



AnkerPay Whitepaper

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Overview

AnkerPlatform

The AnkerPlatform is an improvement on current public chains with characteristics, when combined as a whole, makes it an extraordinary tool for the creation, execution and maintenance of a wide variety of decentralized financial applications, tokenization and smart contracts, on a self-governing decentralized autonomous organization capable of maintaining its governing model and constitution.

AnkerPay

AnkerPay has set out to make a product that has practical solutions to real-world problems with an emphasis on finding solutions for both individuals and corporations. These problems manifest itself most notably in areas lacking proper banking institutions, where the need for a solution to trade is the highest. It is with this backdrop that we have created an end to end solution to certain problems faced by people. AnkerPay has thus made practical solutions to spur adoption. The Point of Sale application allows merchants to accept crypto but receive in their local currency, mitigating the risk of an unstable and or volatile market. Our Transaction surety application is built into all wallets allowing users to send using their email address simplifying the acceptance.

Introduction

Since the inception of bitcoin and Satoshi's white paper, there has been a lot of debate regarding the role of a decentralized future, the importance of p2p transactions and adoption. For many, this last yet crucial part is currently lacking as governments around the world try to make sense of what to do with this new technology. As a whole, the complete control of bitcoin and other coins have been unsuccessful and governments, reserve banks, and large institutions are struggling to come to terms with this phenomenon.

AnkerPay is a decentralized network of nodes without excessive control and intermediaries that ensures lightning-fast and secure transactions, multi-wallets, low fees and a limited number of total coin supply. Since the nodes are continually connected to the network & perform certain tasks, this allows the coin to achieve faster and more private transactions. AnkerPay is a permissionless blockchain-based cryptocurrency with a collection of integrated features to form a blockchain-based company and e-commerce solutions that can be implemented by individuals and corporations.

For example, The AnkerPay Identity service is used by all other services to create cryptographic proof verifying the ownership of an identity and ensuring the owner of the wallet is the only who can make transactions. Similarly, large institutions can use the fact that their identification is AnkerID for Know Your Customer and Anti Money Laundering registration and confirmation making cryptographic payments simple to implement in day to day transactions. When creating an AnkerPay Wallet users can opt to create and verify their identity on the "Anker-chain"; a blockchain that stores the identity of users and allows for verifiable transactions to take place between entities. Additionally, the swift function gives individuals and corporate entities the ability to move funds promptly without the backlog of past transactions.

The market

There has been growing scepticism regarding the crypto market as a whole with primarily banks and economists that rely on the current dispensation that BTC, Eth and the blockchain as a whole is fad similar to the “Tulip Mania” during the 17th century while another claim that blockchain is now abundant and not “scarce” anymore. While comparing the biggest single invention for the past few decades to flowers and wanting a new technology to remain scarce are two obvious fallacies, nevertheless, they fill newspapers and household conversations globally. To address these issues we have made a viable interim adoption plan that will allow for adoptions to take place worldwide especially where it is most needed- in underdeveloped and unbanked communities.

Problems

1. Proof of work: Proof of work has a long list of drawbacks one of which is the sheer amount of energy consumption in order to facilitate a transaction. Making worldwide adoptions either impossible or not energy efficient.
2. Long addresses: Addresses 20+ characters long in a string that makes it hard to remember or even use for the typical user. Avoiding countless BTC losses sent to wrong addresses.
3. Identity and lack of trust: Without trust, the concept of exchange falls apart. The lack of trust creates a unique problem for adolescent forms of payment.
4. Accessibility: Currently banking is expensive in the third world where banking infrastructure is few and far apart, fees are high and transactions slow.
5. Privacy: Transactions can be made privately.
6. Access to fiat: Third world countries are especially far behind when it comes to crypto-fiat exchange services.
7. Lacking basic functions: Current blockchains lack basic but fundamental support that will make adoption easier.

Solutions

1. Proof of stake: Proof of stake is more effective at securing the network since they are not centred are the acquisition of hardware that can give certain competitors a distinct advantage.
2. Alias: Use your email to send to anyone. Each email address is linked to an ANK address.
3. Digital Identity integration: Digital Identity integration into the wallet and AnkerPay servers will allow a trust-based exchange system to evolve to deliver a true currency.
4. Unbanked: An application and chain that serves all the features of a bank or banking institution.
5. Privacy: Opt to send ANK privately.
6. Access to fiat: Using fiscal ATM's and Point of Sale devices to spread AnkerPay to the far-reaching third world.
7. Add functions: Adding functions such as the “ AnkerPay saving account” gives people access to services that have been around for centuries. An identification system is also added to AnkerChain.
8. Smart contracts for Decentralized financial applications.

Current Limitations

Moving away from traditional payment solutions is a growing trend. This becomes even more prevalent in emerging markets where traditional payment solutions are limited or nonexistent.

As financial services evolve and we move more towards a cashless world. Digital payments through platforms like Alipay is the logical step and will disrupt current solutions. When comparing these centralized networks to decentralized solutions it becomes clear that the costs associated with these centralized networks are extremely high and customers still have to rely on a single entity that controls the flow of funds.

Blockchain through decentralized computing networks allows peer to peer transactions for a fraction of the cost-saving time and money.

1. Cryptocurrencies have become a shell of their former selves with high fees and slow transaction times limiting their use and defeating the purpose for what they once were created for.
2. Lack of transparency and accountability has made trading of goods and services hard if not completely undesirable. Private transactions serve a function within the crypto ecosystem but limit the potential of crypto in practice. Accounting practices are marred and simple transactions between individuals complicated.

AnkerPay

Spreading adoption in Africa by creating a truly cashless environment. Eliminating the need for gatekeepers and centralised intermediaries.

1. AnkerPay Wallet:

The AnkerPay Wallet has a variety of features that make it an ideal all in one wallet solution with an incredibly user-friendly design that makes trading storing and using the wallet simply. Users can switch coins listed on the wallet and make daily trades that suit them the most for any given situation. It also includes a savings account where users can stake some of their ANK to earn interest.

2. AnkerPOS:

The AnkerPOS application is an all in one crypto acceptance application that allow institutions, shop owners merchants and vendors to easily and readily accept crypto payments. The buy function can be used to turn any shop or store into a crypto over the counter trading desk. The sell function can provide large stores and casinos with an easy crypto payment solution that settles the transaction in their local currency. The pay function is aimed at merchants that want to use crypto acceptance for their products in-store this is all linked to a dashboard with a complete list of transactions and Invoices.

3. AnkerPlugin:

The AnkerPlugin that fits into most websites provides a cryptocurrency e-commerce solution that gives online stores flexibility when accepting payments.

4. **AnkerATM:**

The AnkerATMs is a growing network of ATMs that allow for purchasing cryptocurrencies and is focused primarily on the Developing Economies like Africa, where the need is the greatest and where banking infrastructure lacks.

The combination of these adoption platforms makes for a truly unique and incredibly rich crypto payment ecosystem and reflects the holistic approach AnkerPay has with regards to crypto payments.

Looking forward

ANK aims to alleviate the problem facing crypto payments today by integrating key elements and features into a single usable coin, solving the overshadowing problem of identification during the transaction acceptance process while keeping the important function of anonymous fund transfer. We think that these problems have plagued full crypto integration and practical application in the real world.

AnkerPay's mission spread adoption through practical implementation on both software and hardware that allows users and merchants to execute transactions, easily perform audits, trace transactions using an ID anchor, AI to calculate the user's credit rating for lenders and for large corporations to move resources in private. We think that AnkerPay is the perfect combination of transparency, speed, and practicality. Low fees will give also give the unbanked the chance to use banking services for the first time. According to the world bank, 1.7 billion people remain unbanked in 2018. AnkerPay's main Mission is to provide an easy and secure solution to this problem.

Creating a three-way approach to solving the core issues with adoption that sets AnkerPay apart.

AnkerPlatform

1. **Smart Contracts:**

Smart contracts have been widely adopted since its inception with a broad scope of use cases from digital identity to land title recording. AnkerPlatform along with all our products aim to be accessible, valuable and free. AnkerPlatform is easy to use and smart-contracts simple to execute, with transactions being paid in ANK. AnkerPlatform will use Quark for signatures, which is a hashing algorithm known for its energy efficiency and low RAM usage lowering the barrier to entry.

With some of the benefits being:

- Open Source and free to use
- Relatively inexpensive
- Solidity based
- Scalable

AnkerPlatform is also ERC-20, ERC-721, ERC-223, ERC-1155, and ERC-777 compatible which allows for interoperability cross-chain development on the AnkerPlatform.

We believe that adoption can be expedited by creating the tools that have been lacking for mass acceptance and making these tools accessible for creators to use. With the spirit of that philosophy AnkerPay's core philosophy has taken root, a leg of which is the overarching umbrella AnkerPlatform.

2. AnkerPlatform as a DOA.

The AnkerChain's decentralized infrastructure was created as a decentralized autonomous organization (DAO) or decentralized autonomous corporation (DAC) and the rules encoded onto the AnkerChain gives node operators the ability to vote on strategic issues central to Anker as a whole. The role of the AnkerNodes will be as follows:

- Decide where capital can be allocated and approve budgets.
- Set up, align and maintain the Anker constitution and its company values as a whole.
- Create short and long term goals that work to further Anker's cause as an organization.

In this DAO model node operators will effectively be the main contributors of the network and of the vision and mission of the network, acting as guardians to the chain and will be rewarded as such with an intuitive design(which will be explained later).

3. AnkerPlatform as decentralized finance infrastructure.

The AnkerChain will support tokens and smart contracts for the public creation of decentralised financial(Defi) services lending its base infrastructure as a platform for other financial services. Entities, corporations and developers can freely develop on the platform to address demand in their respective market places. Transactions will be paid for in ANK with a floating fee, that is accessible and cost-effective.

Decentralized Finance Applications

Our Ankerswaps will enable cross-chain interoperable swaps. This will enable us to create new decentralized Finance applications including, but not limited to the following:

1. Decentralized Lending:

This will enable users to benefit from a blockchain agnostic platform that will algorithmically set interest rates that are based on normal supply and demand rules. Users will be able to take out loans and use any cryptocurrency as collateral.

For example, User A needs to borrow Litecoin for a leveraged trade. He possesses 10 BTC. User A puts the bitcoin up as collateral and Borrows 400 LTC from user B. The cross-chain swap is enabled by the Ankerswap. From here User B receives Interest payments in the BTC and once the loan is repaid the LTC plus the interest is returned to user B and User A will receive the BTC back minus any interest payments.

2. Decentralized Options trading.

As assets digitize in the coming years the next step will be to create a decentralized options trading platform that can facilitate options trading while keeping ownership of assets. American and European style options can be offered. Allowing users to have the freedom to exercise options at any given date, European style options will settle automatically on the expiration date.

3. Decentralised Futures trading

In conjunction with decentralized lending, users will be able to increase their position size and use this to facilitate margin trading without relying on a centralized entity. These Bitcoin and other Crypto asset futures could either be settled in cash or by Physical delivery of the asset on the settlement. Ankerwaps would unlock another unique feature allowing users to use different assets as collateral due to the blockchain agnostic features. Also allowing for delivery in various assets based on the position size.

As assets digitize in the coming years the next step will be to create a decentralized options trading platform that can facilitate options trading while keeping ownership of assets. Similar to the creation of large, so-called, “honey pots” that plague centralized exchanges today, will continue to create problems in the future. That is why a decentralized form of options trading that can alleviate these pitfalls is inevitable. For this reason, the decentralized nature AnkerSwaps is a perfect enabler for such advancements in the way we trade and in the way we view options trading as a whole.

Similarly, as we progress towards a more decentralized economy and invest in software that allows access for anyone anywhere in the world decentralized futures trading can be incorporated in the same manner as options trading. Getting rid of the middleman and granting access to billions of people worldwide. Certain features of AnkerPay can also be implemented such as digital identities, ensuring that the local laws are adhered to for traders. The AnkerPay Blockchain with its innovative solutions grants users and innovators the opportunity to create trustworthy applications, complaint yet decentralized. The same can be said for short term loans, mortgages and others that have been made possible by the AnkerPlatform.

AnkerPlatform built-in Defi.

The AnkerChain has a number of built-in decentralized financial services, one of them being AnkerSavings. AnkerSavings act similar to a savings account at the bank and users can easily place their savings in a vault and earn interest. This feature came to light in the first iteration of the AnkerChain and gives users a hassle-free “staking” mechanism that can be activated in their AnkerPay wallet for iOS and Android. The AnkerPay wallet is an SPV wallet and gives the user complete control. When AnkerSavings is activated it is automatically added to the blockchain. This gives users that want to participate and use their ANK in a meaningful way the opportunity to do so without the constrained efforts and costs involved in running a full node. Similarly, node operators that run on their node on Windows have the option to create a node in a single click. This further enhances the accessibility for operators that do not have the technical know-how but want to secure the network.

AnkerPlatform: Governance and Algorithmic agency.

Node Seniority:

To prevent mining incentive from degrading, usage of services and length of bonding are tied to an inflation metric for block rewards. Transaction fees remain to provide an incentive to mine and relay transactions but rewards depend on the demand for using the AnkerPay network. Bonded validators serve network utility in exchange for a mining reward adjusted based on seniority. The longer the term of the bond contract the more deflation-adjusted return on investment, the user would make up to a maximum rate. As utility increases and bondholders remain, a seniority metric slightly adjusts the supply base for the increased incentives. For every 3 months of blocks that one bonds coins and provides master node services, a 3 % increase in ROI - on average - is accounted for in the mining reward. This can carry forward for up to 18 months in blocks or 25 % maximum deflation-adjusted ROI.

One-click node setup:

To add functionality and ease of use the AnkerPay Wallet features a single click master node setup. Node operators can easily install and add a node to the network using the AnkerPay wallet with their collateral.

Foundation:

For every block mined 10% of ANK go to the network. This funds the network and ensures that the ANK foundation can grow. These funds will be used exclusively on the development of AnkerPay. With the implementation of masternode voting, anyone can then vote on the direction of the project and future developments. This not only ensures the longevity of ANK but allows the project to develop and mature over time. Funding may be used for Exchange listings, to secure merchant partnership, to expand to different geographical locations, for charitable donations and to develop a foundation focused on increasing the overall adoption of not only ANK but all cryptocurrencies. Proposals will be Curated by the ANK team and submitted for voting and approval by the community.

AnkerPay Cold Staking or AnkerSavings:

Cold staking allows users to lock an amount of ANK in their wallet that then acts like a savings account, granting them daily interests. Coins are locked for three months and it allows users that have ANK to benefit from the natural inflation.

AnkerID:

We have created an efficient and safe Identity storage system maintained on a database program which allows direct payments to and from digital identity verified names and entities. We have moved forward and created a decentralized, efficient way of storing information and sending funds that simplifies payment discovery, auditing and maintaining balances that signifies a great leap for mediums of exchanges and security.

Transaction Surety:

Each address is linked to an email address that can then be used in the wallet in order to send to that address. This significantly increases the usability for the average person as users can send easily and without the need to remember the address.

Invoices:

Using the (upcoming) AnkerPay Wallet users can create invoices for payment. Invoices get sent directly to the paying wallet asking them to approve the transaction. Invoices are also a convenient way to store data about sales and purchases.