastructure and blockchain community

RELIABILITY OF THE reOrder INFRASTRUCTURE

Use of the infrastructure by all above-mentioned parties of retail, food and cryptocurrency markets makes it tolerant to market fluctuations.

Market of public catering will need the advantages of automation described above, regardless whether it is growing or falling.



The infrastructure may operate both on fiat and any crypto currencies, which makes it independent from cryptocurrencies in general and from the economic condition of specific tokens or payment methods.

The volatility of particular cryptocurrencies is automatically calculated in terminals at the moment of purchase (i.e. conversion into price-stabilizing crypto- and fiat currencies).

Total capitalization of the infrastructure will increase due to the growth of terminal base, extension of the services provided by it, and, as a result, growth in the number and involvement of the users of food and retail establishments and cryptocurrencies.

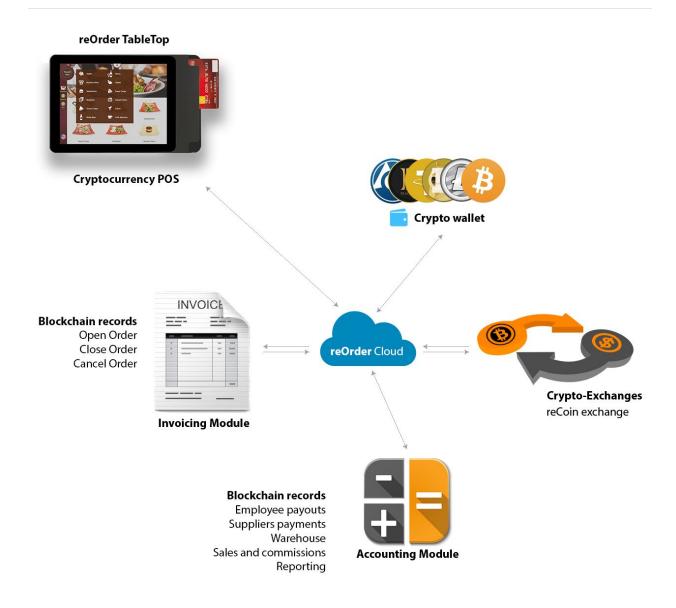
TECHNICAL IMPLEMENTATION

In order to develop the **reOrder** Gateway infrastructure we will implement the following functions:

- Cryptocurrency payment modules
- Connection protocol to external crypto-exchanges
- Crypto wallets
- Receipts using blockchain technologies
- Accounting with the use of blockchain technology

reOrder Gateway Infrastructure Scheme





Cryptocurrency Payment Modules

Currently, only a small number of retail businesses accepts cryptocurrency for payment. The cryptocurrency payment module will provide an unhindered exchange of local fiat currencies to global cryptocurrencies or direct cryptocurrency payments by means of user authorization in the wallet with a bank card.

The payment module for a terminal will allow the use of cryptocurrency calculations in the terminal and make payments online or via a mobile application.

When a customer presses the payment order button, the system offers to choose among three payment methods: cash, bank card or one of cryptocurrencies in the multi-currency wallet. The



receipt amount will change depending on the chosen method, but cryptocurrency will always be the cheapest way with a number of bonuses and discounts involved.

Automatically Created Crypto-Wallets

At this moment far not every user possesses cryptocurrencies or crypto-wallets. The address statistics of the most popular Bitcoin cryptocurrency says that in the middle of 2017 only 10M wallets have been registered. There are even less of cryptocurrency users, and thus the wallet market is at the earliest stage of its development (10M per 7.5B people, i.e. less than 0.2%). Therefore, in the next few years there is a high probability that a retail buyer, using credit or debit card, will still not have a cryptocurrency and multi-cryptocurrency wallet.

The system will allow to pay by cryptocurrency and through cryptocurrency, even if the user will not have a crypto-wallet. The system itself will create a crypto-wallet, authorize it via a bank card, phone number, Apple Pay, Google Wallet, link it to the user profile, acquire the necessary amount of cryptocurrency on the exchange and credit it to the restaurant crypto-wallet.

Currently, there are about 1,800 different issued cryptocurrencies, and in the future their number will only increase due thanks to the growing "tokenization" of the service, finance and real sectors. Therefore, it will be more appropriate to have multi-currency wallet rather than single-currency wallet.

Connection Protocol to External Crypto-Exchanges

Currently, the exchange infrastructure is separated from the application infrastructure, which leads to the necessity to exchange currencies separately, on these very exchanges. The assumed protocol will allow payment by **reOrder** cryptocurrency-participants through the protocol, which provides transactions between **reOrder** Gateway API servers and many crypto-exchanges to provide the exchange functions.

The existing API connections to several cryptocompare API and poloniex API exchanges allow to sequentially request prices on several exchanges through universal APIs (https://www.cryptocompare.com/api/) or proprietary APIs (https://poloniex.com/support/api/).

We plan to add an opportunity of parallel choice of the best sale/purchase price to the existing API functionality, which will happen by comparing quotes from different sources and faster and more centralized request of all prices from all connected and exchanges, currently available through API for the **reOrder** network in general, not for each terminal consecutively. It is necessary, for example, because of the API limitation for number of price requests per time unit on cryptocurrency exchanges. The protocol we're developing will take into account the last time of transaction executed from active exchanges, which will reduce the slippage of quotes thanks to the choice of fast exchange.



Further expansion of the functionality will include the use of communication interface standards for financial information exchange, such as REST API, WebSockets API and FIX API.

We expect at least 10 completed cryptocurrency operations per day in each establishment, which will result in 20,000 transactions per day or about 7.3 million transactions a year, based on 2,000 potential restaurants.

Each transaction will include 10-15 blockchain requests/records, which will result in 70-10 million records per year from the pilot region and increase the load by 2-3 times in a global deployment. The network performance will be achieved by the DPoS architecture, deployed on its own terminal network and the client Full Node wallet software for end users and businesses.

- Examples of API calls
 - Request for balance and currency type of customer wallet
 - Request for balance and currency type of restaurant wallet
 - Request for balance and currency type of **reOrder** wallet
 - Opening and closing of bank card payments/transactions

Blockchain Receipts

Of course, for a business owner, blockchain technologies can provide the most reliable way to fully control sales and guarantee that none of his employees will be able to intentionally change data about already made sales to their advantage.

The generated receipt can be paid with different methods, such as:

- By bank card or via Paypal, Apple Pay, Google wallet applications, etc.
- With a personal crypto-wallet, such as ClassicEtherWallet, WageCan Wallet, Mobi, Counterwallet and others. On our side we will implement a program gate, which will identify a particular payment receipt as a payable invoice and complete the payment once this receipt is paid.

Each receipt can be considered as a separate smart contract. Execution of this smart contract will result in several events, for example,

- Notification of the customer about successful payment (via email or SMS)
- Automatic accrual of bonus points, discounts, etc.
- Making a record about a successful transaction in a blockchain-report (for the owner)

Failure to fulfill this contract on time (for example, the customer has no money on the account) will put this contract on hold. In this case all interested parties will be notified and the customer might lose some bonuses. Once the money appear on the account (which is checked automatically) and the contract is fulfilled, everything falls into place again.



Settlement with the customer or the supplier should not cause any difficulties when transferring from the terminal to the merchant account and back to the retail point. We will implement an accounting module in order to ensure the functionality of bookkeeping, management accounting and settlements between business owner, employees and suppliers. It will include the following features:

- Accounting for processing transactions
- Accounting commissions and sales bonuses
- Accounting payrolls and payments
- Accounting of invoices and payments to suppliers
- Inventory control

Our main goal is to automate these processes and improve safety and reliability of storing data. The inability to interfere with the data, already entered in the registry will easily allow to restore the entire transaction history.

Economic Model

After the implementation of the project (beginning of 2018), the Company expects to profit from the following sources:

- Convenience Fee making profit at a fixed rate of \$1 from each receipt (approx. 25% of all profits)
- Payment processing making profit from agent payouts for each transaction (approx. 2.5% of all profits)
- Advertising broadcast of promo videos, banners, alcohol e-catalog (approx. 25% of all profits)
- Loyalty cards the issue of pre-paid cards for payments in restaurants and stores (approx. 47.5% of all profits).

Monetization features: The main objective is to give the end user the most useful functionality and neatly offer him to pay for the functions which made his life easier. The customer should receive the improved quality of service and 15-20% reduction in the cost of services. For this we ask him to make a contribution of \$1 from the receipt and pay minimum "tip" of 5%. These money will be divided between the Company and the business owner 50/50.

In the beginning of 2018 the Company plans to install self-service terminals free of charge, attracting investments for equipment purchase with the help of blockchain community.

In this document you can find a description of economic model for New York City: https://docs.google.com/document/d/1ycc-8DBXSUtvZt-DfWRs9Fd4_qZWmLENwFu3tf5-EWg/e dit



reCoin TOKENS

At the moment of the Token Sale launch the Company will release 104,000,000 reCoin tokens. reCoin exchange rate is 4500 reCoin = 1 BTC

Discount Conditions

Pre-sale, pre-ICO - at the moment of Token Sale announcement the Company plans to offer reCoin tokens with a 40% discount

First 6 hours from the moment of Token Sale launch - the Company plans to offer reCoin tokens with a 30% discount

Until the end of the first day of Token Sale - the Company plans to offer reCoin tokens with a 25% discount

Until the end of the first week of Token Sale - the Company plans to offer reCoin tokens with a 20% discount

Until the end of the second week of Token Sale - the Company plans to offer reCoin tokens with a 15% discount

Until the end of the third week of Token Sale - the Company plans to offer reCoin tokens with a 10% discount

The last week of Token Sale - the Company plans to offer reCoin tokens without a discount

PARTNERSHIP

Initially, the Company pursues the objectives of the partnership in the following areas:

- Advertising:
 - Local businesses near the terminal installation points
 - Local boards of private announcements (including electronic announcements), local newspapers with private announcements, etc.
 - Local small brewing companies to promote craft sorts of beer
 - Local advertising agencies
 - Global advertising agencies and big companies with famous brands
- Cross-selling and marketing:
 - Local taxi to order a taxi directly through the terminal
 - Local alcohol stores to order alcohol in a restaurant that does not have a license to sell alcohol, but allows to bring your own drinks



 Other goods and services of neighboring establishments that can be ordered and paid through the terminal

Sales:

- A group of sales consultants of processing companies and call centers for personal sales on their customer databases.
- Groups of private distribution networks
- Own team of company sales consultants

CUSTOMERS

During the development process we have evaluated various sales strategies. The main strategy is to enter into service agreements without initial payment, which will provide an easy access to the market.

Due to the fact that the Company plans to transfer equipment for use to small and medium-sized businesses for free, there is a unique opportunity for the Company to quickly obtain the owners' consent to the installation. This will ensure a fast growth of the Company's economic performance. In fact, business owners are ready to sign contracts for free installation of the **reOrder** payment terminals, but in order to accelerate the sales, in addition to their own sellers, we will also use call center resources, professional teams selling various POS solutions and their own existing base of "warm" customers, in addition to agreements made with processing companies which have their own customer bases.

IMPLEMENTATION PLAN

- Summer-Autumn of 2017. Attracting the attention of the Blockchain community to the problems of the modern economy and the corresponding solutions to these problems, the Company's approaches to handle them. Carry out a Token Sale to provide such solutions.
 - a. Preparation of Token Sale documentation
 - b. Carrying out pre-ICO
 - c. Carrying out Token Sale
 - d. Development and implementation of blockchain modules into the **reOrder** infrastructure
 - e. Development of our own terminal to reduce the Company's production costs.
- 2. Beginning of 2018. Achievement of exponential growth through engaging different teams of sales consultants, working in parallel. By supporting different types of sales, the Company significant growth, so the Company will be interested in its own agents.
 - a. Setting up a sales office and building a distribution team
 - b. Building a team of developers, technical and client support



- c. Wholesale purchase of equipment for attracted investments
- d. Deployment of retail infrastructure in New York City
- 3. The middle of 2018. Start sales. Marketing and engagement of the community into the cryptocurrency culture by means of advertising, branding and mass distribution of name cards that can be used to pay for products and services.
 - a. Connecting a stable cryptocurrency for mutual settlements
 - b. Building a marketing department
 - c. Development of a bonus and discount systems
 - d. Development and production of a smart chip and issue of loyalty cards
 - e. Development of an application for members of the bonus systems
 - f. Launch of online loyalty cards sales and their distribution in offline stores
- 4. The end of 2018. Launching an advertising platform
 - a. Building an advertising department team
 - b. Development of the advertising platform functionality, linking the advertisers' profiles, connection of statistics
 - c. Attracting advertisers
- 5. Ehe beginning of 2019. Branding. The Company wants to create its own brand and its own virtual network of restaurants, stores and hotels, build relationships with customers and gain trust, based on the quality of the solutions offered by the Company and their competent implementation.
 - a. Setting goals and criteria for branding
 - b. Brand realization and maintenance
- 6. At the beginning of 2019. Mastering other markets.
 - a. Getting an access to the international market by offering tailored solutions to neighboring countries, as well as offering a franchise
 - b. Access to the related markets, such as retail trading, hotels, will allow the Company to develop in more consistently and independently.

MAIN TEAM

The team in different composition has been working on the project for 1.5 years and at this moment our main team is formed and includes:

- Sergey Shilnov CEO, strategy, marketing, market development, sales management, strategic partnership development, fundraising
- Alexey Potapov COO, marketing, development, logistics, installation process management, sales management, fundraising
- Evgeny Mityaev CTO, Electronic engineer
- Alexander Teplitsky Managing Partner, Investor



- Yuras Zyankovich Legal support
- Igor Bokhonsky Product engineer