BITCARAT

Investment Proposal

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Business Overview

BitCarat presents institutional and retail investors of polished diamonds with a set of state-of-the-art tools that allow capital distribution towards businesses in the sector as well as direct exposure to the diamonds. By solving the issue of fungibility BitCarat introduces an entirely new asset class to wealth managers who are looking for an alternative to gold and an asset that would introduce them with an entirely new more efficient frontier.

The blockchain revolution has provided us with the toolkit to liberate our financial system from market frictions and, by implication, from those who in the name of fighting these frictions designed a system where full control over many belongs to a chosen few. The blockchain is a story about salvation.

Likewise, our story is a narrative about an imperfect world and someone who is destined to save it, a 'hero' with answers to questions doomed as imponderable by common wisdom. The 'hero' in our tale is BitCarat, a blockchain-powered set of facilities that comprise a foundation for the brighter future of diamond markets; the future where liquidity and price efficiency are not abstract textbook definitions with no relevance for the diamond industry, but, instead, are its inherent features with direct implications for both, the present mechanics and future evolution.

More concretely, BitCarat ecosystem is comprised of the following elements:

1. BitCarat, a custom blockchain with a dual currency monetary system and DPOS (Delegated Proof Of Stake) consensus protocol;
2. Two coins: price-stable coin backed by a portfolio of physical diamonds, and a staking coin fueling the economics of security of our blockchain;
3. The diamond pricing formula utilizing ML (Machine Learning) techniques that underpins the coin issuance and redemption mechanism;
4. Private-blockchain-powered hybrid exchange, DIAX (Diamond-powered Digital Asset eXchange). In developing DIAX, we have been guided by the idea of providing an orderly, fair and transparent diamond marketplace. Ultra low-latency high-throughput matching engine and advanced supporting infrastructure is the technological stack we provide to power the first liquid diamond marketplace;
5. DIAX Futures, the first-in-breed platform for providing deep liquidity to and hosting trades in diamond futures with arbitrary specification of physical properties of the underlying gem;
6. Digital diamond bank that provides lending and margin trading services leveraging obvious benefits of a stable coin as a collateral unit.

BitCarat Blockchain & DIAX Exchange

The entire BitCarat ecosystem is a product of interaction of these elements whereby each and every of them serves a unique clearly defined purpose and yet complements others. Linking other elements of BitCarat, two coins are powering the economics of the ecosystem. The rationale behind this separation will become evident in later sections of the text. Essentially, BitCarat can be viewed as an integrated financial system comprised of institutions that offer a comprehensive set of fundamental financial services.

Problem

The problem of fungibility in the diamonds market has always been an impediment for global capital flows to enter the industry. Investing in diamonds implies taking the risk of being unable to liquidate one's position without taking a 10%-20% hit to the implied ROI as a result of the fact that there was simply no efficient secondary market for diamonds.

Market

BitCarat is a project that positions itself as the core infrastructure for the reborn diamond industry. Digital, liquid and transparent, the emerging landscape of diamond trading will have an expanded list of participants. The value BitCarat creates will accrue directly and indirectly to everyone: BitCarat is not simply a milestone that sets in motion the transition to a new paradigm, it is the new paradigm itself.

The Classic Diamond Industry

As we will illustrate in detail later in the text, the value of BitCarat for the diamond industry is immense:

a. DIAX is the first truly liquid secondary market for polished diamonds;

b. DIAX encompasses the universal diamond limit order book: unthinkable today, any diamond can be melted into a massive diamond liquidity pool;

c. DIAX Futures platform offers the first liquid marketplace for diamond derivatives with an arbitrary specificatione[1] of underlying diamond characteristics;

[1] We will elaborate on the importance of flexibility of contract specification below.

d. Finally, TXD, the stable diamond-backed coin and simultaneously the first universal unit of diamond value exposes the diamond industry to two completely new markets: that of professional asset managers and that of crypto traders.

Professional Asset Managers

The value proposition of BitCarat to professional asset managers is quite simple:

a. BitCarat system erases the frictions that have historically set diamonds at a disadvantage to other commodities, such as gold, silver or oil;

b. Basically, BitCarat is designed to provide institutional traders with an orderly access to an entirely new asset class with outstanding properties from a portfolio management perspective;

c. Most importantly, BitCarat enables deep diamond liquidity.

Crypto Traders, Investors and Enthusiasts

Crypto traders, blockchain enthusiasts, ICO investors and those otherwise familiar with the crypto space will also benefit from the launch of BitCarat:

a. TXD, the diamond-backed stable coin, will provide an efficient safe haven asset in times of extreme volatility;

b. A blockchain with eventually free transactions. Importantly, this feature comes without compromising security;

c. Finally, the diamond bank's lending facility is a tool that would allow for efficient shorting of the crypto market along with margin trading.

Having diverse value proposition for a wide range of participants of the diamond trading process, we aspire to see BitCarat as a symbol of the limitless potential of the digital age

technologies to revolutionize the established industrial landscape.

The total addressable global market (TAM) for the main products and services we will provide is:

a. Over $1.8 billion per year for futures and is expected to grow over 20% per year from 2019;

b. About $50 billion per year at the importers' market for rough diamonds;

c. Over $250 billion volume traded of stable coins per year on the cryptocurrency markets.

Our goal is to capture the full potential of these markets within two years of the launch of the products as the functionality of the product is unlike any other on the market and its legitimacy grows. Another potential and growing industry is that of professional asset managers, who exhibit growing interest in polished diamonds as an alternative asset class with unmatched risk/return characteristics.

Business Model

The business model of BitCarat is to provide state-of-the-art novel solutions for institutions by introducing a new asset class as an investment vehicle as well as retail diamond buyers and sellers a venue with narrow spreads and efficient execution.

The company will generate revenues from the trading fees on the exchange - for providing trading of the stable and staking coins as well as offering a wide range of leveraged products that institutions and industry participants can use as an investment asset and hedging instrument.

Barriers to Entry

1. Substantial initial capital requirement and heavy costs of running the operations.
2. Extreme technical sophistication of the required infrastructure makes the process of developing it anew prohibitively time-intensive while purchasing a ready solution - extremely expensive.
3. Very specific domain with a quite unique set of issues: deep knowledge and

extensive experience that is obviously a prerequisite to enter the diamond industry are both scarce and expensive.

4. A de facto monopolistic market, with incumbent firms largely opposing any new entrants.
5. Almost absolute influence of few existing participants over the price of rough diamonds allows them to also exert control over the entire supply chain
6. Unless strong ties to the industry participants are established, the history shows that any efforts to alter its structure were unsuccessful (e.g.the uninspiring story of diamond futures market).
7. Difficulty in obtaining financing for start-ups in the space, at least using conventional methods of fundraising.
8. Regulatory uncertainty regarding the treatment of digital tokens representing the rights to an underlying physical commodity (e.g. the recent cessation of collaboration between carats.io and IDEX diamond exchange).

Competitive Landscape

Blockchain Companies

As of 2017, there are two projects (carats.io, CEDEX) in the blockchain space that have attempted to enter the diamond industry. While having similar goals, impressive teams and partnerships as well as many innovative ideas, neither of the projects offers a comprehensive solution to the complex set of issues that impede the creation of deep liquidity in the diamond market.

“Traditional” Companies

There are also more established companies offering alternative venues for diamond trading with the goal of offering superior diamond liquidity solutions.

Contrary to blockchain companies described above, firms in this category employ different means and do not intend to use blockchain technology as the core of their infrastructure. They include DIAMDAX and Singapore Diamond Exchange (SDiX): both are electronic exchanges. These companies offer platforms for electronic diamond trading to institutional and retail investors alike. In spite of the fact that these companies are firmly established, well-

funded and built by acknowledged industry experts, their solutions represent innovations within an outdated paradigm. In particular, they are subjects to the same underlying problem of fragmented diamond liquidity pools: there is no universal unit of value that could unite diamond liquidity within one orderbook.

Given fundamental difference in the nature of solutions we offer, we do not perceive these companies as competitors; rather, we see opportunities for mutually beneficial collaboration.

Current State

The company is currently in its fundraising stage, nonetheless, it has already developed certain vital parts of the entire infrastructure.

What we have so far:

1.Bleeding edge modular low-latency exchange technology for spot trading;

2.Similarly advanced platform allowing for trading in derivatives;

3. Physical depository: a secure vault allowing for safe storage of diamonds.

What is to be developed:

1.DPOS Consensus protocol and two coins that underpin custom blockchain;

2.Machine learning-based algorithm for pricing diamonds;

3. Digital diamond bank: license allowing for taking TXD-denominated deposits and using these funds for lending.

Funding Requirements

This investment proposal aims to inform the readers of the possibility to register for the whitelist that allows for preferential arrangements between BitCarat and any investor before September 1, 2018 (which is the beginning of Phase I of the crowdfunding campaign).

For investors willing to contribute between US$25,000 and US$50,000 a discount of 53.55% is given on the BTK tokens received as well as 21.5% of the sum invested will be given in the form of TXD (stable coins). For investment amount of US$50,001 to US$250,000 these figures are 58.25% and 23%, and for investments of US$250,001 to US$500,000 the discount for BTK is 63.75% and additional TXD of 25% of investment sum is given. Any investor willing to provide above the aforementioned figures is advised to contact the BitCarat team.

Exit Strategy

Liquidating the positions in this venture will be straightforward through the primary markets where the stable and staking coins will be traded.

Legal

Compliance with the multifaceted applicable regulation is one of, if not the most important aspect when speaking about acquisition of market share of well-established markets with 'sturdy' barriers to entry. In particular, providing a venue for both institutional and retail participants, where the stablecoin along with the staking coin are traded in a fair and transparent setting is the milestone which marks all future developments of the BitCarat project. Furthemore, as noted on multiple occasions earlier, trading of financial derivatives (where the underlying is the stablecoin) as well as banking services are both features that BitCarat will offer. In the the contemporary world of rapidly developing digital economy having all of these features fully functional and available on a global scale to retail and professional investors can be considered at best a stiff challenge.

In this section we will describe how the BitCarat team tackles these issues in manner that is appealing even to the strictest of regulatory bodies by also going over the applicable regulation of the Cayman Islands.

Applicable Regulation

Trading Venue for Stablecoins (TXD)

"Securities Investment Business" is regulated as described in the terms of the Cayman Islands Securities and Investment Business Law (SIBL). Most investment managers and investment advisors fall within the definition of an "Excluded Person" for purposes of SIBL and will not, as a result, be subject to regulation in terms thereof. Excluded Persons will however need to register with the Cayman Islands Monetary Authority (CIMA), registration with which gives rise to no further regulatory obligations than the payment of a prescribed annual fee to CIMA. However, depending on the nature and extent of the Investment Manager's activities, further registration and/or licensing may be required in terms of CIMA which may exclude eligibility to register in the Special Economic Zones (although this is viewed as very unlikely). The Cayman Enterprise City (CEC) Order, 2011, sets out the qualifying criteria for the establishment of an SEZ company within CEC's Commodities and Derivatives Park as follows:

The activities of Cayman Commodities & Derivatives Park are regulated in accordance with *the Special Economic Zones Law (Law 22 of 2011) (2017 Revision) and the Special Economic Zones (Cayman Enterprise City) (Amendment) Order, 2015.*

Therefore, according to these regulation acts: Cayman Commodities & Derivatives Park designed to create a centralized global commodity and derivatives market in Cayman, with the intention of being the first dedicated commodities and derivatives center in the Americas' time zone. Group 649[2] includes financial service activities other than those conducted by monetary institutions, and is modified to include other financial services activities (but only those relating directly or indirectly to commodities, derivatives, futures and options, howsoever and wheresoever settled; commodities fund management; or proprietary trading for own account, including facilitating and supporting such businesses). This group excludes insurance and pension funding activities. The qualifying criteria are broad enough to include the activities of most investment managers and advisers who deal with commodities and derivatives.

[2] *Division: 64 - (Group 649)* other financial service activities, except insurance and pension funding activities.

Summary

In the light of the aforementioned, as the BitCarat project aims to establish a scientific and technological foundation for a diamond marketplace with efficient price formation and deep liquidity, it is necessary to be conformant with the overall regulation of commodities and derivatives investment management in the Cayman Islands.

Trading Venue for Cryptocurrencies (BTK)

While there has still been no legislation passed for cryptocurrencies, the Cayman Islands Monetary Authority has created a working group with members from government and the private sector that has made certain recommendations for government's consideration, existing legislation in the Cayman Islands can be applicable.

In particular, the Securities Investment Business Law (2015 Revision) and the Mutual Funds Law (2015 Revision) can be applicable given the wide definitions of Security and Money Services Business. The Anti-Money Laundering (AML) regime consists of laws and regulations that should be considered duly when conducting a Security Token Offering due to AML's wide application and the likelihood that compliance will be required. Some of the AML Legislation includes the Proceeds of Crimes Law (2018 Revision), the Anti-Money Laundering Regulations, 2018 and the Guidance Notes on the Prevention and Detection of Money Laundering and Terrorist Financing regulations.

Summary

As mentioned earlier, the Cayman Islands Monetary Authority (CIMA) has not expressed its position regarding the legal status of cryptocurrency and its circulation. At the same time, using cryptocurrency as a means of payment, the Money Services Law (MSL) can be applied. In compliance with the law, legal entities are required to obtain a license from CIMA for the implementation of activities to provide monetary services.

Appropriate Licensing

Trading of TXD and BTK and Margin Trading

Money Services Law (2010 Revision) provides for the licensing of all money services businesses and for the regulation of such businesses by the Monetary Authority. The ongoing supervision of money services businesses falls under the remit of the Banking Supervision

Division.

Electronic Transactions Law (2003 Revision) is a law to establish the legal principles applicable to the conduct of electronic commerce and the processing, verification and attribution of electronic records; to provide for the approval, registration and liabilities of service providers; to establish a system for the regulation of processors of personal data; and for incidental and connected purposes. The law enacted by the legislature of the Cayman Islands.

The combination of having this licensing in place allows for the onboarding of retail and institutional clients when considering the trading of TXD and BTK against fiat and cryptocurrencies. In addition, margin trading facilities can be established and accessed upon being compliant with the provisions of the ETL.

Banking Services

The features that the Digital Diamond Bank offers will be made widely available by being fully compliant with the laws laid down in the Monetary Authority Law (MAL) and the Banks and Trust Companies Law (BTCL).

The Monetary Authority Law and the Banks and Trust Companies Law give the Cayman Islands Monetary Authority ("CIMA" or "Authority") the responsibility for licensing and regulating banking and trust business in the Cayman Islands. The Banks and Trust Companies Law provides the legal framework for the operation of banks and trust companies in the Cayman Islands. The Development Bank Law governs the operation of the sole development bank in the Cayman Islands. All applications for licensing under the Bank and Trust Companies Law are sent to, reviewed by and approved or rejected by CIMA.

Contact

Should this opportunity fall within your investing interests, please don't hesitate to contact the undersigned at m@bitcarat.com

Thank you for your consideration. BitCarat.

BitCarat Senior Business Developer
Mikhail Vakhrin

APPENDIX

The Fundraising: Financing the Future

Motivation for a Security Token Offering (STO)

Once a token's value is determined based on the performance of an external asset that token is then classified automatically as security token and all related regulation also subsequently applies. The STO structure provides all of the future and global BitCarat investors - be them institutional or retail - with a fully legitimate way of securing funding for the project as compared to an ICO. The distribution of BTK (the security token) assures that it's holders are entitled to the residual cash flows of the exchange (that is part of the fees) along with the blockchain transactions' fees. In this setting, the BTK clearly qualifies as a security token and will be treated as such.

STO Structure

Two types of tokens will be distributed to the public and private investors – the "stable coin" TXD as well as the "staking coin" BTK.

STO Distribution

The total supply of the BTK is set at 100,000,000 while that of TXD is unlimited. The team reserves 40% if BTK (40,000,000) for project development, advisory and team incentive schemes, market making, listing, and other promotional activities of the project.

The distribution is broken down into three phases as illustrated in the tables below:

	Start		End	
STO Phase	Date	Time GMT+0	Date	Time GMT+0
Phase I	Saturday, September 1, 2018	4:00:00 PM	Monday, October 1, 2018	4:00:00 PM
SPhase II	Monday, October 1, 2018	4:00:00 PM	Thursday, November 1, 2018	4:00:00 PM
SPhase III	Thursday, November 1, 2018	4:00:00 PM	Monday, November 19, 2018	4:00:00 PM

STO Phase	BTK Distributed	In Percent	Price	Discount	Raise	TXD Distributed % of Raise	Worth of TXD Distributed
Phase I	15,000,000	25%	$ 1.04	50%	$1 5,625,000	20%	$ 3,125,000
Phase II	18,000,000	30%	$ 1.56	25%	$ 28,125,000	5%	$ 1,406,250
Phase III	27,000,000	45%	$ 2.08	0%	$ 56,250,000	5%	$ 2,812,500
Total	60,000,000	100%			$ 100,000,000		$ 7,343,750

Each phase begin at 4:00PM GMT+0 and at the 1st day of each new month starting September and ending November of 2018. The first rounds lasts 30 days, the second 31 days, and the last 18. The amount of tokens distributed in each phase increases while the discount falls from 50% in Phase I. The hard cap of the project is US$100,000,000 while the soft cap is US$15,000,000. All unsold tokens will be burned.

In addition to the conventional, nonetheless quite large discounts the BitCarat STO will give as a bonus also TXD- that is, part of the raised sum will be used to purchase and store physical diamonds. These distributions are conditional on reaching the soft cap. To make this point clearer, 20% of the raised funds during Phase I will be used to buy diamonds and distribute (airdrop) to the investors proportionate amount of TXD. The TXD will be readily convertible to physical diamonds that BitCarat will deliver to their respective holders.

Financial Projections for the BitCarat Project

1. BitCarat is a blockchain-focused FinTech company with roots in electronic exchanges embracing stocks, commodities and derivatives trading;
2. We deliver mature technological stack and a conservative compliance framework in order to create the first liquid marketplace for diamonds;
3. We solve the long-standing problem of fungibility in the diamonds industry. This allows for commoditizing diamonds, and turning these precious gems into an alternative asset class;
4. Our team has over a century of combined experience in actual diamond business as well as long-standing presence in leading academic establishments;

5. Our partners' list includes the giants of the diamond industry, such as Alrosa as well as some of the leading players on the emerging digital currency landscape.

The financial projects will be made in terms of income statements on monthly basis where the expenses and revenues are broken down into their components. We have made a number of assumptions without which these projections would be difficult to arrive at using solely public data.

Expenses

a. **Staff & Salaries**: Staff expenses rise over time as the headcount of the company grows. The company begins with a C-suite of six people and staff of nine. In 18 months this number grows to a total of 31 people of which still six are on executive roles, however the development team grows by nearly 60%. The salaries of the staff (excluding C-suite) increase by 5.25% each half year while executive bonuses ranging from 200% to 500% of a month's salary are awarded again half-yearly. Analytics that come up with unique business proposals are awarded 750% of a month's salary which is reviewed at the end of each year.

b. **Advertising & Commercial**: These include costs for promoting the operations of the exchange both in the cryptocurrency space and in the diamonds trading industry. Each half a year they are cut by 50% as the company becomes more and more popular and advertising becomes less and less vital part of the revenue growth.

c. **Exchange Software Development**: The exchange development will cost a cumulative of $2.5 million which is paid in 12 equal parts over the course of a year. Afterwards only minor monthly expenses for maintenance and development will be incurred.

d. **Market Making**: We assume that we will expend $1.5 million in the first months of operations and subsequently each month we will spend $750,000 on market making in order to provide depth to the order books at all times to promote trading by institutional and retail investors alike.

e. **Legal**: The legal expenses include those of obtaining licenses in Switzerland and for litigation reserve. The Swiss licenses are estimated in the amount of $2.25 million paid in the course of 18 months while litigation reserves are $10,000 per month and should cover any unexpected litigation expenses.

f. **Blockchain Development**: While in-house developers will work on the blockchain infrastructure outside developers will also be hired and is expected to pay $150,000

(excluding down-payments) each quarter for five quarters in order to develop and integrate the blockchain fully.

g. **Offices & Other**: Two 100 sqm offices will be leased in Netherlands and Saint-Petersburg respectively which amount to $5,400 per month. Further expansion will be considered after the first 18 months. Other expenses include utilities, employee documentation preparations, unexpected expenses and so forth and are estimated to amount to 0.25% of total expenses and rise at the rate of 2% each month.

Projected Expenses

Expenses

a. **Stablecoin Trading**: We assume taker fee of 0.085% while the maker fees will be 0% both of which match industry standards and even challenge them. We analyze the stable coins market (e.g. USDT, TUSD, and others) - their short and long-term price dynamics and after multiple data filtering we arrive at 53.3% monthly volume growth rate for the first 6 months and about 11% monthly growth rate after that. The total volume traded per month is over $2 billion by the 18th month of operations which by industry standards is relatively modest.

b. **Futures Trading**: Here we look at the growth rates of the volume traded of the three types of futures at ICEX - ranging from 1 CT to 0.3 CT. We find that although the dollar volume is low it's growth rates are staggering at over 80% per month for the first six months followed by 18% per month afterwards. The trading volume reaches $86 million in the 18th month which as compared to the daily average of $5 million at ICEX is considerate estimate.

Beyond these points there will be interest on the side of funds and retails for diamond tokens. On the one side sits the hedging opportunity while on the other the liquidity. Both of which, as noted, in the text above make it extremely attractive for institutional and retail investors alike.

Revenues and Expenses

The breakeven point occurs in January 2020 given that we begin the project in January 2019 and the cumulative net income (retained earnings) from that point until and including June 2019 is $9.110 million and expected to grow at the same steady monthly pace of about 130% per month until the end of 2020.

Making projections beyond that point, in our opinion, is unprofessional and would at the very least mislead our potential investors as the cryptocurrency market is extremely volatile not only in terms of prices but also in terms of regulation, adoption, and especially when amalgamated with the diamonds market.

SUPPLEMENTAL FIGURES

Largest producers of Rough Diamonds in Carats
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
200,000,000
180,000,000
160,000,000
140,000,000
120,000,000
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
-
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Other
Angola
Canada
South Africa
Australia
Congo, Democratic Republic of
Botswana
Russian Federation
Totals

Largest Producers of Rough Diamonds (in USD)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
$16,000,000,000
$14,000,000,000
$12,000,000,000
$10,000,000,000
$8,000,000,000
$6,000,000,000
$4,000,000,000
$2,000,000,000
$-
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Other
Angola
Canada
South Africa
Australia
Congo, Democratic Republic of
Botswana
Russian Federation
Totals

Largest Importers of Rough Diamonds in Carats
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
600,000,000
500,000,000
400,000,000
300,000,000
200,000,000
100,000,000
-
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
Other
China, People's Republic of
United Arab Emirates
Israel
India
European Community / European Union
Totals

Correlations of the assets[3]

[3] SPDR S&P 500 Trust ETF (SPY), iShares STOXX Europe 600 (DE) (EXSA.DE), (Shanghai) SSE Composite Index (000001.SS), SPDR Gold Shares (GLD), Teucrium Corn ETF (CORN), Morgan Stanley Emerging Markets Fund, Inc. (MSF), CBOE Volatility Index (^VIX), Spot 1CT Diamond Price (ICEX quoted)..