



# AZHOS

ENABLING INDUSTRIES

## One Pager Overview AZHOS

September 10th, 2020

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### Description

This document contains AZHOS One Pager Overview with a concentrated introduction of AZHOS business model in a Tweet, the development of the chemical industry as well as the technologies on which AZHOS corporate model builds upon.

In addition, the major problems of the chemical industry are introduced with AZHOS solutions for solving exactly those problems. Further, the Assets AZHOS developed over the last 2 years and the Achievements of the Start-Up will be presented.

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## AZHOS in under 300 words

**Enhancing SCF-financing** - AZHOS is providing an infrastructure for autonomous payment and financing processes in the supply chains of the process industry. By combining several new and already established technologies AZHOS is enabling suppliers to release the capital tied up in inventory and shipments and therefore accelerates the cash-to-cash cycle of connected clients.

**Implementing E-Money** – Based on the established supply chain management solution of its partner company, AZHOS enables the synchronization and optimization of shipments and their respective cashflows through the implementation of Euro on Blockchain, which in cooperation with financial institutions enables the programming of fiat currency payment processes with Smart Contracts.

**Reducing risk through Proof of Existence** - By integrating Blockchain technology into an existing network of IoT devices that measure inventory levels in various industrial warehouses, it is possible for AZHOS to provide a definite and immutable proof of existence for liquids, bulk goods and silo goods, thus increasing transparency in the supply chain and reducing the risk for financing partners.

**Enabling Consumption tied financing** - AZHOS' system enables companies to execute payments and financing directly linked to the consumption or use of a good across several suppliers and customers in real time, reducing the hurdles and costs of financing solutions and providing a clear audit trail for the corresponding shipments.

**Growing with renowned partner** - Together with well-known chemical companies, AZHOS is currently installing several MVPs in Germany and is looking for partners and investors to drive the company's growth and further development of the technology, as the infrastructure offers potential for numerous other business models based on it, such as the securitization of assets in the supply chain.

## Business Model at a glance

**IoT Sensors:** Placed in chemical silos to collect real-time inventory data and enable process automation based on real-world data.

**DLT (Distributed Ledger Technology):** Offers immutable, transparent information on inventory and accounts receivables to every stakeholder in the financing transaction.

**AIBF (Autonomous Inventory-Based Financing):** Smart contracts trigger consumption-based fiat payments at a fraction of the current cost and risk of supply chain financing (SCF).

**Bottom Line:** AZHOS helps optimize financial structures, working capital and payment flows in company networks.

# AZHOS in bullet points – Comprehensible for everyone

## Problems in the chemical industry

1. **Filling level:** Filling levels in silos are intransparent due to a lack of digitization and sensor technology, no legally binding quantification and verification of silo inventory possible. Measurable shipments and transactions are mostly too small.
2. **Delivery Note:** Delivery notes are still often processed manually. Financing options with a delivery note as a legal binding proof can only cover small ticket sizes (e.g. Truck/ Wagon) increasing interest rates and require expensive and repetitive due diligence.
3. **Payment:** Extensive payment periods are common, due to long supply chains and inventory periods in the industry. Supplier are put at a disadvantage with VMI and consignment warehouses, due to monthly inventory measurement cycles deferring the invoicing process.
4. **Liquidity:** Tied-up capital in the supply chains, combined with high internal capital costs and long payment terms lead to systemically low liquidity and debt to equity ratios. Low transparency and high process costs in the supply chain pose big hurdles for banks and suppliers, to provide and receive financing.
5. **Due Diligence and Accounting:** Multiple repetitive and redundant supply chain financing processes over several departments, lead to internal costs, mostly exceeding the potential savings.
6. **Financing Risk:** Banks are obliged to comply with several SCF regulations such as Basel III, including credit risk regulations for investors and imposing high risk premiums on SCF financing of bulk shipments.

## AZHOS problem-solving solutions

1. **Integrated IoT and sensor infrastructure** AZHOS integrates into existing IoT infrastructure and has direct access to the ERP (Enterprise Resource Planning) systems of multiple clients. This allows AZHOS to efficiently automate processes based on real world data such as inventory measurement, without affecting internal systems of a client.
2. **Transparent, Legally Binding Quality of Data** In the case of bulk goods, one of the most important prerequisites is the technically distinct documentation of the inventory levels. AZHOS provides a legally binding "Proof of Existence" through the validation of filling levels by customers and suppliers on blockchain. Once real time stock has been recorded and transferred, they are linked and visualized with the master data of the location (storage capacities, replenishment times, forecast data, etc.).
3. **Process Automation** Through further integration (connection of the ERP systems of supplier and customer), an automated replenishment is possible. Furthermore, a link between determined inventories and existing shipping notes, creates an exact verification (Proof-of-Inventory), which is stored on the blockchain and can be used for further processing.
4. **Enabling and Facilitating Trade Finance** AZHOS enables chemical suppliers and banks to autonomously finance receivables of bulk shipments and allows banks to pre-finance and facilitates financing options, such as factoring. It connects investors, just like banks with suppliers or producers and therefore establishes a new market. By lowering financing hurdles such as lacking transparency and expensive processes AZHOS renders SCF economically viable and increases savings.
5. **Consumption Based Payments and Financing** In the same way as automated, demand-driven shipments are executed, AZHOS provides an automated, consumption-based financing. By coupling inventory measurements in the warehouses with the ERP systems of customers, suppliers and financiers, payment flows and corresponding documents can be triggered in real time, based on consumption. There are no more goods in the DIO/DSO (Days Inventory Outstanding/ Days Sales Outstanding), as payments can be triggered and financed, according to the consumption of the customer.
6. **Instant Settlement of Payments** AZHOS helps suppliers to reduce payment terms from more than 100 days, to less than 1 day. AZHOS offers a solution for long inventory cycles, through immediate IoT payments (devices settle their own bills through ERP integrations for consumption). In addition, the

capital costs of tied up capital are eliminated, which leads to enormous savings compared to Internal Financing of more than 60% with AZHOS financing. Therefore the supplier can improve liquidity.

7. **Fiat on Blockchain Technology** The usage of tokenized fiat currency enables direct programming of cashflows. Using tokenized money, a fully digitized payment cycle is enabling autonomous payments, that are being triggered by IoT Devices, like sensors in a Silo, and avoiding hedging risks at the same time. AZHOS is one of the first companies that combines the security of the Euro with the versatility and programmability of a token and guarantees direct ERP integration of payments.
8. **Clear Audit Trail** Through process automation, invoices are being created autonomously and a comprehensive and transparent overview of all goods movements is given. The automated process facilitates future audits and reduces organizational expenses significantly, as the bookkeeping processes can be automated parallel to each other while decreasing human made errors.

## Assets und Achievements

- **Strong Partnerships** AZHOS maintains a comprehensive partnership with VMI Expert Orbit Logistics to build on more than 20 years of experience and 63 existing customers. Orbit Logistics offers AZHOS access to 350 companies. AZHOS has access to 10 of world's 30 biggest chemical companies through the global logistics and ERP infrastructure of Orbit Logistics, like Dow Chemicals, SABIC, Bayer, Evonik, Lanxess and DSM. The combination between real world assets and datasources from Orbit and the technology from AZHOS generates the most value for both customers and financial institutions.
- **Solid Existing Infrastructure** AZHOS is tracking 10M tons of goods per year, valued \$50B in chemicals each year. The total value of goods tracked by AZHOS infrastructure already exceeded \$35B in 2020 by now. More than 6400 sensors and data points are available through Orbit Logistics. AZHOS is currently operating in 54 countries.
- **Running Pilots** Pilot clients include BASF and EVONIK and AZHOS completed Proof of Concept and Partnering with Evonik and Commerzbank. Further Proof of Concept with BASF, K+S is ongoing, as well as talks with financiers such as BASF-Finance and Arvato. Our best customers are Chemical Industry Producers and their Procurement and Supply Partners.
- **New Edge Technology** AZHOS uses E-Money on Blockchain as one of the first start-ups and is cooperating with IO-Cash and Alastria. The company developed one of the first autonomous supply chain ecosystem and offers a new and unprecedented form of supply chain financing, based on blockchain technology. By utilizing latest technology, AZHOS provides a unique Proof of Existence in a trust-free environment, to enable a consumptionbased financing of goods.
- **Award Winning Company** *"With its smart supply chain financing solution, enabling the automation of cashflows in parallel to the flow of goods"*, AZHOS earned the 2020 Frost & Sullivan Entrepreneurial Company of the Year Award. AZHOS received "excellent" ratings in Entrepreneurial Innovation, as well as in Customer Impact. AZHOS received a Chair in the Enterprise Ethereum Alliance (SIG: Chemicals) and access to Ethereum's core developers. CIO Review awarded AZHOS to the Top 10 Blockchain Companies of Europe.
- **Leading in Community** AZHOS has been active in more than 60 conferences in the last year, it was represented in the Crypto Assets Conference, Chemspec Europe, World Crypto Conference, Disrupt Network, and the European Chemistry Partnering. It engaged with the Bundesverband Materialwirtschaft (BME), Industriehandelskammer (IHK), the German American Chamber of Commerce, the Blockchain Bundesverband, International Token Standardization Association (ITSA), Micobo and many more. Well-known newspapers like ARD, Handelsblatt, Capital, BTC Echo, Finance magazine, Cryptoticker, The Tokenizer published articles about Azhos.
- **Experienced Team** The team consists of qualified board members and management with backgrounds from McKinsey, MIT, PWC, Siemens, HSG Sankt Gallen, the German ministry of finance and Frankfurt School of Finance and Management.