

Don't trust, verify!

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1. Introduction

The growing sophistication of off-the-shelf technology capable of creating a viable fake certificate—and the emerging market for such services—combines with the need for fast verification to create an opportunity for criminals. Businesses cannot afford to wait the weeks or even months to verify authenticity of a certificate, and must rely on the certificate itself. It is no wonder that this combination of forces has created a thriving market for fake certificates, causing many millions in damages by authenticating those who are not qualified for a particular job. Given the scale of the problem, this situation has undoubtedly resulted in loss of life.

In the Republic of Croatia alone, there were dozens of cases of public service employees with fake diplomas and certificates, and with further investigation, dozens of other forgeries were found. University diplomas are far from the only documents falsified.[1] Many other documents and certificates, such as professional course certification, industry skill certification, licensing documents, are forged and passed on because they are professionally forged and companies simply can't go through a major effort to verify each one. When the documents are from another country, the cost and effort to verify is compounded significantly. Forging and creation of fake certificates is the basis of whole businesses[2] and financial losses, and the consequences are hugely significant.

1.1. Target Market

The Blockademia System aims primarily to verify the authenticity of documents issued by educational institutions such as universities, community colleges, high schools, elementary schools, adult education institutions, and any other document publishers that need protection from forgery. Secondary markets include publishers of certificates from city, regional, and state offices; insurance; pharmaceutical companies; and more.

Any abuse, sabotage or non-compliance with the principles, rules and codes of the project will result in suspension. The policy of the project is to educate and inform users. Exploitation of users, insults and conflicts within the project are strictly prohibited in accordance with social norms.

One of the goals of the project is that all actions related to the project are transparent and available to users in a timely manner. The project should be immune to manipulations, insider actions to the detriment of the project and any form of abuse.

1.2. Target Users

The Blockademia System will serve educational institutions, city, regional, and state offices, insurance, pharmaceutical companies, and any other document publishers that need protection from forgery. On the other side, companies and regulators are the entities that need to check that any given document is authentic or is a forgery.

The Blockademia System benefits three key users: The companies who require proof of authentication for documents they request; the users who own the certificates that validate their skill/status; and the institutes who create the certificates, and who must continuously validate them upon request. The ecosystem for this problem is fortuitous, because the Blockademia system solves all three problems for all three users. The structure is self-reinforcing so that each user benefits every time the system is used. This is especially beneficial because the current process is onerous at best, and is further complicated through cross-country verification[3].

It is expected that by 2030, almost 300 million people will own a higher education degree certificate[4]. This trend indicates that not only higher education institutions, but other institutions and companies publishing certificates will have the same verification problem—and will benefit from the Blockademia solution—meaning that the total number of potential users is much higher.

According to the latest data, the numbers of academic institutions and potential users of the Blockademia System are:

REGION	INSTITUTIONS
Adriatic	450
EU	2.725
Globally	more than 25.000

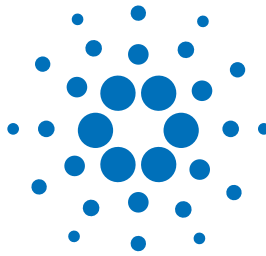
1.3. Why Blockchain?

Every blockchain uses complex cryptography to create and verify blocks in chronological order. This creates a chain of blocks that is immutable and permanently stored. This chain of blocks can be described as a ledger. The ledger is distributed to thousands of computers worldwide, and new blocks are constantly being added synchronously to all the computers in the network.

Blockchain transactions are fast,
secure, and decentralized,
which enables a trustless ledger
with no feasible way
to attack the ledger.

Given the use case of storing proof of validity from the source, into a trustless ledger easily accessed when given permission by the document holder, is ideal for all three user types. This use case is exactly what blockchain was developed to accomplish.

1.4. Why Cardano?



Cardano is the first blockchain platform developed by scientific principles, with a vast team of scientists and academic experts continuously working on its development. The code is thoroughly checked and formally verified before being put to general use.

With such a methodology, Cardano is becoming a third-generation blockchain that benefits from the hindsight of previous generations. By learning from the bottlenecks, logistical issues, and scalability constraints of Gen 1 and 2 chains^[5], it can easily overcome the issues experienced by Bitcoin and Ethereum while keeping the desirable features of a decentralized platform – security, speed, and interoperability.

Cardano also enables the creation of tokens on its blockchain, which keep many important features of ADA – Cardano's native token^[6]. Enabling next-generation smart contracts, Cardano has positioned itself as a leading blockchain platform for years and decades to come. Therefore we believe that choosing Cardano is a logical choice.

2. Blockademia System

Blockademia is a decentralized information system for both publishing and checking the authenticity of issued diplomas, certificates, and other documents using Cardano blockchain transactions.

Cardano blockchain transactions records are public, immutable and unique. Each transaction has date and time of transaction written as part of transaction as well as other metadata which ensure each transaction's uniqueness.

Using these blockchain features, Blockademia ensures the permanence and immutability of the published entry, which includes document metadata and subsequent authenticity checks. Blockademia is a modular application with predefined functionality depending on the size and publisher requirements.

The Blockademia System structure is comprised of:

- Web application and mobile app for publishing/verifying the documents
- Cardano blockchain entries which ensure immutability
- Blockademia utility token (ACI) as a "fuel" for running the Blockademia System
- Decentralized system for credibility rating of publishing entities

The Blockademia System features different models which will support:

- Single-user, Multi-user, and No-limit users
- Functionality with or without Document Management System (DMS)
- Web application, Mobile app, and Rest API access interface

The Blockademia System consists of four functionality models (versions):

Blockademia Basic	<ul style="list-style-type: none"> • Single user • No DMS • Web interface only • Maximum of 25 documents published within a calendar year
Blockademia Medium	<ul style="list-style-type: none"> • Multi-user (max. 3 named users) • No DMS functionality • Web interface only • Max of 100 documents published within a calendar year
Blockademia Pro	<ul style="list-style-type: none"> • Multi-user (max. 9 named users) • DMS functionality included • Web application included • Mobile application (IOS and Android) included • No limit of documents published
Blockademia Enterprise	<ul style="list-style-type: none"> • Unlimited application users • DMS functionality included • Web application included • Mobile application (IOS and Android) included • Administrator user interface • Unlimited documents published • Web API (REST) interface enabled

Pro and Enterprise versions include the DMS (Document Management System) module, while the Rest API connector is reserved for only the Enterprise version. These modules enable simple connections to other systems.

In order to use a specific Blockademia app model, the needs to have a specific amount of ACI tokens in their wallet:

Blockademia Apps Version:	Min. ACI token in wallet
Blockademia Basic	300
Blockademia Medium	1.000
Blockademia Pro	9.000
Blockademia Enterprise	15.000

These tokens must be in wallet at all time during operation of dApp in specific version. **Blockademia dApp** will not use these ACI tokens for transaction fees payment or for any other expense.

2.1. Blockademia dApp

The Blockademia dApp is a web application used for publishing and verifying the originality/authenticity of issued documents.

The Blockademia dApp enables users to:

- Publish documents
- Verify documents
- Manage users (in Medium, Pro and Enterprise versions)
- Manage wallets
- Configure dApp settings (theme, language, etc.)

Blockademia has a dual-layer structure where the processes of document publishing, along with all user processes, are being executed in an isolated part of the application. The blockchain interaction is included in a separate service area. This way, cost and performance optimization of the system is achieved.

Registered users can be private users, registered and checked via KYC procedure, or corporate users, operating within their company (if it is registered as Blockademia user).

2.1.1. Publish a Document (Blockchain Entry)

The publisher uses the **dApp web application** to prepare a document and custom metadata, which is then used to generate a unique hash that is written to the blockchain as transaction metadata^[7].

Publishing documents can be done only through the Blockademia dApp web application. The dApp enables users to publish a single or multiple documents in one simple process.

Single document publishing process is considered a transaction, and the Blockademia dApp will charge the user a publishing fee per document. Publishing documents requires availability of ACI tokens in the user's wallet. The publisher has access to the interface where they can easily check their balance of ACI tokens.

After the entry is added, the publisher receives a confirmation PDF which contains:

- QR code for each document, used later for simple verification of published doc
- Verification link in human readable format
- Metadata which has been created during the publishing process
- Metadata been added to the transaction as sys data (timestamp, etc.)
- Instructions on how to verify the document using data from the confirmation

2.1.2. Verifying Authenticity

Verifying the authenticity of a document is accomplished through the **Blockademia dApp web interface** or Android/iOS Blockademia application.

Verification starts with scanning the QR code from a verification PDF, clicking on the verification link, and manually entering the verification code. The Enterprise version enables advanced options of verification via API interface.

The verification process returns a confirmation that the document has been published by the publisher (hash OK) or returns a message that the document has not been found on the blockchain. If the hash is OK, the Blockademia dApp will display the document metadata and optional documents.

If the document (verification hash) is not found, it means that the Blockademia cannot confirm validity of document and process is terminated.

Verification of up to 10 documents is free of charge (upon registration the user receives 10 ACI Tokens as a welcome), and subsequent documents are charged from ACI tokens in a user's wallet.

3. Blockademia token (ACI)

Blockademia token (ACI) is a native token on the Cardano blockchain. It is both a utility token and a governance token of the Blockademia decentralized system.

The intended uses of Blockademia token are:

- Paying the user fees for using the Blockademia system
- Rewarding users for participating in the system (publisher, referrers onboarding publisher)
- Treasury financing
- Governance of the decentralized Blockademia system

The system will include a form of rewarding users who hold the token to disincentivize token sales after exchange listings.

ACI token usage is designed to disconnect the cost of the service from crypto market volatility. The system itself drives the ACI token demand regardless of token price.

3.1. ACI Token Mechanics

The total ACI token supply cap is 250.000.000 ACI.

1 ACI is divisible to 6 decimal places, which is represented as 1.000000 ACI.

The smallest divisible part of the ACI token is called a chip and is equal to 0.000001 ACI.

To ensure fair initial distribution and optimal initial decentralization, initial token distribution will follow these guidelines:

- ACI tokens will be distributed to as many Blockademia users as possible
- No single ACI token owner will be distributed a significant amount of ACI tokens in regards to total supply; this will limit the possibility of market manipulation
- There will be no significant differences to token price within the initial offering
- Participants of the initial distribution will be actors from different sectors: future system users, early adopters, investors

All participants of the initial offering will be registered users and will be subjected to the KYC procedure.

Blockademia system participants are divided into several groups:

MANAGER Initially Smart Contract Ltd., but will be the Community in the long term	PUBLISHER legal entity – an entity that issues documents	INDIVIDUAL legal or private entity – the owner of the published document
VERIFIER legal or private entity – verifying the authenticity of published documents	FRANCHISE PARTNER legal entity – franchise owner for a country or region	TREASURY Addresses that store the reserve of the ACI tokens

For a participant to actively use the system, they need to hold a minimum amount of ACI tokens according to required application version (model).

To enable and incentivize system growth, the required holding amounts will progressively decrease in correlation with the development of active publishers.

This mechanic will incentivize early adopters to hold their tokens for longer and simultaneously reward the early publishers.

Their required holding amounts will decrease over time, releasing tokens which can be used for publishing or verification transaction fee payment.

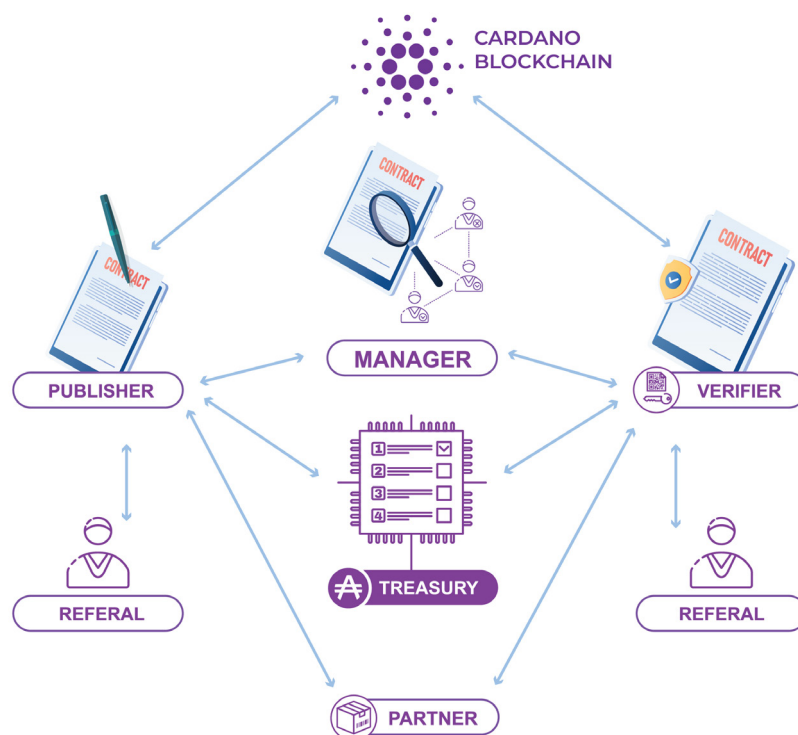
Transaction cost

The system charges for the following activities:

- Publishing documents to the blockchain
- Verifying documents to the blockchain

For each internal transaction (transferring ACI tokens between wallets), a standard system fee is calculated with no less than 0.05 ACI per transaction, which is added to the Treasury.

For a transaction in the Cardano network, a Cardano network fee is charged.



3.2. ACI Token Liquidity

The initial offering of the ACI token will be implemented through the Smart Contract web platform.

The token will be available for purchase in ADA.

Tokens that are earned through the referral system will be distributed free of charge when the initial distribution is completed. The reward system for decentralizing the Blockademia network will continue after the initial distribution until the budgeted number of tokens for this purpose is spent.

After the initial distribution, the Blockademia team will list the ACI token to cryptocurrency exchanges to achieve the highest possible liquidity and enable users globally to purchase tokens. ACI token will be listed on Cardano decentralized exchanges as soon as that is technically possible.

3.3. ACI Token Distribution

ACI initial offer: 34 % of total supply / 85.000.000 ACI tokens		
Distribution	Percentage	Token supply
Project	49	122.500.000
Treasury	2	5.000.000
Private sale	6	15.000.000
Early sale T1	4	10.000.000
Early sale T2	8	20.000.000
Community sale	16	10.000.000
Team and Advisors	15	37.500.000
Total supply	100%	250,000,000

3.4. Initial Offer Dates

Distribution	Start	End
Private sale	01.10.2021. 0:00	14.11.2021. 23:59
Early sale T1	15.11.2021. 0:00	21.11.2021. 23:59
Early sale T2	22.11.2021. 8:00	28.11.2021. 23:59
Community sale	29.11.2021. 8:00	05.12.2021. 23:59

3.5. ACI Token Prices and Sales Limits

Distribution	Token price in €	Amounts to buy in €	ACI Token sale limit
Private sale	0,15	300k - 1M	15.000.000
Early sale T1	0,20	100k - 300k	12.500.000
Early sale T2	0,25	5k - 100k	20.000.000
Community sale	0,30	100 - 5k	37.500.000

Distribution	Token price in €	Amounts to buy in €	€
Private sale	0,15	300k - 1M	2.250.000
Early sale T1	0,20	100k - 300k	2.500.000
Early sale T2	0,25	5k - 100k	5.000.000
Community sale	0,30	100 - 5k	11.250.000

3.6. ACI Token Acquisition Plan

Distribution	Acquisition period	Minting plan
Team & Advisor	18 months	3 months
Private sale	12 months	3 months
Early sale T1	12 months	3 months
Early sale T2	6 months	3 months
Community sale		3 months

3.7. ACI Token Release Plan

Distribution	ACI Tokens	Release plan
Team & Advisor	37.500.000 + 10% APY	18+3 months
Private sale	15.000.000 + 10% APY	12+3 months
Early sale T1	12.500.000 + 10% APY	12+3 months
Early sale T2	20.000.000 + 10% APY	6+3 months
Community sale	37.500.000 + 10% APY	3 months

3.8. Project Development Token Release Plan

There are 122.500.000 ACI tokens intended to be used for the Blockademia project development.

They will be released as follows:

Release percentage	Acquisition period	ACI token amount
20%	3 months	24.500.000
20%	6 months	24.500.000
30%	12 months	36.750.000
20%	18 months	24.500.000
10%	24 months	12.250.000

3.9. ACI Token Rewards

When the functionality of the Blockademia platform is ready for public use and finalization of the initial token distribution, the owners of ACI tokens will be able to lock their tokens and earn an additional yield of 10% per year in ACI tokens.

Locking the tokens will grant access to some advanced functionalities of the system besides providing yield.

4. User Network Growth

To ensure the growth of the Blockademia user base, the following incentives are implemented:

– **Rewards for onboarding new users via Referral** – Users who onboard a new publisher or verifier via Referral will permanently receive a percentage of each transaction a new publisher or verifier issues/checks using the system. They will also receive a single payment in ACI tokens for onboarding new users.

– **Rewards for publisher** – Each publisher receives a small percentage of the transaction costs paid to verify the documents they publish. The intention is to motivate the users to spread the word and the use of the Blockademia System.

Each transaction fee withing Blockademia system
will be distributed in a following manner:

Manager – **65%**

Franchise Partner – **20%**

Publisher **5%** (for verification of their documents)

Refferer – **5%**

Treasury – **5%**

5. Governance

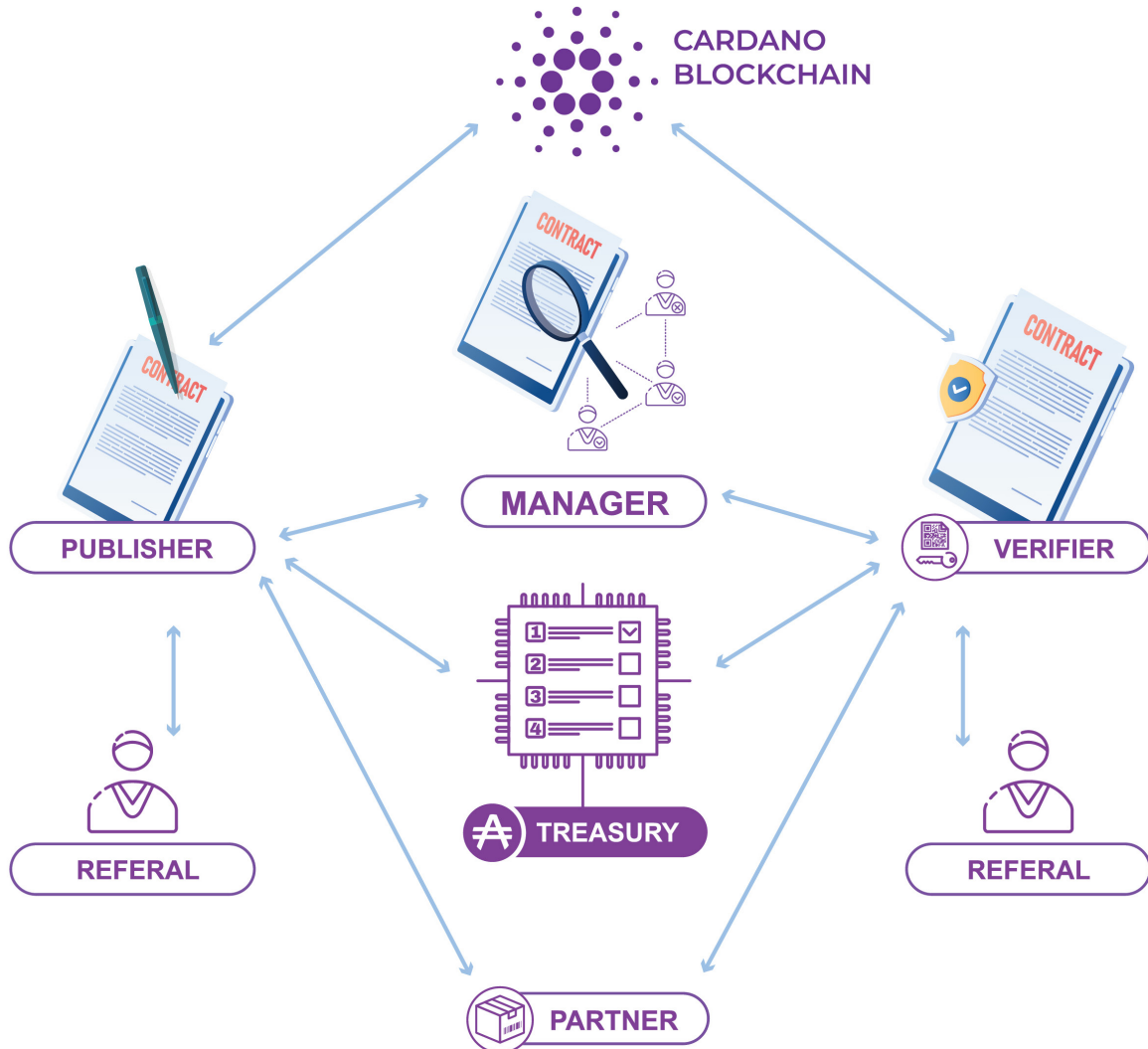
Blockademia system will work in a semi-decentralized manner at the moment of its creation. This means that the project's development will be managed by the company Smart Contract Ltd. from Zagreb, Croatia and the system's data management will be a hybrid of the web interface and the Cardano blockchain.

Decentralization of the system through an intelligent contract application will be carried out after the finalization of the Goguen phase in the Cardano ecosystem and the enabling of 'Babel fees' – paying the on-chain transaction costs with a native ACI token.

As Cardano reaches the Voltaire phase of development, the Blockademia system will transition to complete community governance, the code will be open-sourced, and Blockademia will become a Decentralized Autonomous Organization (DAO).

To ensure consistent funding and development of the Blockademia system, a certain amount of ACI tokens will be distributed to the Treasury from the beginning. The Treasury will be available to the DAO to use as it sees fit.

6. Business Model



TRANSACTION FEE

The system charges for the following activities:

» Publishing and verifying documents to the blockchain

For each internal transaction (transferring ACI tokens between wallets), a standard system fee is calculated with no less than **0,05 ACI per transaction**, added to the treasury.

For a transaction in the Cardano network, a Cardano network fee is charged.

7. Social Responsibility

At the end of each business year, the company Smart Contract Ltd. will direct a part of its financial flow toward socially sensitive groups—especially children—to help ensure a higher quality of education and personal development for everyone. The same practice will be conducted in countries/territories where Representatives operate.

8. Roadmap

Q3 2021

- » Front end web development
- » Team creation and formation
- » Cardano Project Catalyst Fund 6 participation
- » Blockademia KickOff & announcement on Cardano Summit 2021
- » Preparation of ACI initial offering

Q4 2021

- » Back end web development
- » Market research and marketing
- » Blockademia announcement on Cardano 360 and other vital events
- » ACI token initial offering
- » ACI Token minting

Q1 - Q2 2022

- » Development of Blockademia application for publishers
- » Development of Blockademia application for verifiers
- » Application integration with Cardano blockchain
- » Early users testnet
- » Listing ACI tokens on Crypto exchanges
- » Begin introducing into circulation the first quantities of locked ACI tokens
- » Mint and distribution of Blockademia Professor NFT

Q3 2022

- » iOS and Android mobile applications development for verifiers
- » Application testing

Q4 2022

- » Mainnet release

Long term goals

- » Growing in the international market through a representative program
- » Complete decentralization and DAO creation

9. Conclusion

Blockademia is a Croatian startup that, using Cardano technology, enables permanent, immutable and secure storage of the proof of authenticity for any published document and verification, by any user, at any given time. Verification of authenticity is affordable, fast, and straightforward through the usage of the Blockademia mobile application.

Using the Blockademia application, the document publisher protect their product from forgery and abuse while adding quality to the ecosystems that rely on authentic, verified documentation. Blockademia System users are private or legal entities, small or large, that have a regular need to verify document's authenticity.

The Blockademia System enables full transparency in its functionality, and solves many of the problems prevalent with forgeries and manipulations^[8]. We fully expect this system to drastically reduce the pain of verifying official documents wherever it is used.

We believe that decentralized systems relying on blockchain technology are the future. Users of such systems can participate in building and governing these systems, as well as take part in open and transparent ways to earn income by participating—which is key to building a better society.

10. References

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11. Accomplished

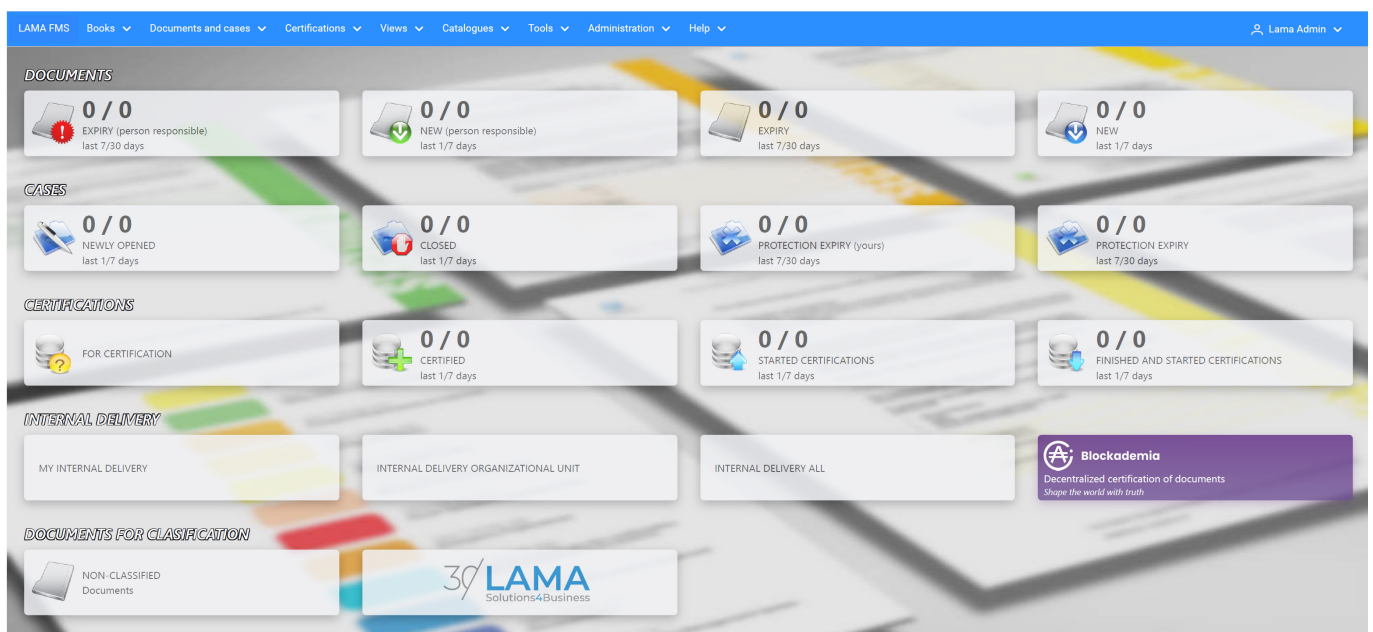
We are proud to announce that all goals according to the Roadmap from the 2021-2022 plan have been successfully achieved. We also refreshed and expanded the team.

During the development, together with our partners, we researched market needs.

Blockademia is a system that can work independently, but it can also be part of another system and thereby improve business processes, such as speed, security and immutability.

The digital transformation of the market in daily work uses certain systems such as Document Management System (DMS), Enterprise Resource Planning (ERP), etc... which public and private companies use every day, and the Blockademia system adds new functions and value to this system.

According to this, we made a partnership with the Franchiser and integrated Blockademia with their DMS system.



12. Growth strategy

MARKETS

- » Recruitment of new users
- » Helping & coaching active users
- » Connect Blockademia with Document Management System
- » Connect Blockademia with other system
- » Engage Franchise Partners World Wide
- » Listing ACI token on CEX & DEX

MARKETING

- » Allows ACI holders to earn rewards while staking ACI token in Blockademia system
- » Supported referral programme
- » Informing existing and informing and finding new users

SALES

- » Taking care of existing users
- » Finding new users
- » Finding new partners
- » Finding new Franchizers

PARTNERS

- » Focuses on global scaling through a decentralized franchise concept
- » Ensure local customer support World Wide

TECHNOLOGY

- » Constantly working on improving the user friendliness of the system
- » Constantly working on further features

13. Competitive advantages

TEAM

- » Long experienced Board
- » Long experienced Developers
- » Long experienced Strategic Partners & Advisor

COMMUNITY

- » Total user 57k subscribers
- » More than 4k active users World Wide

TEHNOLOGY

- » Perfect use case for leveraging blockchain technology

PARTNERS

- » Active Franchisers

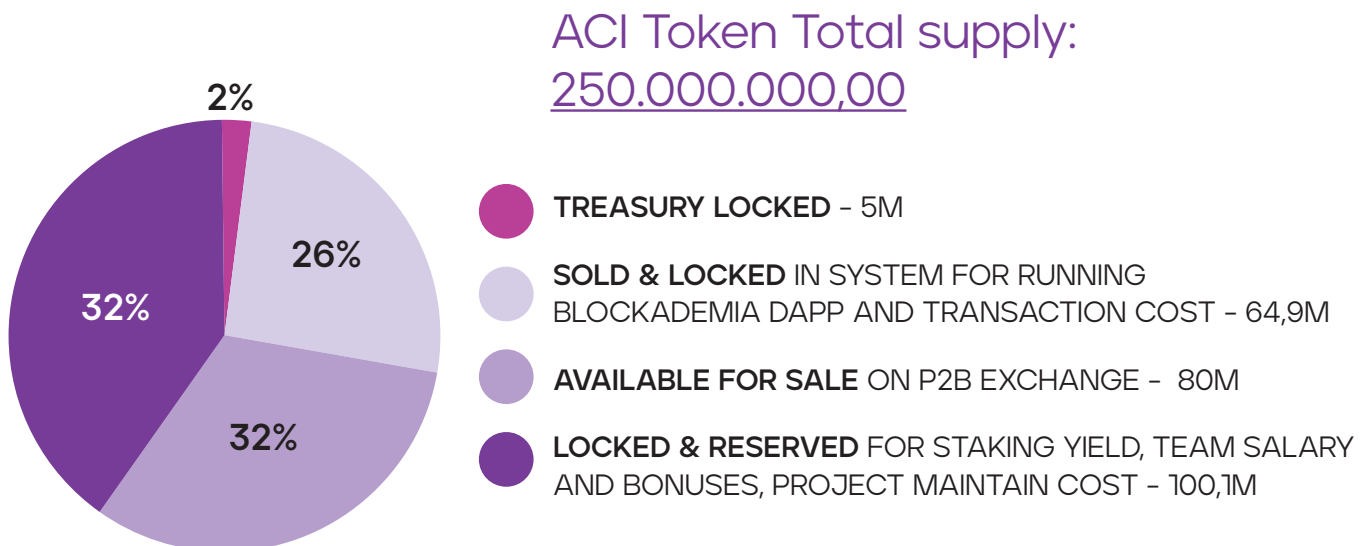
NETWORK EFFECT

- » Active reward system for using Blockademia
- » Active reward system for recommending Blockademia

14. ACI Token Distribution 2023

Listing on exchange, we want to ensure access to ACI Tokens to all current and future users

Expand the number of wallets & decentralized Blockademia system



JOIN US

on the exciting journey
with Blockademia
decentralized system
for publishing and
verifying documents
powered by blockchain.