Invox Finance Platform

White Paper

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FINANCE

Contents

Founders' Introduction

We are excited to offer small businesses worldwide a solution to their cash-flow problems by providing accessible, low interest financing through our distributed invoice financing platform.

The traditional invoice financing model does not create a direct relationship between the person funding an invoice and the person paying that invoice. Our proposal is to create a decentralised platform which will connect all parties, distribute information with greater flexibility, and lower the risks of all involved.

We draw on our many years of experience running a successful invoice financing company in Australia, ABR Finance Pty Ltd (www.abrfinance.com.au).

ABR Finance has been in operation since 2012 and has helped fund businesses throughout Australia with $30 million AUD in invoicing, across a broad range of industries including IT, wholesale, construction, transport, engineering, equipment and labour hire, publishing and professional services.

We understand that one of the main challenges facing small to medium-sized enterprises today is the ability to maintain a healthy cash-flow. Even a successful business which delivers quality goods or services, to a loyal customer base, can run into trouble if they experience an unavoidable, periodic drop in cash-flow.

An Australian Securities and Investments Commission report into corporate insolvencies found that 40% of businesses had inadequate cash flow or high cash use[1].

We hope you share our vision of small businesses using blockchain technology to access financing at low interest rates!

Kind regards,

Alex and Adam Mezhvinsky
Co-founders
Invox Finance

[1]   Source: www.asic.gov.au/about-asic/media-centre/find-a-media-release/2012-releases/12-218mr-asic-reports-on-corporate-insolvencies-2011-2012/

The
Opportunity

Invoice Financing

Current Market

Invox Tokens

Initial Coin Offering

Traditional Invoice Financing

The Invox Finance Model

Why is Invoice Financing Needed?

Many businesses, especially small businesses, require invoice financing as they struggle to stay afloat due to cash-flow problems. Insufficient or irregular cash flow does not afford SMBs the ability to meet day-to-day expenses and commitments.

Each business has different arrangements with its various contractors and employees. Often businesses will receive payments for their goods and services monthly, but in the meantime it will be necessary for them to meet their weekly or monthly expenses, such as employee salaries.

We will refer to the invoice financing facilities, where investors advance funds to the sellers against their issued invoices as "invoice lending" or "invoice loan" or "lending".

Real World Example[1]

Bill runs a small transport contracting business and offers delivery services to a national delivery chain. His business will usually be paid for its services between 30 to 90 days after an invoice for is issued.

This means that on average, it may take 45 days for Bill to eventually get paid for each job. In the meantime, Bill continues to run his business and has obligations to pay his drivers (usually on a weekly basis), meet fuel costs, ongoing tax liabilities and other periodic expenses. Bill comes to an invoice financier to help with this problem as this allows him to obtain cash flow immediately. Generally current traditional invoice financing costs Bill 1 to 2% a week.

This is only one example that illustrates how an array of industries, such as IT services, wholesale, manufacturing, building, labour and equipment rental constantly experience periodic cash-flow problems.

1   Current client of ABR Finance Pty Ltd. The client name is changed due to confidentiality.

Key Problems

How we are solving small business cash flow problems:

Seller

The seller aims to obtain the best possible price for their goods or services and to receive payment for these as soon as possible. Allowing the buyer to delay payment of the invoices makes the seller more competitive but can also create periodic cash-flow issues for the seller.

The risk to the seller is that they will not be able to continue operating their business without invoices being paid on delivery.

Buyer

The buyer wants to obtain the lowest possible price for their purchase and to delay invoice payment for as long as possible to optimise the use of their working capital.

The risk to the buyer is that they may not have sufficient cash available to pay the invoices on delivery or shortly thereafter.

Investor

Investors are currently not able to directly invest in invoice financing without establishing an invoice financing business.

In the traditional invoice financing model, the risk is that the investor does not have a direct relationship with the buyer. The investor solely trusts the information provided by the seller. This exposes the investor to a considerable risk of the invoice not being paid as agreed, or being disputed.

Our Solutions

How we are solving small business cash flow problems:

Seller

Through our platform we will connect the seller directly with individual investors who will finance the seller's invoices.

The seller will be able to get 80% of the face value of each invoice as soon as the invoices are issued and registered on our platform, thereby reducing the risk that they will not have the money to cover their operating expenses while they are waiting to get paid.

Buyer

Once the seller has access to invoice financing, the seller is in a position to give the buyer more time to pay for their invoices (typically 30 to 60 days, however on our platform longer payment terms will be available), thereby optimising the buyer's cash-flow position.

When the invoice is paid by the buyer on our platform, the seller will receive the 20% balance of the invoice less the financing fee payable to the investors.

Investor

Through our platform, investors will be granted access to an investment product that is for the most part currently only available to the banks and finance companies. Each investor will be able to invest in a number of loan fragments from a large number of diverse businesses across various industry sectors. Our platform's loan fragmentation algorithm will automatically match the investor's risk and investment profile with a predicted return on investment.

Unlike in the traditional invoice financing model, on our platform the buyer will be part of the eco-system and will be asked to verify that the invoice is genuine and is due and payable. This reduces the risk to the investors that the invoice will not be paid. Invoices that are not verified by the buyer as genuine, due and payable may not be funded.

Invox Finance Platform and Tokenomics Summary

Invox Finance platform will allow sellers to register their invoices on the ledger and will provide access to these invoice to the relevant parties, such as buyers, and investors.

When the seller requests funding for a particular invoice, Invox Finance Platform will automatically request the buyer to verify that the goods and/or services have been delivered and that the information contained within the invoice is correct, and that it is due and payable directly through the Invox Finance Platform.

Upon verification, the Invox Finance loan fragmentation algorithm will match investors to the requested invoice loan. This is explained in more detail within this paper.

If the investor(s) lent 80% of the value of a particular invoice, on receipt of full payment, the system will calculate the amount payable to the investor(s) (including interest) and send the balance to the seller.

This flow is visually represented together with our tokenomics on the next page:

Invox Finance Platform and Tokenomics Summary

Investor

Day 1: Invests $8,000 for a $10,000 invoice.

Day 365: Obtains $900 in interest and pays $264 in tokens to the platform.

7.95% Net Return to Investor

Seller

Day 0: Onboards the $10,000 invoice to the platform and pays 1.1% of its value ($110 in tokens to the platform). They must also hold 1.0% of the value of the loan amount on the platform ($80 in tokens).

Day 1: Obtains an $8,000 loan (80% of the value of the invoice).

Day 365: Once the invoice is paid by the buyer into the system the seller receives the $2000 (20% balance of the invoice) less the $900 in interest. The seller also obtains a reward of $50 of tokens.

12% Net Interest Charge to Seller

Buyer

Day 0: The buyer is invoiced ($10,000) and verifies through the platform that the invoice is correct, due and payable.

Day 365: Pays the $10,000 invoice through the platform and receives a reward of $50 in tokens.

Fiat: Investor loans $8,000

Fiat: Principal ($8,000) plus interest ($900)

Token Fee: 3.3% p.a. of Advance Amount ($264 in tokens)

Token Fee: 1.1% of onboarded. Invoice Value ($110 in tokens)

Fiat: Seller obtains $8,000 loan

Fiat: Difference ($2,000) less interest ($900)

Token Reward: 0.5% of the Invoice Value ($50 in tokens)

Fiat: Pays invoice fully ($10,000)

Token Reward: 0.5% of the Invoice Value ($50 in tokens)

Example Assumes:

- $10,000 invoice
- 80% advance amount
- Verified Invoice
- Full repayment
- 9 p.a. interest

For illustration purposes, we assume one investor investing into one invoice and that invoice is payable in 365 days.

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Typically, on our platform many investors will invest into one invoice using loan fragmentation and the average repayment is 45 days.

Invox Finance total revenue on $8,000 advance is 3.425%

1.0% per annum of each advance amount ($80 in tokens)

1.8% per annum of each advance amount ($144 in tokens)

0.1% of the Invoice Value ($10 in tokens)

0.5% per annum of each advance amount ($40 in tokens)

Invox Finance Treasury

+$80 in tokens

Locked for a minimum of 12 months

Invox Finance Revenue Account

+$154 in tokens

Invox Finance Insurance Fund

+$40 in tokens

Minimum buffer amount to be maintained (TBA)

Investing in Invoices through our Loans Smart Contracts

The Loans Smart Contracts will facilitate the flow of funds between all parties.

To participate in invoice financing on the Invox Finance Platform, an investor will deposit fiat funds into an interest bearing trust account held with an independent financial institution ("trust account").

The investor will then be able to allocate a specific amount of funds to various risk rated lending facilities (suggested by the Invox Finance Platform). For example, in Australia, an investor will be able to deposit $1,000,000 AUD into a trust account with an Australian bank. The investor will then be able to allocate $500,000 AUD to a higher risk profile invoice lending facilities and $500,000 AUD into a lower risk profile lending facilities. Other risk profiles will attract higher interest rates but may also have a higher default rate.Investors will be able to allocate certain portions of their investment portfolio to various risk and investment profiles to create a return on investment which matches their individual goals.

Each invoice lending facility will be comprised of a number of fragments of individual invoice loans. That is, each invoice loan will be fragmented into a number of smaller increments allowing a single investor to purchase a number of fragments from a large number of different loans to increase their portfolio's diversification and, most importantly, reduce their overall risk profile[1].

When an invoice loan is created and the terms of the relevant smart contract are met, the Invox Finance Platform will transfer the required loan amount to the seller in fiat currency. The system will then debit the seller's internal account and credit the Seller's operational bank account with the equivalent fiat currency amount from the trust account.

When a buyer pays the invoice into the Invox Finance Platform's external bank account[2], the Invox Finance Platform will automatically credit the investor's internal account with the equivalent amount of funds and execute the relevant smart contract to settle the invoice. That is, it will calculate the amount required to be paid to the investor (including interest) and transfer the balance to the seller's internal account. The system will then debit the seller's internal account and credit the seller's operational bank account with the equivalent fiat currency amount.

1   The fragmentation algorithm and loan packaging rules will be transparent and made available to all parties. As part of the development of the platform, appropriate advice will be obtained as to any applicable regulatory and licensing requirements and any necessary licenses will be sought.

2   A linux / python cron job will orchestrate calls from our banking partners' API to the smart contract.

Loans Smart Contracts: Advantages

Secure Records

The Smart Contract will provide a permanent record of all loans and funds within the Invox Finance Platform that cannot be manipulated or altered by any single party. The ledger and the trust account will also be audited by an independent major accounting firm to allow all parties to be confident that their funds are being used as intended in a safe and appropriate manner. As with the Dynamic Invoice Smart Contract, eventually the need for paper-based record keeping will be eliminated.

Invoice Fragmentation

The fragmentation of each invoice lending facility will allow each investor to purchase a pool of fragments from a large number of loans, reducing the risk profile and further diversifying their investment portfolio. We aim to develop a loan fragmentation algorithm will that will analyse a number of risk factors for each seller, buyer profile and industry sector to create loan fragments that will best match the risk and investment profile of individual investors.

Seamless Flow of Funds Between Parties

As soon as an invoice lending facility is established between the seller and the investor, and the relevant smart contract conditions are met, the funds will be automatically transferred by the system from the investor to the seller, and each party will be notified that this has occurred. The use of the distributed ledger will ensure that the internal transfer of funds between parties is seamless, fast, reliable, auditable and transparent.

Integrate with Accounting Software

The platform will provide an API interface to accounting and payment systems to interface with our contracts. This will also allow seamless integration with major accounting software platforms and reduce paper-based document requirements.
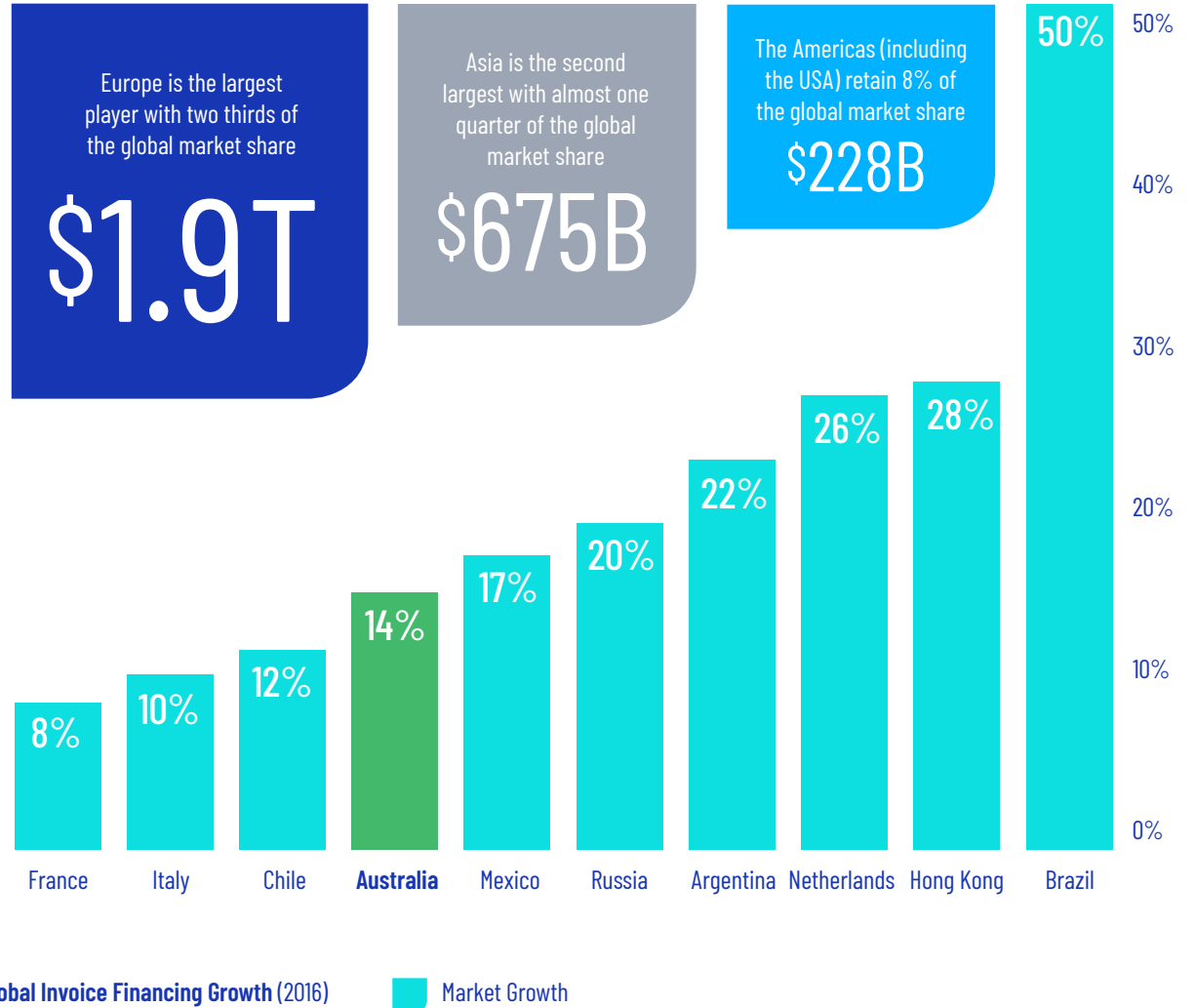
Current Market

Invoice financing is a global market valued at approximately $2.85 trillion USD.[1]

The latest figures have shown continued growth in the invoice financing industry globally. The markets which posted the highest growth rates in this industry as shown below include Brazil, Hong Kong, the Netherlands and Argentina. In Europe, which is two thirds of the market, the biggest players behind the Netherlands are Italy, France and Germany. Outside of the EU it is worth noting that Russia, Mexico and Australia have also been high performers.[2]

1   Source: www.abfa.org.uk/news/118/Global-Factoring-Volume-reaches-all-time-high
2   Source: www.fci.nl/en/news/2016%20Global%20Factoring%20Statistics/4147

Europe is the largest player with two thirds of the global market share

$1.9T

Asia is the second largest with almost one quarter of the global market share

$675B

The Americas (including the USA) retain 8% of the global market share

$228B

USA	Germany	Singapore	France	Italy	Chile	**Australia**	Mexico	Russia	Argentina	Netherlands	Hong Kong	Brazil	
3%	4%	4%	8%	10%	12%	14%	17%	20%	22%	26%	28%	50%	

Global Invoice Financing Growth (2016)   ▮ Market Growth

Invox Tokens

Invox Tokens will be created on a public ledger using the ERC-20 standard and will have the following utility:

- will provide access to the Invox Finance Platform for the sellers. That is, each Seller will be required to pay a certain amount of Invox Tokens on a yearly basis to gain access to the platform; and
- reward work performed for the platform. That is, the system will reward buyers and sellers with Invox Tokens for verification and payment of invoices.

The Proof of Verification Token

As highlighted in the introduction, invoice financing is based on a relationship of trust between the investor, seller and buyer. The seller needs to trust that the buyer will pay the invoice after the goods or services have already been delivered. The investor also needs to trust that the buyer will pay the invoice to the investor.

To increase this level of trust, Invox Tokens will be used in the following way:

Every time the buyer verifies and pays the seller's invoice, together the buyer and seller will be credited with 1.0% of the face value of the invoice in Invox Tokens by the platform.

This will provide an incentive to the buyer to verify and pay the invoices, reward the seller for a successful repayment of an advance against an invoice, and provide the investor with an additional level of confidence that they are dealing with

trusted sellers and buyers. The investor will also have the ability to see how many tokens in total a seller and a buyer have each been rewarded with by the system (regardless of whether the tokens remain in the seller's or buyer's wallets) to determine the level of risk it can place on these parties.

Thus, the more Invox Tokens a buyer has been rewarded with by the Invox Finance Platform, the greater the level of trust investors can place on the invoices issued to that buyer. Similarly, the more tokens the seller has been rewarded by the Invox Finance Platform, the greater level of confidence and trust the investor will have that the advances made to the seller will be repaid. The amount of tokens a seller and buyer have been rewarded by the system will be tracked regardless of whether the Invox Token had been used by the seller or the buyer. This data point will be used when analysing the risk level associated with a seller and their buyers.

Invox Tokens are Integrated with our Trusted Member Program

To gain access to the Invox Finance Platform sellers will need to hold Invox Tokens

Buyers and investors will not be required to hold any Invox Tokens. For a seller to gain access to the Invox Finance Platform, the seller will need to purchase Invox Tokens during the ICO at a discount after the ICO from the Invox Finance platform, or from an exchange.

The seller's financing limit will be a multiple of 100 of the amount of Invox tokens they hold (1.0% of the value of the invoices they want funded). For example if a Seller holds $1,000 AUD worth of Invox Tokens the seller's financing limit will be $100,000 AUD.

The Invox Finance Platform will generate revenue by charging fees to the sellers and investors. Buyers are not charged for using or accessing the Invox Finance Platform.

Business Model & Tokenomics

Sellers

Invox Finance will charge sellers a processing and administration fee equivalent to 1.1% of the face value of each invoice registered on the platform. This will be paid in Invox Tokens. A large proportion (approx. 91%) of this revenue will be used to reward buyers and sellers for the verification and payment of invoices. That is, 1% of the face value of each invoice will be used for rewards and 0.1% will be utilised by Invox Finance for cost recovery to maintain the system. There will be no other charges to the seller with the exception of any statutory charges or third party services. Invox Finance will reward sellers with Invox Tokens to the value of 0.5% of the face value of each invoice they settle.

Buyers

Invox Finance will reward buyers with Invox Tokens to the value of 0.5% of the face value of each invoice they verify and fully pay. Through accumulating Invox Tokens buyers will be able to onboard into the system to become sellers themselves.

Investors

Invox Finance will charge investors a processing and administration fee equivalent to 3.3% of each advance amount. This is to be paid in Invox Tokens.

From this revenue an amount in Invox tokens equivalent to:
- 1.0% per annum of each advance amount will be placed into the Invox Finance Treasury (locked for a minimum of 12 months).
- 1.8% per annum of each advance amount and 0.1% of the face value of each funded invoice will be utilised by Invox Finance for cost recovery in order to maintain the system and to generate revenue.
- 0.5% per annum of each advance amount will be placed into the Invox Finance Self-Insurance Fund. The mandate of this fund will be to accumulate and maintain a buffer in Invox Tokens to provide members with self-insurance services and to benefit the users of the system by providing funds for debt recovery and enforcement. Effectively, members will insure each other against unrecoverable debts. The size of the buffer to be maintained will be determined in accordance with best industry practice.

Business Model & Tokenomics

This flow is visually represented together with our tokenomics here:
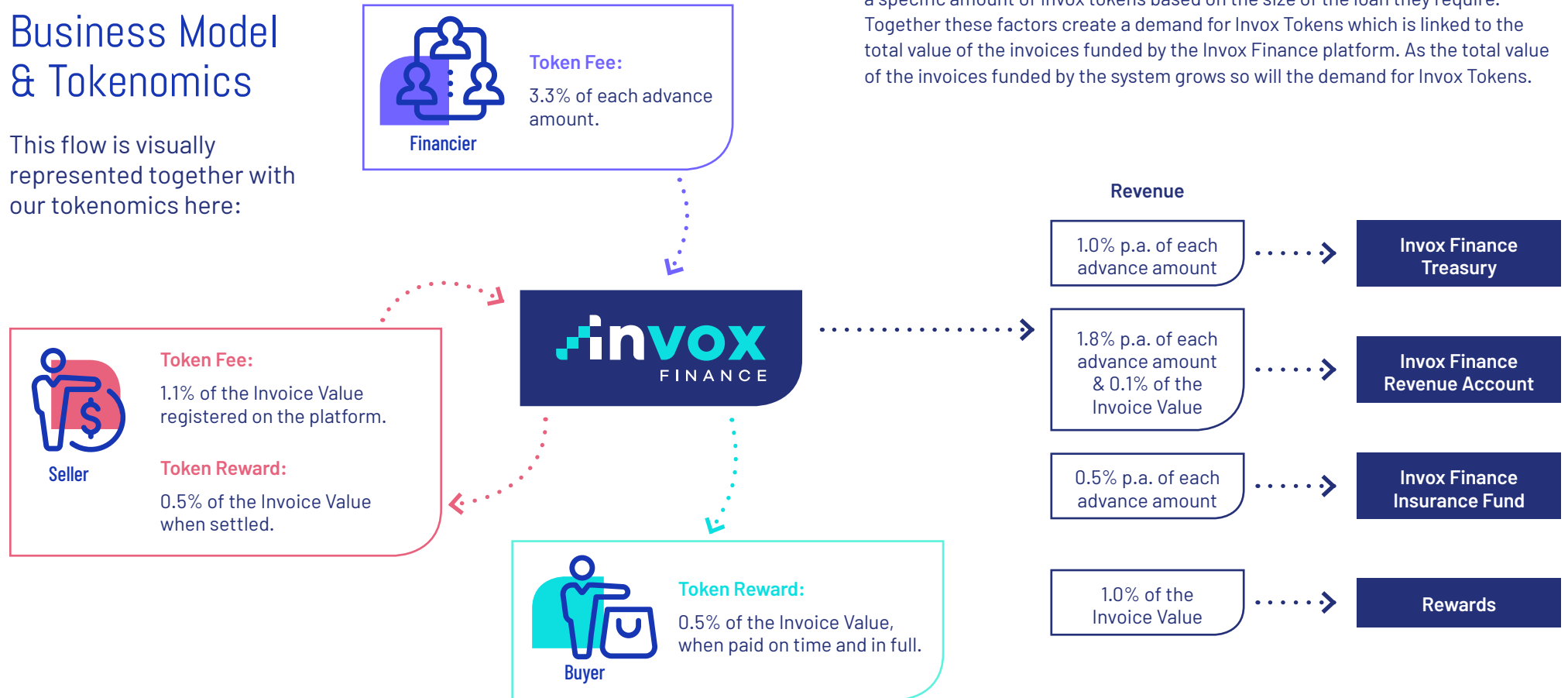
Demand

All fees are paid in Invox tokens and are linked to the value of the invoice or the advance amount on that invoice. Additionally, the seller is required to hold a specific amount of Invox tokens based on the size of the loan they require. Together these factors create a demand for Invox Tokens which is linked to the total value of the invoices funded by the Invox Finance platform. As the total value of the invoices funded by the system grows so will the demand for Invox Tokens.

Financier

Token Fee:
3.3% of each advance amount.

Seller

Token Fee:
1.1% of the Invoice Value registered on the platform.

Token Reward:
0.5% of the Invoice Value when settled.

Buyer

Token Reward:
0.5% of the Invoice Value, when paid on time and in full.

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Revenue

1.0% p.a. of each advance amount → **Invox Finance Treasury**

1.8% p.a. of each advance amount & 0.1% of the Invoice Value → **Invox Finance Revenue Account**

0.5% p.a. of each advance amount → **Invox Finance Insurance Fund**

1.0% of the Invoice Value → **Rewards**

Initial Coin Offering

The rationale behind conducting the ICO is to pre-sell membership to the system through the sale of Invox Tokens.

While a seller can obtain membership through either purchasing Invox Tokens or earning them through rewards for verification and payment of invoices, initially all sellers and investors must purchase Invox Tokens (either at the ICO at a discounted rate or from the Invox Finance Platform) to be able to hold the required amount of Invox tokens to access the Invox Finance Platform at their required financing limit.

For this reason there must also be an initial supply of tokens when the Invox Finance Platform is introduced.

In addition to the 55% of tokens sold during the ICO, 20% of the tokens will be set aside for founders and advisors, 20% of the tokens will be set aside for the operational fund and 5% will be set aside for bounties and airdrops. There will never be any more Invox Tokens created after the ICO is complete and thus there is no need to burn any tokens. The founding team and advisers will be allocated a portion of Invox Tokens, which will be locked in an escrow.

Advisors will have their tokens locked for 6 months after the tokens are generated. The founding team will have their tokens locked as follows: no tokens will be made available for 6 months after the tokens are generated and then 1/18 of the token allocation will be released every month thereafter for an 18-month period.

Citizens and residents of the United States of America, China or any citizens of countries which outlaw ICOs or cryptocurrencies will not be able to participate in the ICO.

Token Value	Pre-sale
1 ETH = 10,000 INVOX	**SOLD OUT +** **Soft Cap Achieved**

Max Cap Main Sale	Maximum Supply
20,000 ETH	**464,000,000 INVOX**
Main Sale Minimum Buy	
ETH 0.1	

Bonus Structure

Stage 1	●	03/04/18 to 28/04/18	20% BONUS
Stage 2	●	29/04/18 to 19/05/18	10% BONUS
Stage 3	●	20/05/18 to 09/06/18	5% BONUS
Stage 4	●	10/06/18 to end ICO	0% BONUS

If you are a private investor wanting to place above 100 ETH, please email hello@invoxfinance.io

Traditional Invoice Financing

A small business can accelerate its cash-flow by selling its invoices to a investor and in return, obtain immediate cash.

An investor will approve a business based on the financial strength of its customers (i.e. to whom the business supplies and issues invoices). From the investor's point of view, the invoices are its only security. Customer disputes, non-payment of invoices and fraud reduce the integrity of these invoices.
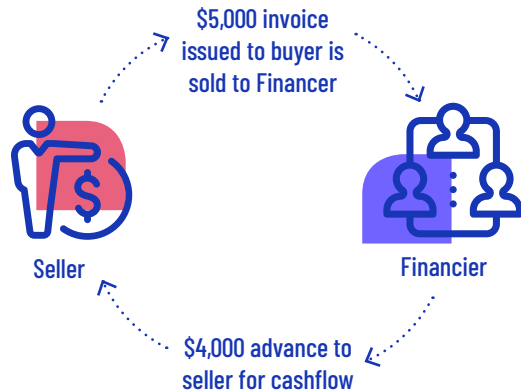
To address these issues, investors:

- assess each debtor,
- verify invoices,
- obtain proof of delivery,
- confirm payment liability,
- undergo credit checks
- obtain debtor insurance, and
- utilise lawyers or debt collectors

These processes are time-consuming and require substantial manpower. Traditional invoice financing usually fixes the cash-flow problem but can be expensive as the fees charged by the financier (what we call an Investor as part of the Invox Finance platform) are usually very high. Invoice financing can be the best short-term funding solution, provided that it is used only when the funds are required to smooth periodic cash-flow bumps.

	Unsecured Business Loan from non-bank	Bank Overdraft	Traditional Invoice Financing	Invox Finance
Interest rate charged to borrower	30-60% p.a.	10-15% p.a.	15-35% p.a.	9-20% p.a.
Av. Est. Investor returns	10-15% p.a.	3-6% (shareholder dividends)	5-15% p.a.	8-17% p.a.
Collateral	None	Business Assets and/or Real Estate Security	Invoices	Invoices
Documentation	3 years financials	3 years financials	Current receivables	Current receivables
Application Fee	Yes - 2 to 5% of the loan amount	Yes - nominal application fee	Yes - 2 to 3% of the loan amount	None, but 1% of the loan amount must be held by the seller as a stake for the duration of the loan.

How Traditional Invoice Financing Works

$5,000 invoice issued to buyer is sold to Financer

Seller

Financier

$4,000 advance to seller for cashflow

Buyer pays $5,000 invoice to financier within 30 days

Financier pays $1,000 balance less agreed fee/interest
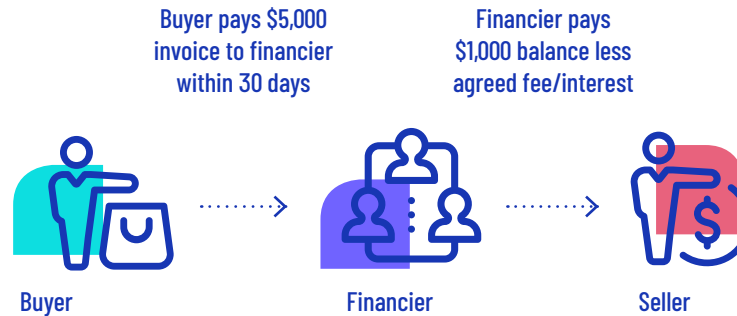
Buyer

Financier

Seller

First Transaction

Invoice financing is based on the financier purchasing invoices from the seller.

Once the financier approves a seller for an invoice finance facility, the financier will agree to advance monies to the seller against each invoice. When the seller issues the invoices to a buyer, the seller will request funding from the financier against these invoices (usually up to 80% of the face value of each issued invoice). The financier will then advance the agreed amount to the seller.

The financier will be relying on the invoices to be paid directly to them by the buyer in due course, in order to have their invoice finance loan repaid.

Second Transaction

The financier will then require that the payments for all issued invoices are made into a bank account that is controlled by the financier.

The seller will need to notify its customers (buyers) of the new bank account details and all future invoice payments will need to be made into that account.

Third Transaction

When the financier receives a full payment for a funded invoice from the buyer, it will return the balance of the invoice value to the seller less its fee. Usually this is 20% less any fees or interest.

For Example

When the seller issues a $5,000 invoice to the buyer, the investor will advance $4,000 to the seller immediately on the issue of that invoice. When the financier receives full payment of $5,000 for this invoice directly from the buyer in 30 days, the financier will settle this invoice by sending back the balance, which is $1,000 less the agreed fee. In calculating the fee the financier bases on the applicable turnover fee, interest rate and the time the invoice was outstanding) and return the balance to the seller. The interest rate charged by the financier will depend on a number of factors, such as:

- the assessed credit rating of the seller;
- the strength of the financial position of the buyer;
- the industry sector that the seller and the buyer are involved in; and
- which type of documentation will be available to confirm the delivery of the products.

The Invox Finance Model

How Invox Finance will disrupt and revolutionise traditional Invoice Financing.

We plan to disrupt and revolutionise the traditional invoice finance industry by implementing a global distributed peer-to-peer lending platform called the Invox Finance Platform. This platform will completely eliminate the need for a traditional financier's involvement by connecting businesses that wish to accelerate their cash-flow through selling their invoices ("sellers"), directly with investors[1] who wish to finance these invoices.

Invox Finance's key differences include:

Distributed Platform

The Invox Finance Platform will allow sellers, buyers, investors and other service providers to directly connect, interact, share and distribute information in a trustless environment utilising a fully distributed ledger.
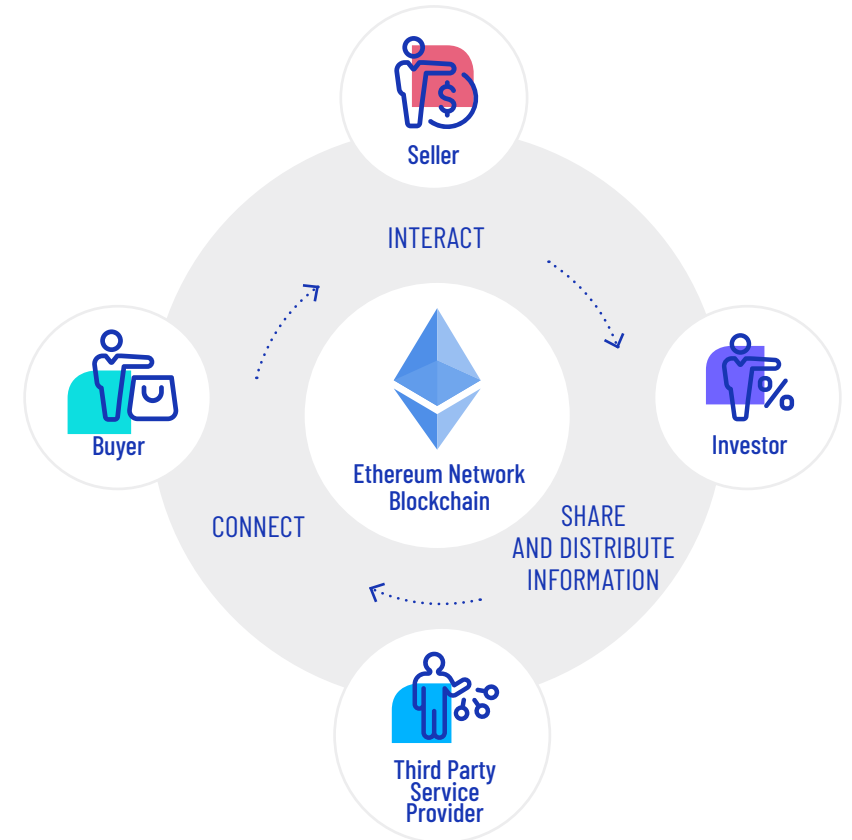
Direct Access to Investors

The Invox Finance Platform will provide sellers direct access to individual investors. This new distributed peer-to-peer lending environment will benefit both sellers and the investors.

Lower Rates for Sellers

Sellers will be able to obtain financing at lower interest rates than normally received from a traditional financier.

A new way for Investors to Diversify

Each invoice loan is split into smaller fragments to allow many investors to invest into one invoice. This allows investors to buy into a unique investment product normally available to only banks and finance companies as well as reducing risks through diversification.

Seller

INTERACT

Buyer

Ethereum Network Blockchain

Investor

CONNECT

SHARE AND DISTRIBUTE INFORMATION

Third Party Service Provider

1   In this paper, investors are persons who will lend funds to the sellers via Invox Finance Platform. Further information on who can be an investor on the Invox Finance Platform is available in the Legal section of this paper. As part of the development of the platform, appropriate advice will be obtained as to any applicable regulatory and licensing requirements and any necessary licenses will be sought.

The
Platform

The Platform Overview

The Invox Finance Platform is a distributed peer-to-peer invoice lending platform that will allow sellers, buyers, investors and other service providers to connect, interact, share and distribute information.

This platform will facilitate an eco-system where trust between the parties is developed via an in-built reward system. The execution of transactions and flow of information are not dependent on one single centralised service provider, but are governed by a transparent set of rules executed on a fully distributed ledger.

This will further promote the confidence of all parties in each other as well as furthering the successful completion of each invoice lending transaction.

Furthermore, the Invox Finance Platform will provide sellers (who wish to borrow funds against their invoices) direct access to individual investors. This peer-to-peer lending environment will benefit both the sellers and the investors. Sellers will be able to obtain financing at lower interest rates. Investors will be granted access to an investment product that is for the most part currently only available to the banks and finance companies.[1]

1   As part of the development of the platform, appropriate advice will be obtained as to any applicable regulatory and licensing requirements and any necessary licenses will be sought.

The Invox Finance Platform will comprise of the following:
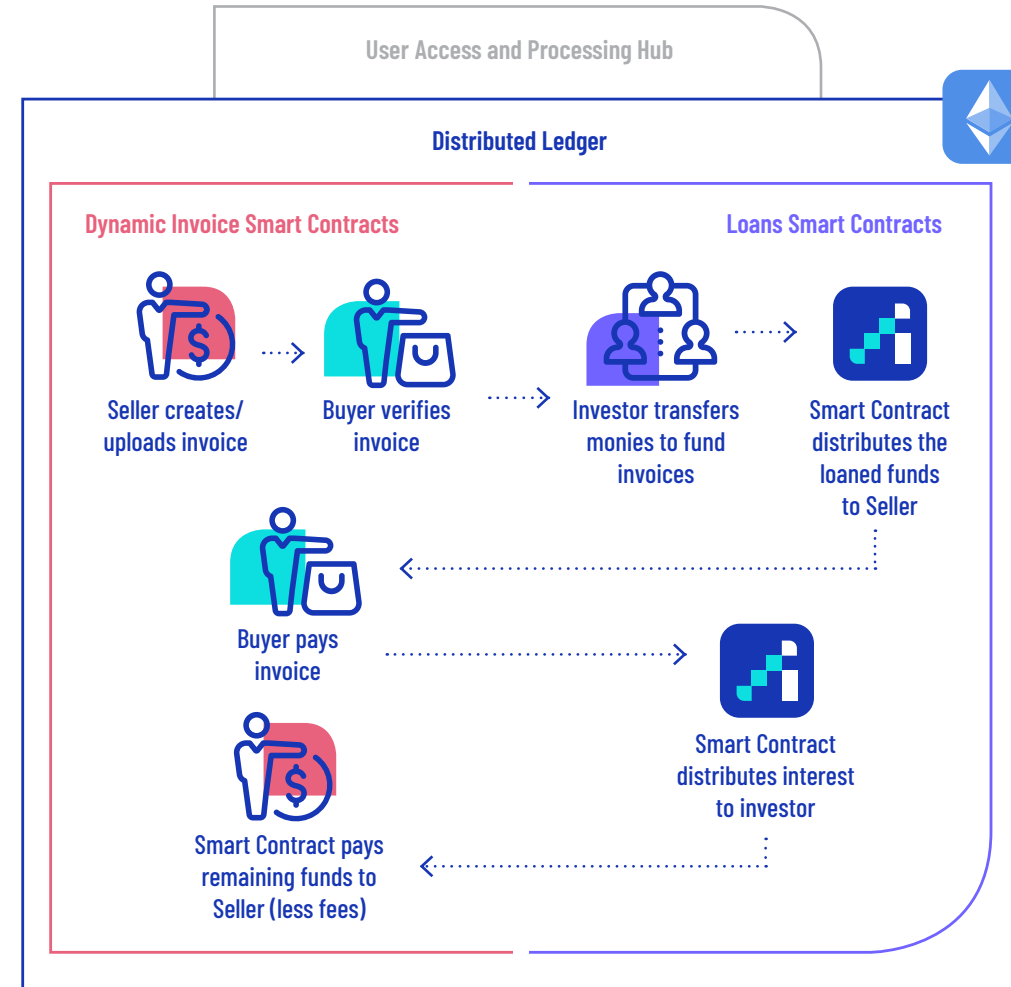
Dynamic Invoice Smart Contracts

Once a seller enters the invoice data, a Dynamic Invoice Smart Contracts will be deployed to the Ethereum mainnet. They will facilitate the creation of completely dynamic invoices and registration of these invoices on a distributed ledger. Dynamic invoices will also store additional information such as invoice verification status, advances made against the invoices and payments received. They will also ensure that the information stored on the ledger is transparent, reliable and secure. Blockchains enable data structures representing invoices to be deployed and to be tamper proof. This enables all participants of the ledger to view the state of the invoice with respect to time.

Invoice Loans Smart Contracts

The loan smart contracts will also be deployed on the Ethereum mainnet. These contracts will enable the flow of funds between investors, sellers and buyers. They will also direct funds to a specific party (when certain smart contract conditions are met) and enable fragmentation of invoice loans to reduce risk to the investor. The invoice loan terms and conditions will be coded into the smart contracts, providing all participants certainty that their terms and conditions will be enforced.

User Access and Processing Hub

This is where all parties will meet and interact with one another. The Hub's main purpose will be to allow investors, sellers, buyers and other interested parties to have a seamless and efficient way of communicating, exchanging information, and facilitating the initiation and execution of various smart contracts and processes.

Bank API Integration

By integrating with our banking partners' APIs will allow small business owners to interact with their bank accounts through our platform. For example, this would allow a seller to obtain fiat directly to their bank account once a loan is obtained.

User Access and Processing Hub

Distributed Ledger

Dynamic Invoice Smart Contracts — **Loans Smart Contracts**

Seller creates/uploads invoice → Buyer verifies invoice → Investor transfers monies to fund invoices → Smart Contract distributes the loaned funds to Seller

Buyer pays invoice ←

Smart Contract distributes interest to investor

Smart Contract pays remaining funds to Seller (less fees) ←

Dynamic Invoice Smart Contracts

This set of smart contracts will facilitate the creation and registration of dynamic invoices to promote authenticity and transparency to all parties involved - the buyer, seller, investor and other interested parties such as debtor insurers. It will also act as a safeguard against data manipulation by any one party.

There are a number of significant differences between a paper-based invoice and a dynamic invoice record on a distributed ledger:

They will have the following functionality:

Scanning of existing paper-based Invoices and adding a hash (SHA3-512) signature on an electronic copy - this will allow existing paper-based invoices to be registered on the ledger with additional digital information attached to them.

At any time, the original documents can be reproduced, providing the document existed in its current state before the time it was entered into the blockchain.

All new invoices will be created as a dynamic invoice record. This will eliminate the need for scanning paper-based records.

1

The information on the paper-based invoices is static and cannot be updated. The information on the dynamic invoice record can be updated in real time.

For example, when a seller issues an invoice to the buyer and then sells that invoice to a investor to obtain invoice funding, the investor will need to write to the buyer to inform the buyer that the invoice must be paid directly into investor's bank account. With a dynamic invoice, the investor will be able to update the account details on the invoice and show the investor's name and the amount advanced against this invoice.

3

Invoice verification of the paper-based invoices requires the investor to manually request the seller to verify that the invoice is due and payable. The process of dynamic invoice verification will be automated with verification acknowledgment recorded as part of the invoice information. The buyer is sent an email or text to provide a verification and acknowledge that payment is now due through the Invox Finance platform. This provides better invoice data for calculating risk as well as placing the buyer on notice of how to correctly pay their invoice.

2

The information on a paper-based invoice can be forged or altered by any single party. Once placed into a smart contract, it will not be possible to manipulate a dynamic invoice record on a distributed ledger by any one party as the invoice information will be stored on a public ledger[1]. This reduces the risk to only the seller's initial inputs.

4

When the goods are delivered, the buyer is usually required to sign delivery documents to acknowledge delivery and acceptance of the goods. This process will also be automated through the use of APIs or blockchain solutions to reduce the need for any additional documents. The acknowledgement of the delivery by the buyer will be recorded as part of the dynamic invoice and stored on the public ledger.

1   All sensitive data will be securely stored offchain and only the SHA3-512 hash will be added to the public chain.

Dynamic Invoice Smart Contracts

Registration and Verification of Invoices

Once an invoice is created, it is registered on an immutable distributed ledger that will provide relevant invoice information to the parties of the transaction based on a permissions-based mechanism.

For example, a seller will register an invoice on the ledger and allow access to this invoice to the buyer, the investor, and the debtor insurer. If the seller requests funding for this invoice from an investor (or investors), the system will register investor's interest against the invoice on the ledger. The Invox Finance Platform will then automatically request the buyer to verify that the goods and/or services have been delivered and that the information contained within the invoice is correct, and that it is due and payable directly through the Invox Finance Platform. Additionally, if the seller requests debtor insurance for this invoice, the debtor insurer will also be able to note their interest and see the status of the verification of the invoice.

Confidentiality and Privacy

Access to any information in respect to a particular invoice will be under the complete control of the seller, who will be able to prevent or grant access to full or partial invoice information to the interested parties, thus protecting confidentiality and privacy.

No personally identifiable information, such as business name, address and business identification number are stored on the blockchain. Users are known to the system via one of their public keys. Registered users will be issued more than one public key to obfuscate the users' identity. All other sensitive data is securely stored offchain, and only the SHA3-512 hash is added to the public chain. This information cannot be reversed to produce the original digital content.

Search Functionality

The ledger will be searchable in respect of specific identifiers and their verification but only by the parties that have been granted access to specific invoices by the seller.[1]

Settlement of Invoices

The ledger will facilitate and record settlement of the invoices, upon receipt of full payment, and marking the invoices as closed and settled. For example, if the investor lent 80% of the value of a particular invoice, on receipt of full payment, the system will calculate and execute the amount payable to the investor (including interest) and send the balance to the seller. For example if the interest paid to the investor is 1% then 19% (the balance) is sent back to the seller.

Dispute Resolution

Dispute resolution will be facilitated by the ability to provide reliable evidence to the courts or mediators directly from the invoice records stored on the ledger, eliminating the need for the protracted information disclosure process. Terms may be enforced through the smart contract itself, such as penalties for lateness of payments. Invox Finance will also partner with legal service providers to offer dispute resolution, debt collecting and legal services. This will allow for sellers to continue running their business while Invox Finance, and its partners, will resolve any overdue debts.

1   A public key will be required to search sensitive information. A separate public key will be issued for each transaction.

Dynamic Invoice Smart Contracts: Advantages

Secure Records

Smart Contracts will provide a permanent record of an invoice which cannot be manipulated or altered by any single party. This will increase confidence of the investor who is lending funds against the invoice that the invoice is genuine and has not been pledged as security to other investors. Eventually, the need for paper-based invoicing will be eliminated.

Ease of Use and Automation

Our platform will provide easy access to all parties involved to access and record data relevant to the invoice. As soon as the invoice is registered on the ledger, the buyer will be notified and prompted to accept the invoice and verify that it is due and payable. The investor will then be notified by the system that the buyer has accepted the invoice and that the funds can now be advanced to the seller. The seller will also be notified by the system that it is open to the seller to request funding against this invoice.

Lower Interest Rates and Insurance

The seller will be able to obtain lower interest rates from investors as the risk of fraud, data manipulation and non-payment of invoices is reduced. The system will calculate and assign an internal credit score to each seller. This credit score will be based on a number of factors including the risk of the invoices not being paid or being disputed.

The seller will be able to obtain cheaper and individualised debtor insurance, as insurance companies will be able to obtain precise and comprehensive information on each transaction.

Secure Reporting

The creation and distribution of reports (such as monthly debtor statements and aged debtor reports) will be automated and hashed to prevent data manipulation.

Integration with Other Software

The API interface will provide seamless integration with the major accounting software platforms, banks, and payment applications. By providing seamless integration with all of the software

businesses already use Invox Finance will allow for small business owners to easily onboard into the cryptocurrency ecosystem. For example a business can onboard an invoice already created in Quickbooks accounting software and have their cash advance placed directly into their bank account in fiat.

Integrity of Data

Smart Contracts will provide reliable evidence necessary for enforcement of invoice payments and debt collection. Invoices will be registered on a distributed public ledger and therefore the reliability and integrity of the data will be significantly increased. Distributed ledger solution enables the trust to be distributed throughout the Invox Finance Platform without the need for a central entity to control the information and dictate the terms of use. Simple contract terms can be coded into the smart contract, removing the need for a third party to adjudicate.

The User Access and Processing Hub

The User Access and Processing Hub is where all parties will meet and interact with one another. The Hub's main purpose will be to allow investors, sellers, buyers and other interested parties to have a seamless and efficient way of communicating, exchanging information, and facilitating the initiation and execution of various smart contracts and processes.

The Hub will provide the following functionality, executed in a high calibre UI with a seamless user experience:

The Hub

User Access	Risk Assessment	Loan Management	Invoice Management
User interface (desktop and mobile)	Application process management	Integration with Loans Smart Contracts	Integration with Dynamic Invoice Smart Contracts
User creation and management	Identity verification	Risk profile matching	Advance account processing and management
Know Your Customer verification and management (KYC)	External data collection	Loan initiation, approval and management	Invoice settlement
Third party access interfaces (APIs)	Risk analysis and assessment	Legal documentation management	Debt collection and enforcement management
Trusted Member Reward Program	Ongoing risk monitoring	Transaction processing, tracking and management	Report generation
Report generation	Report generation	Report generation	

The Hub's Main Advantages Over Centralised Peer-to-Peer Platforms

User and Process Integration

The Hub will provide seamless access to the Invox Finance Platform for all users. It will also simplify and increase the efficiency of all processes.

Loan Fragmentation

Each invoice financing loan will be fragmented into a number of smaller segments allowing a number of investors to participate in one single loan. This provides benefits to both the investors and sellers, and is a key point of difference of the Invox Finance Platform when compared to traditional invoice finance lenders.[1]

Fragmentation will allow investors to pool their resources together to fund more significant loans and ensure that larger facilities can still obtain these funds at affordable rates.

It will also provide a single investor with the ability to fund a number of segments from a large number of different loans to increase their portfolio's diversification and, most importantly, reduce their overall risk appetite.

The logic to facilitate loan fragmentation will be implemented within Loans Smart Contracts.

The Invox Financing Platform will provide investors a choice of several different pools to invest in, based on either rate of return or a specific industry sector. When choosing which pool(s) to invest in, investors will be given an estimated rate of return over the chosen investment period of their investment contract. Investors will also be able to obtain debtor insurance to further reduce their risk. However, the cost of debtor insurance will reduce the return on investment.

Automation of Credit Assessment and Rating

TThis will be achieved through an interface with third-party credit assessment agencies, and by utilising internal algorithms to increase the reliability of a credit score.

Invox Finance also aims to break away from traditional credit assessment models to serve a wider community through the use of other blockchain applications and/or our Invox Finance "proof of verification" algorithm.[2]

---

1   As part of the development of the platform, appropriate advice will be obtained as to any applicable regulatory and licensing requirements and any necessary licenses will be sought.
2   The algorithm is yet to be developed.

The Offer

Platform Breakdown

Development of Beta

Invox Roadmap

Token Allocation & Funds Breakdown

Platform Breakdown

Development of Beta

The Beta will have the following features.[1]

Dynamic Invoice Smart Contracts

- Scanning and uploading of existing paper-based invoices and adding a hash (SHA3-512) signature of an electronic copy
- Creation of dynamic invoices
- Registration of dynamic invoices on the ledger
- Interaction with the User Access and Processing Hub

Loans Smart Contracts

- Creation and administration of invoice lending facilities
- Loan fragmentation
- Interaction with the User Access and Processing Hub

User Access and Processing Hub

- User interface (desktop and mobile)
- User creation, registration and management
- Know Your Customer verification and management
- Basic Report Generation
- Application and approval management
- Loan initiation, approval and management
- Transaction processing, tracking and management
- Advance Account processing and management
- Invoice settlement management
- Interaction with various parts and processes of the platform

Invox Token Smart Contract for Trusted Members

- Create Invox Tokens
- Trusted members' benefits management
- Interaction with the User Access and Processing Hub

1   All Smart Contracts will be open-sourced and auditable.

Invox Roadmap

Our goal is to complete the following:

We have completed the following:

Q3
- Idea formulated

Q4
- Incorporated as Invox Finance Pty Ltd

Q1
- Proof of concept code and testing
- Wireframe
- V1 of the White Paper
- V1 of the Website
- Pre ICO began
- Pre ICO sold out

Q2
- V2 of the White Paper
- V2 of the Website
- Complete ICO and
- Distribute Invox Tokens
- Mockup complete for buyer, seller and investors journeys

Q3
- First invoice issued on alpha platform

Q4
- Initial user testing on beta platform

Q1
- Invox Finance Debit Cards Available

Q2
- Mobile application testing
- Integration with Celsius
- Launch into second region

Q3
- Mobile Application Release

Q4
- Launch into third region
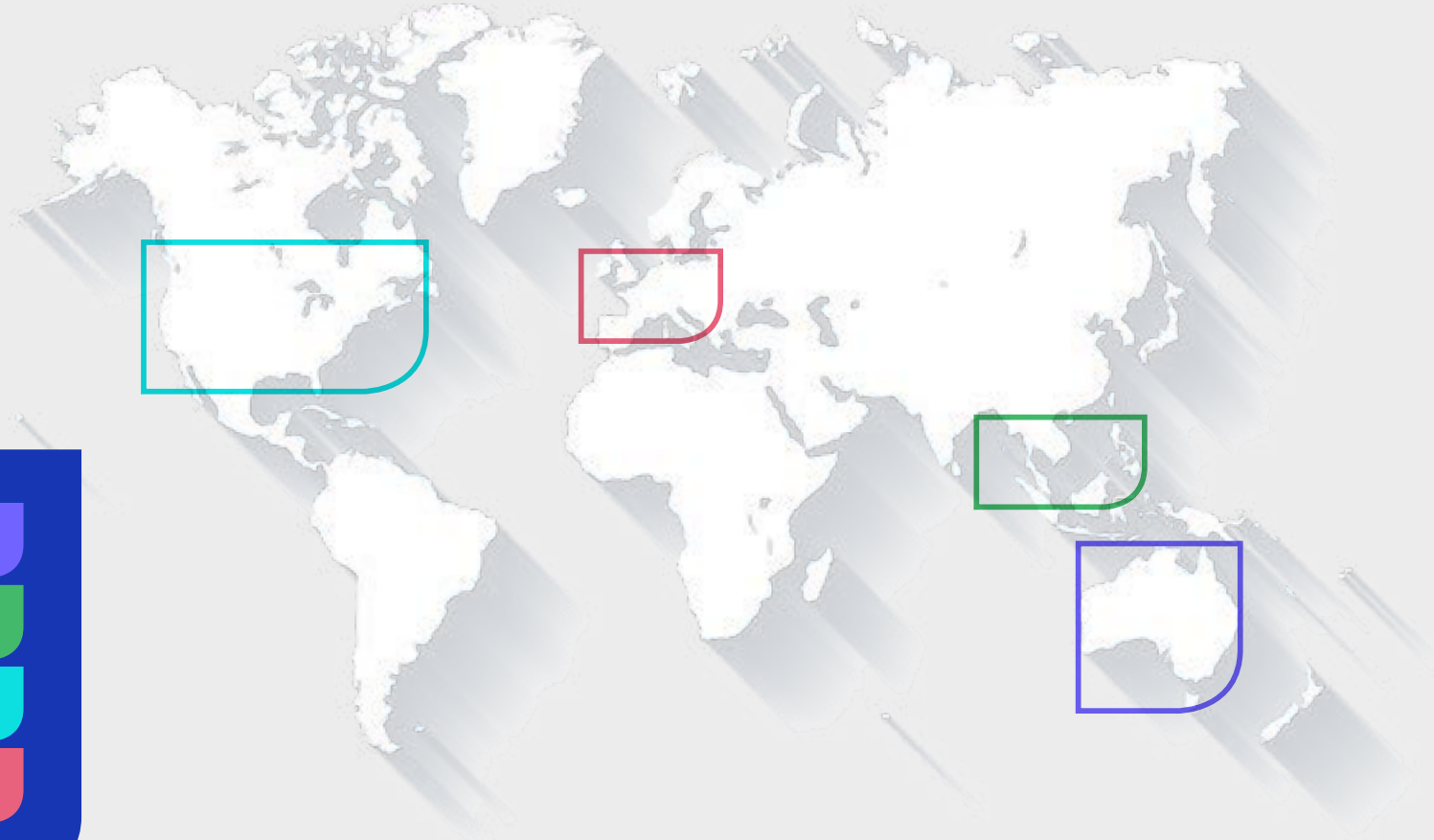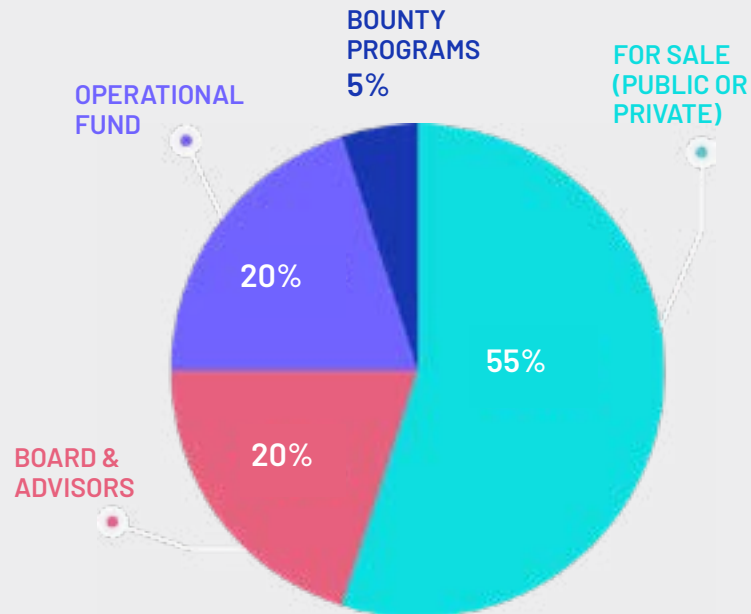
| 2017 | 2018 | 2018 | 2019 |

Invox Roadmap

GEOGRAPHIC ROLLOUT

Beta Rollout	Australia
First Priority	Asia Pacific
Second Priority	North America
Third Priority	Europe

Token and Fund Allocation Structure

Token Allocation

BOUNTY PROGRAMS
5%

OPERATIONAL FUND

FOR SALE (PUBLIC OR PRIVATE)

20%

55%

BOARD & ADVISORS

20%

Funds Breakdown

RESEARCH & DEVELOPMENT

MISC. 1%

SALES & MARKETING

INVOICE INVESTMENT FUND

10%

20%

45%

OPERATIONS & MANAGEMENT

24%
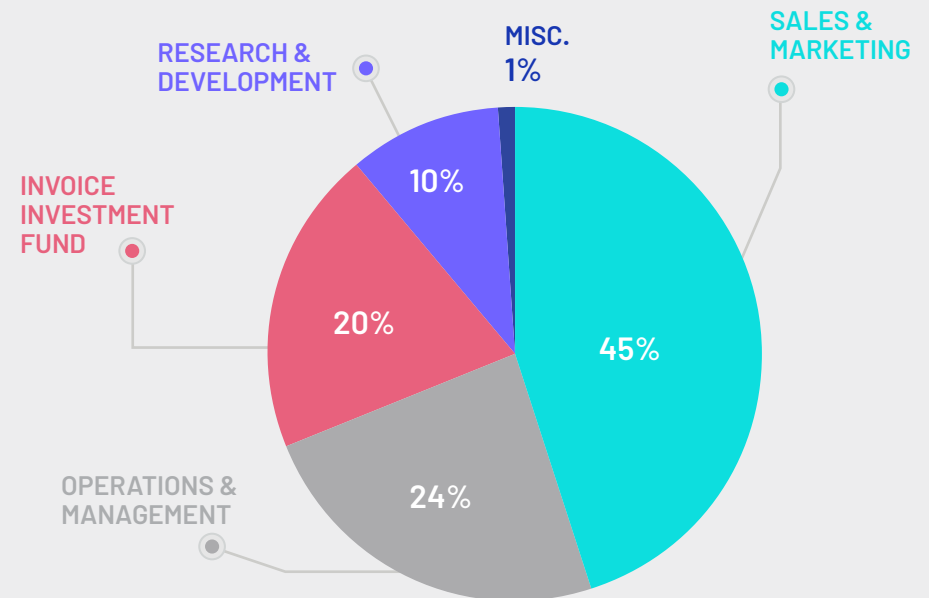
Funds Breakdown

Sales & Marketing

Estimated at 45 %

Ensuring that there is a strong user base and community will be one of the key areas of focus for the management team in the early years of Invox Finance. This includes educating sellers and buyers as to the benefits of being granted Invox Tokens and the value it generates within the Invox Finance Platform itself. Once the Invox Finance Platform has a steady user base in Australia, the management team will focus their attention on international expansion and global scalability.

Invoice Investment Fund

Estimated at 20%

An Invoice Investment Fund will be created to ensure that all invoices within the system can be funded. We endeavour to use the return generated by this fund as follows:

- 50% of the returns will be reinvested into the Invoice Investment Fund;
- 30% of the returns will be set aside to facilitate the costs associated with debt recovery within the system; and
- 20% of the returns will be utilised to set up a debtor insurance fund.

Therefore, the general mandate for this fund is to benefit the system and its users by providing funds for liquidity, debt recovery and risk reduction.

Operations & Management

Estimated at 24%

This will cover all legal, accounting, auditing and any other professional services required by Invox Finance as well as the overhead costs.

Miscellaneous

Estimated at 1%

This expenditure item allocates funds to all unforeseen costs.

Research & Development

Estimated at 10%

The other key focus for the management team will be executing the Invox Finance Platform's software and system development. A Proof of Concept System including the Dynamic Invoice Smart Contract was created by the founding team, before receiving any funding, to showcase the system's core features.

A Beta will be developed. Once the Beta is created and user tested, the funds raised from the ICO will be allocated to build the complete eco-system as described within this White Paper.

Legal

In this section legal framework policies and procedures in relation to the operation of the Invox Finance Platform are described. For the purpose of this paper, only Australian legal and regulatory requirements have been addressed.

Invox Finance Platform will be introduced in other countries. For that purpose, Invox Finance will engage legal representatives in the relevant jurisdiction to ensure full compliance with the applicable laws.

What type of finance will Invox Finance provide?

Invox Finance will only provide business finance in a form of invoice financing. We will not provide any consumer or personal loans.

Once the seller is approved for an invoice finance facility, the seller will be required to execute the following documents:

1. Invoice Finance Agreement—under this agreement the seller will assign all its present and future invoices to the investor(s) via the Invox Investment Trust). In return, the investor(s) will make advances (i.e. lend funds) to the seller. This agreement will also constitute a security interest over the invoices of the seller and will be registered on the Personal Property Securities Register under the Personal Property Securities Act 2009 (Cth) ("**PPSR**"); and

2. The Charge over all present and after-acquired property of the seller's business—this document will also constitute a security interest and will be registered on the PPSR.

Who can qualify as the Seller?

Any business that provides goods or services ("**products**") to its customers ("**buyers**") and allows them an extended period of time for payment (e.g. 30 to 90 days) after the delivery of the products and the issue of the relevant invoice, will be eligible to apply for financing on the Invox Finance Platform ("**seller**").

Sellers do not necessarily need to operate as a company, sole traders, partnerships or trusts will also be acceptable.

Who can be an Investor on the Invox Finance Platform?

Initially only non-retail investors will be able to invest on the Invox Finance Platform. That is, investors that invest more than $500,000 AUD on the Invox Finance Platform; or they are a large business; or they are a sophisticated investor by definition ("**investors**"). In general, a person is a sophisticated investor if this person has net assets of at least $2.5m AUD; or has gross income for each of the last two financial years of at least $250,000 AUD. (refer www.asic.gov.au/regulatory-resources/financial-services/financial-product-disclosure/certificates-issued-by-a-qualified-accountant/ for more information).

Investments on the Invox Finance Platform will be made via an unregistered managed investment scheme—Invox Investment Trust. When an investor makes an investment on the platform, it will receive a beneficial interest in the Invox Investment Trust. Initially, when the funds are deposited by an investor on the platform, these funds will be classified as "cash interests" and will be held in a trust account with an authorised deposit-taking institution within the meaning of the Banking Act 1959 (Cth) ("**Bank**") in the name of the Invox Investment Trust custodian. Invox Finance will appoint a reputable experienced and independent custodian to ensure that the assets of the Invox Investment Trust are segregated from other assets, properly protected and shielded from any adverse events or actions that

may impact Invox Finance. As part of the development of the platform, appropriate advice will be obtained as to any applicable regulatory and licensing requirements and any necessary licences will be sought.

In the future, retail investors will also be able to invest on the Invox Finance Platform. This will require Invox Finance to comply with additional legal and regulatory requirements (additional information on these requirements is available at www.asic.gov.au/for-finance-professionals/fund-operators/establishing-and-registering-a-fund/how-to-register-a-managed-investment-scheme/. As stated above, as part of the development of the platform, appropriate advice will be obtained as to any applicable regulatory and licensing requirements and any necessary licenses will be sought.

Once the funds are deployed for the purposes of funding specific sellers, these funds will be classified as "loan interests". When the relevant invoices are repaid and settled, the funds (plus any interest received on loan interests) will convert back into cash interests.

In addition, investors will receive interest on any cash interests. This interest will be determined by the Bank. Invox Finance will not charge any additional fees for managing cash interests.

Credit Policy

Invox Finance will develop and implement comprehensive procedures and a Credit Policy. This policy will address such issues as:

1. Application procedure;
2. Supporting documentation requirements;
3. Seller's credit assessment;
4. Risk category assignment;
5. Approval procedure; and
6. Ongoing monitoring.

Third-party service providers (such as Credit Reporting Agencies), open-source applications and internal algorithms will be utilised to automate the above procedures as much as possible.

Other policies and procedures

Invox Finance will also develop and implement the following policies and procedures:

1. Privacy Policy in compliance with the Privacy Act 1988 (Cth) and the Australian Privacy Principles;
2. AML Policy and Program, including Know Your Customer (KYC) procedures in compliance with the Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (Cth);
3. Invox Finance Platform and Website Use Policy and Terms and Conditions;
4. Third Party Service Providers System Access Policy and Procedures;
5. Corporate Governance policies and procedures;
6. Treasury Policy and Procedures;
7. Enforcement and Debt Recovery Policy and Procedures; and
8. Invox Finance Internal policies and procedures addressing sales and marketing, social media, HR and other internal business matters.

Disclaimer: Important Notice

The information provided in this White Paper ("**paper**") by Invox Finance Pty Ltd ("**the Company**") is for information purposes only and is not a statement of future intent or an offer or a solicitation to purchase or sell any financial instruments, including but not limited to any securities.

The products and services described in this paper are the current ideas, plans and goals of the Company in respect of the development and implementation of the Invox Finance Platform ("**platform**"). These ideas, plans and goals have not yet been developed and implemented (unless expressly stated otherwise in this paper). The Company has full intention to implement these ideas, plans and goals. However, these ideas, plans and goals may change in the future and the Company reserves its right to change anything described in this paper in its absolute discretion.

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Any person reading or in receipt of this paper should rely solely on its own assessment, judgment, knowledge or investigation of the Matters expressly or impliedly stated or described in this paper or any Implications made by this paper.

Any plans, projections, forecasts, targets or goals stated (expressly or otherwise) in this paper may not be achieved due to a number of risk factors, including but not limited to changes or defects in present and future technology solutions and developments, market or sector volatility, regulatory and legal exposure, corporate decisions and actions or unavailability or accurate and complete information. Any plans, projections, forecasts, targets or goals stated (expressly or otherwise) in this paper are also subject to the Company obtaining appropriate licences which is not guaranteed due to the nature of the technology proposed to be utilised (including but not limited to blockchain and cryptocurrencies) and financial and other regulation of the same being in an early stage as well as due to other reasons and circumstances that may become relevant.

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Invox Tokens can only be redeemed for membership of the Invox Finance Platform, they are non-refundable and are not intended for speculative investment.

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This paper is only available on www.invoxfinance.io and is not to be copied, reproduced or redistributed or published without prior written consent of the Company.

Appendix

Resources

www.azure.microsoft.com/en-us/services/key-vault/

www.en.wikipedia.org/wiki/SHA-3

Ropsten test data

Deploying

0xc504063fe572d03df197595c3c9c0271abdae412eea4b4f9120b7179b8ca04c4

View your transaction & Contract Address 0x66b171a550d67a2d1907d63ec58b8320772801e3

TxHash:	0xc504063fe572d03df197595c3c9c0271abdae412eea4b4f9120b7179b8ca04c4
Block Height:	2364900 (9 block confirmations)
TimeStamp:	1 min ago (Dec-30-2017 05:54:11 AM +UTC)
From:	0xe2356d29d5dfecb4ee43c031204aeded24749959
To:	[Contract 0x66b171a550d67a2d1907d63ec58b8320772801e3 Created]
Value:	0 Ether ($0.00)
Gas Limit:	1146662
Gas Used By Txn:	1146662
Gas Price:	0.000000021 Ether (21 Gwei)
Actual Tx Cost/Fee:	0.024079902 Ether ($0.000000)
Cumulative Gas Used:	1435216
TxReceipt Status:	Success
Nonce:	4

Adding an invoice

TX Hash: 0xd0ee2756eee644b9c7681185e520f81451aa84718f71b1f1c9d866fedfae37ba

View your transaction

Batch Invoicing Tests

In an attempt to reduce gas, batching invoice creation has been tested: www.ropsten.etherscan.io/tx/0xb610f3dc655913ee10dfce0e6cd0c9a485c1d5e14b8137f62619dc1b1ee9c599

As expected, gas doesn't decrease. It actually increases to approximately $0.90 v per invoice (as at January 2018). This is because the batch smart contract function has a loop inside it. So we're paying for storage gas and computational gas.

Load test script

```
## Note, requires pip install json-rpc
## pip install 'jsonrpcclient[requests]'
## pip install ethjsonrpc
import requests
import json
import jsonrpcclient
node_url = '127.0.0.1' # Test RPC
#node_url = '60.226.74.183' # Ropsten node
contract_address = '0x8db2caae9ef066aedf81423b9ae0e92a2603c533' #
    Testrpc
#contract_address = '0x89f3e42Db3ef5979c206c62D3F73DbD51d2b8Dc9'
    # Ropsten
from ethjsonrpc import EthJsonRpc
c = EthJsonRpc(node_url, 8545)
# Test connect
blockHeight = c.eth_blockNumber()
print('')
print(blockHeight)
contract_owner = 'e2356d29d5dfecb4ee43c031204aeded24749959' # Test
    rpc
# contract_owner = 'a2a8d81485a1DEe0ace2D5d6600225423Dd573B5' #
    Ropsten
y = 100000
for x in range(0, y):
tx = c.call_with_transaction(contract_owner, contract_
    address, 'add(uint256,uint256,address,bytes32)',
    1,1,'0xe2356d29d5dfecb4ee43c031204aeded24749959','')
print(tx)
print()
```

Appendix

Invox vs. Populous and other Peer-to-Peer platforms

Most peer-to-peer invoice financing platforms use centralised structures. All of these platforms essentially connect invoice sellers and investors in an online environment.

Unlike these centralized solutions both Populous and Invox Finance are looking to the future of blockchain to solve current issues of invoice financing. Invox Finance has the utmost respect for the goals the Populous team are aiming to achieve. The currently centralized invoice financing environment is in need of disruption. Both Invox Finance and Populous are at the front line of this disruption. There are however some key differences highlighted on this page between Populous and Invox. The following table compares the two platforms:

Populous Platform	Invox Finance Platform
While the Populous platform connects invoice sellers with investors, it does not involve a key player, the buyer of the goods and services.	The Invox Finance Platform will connect sellers, investors and buyers on one platform, as well as third-party service providers (such as credit rating agencies and debtor insurance companies). It is critical that the buyer of the goods and services is connected to the platform and is able to verify invoices and have access to dynamic invoice data. The buyers will also be rewarded with Invox Tokens for verifying invoices.
The invoices uploaded onto the Populous platform are paper-based invoices making them "static".	The Invox Finance Platform will incorporate a set of Dynamic Invoice Smart Contracts. This will allow for creation and registration of Dynamic Invoices in a completely digital format (eventually eliminating the need for paper-based invoices). There are many advantages of creating and registering invoices on the Dynamic Invoice Smart Contract, such as no central authority to control, host or potentially manipulate the data. Once deployed, the business practices are known to all network participants and cannot be changed.
The Populous platform requires investors to bid against each other at auctions for financing invoices.	The Invox Finance Platform will provide all investors with equal access to a large pool of sellers based on the investors' risk preference. This eliminates the need for investors to undercut each other in an auction environment.
Populous requires investors to join together in a group if they are unable to fund larger invoices.	The Invox Finance Platform will divide each loan into a number of fragments thus allowing investors to invest into a large number of loans (with different risk profiles) to further minimise their risk and maximise their return on investment. Also, by fragmentising each loan, we will be able to create tailored loan products with various risk profiles and offer those loan products to investors based on their chosen risk profile.
Populous was founded in 20177.	Two of the founders of the Invox Finance Platform created and run ABR Finance Pty Ltd—an invoice finance company that has been operating since 2012. ABR Finance has successfully funded many small to medium businesses in Australia. Alex Mezhvinsky who is one of the founders of the Invox Finance Platform is the Managing Director of ABR Finance Pty Ltd and has extensive engineering, legal, finance and management experience.

Appendix

Invoice Details

Dynamic invoices will be created with the following fields:

Blockchain fields

- Invoice Number
- Unique Digital ID
- Invoice Date
- Invoice Amount in Cents
- Value Added Tax (i.e. GST) Amount in Cents
- Sellers Public Key
- Buyers Public Key
- Due Date in Days
- Verified
- Timestamp as per the Blockchain
- Hash of the Offchain Fields

Other offchain fields

- Itemised Description of Goods/ Services Supplied
- Seller's Name
- Seller's Business Identifier (i.e. ABN)
- Seller's Address
- Buyer's Name
- Buyer's Business Identifier (i.e. ABN)
- Buyer's Address
- Investor's Name
- Contract Terms
- Advances Made Against Invoice and Dates
- Payments Made Against Invoice and Dates
- Invoice Payment Status
- Invoice Advance Status
- Invoice Assignment Details
- Insurance Details
- Security / Interested Parties Registered Against Invoice
- Account for Payment.

Testing

With our testing on the Ropsten test network, we have found that adding dynamic invoices, at the 2 January 2018 ETH price, will cost around $0.71 USD (0.00078623 ETH). This price estimate accounts for differences between the price on the Ropsten test network and the mainnet.

Details of the testing performed are as follows:

a. Tested on Ropsten network

b. Owner Address 0xE2356D29D5DFeCb4EE43C031204aeDED24749959

c. Contract Address 0x66B171A550D67a2D1907d63Ec58B8320772801E3

d. See Appendix for Python test script.
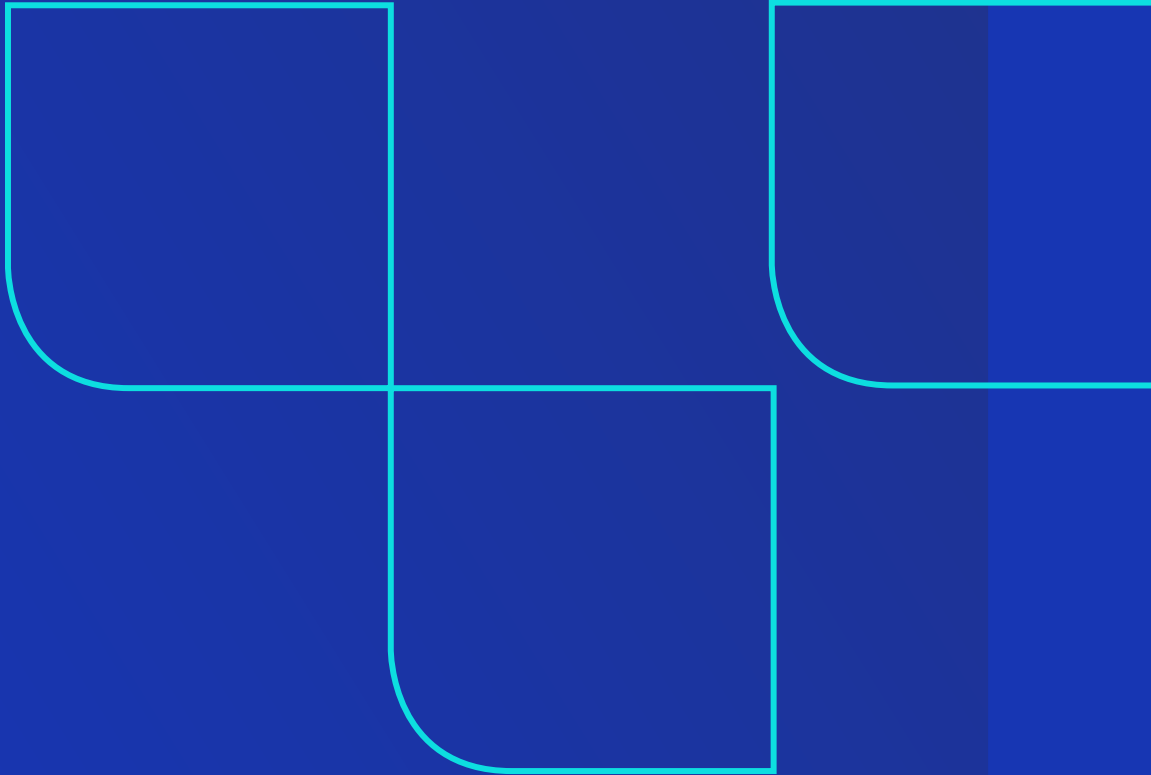
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