Blinking
Blockchain-based Digital ID using IBM
—
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Co-founder & COO
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No established, reliable, and universal way of creating, handling and confirming digital identity of people in the online environment.

Legacy technologies base identity verification on outdated practice - PKI.

New solutions are mixed with suspicious processes of either 2FA, device authorization or offline verifications that demand scans of official documents, yet again forcing us to use IDs and passports.

So called - “Sovereignty solutions” - even bigger problems - wrong business logic:

- Too idealistic - individual sovereignty
- Public blockchains - unstable, early phase
- No formal confirmation - still needed. Who confirms my user other than my user?
Digital Services Market Needs

An increasing need for a solution to the problem of digital identity management.

Creating, handling and verifying digital identities of users in the online sphere is in collision with ever-changing regulations.

Evident need for a secure KYC process relying on 100% verifiable and trustworthy digital identities based on biometric data.

Distributed, more secure and more transparent way of storing personal user data increasing trust and reliability.
What is Blinking?

- Permissioned blockchain digital ID platform that gives users control over their data.
- Complete digital identity management platform for businesses.
- Multi-factor authentication, KYC (Know-Your-Customer) and GDPR compliance tool.

At the same time:
- Protect and secure private identity and personal information of users.
- Provide businesses and services with secure access to user identities.
- Create a way to share users’ identity and data, in the users’ interest.
Problem

Reliable, trustworthy, and secure way of creating, handling, and confirming user digital identities, that gives users control over their private data.
Solution

Blockchain-based digital identity management platform for businesses that also provides KYC (Know Your Customer) tools and processes and GDPR-ready data storage.
Solution

Authentication and authorization relies on establishing digital representation of real person. Combination of something that people **know, have and they are** is the most secure way.

Password or PIN authentication is a traditional way of proving what **people know**.

Systems that require higher **level** of security (such as bank services) opt to increase the level of security with something **people have** (smart card or mobile phone).

**Highest level** of security would require combining what people know and have with what **people are (biometrics)**.
Section divider
Product

**BLINKING AUTH**

- AUTH module provides businesses with Digital Identity Management System.
- Based on secure, private, permissioned, scalable blockchain architecture.
- Based on multi-factor biometric authentication of user identities.
- Provides businesses with a secure way for their clients to access their services.
- Provides users with a way to allow or revoke access to their private data.
- Gives users knowledge of who, when, and why accessed or used their private data.
Product

BLINKING KYC

– KYC (Know-Your-Customer) tool for businesses & organisations.
– Supports AML, FATCA, PEP or any other sets of checks and documents.
– Can be: Public Cloud Solution, Private Cloud Solution or on premise.
– Provides secure, encrypted way of sharing user digital identities.
– System allows flexible multi-party acquisition and renewal of user data.
– Client decides on the provision of his private data to businesses.
BLINKING GDPR

– Blockchain storage system that provides technical GDPR compliance for businesses.

– Out-of-the-box solution for handling their users' or customers' private & personal data.

– Eliminates single-point-of-failure (distributed).

– Transparent tracking and logging of every action that involves personal user data.

– Helps businesses comply with GDPR & PSD2 regulations.
Application Capability

- Desktop, Android & iOS compatible.
- Wallet - Identity Management Tool.
- Multi-factor: Password / Device / Biometrics
- Easy combination of two or more modalities.
- Possibility of adding more modalities.
- Connection to any Bluetooth device/sensor.
Product Details

Blinking business benefits

✅ **Digital Identity Management System.**
Management of DID in a controlled environment.

✅ Established & Reliable **KYC (Know Your Customer) Tools & Processes.**

✅ **Regulatory Compliance** with GDPR, PSD2, AML, FATCA regulations.

✅ Different/Specific **authentication modalities** including biometric algorithms.

✅ Highly flexible architecture and engineering practices providing different approaches depending on business model.
Product Details

Blinking end-user benefits

- **Verifiable Digital ID** - formally acceptable digital representation of persons identity.
- (Non)-Anonymous Digital Identity
- **Authentication & Authorization**.
- **Consent Mechanism**: Approve/Revoke Access to personal data.
- Easy registration for various participant services in the network.
- User is in control and the sole identity owner. Depending on the regulatory or business requirements.
Blinking is built using Hyperledger Fabric, private, permissioned blockchain infrastructure and platform for distributed ledger solutions.

Blinking relies on IBM Cloud services and infrastructure needed to realise the business potential.

Using academic & research knowledge and expertise, Blinking developed in-house biometric algorithm that functions in a distributed system with higher level of security.
Why blockchain?

- Helps protect private data (data signatures are stored in the ledger).
- They cannot be tempered with, any attempt will be recorded.
- Enables exchange of data between participants based on users consent.
- Every data access is recorded and user has the overview.
- Verification of identity is done by multiple peers (Smart Contracts).

Increases trust in the system - DLT (Distributed Ledger Technology).
Why Hyperledger Fabric?

- Designed with simplicity in mind.
- Good for business solutions.
- Provides scalability.
- Performances are analogue to transaction based systems.
- Easy integration with other technologies, allows for creation of flexible solutions.
- Strong community, sound support, IBM leads the community and is the strongest contributor.
Private user data can be stored in a secure container in Blinking but it cannot be decrypted without all the peers in a distributed network providing confirmation. Likewise, container can be on a privately hosted cloud or in an offline network.

Data is not stored in the digital ledger. This is one of the main benefits of using permissioned blockchain network. We store data in a distributed database system that can be accessed from smart contracts and ledger holds only signatures of data to ensure that no tempering is done of chain.

Complex Blinking system includes digital certificates, digital signatures and multiple encryption steps involving SHA-256 and AES-256 encryption algorithms. Systems architecture guarantees data encryption every time data is used.
Partnerships
The team

**Co-founders:**
CEO Alex Migitko
COO Miloš Milovanović
CTO Miroslav Minović
Blockchain Architect - Uroš Šošević

and 20 more proud and motivated team members!
Growth

IBM Business Partner

Blinking has signed a partnership with IBM and officially became Business Partner.

Blinking system relies heavily on IBM Cloud services.

Hyperledger General Member

Blinking chose Hyperledger Fabric as a core framework because it is a very well designed solution with a great balance between simplicity and features required to build a high-quality business solution. Hyperledger Fabric’s easy integration with other technologies, strong community and sound support truly give us a chance to focus on our expertise – developing a digital identity management system.

Patent Application Filed

Patent for Blinking system is filed on the European level and is currently pending under ref. No. EP18186310.1 on 30th July 2018 under name “Authenticating Client over Network”.

Pilot Testing Phases

PoC launch and testing phase with 5 Serbian banks covering 40% of market began in Sept. 2018.

Banks employees successfully tested creation of digital identities and KYC data exchange.

Many people tested the system in real-time with several hundred completed KYC exchanges.

Banks are very interested in the implementation and reaching the production phase.
Timeline

Blinking is a small startup from Belgrade, Serbia that is now 1 year old.

- Product has been growing rapidly due to motivation and devotion of a young team of expert software engineers and experienced people with decades of business experience.

- Company was founded by university professors and people with business experience.

- Team is made up from excellent ex-students and colleagues from academia.

1. Beginnings
- Blinking is fully functional
- Initial business negotiations
- Exhibiting at CeBIT
- IBM Business Partner

2. Pilot - Patent
- Patent for the Blinking system is filed with the EPO
- European Patent Office
- Blinking trademark
- Pilot with 5 Serbian banks is in preparation phase

3. Business development
- 1st phase of pilot with banks completed
- Entering the 2nd phase of bank pilot
- CES Awards Startup of the year
- Members of 2 Dubai accelerators

4. Growth & Scale
- Pilot is fully completed
- Entering production phase with banks
- Completing pilot phase with Dubai government institutions

5. New markets
- Exploring and entering new markets with focus on the west.
- Production phase with Dubai institutions?
Thank you

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