BUSINESS OVERVIEW

Decentralized business platform for frictionless collaboration

Secure business deals within your professional network

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ties.network
# TABLE OF CONTENT

1. Abstract  3
   1.1. What is Ties.Network?  3

2. Ties.Network Token Generation Event information  4
   2.1. Ties.Network token  4
   2.2. Ties.Network Token Generation Event
      2.2.1. Token Generation Event funding terms  5
      2.2.2. Token Generation Event bonus scale for early investors  5
   2.3. Token Generation Event funds allocation  6

3. Ties.Network business model  6
   3.1. Ties.Network Business model
      3.1.1. Business social networking market  6
      3.1.2. Business model and IT design  7
      3.1.3. Features  8
   3.2. Ties.DB
      3.2.1. Cloud data storage market size  9
      3.2.2. Ties.DB incentives  10
      3.2.3. Features  11

4. Ties.Network financial model  13
   4.1. Monetization model
      4.1.1. Premium accounts  13
      4.1.2. Escrow  13
   4.2. Ties.Network customer base growth forecast  13
   4.3. Financial model
      4.3.1. Pessimistic scenario  14
      4.3.2. Optimistic scenario  16

5. Ties.Network design mock ups  18
   5.1. Personal information card  18
   5.2. Integrated chat  18
   5.3. Payment functionality  19
   5.4. Transaction confirmation  19

6. Ties.Network team  20
   6.1. Core team  20
   6.2. Team advisors  22

7. Product development roadmap  24

8. References  26
1. ABSTRACT

1.1. What is Ties.Network?

As a business tool, Ties.Network is a decentralized social platform where business professionals can connect and strike business deals via smart-contracts in no time. The platform uses a trustworthy rating system, thus making sure all participants can focus solely on business and benefits of beneficial relationships, and leave the verification and trust issues to the platform’s integrated solutions.

As an IT product, Ties.Network is based on Ties.DB – a public, decentralized, and distributed noSQL database that allows to store huge amounts of dynamic data and search within the content of files. Ties.DB is a public, open-source solution that can be utilized by other dApps and decentralized blockchain-related projects to facilitate their entering the market and structure large amounts of data.

Ties.Network provides all the benefits of well-known social business networks for the crypto-community complemented by strongest advantages of blockchain technology. It is a decentralized platform for traders, investors, developers, programmers, consultants and enthusiasts to hire and be hired, recruit partners, employees and volunteers, sell products or services, enter joint deals based on smart contracts, network and promote yourself, finance projects and much more. People can work individually or as teams to accomplish their objectives.

A process of ratings and reviews (“crowdsourcing”) provides each participant with maximum visibility, while also giving them the option of anonymity. All transactions in Ties.Network are safe and secure and based on the Ethereum blockchain.

At registration, each user receives default rating based on objective observations of user’s activity in the crypto-community and based on provided documents. The community will modify this rating based on deals that have already been struck using impartial and decentralized voting. Decentralized rating system and genuine reviews make it easy to find a business partner and do proper due diligence with independent expert’s assistance.

We expect Ties.Network to become the most common place for crypto community to set up projects, hire team members, get professional opinion, and get financing from other users.
2. TIES.NETWORK
TOKEN GENERATION EVENT INFORMATION

2.1. Ties.Network token

Ties.Network uses a token issued on Ethereum blockchain - TIE token. Tokens will be created during the crowdfunding period (Token Generation Event). Total number of tokens available on the market is limited. TIE tokens will be used by token holders to transact with other users of Ties.Network, be it smart contracts, data storage, or P2P interactions.

Ties.Network Token Generation Event and TIE token creation will be organised with the use of Ethereum smart contracts. Everyone interested in supporting Ties.Network development or becoming its user, will send the desired amount to Ties.Network Ethereum address determined for Token Generation Event. In exchange for that, certain amount of TIE tokens will be created at TIE/ETH exchange rate for the participant. Opportunity to purchase TIE tokens will become available with the start of crowdfunding period. Token crowdfunding will finish when one of Token Generation Event caps is reached. The caps are listed below:

<table>
<thead>
<tr>
<th>Ties.Network Token Generation Event caps/cut-offs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Token issuance cap</td>
</tr>
<tr>
<td>Token Generation Event minimum funding cut-off</td>
</tr>
</tbody>
</table>
2.2 Ties.Network Token Generation Event

2.2.1. Token Generation Event funding terms

<table>
<thead>
<tr>
<th>Token Generation Event breakdown</th>
<th>Tokens</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total tokens issued</td>
<td>200 000 000</td>
<td>100%</td>
</tr>
<tr>
<td>Tokens for open market</td>
<td>140 000 000</td>
<td>70%</td>
</tr>
<tr>
<td>Advisers, bounty, marketing</td>
<td>5 000 000</td>
<td>2.5%</td>
</tr>
<tr>
<td>Network Promotions</td>
<td>15 000 000</td>
<td>7.5%</td>
</tr>
<tr>
<td>Team tokens</td>
<td>40 000 000</td>
<td>20%</td>
</tr>
</tbody>
</table>

Ties.Network Token Generation Event funding terms:

- Token Generation Event will be available through Ethereum smart contract.
- No token creation will be available after the Token Generation Event. At the end of the Token Generation Event, TIE tokens creation will be closed permanently.
- Purchase and sale of tokens is conducted via the internal platform exchange or via an outside exchange which lists TIE tokens.
- At registration, users send participation fee to the system, which is then refunded out of the platform budget.
- The cut-off for Ties.Network Token Generation Event funding is $3.000.000. If this is not reached before Token Generation Event end date, all investments will be refunded to the participants.

2.2.2. Token Generation Event bonus scale for early investors

Ties.Network Token Generation Event offers special discounts dependent on how early an investor has decided to support the Token Generation Event. Discounts range from 20% for first 10% of tokens sold stepping down to no discount for last 10% of tokens available for the market. Currently, there are 140.000.000 tokens available, so discount steps down with each 14.000.000 tokens sold. Exact discount rate is available on the picture below:

[Diagram showing bonus scale for TGE in %]
2.3. Token Generation Event funds allocation

Funds raised with the Ties.Network Token Generation Event will be used to cover primarily marketing and operating costs. Generally speaking, Token Generation Event funds will be used to provide sustainable and continuous project development.

<table>
<thead>
<tr>
<th>Token Generation Event funds allocation</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing support</td>
<td>31%</td>
</tr>
<tr>
<td>IT functions</td>
<td>19%</td>
</tr>
<tr>
<td>Business functions</td>
<td>20%</td>
</tr>
<tr>
<td>Support functions</td>
<td>16%</td>
</tr>
<tr>
<td>Non-business related</td>
<td>14%</td>
</tr>
</tbody>
</table>

3. TIES.NETWORK BUSINESS MODEL

The business model is based on extensive research and market trends of corresponding products – cryptocurrencies: Bitcoin, Ethereum, Ethereum-based tokens and social business networks.

The user adoption of various cryptocurrencies has really taken off, with billions in market capitalization and millions of wallets estimated to have been active in 2016. The industry is becoming more fluid, and a multitude of cryptocurrencies, not just bitcoin, are now supported by a growing ecosystem, fulfilling an array of functions. However, issues of security and regulatory compliance are likely to remain prevalent for years to come and may negatively affect any endeavours in this fields.

The current number of unique active users of cryptocurrency wallets is estimated to be between 2.9 million and 5.8 million. Due to anonymity, it is impossible to know precisely how many people use cryptocurrency.

Studies show that cryptocurrencies are trading in 42 different national currencies. 86% of payment companies perform KYC/AML checks; internally performed checks are the preferred method.

The cryptocurrency industry builds the infrastructure and services to make cryptocurrencies more accessible to mainstream users.

Ties.Network business model relies on two main market trends (besides blockchain technology) – social business networking and cloud storage services.

3.1. Ties.Network Business model

3.1.1. Business social networking market

In early 2017, LinkedIn announced that they now have half a billion members in 200 countries, who are connecting and engaging with one another. This community represents 10+ million active jobs, access to 9+ million companies.
For individuals, social capital allows a person to draw on resources from other members of the networks to which he or she belongs. These resources can take the form of useful information, personal relationships, or the capacity to organize groups. As well, networks within these services also can be established or built by joining special interest groups that others have made, or creating one and asking others to join.

Number of LinkedIn members (in millions):

Linkedin growth is almost not affected by Facebook growth, as those networks complement each other, since they occupy adjacent niches – social networking and business networking. Same should happen with Ties.Network as it’s niche lies in cryptocurrency field.

3.1.2. Business model and IT design

The exponential and massive growth of the crypto-community over the past few years has uncovered a potential market for a platform providing business and employment-oriented social networking services that can operate using the blockchain. Such a platform would help participants both inside and outside of the community in accomplishing safe deals, project launches, promotion of businesses, finding projects to invest in, and groups to join. Additionally, such a platform would help in recruiting collaborators, posting jobs as well as CVs with all parties profiting from such transactions.

Currently, there is no platform that provides similar array of services. It is time to introduce a large scale public social network based on blockchain technology that would include a decentralized ledger for business and social networking purposes. This will allow the crypto-community to have access to a single, universal and public platform that allows cooperation, discussion of business deals and striking business deals in the same environment. Ties.Network will thus become the business network of choice for the crypto-community.
Ties.Network integration of smart contracts into a business network provides the user with the following features:

- Trading goods and services
- Trading cryptocurrencies
- Hiring and recruiting specialists
- Financing ICOs and blockchain projects
- Receiving feedback for startups or blockchain projects
- Promoting or networking blockchain projects and startups

3.1.3. Features

Ties.Network platform is a publicly distributed system of self-motivated servers that represent a common purpose and has the following features:

1. **Decentralization.** The Ties.Network platform consists of a decentralized server network (TiNodes). Client applications connect to nodes within the network. At the heart of each TiNode is the blockchain that fosters decentralization. At the moment, various blockchain versions can be used for Ties.Network. Ethereum will be used for the initial stage but the platform can be spread to another blockchain with smart contracts to meet network growth and other requirements such as scaling and speed, if Ethereum won’t be able to address scalability issues.

2. **Stability.** The platform is resistant to malicious activity of the participants due to blockchain technology intrinsically resisting the malicious behavior of individual network members. However, if there is something else besides the blockchain in the system, stability is required to ensure sustainability.

3. **Anonymity** of individual servers and users and privacy of communications between servers and users. Traditionally, IP masking and traffic encryption methods (such as TOR or I2P) have been used to provide anonymity and privacy for both platform clients and individual nodes by hiding their IP address. However, these methods are too slow and server-synchronized data requires far more powerful processing speed. To resolve the issue, we use a Hyperboria mesh network that uses the cjdns protocol.
4. **Data storage.** The ability to store data and conduct search through a large amount of structured data.

5. **Scalability.** The capability of the platform to handle a growing amount of work in order to accommodate user growth.

6. **Open-source.** All platform components have open-source code and are published with an open license.

7. **Publicity.** Anyone can join the network support system by installing the open software of the system.

8. **Profitability.** Users can profit from the platform.

9. **Speed.** The platform includes fast processing to achieve real-time computation and overcome the lag caused by current cloud-based models.

10. **Expansion possibilities.** The platform supports third-party applications (dApps) and provides a new model for building successful and massively scalable applications.

### 3.2. Ties.DB

#### 3.2.1. Cloud data storage market size

It’s not a secret that cloud storage is a global trend. Why spend your own “limited” hard disk space when you can store everything in the cloud? Forecast shows that number of cloud users will increase by 50% by 2020. Real revenues are growing even quicker, which means that customers need more space in the cloud and are ready to pay for it.

However, in terms of decentralisation, approach to cloud storage realisation will have to be altered. A good example would be the instance of a cloud storage system containing many nodes storing huge amount of digital data. Due to usage of the data being used in bursts and if a particular node’s data is modified without the knowledge of other users the data generated using these modified objects would be inconsistent and if no sufficient metadata stating the source of data is present the discovery of what exactly went wrong would be a tedious task.

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**Number of personal users and revenues of cloud storage worldwide**

![Bar chart showing the number of personal users and revenues of cloud storage worldwide from 2014 to 2020. The y-axis represents billions (Bln.) and billions of dollars (Bln. $). The x-axis represents the years from 2014 to 2020.](chart.png)
The development of blockchain and crypto-economics inevitably pushes forward the market of decentralized applications. In fact, we are on the verge of a whole new world that 100% repeats the world of the classical ("centralized") Internet: decentralized social networks, instant messengers, stock exchanges, business platforms, recruiting agencies, cloud storages, search engines, information aggregators, and the media. Thus, the future will face a global infrastructure problem – the need to store large amounts of data in a structured way.

Provenance of data objects in a cloud storage environment is also extremely important because data on the cloud in most scenarios would be shared widely and this makes it important that data consumers should have the ability to know how the data was updated and how trustworthy the data is, especially in scenarios where data is corrupted or not what was actually expected the system could detect malicious attempts of corrupting the data hence enhancing the security level of these systems.

### 3.2.2. Ties.DB incentives

There are two types of incentives in Ties.DB – incentives for storing content on the node server and retrieving content from the node server. Incentives are meant to support network participants for their efforts and also cover maintenance costs.

When the user places the content in the database on the node server, he or she pays the node’s service fee for storing and processing content. The system does not only motivate node owners to utilize the process, but also prevents attackers from littering the database. Later the platform refunds user expenses in case users show no signs of malicious activity and there is no collusion between the participant and the node. User costs for storage as well as for content retrieval come from the platform budget. There are some generic rules for node organization and management:

- Anyone can participate in the public network with their own hardware
- Incentives motivate network participants to behave honestly and responsibly
- Users and nodes should have deposit on blockchain smart contract
- Users pay for database operations

#### 3.2.2.1. INCENTIVES FOR RETRIEVAL

General rules for retrieval incentives:

- Coordinator manages the user’s request to retrieve data
- User pays coordinator and nodes with “cheques” (off-chain)
3.2.2.2. INCENTIVES FOR STORAGE

General rules for storage incentives:

- Coordinator manages the user’s request to store data
- Nodes return receipt confirming they stored the data
- User pays the coordinator and nodes with “cheques” (off-chain)
- Receipt enables anyone to verify that data is stored properly
- Node violating storage contract can be deprived of its deposit

3.2.3. Features

Ties.DB is a new-generation database designed to meet the demands of Ties.Network and solve some problems of future data management and has the following features:

1. **Distribution**
   Ties.DB supports an unlimited number of replicas, so by connecting any one of them, the user gets access to all data.

2. **Publicity**
   Ties.DB was created to be operated in the public area. New nodes can be added to the network, so the network load will immediately be distributed among them.

3. **Resistance to attacks in a public network**
   Since all data placed in Ties.DB is owner-encrypted, nodes cannot arbitrarily change the data, nor can they corrupt data when replicating other nodes. Attempts to substitute are immediately detected through changes in the electronic signature. Any participant who does so, or attempts to do so, will be instantly removed from the network.

4. **Sharding support**
   Each node is responsible for a certain amount of stored primary data keys. Data replication has scalability, so it can grow with the network.
5. **Speed**  
Due to the data storage principles, the read/write speed in Ties.DB will be identical to similar databases, such as Apache Cassandra.

6. **Ability to store structured data**  
Data stored on Ties.Network complements its platform. It can be a JSON document with a structure, which is useful for certain applications.

7. **Ability to delete data**  
Data removal is supported in Ties.DB. Although instant data deletion cannot be guaranteed, data will be deleted if the nodes act non-maliciously. A malicious node can never delete all of the data, since only certain primary key intervals can be forwarded to it.

8. **Request language with an ability to conduct search using more than the primary key**  
The language expansion – ElasticSearch, which is similar to integration methods with Cassandra in the Elassandra project, allows secondary key search as well as a full-text search.

### Ties.DB is a new-generation database

<table>
<thead>
<tr>
<th>Abilities\Databases</th>
<th>Ties.DB</th>
<th>IPFS</th>
<th>BigChainDB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Public</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Resistance to the Byzantine Generals' Problem</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Sharding support</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Speed</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ability to store structured data</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ability to delete data</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Request language with an ability to conduct search using more than the primary key</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

In addition to the Ties.Network project, Ties.DB can also be used for other projects. It relies on a blockchain, which supports smart contracts. Therefore, it can be used for other distributed blockchain layers similar to Ethereum and others. No matter where Ties.DB is applied, it will incorporate special data organization:

- Public - any user can write to the database
- Each record remembers its creator (owner)
- Record can be modified by owner only
- Everyone can read all records
- Each user has its own primary key space
- Permissions are rechecked on replication
- Permissions are managed via smart contract
4. TIES.NETWORK FINANCIAL MODEL

4.1. Monetization model

To make the whole project sustainable in a business way, there needs to be monetization part. At the moment, there is at least 2 methods of platform monetization for users of Ties.Network:

1. Premium accounts
2. Escrow service

4.1.1. Premium accounts

Premium accounts provide users with higher visibility compared to other users. Such promotion will help get new and relevant connections faster, that will also help user build personal rating quicker.

Premium accounts are charged based on monthly subscription. User can turn subscription on/off at any time.

4.1.2. Escrow

Escrow will allow users to have guarantees upon completion of certain contract. Escrow can be provided to any user (both Premium and non-Premium). Each contract can be protected by one Escrow. Escrow cannot cover more than one contract.

4.2. Ties.Network customer base growth forecast

Based on our assumptions and crypto-market growth forecast, we expect steady, non-explosive growth of Ties.Network users in the next 5 years. As market research showed, Premium users occupy 15% of total customer base on average. As for customer base growth, social media networks grow at 10–20% quarterly on average. Same approach lies within our business model. Thus, we anticipate to have 2-3 mln users in 5 years.
4.3. Financial model

The main assumptions and prerequisites of the financial model:

- User growth rate is based on statistics of well-known social business networks
- Quarterly user growth rate: 15% (excl. direct marketing)
- Token growth rate is forecasted based on altcoin and BTC/ETH market statistics
- Average client of Etherium holds up to $4000 on average
- Our forecast is that users will hold up to $1000 on average in TIE tokens
- Operating expenses are covered by revenue generated on the Token Generation Event and after breakeven point - by the product itself
- Initial Ties.Network capital is built during the Token Generation Event
- Ties.Network staff will reach 200 employees in 2 years
- Discount rate (WACC) applied to business model was set at 15% per annum.

4.3.1. Pessimistic scenario

We used the following assumptions for pessimistic scenario:

- Low usage of Premium accounts
- Low usage of Escrow service
- Reduced user base growth rates
- Slower development times

Charts below show correlation between TIE token price and market capitalisation. Since market cap is based on number of TIE token holders, Ties.Network should be aimed at acquiring customer base quickly to sustain growth.

4.3.1.1. [PESSIMISTIC] TIE TOKEN PRICE AND MARKET CAP

Assumptions:

- 40% reduced results and growth rates
- 1 mln. users accrued by end of year 5
- Average client holds $623 in TIE tokens by end of year 5 ($740 by end of year 3)
- Year 1 is the year of development - minimum number of enrolled users
- Marketing campaigns (main source of new users) start from year 2, after Ties.Network beta is launched

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>3 000</td>
<td>242 313</td>
<td>510 182</td>
<td>830 496</td>
<td>1 299 467</td>
</tr>
</tbody>
</table>
Number of active users on the Ties.Network directly affects market cap and token price, so pessimistically we anticipate the token to trade close to $10. Market cap at this price is forecasted as close to $2 bln. by the end of year 5.

4.3.1.2. [PESSIMISTIC] TIE TOKEN PRICE VS MARKET CAP

Because of slow start, the company will require more time to prepare the product and start generating substantial revenue.

In case of pessimistic scenario, it would take up to 3 years to come to breakeven. Still, the proposed business model is bankruptcy-proof even at pessimistic market growth. DPP (Discounted Payback Period) in this case would be 48.2 months with 5-year IRR of 50%.

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$22,483</td>
<td>$4,472,423</td>
<td>$15,271,223</td>
<td>$29,228,408</td>
<td>$66,113,550</td>
</tr>
<tr>
<td>OpEx</td>
<td>$4,693,565</td>
<td>$7,737,924</td>
<td>$5,554,179</td>
<td>$9,985,825</td>
<td>$26,250,416</td>
</tr>
<tr>
<td>Other expenses</td>
<td>$1,220,000</td>
<td>$520,000</td>
<td>$440,000</td>
<td>$440,000</td>
<td>$440,000</td>
</tr>
<tr>
<td>EBITDA</td>
<td>-$4,451,082</td>
<td>-$2,845,502</td>
<td>$10,157,044</td>
<td>$19,682,583</td>
<td>$40,303,133</td>
</tr>
<tr>
<td>Net Income</td>
<td>-$3,736,866</td>
<td>-$2,089,921</td>
<td>$4,975,126</td>
<td>$7,881,762</td>
<td>$13,062,352</td>
</tr>
<tr>
<td>Cash flow</td>
<td>-$4,956,866</td>
<td>-$2,609,921</td>
<td>$4,535,126</td>
<td>$7,441,762</td>
<td>$12,622,352</td>
</tr>
<tr>
<td>Discounted Cash Flow</td>
<td>-$4,310,318</td>
<td>-$1,973,475</td>
<td>$2,981,919</td>
<td>$4,254,852</td>
<td>$6,275,540</td>
</tr>
</tbody>
</table>
4.3.2. Optimistic scenario

We used the following assumptions for optimistic scenario:

- Realistic, market-based usage of Premium accounts
- Realistic, market-based usage of Escrow service
- Forecasted user base growth rates
- Planned development times

According to our forecasts, number of Ties.Network users will exceed 2 mln. by the end of year 5. It will positively affect market cap of TIE token. Popularity of Ties.Network should be the first priority in terms of driving token price.

4.3.2.1. [OPTIMISTIC] TIE TOKEN PRICE VS MARKET CAP

Assumptions:

- At least 1 mln. users is accrued at end of year 4
- Average client holds $1038 in TIE tokens by end of year 5 ($1233 by end of year 3)
- Year 1 is the year of development - minimum number of enrolled users
- Marketing campaigns (main source of new users) start from year 2, when Ties.Network beta is launched. Regular progress announcements before beta launch

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users</td>
<td>5000</td>
<td>403855</td>
<td>850304</td>
<td>1384160</td>
<td>2165779</td>
</tr>
</tbody>
</table>

Number of crypto-users is gaining traction with each year, so we are quite confident to say that Ties.Network will work for more than 2 mln. users by the end of year 5. Since more users generate more transactions, market cap will be higher than $3 bln. This all will boost token price to as high as $15 on year 5. Regular product updates, marketing support and PR may raise token price to $20.
4.3.1.2. [OPTIMISTIC] TIE REVENUES AND CASH FLOW

We expect the whole product to become financially self-sustainable in 2.5 years. It will remove the product’s dependence on regular “inevitable” investments, and should positively affect the token price when this happens. Nevertheless, any spare money or investments will still be spent on company growth to guarantee stable market cap growth.

In case of optimistic scenario, the breakeven point is reached by the during year 3. DPP (Discounted Payback Period) in this case would be 35.1 months with 5-year IRR of 87%. Marketing investments will be required to get the critical mass of customers to secure future growth or Ties.Network.

<table>
<thead>
<tr>
<th>Year</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$37 472</td>
<td>$7 454 038</td>
<td>$25 452 038</td>
<td>$48 714 014</td>
<td>$110 189 250</td>
</tr>
<tr>
<td>OpEx</td>
<td>$4 693 565</td>
<td>$7 737 924</td>
<td>$5 554 179</td>
<td>$9 985 825</td>
<td>$26 250 416</td>
</tr>
<tr>
<td>Other expenses</td>
<td>$1 220 000</td>
<td>$520 000</td>
<td>$440 000</td>
<td>$440 000</td>
<td>$440 000</td>
</tr>
<tr>
<td>EBITDA</td>
<td>-$4 436 093</td>
<td>$136 113</td>
<td>$20 337 859</td>
<td>$39 168 188</td>
<td>$84 378 833</td>
</tr>
<tr>
<td>Net Income</td>
<td>-$3 724 875</td>
<td>-$181 687</td>
<td>$10 187 704</td>
<td>$15 863 066</td>
<td>$27 505 077</td>
</tr>
<tr>
<td>Cash flow</td>
<td>-$4 944 875</td>
<td>-$701 687</td>
<td>$9 747 704</td>
<td>$15 423 066</td>
<td>$27 065 077</td>
</tr>
<tr>
<td>Discounted Cash Flow</td>
<td>-$4 299 891</td>
<td>-$530 577</td>
<td>$6 409 273</td>
<td>$8 818 188</td>
<td>$13 456 127</td>
</tr>
</tbody>
</table>
5. TIES.NETWORK DESIGN MOCK UPS

For you to get the flavor of what is being developed, below is the showcase of some of Ties.Network interfaces (they are still subject to change until officially launched).

5.1. Personal information card

5.2. Integrated chat
5.3. Payment functionality

![Payment functionality image]

5.4. Transaction confirmation

![Transaction confirmation image]

The product is still in work in progress phase, and besides doing mock-ups we are working on providing an interactive prototype of our platform.
6. TIES.NETWORK TEAM

Ties.Network is built and supported by a team of skilled specialists and active professionals. We are always looking for talented people from different industries that are aimed for results and inspired with difficult tasks.

6.1. Core team

Alexander Neymark
Founder, CEO

Alexander Neymark has a significant experience in launching and developing innovative financial services in banks and telecommunications companies (starting from 2000). In 2012, he started working on creating a platform for aggregating financial user data (account aggregation technology), which was implemented in the final development of Krawlly (krawlly.com) creating smart crawlers for aggregating financial user data.

Dmitry Kochin
Founder, CTO, PhD

Dmitry Kochin has strong experience in IT and is PhD in Technical Sciences. Serial entrepreneur in IT sector since 2005. He has been involved in a variety of software projects dealing with payment processing, account aggregation, computer telephony and even financial services within online games. Since 2014, he’s been absorbed with his study of blockchain and cryptocurrency problems.

Anton Filatov
Head of Software Development

Starting his career as a programmer in 2006, Anton actively participated in numerous and diverse IT projects, from video surveillance and financial systems to state-level automation systems. Has extensive experience in software development using modern programming languages and advanced technologies.
Natalia Tokar
Business Development Partner

Natalia is an expert in international sales and cross-cultural negotiations. Her exceptional communication skills and business development strategies have proven to work in a number of financial projects across USA, Germany, England, France, UAE, Seychelles, Russia, and the Caribbean over the last 6 years. She is developing investor relations with crypto communities globally and is a regular speaker at international events.

Sergey Mukhanov
Head of Product Management

Sergey Mukhanov is a skilled professional with over 10-year experience in product management and development of innovative payment solutions from scratch to 40-million audience. He has extensive work experience with banks, telecommunication companies and worldwide payment systems.

Nicola Marangoni
Java developer, Big Data Expert

Nicola Marangoni has strong competence in analytics databases and distributed systems. Starting from 1999, he has been involved in several Data Warehousing, Business Intelligence and Analytics projects in many different branches. Since 2012, he is focused on distributed systems like Apache Hadoop, HBase and Apache Spark and has developed an extensive experience in data engineering and data architecture.

Ivan Vyatkin
Software developer

MGIMO college graduate with 6 years of experience in IT. He participated in projects of different kind: online stores, media portals (news), aggregation of accounts (Krawlly) and so on. Since 2014, Ivan have been working on the development of PWA (Progressive Web Apps) and studying various ideas for creating a user-friendly UI/UX interfaces.
Rodrigo Acosta
Software developer
A blockchain developer with experience in smart contracts, assets, bitcoin, android and governance systems. Rodrigo have worked with Dash, Pivx and Internet of People.

Hendry Rodriguez
Software developer
Java developer passionate about blockchain and cryptography technologies.

6.2. Team advisors

Aaron Schwartz
Advisor. Education and Science

Marcel Schlatter
Technical advisor
Wulf Kaal
Advisor, PR and Social Outreach

Juan Garcia Morgado
Advisor, Legal and Consulting (Europe)

Ian M. Worrall
Advisor, Finance and Security
7. PRODUCT DEVELOPMENT ROADMAP

Below is the list of vital milestones in Ties.Network development for 1.5 years after official launch:

[2Q 2017]
- Mock-ups ready
- Client interface prototyping
- Sandbox preparation
- White paper published

[3Q 2017]
- Wide range promotion of Ties.Network through crypto-community
- Pre-Token Generation Event marketing campaign
- Yellow paper published
- Prototype launch and testing
- Token Generation Event announced

[4Q 2017]
- Moderators and super-moderators testing
- Pre-Alpha version of Ties.DB
- Pre-Alpha version of Ties.Network
- Ties.Network Marketing campaign

[1Q 2018]
- ICO due diligence testing
- Development of Ties.Network alpha
[2Q 2018]
- Ties.Network Alpha launch and testing
- Ties.DB alpha launch and testing
- P2P token exchange added
- Etherium-based tokens added
- Marketing campaign for Ethereum-based token owners
- ICO due diligence added

[3Q 2018]
- Smart-contracts added
- Escrow added
- Premium subscription added
- Ties.DB beta testing

[4Q 2018]
- Moderators and super-moderators added
- Full decentralization launch
- Ties.DB beta launch
- Ties.DB Marketing campaign
8. REFERENCES

2. https://www.linkedin.com/pulse/celebrating-half-a-billion-members-linkedin500m-nathaniel-bibby
Let’s stay in touch