

WHITEPAPER

V.01 6-29-2021



Table of Contents

Executive Summary
Introduction:
What is Cryptocurrency?4
Opportunity6
Problems worth solving:7
Clanity as a solution9
Business & Our Features13
Revenue Model14
Fee from community engagement tasks14
Transaction fee
External cryptocurrency fee15
Commission from data monetization15
Clanity Platforms
External Fees
Market analysis
Growth of Cryptocurrency and Blockchain17
Business Partners' customer acquisition and retention
Customers' loyalty rewards18
Social media for community engagement 19
Competitive Landscape
Tokenomics
Roadmap
Team
Advisors
Conclusion
Disclaimer
Glossary
References

Executive Summary

With Blockchain revolutionizing business models worldwide, businesses' rewards and customer engagement functions are making underwhelming progress, if at all. These programs follow the archaic and decades-old practices that have led them to become ineffective means of generating customer loyalty. In support, research shows that 54% of loyalty members are inactive, further pointing towards the ineffectiveness of reward programs in retaining customers.

Clanity aims to address this problem with its plan to build a self-sustaining community worldwide by connecting businesses with their customers through our blockchain rewards and engagement program.

Clanity will have a Cardano native utility token with a worldwide use case and a high potential for world adoption. This token will be used to reward customers for performing transactions with our business partners. Furthermore, business partners shall also use this token to create community engagement opportunities for the public and reward the public for engaging with the brand. In this way, Clanity shall utilize the latest advances in cryptography and distributed ledger technology to support local businesses and low-funded schools by creating rewarding and attractive loyalty/reward programs and community-business engagement opportunities.

Problems	Solution
Inefficient rewards programs	Revolutionize rewards programs using Blockchain
Underutilized blockchain-based value additions	Introduce Blockchain in the underrepresented rewards functions
Decreased funding in local public schools	Support local schools by providing an opportunity to become engagers and earn rewards
Data exploitation by corporate giants	Users control and own their data with an opportunity to earn by choosing to share their data
Online competitors challenging local physical retailers	Encourage foot traffic to brick-and-mortar retailers

In pursuit of our mission, we will be solving many problems, as shown in the table below:

With the cost of customer acquisition increasing by 60% over the past six years, we believe businesses are drawing their attention towards customer retention as a more cost-effective and long-term solution. The loyalty management market in 2020 was estimated to be worth \$185 billion globally, with a 5-6% CAGR estimated till 2022. Clanity aims to exploit this growing and massive opportunity with its unique and innovative solution revolving around customer retention and loyalty.

Clanity has four main revenue streams:

- 1) Fees from community engagement tasks
- 2) Transaction fees
- 3) External cryptocurrency fees
- 4) Commission from data monetization



To drive Clanity's vision forward, we have assembled a team of experts and specialists consisting of four core team members with specialisms ranging from marketing to blockchain development to administration and operations. To support them, Clanity has industry expert advisors engaged as well.

Tokenomics

The Clanity tokens shall use the Cardano blockchain. We aim to create a fixed supply of 1 billion Clanity tokens, out of which 60% (600 million) tokens shall be used to raise \$50 million in funding. This funding shall be raised in three stages at different valuations, with the last being a crowd sale at \$0.1/token.

The remaining 40% (400 million) tokens shall be utilized as reserves for network participation rewards by staking and providing liquidity.

Introduction:

What is Cryptocurrency?

Cryptocurrency is decentralized digital money based on blockchain technology. You may be familiar with the most popular versions, Bitcoin and Ethereum, but there are about 5,000 different cryptocurrencies in circulation, according to CoinLore.

Many companies have issued their currencies, often called tokens, and these can be traded specifically for the goods and services that the Company provides through cryptographic proof. That cryptographic proof comes in the form of verified and recorded transactions in the form of a program called a blockchain.

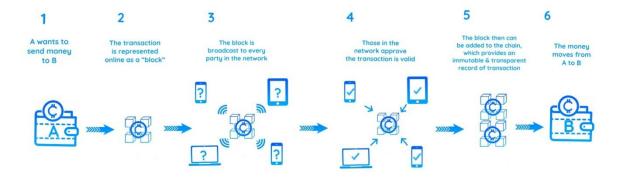
What is Blockchain?

A blockchain is an open, distributed ledger that records transactions in code. In practice, it's a little like a checkbook that's distributed across countless computers around the world. Transactions are recorded in "blocks" linked together on a "chain" of previous cryptocurrency transactions.

Imagine a book where you write down everything you transacted on each day, each page represents a block, and the entire book represents a blockchain.

Blockchain transactions rely on one of the two validators, **proof of work** or **proof of stake**. Both rely on a consensus mechanism to verify transactions. However, proof of work requires more computing resources and power to solve mathematical equations to validate. In contrast, proof of stake reduces the amount of power necessary to check transactions through "staking." Think of it as like a bank deposit to earn interest. Participants can stake their cryptocurrencies to participate and be eligible to verify transactions and, in return, get shares of cryptocurrencies.

One key feature of blockchain technology is that a hacker cannot alter a blockchain ledger unless they successfully got at least 51% of the ledgers to match their fraudulent version. The amount of resources necessary to do this makes fraud unlikely. This feature makes the blockchain ledger immutable and transparent.



How a blockchain works



What is a smart contract?

Smart contracts are simply programs stored on a blockchain that run when predetermined conditions are met. They are typically used to automate the execution of an agreement so that all participants can be immediately certain of the outcome without intermediary involvement or time loss. They can also automate a workflow, triggering subsequent and programmed actions when conditions are met.

What is Cardano, and why is it a better platform?



Cardano is a 3rd generation blockchain focusing on **security, scalability, and** *interoperability*. Since its inception, the technology has grown along with the community, which has been evident in 2021. Cardano is solving some critical problems with the 1st generation, Bitcoin, and 2nd generation, Ethereum. Previous generation blockchains suffer from a limited number of transactions they can handle, making them inefficient for globalscale mass use.

When the Cardano blockchain was first tested in 2017, it could process around 257 transactions per second (TPS). On the other hand, Bitcoin can only process 7 TPS and Ethereum a little higher at 25 TPS. Visa can process approximately 2,000 TPS which is unreachable at the moment in the blockchain world. However, with the introduction of Cardano's Ouroboros Hydra solution, it is now looking at more than 1 million TPS. Not only that, Ouroboros also reduces energy cost, provides provable security guarantees with transactions and seamless execution of smart contracts with Hydra's Extended-UTxO model.

Feature	Cardano Native Tokens	Ethereum ERC20
Relationship to the Blockchain	It's native. Most functionality is built into the ledger itself. A contract standard. copy-paste the stand code & modify it	
Transfer logic provided by	The Cardano ledger itself.	Copy-pasting from the ERC- 20 template.
Controlled by	A forging policy script in any scripting language supported by Cardano.	A Solidity smart contract.
Smart contract not required to transfer	~	×
Can it be used by other smart contracts without special support?	~	×
Can it be transferred alongside other tokens?	~	×
No special fees required to transfer?	~	×

Comparison Chart between Cardano Native Tokens and Ethereum ERC-20



Additional event-handling not required to track transfers?	~	×
Supports non-fungible tokens?	~	×

Cardano supports user-defined tokens natively, without the need for custom code, through the native tokens framework. **Native tokens** is an accounting system defined as part of the cryptocurrency ledger and enables tokens to be transacted with (tracked, sent, and received.) This feature eliminates the need to use custom code or costly smart contracts. In short, native tokens remove the unnecessary layer of expensive complexity and inherent inefficiency found in most blockchains.

Aside from the robust technology, Cardano's mission is to become a platform for changemakers, innovators, and visionaries, with the tools and technologies required to create possibilities for the many and the few and bring positive global change. This vision perfectly aligns with Clanity's mission, and it makes perfect sense for us to be under the Cardano blockchain. To work together and create something good for the world through the power of blockchain technology.

"Making the world work better for all." -Cardano

Cardano, Clanity, and our B2C rewards program

Clanity aims to utilize the Carano blockchain and Cryptocurrency to help local businesses increase traffic, customer loyalty, and collaboration with other businesses with our B2C rewards program. Our program is based on a better philosophy to build customer loyalty by offering innovative value additions beyond any specific business scope.

Our rewards program consists of three main elements:

- 1. Customers gain rewards (in the form of Cryptocurrency) in return for transactions with our partner businesses. The business in return will gain advertising opportunities in our community.
- 2. Businesses share community engagement activities that will aid them in advertising and branding. When customers participate in these activities, customers earn rewards.
- 3. Holding a certain amount of tokens in their wallets shall enable consumers to further rewards.

These shall be discussed in more detail in our user-case section.

Opportunity

Clanity aims to address the following problems which create a business opportunity for Clanity.

Problems worth solving:

Inefficient rewards programs

According to the 2017 COLLOQUY Loyalty Census, a whopping **54% of loyalty program members are inactive.** Many never engage, or they opt out after a month. It lacks differentiation and fails to gain attention, attract new members, and retain existing members. Based on our research, 75% of consumers want to be rewarded for non-transactional engagements like taking a survey or interacting on social media. However, brands don't reward customers beyond the transaction.

Different brands also have different loyalty programs, which can be challenging to manage by the users. More than 50% of accumulated points, with an estimated worth of \$50 billion, are never redeemed.

According to a KPMG survey, 38% of customers had one or more of the following issues with the loyalty reward programs they participated in:

- Difficulty in redeeming awards
- Understanding what amounts of purchase correlate with rewarding points (a lack of transparency)
- Getting credits for purchases
- Having an accurate points balance

Underutilized blockchain-based value additions

Blockchain technology is the most influential technology of the 21st century. The benefits of this technology enables it to provide alternate business models and unique value propositions which are mutually beneficial to all market participants. Unfortunately, its adoption has not been that easy. It has its own set of challenges that needs to be overcome to accelerate its adoption. Though the financial services are early adopters of this technology, other sectors need to be enticed and educated by developing and applying this fantastic technology in their market niche.

Decreased funding in local public schools

Before the pandemic, governments were spending vastly different amounts on education. While it is difficult to estimate the effects of COVID-19 for each source of funding and for each country, in low- and middle-income countries, the pandemic is expected to reduce planned increases in education spending in 2020. There is evidence that some countries are already cutting their education budgets to make space for the required spending on health and social protection. Declining incomes may also lead to shifts in enrollment from private schools to public schools, adding further pressure on public education budgets. As schools begin to reopen, it will be critical to allocate additional funding to schools, universities, and other institutions. Funding will also be needed to ensure that the pandemic's impact does not fall disproportionately on the poorest and most vulnerable students.

"Without a remarkable economic rebound in the next couple of months, America's public education system will require additional federal

ACCORDING TO 2017 COLLOQUY LOYALTY CENSUS, A WHOPPING 54% OF LOYALTY PROGRAM MEMBERS ARE INACTIVE.



assistance to avoid a round of education cuts in the next two school years — cuts that, as we learned during the Great Recession, will fall hardest on historically underserved children." -Valerie Strauss | Washington Post

Data exploit by corporate giants

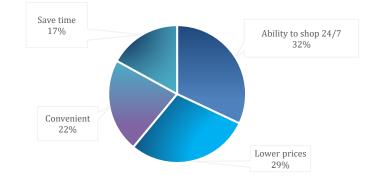
The right to privacy is a fundamental human right. However, once you sign the terms of service online to use software, the organization gains control over your data. The minute you fill an account online, most likely, the data brokers or companies are already building a profile about you and your interests. The majority **59%** of consumers believe that companies are not transparent about how they use data.

of consumers are not even aware of the extend of the data which is being shared. About this, 59% of consumers believe that companies are not transparent about how they use data. A further 36% of consumers think that companies are not concerned about the security of user data.

This \$300 billion-a-year industry is expanding with new types of data and innovative ways of data collection. Resultantly, consumers are becoming increasingly aware of the risks and shift towards more secure service providers.

Online competitors challenging local physical retailers

With e-commerce and online retailing building market share over the past decade, brick-andmortar companies are in trouble trying to keep up. Online retailers are winning customers with their low-cost business models and the customer conveniences offered. This trend is causing less foot traffic to traditional businesses, and resultantly their revenues are suffering. Research shows that 57% of consumers prefer to shop online. Below is a pie chart showing the reasons consumers prefer to shop online. COVID-19 has further worsened the situation for brick-and-mortar stores where customers are increasingly becoming concerned to visit any store physically and would instead prefer goods being delivered to them via online sales channels.



Reasons for shopping online

Clanity as a solution

Clanity proposes the following solution via its unique business model and proposition considering the above problems.

Universally revolutionize the rewards program

With 50% of points gained from reward programs unused till expired, this industry needs to be revolutionized. Clanity uses Blockchain and token technology to introduce a reward mechanism where rewards (tokens) can be gained for purchases made by customers, participating in community engagement activities, etc.

"Clanity will pioneer and revolutionize the rewards program by creating a universal reward token."

Introducing Blockchain to add value in unlikely areas

Clanity is introducing Blockchain to new areas such as rewards programs to benefit its market participants. Blockchain technology will increase the number of people benefitting from Blockchain's efficient and transparent transaction mechanism and provide businesses with opportunities to attract and provide unique benefits to their customers. Small businesses unaware of the technology would be taken on board as partners, increasing the adoption rate of blockchain technology, creating a network effect where more and more businesses would also move towards the technology adoption to remain competitive. Clanity, with its business model, would help such businesses in their adoption while remaining competitive and improving their customer acquisition.

Supports low funded schools or high impact nonprofit organizations

We strongly believe that our future depends on the younger generation, and providing them the educational resources is essential for scientific and economic advancement, which highly impacts the community. Part of Clanity's goal is to support low-funded schools and highimpact nonprofits to ensure that the younger generation is well equipped to take over the responsibilities of world innovation.

This shall be achieved by engaging schools to join our community to promote businesses by performing community engagement activities and earn rewards in return. An example of community engagement can be a business partner creating a task for engagers to complete. This task could be sharing social media posts, engaging with the brand on social media, creating user-generated content for the business, etc. The business partner will pay clanity tokens to access the functionality of creating these tasks. These tokens shall be used to pay engagers or users who complete these tasks. This creates advertisement opportunities for businesses and revenue for users (in this case, schools).

Furthermore, we would develop our Clanity Foundation to donate to schools on a need and merit basis.



Users control and own their data

Clanity wants users to own their data. In short, we respect our users' privacy. We do, however, need some information to optimize the model in some cases, but we will not sell them. For example, we need to know where our users live; suppose most of our users live in Hawaii. In that case, we want to bring in as many business partners in Hawaii on board so our users can earn the most rewards they can possibly accumulate while also helping their local economy. Allowing users to sell their data for self-monetization to business partners may be integrated into the platform in the future if there is a huge demand.

Bring foot traffic to business partners

Clanity's goal is to bring foot traffic back to brick and mortar businesses through our token rewards program. We will be reinventing the process of how businesses acquire new loyal customers. Clanity will offer efficient ways of targeting customers and effectively convert them into loyal purchasing customers.

We aim to do this by offering incentives for customers to visit these stores by offering tokens on physical purchases. These tokens shall allow purchases from these stores and transferable or traded for fiat currencies like the dollar and other cryptocurrencies. This would encourage customers to shop at our business partners for rewards.

Eventually, Clanity will cater to brick and mortar businesses and plans to expand and capture venue events like sports and concerts alike.



Token Use Case

The following three primary use cases showcase the utility and user benefits of the token. The cases demonstrate the flow of events and processes that lead to the outcome. The three cases include purchase rewards, community engagement rewards, and staking rewards.

1. **Purchase Rewards -** Clanity will incentivize users who complete a purchase at a business partner through our rewards program. Business partners will also get an advertising or community engagement incentive for every customer purchase—a win-win solution.

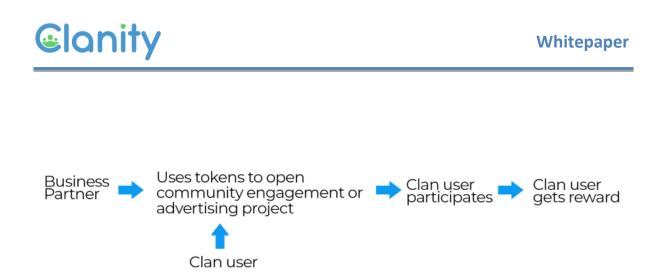
Ex. Taco Store A joined Clanity as a business partner. John Doe is craving tacos. There are 5 Taco Stores in his area. Only Taco Store A is offering Clanity token rewards. The most likely scenario is, John Doe will buy his tacos at Taco Store A due to the token rewards. If John Doe completes his purchase and gets his rewards, Taco Store A will also get its advertising/community engagement perk.



2. Community Engagement Rewards - Clanity will allow business partners to engage with their customers through our advertising and engagement program. Users will be more inclined to participate due to the token rewards once a community engagement task is completed using their social media platforms. At the same time, this will provide a low-cost customer acquisition, increase brand awareness and brand loyalty to our business partners.

This community engagement program is not only limited to brick-and-mortar businesses. We will eventually open this to online stores that need to advertise for community engagement using their tokens.

Ex. Taco Store A uses its tokens to create a community engagement task for advertising/promotion. The user or users who complete the task gets the reward.



3. Staking Rewards - users who hold a minimum of 15,000 Clanity tokens will be able to get interest rewards. This reward mechanism will be dependent on the number of coins staked, which are also dependent on the lock-up months.



Business & Our Features

Clanity plans to create beautifully designed platforms that are simple and easy to use yet very well architecture and robust for tech-savvy and non-technical users. Our platform shall have the following features:

User-friendly design - Clanity will be designed to offer value to our users and encourage widespread use. Our sound design will create a sense of trust and smooth transaction between the product and users.

Scalability and quick transaction time - Clanity plans to be widely adopted worldwide. Harnessing the power of Cardano means Clanity can process hundreds of transactions per second and maybe millions with the Ouroboros Hydra solution upgrade.

Minimal transaction fees - Clanity understands that users' most significant concerns involve the transaction fees. We want Clanity to be worthwhile, so we have designed the tokens to have one of the lowest transaction fees compared to other cryptocurrencies.

Trust and transparency – Clanity believes that trust and transparency create loyalty. Our features which include no third-party involvement and encrypted transaction records, lead to strong controls in this process. With such processes and controls in place, we can ensure the security and authenticity of your data.

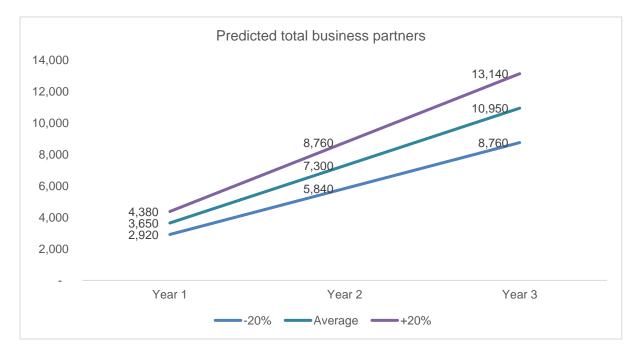
Security - We understand that the security of a token is essential. Our plan is for Clanity to be a more efficient and cheap way to interact between systems and use smart contracts most securely.

"Security goes hand in hand with adoption. Adoption goes hand in hand with usefulness. Usefulness is about the possibilities of using a network but also about the price of transactions and the time needed for settlement." -Underesearcher | Medium

Revenue Model

As demonstrated, Clanity will be utilizing Cryptocurrency and Blockchain to create a community around its token where all users will be using the token for transactions and activities, which will benefit the community.

We aim to attract, at least, an average of 10 business partners to our platform a day. Based on such estimates, it would lead to 10,950 business partners over three years. This will be accomplished by giving early bird incentives or perks. The graph below displays our constant rate of growth expected.



Clanity aims to generate income by charging small percentages on different activities the community engages in. Below are Clanity's primary revenue streams:

Fee from community engagement tasks

Business partners using Clanity tokens to create community engagement tasks for their advertisement and promotion shall be charged a 5-10% fee.

Projections	Year 1	Year 2	Year 3
Business partners acquired (assuming 10 per day)	3,650	7,300	10,950
Total community engagement tasks created (assuming 48 per business per annum)	175,200	350,400	525,600

Clanity

Transaction fee

A minimal fee of 0.5-1% shall be charged on all transactions (buy/sell and transfers).

External cryptocurrency fee

In payCLAN, if the business partners accept external (other) cryptocurrencies as payment, then a premium of 3-10% shall be charged on the transaction. This premium is on top of the minimum transaction fee. There may be 0-1% fee if the business partner is accepting Clanity tokens.

Commission from data monetization

5-10% of the revenue earned by users selling their data to companies shall be received by Clanity.

Clanity Platforms

Clanity offers several uses that go beyond the average peer-to-peer trading of Cryptocurrency. We plan to go mainstream and ensure mass adoption of our native currency. The lists below are the planned platforms that Clanity wants to create for the ecosystem. These may change depending on the evolution of the project.

CLANwallet - This is the planned web or application that seamlessly connects brick and mortar businesses and their customers once a purchase is completed. CLANwallet will process, hold rewards and serve as an actual token wallet for users.

CLANswap - This is a planned swap exchange platform built on the web or application for Clanity tokens that users can connect to **CLANwallet**. Cardano, Cardano native tokens, and possibly other cross-chain cryptocurrencies will be easily traded on this platform.

CLANbuzz - This is the planned smartphone application to materialize the community engagement and reward efforts for business partners and community members. Both parties can sign up and add specific tasks or complete certain tasks to get rewards and perks.

PayCLAN - This is a planned payment gateway application for business partners to accept Clanity tokens as payment from users. Using this, they will get token rewards per transaction and or little to no transaction fees.

DataCLAN - This is a planned platform that we may implement depending on demand to allow users to sell their data to business partners for their desired amount. Business partners may also offer a price to buy a user's data. Clanity will be taking a nominal fee for this transaction.

External Fees

External fees are not part of our revenue and are fees charged by service providers and other cryptocurrencies we must partner with to function.

The external fee that may be charged to customers is the Cardano minimal fee for transactions which is 0.17 per transaction.

There will also be fees regarding the exchange platform Clanity shall be listed on. This will also be borne by users and depend on the exchange users will use to perform transactions.

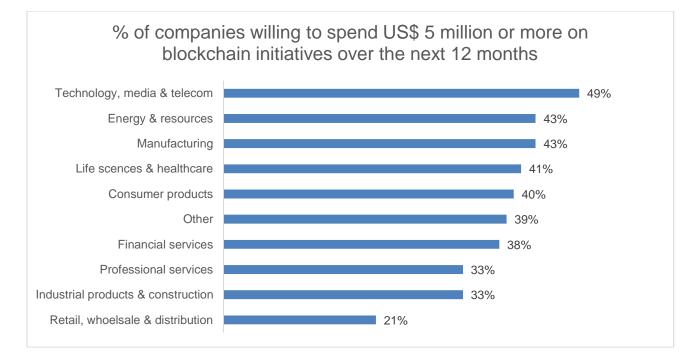
Market analysis

Growth of Cryptocurrency and Blockchain

Interest in Cryptocurrency among consumers, businesses, and everyday investors skyrocketed in 2021 as the price of Bitcoin rose from \$5,300 to \$60,000 in 12 months. Cryptocurrencies have many benefits for frictionless transactions and inflation control, but many investors add these currencies as assets to their diversified portfolios. As cryptocurrencies evolve and their number expands, retailers both large and small in the U.S. and globally are left to evaluate whether they should jump on board this semi-regulated digital train, and if so, how. Individual investors, small enterprises, and small-scale industries are increasingly switching to digital money to prevent the loss of cash in economic collapse or other crises in the current situation.

At the same time, other kinds of organizations, from financial management businesses to nonprofit fundraising groups, are examining the best way to integrate cryptocurrency use into their operational strategies. An example of this can be how several globally leading companies have begun accepting Cryptocurrency for transactions. Such a list of companies includes Microsoft, Coca-Cola, Tesla, Amazon, PayPal, Visa, etc.

The global blockchain tech market size was about **\$3.67 billion in 2020** and was projected to grow with a compound annual growth rate (CAGR) of 82.4% from 2021 to 2028. The report cites studies showing that by 2030, blockchain technology is expected to be a significant contributor to the global GDP, lifting it by close to USD 2 trillion. Deloitte's research suggests that 40% (out of 1,386) of companies in their survey are planning to invest US\$5 million or more in blockchain initiatives over the next year. Sectoral details can be seen in the graph below:



Clanity hopes to bring the same growth and opportunities to our targeted sectors.

Business Partners' customer acquisition and retention

Every business today competes for customer trust due to the pandemic. According to ProfitWell's survey of 1,800 companies, the cost of acquiring new customers has increased by 60% for B2C companies over the past six years. Hence, customer retention is cheaper and more beneficial in the long run. This makes loyalty a competitive differentiator in the marketplace. It is expected that more brands will be revamping their loyalty programs to meet and exceed customer expectations.

"The travel and hospitality sector, covering airline and hotel programs, restaurant, car rental, cruise line and gaming programs, accounts for 1.1 billion memberships." -Melissa Fruend | Colloquy

Research states that more than 90% of companies have some sort of loyalty program and 61% of retailers cite customer retention as their biggest obstacle. To give you an idea of how huge this market is, there are 3.3 billion loyalty memberships in the U.S. alone. That is, no doubt, a staggering amount.

To positively affect the sales growth, in the U.S., **51% of retailers plan to offer loyalty programs to consumers in the study back in 2018.** Due to increasing online competition, studies have suggested that 54% of brick-and-mortar retailers have introduced loyalty programs, and 24% plan to do so in the future. 50% of restaurant operators believe guests would enroll in every loyalty program made available to them.

Businesses like brick and mortar stores can use the power of Clanity by taking advantage of the first to market approach to acquire new customers and retain their current customers.

Customers' loyalty rewards

New ways of offering customer loyalty programs are needed in today's generation.

- Studies showed that 45% of diners would select a restaurant if they belong to its loyalty program.
- 79% of Americans say that they are more likely to join a rewards program that doesn't require them to carry a physical card.
- 95% of consumers want to engage with their loyalty program using engaging technology like chatbots, A.I., V.R., and smart devices.
- 75% of consumers say they would engage more with loyalty programs they can easily access from smartphones.

Currently, most customer loyalty rewards require plastic cards or rewards that are mailed in. With the ever-changing technology, retailers need to catch up and adapt to the ever-evolving high technology culture. To fill this gap, Clanity comes in handy for the business partners. We deliver this to their customers through our blockchain application. Data has also shown that 31% of customers say that their most significant issue with loyalty programs is that they expire before using them. This has been the most common response. Well, guess what? Customer rewards will never expire in Clanity. Not only that, but the token may also go up in value if the price per token goes up.

"Searches for 'rewards app' have grown by over 90% in the past two years." -Google

Social media for community engagement

According to Backlinko, the current percentage of people using social media is 50.64% of the world's total population. However, when we look into platform penetration rates from people in eligible audiences, 83.36% of 4.57 billion global internet users and 90.71% of 4.20 billion mobile internet users are on social media.

As of 2021, the number of people using social media is over 3.96 billion worldwide, with the average user having 8.6 accounts on different networking sites. Popular platforms like Facebook have over 66.09% of their monthly users logging in to use social media daily.

The total number of people using social media grew by 9.2% between April 2019 and Jan 2020. Social media growth by region 2019-2020:

- North America: +6.96%
- South America: +8.00%
- Europe: +4.32%
- Africa: +13.92%
- Asia: +16.98%
- Australasia: +4.9%

Key Statistics by the total population

- On average, 49% of the world are active social media users, regardless of age
- On average, 63% of the world's population aged 13+ are active on social media
- USA has 70% regardless of age, 83% for only those aged 13+ years
- U.K. has 66% regardless of age, 79% for only those aged 13+ years
- Canada has 67% regardless of age, 77% for only those aged 13+ years
- Australia has 71% regardless of age, 85% for only those aged 13+ years
- India has 29% regardless of age, 38% for only those aged 13+ years

Social media has undoubtedly changed our lives since its adoption. The extent of usage and massive following of social media has made it a part of everyday life for billions of people all around the world. Facebook, Twitter, Instagram, TikTok and Snapchat, just to name a few. Due to its influence, social media has been used as a platform for advertisers to increase reach effectively in an efficient way. **Based on our research**, **87% of companies use social media to engage with their customers**.

Based on the promising numbers stated above, Clanity will have an advantage in capturing social media users for advertising and community engagement through our app. Imagine the number of people who will want to get paid for every post or tweet they make on their social media account? These are regular users with actual real connections in their social media that will provide organic targeted reach. Clanity's plan includes capturing the social media market as a compelling advertising opportunity for our business partners and monetizing opportunity for our users.

Competitive Landscape

The customer rewards and loyalty industry are a niche area, with many businesses opting to manage their rewards programs in-house. However, some leading global loyalty management agencies provide such services to businesses and companies. These loyalty management companies operate in the same sector as Clanity and are direct competitors, albeit with different business models and value propositions. Please find below the detail of these competitors compared with Clanity:

Competitors	Value proposition	Blockchain- based platform?	Reward- based community engagement initiatives	Increasing social benefit and financial inclusion?	Provision of analytics to business partners?
Clanity	We use blockchain technology to create a self- sustaining business environment that provides mutual benefit to businesses and users using cryptocurrency- based reward programs.	Yes	Yes	Yes	Yes with DataCLAN, data will be directly sold by the users.
Connexions Loyalty	Using 550,000 unique items/gifts to provide customers for gaining a certain number of points.	No	No	No	Yes
Kognitiv	Generic reward point management platform solution.	No	No	No	Yes
Blackhawk Network	Provision of gift cards and digital rewards.	No	No	No	No
Maritz Motivation	Utilizing data science methodologies to create strategic rewards programs.	No	No	No	Yes
Antavo	Delivering a pure- play loyalty program technology for omnichannel and eCommerce, combined with next-gen in-store functionalities.	No	No	No	No

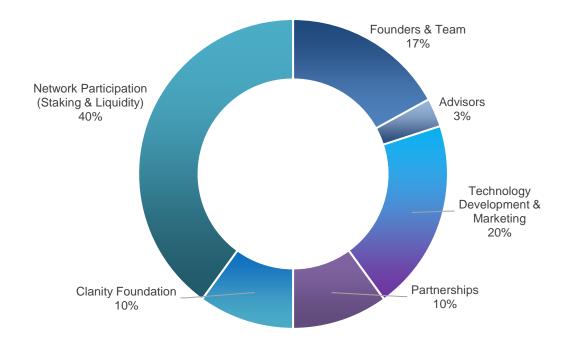
As we can see from the table above, the competition is engaged in traditional reward/loyalty program strategies. Clanity's unique value proposition and business model enables it to revolutionize the rewards industry by creating an environment where businesses and customers engage in-depth, unlike before.

There are some common strategies that businesses and loyalty management agencies are implementing to boost customer retention rates. These strategies are shared below:

- To boost loyalty, businesses invest in analytics and business intelligence tools to understand customer behaviour and create strategies to improve customer retention.
- There is a shift from customer acquisition to customer retention, as the latter is more cost-efficient.
- Businesses are offering a wide range of loyalty rewards to convenience the customer. These rewards include card rewards, affinity programs, cashback programs, point-based card rewards.

Tokenomics

The Clanity token is a Cardano native token with a total fixed supply of **1,000,000,000** (1 billion) tokens. Clanity will be supported natively within the Cardano ecosystem.



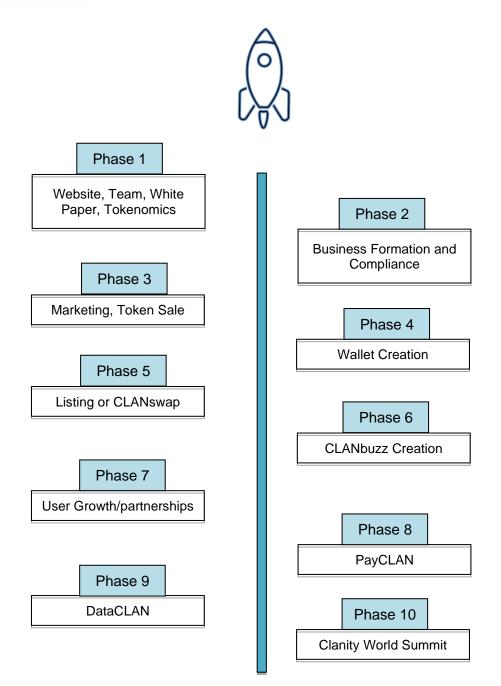
Total token allocation is as follows:

- 17.0% will be vested long-term by founder/s and team members with a full lock duration of 6 months and a subsequent monthly unlock rate of 8.33%. Team distribution is based on participation and contribution of team members plus reserve funding for future team members.
- 3.0% will be vested long-term by eligible advisors with a full lock duration of 6 months, and a subsequent monthly unlock rate of 8.33%. Advisor distribution is based on participation and contribution of team members plus reserve funding for future advisors.
- 20% of tokens will be used for technology development and marketing with a no locked duration and with 100% full release to build the Clanity ecosystem
- 10% will be used for partnerships and events with a no-locked duration and with 100% full release to strengthen Clanity's network.
- 10% of Clanity tokens will go to the foundation with 100% full release. This will be used to provide grants to participating low-income schools and high-impact nonprofit organizations and listing in exchanges or DEX on release.
- 40% of tokens will be used as reserves for network participation rewards by staking and providing liquidity

Round	Minimum Amount & release	Number of Tokens	Sale	Price	Total Amount
1st 1wk	Min \$100 Max \$25,000	100,000,000	Pre-sale	\$0.05	\$5,000,000
2nd 1wk	Min \$50 Max \$25,000	200,000,000	Pre-sale	\$0.075	\$15,000,000
3rd 3wks	Min \$0 Max \$25,000	300,000,000	Crowd sale	\$0.1	\$30,000,000

50% of unsold tokens during crowdsale will be distributed to liquidity. The remaining 50% will be distributed between foundation, rewards, team, development, and marketing fund.

Roadmap



Implementation Roadmap

The implementation roadmap is a guide on when the above roadmap is planned to be implemented and the activities that shall be performed afterwards on a continuous basis.

The roadmap is planned to be completed within a 3-year period after the crowdsale.



After that, there shall be a focus on community engagement and brand building. We shall create events and summits allowing our business partners to market their businesses and promote their products.

The continuous marketing and goal of obtaining business partners shall continue indefinitely; This would enable Clanity to grow and expand into other towns and regions, eventually building self-sustaining towns all over the world Clanity.

Team

Jade Tao - Operations



Jade Tao has over 9 years of experience in start-up and founded 2 companies previously. She has in-depth experience in project management, leadership and investing. She graduated from a Silicon Valley accelerator program in 2013. Jade has played a pivotal role during COVID-19 crisis and was acknowledged for her leadership contribution from a distinguished hospital in California. She is a blockchain enthusiast, investor, Member of the Blockchain Council and a Community Advisor for Fund5 Cardano Project Catalyst.

Jasmin Jayme -Marketing



Jasmin Jayme has extensive marketing and management leadership experience since 2012. She is an SEO and Conversion Analyst. Jasmin also has startup experience in the online games and travel industry. She is not only a content writer and an email marketer, she is also an avid gamer and crypto enthusiast.



Gerardo Estrada- Front-End Web Developer



Gerardo Estrada has been building websites and creating graphics design for over 10yrs. He is passionate about startups and he is a crypto enthusiast. When he is not writing codes or designing, Lalo spends his time creating music and exploring new softwares.

Sergey Bushnyak – Back-End Web Developer and Blockchain Developer



Sergey Bushnyak has worked with the Cardano blockchain and the Plutus testnet. He has great experience with Haskell and has been a software engineer since 2012. Sergey loves cryptography, mathematics and physics which is evident in all his work.

Advisors

Anders Johnsson - Blockchain Technology Advisor



Anders Johnsson is a serial entrepreneur with over 15 years international experience in startup businesses in the US, Sweden, UK, Australia, and ten years in China. He has a demonstrated history and is skilled in Project Management, V.C. funding, Investing, Startups, International expansion, Strategic planning, and Global Management. He is fluent in Swedish, English, and Mandarin Chinese. He is a founding partner of 24/7 BlockLabs and a co-founder of Maxamera, a provider of mobile applications and blockchain developments of custom-made decentralized applications. He is a co-founder of Diakrit (www.diakrit.com) an industry pioneer in creating digital

visualization tools, V.R. and A.I. for the real estate sector. As co-founder and majority shareholder of Diakrit, Anders Johnsson was part of the original team between 2001-2010, building the Company from 0 to 400+ employees and operations in 11 countries. Diakrit was successfully acquired by News Corp in 2016.



Jaian Cuttari -Blockchain Financial Advisor



Jaian is the CEO of Veltrust, an international advisory and investment firm and founder of BDAMcoin. Jaian has also cofounded several companies and has served as advisor and executive on various boards alongside industry and government leaders. Apart from managing over \$150 million in digital assets, He has a passion for commercial diplomacy centered around world trade and growing emerging markets, after traveling to many parts of the world and being well versed in cultures and having extensive insight about a wide range of industries. Jaian brings his global perspective in assisting governments and companies in utilizing industry-leading technologies to create a meaningful impact for communities worldwide.

Cal Evans -Legal Advisor



Cal is a Market Leading Cryptocurrency Compliance and Strategy Expert, ICO Advisor, U.K. Lawyer, and U.S. Litigation Specialist. He is a top-five Cryptocurrency Compliance expert, one of the very few international tech lawyers with expertise in ICO compliance and strategy. Cal formerly advised the U.K. government with the Department of Business Innovation and Skills, helping to draft the 2011 Agency Workers Regulations. Having experience working in top firms of Silicon Valley, in 2016, Cal started Gresham International, a compliance and strategy firm specializing in the cryptocurrency space.

Partners

Gresham International

Gresham International is the market leader in Cryptocurrency & Security Token Compliance and Legal Services. They have been nominated as compliance firm of the year 2018 iblockchain summit China.



Blockchain Networks

AtalaPrism

AtalaPrism is a decentralized identity solution that enables people to own their personal data and interact with organizations seamlessly, privately, and securely.

Cardano

Cardano is a blockchain platform for changemakers, innovators, and visionaries, with the tools and technologies required to create possibility for the many, as well as the few, and bring about positive global change.

Conclusion

Clanity is a blockchain technology hoping to return the power of finance to the end-users to promote financial inclusion. To simplify, Clanity wants to give the economic power back to the people. Clanity's goal is to create a community that supports each member through its contributions and create a community that thrives within its financial ecosystem or model. Once Clanity is fully and universally adopted, a cycle will then be established through the platform, building self-sustaining communities, one town at a time, all over the world.

"It is our responsibility to inspire this ideological change, to break free of models that optimize only to the demands of the existing capitalist system. It's difficult, but it's doable." - Maja Vujinovic

Disclaimer

This document entirely is the sole property of Clanity.

This document entirely is strictly private, confidential, and personal to its recipients and may not be copied, distributed, adapted, or reproduced in whole or in part, in any form or by any means, nor passed to any third party, without the prior written consent of the Company.

This document entirely is a work in progress, and the information herein is current only as of the date on the cover hereof and is subject to review and revision. Thereafter, the information may have changed.

The presentation of the Available Information is solely for informational purposes. Anyone interested in purchasing Tokens and participating in the Token Sale should consider the various risks prior to making any decision in respect of the Token Sale. The Available Information does not comprise any advice by the Company or by the Company Representatives, or any recommendation to any recipient of the Available Information, by the virtue of any participation in the Token Sale or otherwise. The Available Information does not necessarily identify, or claim to identify, all the risk factors connected with the Company, the Company's business platform that is yet to be developed, the Tokens, the Token Sale, any future Token functionality or the Available Information. All the participants must make their own independent evaluation, after making such investigations as they consider essential, of the merits of participating in the Token Sale and after taking their own independent professional advice. Any participant in the Token Sale should check with and rely upon their own investment, accounting, legal and tax representatives and consultants in respect of such matters concerning the Company, the Company's business platform that is yet to be developed, the Tokens, the Token Sale, any future Token functionality and the Available Information and to assess separately the financial risks, consequences and appropriateness of the purchase of Tokens, or if in any doubt about the facts set out in the Available Information. A purchase of Tokens comprises considerable risk and might involve extraordinary risks that may lead to a loss of all or a significant portion of monies or monetary value utilized to acquire Tokens. Participants in the Token Sale are urged to completely understand, be aware of and accept the characteristics of the Company, the Company's business platform that is yet to be developed, the Tokens, the Token Sale, any future Token functionality and the Available Information. If you are not prepared to accept any or all of these Terms or the risks set out in these Terms then YOU ARE URGED NOT TO PARTICIPATE IN THE TOKEN SALE. No guarantee or assurance is given by the Company or by the Company Representatives that the Company's proposals, objectives and/or outcomes set out in the Available Information will be achieved in whole or in part. You are urged to consider whether participation in the Token Sale is suitable for you having regard to your personal and financial circumstances and your financial resources.

RISKS RELATING TO THE COMPANY

The Company's business platform that is yet to be developed.

Any events or circumstances which adversely affect the Company or any of its successor or affiliated operating entities may have a corresponding adverse effect on the Company's business platform that is yet to be developed, including but not limited to the development, structuring and launch of the Company's business platform. Such adverse effects would correspondingly have an impact on the utility, liquidity, and the trading price of the Tokens.



The Company may be materially and adversely affected if it fails to effectively manage its operations as its business develops and evolves, which would have a direct impact on its ability to develop, maintain or operate the Company's business platform and/or develop, structure and/or license any Token functionality.

The financial technology and cryptocurrency industries in which the Company competes have grown rapidly over the past few years and continue to evolve in response to new technological advances, changing business models, shifting regulations and other factors. As a result of this constantly changing environment, the Company may face operational difficulties in adjusting to the changes, and the sustainability of the Company will depend on its ability to manage its operations, ensure that it hires qualified and competent employees, and provides proper training for its personnel. As its business evolves, the Company must also expand and adapt its operational infrastructure. The Company's business will in part rely on its blockchain-based software systems, cryptocurrency wallets or other related token storage mechanisms, blockchain technology and smart contract technology. All of these systems, tools, and skillsets represent complex, costly, and rapidly changing technical infrastructure. In order to demonstrate continued ability to effectively manage technical support infrastructure for the Company's business platform that is yet to be developed and the future functionality of the Tokens, the Company will need to continue to upgrade and improve its data systems and other operational systems, procedures, and controls. These upgrades and improvements will require a dedication of resources and are likely to be complex and increasingly rely on hosted computer services from third parties that the Company does not or will not control. If the Company is unable to adapt its systems and organization in a timely, efficient, and cost-effective manner to accommodate changing circumstances, its business, financial condition and/or results of operations may be adversely affected. If the third parties whom the Company relies on are subject to a security breach or otherwise suffer disruptions that impact the services the Company uses, the integrity and availability of its internal information could be compromised, which may consequently cause the loss of confidential or proprietary information and/or economic loss. The loss of financial, labor or other resources, and any other adverse effect on the Company's business, financial condition and/or operations, would have a direct adverse effect on the Company's ability to develop maintain or operate the Company's business platform and/or to develop, structure and/or license the anticipated Token functionality. Any adverse effects affecting the Company business or technology are likely to also adversely impact the utility, liquidity, and trading price of the Tokens.

The Company may experience system failures, unplanned interruptions in its network or services, hardware or software defects, security breaches or other causes that could adversely affect the Company's infrastructure network, and/or the Company's business platform that is yet to be developed.

The Company is not able to anticipate when there would be occurrences of hacks, cyber-attacks, distributed denials of service or errors, vulnerabilities or defects in: the Company's business platform that is yet to be developed, in the smart contracts on which the Company or the Company's business platform relies, or on the Ethereum or any other blockchain. Such events may include, for example, flaws in programming or source code leading to exploitation or abuse thereof. The Company may not be able to detect such hacks, cyber-attacks, distributed denials of service errors vulnerabilities or defects in a timely manner, and may not have sufficient resources to efficiently cope with multiple service incidents happening simultaneously or in rapid succession.

The Company's network or services, which would include the Company's business platform that is yet to be developed and, if successfully structured, developed, licensed and launched, the



Token functionality, could be disrupted by numerous events, including natural disasters, equipment breakdown, network connectivity downtime, power losses, or even intentional disruptions of its services, such as disruptions caused by software viruses or attacks by unauthorized users, some of which are beyond the Company's control. There can be no assurance that cyber-attacks, such as distributed denials of service, will not be attempted in the future or that the Company's security measures will be effective. The Company may be prone to attacks on its infrastructure intended to steal information about its technology, financial data or user information or take other actions that would be damaging to the Company and/or holders of the Tokens. Any significant breach of the Company's security measures or other disruptions resulting in a compromise of the usability, stability, and security of the Company's business platform that is yet to be developed may adversely affect the utility, liquidity and/or trading price of the Tokens.

The Company may in the future be dependent in part on the location and data centre facilities of third parties.

The Company's future infrastructure network may be established in whole or in part through servers which it owns and/or houses at the location facilities of third parties, and/or servers that it rents at data centre facilities of third parties. If the Company is unable to renew its data facility leases on commercially reasonable terms or at all, the Company may be required to transfer its servers to a new data centre facility, and may incur significant costs and possible service interruption in connection with the relocation. These facilities are also vulnerable to damage or interruption from, among others, natural disasters, arson, terrorist attacks, power losses, and telecommunication failures.

Additionally, the third-party providers of such facilities may suffer a breach of security as a result of third-party action, employee error, malfeasance or otherwise, and a third party may obtain unauthorised access to the data in such servers. The Company and the providers of such facilities may be unable to anticipate these techniques or to implement adequate preventive measures.

General global market and economic conditions may have an adverse impact on the Company's operating performance, results of operations and/or cash flows.

The Company could continue to be affected by general global economic and market conditions. Challenging economic conditions worldwide have from time to time, contributed, and may continue to contribute, to slowdowns in the information technology industry at large. Weakness in the economy could have a negative effect on the Company's business, operations and financial condition, including decreases in revenue and operating cash flows, and inability to attract future equity and/or debt financing on commercially reasonable terms. Additionally, in a down-cycle economic environment, the Company may experience the negative effects of a slowdown in trading and usage of the Company's business platform that is yet to be developed and may delay or cancel the development, structuring, licensing and/or launch of the anticipated Token functionality.

Suppliers on which the Company relies for servers, bandwidth, location and other services could also be negatively impacted by economic conditions that, in turn, could have a negative impact on the Company's operations or expenses. There can be no assurance, therefore, that current economic conditions or worsening economic conditions or a prolonged or recurring recession will not have a significant, adverse impact on the Company's business, financial condition and results of operations, and hence, the Company's business platform that is yet to be developed and/or the ability to develop, structure, license and/or launch any Token functionality. Any such circumstances would then correspondingly negatively impact the utility, liquidity, and/or trading price of the Tokens.

The Company or the Tokens may be affected by newly implemented regulations.

Distributed ledger technologies, businesses and activities as well as cryptocurrencies and cryptocurrency-related businesses and activities are generally unregulated worldwide, but numerous regulatory authorities across jurisdictions have been outspoken about considering the implementation of regulatory regimes which govern distributed ledger technologies, businesses and activities as well as cryptocurrencies and cryptocurrency-related businesses and activities. The Company or the Tokens may be affected by newly implemented regulations relating to distributed ledger technologies, businesses and activities as well as cryptocurrencies and cryptocurrency-related businesses and activities, including having to take measures to comply with such regulations, or having to deal with gueries, notices, requests or enforcement actions by regulatory authorities, which may come at a substantial cost and may also require substantial modifications to the Company's business platform that is yet to be developed and/or the anticipated Token functionality. This may impact the appeal or practicality or functionality of the Company's business platform that is yet to be developed and/or the anticipated Token functionality for users and result in decreased usage of and demand for the Company's business platform and the Tokens. Further, should the costs (financial or otherwise) of complying with such newly implemented regulations exceed a certain threshold, maintaining the Company's business platform that is yet to be developed and/or developing, structuring, licensing and/or launching the Token functionality may no longer be commercially viable, and the Company may opt to discontinue the Company's business platform that is yet to be developed and/or the anticipated Token functionality, and/or the Tokens. Further, it is difficult to predict how or whether governments or regulatory authorities may implement any changes to laws and regulations affecting distributed ledger technology and its applications, including the Company's business platform that is yet to be developed and/or the anticipated Token functionality, and/or the Tokens.

The Company may also have to cease operations in a jurisdiction that makes it illegal to operate in such jurisdiction, or make it commercially unviable or undesirable to obtain the necessary regulatory approval(s) to operate in such jurisdiction. In scenarios such as the foregoing, the utility, liquidity, and/or trading price of Tokens will be adversely affected and/or Tokens may cease to be traded.

There may be unanticipated risks arising from the Tokens.

Cryptographic tokens such as the Tokens are a relatively new and dynamic technology. In addition to the risks included in the above discussion of risk factors, there are other risks associated with your purchase, holding, and use of the Tokens, including those that the Company cannot anticipate. Such risks may further appear as unanticipated variations or combinations of the risks discussed above.

Glossary

Decentralized

Decentralized means to move departments and responsibilities away from a center of control and towards individual autonomous units. In the context of this whitepaper, it means to move away from a centralized system of finance such as central banks and fiat currencies towards decentralized Blockchain and Cryptocurrency.

Immutable

Immutable means not to change over time. In the context of this whitepaper, immutable stands for the ability of Blockchain to retain all records. There is no opportunity to manipulate, replace or falsify data on the Blockchain.

Utility Token

A digital token of Cryptocurrency is issues in with funding the development of a cryptocurrency. These tokens can later be used to purchase goods/services offered by the issuer.

Ledger

A ledger is a book or collection of accounts and transactions. In terms of the Blockchain, ledgers are distributed. This means that they are consensually shared and synchronized across multiple locations and institutions. This ensures that each transaction can have a "public" witness and can be accessed by all users.

References

- 1. '25 Stats on Consumer Shopping Trends for 2019'. *Business 2 Community*, <u>https://www.business2community.com/consumer-marketing/25-stats-on-consumer-shopping-trends-for-2019-02175812. Accessed 24 June 2021</u>.
- 2. 'Blockchain's Adoption Challenge Is a Human Problem, Not Technical'. *CoinDesk*, 12 May 2019, https://www.coindesk.com/blockchains-adoption-challenge-is-a-human-problem-not-technical.
- 3. 'Cardano Blockchain To Take The Lead In Scalability With Hydra'. *New Media Freedom*, https://newmediafreedom.com/cardano-blockchain-to-take-the-lead-in-scalability-with-hydra/. Accessed 24 June 2021.
- 4. 'Consumer Opinions on Companies Using Personal Data in 2019'. *Statista*, https://www.statista.com/statistics/1026890/data-and-privacy-consumer-opinions-inthe-united-kingdom-and-ireland/. Accessed 24 June 2021.
- 'Distributed Ledgers'. *Investopedia*, https://www.investopedia.com/terms/d/distributed-ledgers.asp. Accessed 24 June 2021.
- 'Many Paths Lead to Blockchain Adoption, and No Two Are Alike'. *Deloitte Insights*, https://www2.deloitte.com/uk/en/insights/topics/understanding-blockchainpotential/global-blockchain-survey/2019-adoption-by-industry.html. Accessed 24 June 2021.
- 7. 8 Ways Blockchain Is Revolutionizing Transportation And Logistics. https://www.winnesota.com/blockchain. Accessed 24 June 2021.
- 8. Autry, Ashley. *Loyalty Statistics: The Ultimate Collection*. https://blog.accessdevelopment.com/the-ultimate-collection-of-loyalty-statistics. Accessed 24 June 2021.
- Bartik, Alexander W., et al. "The Impact of COVID-19 on Small Business Outcomes and Expectations." *Proceedings of the National Academy of Sciences*, vol. 117, no. 30, 2020, pp. 17656–17666., doi:10.1073/pnas.2006991117.
- 10. Bialik, Carl. 'Yelp Economic Average Q1 2020 Report: How the Coronavirus Pandemic Has Affected Local Businesses'. *Medium*, 28 Apr. 2020, <u>https://medium.com/locally-optimal/yelp-economic-average-q1-2020-report-</u> <u>coronavirus-pandemic-local-businesses-economy-d29391f20167</u>.
- Caporaso, T., 2019. The Top 2019 Loyalty Trends for Retailers. [online] Nasdaq. Available at: https://www.nasdaq.com/articles/top-2019-loyalty-trends-retailers-2019-01-23> [Accessed 24 June 2021].

- 12. climblean. 'Startup Traction Channel: Community Building'. *Climb Lean*, 26 Apr. 2018, https://climblean.wordpress.com/2018/04/26/startup-traction-channel-community-building/.
- Clyde | Three Ways To Combat Rising Customer Acquisition Costs. https://www.joinclyde.com//blog/three-ways-to-combat-rising-customer-acquisitioncosts. Accessed 24 June 2021.
- CNN, By Jason Morris and Ed Lavandera. 'Why Big Companies Buy, Sell Your Data'. CNN, https://www.cnn.com/2012/08/23/tech/web/big-data-acxiom/index.html. Accessed 24 June 2021.
- COVID-19's Impact on Small Businesses | McKinsey. https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19seffect-on-jobs-at-small-businesses-in-the-united-states. Accessed 24 June 2021.
- Definition of UTILITY TOKEN. https://www.merriamwebster.com/dictionary/utility+token. Accessed 24 June 2021.
- 17. *Email Design Systems: Laying the Groundwork for Collaboration Ansira*. https://ansira.com/insights/blog/5-loyalty-program-challenges-and-how-to-overcomethem. Accessed 24 June 2021.
- 18. Europe, and North America. 'Your Data Is Shared and Sold... What's Being Done About It?' *Knowledge*@*Wharton*, https://knowledge.wharton.upenn.edu/article/data-shared-sold-whats-done/. Accessed 24 June 2021.
- 19. Hammory, M. & Black, K. "Is it time to rethink loyalty points." KPMG, 2016,
- Increasing Use of Cryptocurrency and Blockchain Will See Global Market Hit Over \$30B by 2027. https://coinidol.com/blockchain-global-market/. Accessed 24 June 2021.
- Morgan, Blake. '50 Stats That Show The Importance Of Good Loyalty Programs, Even During A Crisis'. *Forbes*, https://www.forbes.com/sites/blakemorgan/2020/05/07/50-stats-that-show-theimportance-of-good-loyalty-programs-even-during-a-crisis/. Accessed 24 June 2021.
- 22. New Media Freedom. 2021. Cardano Blockchain To Take The Lead In Scalability With Hydra - New Media Freedom. [online] Available at: https://newmediafreedom.com/cardano-blockchain-to-take-the-lead-in-scalabilitywith-hydra/> [Accessed 24 June 2021].
- 23. Research and Markets Itd. *Global Blockchain and Cryptocurrency Market 2021*. https://www.researchandmarkets.com/reports/5308868/global-blockchain-andcryptocurrency-market-2021. Accessed 24 June 2021.



- 24. Sharma, Toshendra Kumar. *5 Key Challenges For Blockchain Adoption In 2020*. 26 Mar. 2020, <u>https://www.blockchain-council.org/blockchain/5-key-challenges-for-blockchain-adoption-in-2020/</u>.
- 25. Steem, 2017. Steem: An incentivized, blockchain-based, public content platform.. [online] Available at: https://whitepaper.io/document/15/steem-whitepaper [Accessed 24 June 2021].
- 26. TechBullion, Angela Scott-Briggs. 'Rapid Acceptance of Digital Ledgers and Blockchain Technology in the Entire Financial Space Underscore Growth in the Cryptocurrency Market'. *TechBullion*, 11 May 2021, https://techbullion.com/rapidacceptance-of-digital-ledgers-and-blockchain-technology-in-the-entire-financialspace-underscore-growth-in-the-cryptocurrency-market/.
- U.S. Customer Loyalty Program Memberships Reach Double Digit Growth at 3.8 Billion, 2017 COLLOQUY Loyalty Census Reports. 29 June 2017, https://www.businesswire.com/news/home/20170629005694/en/U.S.-Customer-Loyalty-Program-Memberships-Reach-Double-Digit-Growth-at-3.8-Billion-2017-COLLOQUY-Loyalty-Census-Reports.
- 28. Undersearcher. 'How Secure Is Cardano?' *Medium*, 10 Apr. 2019, https://medium.com/@undersearcher/how-secure-is-cardano-5f1e076be968.
- 29. Walsh, David. 'These Are the Major Companies That Accept Cryptocurrencies as Payment'. *Euronews*, 7 Apr. 2021, https://www.euronews.com/next/2021/04/07/paying-with-cryptocurrencies-these-are-the-major-companies-that-accept-cryptos-as-payment.
- 30. What Are Smart Contracts on Blockchain. https://www.ibm.com/topics/smartcontracts. Accessed 24 June 2021.
- Ashford, K. and Schmidt, J., 2021. What is Cryptocurrency?. [online] Forbes.com. Available at: https://www.forbes.com/advisor/investing/what-is-cryptocurrency/ [Accessed 24 June 2021].
- 32. Beroeinc.com. 2021. [online] Available at: https://www.beroeinc.com/category-intelligence/loyalty-programs-market/ [Accessed 28 June 2021].
- Backlinko. 2021. How Many People Use Social Media in 2021? (65+ Statistics). [online] Available at: https://backlinko.com/social-media-users> [Accessed 28 June 2021].
- SocialX. 2021. Raymond Ong about Blockchain and the Social Experience SocialX. [online] Available at: https://socialx.network/raymond-ong-blockchain-social-experience/> [Accessed 28 June 2021].