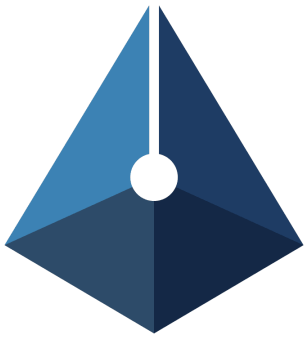


ink PROTOCOL

Decentralized reputation and payments for peer-to-peer marketplaces

Listia Inc.

Ink Protocol Whitepaper, Public Draft v5 - December 1, 2017

https://paywithink.com

Summary

Ink Protocol is developed by Listia, a P2P marketplace for buying and selling used goods online. Launched in 2009, the marketplace now has over 10 million registered users who have exchanged 100 million items. The company has raised $11MM in venture capital from prominent investors.

Listia will be introducing a new decentralized reputation and payment system called Ink Protocol ("Ink"), which is powered by the Ethereum blockchain and XNK, an ERC20 compatible token. Ink helps users safely send and receive payments in P2P marketplaces while earning public reputation for every completed transaction. It greatly enhances the buying/selling process with decentralized reputation and feedback ratings, decentralized escrow for secure payments, third party dispute resolution, and very low transaction costs.

Ink can be integrated into new or existing marketplaces and can also be used in marketplaces that don't directly handle payments (eg, Craigslist and Facebook Marketplace). For sellers, accepting Ink builds up their public reputation, which allows them to start selling quickly on new marketplaces without needing to build reputation from scratch. Buyers can view any seller's reputation across multiple marketplaces and confidently pay using either automated or human-mediated escrow contracts. Payments can be made and received natively using the Ink Protocol Token (XNK) or converted easily to and from fiat currencies like USD.

Ink will also become the new reputation and payment system within the Listia marketplace. Listia currently uses a centralized virtual currency called Listia Credits for all transactions. Existing users with Listia Credits will have their balances converted to XNK, providing Ink with a tremendous boost for initial usage, stability, and network effects on day one. Additionally, Listia will create a standalone payments app so users of local marketplaces such as Craigslist and Facebook Marketplace can build reputation and start using Ink right away. With large scale adoption and apps that can be used in multiple marketplaces at launch, Ink is well situated to become the preferred reputation and payment system in all P2P marketplace transactions.

1. History & Vision

About Listia

The Listia marketplace (https://www.listia.com) was founded and launched in 2009 as a "Marketplace for Free Stuff"[1]. Listia's vision is to create a safe, easy, and rewarding way for people to get rid of the unused stuff lying around their homes. Today, the community consists of 10 million registered users who have exchanged 100 million items through the Listia mobile apps and website. Listia has raised over $11M in venture capital from prominent Silicon Valley VCs and investors including General Catalyst, A16Z, Y Combinator, SV Angel, Founder Collective, Max Levchin, Naval Ravikant and others.

Listia is unique in that users of the marketplace buy and sell goods exclusively using a centralized virtual currency the company created called "Listia Credits" which have been in circulation since launch. Users earn Credits by selling things in the marketplace and then spend those Credits to buy other things in the marketplace. Credits can also be earned through various activities such as interacting with listings or other users, inviting friends, completing special offers and goals, or they can be purchased directly from Listia.

Today's Listia Credits

As it works today, there are a couple key reasons why the Listia marketplace works better with the Credit system than it would with real money. For example:

- Used goods are hard to value

  When Listia was created, marketplaces like Craigslist and eBay were already huge, yet people in the U.S. still have over $3,100[2] of unused goods in their homes. It seemed that unless an item was worth a lot of money, people had little incentive to price and list those items for sale. Listia invented new ways to motivate people to start selling these types of items by creating a marketplace that is fun, easy to use and rewarding in non-monetary ways. Price was no longer something that held people back, and users love buying and selling their used items using Credits.

- No or low transaction fees

People who sell items in some of the most popular marketplaces generally pay upwards of 10-20% in transaction fees. A portion of the fee is simply how the business makes money, but a large part of the fee is there because transferring real money between people is an expensive process due to credit card and bank fees, escrow services, chargebacks, fraud, etc. Listia's Credit system allows users to trade items fee-free and thus extract more value than existing marketplaces. This is especially important with lower priced items where fees effectively kill any incentive to sell in the first place.

These two reasons alone have been enough to support over 100 million items exchanged since 2009. However, with technology constantly evolving, and the advent of smart contracts and decentralized currencies, Listia now has a chance to revolutionize not only the Listia marketplace, but all third party marketplaces by establishing a decentralized payment system specifically designed to handle trustless transactions, reputation, and feedback.

Introducing a new decentralized reputation and payment system

Listia Credits have worked exceptionally well over the past 8 years, albeit with plenty of ups and downs along the way. Now, learning from years of running a marketplace and virtual currency, Listia is introducing a new decentralized cryptocurrency and reputation system called Ink Protocol ("Ink"), which is powered by the Ethereum blockchain and XNK, an ERC20 compatible token. Ink is designed specifically for P2P marketplace transactions where trust between the buyer and seller may be limited.

Ink will not only be useful on Listia, but will also serve as a fully decentralized reputation and payment system for potentially any P2P transaction, independent of marketplace. Ink has the power to create, disrupt, and adapt to the world's largest online marketplaces by publicly sharing reputation information on the Ethereum blockchain.

Due to its decentralized nature, sellers can bring their reputation with them to sell on multiple marketplaces at the same time or move from one to another without having to rebuild their reputation. Buyers can also view any seller's reputation and confidently pay using escrow contracts with optional third party mediation. Payments can be made directly using XNK or converted to and from fiat currencies like USD.

To support these use cases, Ink will natively solve some of the most common and difficult issues with transacting on a pure P2P marketplace. With these features, Ink has a big advantage over not only Listia Credits, but also traditional forms of payment:

- Decentralized Reputation and Feedback
- Decentralized Escrow
- Third Party Dispute Resolution
- Very Low Transaction Costs

It's important to note that most current marketplaces such as Listia were never built to be 100% decentralized. So, while Ink supports all of these features, individual marketplaces have the freedom to customize their integration to fit their community. For example, Ink still allows Listia's customer support team to provide an extra layer of security and trust by mediating every dispute as the third party. Each marketplace that uses Ink can establish their own rules and implement dispute resolution as they see fit, and users who use Ink for transactions on unmanaged marketplaces like Craigslist and Facebook Marketplace are free to choose their own third party mediator, an automated contract, or none at all.

Timeline

June 2009 - Listia Inc. is founded and receives funding from Y Combinator
August 2009 - The Listia marketplace launches
October 2009 - Listia announces $400K angel round
April 2011 - Listia launches iOS app, announces $1.75MM seed round led by A16Z
January 2012 - Listia reaches 1M registered users, launches Android app
January 2013 - Listia partners with Best Buy to power the Listia Rewards Store
October 2013 - Listia announces $9MM series A led by General Catalyst
February 2014 - Listia allows Bitcoin to be bought and sold in the marketplace
November 2014 - Listia first experiments with creating a cryptocurrency
December 2015 - Listia launches the Credit Exchange, allowing sellers to earn USD
April 2016 - Listia launches Credits + Cash feature
June 2016 - Listia launches Listia Plus
September 2016 - Listia integrates shipping labels and tracking
May 2017 - Listia hits 10M registered users
June 2017 - Listia begins work on Ink Protocol design and whitepaper
September 2017 - Listia publishes first draft of Ink Protocol whitepaper

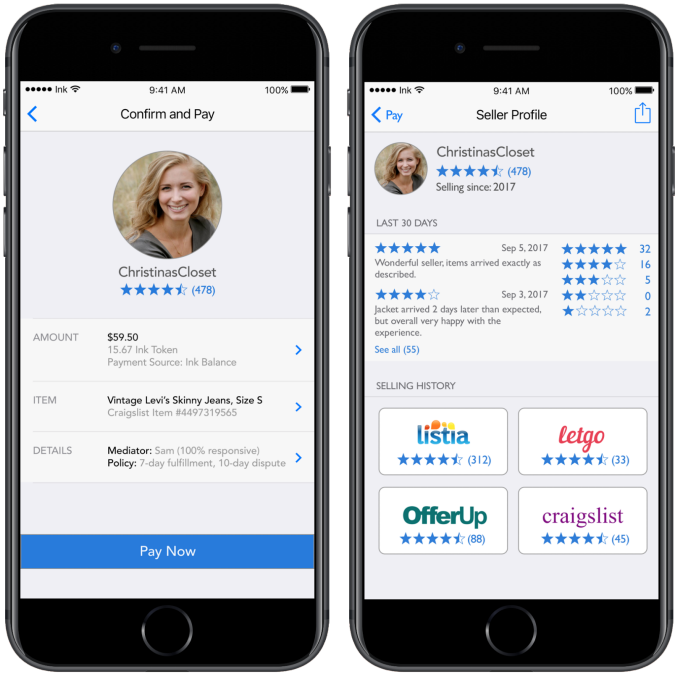
November 2017 - Listia introduces the Ink Protocol project publicly
January 2018 - Ink Protocol public launch and token distribution event

Immediate value, growth and network effects

Unlike other recently launched cryptocurrencies, Listia has a large community of users who have already generated millions of dollars in revenue using an existing virtual currency called Listia Credits. Ink will be fully integrated into the Listia marketplace and replace Listia Credits, resulting in widespread adoption and immediate usage of Ink at launch. With the current install base, that will mean millions of real user wallets can go live and there will be enough transaction liquidity to start using Ink as intended from day one.

At launch, the Listia marketplace will be able to jumpstart Ink via millions of buyers with XNK balances, sellers with feedback and reputation, and also kick off the network effects in a way that most new cryptocurrencies could never do.

Ink Pay app and Ink Protocol on other marketplaces



On top of integrating with the Listia marketplace, Listia will also create a standalone payments app, called Ink Pay, so users of other marketplaces such as Craigslist can build reputation and start using Ink immediately without having to wait for those marketplaces to integrate. The app is designed to obscure everything related to blockchain and cryptocurrencies, so anyone can start using it. Buyers and sellers would simply meet up and send payment instantly, while generating publicly accessible reputation for each other.

As more people start using Ink, their reputation and transaction history start to grow and each additional completed transaction adds to their trustworthiness. This public history, stored on the Ethereum blockchain, is incredibly useful in person-to-person transactions to establish trust and credibility. Being able to move around and carry your reputation with you to any other

marketplace will be a huge benefit, so any marketplace that supports Ink natively can easily improve the trust and success rate of their communities.

Ink also has the power to disrupt marketplaces that choose not to share reputation and feedback on the blockchain and attempt to monopolize the data. New marketplaces can quickly launch with instant trust and feedback in place, while adding to the rapidly growing public feedback and transaction history. Eventually, trusted users will begin to see every completed transaction online as something that they should be rewarded and credited for, and marketplaces that refuse to give them public credit on the blockchain for their activity will be viewed as incomplete or unsatisfying experiences. Users will migrate to marketplaces that give them public recognition, so they can get better user experiences across every marketplace at once.

2. The Ink Protocol Token (XNK) and Features

Purpose

Ink is a decentralized reputation and payment system powered by the Ethereum blockchain and a native ERC20 utility token called Ink Protocol Token (XNK). It is designed specifically for P2P marketplace transactions where trust between the buyer and seller may be limited. Ink greatly enhances the buying/selling process by helping users safely send and receive payments in P2P marketplaces while earning publicly viewable reputation. Payments within Ink are sent using XNK, but users can also convert to and from other cryptocurrencies or fiat currencies such as USD.

Token implementation

Ink is implemented on Ethereum as a Smart Contract and includes an ERC20 compatible utility token, called XNK, which is used for payments. XNK is a general purpose cryptocurrency that is:

- Fixed supply
- Fractionally divisible
- Non-inflationary
- Fungible and transferable, likely via third party exchanges

Smart Contract features

Ink solves some of the most common and difficult issues with buying and selling on a P2P marketplace through the following features:

- Decentralized feedback

  After every completed Ink transaction, the buyer can leave feedback for the seller about that transaction. Ink does not support leaving feedback for a buyer, as this is typically not useful nor is it actionable since sellers usually cannot choose their buyers.

  Feedback consists of a rating and a comment about the transaction, which are stored as data on the Ethereum blockchain. The feedback entry references the id of the transaction that the seller was involved in and can be seen by anyone with access to the

public Ethereum blockchain and Ink Smart Contract. Any person or marketplace will then be able to look up the feedback history for a specific seller to determine their trustworthiness before choosing to buy from that seller.

- Decentralized reputation

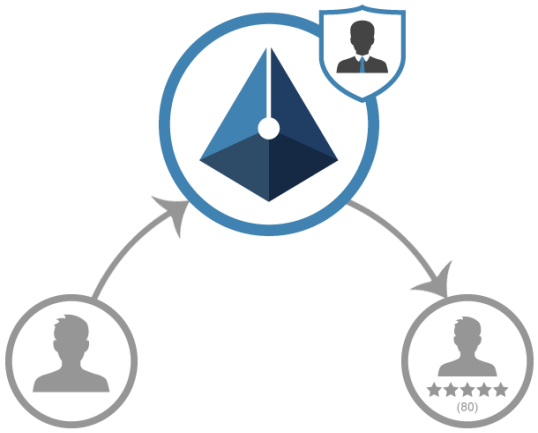
  Reputation refers to the aggregate of all the seller's feedback and transaction history. The feedback and transaction history for an individual seller can be read from the public data within the Smart Contract and used by anyone to assign a reputation score based on those signals. Ink does not include a specific algorithm or calculation method to compute this score, as it should be marketplace or app-specific.

  However, not all information should be treated equally. Ink transactions will include information about the parties involved, who mediated the transaction, what happened with the transaction (confirmed or refunded), the feedback rating and comment, and optionally what the transaction was for. Each individual marketplace has access to all of this information and should filter what is important to them when displaying a reputation score. For example, as more third party marketplaces start using Ink, it is possible that certain marketplaces may be untrustworthy and transactions recorded through them may hold little to no value when scoring reputation within another marketplace. Additionally, transactions where users simply transfer XNK to each other without context should not be used in a reputation score to prevent gaming the system.

- Decentralized escrow with third party dispute resolution

  Ink supports decentralized escrow natively to create a safe way for buyers and sellers to transact. When a buyer pays, the Ink Tokens are held by the contract until the buyer indicates that the items have been received. At that point, the tokens are released to the seller and the transaction is finalized. This also serves as a staking function within the protocol. The seller must stake their reputation against the tokens until the buyer receives their item.

However, sometimes the transaction in a P2P marketplace does not go as planned. For example, the item may arrive damaged, the seller may lie about shipping an item out, or the item may not be as described. In this case, most centralized marketplaces will help resolve your dispute by having a customer support team member look at the evidence and decide whether a refund is necessary.



Ink supports this in a decentralized way by allowing users to assign a human or automated mediator to every transaction. The mediator of a transaction exists as a third party Smart Contract that anybody can create. For example, marketplaces will create their own mediation contract to be used by their customer support staff, and individuals may set up their own contracts and provide mediation services to others.

- Mediation and Transaction Fees

  To create incentives for marketplaces, apps, and users, Ink allows mediators in a transaction to take a transaction and/or mediation fee in the form of Ink Protocol Tokens. The fee structure is defined by the mediator's Smart Contract and can be setup as either a flat fee or a percentage fee. The mediator has the option of taking both a transaction fee on every transaction and/or a mediation fee on transactions where the buyer and seller actually need the mediator to step in.

  Marketplaces that incorporate Ink will likely set themselves as the mediator of every transaction within the marketplace and take transaction fees and/or mediation fees as part of their business model. It is also possible that individuals may set up mediation services where they can get rewarded to help mediate disputes on marketplaces such as Craigslist or Facebook Marketplace. It will be up to the buyers, sellers, and the community at large to vet these third party mediators by auditing their public Smart Contracts and mediation histories, all of which will be viewable on the Ethereum blockchain.

- Linked Addresses

  Buyers and sellers within Ink are designated by their Ethereum addresses, which is how you uniquely identify a specific user and pay that user. Over time, users may accumulate

multiple addresses that they use on different marketplaces or apps. These addresses would all have their own transaction and feedback history and thus differing reputations. Ink allows users to link addresses they own to merge their feedback and transaction histories and create a single reputation. Linked addresses cannot be unlinked.

- Authorized Agents

  Ink allows one address to designate another address as its Authorized Agent and act on its behalf. This is mostly used by marketplaces or apps which may want to control an address for the end user, which is the key to getting mass consumer adoption. Specifically, this is useful when the marketplace wants to hide the complexities of using the Ethereum blockchain and Ink Smart Contracts or when the marketplace wants to incur the ETH gas costs itself and not have to send ETH to each address it controls just to pay for the gas required to run a contract function. This way, a marketplace or app can control many addresses at once and not have to waste time and money sending ETH to each address before it can perform a function.

Transaction States

Ink distills a typical marketplace transaction into a series of states defined below. This flow was developed based on the team's many years of experience running Listia and dealing with all sorts of outcomes and edge cases that can occur during a marketplace transaction. A full diagram of the states is included below as well.

- Initiating a Transaction

  All transactions are created by the buyer. The buyer specifies:

  1. Who the seller is (represented by an Ethereum address)
  2. The price of the item in tokens
  3. Optionally, the mediator and policy addresses
  4. The metadata of the transaction (this is a hashed representation of the metadata)

  It may seem strange at first that the buyer is the one initiating the transaction, but this is to prevent an extra call to the Ethereum blockchain. In practice, apps supporting the Ink Protocol will wrap the entire process for buyers and sellers such that either the buyer or seller can create a transaction. Additionally, even though a buyer initiates the transaction, it does not mean that the seller is automatically held accountable for the

transaction. The seller must approve the transaction before it is considered legitimate. The seller can also just ignore it completely. Meanwhile, the buyer's funds are held in escrow by the transaction.

- Revoking a Transaction

  If the buyer and seller do not agree on the terms of the transaction, the seller simply ignores the transaction. The buyer however, has to revoke the transaction to get her tokens back from escrow.

- Accepting a Transaction

  The seller specified on the transaction can accept the transaction if he agrees to the terms specified by the buyer. Accepting the transaction means that the seller can confidently begin to process and ship the purchased item since the payment is secured in escrow.

- Transaction in Progress

  Upon accepting, the transaction is now in progress, and the seller is now on a fulfillment timer to deliver the goods as promised. The length of time allowed for fulfillment (e.g. 2 weeks) is defined in the Policy specified in the transaction. At this point, one of four things can happen:

  1. If the item is not delivered within the fulfillment time, the buyer has the option to dispute the transaction.
  2. If the buyer receives the item and all is well, she would confirm the transaction and the payment will be moved to the seller's address from escrow.
  3. The seller can refund the transaction if something went wrong and the seller accepts fault.
  4. Enough time (defined in the Policy as the "transaction time") has gone by and the buyer has neither confirmed nor disputed the transaction. The seller is now able to confirm the transaction himself and receive payment.

- Transaction is Disputed

  After the buyer disputes the transaction, the seller has a chance to respond. One of four things can happen:

1. The seller can escalate the dispute to the mediator to determine the outcome of the transaction.
2. The seller can refund the transaction.
3. The buyer can confirm the transaction.
4. The buyer can force a refund on the transaction after a time (defined in the Policy as the “escalation time”) has passed.

- Transaction in Mediation

  After escalation, the mediator chosen by the buyer and seller should begin the process of collecting information to make an informed decision on the outcome of the transaction. The mediator is granted a period of time, defined by “mediation time” in the Policy of the transaction, to complete this work. During this period, neither buyer nor seller can act on the transaction.

  In the rare case that the mediator is non-responsive or late in their response (the “mediation time” has passed), the buyer and seller each have two options available to them. The buyer can choose to confirm the transaction, thus transferring the payment to the seller. The seller on the other hand can choose to refund the transaction. Alternatively, both the buyer and seller can unilaterally settle the transaction, causing a 50/50 split in the payment going to buyer and seller. For all three of these outcomes, no mediation fee may be taken by the mediator.

  After the “mediation time”, and until the buyer or seller have taken action, the mediator can still respond to the dispute.

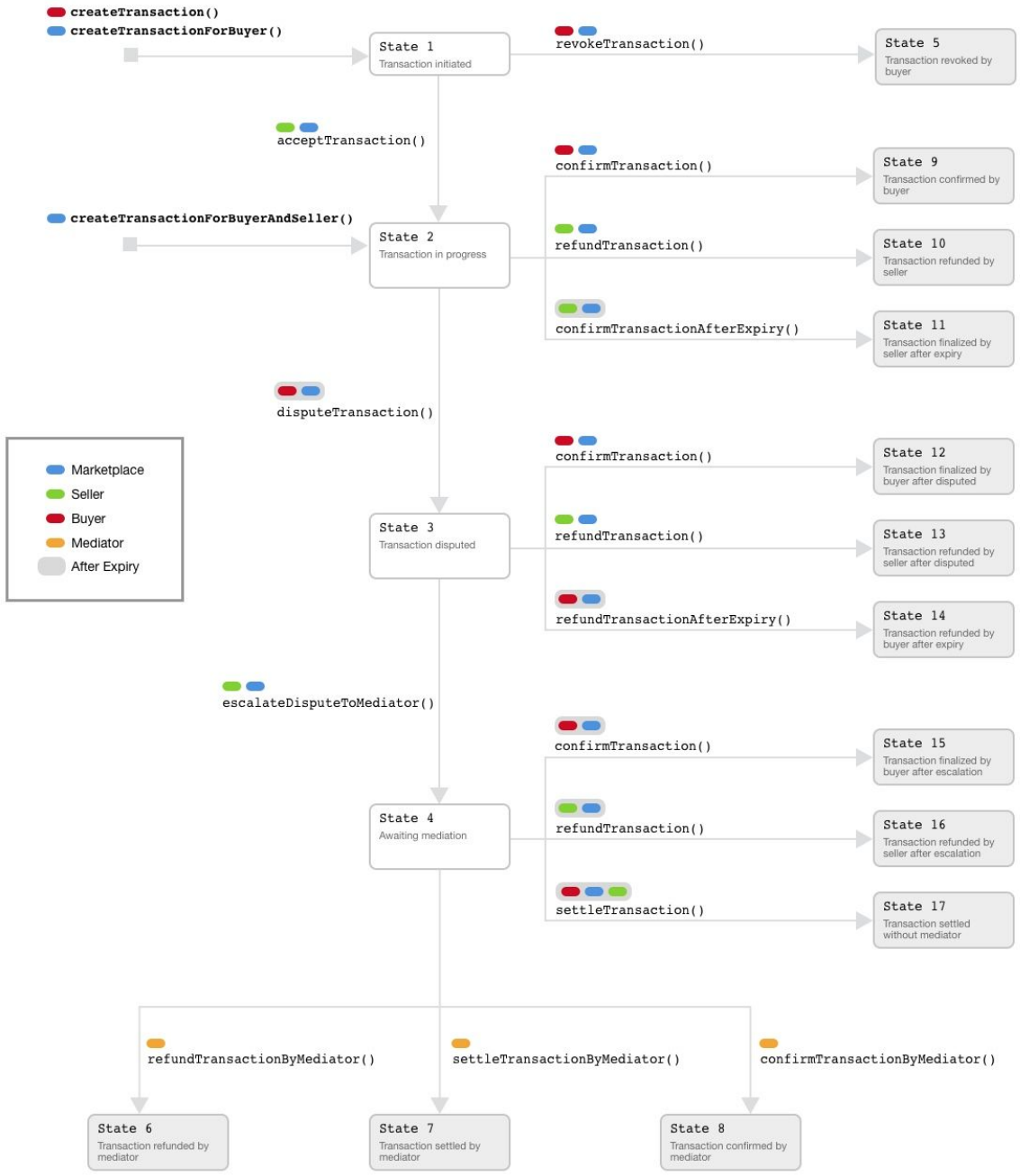
- Transaction is Mediated

  The assigned mediator is responsible for making a decision after collecting enough information from both buyer and seller. The mediator can do one of the follow:

  1. Refund the transaction—payment goes back to the buyer, less the mediator’s fee.
  2. Confirm the transaction—payment goes to the seller, less the mediator’s fee.
  3. Settle the transaction—the payment is divided between the buyer and seller at the mediator’s discretion. The mediator can also take a mediation fee at this point as well.

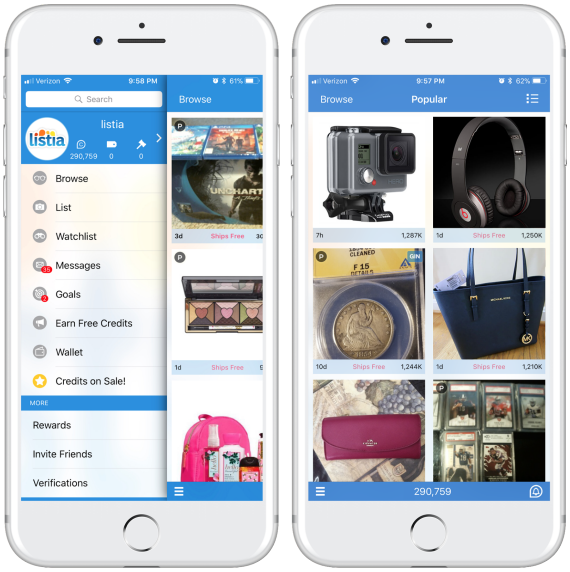
Ink Contract State Diagram

Transaction with Mediator



3. Integration with the Listia Marketplace

Replacing Listia Credits



XNK will fully replace Listia Credits as the main currency, and Ink will become the main reputation system within the marketplace. Users will buy and sell items using XNK and initially will be able to earn additional XNK for engaging with users, listings, and advertisers in the marketplace. It will be a seamless transition for current Listia users who are already accustomed to using a virtual currency to buy and sell.

Existing Listia users will need to login and verify their accounts, if they haven't already, before exchanging their current Listia Credits for XNK. This exchange of Credits for XNK will be available at launch and for at least 6 months after launch. At launch, new listings and prices in the marketplace will be converted from Credits to XNK, so each user's buying power remains exactly the same to start. This will serve as an initial anchor and stabilizer for the market price of XNK.

After launch, users will also start to earn XNK in all the places where they used to earn Listia Credits, such as certain goals and incentivized engagement, referring other users, and completing tasks and offers. The amounts of these rewards will change and the requirements may become more strict as the incentives and potential value of XNK changes. Users will still be able to buy XNK to spend or make up the difference when they don't have enough to buy an item. In this case, Listia may sell directly from its own supply of XNK or help users buy from a third party exchange.

Millions of consumer wallets

Listia will integrate virtual XNK wallets for each Listia user account. The wallets will be created and maintained by Listia for the purposes of transactions within the Listia marketplace, but will also support withdrawals and deposits to and from external addresses via the public Ethereum network. Within the Listia marketplace, Listia will manage the transactions for each user and hide the complexities of dealing with public/private keys, Smart Contracts, etc. In the beginning,

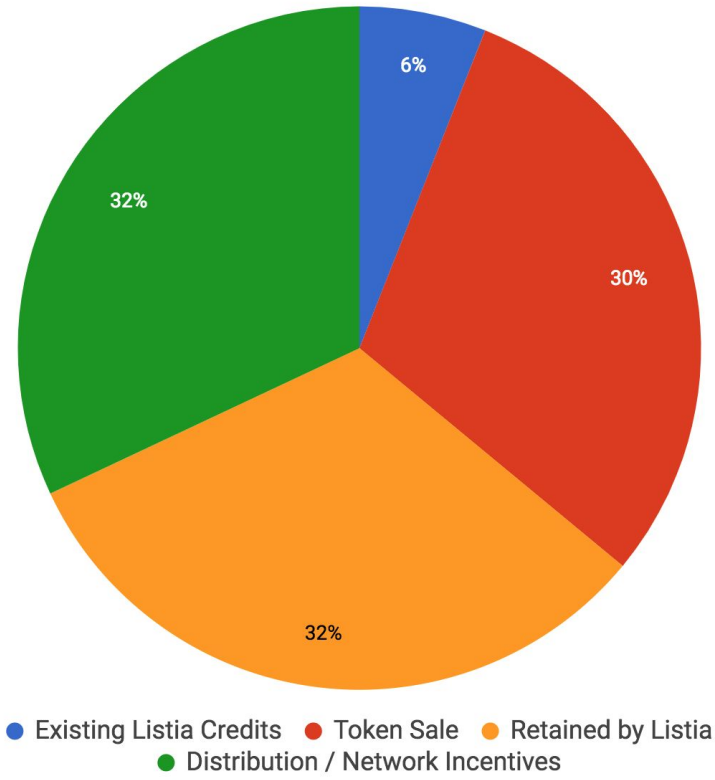
Listia will maintain its own centralized off-chain transaction history to speed up transactions and avoid fees, while separately settling fully completed transactions on the Ethereum blockchain as needed to publicly record reputation and feedback. However, the long term plan is for all Ink transactions on Listia to settle directly on the Ethereum blockchain. Listia users will not need any Ethereum or cryptocurrency knowledge to start and continue buying and selling in the marketplace.

4. Token Distribution & Economics

Token distribution

XNK will be distributed as widely as possible during a token distribution event at launch. The distribution will consist of exchanging existing Listia Credits for XNK, and also a private and public capped sale of tokens.

Token allocation



Token sale terms

- Ethereum ERC20 Token called XNK
- 500 Million Ink Protocol Tokens Issued (500,000,000 XNK)
    - 6% reserved for existing Listia User Credits
    - 30% sold in presale and public token sale
    - 32% retained by Listia, vested over 3 years
    - 32% allocated for distribution and incentivizing the network, released over 3 years
- Price per Token: $0.10 USD
- $15MM Maximum Sale Cap

5. Team

The team first came together in 2009 to build Listia into a community where over 100 million items have been traded. With over 8 years of experience building a peer-to-peer marketplace, the team is now focused on applying what they have learned and creating the foundation for decentralized marketplaces of the future.

https://www.paywithink.com/#team

6. FAQ

"For Listia, what is the benefit of switching from Credits to XNK?"

- XNK provide more value to the end user because they are fungible and can be exchanged for fiat currency or other cryptocurrencies.

- Listia no longer needs to act as a central bank to print and regulate the credits, which has led to inflation issues in the past.

- Listia can eventually replace its centralized reputation, feedback, and escrow systems with Ink's decentralized system.

"Why create Ink and not use existing tokens or cryptocurrencies?"

- From a technology standpoint, you could certainly use other cryptocurrencies purely for payment, but Ink is more than just a payment system. Ink is all about decentralizing reputation and helping buyers and sellers connect and pay safely no matter which

marketplace platform they choose to use. The Ink Protocol Token is required to write to this new reputation network and is the best way to guarantee that payment is made to the right person.

- The price of XNK should also be decoupled from the price of ETH and other purpose-built cryptocurrencies, as Ink's market cap should be tied to the GMV of the goods and services being traded in peer to peer markets and not the price of running contracts in Ethereum or influenced by Ethereum policies that may affect ETH in significant ways.

- Most importantly, creating a native token helps to create strong incentives for users and build very powerful network effects. The problem with current cryptocurrencies is that there isn't any consumer usage and no reason for users to start using it. Ink has the power to change that, as it is designed from the ground up specifically for P2P marketplace transactions. Users who use it will have an ownership stake in the system and be more incentivized to spread its usage as they can directly benefit from its success.

- To truly jumpstart these network effects, Listia will be able to distribute XNK to millions of users in the existing marketplace. These are power users who are already buying and selling using a virtual currency. Each of these users can directly benefit by spreading the usage of Ink. It is not possible to do this with an existing cryptocurrency such as ETH or BTC.

"What incentive is there to hold XNK? Will the velocity be too high to support the token's economy?"

- XNK is designed to function as a cryptocurrency, so selling and buying with XNK will typically be cheaper than converting back and forth between fiat currency each time, due to credit card and/or bank fees. So, for users that are buying and selling frequently within either the Listia marketplace or other marketplaces, it makes sense to hold XNK so they can purchase goods or services through the token at a later time.

- Managed marketplaces like Listia will also incentivize holding XNK by giving lower service and transaction fees when transacting using the cryptocurrency vs. fiat.

- Ink has a staking function built directly into the protocol in the form of the escrow feature, which naturally reduces velocity of the token. Escrow locks up tokens for a long period of time, usually many days to a couple weeks. During this time, the seller prepares

and ships the item while staking their reputation against the tokens in escrow until the buyer receives the item.

"What unique functionality will Ink provide that is not already present in other tokens and cryptocurrencies?"

- Ink is built specifically for a typical transaction within a P2P marketplace and thus includes all of these features built-in: decentralized reputation and feedback, decentralized escrow, and third party dispute resolution.

"Why would other companies use Ink over starting their own coin or token?"

- Any app can certainly start their own token for transactions within their own ecosystem, but by creating a purpose-built token for P2P marketplace reputation and payments, getting it into the hands of millions of people on day one and being the first of its kind, Ink can generate the network effects necessary to become the *de facto* standard way that people buy and sell with each other.

- Once enough users have built up their public reputation within Ink, it will be difficult to incentivize them to move to a new system.

"Will companies be willing to share proprietary data from users?"

- Ink is designed to capture the fundamental details about a transaction, so it does not require other companies to actively share any proprietary or sensitive data about their users. The data within the Ink ecosystem will be built organically one transaction at a time, with a big boost from the Listia marketplace integration.

"Why would other marketplaces use Ink instead of only fiat currency like USD?"

- Listia will also be building a simple payments app so users of huge marketplaces such as Craigslist, Facebook Marketplace, OfferUp, Letgo, etc. can start using Ink right away, without needing any integration or support from those marketplaces.

- Companies like Airbnb rely heavily on user reputation and feedback, which is why they have insurance for home renters and require deposits for guests. If users came on board with existing transaction histories, things like insurance rates could go down and there would be lower fees for home renters that accept Ink. Guests would not need to place deposits each time, and then get them refunded, as they could use the Ink escrow feature, which would automatically settle funds as needed.

- Marketplaces that exchange money for services like Angie's List or Upwork try to control feedback scoring and reputation within their marketplace. However, for the service provider that is providing great quality service, they still have to ask you to leave positive feedback. The decentralized reputation and feedback built into Ink rewards service providers with a better payment option and automated way to earn reputation and get feedback. Marketplaces working together on one blockchain have more power to root out bad service providers while making it more efficient and rewarding for good providers.

7. Links

[1]https://techcrunch.com/2009/08/05/listia-is-an-awesome-way-to-give-and-get-free-stuff/

[2]http://www.businesswire.com/news/home/20070426005614/en/Average-U.S.-Household-50-Unused-Items-Worth