JEWEL GLOBAL DIAMOND COMMODITY EXCHANGE

WHITE PAPER

TRANSFORMING JEWEL INTO A NEW FINANCIAL ASSET CLASS

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INTRODUCTION

The JEWEL ecosystem was designed to bridge the gap between traditional online trading and Crypto investments. The JEWEL Coin will power three platforms: an exchange, a wallet and online trading on derivatives. All three platforms will allow fiat and crypto transactions. Currently the 5 trillion dollar per day online trading market and the multi-billion dollar crypto market are still separated. Making the jump from online trading to crypto is complicated and managing fiat finances is difficult for crypto investors. Our project will create a financial management hub with a seamless process where buying, storing, exchanging and trading on both fiat and cryptos is available. In short, investors can manage all their fiat and crypto finances on the same platforms, with major benefits for JEWEL Coin holders. This whitepaper will describe the products, details and vision of the project and explain how we will make it become a reality.

Diamonds have the potential to become the next asset class. This white paper addresses how JEWEL intends to bridge the gap between the current diamond ecosystem and the developing financial markets. After presenting the difficulties and obstacles unique to the diamond ecosystem, we will present four layers of developments and innovations marking JEWEL as the future global exchange for investment in diamonds. In contrast to other commodities, such as gold, it is difficult to achieve uniform pricing characteristics for diamonds since they are not fungible. One carat of diamonds is not equal to another carat due to many countless combinations of characteristics. Furthermore, the diamond market is missing liquidity. While one can buy diamonds at retail, it is a challenge to resell them at a reasonable market price. Since diamond exchanges operate on a business-to-business (B2B) basis, they are not relevant for traders and, in fact, there is no platform for reselling diamonds. This white paper outlines how we aim to bridge the gap between the current diamond ecosystem and the future diamond investment market through a Diamond Digital Certificate process that will transform diamonds from a unique asset to a fungible asset with clearly defined values. In addition, we present a corresponding trading platform that will provide a two-sided market in which traders will be able to trade and liquidate their diamond holdings. We present and discuss the advantages of the JEDEX platform, the mechanisms to achieve fungibility for diamond trading, the process necessary to create diamond market value transparency and, finally, the blockchain-based JEDEX diamond-trading platform.

JEWEL WITH RAPAPORT

Diamonds are most commonly known as precious gemstones used in the jewelry industry. According to a recent report1, consumer demand for diamonds accounts for 95% while investment demand accounts for less than 5%. In 2015, the value of the worldwide diamond jewelry market hit US $79 billion [13]. Moreover, Frost & Sullivan [19] predict a demand-supply shortfall of mined diamonds that increases every year, leading to a demand-supply gap of 41 million carats by 2022 and 278 million carats in 2050 (approximately US $40 billion). As a result, diamond prices are likely to be affected over the coming decades, making them a potentially interesting investment asset.

Even though diamonds present an alternative investment, up until now, several issues have prevented their use as an investment vehicle. Bain & Company [26] identify three main constraints: First, it is difficult to achieve uniform pricing for diamonds in contrast to other commodities, such as gold, since diamonds are not fungible. As a result, one carat of diamonds is not equal to another carat. Generally, diamonds are priced based on clarity, color, cut and carat size, the “4Cs” of the diamond industry. However, they are also valued based on emotional factors [10][36]. Different combinations of the 4Cs result in countless characteristic combinations, making it difficult to establish a per-carat price. Second, there is a lack of pricing transparency in the diamond industry due to missing industry standards and oligopoly structures. Finally, the diamond market lacks liquidity in that diamonds are usually a one-sided market with limited to no ability to resell them at their real market price. Paradoxically, a surplus of liquidity also exists because the industry annually pushes diamonds worth approximately US $20 billion into the market. Even though diamond trading exchanges exist, they only service B2B transactions, making them irrelevant for individuals or traders.

Two main issues have to be solved in order to allow commodity the creation of Diamond Digital Certificates: First, the creation of a process that transforms diamonds from a unique asset to a fungible asset with a transparent and clearly defined value.
Second, the creation of a trading platform that provides a two-sided market in which traders can liquidate and invest in diamond holdings. This white paper addresses this gap by introducing JEDEX's blockchain-based asset-class trading platform for diamonds, It answers the question of how to transform diamonds from a unique asset to a transparent, fungible asset. We also pose the following sub-questions: What data and market indicators must be compiled to create diamond market value transparency? How can a two-sided market for diamond trading be established? And, what are the mechanisms to achieve fungibility for diamond trading?

THE JEWEL ECOSYSTEM

Following the success of the JEWEL brand and platform we are now creating an Ecosystem around both crypto and fiat trading, which will act as a one-stop-shop to buy, store, sell, exchange and trade on fiat and crypto currencies. The ecosystem will be fueled by the JEWEL coin, built on the Ethereum network and designed for two platforms. The coin will have real-life value and offer its holders benefits on the JEDEX trading platform, Jewel.Finance.

PROJECT ESSENTIALS

- Creating a new asset class out of diamonds
- First diamond exchange for retail clients
- Market potential = US $350 billion
- Alpha version of the proprietary algorithm available on the site
- Strong team – proven results
- Financed by a publicly held company

Keywords: blockchain, smart contract, Ethereum, diamond trading, Diamond Digital Certificate, price-discovery mechanism, decentralized, peer-to-peer, JEDEX, RAPAPORT, JEWEL Coin

2 CASE STUDY AND MARKET OVERVIEW

Section 2.1 describes the status quo of the current diamond trading market. In subsequent sections, we show the innovations the JEWEL platform will bring to the market. Section 2.2 gives additional background literature so readers who are new to this domain can become aware of necessary concepts, terms and frameworks.

2.1 STATUS QUO IN THE DIAMOND MARKET

At the moment, there are two main motivations for investing in precious metals such as gold, silver, platinum or diamonds. First, traders purchase such commodities to maximize yields by generating above-market returns due to price appreciation. Second, hedge-oriented traders seek a stable store of value to preserve their capital or to lower the volatility of their overall portfolios, e.g. although polished diamonds generate less returns than other commodities, they are significantly more stable [26].

Interested traders who consider taking a position in diamonds have different options. They can either purchase individual stones or sealed boxes of stones, referred to as diamond bullions. Bullions are usually filled with small stones of a defined type and can range in price. Alternatively, private banks may offer their clients the opportunity to invest directly in physical diamonds, providing purchase services where diamonds are valuated and certified.

Traders may also gain exposure to prices of polished diamonds via asset management firms that buy and hold stores of physical diamonds. Those firms sell shares entitling holders to a pro-rata portion of the value of the diamond stores. The funds typically purchase polished colorless stones weighing one to five carats. Traders may alternatively buy shares of companies that operate in the diamond industry. However, the value of company shares does not necessarily correlate with the value of diamonds and depends on additional factors [26]. It is important to note that diamond exchanges only target B2B transactions and are not relevant for individual traders. Consequently, it is challenging for individuals to sell diamonds at their market price. This has led to the current system in which jewelry shops buy diamonds from individuals at a price point considerably below fair market value.

2.2 RELATED PROJECTS USING BLOCKCHAIN TECHNOLOGY

The JEWEL project addresses the pricing issues and the need to unlock diamonds as an investment option using blockchain technology. Blockchain technology is best known for providing the foundation of the peer-to-peer (P2P) cryptocurrency and payment system Bitcoin [29]. In recent years, the blockchain concept, also called the distributed ledger system, has spread in popularity. This has resulted in various blockchain-based applications such as in the finance sector [8][24][30], in prediction markets [20][35][37], as a platform for the Internet-of-Things (IoT) applications [9][32], in the legal industry [31] and so on.

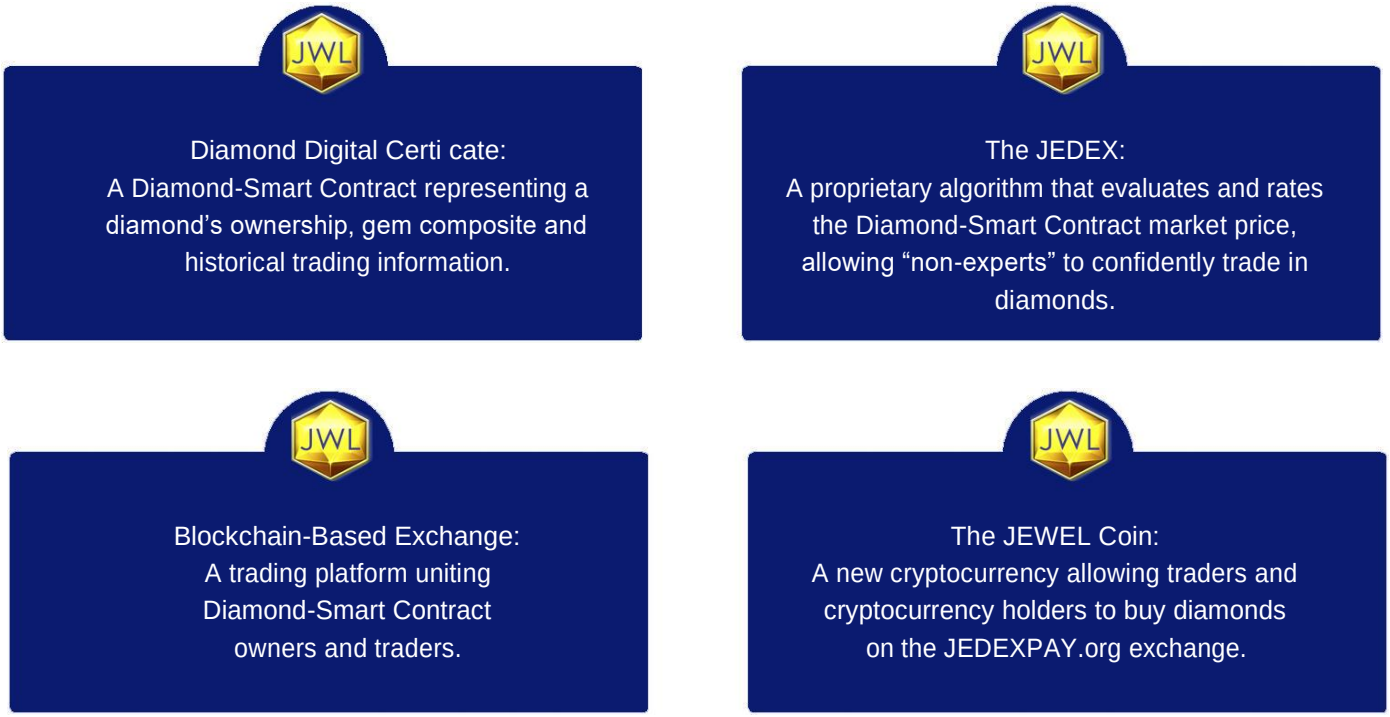
JEWEL utilizes the Ethereum [39] blockchain for its solution. In addition to the underlying distributed ledger, Ethereum incorporates Turing-complete programming languages on the protocol-layer to realize smart contract capabilities. Smart contracts are, “orchestration and choreography protocols that facilitate, verify and enact with computing means a negotiated agreement between consenting parties” [12]. The latter establish binding agreements and deploy applications using such smart contracts to enable certain services and functionalities, e.g., a P2P-trading platform.

Several projects offer tokenization of asset classes, e.g., Goldmint [21], OneGram [22] and Xaurum [40], which represent gold-based cryptocurrency. Due to the fungible nature of gold, it is far easier to enable tokenization of metal-based asset classes. Carats.io[2] and the Israel Diamond Exchange (IDE) have established a diamond-backed cryptocurrency based on an index reflecting the activity within the Israeli diamond industry [18]. Alrosa[3] is backing a project similar to Carats.io together with an initial coin offering (ICO) called D1 Coin4. Everledger5 is also a diamond-focused and blockchain-based project that tracks defining characteristics, history and ownership of diamonds to create a permanent record on the blockchain.

3 THE JEWEL SOLUTION

The ultimate objective of the global website jewelpay.org is to bridge the gap between the traditional diamond industry and the more innovative financial markets. The platform envisions bringing together diamond holders who want to liquidate their holdings and traders looking to diversify or hedge their investment portfolio to include diamonds as an investment asset, and doing so in a secure and transparent way.

JEWEL is built on four pillars: The JEWEL proprietary technology, blockchain technology, Diamond Digital Certificate and the JEWEL Coin.



Section 3.1 presents the way the JEWEL establishes transparency and standardization in diamond trading. Section 3.2 discusses the Diamond Digital Certificate. Section 3.3 maps the JEWEL solution in the domain of blockchain-based exchanges. Finally, Section 3.4 outlines the JEWEL Coin.

3.1 TRANSPARENCY AND STANDARDIZATION: THE JEDEX

The JEWEL, JEWEL's proprietary machine-learning algorithm, addresses the most significant obstacles in transforming diamonds into an asset class, i.e. lack of transparency and coherence in diamond value appraisal. The JEDEX takes gemological data, diamond financial data and global inventory data into consideration. Utilizing the global diamond inventory data, the JEDEX quantifies diamond prices and ranks individual diamonds and their respective prices [38].

Briefly, machine learning allows software applications to accurately predict outcomes without being explicitly programmed. Machine-learning algorithms receive input data and apply statistical analysis for predicting an output value within acceptable ranges.

4https://www.d1coin.io/
5https://www.everledger.io

The JEWEL comprises three elements (Fig.1). The first is the gem composite, expressed in percentage terms and representing a diamond's gemological perfection. The second JEWEL element is the parallel composite indicating the rarity of a diamond category and the available quantity of diamonds in the relevant category. The third JEWEL element is the indices composite, giving potential traders market directions for the diamond industry.

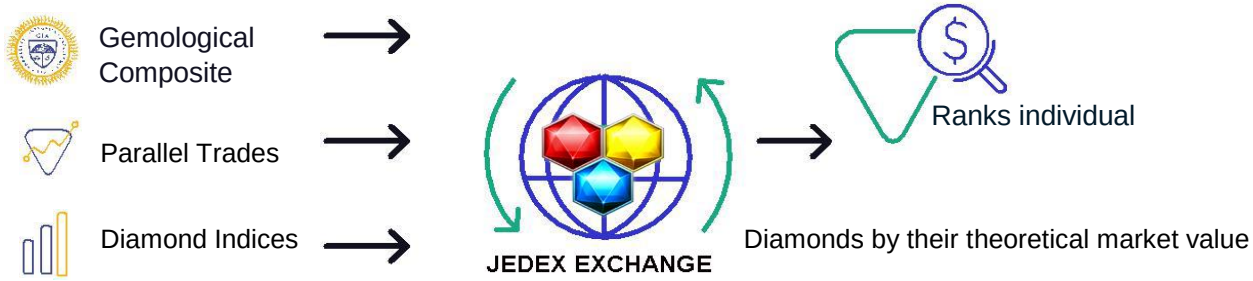


Fig.1: Simplification of the JEWEL algorithm

Using the JEWEL, traders will be able to base their investment decisions on analytical data, which has not been available so far. In so doing, traders will be able to answer the question of which diamond represents the best value for money.

To maximize accuracy, JEWEL is developing the JEDEX towards pricing additional types of diamonds. The accumulated data is continuously analyzed and supplied to the pricing algorithm. The JEDEX has the goal of pricing any certified diamond at an accuracy rate of more than 99.5%.

3.2 THE DIAMOND DIGITAL CERTIFICATE

A private diamond holder or dealer wishing to liquidate his or her holdings will be able to use the simple JEWEL Diamond Digital Certificate onboarding process to create a smart contract. This contract represents the financial offering, including the sale of a single diamond, a shared investment on a high value diamond or a diamond basket sold to multiple traders (Diamond ETF). Once the request is executed, the diamonds will be delivered to the custodian and validated against their GIA certificate. Following approval, the Diamond-Smart Contract will be created and sent to the owner's digital wallet. The diamond will remain at the custodian for safe keeping and the Diamond-Smart Contract holder will have the option to either list the Diamond-Smart Contract on the JEDEX Exchange or to sell directly peer-to-peer

To ensure trust and reliability, the JEDEX Exchange will only allow its users to purchase GIA-certified diamonds. GIA certificates are issued following grading by the Gemological Institute of America (GIA).

Fig. 2: Three simple steps to upload a diamond/s and create a Diamond-Smart Contract 1) Enter the GIA certificate (or certificates if loading a diamond basket) 2) Choose how many smart contracts to create (one for single stone sales, multiple for shared investment or diamond basket) 3) List the diamond on JEWEL or sell peer-to-peer. Order a pick-up.

3.3 BLOCKCHAIN TECHNOLOGY

The JEWEL project uses blockchain technology to create a Diamond Digital Certificate. In the first phase, Diamond-Smart Contracts will be issued via a simple process initiated once a diamond holder lists a stone for trading. The simple interface will create a smart contract that represents the diamond's gemological data and additional information to allow the creation of a financial product that represents the underlying asset, i.e., diamonds. As the blockchain-based JEWEL ecosystem evolves, we anticipate the diamond ecosystem will adopt Diamond-Smart Contracts as the new means of trading diamonds.

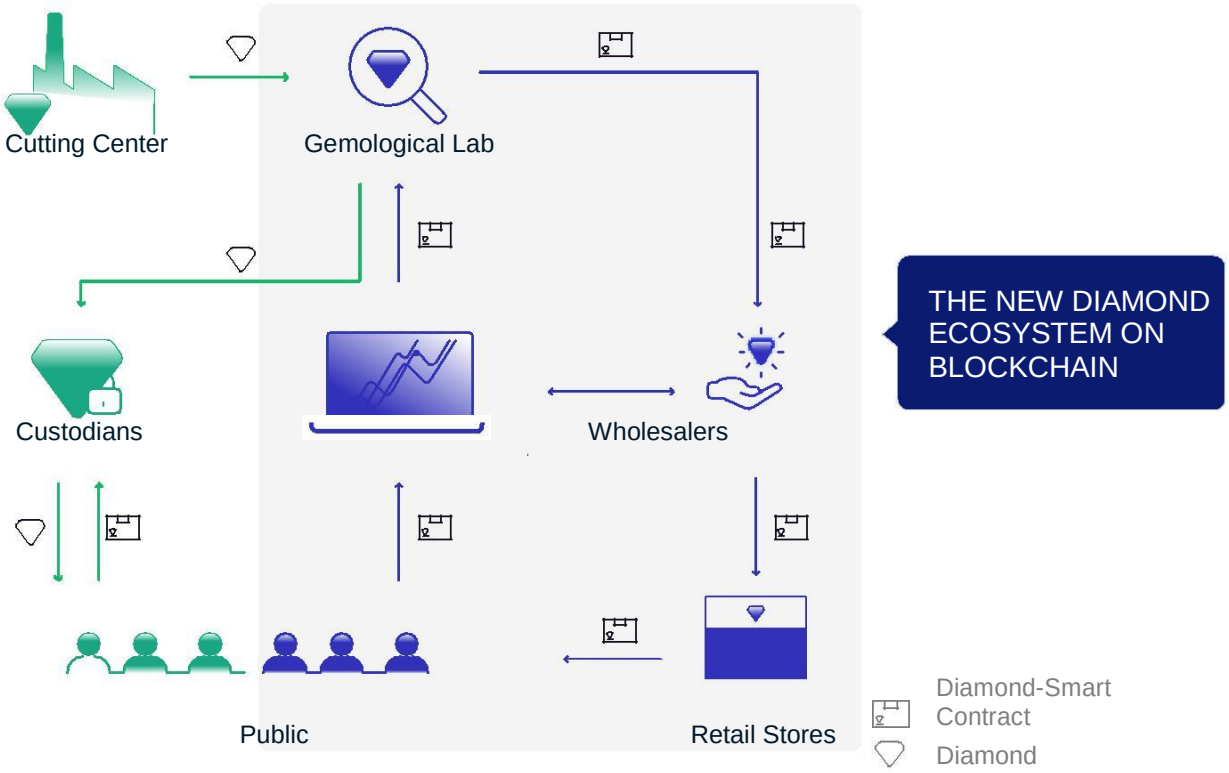


Fig.3: The vision – the diamond ecosystem on blockchain

Figure 3 shows the Blue Ocean vision of the diamond ecosystem. The finished polished diamond will be sent for registration to the gemological lab. After examining the diamond and issuing the grading report, the lab – using the JEWEL open platform – will list the diamond to create the Diamond-Smart Contract. The token includes the following information: GIA ID, register wallet, historical transactions and data necessary to create the fungibility mechanism. JEWEL offers a simple Diamond Digital Certificate creation process to create a smart contract token (Diamond-Smart Contract) as described in 3.2

After the Diamond-Smart Contract creation, the diamond will be sent to a custodian. B2B digital diamond trading will commence until the stone reaches its final destination; either on the JEDEX Exchange as a financial asset or until it is purchased as merchandize by the end user. Once the diamond has been physically delivered to the end user, the Diamond-Smart Contract will be marked as delisted on the blockchain.

A Diamond Digital Certificate is beneficial to the entire ecosystem in many ways:

- No additional transportation and insurance costs will occur while stones are traded within the ecosystem.
- All transactions using the JEWEL Coin will save fiat-currency transaction charges.
- The diamond origin and all transactions will be documented on the Diamond-Smart Contract.
- The trades will be executed quickly, efficiently and P2P without any third-party involvement.
- Open blockchain technology allows anyone to collect, aggregate and analyze data for their own purposes and for public use, thereby increasing transparency.

3.4 THE JEWEL COIN

The JEWEL Coin will be implemented as an ERC-20-compatible token over the public Ethereum blockchain. Activity on jewelpay.org, and later on within the diamond ecosystem, will be performed solely using JEWEL Coin. This will make the token an integral part of the JEWEL platform and the driver of its economy.

- Traders who want to purchase diamonds and diamond derivatives via Diamond-Smart Contracts on the JEWEL platform will have to purchase JEWEL Coin to carry out their transactions.
- Payment to and for all service providers, such as the gemological labs, custodian, insurance and transportation will only be possible using JEWEL Coin.
- Traders opening a short position will use JEWEL Coin to cover the collateral and borrowing fees.
- Traders will be able to use their portfolios as collateral to receive JEWEL Coin loans.

Demand for JEWEL Coins will be influenced by the number of active traders using the platform. The number of active users is expected to grow rapidly in the early years as the JEDEX Exchange opens new markets, either by expanding its own operation or via licensing software to local entities.

As Fig.4 shows, use of JEWEL Coin on the JEDEX Exchange will later expand to the diamond ecosystem. Dealers and service providers will receive JEWEL Coins from JEWEL traders and will use the JEWEL Coins to pay for inventory and services throughout the entire diamond ecosystem to increase efficiency and reduce transaction costs.

4 A TWO-SIDED DIAMOND-TRADING MARKET

All Diamond-Smart Contracts, as well as their trades, will be stored on the blockchain, thereby providing a fully transparent registry of the underlying diamonds trading history. Diamond-Smart Contracts will be tradable on the JEWEL trading platform or on a P2P basis, allowing traders to easily participate in diamond investments. The novel result will be a decentralized and fungible asset-class trading platform that permits professional-level investments in diamonds without requiring any expertise in diamond trading.

To explain how JEWEL will establish a two-sided market for diamond trading, Section 4.1 specifies the mechanism for uploading diamonds to the platform for subsequent trading. Section 4.2 focuses on buying and selling individual diamonds. Finally, Section 4.3 describes the way JEWEL users may take possession of physical diamonds.

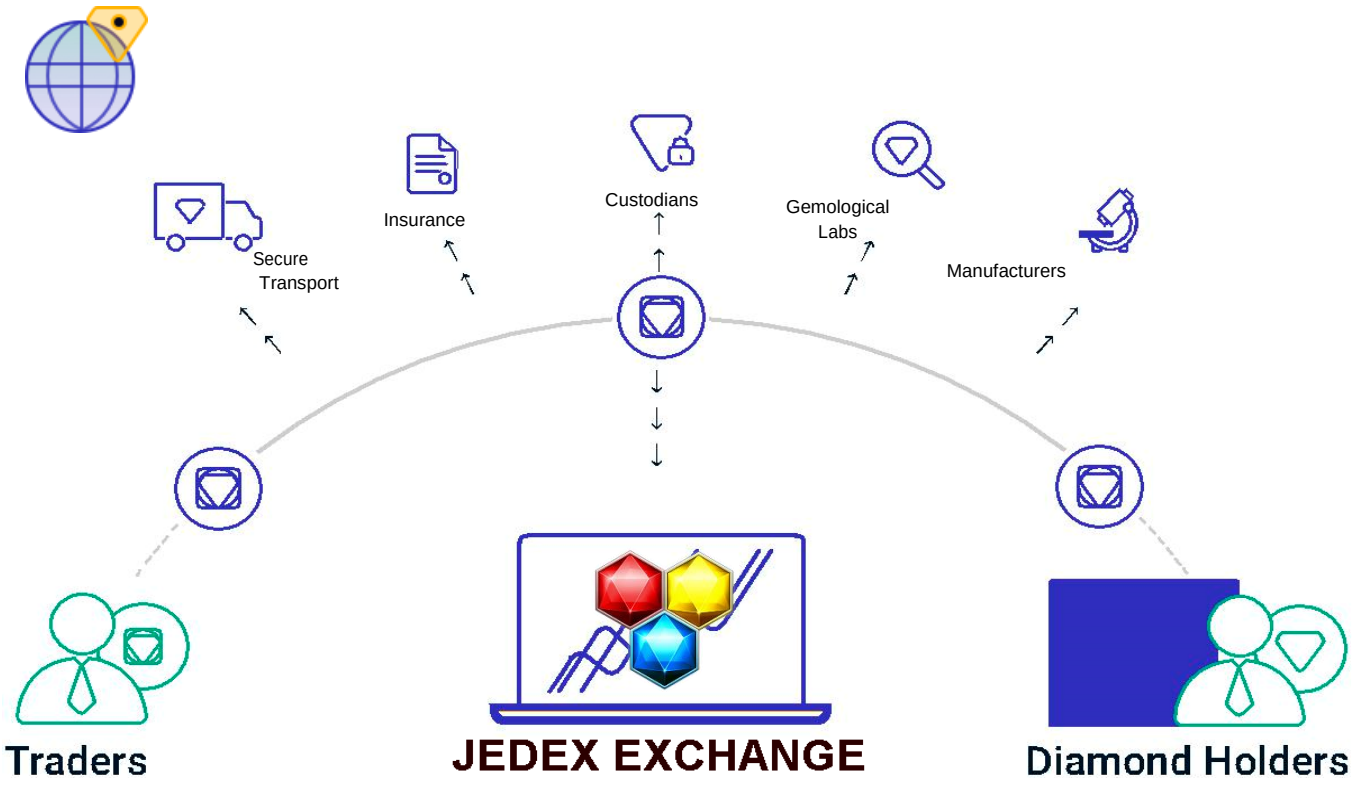


Fig.4: The expanding use of JEDEX Coin in the diamond ecosystem

4.1 SUPPLY-SIDE: SELLING DIAMONDS ON JEDEX

On the supply side, we have identified two main sources of supply:

a. Diamond Dealers –Post signing a strategic cooperation agreement with the diamond industry global leader JEDEX online (see Partners section), JEDEX will be connected with all the major global diamond manufacturers.

b. Private Diamond Holders – A considerable obstacle for transforming diamonds into a financial instrument is the inability for private diamond holders to resell stones fairly. A retail client looking to sell back a diamond to a dealer or pawn shop usually receives a price 30-50% below fair market value. Such a spread between the buying and selling price is the result of the illiquid and currently non-transparent diamond market.

Private diamond owners hold hundreds of billions of dollars' worth of stones. In 2016 alone, approximately US $20 billion was purchased at retail. We believe the opportunity to sell at market price will create an unprecedented flow of diamonds on to the JEDEX Exchange. JEWEL use blockchain technology to create a Diamond Digital Certificate for all listed diamonds, including those from private owners, as illustrated in Fig 2. above.

4.2 DEMAND-SIDE: INVESTING IN DIAMONDS

With the JEDEX platform, traders will be able to purchase a Diamond-Smart Contract (representing a diamond) using JEWEL Coin.

The new asset class created by the JEWEL project will attract the following potential traders:

a. Commodity Traders – Those traders currently investing in commodities such as precious metals seeking exposure to the sector or using these commodities as a hedging tool for currency or market fluctuation will be excited to discover diamonds as new asset class with low volatility and with very low correlation to the stock market.

b. Cryptocurrency Holders – Cryptocurrency holders looking to reduce volatility will use the JEDEX Exchange as an opportunity to lock in and realize the value of their crypto assets.

Leveraging the online B2C expertise of its business partner, TechFinancials, Inc., JEDEX will gradually expand to more markets to open this new and exciting asset class to traders looking to diversify their portfolios.

4.3 DELIVERY OF DIAMONDS

A trader who purchases a Diamond-Smart Contract will be able to request the delivery of a physical diamond. In such cases, the delivery process will begin when the Diamond-Smart Contract status changes to In Delivery Process and the diamond is sent to the owner. Once the owner receives the diamond, the Diamond-Smart Contract will be marked as delisted by the smart contract.

Fig.5: JEDEX creating a two-sided market

5 JEWEL FINANCIAL OFFERINGS

JEWEL is an open and transparent market place for traders to liquidate and invest in diamonds as a new financial asset class using blockchain technology and asset tokenization. All financial offerings are subject to regulation in the relevant jurisdiction.

Section 5.1 explains category trading of diamonds on the JEWEL platform. Section 5.2 discusses the processing of short sales with categorized diamonds. Finally, Section 5.3 shows an example of basket or ETF trading.

5.1 CATEGORY TRADING

One of the main hurdles of transforming diamonds to an asset class is the ability to create homogeneous products. The JEWEL solution will combine blockchain technology and the JEDEX algorithm to create Category Trading. The methodology assigns commonly traded diamonds to major categories based on their gemological characteristics [15]. For each category, JEWEL defines a benchmark. Within each category, the diamonds will receive a deviation score from the category benchmark, which is encrypted in the Diamond-Smart Contract. The ability to assign a deviation to the Diamond-Smart Contract is the result of the JEDEX algorithm. Once listed, a smart contract will calculate the value difference from the category based on the deviation score and allow the JEDEX to evaluate and rate all Diamond-Smart Contracts in the same category, creating a homogeneous asset class for the traders.

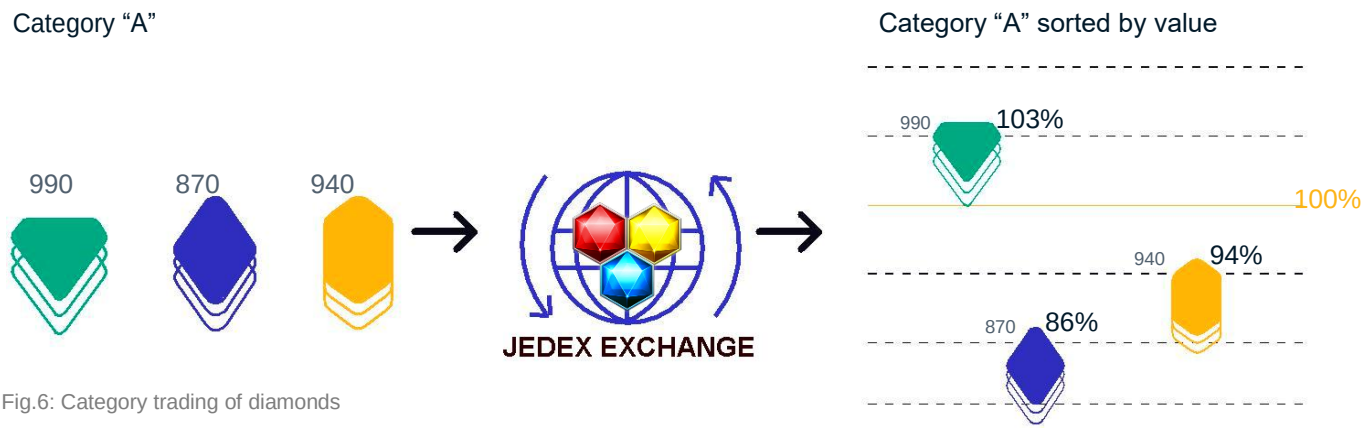


Fig.6: Category trading of diamonds

Figure 6 depicts an example where three diamond holders (shown on the left side) list diamonds that are all 1 carat in size, but have slightly deviating gem compositions. In the center of the figure is the JEDEX trading platform, which uses the JEDEX to calculate a 1-carat category that is a 100% gem composite. The result (on the right side) shows that the JEDEX calculations yield a clearly justified theoretical market price per diamond that is expressed in tradeable Diamond-Smart Contracts.

5.2 SHARED INVESTMENT

One of the most exciting and innovative trades the JEWEL platform will offer its users is the “Shared Investment” option. After uploading a diamond for trade, a diamond holder will have the option of selling the stone as a single Diamond-Smart Contract or as multiple Diamond-Smart Contracts. Choosing the multiple Diamond-Smart Contracts option will create multiple smart contracts that represent partial ownership of the backed diamond.

This function will, for the first time, allow retail clients to invest in high-valued diamonds that are usually a speculative and volatile segment of the diamond market.

5.3 SHORT SALE

Short selling is the well-established practice of selling securities without owning them. This strategy is motivated by the belief that the price of a security will drop, allowing it to be bought back a lower price to generate a profit. In such a case, traders earn the price difference of the security minus the borrowing cost.

To open a short sale position [17] on the JEDEX Exchange, a trader will send a short sell order that will initiate a request to locate and borrow the relevant category. Once this order is approved and if the bid/ask prices match, the order will be executed. Short selling on JEWEL will use an automated feed from the Lending Company for the quick approval of the borrowing request.

When the short sale is executed, the Lending Company will lend the Diamond-Smart Contract to the short seller against collateral and borrowing fees. The collateral and lending fees will be calculated on a daily basis.

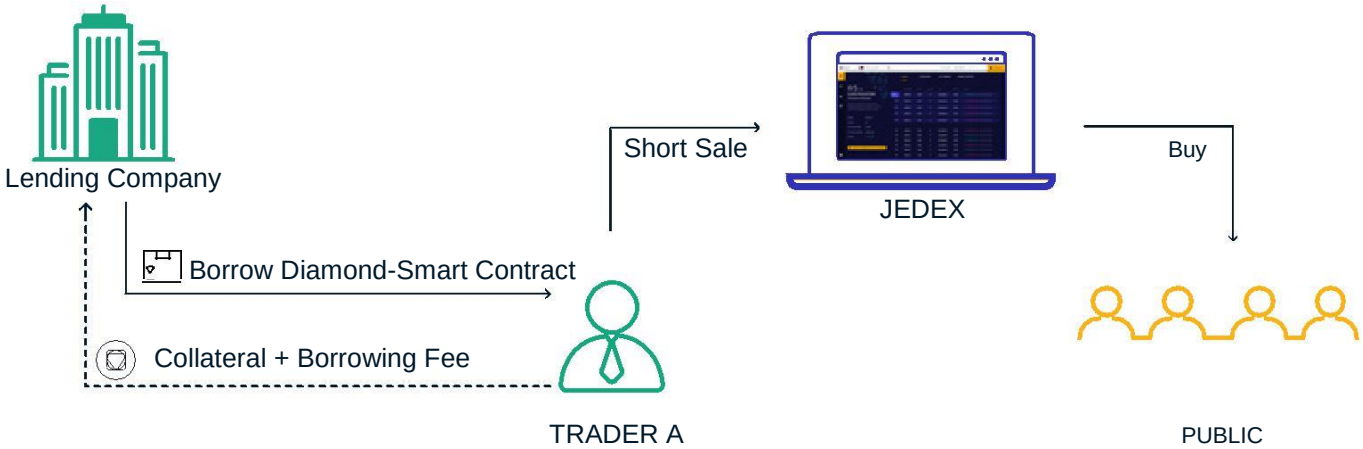


Fig.7: Opening a short-sale position

Fig. 7 shows the opening protocol of a JEWEL short sale position. To the left of the figure, the Lending Company lends a Diamond-Smart Contract to Trader A, who in return deposits collateral plus borrowing fees. Once the short seller ask price is matched by the buyer bid price, the trade will be executed.

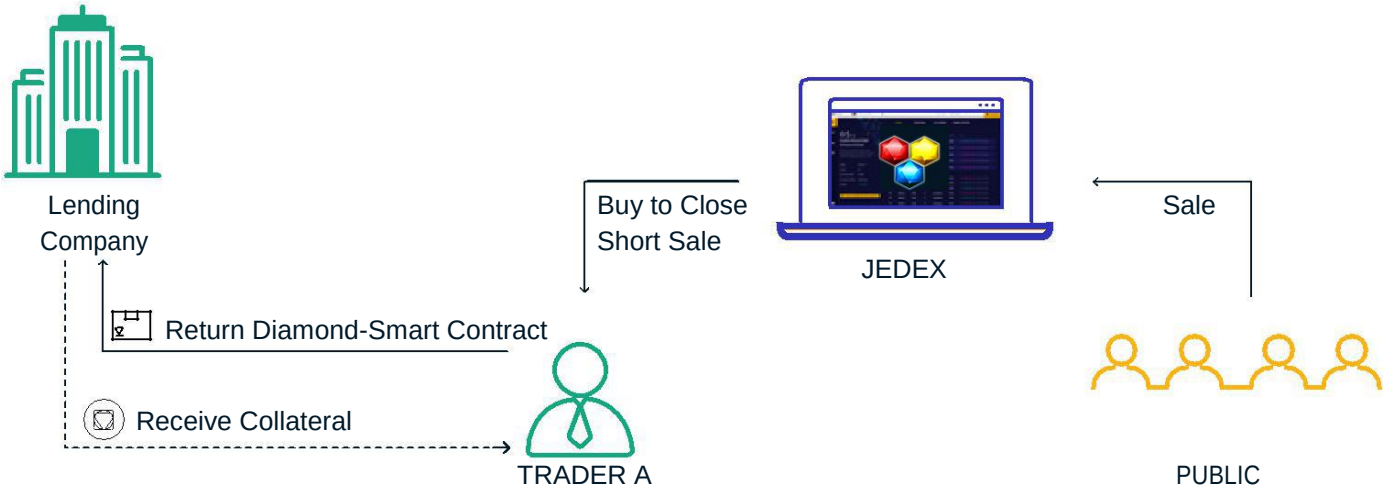


Fig.8: Closing a short-sale position

Fig.8: To close the short position, Trader A buys the same Diamond-Smart Contract category on the JEDEX Exchange and returns it to the Lending Company. The Lending Company returns the collateral to trader A and the transaction is completed, leaving trader A with the trade margin minus the borrowing fees.

When the trader wants to close the short position, the same diamond category is bought back on the JEDEX Exchange and returned to the lender. The short seller retains the margin, less the borrowing cost paid to the lender.

5.4 BASKET TRADING – DIAMOND ETFS

One of the main milestones representing the evolution of a financial asset is the creation of derivative products [16] that allow diversification and efficient market exposure. Briefly, a derivative product is a contract based on an underlying asset from which the former value is derived. Given the anticipated rapid demand for the new diamond asset class, the JEDEX platform is structured to develop financial instruments, such as exchange-traded fund (ETF) [33] trading. ETFs are traded comparably to stocks and traditionally held assets, e.g., commodities, bonds, stocks and so on.

Mapped onto the JEWEL system, a diamond holder will be able to upload a list of GIA certificates [34] to trade multiple diamonds as one basket. The JEWEL system creates multiple Diamond-Smart Contracts that each represent a partial ownership of the basket. This novel function is anticipated to evolve over time to complex financial products backed by diamonds, such as short ETFs, leveraged ETFs, single category ETF baskets, multi-category ETF baskets, rear and high value ETF baskets and more.

5.5 LOANS TO TRADERS

The diamonds held by the custodian on behalf of traders will be able to serve as collateral for providing loans.

Users will be able to get JEWEL Coin loans based on their portfolio liquidity. Interest will be set according to common interest rates. Such loans will be provided on selected Diamond-Smart Contracts (e.g. loans will not be given on shared investment Smart Contracts). Once a loan is granted, the Diamond-Smart Contracts that are set as collateral will be marked on the smart contract and could change ownership if the lender defaults.

6 THE JEWEL PLATFORM

The JEWEL platform will give traders a clear view of possible financial offerings without the need for extensive knowledge about diamonds.

The trading platform screenshots below illustrate the methodology that will enable traders to choose either an investment range or an investment category. The JEDEX displays diamonds, listed in sequence by “best-value investment” from top to bottom. The JEDEX rating range is represented numerically in values from 0.599 to 0.999 with the higher rating representing the most valuable investment (based on the JEDEX algorithm as described in Chapter 3.1).

In addition, the system will provide traders with financial and gemological data, allowing them to gauge the investment potential in parallel to the JEDEX recommendation.

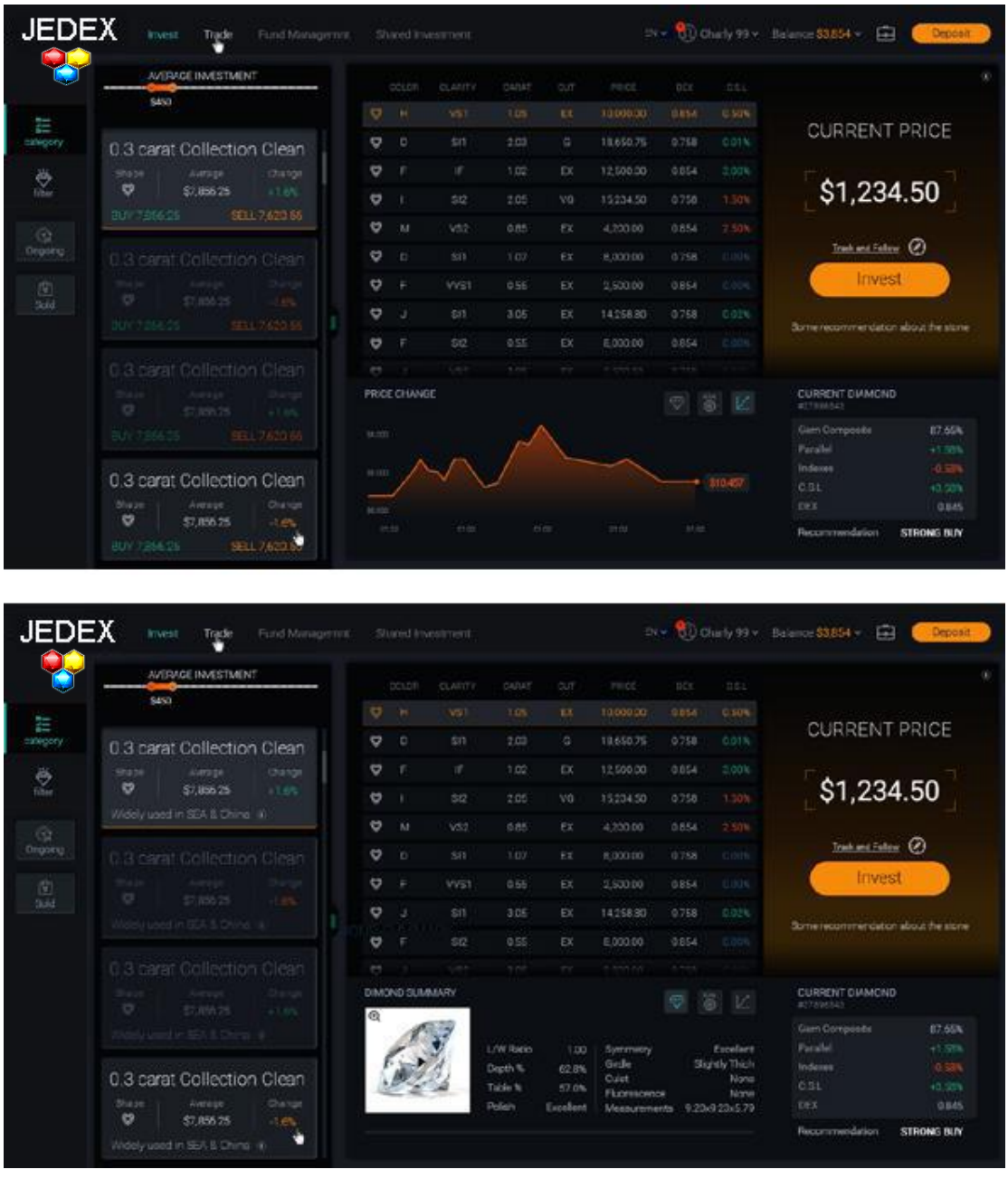


Fig. 9: Screenshots of the JEWEL Exchange. The buyer will choose the desired investment category. The JEDEX, the proprietary JEWEL algorithm, sorts all diamonds in that category, displaying the best-value diamonds at the top (asking price vs. market price).

7 RAPID DEPLOYMENT – FEASIBILITY EVALUATION

We have performed a paper-based feasibility evaluation that considers existing blockchain projects to explore the degree of rapid JEWEL deployment. The suggestions in this section are tentative system candidates. Ultimately, the JEWEL ecosystem must satisfy functional and non-functional requirements derived from the system presentation in earlier sections. Section 8.1 briefly presents the requirements and Section 8.2 lists existing system candidates for rapid JEWEL deployment.

7.1 REQUIREMENT SETS

Functional requirements for the JEWEL system are as follows:

Identification authentication of stakeholders is essential to ensure that only credibly credentialed interaction with the diamond-trading platform is possible. Smart-contracting capability is another functional requirement for diamond trading on the JEWEL platform. Evaluation functionality must guarantee that smart contracts are developed in a sound way and are executed as intended without flaws that would lead to unintended consequences, e.g., a wrongful diamond classification, loss of tokens and so on. Data-storage management is also essential for the JEWEL system. Mass data must be stored in a blockchain-based way and there should be an additional blockchain database with an elaborate manipulation-logics layer on top.

Non-functional requirements [2][23] for the JEWEL system are discernible during development versus runtime and we have chosen a suitable subset for both. Modifiability and integrality of the JEWEL system are non-discernible while security, interoperability, high automation, performance, usability and flexibility are discernible during runtime. Finally, we consider requirements of the JEWEL architecture that are beyond the scope of this paper and future work, namely scalability, applicability, completeness and feasibility.

Modifiability is non-discernible and means taking changes and adaptations to the diamond-trading context into account. These comprise regular updates and harmonization of composed blockchain systems, e.g., those resulting from regulatory changes.

Security refers to JEWEL's ability to not allow unauthorized usage and denial-of-service attempts while allowing trusted users with good reputations. The sub-requirements of security [1] are system availability for authorized action, confidentiality and integrity. Confidentiality is the absence of unauthorized disclosure of information. Integrity is the absence of improper system alterations. A diligent security study is important to the JEWEL system implementation and our important future work.

High automation is assured if the JEWEL system considers the existing blockchain-based systems for an application implementation. Flexibility is given when the system is built to accommodate many diverse activities during runtime including the participation of diverse partners and the exchange of diverse data.

Usability of the JEWEL system [4] will be achieved by taking the following sub-requirements into account: User interface simplicity and error avoidance assumes anticipating and preventing common stakeholder-use errors during diamond trading; closely related error handling supports a user with error recovery and learnability infers users can quickly master JEWEL-based diamond trading.

7.2 EXISTING RAPID-DEPLOYMENT SYSTEMS

To prevent us from "re-inventing the wheel," we performed a study about available systems for the rapid deployment of the JEWEL system. For identification, an existing blockchain-based system is Civic[6], which currently only takes the email address and mobile phone number of users who wish to gain identified access into consideration. The advantage of Civic is that users retain ownership of their identity, which differs from alternative systems such as the Estonian e-residency[7] identification. In the latter case, a government entity retains identification ownership and has the

[6] http://civic.io/

power of revocation, which is undesirable. While the newly established Civic identification is currently still limited, research shows [25] that authentication is essential to ensure an identified individual is who he or she claims to be. While the current version of Civic is limited so that authentication of identification is not assured, it is possible to combine Civic with other existing services such as Verify[8], which automatically checks government-issued documents against database systems for identity authentication.

For smart contracting the current standard is Ethereum [39], despite acknowledged drawbacks. First, proof-of-work (PoW) transaction validation does not scale and thus, Ethereum is not feasible for most industry applications. Second, the Ethereum-affiliated Solidity smart-contract language cannot be formally verified [6] and was recently hacked[9] because of security flaws. This resulted in a loss of approximately US $50 million[10]. More scalable is a smart-contract solution that uses proof-of-stake (PoS) [5] transaction validation and blockchain sharding [27]. For example, the smart-contract system Qtum [11] already uses PoS successfully in its application.

For smart-contract evaluation, several existing systems with minimal capabilities are available. For a limited set of insecure coding deficiencies, Securify[11] formally verifies Ethereum smart contracts as a beta version. Securify provides an online verification example with checks for recursive calls, transaction recordings, unexpected Ether flows, insecure coding patterns and untrusted-input use in security operations. Other examples for projects under development are the Embark-framework[12] and Populus[13]. Both appear immature for formal verification and evaluation.

The ongoing research topic of smart-contract evaluation is addressed in recent scientific publications. In [7], the authors explore the challenge of writing secure smart contracts. A problem is that programs and pseudonymous users call third-party program public methods with the consequence of insecurely combining trusted and untrusted programs. Translating the smart-contract code to the functional programming language F* is an option to allow for analyzing and verifying Solidity-code runtime safety and functional correctness. In [14], common smart-contract development pitfalls are checked based on a set of heuristics stemming from empiric observations of students. The occurrence of common development mistakes decreases by following best practices as the pitfall heuristics address the aspects of failures to use cryptography, misaligning incentives, errors in encoding the state machines and Ethereum-specific mistakes such as incentive or call-stack bugs.

For blockchain-based mass-data storage, the so-called Interplanetar File System[14] (IPFS) [3] is an open-source, content-addressable, P2P, distributed hypermedia protocol. IPFS provides a highly performing block-storage model with hyperlink-addressable data sets. In IPFS, a single computer stores data subsets using content addressing with hash-linked lists distributed across several computers. Data is distributed in IPFS across several computers to develop distributed blockchain applications in addition to adding immutable, permanent IPFS links into a blockchain transaction.

For managing diamond-trading data, BigChainDB [28] is an existing suitable system candidate that is a decentralized blockchain database with blockchain characteristics for the creation and movement of digital assets, immutable trading-event tracing and decentralized control. Its complementary nature to other blockchain systems, such as IPFS, Ethereum or Qtum, is important for the JEWEL system.

7 http://e-resident.gov.ee/

8 http://www.verif-y.com

9 https://www.wired.com/2016/06/50-million-hack-just-showed-dao-human/

10 https://bitcoinsmagazine.com/articles/ethereum-classic-hard-forksdiffuses-difficulty-bomb-1484350622/

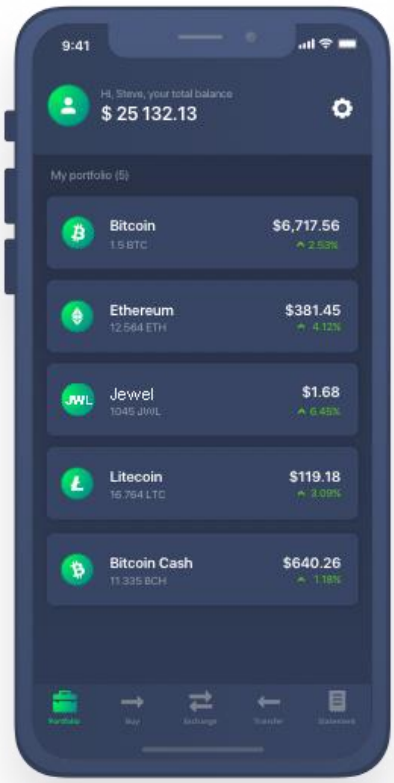
11 https://securify.ch/

12 https://github.com/iurimatias/embark-framework

13 http://populus.readthedocs.io/en/latest/

14 https://ipfs.io/

8 JEWEL.Finance



JEWEL.Finance is a crypto-fiat online wallet designed to integrate the shift between traditional online investments and the block chain revolution.

Crypto Investors

The financial world has been experiencing a shift from traditional bank accounts to crypto wallets. That is of course due to the increasing use of cryptocurrencies. Cryptocurrencies however do not eliminate the need and use of fiat currencies.

Fiat Investors

Investors who want to buy cryptos for the first time need to invest in one of the big digital currencies such as Bitcoin or Ethereum first, and buy another altcoin using their BTC or ETH. This makes the process lengthy, expensive and complicated for a newcomer to crypto.

Crypto and Fiat Investors

Investors who choose to use both fiat and cryptos need two separate wallets to manage their finances.

JEWEL.Finance

JEWEL.Finance is an online wallet which will be designed with an easy and user-friendly interface, offering both fiat and cryptocurrency management and making block chain transactions simple. Furthermore, the JEWEL wallet will allow investors to buy cryptocurrencies using fiat currencies and withdraw cryptocurrencies into fiat currencies. Holders of the JEWEL coin can use the coin to pay 50% lower commissions on transaction fees. The wallet can be used to store more than 20 cryptocurrencies (Bitcoin, Ethereum, Litecoin, JEWEL Coin and more) which can be used to make payments anywhere online for any products, services or investments. At the same time investors who choose to open accounts on multiple JEWEL platforms will only need one set of credentials for ease of use. The JEWEL.Finance wallet will be used to buy, store, exchange and pay with both crypto and fiat currencies. The wallet will not be crypto-to-crypto and fiat-to-fiat based. All currencies, both fiat and digital, will be interchangeable making all financial transactions easy and seamless. JEWEL.Finance is a valuable wallet which can be used by fiat investors, crypto investors and anyone who uses both or would like to transition from one to the other.

What Makes JEWEL.Finance Special?

JEWEL.Finance is designed to make block chain transactions easy for everyone. Cryptocurrencies are leading the future and everyone wants access even though many parts of the process can be confusing for inexperienced investors - after all it is a new technology and most investors are indeed inexperienced. JEWEL.Finance will be an easy platform where all functionalities and payments are clarified and made simple. JEWEL.Finance will be a financial hub where investors can manage all their crypto and fiat finances. JEWEL.Finance will offer the following uses:

- Buy cryptocurrencies with fiat currencies
- Withdraw fiat from cryptocurrencies
- Buy fiat and cryptocurrencies
- Store fiat and cryptocurrencies
- Make payments with fiat and cryptocurrencies
- Exchange fiat and cryptocurrencies
- Pay 50% less commission with JEWEL Coin

8 MARKET TRENDS AND POTENTIAL

The current diamond B2B trade market is valued at approximately US $60 billion a year, with consumers purchasing merchandise worth US $20 billion annually. Only 5% of this US $20 billion market is purchased for investment purposes.

There are major global forces, mostly focused on the B2B or derivatives markets, seeking to introduce diamonds to the finance market. These include the Indian Commodity Exchange, RapX's collaboration with Bloomberg and the Singapore Diamond Investment Exchange. The transformation from merchandise to financial asset class will increase investment volume substantially.

To evaluate the potential market size for investment diamonds, we have analyzed the gold market. This market has a turnover of US $700 billion, with gold and gold derivative investments totaling 80% approximately, or US $550 billion. The remaining 20% represents jewelry and industrial use. The current diamond market turnover is approximately US $90 billion with an investment value of only US $1 billion. By removing the market barriers described above, we believe diamonds will become the leading investment assets for traders seeking to hedge currency or get exposure to this alternative asset class. This shift could potentially increase the diamond investment market from US $1 billion to US $350 billion, assuming the relationship between investment turnover and jewelry and industrial use is similar to that of gold- 80% vs. 20%

GOLD MARKET

Current

20% GOLD JEWELRY INDUSTRIAL OTHER → US $140bn

80% INVESTMENT → US $550bn

DIAMOND MARKET

Current

99% DIAMOND JEWELRY INDUSTRIAL OTHER → US $87bn

1% INVESTMENT → US $1bn

Future

20% DIAMOND JEWELRY INDUSTRIAL OTHER → US $87bn

80% INVESTMENT → US $348bn

9 THE JEWELPAY GROUP TEAM AND PARTNERS

The JEWEL project was founded by a team of professionals in the internet, online marketing, financial technologies and diamond industries. TechFinancials, Inc has provided the financing for the project by way of a loan and equity investment, for which it was granted an option to be the holder of up to 92% of the JEWEL project.

TechFinancials, Inc is a leading developer of financial trading technologies, its experienced team of software developers, financial engineers and online marketing technology developers will provide development services for creating the trading technology, alongside the JEWELPAY GROUP team.

9.1 THE TEAM – A PROVEN TRACK RECORD

MARA KABDULLA

Mara Kabdula is the CEO of the Jewelpay Group and the mastermind behind the JEDEX brand. His vision lead to the award winning platform with millions of clients and his vision is leading the creation of the JEWELPAY ecosystem.

MAYA SENSOY

Maya Şensoy is the marketing leader at Jewelpay Group. She is one of the brightest minds in marketing who helped turn Jewelpay group into one of the biggest fintech platforms on the market. Her savvy technical knowledge combined with his natural creative instinct has lead to measurable results which prove her abilities.

STEVEN KERYA

Steven Kerya is a world renowned marketer and an advanced crypto advisor and investor. With more than 12 years of experience in digital marketing Steven has become an expert at driving growth in any business, especially in blockchain related ventures. Steven is the founder of several companies including New Challenge.

MOANGI LEUNG

Moangi Leung is an entrepreneur, founder and renowned crypto investment advisor. He co-founded and launched two successful companies; Space Capital Group Limited and Crypto28. Prior to that he mastered the financial industry through high ranked jobs for close to a decade. Moangi is considered one of the top advisors for the blockchain industry.

HIRANYA TYAGI

Hiranya Tyagi leads the Jewelpay Group customer care team and overlooks support quality and customer satisfaction at all stages of the process. He has a history in the investment banking industry and excels in many sectors. His vast knowledge enables him to combine knowledge from all the departments to handle all customer queries.

BALAGUN AKEEM

Balagun Akeem is the technical leader at the Jewelpay platforms. He has more than 5 years experience of building and leading effective development teams (up to 50 developers). He developed successful proven high load projects with multi-million daily active audience. He is also a crypto expert with more than 5 years of experience in blockchain.

2017

Company founded

50+

Employees

PARTNERSHIPS

Google facebook

JEDEX EXCHANGE

JEWEL ROADMAP

2017
The JEWEL Group is established

January 2018
Partnership with Rapaport

March 2018
Google and Facebook partnerships

19.09.2018 - 14.10.2018
Private presale

15.10.2018 - 13.11.2018
Crowd presale

14.11.2018 - 15.12.2018
Crowd sale

15 December 2018
Obtaining License for crypto payments and exchange

8 March 2019
Listing on exchanges

20 March 2019
Jewel.Finance wallet launched

10 May 2019
Jedex exchange launched

JEWEL ROADMAP

August 2019
Jedex iOS and Android apps launch

September 2019
Airdrop

October 2019
Perfomance improvement JEDEX

November 2019
Marketing campaign

January 2019
Top 20 in Coinmarketcap

JEWEL COIN SALE SCHEDULE

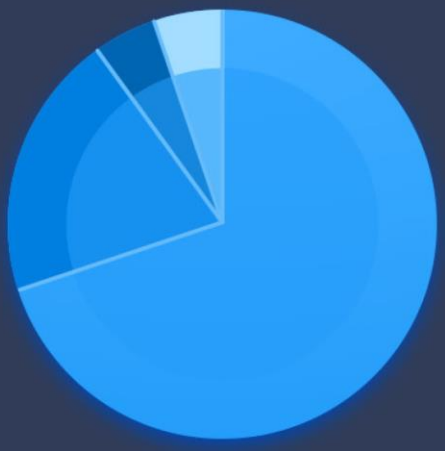
18.09.2018- 14.10.2018
private presale

15.10.2018-13.11.2018
crowd presale

14.11.2018- 15.12.2018
crowd sale

Jewel coin falls under the classification of a utility coin not a security coin. Utility coins are designed to be utilized on a specific platform or app not as an investment. **Jewel coin** was designed to be used on our platforms to offer a seamless trading process.

JEWEL COIN DISTRIBUTION



- Crowdsale 70%
- Company 20%
- Bounty 5%
- Team (locked till 1 Jan) 5%

Total supply 300 000 000 coins.
All unsold coins will be burnt.

1JEWEL = $0.20
during sale

500 JEWEL
minimum purchase

CONCLUSION

We have presented the JEWEL trading platform, which will turn diamonds into a tradable asset class. This paper explains the status quo in which the main problem hindering diamonds as a tradeable asset class is the very characteristic that the diamond industry promotes – each stone is unique. Consequently, there is a lack of transparency and liquidity, on the one hand, as diamonds change ownership via private transactions. On the other hand, there is an untapped investment market that we estimate at US $350 billion. Once JEWEL is launched, this investment market will start growing rapidly.

We have discussed our long-term vision of a diamond ecosystem based on blockchain technology and shown examples of other projects that are also based on Diamond Digital Certificates and in which all means of payments are digital.

The market indicators for creating diamond market value transparency and coherence are established by the JEDEX, the JEWEL machine-learning algorithm that takes several factors into account.

These factors include diamond financial and global inventory data, diamond prices and their individual rankings. Currently, the JEDEX is available for 0.3-, 0.5- and 1-carat round diamonds.

A considerable challenge has been to establish fungibility for diamonds to allow uniform trading. The JEWEL platform will solve this problem by applying the JEDEX algorithm and creating a smart-contract that represents a gemologically validated asset. Consequently, it is possible to apply innovative trading mechanisms employing blockchain-based tokens, such as category trading, short selling or ETF trading, to the diamond industry. We stress that these mechanisms are not a complete set. In the future, more diamond-trading mechanisms will be developed with blockchain-based Diamond Digital Certificates being the technological enabler.
The Diamond-Smart Contracts will be transparently registered on the blockchain to achieve full diamond-trading traceability. This will allow Diamond-Smart Contracts, representing fungible diamonds, to be traded on the JEWEL platform or P2P by professional traders in a decentralized way. Consequently, we will enable single-diamond trading, uploading diamonds for sale and also taking physical delivery by a trader in which all related events are stored on the blockchain. The result will be the establishment of a two-sided market for diamond trading.

While the deployment feasibility of the JEWEL system is positive, limitations of this paper pertain to the JEWEL platform being a decentralized and distributed diamond-trading platform with complex business semantics flowing across system components that must be cross-component dependable and free of concurrency conflicts.

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FOR WHITEPAPER

Last Updated September 14, 2018

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As of the date of publication of this whitepaper, JEWEL tokens (the “Tokens”) have no known or intended future use (other than on JEWEL network/platform which is still under development) (the “Network”). The intended purpose of the Tokens is to facilitate the provision and receipt of services through the Network as set forth in this whitepaper (collectively, the “Services”).

No promises of future performance or value are or will be made with respect to JEWEL, including no promise of inherent value, no promise of any payments, and no guarantee that JEWEL will hold any particular value. Unless prospective participants fully understand and accept the nature of JEWEL business and the potential risks associated with the acquisition, storage and transfer of ERC-20 tokens such as JEWEL tokens, they should not participate in the token sale.

JEWEL tokens are not being structured or intended to be sold as securities. JEWEL tokens hold no rights and confer no interests in the equity of JEWEL. JEWEL tokens are sold with an intended future use on JEWEL platform and all proceeds received during the token sale may be spent freely by JEWEL on the development of its business and the underlying technological infrastructure.

This whitepaper does not constitute a prospectus or disclosure document and is not an offer to sell, nor the solicitation of any offer to buy any investment or nancial instrument in any jurisdiction. JEWEL tokens should not be acquired for speculative or investment purposes with the expectation of making an investment return.

No regulatory authority has examined or approved any of the information set out in this whitepaper. No such action has or will be taken under the laws, regulatory requirements or rules of any jurisdiction. The publication, distribution or dissemination of this whitepaper does not imply that applicable laws or regulatory requirements have been complied with.

Participation in the token sale carries substantial risk and may involve special risks that could lead to a loss of all or a substantial portion of your contribution as stated herein. Further information about the risks of participating in the token sale is set out in the Token Sale T&Cs. Please ensure that you have read, understood and are prepared to accept the risks of participating in the token sale before sending a contribution to us.

The Tokens are designed and intended to perform as a functional utility for use only on the Company's business platform that is yet to be developed. The token sale and/or JEWEL tokens could be impacted by regulatory action, including potential restrictions on the ownership, use, or possession of such tokens. Regulators or other competent authorities may demand that we revise the mechanics of the token sale and/or the functionality of JEWEL tokens in order to comply with regulatory requirements or other governmental or business obligations. Nevertheless, we believe we are taking commercially reasonable steps to ensure that the token sale mechanics and issue of JEWEL tokens do not violate applicable laws and regulations. We have used reasonable endeavours to approach the token sale in a responsible and sensible manner. Given the legal uncertain of distributed ledger technologies, businesses and activities as well as cryptocurrencies and cryptocurrency-related businesses and activities in a number of jurisdictions, we have spent time and resources to consider its business approach and where it proposes to operate now and in the future.

It is possible that JEWEL Tokens described in this whitepaper and which are the subject of the token sale may comprise a security in your jurisdiction or the offer for sale by the Company of the Tokens in your jurisdiction may be a regulated or prohibited activity and in either of these cases the Company may be liable for the same. The Company accepts no responsibility or liability to you in these or any other circumstances. You are strongly advised to take independent legal advice in respect of the legality in your jurisdiction of your participation in the token sale and purchase of Tokens.

A private key, or a combination of private keys, is necessary to control and dispose of JEWEL Tokens stored in your digital wallet or vault. Accordingly, loss of requisite private key(s) associated with your digital wallet or vault storing JEWEL Tokens may result in loss of such JEWEL Tokens. Moreover, any third party that gains access to such private key(s), including by gaining access to login credentials of a hosted wallet service you use, may be able to misappropriate your JEWEL Tokens.
Because JEWEL Tokens and the Network are based on the Ethereum protocol, any malfunction, breakdown or abandonment of the Ethereum protocol may have a material adverse effect on the Network or JEWEL Tokens. Moreover, advances in cryptography, or technical advances such as the development of quantum computing, could present risks to the JEWEL Tokens and the Network by rendering ineffective the cryptographic consensus mechanism that underpins the Ethereum protocol.

As with other decentralized cryptographic tokens based on the Ethereum protocol, the JEWEL tokens are susceptible to attacks by miners in the course of validating JEWEL Token transactions on the Ethereum blockchain, including, but not limited to double-spend attacks, majority mining power attacks, and sel sh-mining attacks. Any successful attacks present a risk to the Network and the JEWEL Tokens, including, but not limited to, accurate execution and recording of transactions involving Tokens.

Hackers or other malicious groups or organizations may attempt to interfere with the Network or the JEWEL Tokens in a variety of ways, including, but not limited to, malware attacks, denial of service attacks, consensus-based attacks, Sybil attacks, smur ng and spoo ng. Furthermore, because the Network is based on open-source software, there is a risk that a third party or a member of the Company team may intentionally or unintentionally introduce weaknesses into the core infrastructure of the Network, which could negatively affect the Network and the JEWEL Tokens.

Unlike bank accounts or accounts at some other nancial institutions, JEWEL Tokens are uninsured unless you speci cally obtain private insurance to insure them. Thus, in the event of loss or loss of utility value, there is no public insurer or private insurance arranged by us, to offer recourse to you.

The regulatory status of the JEWEL Tokens and distributed ledger technology is unclear or unsettled in many jurisdictions. It is dif cult to predict how or whether regulatory agencies may apply existing regulation with respect to such technology and its applications, including the Network and the JEWEL Tokens. It is likewise dif cult to predict how or whether legislatures or regulatory agencies may implement changes to law and regulation affecting distributed ledger technology and its applications, including the Network and the JEWEL Tokens. Regulatory actions could negatively impact the Network and the JEWEL Tokens in various ways, including, for purposes of illustration only, through a determination that JEWEL Tokens are a regulated nancial instrument that require registration or licensing. Company may cease operations in a jurisdiction in the event that regulatory actions, or changes to law or regulation, make it illegal to operate in such jurisdiction, or commercially undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction.

The tax characterization of JEWEL Tokens is uncertain. You must seek your own tax advice in connection with purchasing, holding and utilizing JEWEL Tokens, which may result in adverse tax consequences to you, including, without limitation, withholding taxes, transfer taxes, value added taxes, income taxes and similar taxes, levies, duties or other charges and tax reporting requirements.

It is possible that alternative networks could be established in an attempt to facilitate services that are materially similar to the Services.
The Network may compete with these alternative networks, which could negatively impact the Network and JEWEL Tokens.

It is possible that the Network will not be used by a large number of individuals, companies and other entities or that there will be limited public interest in the creation and development of distributed ecosystems (such as the Network) more generally. Such lack of use or interest could negatively impact the development of the Network and therefore the potential functionality of JEWEL Tokens.

The Network is still under development and may undergo signi cant changes over time. Although we intend for the JEWEL Tokens and Network to follow the speci cations set forth in this whitepaper, and will take commercially reasonable steps toward those ends (subject to internal business description), we may have to make changes to the speci cations of the JEWEL Tokens or Network for any number of legitimate reasons. This

could create the risk that the JEWEL Tokens or Network, as further developed and maintained, may not meet your expectations at the time of purchase. Furthermore, despite our good faith efforts to develop and maintain the Network, it is still possible that the Network will experience malfunctions or otherwise fail to be adequately developed or maintained, which may negatively impact the Network and JEWEL Tokens.

It is possible that, due to any number of reasons, including, but not limited to, an unfavorable uctuation in the value of Ethereum (or other cryptographic and at currencies), decrease in the JEWEL Tokens' functionality due to negative adoption of the Network, the failure of commercial relationships, or intellectual property ownership challenges, the Network may no longer be viable to operate and the Company may dissolve.

Because JEWEL Tokens confer no governance rights of any kind with respect to the Network or Company or its corporate af liates, all decisions involving the Network or Company will be made by Company at its sole and absolute discretion, including, but not limited to, decisions to discontinue the Network, to create and sell more JEWEL Tokens for use in the Network, or to sell or liquidate the Company. These decisions could adversely affect the Network and the JEWEL Tokens you hold.

As the Company provides a decentralized cloud storage service to individual and institutional clients, including users and applications, the Services are susceptible to a number of risks related to the storage of data in the cloud. The Services may involve the storage of large amounts of sensitive and/or proprietary information, which may be compromised in the event of a cyberattack or other malicious activity. Similarly, the Services may be interrupted and les may become temporarily unavailable in the event of such an attack or malicious activity. Because users can use a variety of hardware and software that may interface with the Network, there is the risk that the Services may become unavailable or interrupted based on a failure of interoperability or an inability to integrate these third-party systems and devices that the Company does not control with the Company's Services. The risk that the Services may face increasing interruptions and the Network may face additional security vulnerabilities could adversely affect the Network and therefore the future functionality of any JEWEL Tokens that you hold.

Cryptographic tokens such as the JEWEL Tokens are a new and untested technology. In addition to the risks included herein, there are other risks associated with your purchase, holding and use of JEWEL Tokens, including those that the Company cannot anticipate. Such risks may further materialize as unanticipated variations or combinations of the risks discussed herein.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This whitepaper contains forward-looking statements or information (collectively "forward-looking statements") that relate to our current expecta-tions of future events. In some cases, these forward-looking statements can be identi ed by words or phrases such as "may", "will", "expect", "anticipate", "aim", "estimate", "intend", "plan", "seek", "believe", "potential", "continue", "is/are likely to" or the negative of these terms, or other similar expressions intended to identify forward-looking statements. We have based these forward-looking statements on current projections about future events and nancial trends that we believe are relevant to our nancial condition, results of operations, business strategy, nancial needs, or the results of the token sale.

In addition to statements relating to the matters set out here, this whitepaper contains forward-looking statements related to JEWEL proposed operating model. The model speaks to our objectives only, and is not a forecast, projection or prediction of future results of operations.

Forward-looking statements are based on certain assumptions and analysis made by JEWEL in light of its experience and perception of historical trends, current conditions and expected future developments and other factors it believes are appropriate, and are subject to risks and uncertain-ties. Although the forward-looking statements contained in this whitepaper are based upon what we believe are reasonable assumptions, there are risks, uncertainties, assumptions, and other factors which could cause our actual results, performances, achievements and/or experiences to differ materially from the expectations expressed, implied, or perceived in forward-looking statements. Given such risks, prospective participants in the token sale should not place undue reliance on these forward-looking statements.