ZYGOT

Whitepaper

&

OSI + ERP = ZERP

Open
Source
Intelligent

Enterprise
Resource
Planning

The ZERP platform introduces Open Source Intelligent ERP solution that utilises the advantagesof blockchain technology. Its coins are Zygots. ZERP has ‘lightweight’ character offering accessible decentralised ERP architecture available for all company sizes - micro, SME, corporate, with hope to provide the benefits of ERP system to users and collaborators with various budgets. The foundation of the ZERP is decentralisation of actors. On one side, the users of various sizes can benefit from open-source high quality ERP modules that compose a system, and participate in its continuous improvement and maintenance; while the teams of developers are again decentralised and there is no single provider, but numerous compositions (teams) of developers that address and compete through the principles of user requirements satisfaction and upward push of quality. Blockchain’s peer-to-peer networking and distributed validation will provide a foundation for the ZERP initial concept, but will also represent a place to build on a future ZERP platform that will be generic enough to cover the entire supply-net of certain domains and/or businesses become the unifying ERP platform of the business ecosystems beyond tomorrow.

A. DESCRIPTION OF THE BUSINESS

The ZERP platform introduces open source, intelligent ERP solution that utilizes the advantages of blockchain technology. Its 'lightweight' character will be mostly visible in the cloud-based Software-as-a-Service (SaaS) architecture and profile availability for any company size - micro, SME, corporate, with hope to provide the benefits of ERP system to companies with various budgets. This is achieved by emphasizing ZERP's modularity and variability, as well as dynamic adaptability as integral part of its lifecycle as intelligent solution. The foundation of the ZERP is decentralisation of actors. On one side, the users of various sizes can benefit from open-source high quality ERP modules that compose a system, and participate in its improvement and maintenance; while the teams of developers are again decentralised and there is no single provider, but numerous compositions of developers that address and compete through the principles of user requirements satisfaction and upward push of quality.
Blockchain's peer-to-peer networking and distributed validation will provide a foundation for the ZERP initial concept, but will also represent a place to build on a future ZERP platform that will be generic enough to cover the entire supply-net of certain domains and/or businesses become the unifying ERP platform of the business ecosystems beyond tomorrow.

B. ERP SOLUTIONS - GENERATING VALUE FOR BUSINESSES

Enterprise resource planning software, or ERP, is a suite of customizable applications that allow businesses to integrate and manage their most important processes. It is an attempt to create an integrated product that manages the majority of operations in a company. What is different about ERP systems, is that they integrate across functions to create a single, unified system rather than a group of separate, insular applications. As idea, concept, approach, goal ERP solutions are what every business needs in this information era.

Its advantages enlist:

- When **designed for the current and future needs,** ERP solutions are capable of improving a lot of processes in a company and a competitive advantage over competitors

- As an IT solution, the ERP **gathers on the discussion and creation table** top, middle, operational management and specialists on one side, and mirrors competent information systems professionals on the other. This broad composition of inputs and competences can result with significant value for the business and its employees, managers and stakeholders, but also align strategy, tactics, operations from the perspective of **dynamic business-IT alignment**

- There is a lot of **business process improvement, redesign, optimization and standardization** taking place in the early stages of ERP implementation roadmap as well as **improved collaboration and workflows** that help improve the business model and clarify competitive advantages too. These aspects provide **complete visibility of the most important processes and components** of the business allowing managers the necessary situation awareness but also managing mechanism at hand for achieving purpose(s)

- ERP should be able to ‘check all the boxes’ of the **enterprise needs and wishes**
- ERP modularity should provide **customization and adaptability for various predictable and unpredictable contexts** of application

- Integration of **legislative, data protection, regulatory, domain-specific aspects and compliance**

However, the disadvantages are significant too, not so much on conceptual level of the ERP systems, but in direction of their use and functionality achieved. Here are some:

- **Direct and indirect costs** - both significant and both hard to keep within any plans (resources such as money, time, loss in quality, dedicated people-on-the-job, business lines suffering, licensing, ...)
- **Depending on one provider’s will and quality** and having very little maneuvering space
- Over- or under-**customization** and **slow response** by a distant dedicated team

Rigidity and **slow response to changes**

Inability to deliver the expected dynamic functionality in turbulent environment

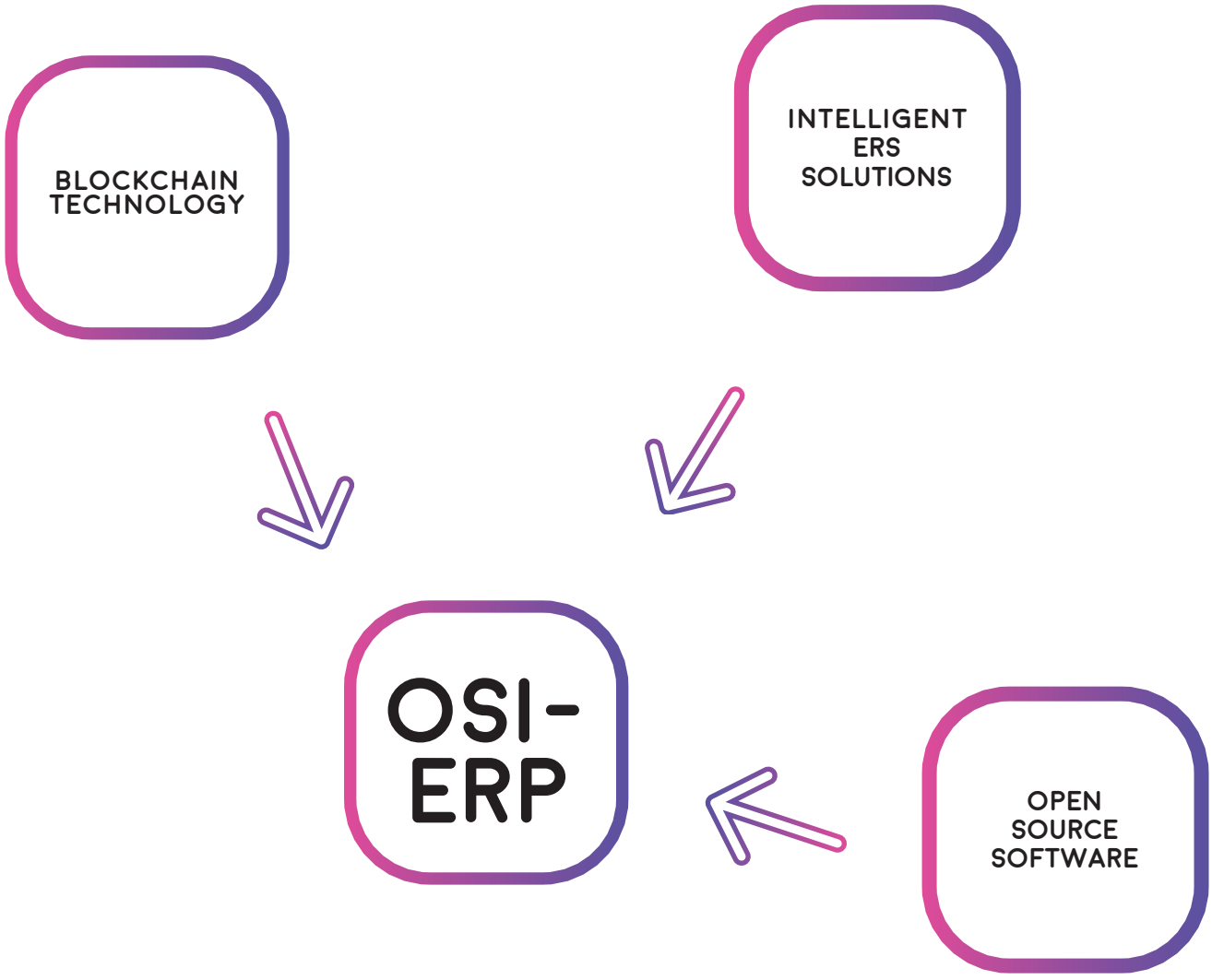
Lack of interoperability within the enterprise and across the supply chain

Potential **loss of individual competitive advantage** due to standardisation of the business processes

C. TOWARDS REMAPPING OF THE ERP POTENTIALS

We are proposing a new vision for implementation of the next generation ERPs - that incorporates intelligence, richer analytical capabilities from the end-user perspective, and broader scope of coverage potential across the entire business ecosystem - which help establish or re-enforce the existing and generate new relations among the business stakeholders. The main principles are: flexibility, efficiency and effectiveness; and adaptability.

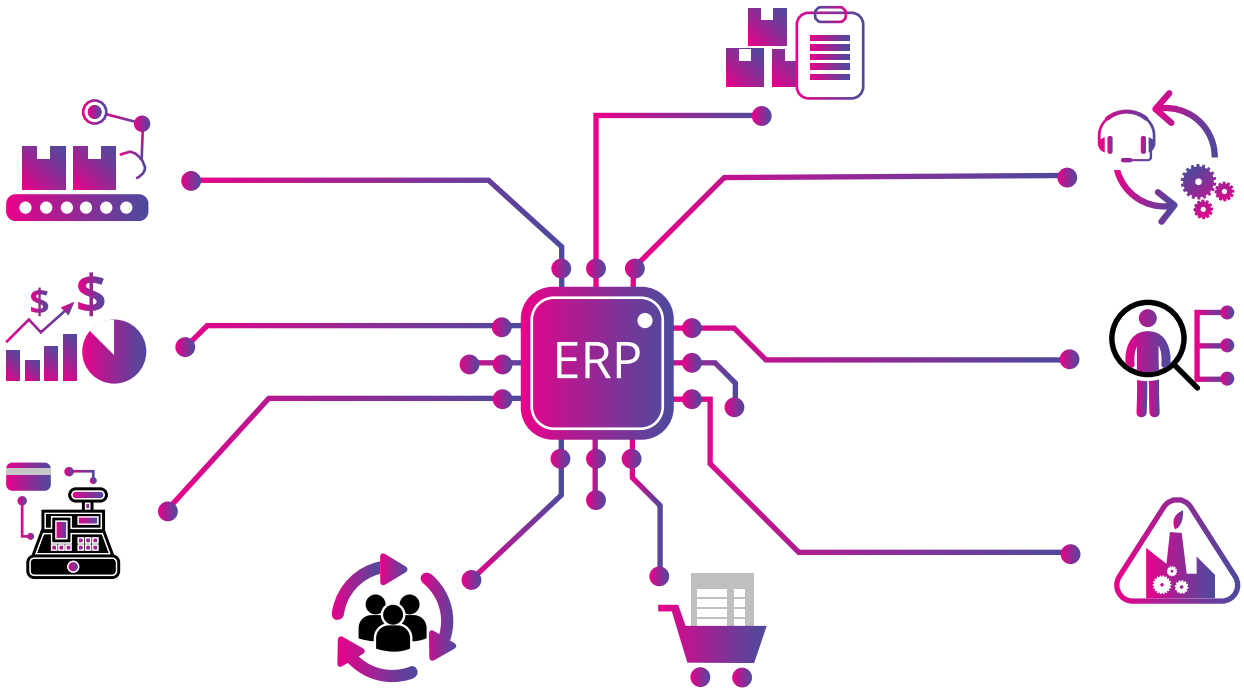
This model remaps the ERP potentials based on the synergy of three main components: intelligent ERP solutions, blockchain technology and open source software.



Principle 1 - INTELLIGENT ERP SOFTWARE

Intelligent software should be able to respond effectively and follow the exponential data flows that need to be processed, stored, manipulated and utilized by the companies. With each new ERP module, the hardship of its functional integration increases to sometimes form-without-function situation. The intelligent ERP should allow acknowledgement, recognition and cross-sectional integration of data of various functional modules in almost seamless manner (very much opposite of the hard and formal migrations or upgrades that are a frequent case). With the heavy and rigid ERPs, the companies either stay at one level too long, or need to make a massive effort to shift to the next one. Business doesn't happen with such discontinuity, and it is the job of the ERP to be able to follow as real as possible the business dynamic needs.

ZERP's foundation is based on data warehouse, OLAP and data mining as key pillars of the business intelligence. In fact, to mirror the dynamic intelligent reconfigurable business processes, we will produce dynamic, intelligent modular ERP. Furthermore, the ZERP will aim to uncover and suggest mismatches and offer alternatives back to the management, on what is missing and/or can be re-routed in more optimal manner. In this sense, ZERP aims to open new dimension of redesigning and redefining the traditional managerial approaches by creating a new platform that generates 'digital logical framework' as fundamental assumption to achieve digital business process management.



BLOCKCHAIN **TECHNOLOGY**

Principle 2 - Blockchain technology

The disruptive profile of the blockchain technology should allow reliability and security in the development and use of the ERP software. Namely, the blockchain technology allows registration of the operational transactions in blocks, and the data can be shared across p2p network. Since none of the actors

of the blockchain can modify or alter the existing blocks, the blockchain platform provides safe chronological evidence for the transactions, protection and increased resilience in the sense of abuse, because all peers need to achieve consensus to accept the registered transaction. Blockchain allows easier following of transactions and improved privacy, efficiency, transparency and greater confidence in the system. Using blockchain technology in ERP systems allows greater control in the utilization of the existing company data in terms of generation and transfer of new information into distributed ledger. Cloud blockchain ERP basically perceives decentralized platform of databases with integrity to which the users can access in real time and from any location. Scalability and security are qualitatively new transformative content that differentiate decentralized blockchain ERP from on premise ERP. ERP structured in this manner employs greater efficiency and agility in the process of business decision-making and business process re-engineering, responsive to the dynamic changes in the global competitive environment. The ZERP concept is founded on developing broad ecosystem that includes integration of many users to the only blockchain platform where they can freely use their ERP applications, develop the functionalities and more easily articulate their needs connected with the ERP used. Basically we're talking about implementation of innovative and more advanced ERP solutions to a functional ecosystem based on the new blockchain technological paradigm as a source of added value for the companies. ZERP will be an open interoperable software powered by DPoS blockchain system where the companies will be able to have access to more sophisticated ERP software. The peer-to-peer network configuration of the blockchain will allow the peers in the chain to permanently qualitatively improve the software, and develop and strengthen its performance and functionality.

Principle 3 - Open-source ERP

The provision of open access ability to quality and more sophisticated ERP solutions is especially important to those companies who have limited financial resources, and limited availability to purchase expensive commercial software from the big ERP providers. Considering the benefits of using of ERP systems in increasing efficiency and agility in the business management, the attractiveness and interest to use open source or CRP increase. Gartner research confirms these tendencies of substantial interest to use open-source software.

Their investigation of 547 companies shows that nearly nearly 46 percent of organizations have deployed open-source applications for specific departments and projects and 22 percent of the surveyed businesses use open source consistently across all departments....While lower cost of ownership remained a major factor, at 29 percent, nearly one-third of executives cited flexibility, increased innovation, shorter development and faster procurement as reasons for picking open source over proprietary software.....

In our preliminary investigation the companies prefer the cloud ERP option as more attractive. The advantages of distributed and decentralized ERP are in direction of reduction (or no) investments in own computer infrastructure; no licenses for software use; avoidance of the expenses for software maintenance; possibility for upgrades of the open source code; possibility for access from various geographical locations; greater security, scalability and elasticity of the system; reduces counterparty risk.

D. CONCEPTUAL MODEL OF ZERP

The core concepts of the innovative approach are founded on integration of the software solution and distributive model that encompasses distinctive traits compared to the current practices in ERP software. The ZERP sequencing adds dynamic components that form qualitatively more advanced model of distribution and use of ERP systems. The model's structure integrates the following components:

- Use of the distributed and scalable network of servers for hosting (EOS witnesses)

- The ZERP maintains validity and control of the data that will be imported using blockchain technology, with encrypted and protected data

Free access to open source code with very minimal determined amount charged for hosting/processing.

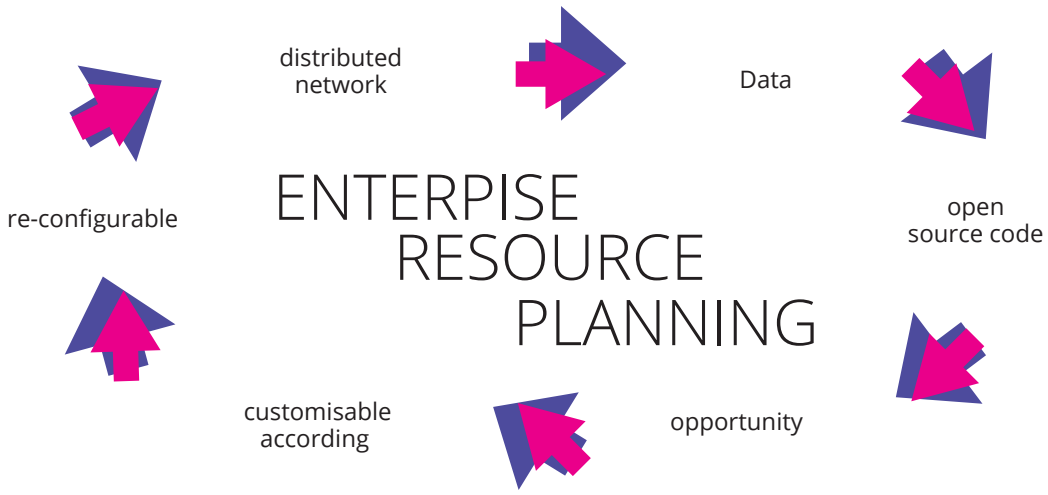
- ZERP will have the opportunity to use the processing power from external sources

- ZERP will be able to customisable according to the specific user needs with user input and requirements engineering going in and beyond the development or alteration stage the source code changes and alterations will be implemented if they are accepted by the core team

- The ERP will be re-configurable and scalable

- The ERP will have user friendly interface to allow easy implementation by users with minimum training by the staff

The ERP layer will be on top of EOS as the ERP Modular Enterprise Engine Layer. The Engine layer will be adaptable for different needs. Also different need can be implemented in the GUI.



DISTINCTIVE FEATURES OF ZERP

ZERP is an advanced solution that will generate a plethora of distinctive advantages compared with the existing ERP systems and architecture.

- Innovativeness - The integrated data flow based on blockchain technology allowing increased security and reliability to the users
- Availability (accessibility) to large number of geographically scattered and size-unspecific business community of companies
- Variability – possibility to implement in various domains and contexts
- Adaptability - to the changing circumstances and business needs
- Cost-efficiency - ability to use advanced modular ERP with significantly l ower costs compared to the traditional ERP software solutions from big providers because of its decentralised maintenance and development

E. THE ZERP VALUE PROPOSITION

ZERP addresses the elaborated downsides of the ERP software, combined with its expanded goals, sublimed into a distinctive value proposition for itsusers:

- ZERP incorporates powerful integrative capabilities, allowing the advan tages of the ERP concept and overcoming the disadvantages of price, accessibility and adaptability
- Business process reengineering and business-IT alignment through implementation of novel and complexity-appropriate organisational and managerial approaches
- Real-time processing and analysis of big data - a key factor for agile and responsive information support for dynamic decision-making and strate gic effects Improvement of the strategic value of the company by giving at hand reliable and updated information support
- A completely new paradigm where the users aggregate their needs and requirements and address number of interested developer teams who find challenge in addressing actual user problems and incentive in the added value of the entire ERP and the network

- Continuous responsiveness and co-creation of improved modules with all stakeholders and achievement of need-appropriate structure with the businesses as end-users
- Improved user experience and optimal customization for the benefit of the employees, from individual and group perspective.
- ZERP aims to support the informational structure of the broad scope of the business ecosystem and establish value co-creation network that will benefit from its capabilities in achieving own and collective purposes.
of the entire ERP and the network that will benefit from its capabilities in achieving own and collective purposes.

F. THE BUSINESS MODEL

Our team is determined to developing high quality functional ERP solution that is inclusive (not exclusive) in use. Analysing the blockchain and ERP trends, we are using EOS as a foundation and following the decentralised application architecture.
The ERP software development will benefit from the know-how that our team (named ZYGOT) has engineered in the past 25 years working on ERP projects (cloud and on-premise) and combined IT/Management/Academic/ Entrepreneurial experience of the core founders of over 80 years.
In order to have faster and accelerated induction and broader community support, we will use the principles of coin emission.
To develop the prototype, we will obtain funding via seed token sale (for the pilot stage) and token sale in which we will emit Zygot-Tokens (ZYG), possible to be bought with discount and/or other incentives in the pre-sale.
The prototype ought the have the following modules:

- Accounting
- Manufacturing: engineering, capacity, workflow management, quality control, bills of material, manufacturing process, etc.
- Financials: Accounts payable, accounts receivable, fixed assets, general ledger and cash management, etc.

- Supply Chain Management: Inventory, supply chain planning, supplier scheduling, claim processing, order entry, purchasing, etc.
- Customer relationship management (CRM)
- Data Warehouse

We are expecting strong contribution from all collaborators: users, contributors, implementers. Each category of collaborator has various and specific interests and motivation to join this project. The essential drive is the creation of Open Source Intelligent ERP solution that will be used multimodally, multi-lingually, any-time, any-place, any-device, any-company-size.

PRICING, PLAN, PROOF OF STAKE - VALORISATION/MONETISATION

The project has several aspects of decentralization:

- On one side, the ZERP open source software will be improved (and main tained) through users' requests on a dashboard, where the users also propose number of tokens to be paid for the service to the ones who deliver it
- On the other side, there will be teams of developers that monitor the dashboard for work on the software modules, and if capable and interest ed to do the job, they dedicate to a specific user(s) request. After complet ing the assignment, through 'smart contracts' they receive the aggregated coins offered from users side for the specific job, because so many users needed it

There are several preconditions and governing principles to be fulfilled for this model to take place properly. The teams of developers should be holders of certain amount of coins which will be frozen if a task is assigned to them. They can apply for working on a module with maximum amount of tokens that is 20-times bigger than their coins set aside for the specific instance. The smart contract protects all sides from fraudulent behavior. And, last, but not least, the community of users expresses satisfaction for the job done by the developers, according the requests, and in case of bad marks that specific team will not be able to uptake engagements on modules further on - in other words, the

incentive is to keep a good reputation and deliver high quality work in order to sustain as developers on ZERP. This logic protects all ERP users, regardless of their size and financial power, to be dependent on single provider and 'stuck' with long modification queues, budgets, lost-in-translation problems and managerial politics.

TOKEN SALE, PRICE, BONUS

A token sale will be held in April 2018. We will issue a token called Zygot (symbol ZYG) to support the initiation of the prototype. The token sale will enable the purchase of the tokens, while the pre-sale will provide the initial funding and attraction of the first supporters and collaborators.

Start date: **Jun 1st, 2018 14:00:00 CET**

End date: **Jun 15th, 2018 23:59:59 CET,** or when tokens sold out, whatever comes first.

Token price - Total number of crowdfunding for project development is 15 mil $ for 300,000,000 of total 500,000,000 Zygot Coins.

TOKEN UTILITY

The tokens are to be obtained by at least three profiles of stakeholders:

- Firstly, the potential users can contribute into ZERP with the motivation to get an ERP developed and maintained on decentralized principles
- Secondly, the potential developers will have interest in contributing in our tokens because of the possibility to get jobs on real issues of a novel product
- Thirdly, parties that are interested in contributing in ZERP and being up-to-date with technology, contributing to sustaining a new ERPparadigm.

The owners of tokens will have the opportunity to use modules by freezing tokens, or, in case they would like to sell their tokens, do so to other interested buyers.

TOKEN MECHANICS

The principles for using some modules will be by staking some amount of Zygots. In the next 4 years, each year 12.5% of frozen coins can be released to the owner (it means 50% of frozen coins will be released to the owners). The rest 50% can be released after breaking to use some module of application. Each year new 2.5% of tokens will be generated for extension a new users. This is another novelty of this project - the calculated inflation of the tokens. This means that once the project is running, there will be only tokens in exchange for further development of ZERP. However, a small percentage of new tokens should provide motivation for the buyers to get into a project that grows in stakeholders and quality.

TOKEN SALE DETAILS (AS A TABLE)

Service provider and token Issuer:
Token name: Zygot-ERP
Token symbol: ZYG
Total supply: 500,000,000 (five hundred million) tokens
Token for deliver for free to EOS token owners: 200,000,000 tokens with precondition of owning minimum
Hard cap: **15,000,000 $**

Contribution limits: Minimum contribution: _____ Maximum contribution: _____
Token protocol: ERC20 on the Ethereum blockchain
Unsold tokens: All unsold tokens will be burned
ZYG prices: Initial discounted price: 1 ZYG = 0.00070 ETH / 0.075$
Full price: 1 ZYG = 0.00093 ETH
Accepted coins: ETH
Token transfer: Tokens will be transferred immediately but will be locked until the end of the token sale
Token standard: ERC-20

TOKEN ALLOCATION

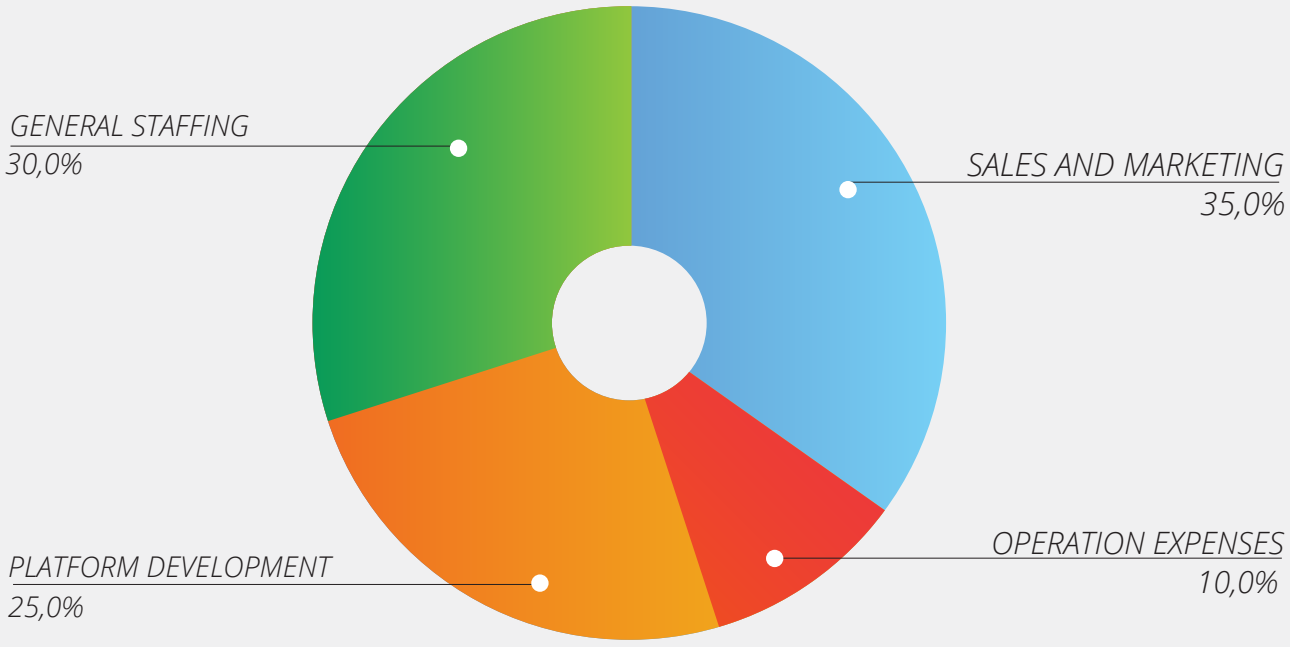
The distribution of ZYG tokens will be as follows:

Token allocation

USE OF RAISED FUND

The use of raised contributions will be as follows:

Use of raised contributions



ROADMAP | The roadmap of the project is as follows:

Phase 1

- Customer database engine with necessary data-entries and 2 front-end themes **Q2, 2018**
- Invoicing engine and respective frontend themes **Q2, 2018**
- Funding and development **Q3, 2018**
- Payments engine for the respective themes **Q3, 2018**
- Reconcilliation engine for the respective themes **Q3, 2018**
- Payments notification engine **Q3, 2018**
- Funding, phase 1 **Q3, 2018**

Phase 2

- Marketing activities, marketplace dashboard for all involved stake holders **Q4, 2018**
- Completion of the development team **Q4, 2018**
- Engine for supplies (raw materials,semi-products products) **Q4, 2018**
- Funding, phase 2 **Q4, 2018**
- Incoming and outgoing invoices engine per products **Q4, 2018**
- Closed testing of modules by Vertex clients **Q4, 2018**

Phase 3

- Tripple entry accounting **Q1, 2019**
- Warehouse Management Software **Q1, 2019**
- Production **Q2, 2019**
- Purchasing **Q3, 2019**
- Sales **Q4, 2019**
- Pilot real business users involvement for the Beta-version (10 companies from diverse profiles according: size, geographic dispersion, domain, maturity) **Q4, 2019**

Phase 4

- Supply chain management **Q1,2, 2020**
- CRM **Q1,2, 2020**
- e-comerce **Q1,2,3, 2021**
- Inventory Management **Q1,2,3,4, 2021**
- HR Software Management **Q1, 2022**
- Platform simulation in real-environment (several developer teams, several users, dashboard,...) **Q1, 2022**

Phase 5

- Mobile app reports on request and push-notifications **Q1,2,3,4, 2022**
- Applications revisioning, wrap-up and go-live **Q1,2, 2023**

Phase 6

- CONTINUOUS IMPROVEMENT

Gjorgji Mancheski

Founder

Programmer, Team leader, PhD in economics
University Professor
Currently dean of the Faculty of Economics – Prilep
Contact info, Link to CV/LinkedIn

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more info:

zygot.io

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