ASTRAKODE
BLOCKCHAIN

The new blockchain platform by Smart Shaped
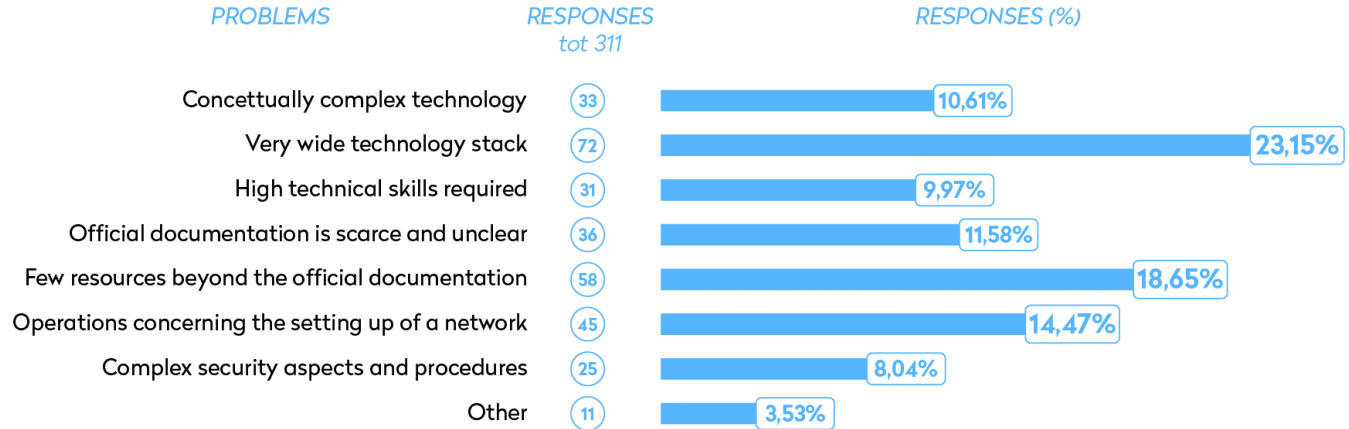
Astrakode.tech

Problems

We have individuated three key issues with enterprise blockchain development:

- limited access to the technology due to its complexity and stack size;

- scarcity of qualified professionals able to develop production grade solutions;

- scarcity of documentation and other similar resources.

In addition to our own experience with the development of similar solutions, the problems we have identified have also been validated through market research.

What are the main difficulties you encountered while developing with Hyperledger Fabric? A recent survey:

PROBLEMS	RESPONSES tot 311	RESPONSES (%)
Concettually complex technology	33	10,61%
Very wide technology stack	72	23,15%
High technical skills required	31	9,97%
Official documentation is scarce and unclear	36	11,58%
Few resources beyond the official documentation	58	18,65%
Operations concerning the setting up of a network	45	14,47%
Complex security aspects and procedures	25	8,04%
Other	11	3,53%

The solution

Why AstraKode Blockchain?

The aim of the platform is to facilitate enterprise blockchain solutions by providing tools able to simplify all of their three main elements: network design, smart contract development, and deployment.
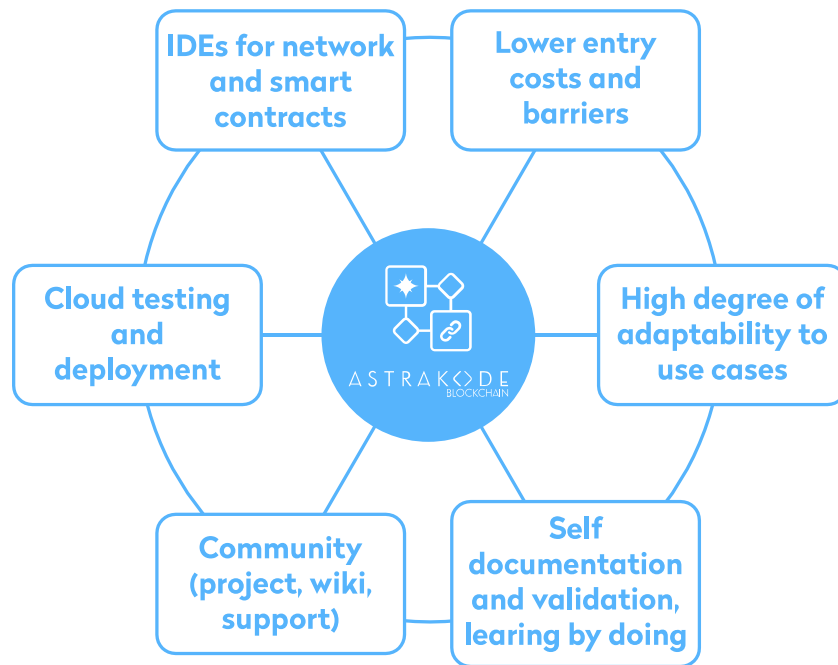
Key Features

Network Composer: visual environment (low-code) for the creation of custom blockchain networks.
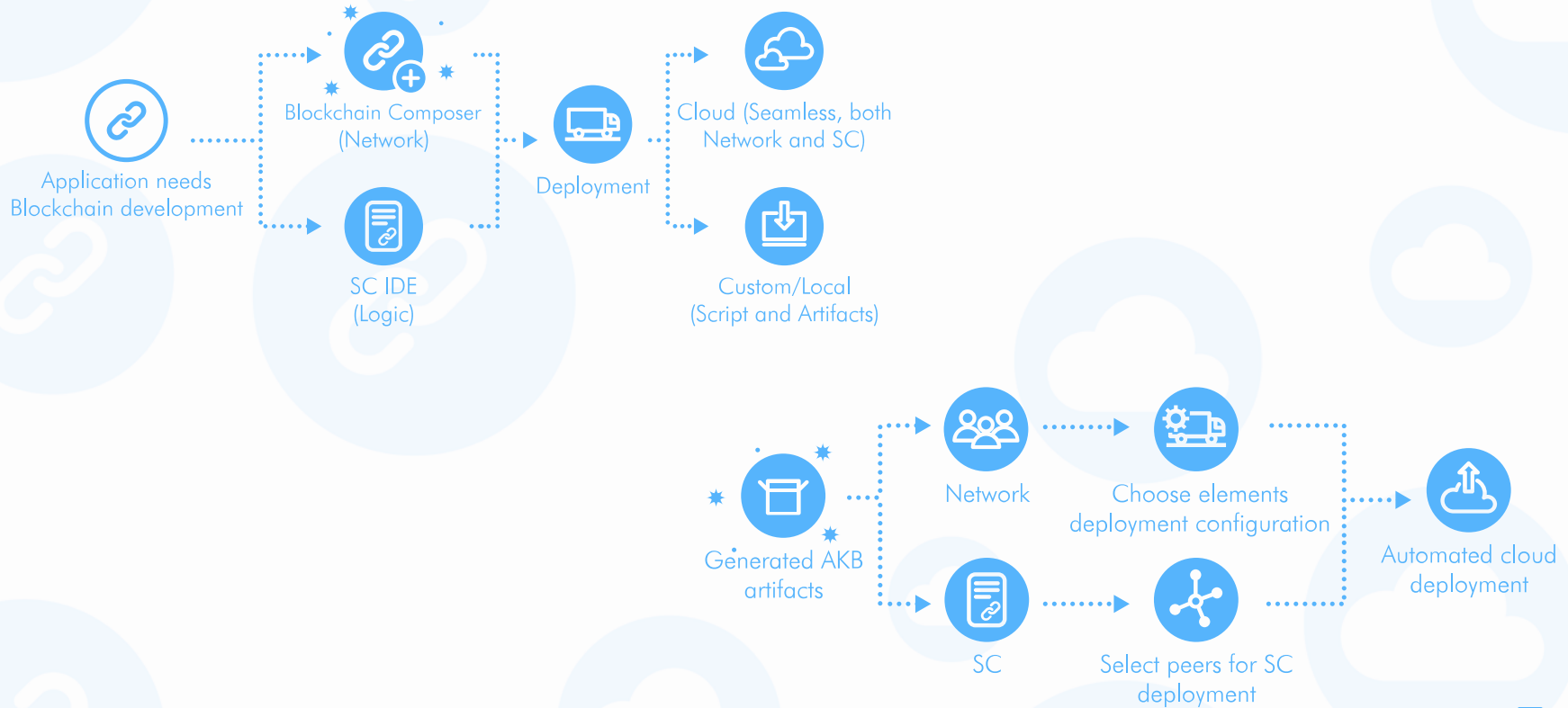**Smart Contract IDE:** visual development environment (low-code) for smart contracts.
Cloud Deployment: testing environment and integration with main cloud service providers to deploy and manage the networks and smart contracts created with AstraKode Blockchain.
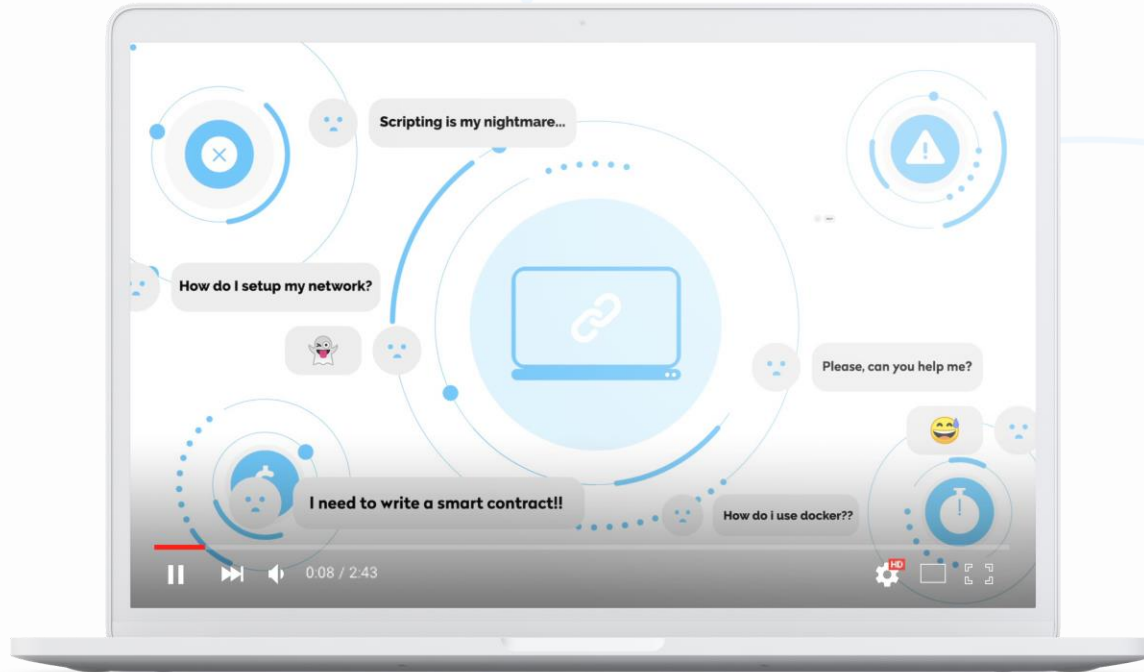**Community:** the built-in community provides access to project discussion, peer support, and valuable learning content, both platform and technology related.

IDEs for network and smart contracts

Lower entry costs and barriers

Cloud testing and deployment

High degree of adaptability to use cases

Community (project, wiki, support)

Self documentation and validation, learing by doing

How it works

Application needs Blockchain development

Blockchain Composer (Network)

SC IDE (Logic)

Deployment

Cloud (Seamless, both Network and SC)

Custom/Local (Script and Artifacts)

Generated AKB artifacts

Network

SC

Choose elements deployment configuration

Select peers for SC deployment

Automated cloud deployment

ASTRAKODE

How it works

Target Customers

IT providers or Companies with a Software team

Freelance Developers

Blockchain enthusiasts

Our target end-users are blockchain and smart contract designers and developers, either working freelance or in an enterprise environment,

Our target customers are companies looking for enterprise blockchain solutions.

The target sectors are primarily ones such as **Services, Finance**, **Agri-Food** or **Logistics**, where the need for enterprise blockchain solutions is higher.
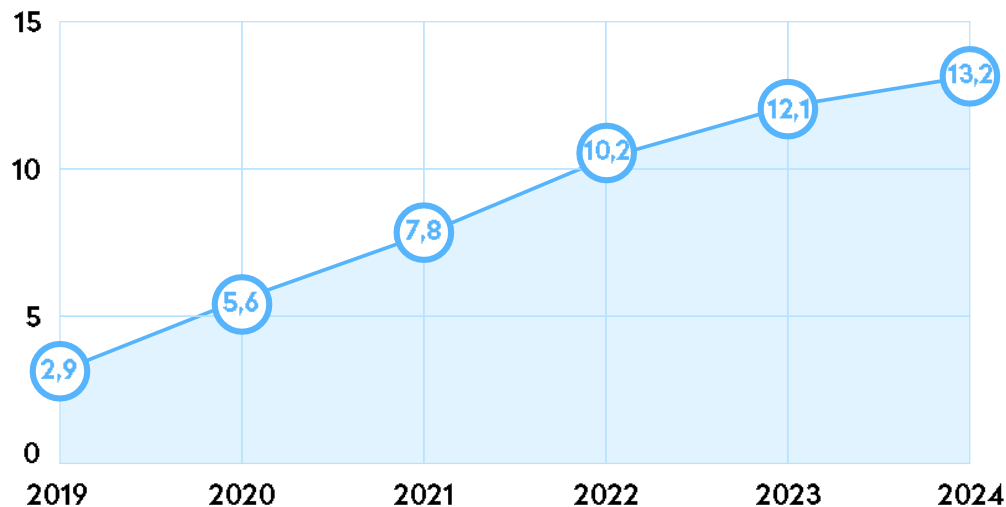
Market Analysis

Trends

The estimated growth in the Enterprise Blockchain Market represent a great chance for projects such as AstraKode Blockchain.

The data show a fast pace growing market, with an initial size of 2,9B USD (2019) forecasts suggest the market will see an increase up to 13.2B USD (2024) with a CAGR of 35.4% for the period under analysis.
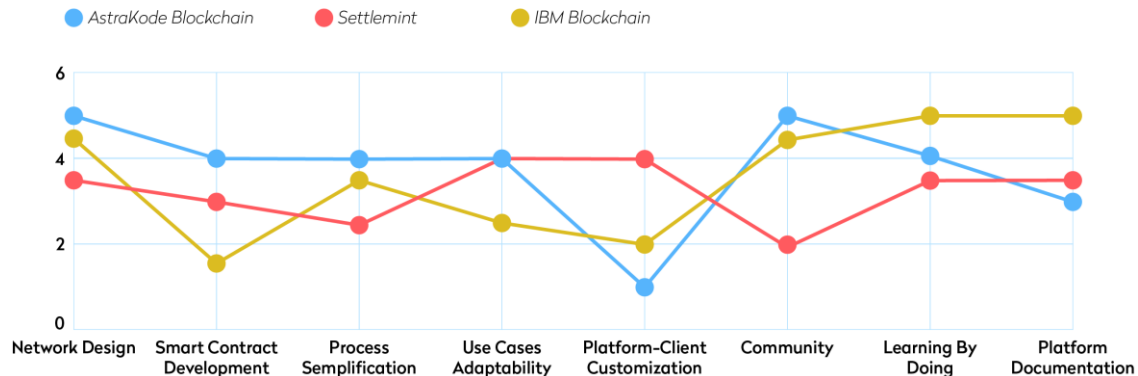
Enterprise Blockchain Market Growth

Source: *Deep Analysis Enterprise Blockchain – Market Forecast & Scenarios 2019–2024*
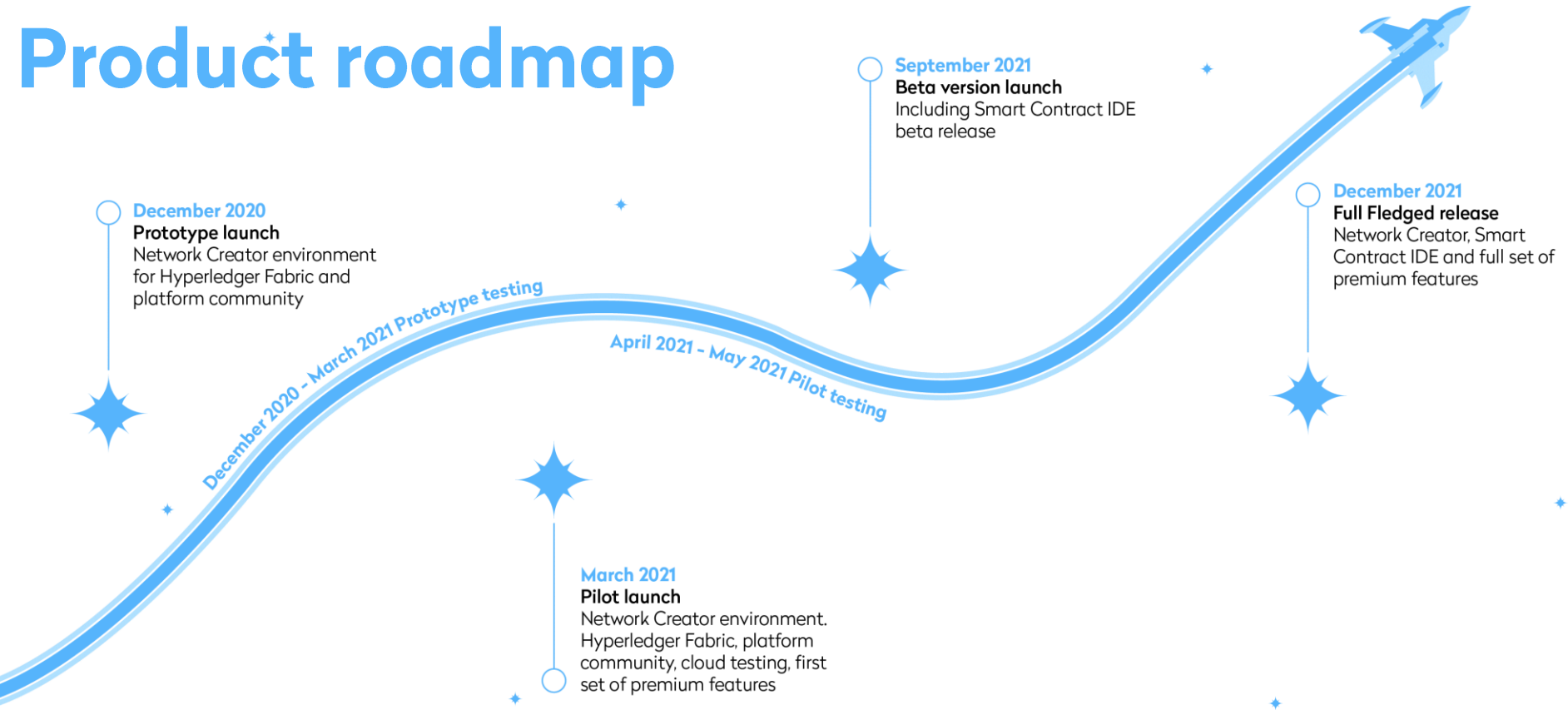
Astrakode Blockchain USPs

- All-in-one solution for network design, smart contract development, and cloud testing and deployment;

- High configurability for both networks and smart contracts is able to match a wide range of use cases;

- Visual development environments and low-code enable self documentation and validation;

- Ease of use, enabling any enthusiast with an understanding of the technology to use the platform;

- Built-in community for project discussion, peer support, and platform/technology learning content.

Value curves

● AstraKode Blockchain   ● Settlemint   ● IBM Blockchain

Categories: Network Design, Smart Contract Development, Process Semplification, Use Cases Adaptability, Platform-Client Customization, Community, Learning By Doing, Platform Documentation

Product roadmap

December 2020
Prototype launch
Network Creator environment for Hyperledger Fabric and platform community

December 2020 - March 2021 Prototype testing

April 2021 - May 2021 Pilot testing

September 2021
Beta version launch
Including Smart Contract IDE beta release

December 2021
Full Fledged release
Network Creator, Smart Contract IDE and full set of premium features

March 2021
Pilot launch
Network Creator environment. Hyperledger Fabric, platform community, cloud testing, first set of premium features

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BLOCKCHAIN

Business model

Revenue model

Our business model is based on a freemium approach with a bottom-up selling strategy.

The free perimeter will include both Network Creator and Smart Contracts IDE but is going to be limited in both:

- scope (for instance by limiting access to the cloud testing environment);
- features (for instance by limiting the amount of peers per organizations, or by enabling the creation of separate certificate authorities for MSP and TLS).

Costs Structure

The costs identified and required by the project can be listed as follows;

- The Core Developers Team;
- AWS IaaS;
- Community maintenance;
- Other SaaS services;
- Taxations.

ASTRAKODE BLOCKCHAIN	FREE PACKAGE	DEV PACKAGE	ENTERPRISE PACKAGE
Price	0€ u/m	49€ u/m	299€ u/m
Network composer and smart contract ide	●	●	●
Premium features	—	●	●
Solution testing on dedicated cloud environment	—	●	●
Third-party cloud providers for deployment	—	—	●
SLA support	—	—	●

ASTRAKODE BLOCKCHAIN

Potential adopter profile

Adopter ID

Company size: *any.*

Sectors: *any sector with a use case tech fit.*

Internal IT capabilities: *both present and not present, although at least some degree of technical capabilities is needed.*

Blockchain expertise: *no prerequisites other than fundamental understanding of technology and use case implementation.*

Use case tech fit: *private/permissioned blockchain solution.*

Adopters within our network

PLASTIC FREE CERTIFICATION
AB210077

Innovative startup aiming at assisting organizations to reach a **plastic free set up** (and certify it). The certification process is data-driven and its degree of compliance is adjusted through time. By recording compliance levels to a private blockchain, and utilizing **smart contracts** to have the auditing verify such levels and "stamp" them, the process would be more easily **traceable** and **verifiable.** The (partial or full) certification will then be accessible to all relevant parties, so that full **transparency** is achieved.

AKB can help them to lower both their economic and technological barriers.

D-VISOR by JADS

Applied R&D security tech SME, offering **AI-driven solutions** to improve safety and security related issues, primarily aimed at the hospitality and event management sectors. Their platform **D-GEM** provides end-to-end support for a range of issues, from preparations, to AI-enabled safety and security monitoring. Blockchain would support safe **archiviation** of document interaction logs, help leverage end-to-end **privacy**, increase **trust** between users, and **secure** data-stream storage and exchange.

They would take advantages from AKB's non-technical enabling nature

DESIGNATED by 20tab

Software house and ICT Consulting agency specialized in **digital product development.** Their web app platform is a technological solution to store personal and confidential documents with information that can be consulted by third parties in case of necessity through an elaborate authentication and security procedure. A blockchain infrastructure would solve most of the problems related to the **security** of stored data and **access management**.

AKB will enable them to remove their technical gap

SMART SHAPED
S O F T W A R E

Smart Shaped is a startup founded in 2015 with the desire to use the software modeling and low-code paradigms to improve and innovate the enterprise software development landscape. Since 2017 Smart Shaped has increasingly gained interest and experience on blockchain technology, and in 2019 this concretized in the ideation and start-up of the AstraKode Blockchain project.

The AKB team

Fabiano Izzo
CEO & Founder

Fabiano is experienced in the following fields: software analysis, enterprise solution design, software development, solution testing and delivery, project management.

Lucio Menna
CTO & Founder

Lucio has very extensive knowledge of the most used application servers, on AGILE methodologies, and on WEB technologies. Furthermore, Lucio is experienced with both permissioned and public blockchain solutions.

Marco Paolini
Business Developer

Marco is experienced in business development and has also acquired extensive knowledge on e-marketing and social media marketing.

Damiano D'Amici
Data/Business Analyst Developer

Damiano has extensive experience working with permissioned blockchain implementations, and has been one of the key people behind the ideation and design of AKB.

Thank you!