WHITE PAPER VERSION 1.1
SEPTEMBER 2022

Education Economic Ecosystem Supported by Decentralized Finance Network and Metaverse

Smart Contract (Polygon Network):
0xc145718228438a045d76d11248fb779e4d23f942

inkluziva

inkluziva

PARTNERS

ISG Participações S.A.

OROS Soluções Educacionais

truly. Tecnologia

BRISK EPM

iNuTech

Estudologia

4VR Virtual Reality

PORTVM

eduka

SIGE Sistema de Gestão Escolar

VEGA CRYPTO

INVESTBRASIL Instituto Brasil de Investimentos e Cooperação Internacional

TGT Digital

Finep Inovação e Pesquisa Empresa Pública do MCTI

MAIS Distribuidora de Livros

Monteiro Rusu Monteiro, Rusu, Carneirão e Berchi Advogados

SUMMARY

FOUNDER'S LETTER

The challenges of education in regions with a fragile economy are numerous. They are in the great social inequalities and in the serious infrastructure problems. Project Inkluziva was created to help combat this scenario, as a response to the economic and social reality that surrounds and worsens education issues. What began with the observation of important problems in the education scenario, soon materialized in the proposal of a platform of products and services which merge both technology and education.

This *whitepaper* presents an economic ecosystem with a decentralized finance network, which was created with the purpose of contributing to the teaching-learning process, in the various existing agents, to improve the effectiveness of teaching and generate an outstanding economic and social impact.

The Inkluziva Project originates from Oros Education Solutions, a reference and leader in the global market in the Technology-Mediated Education (TME) segment and controlled by ISG Participations, a business corporation of which I am the founder. Oros delivers excellent education content to tens of thousands of students from schools in poor regions, where formal education is limited in terms of the number of students served or takes place in a precarious manner. The results of our experience with Oros confirm the urgency of guaranteeing inclusive and quality education for all, which is definitely the way to face social inequalities.

In summary, Inkluziva's economic ecosystem (inclusive, in Esperanto) aims to bring together the various actors that surround and are present in the education environment, at the center of which are students and the quality of education, based on a decentralized finance network, based on token economy. We believe it is possible to grow and consolidate, at a global level, a business model of evident added value and committed to generating social and environmental impact.

This *whitepaper* is intended to attract partners to our community. Keep reading below to learn about our success story and the fundamentals of the Inkluziva Project.

Welcome to Inkluziva!

Carlos Jacobino
CEO and Founder of Inkluziva

Founder and Shareholder of ISG Participations

LEGAL NOTICE

It is important that you read this item carefully before making any decision and, if in doubt, seek legal and financial advice, as well as other experts, in order to make you aware of the risks and consequences of acquiring tokens through *blockchain*.

This document does not oblige you to assume any legal commitment with Inkluziva, nor does it constitute, in whole or in part, an opinion that can be interpreted as advice or suggestion for the acquisition of tokens.

If you decide to acquire tokens based on the Inkluziva project, please be aware that your initiative does not constitute the acquisition of crypto-assets for securities of any nature, investment units or common or preferred shares of Inkluziva or its related company or any security or collective agreement.

Each buyer is solely responsible for the fiscal and tax liability for their own transactions, with the owners, managers and other members of the Inkluziva team being exempt from any obligation regarding the individual decisions and actions of their buyers.

Bear in mind that the world of tokens is in its infancy and authorities in several countries are making efforts to regulate businesses and operations of this nature, the terms of which may and should be modified in order to meet regulatory requirements and compliance with legislation.

As with this whitepaper, any statement, whether oral or written, issued on behalf of Inkluziva, by its founders, team members or any individual or legal entity, directly or indirectly linked to the company, has a purely informative character.

Therefore, these statements are not guarantees and are based on projections of Inkluziva's business model, therefore, Inkluziva is not responsible for losses or damages arising from individual decisions made from this material or from information obtained through our communication channels, third-party websites and other information.

Inkluziva will make efforts to keep this whitepaper and other means of communication, fed with updated information, so that changes, total or partial, may occur without prior notice.

All product and company names are trademarks™ or registered trademarks® of their respective owners. Use of these company names does not imply any affiliation or endorsement by them.

1. INTRODUCTION

The United Nations (UN), through the 2030 Agenda, proposed 17 Sustainable Development Goals (SDGs). We have highlight in this section SDG - 4 Quality Education, which presents the objectives related to education. In this political strategy, the universalization of school attendance and the quality of education are permanent guidelines for all nations, especially the poorest. However, most education institutions face difficulties that make the fulfillment of those proposed objectives unfeasible:

- Structural difficulties to meet teaching demands in remote communities;
- Insufficient number of teachers;
- Undervalued teachers, subject to various forms of violence and without adequate training;
- Lack of models that allow the inclusion of people with special needs;
- High failure rates;
- High school drop-out;
- Housing, sanitary, financial, hygiene and nutrition conditions of poor students;
- Possible unnoticed illnesses of a physical, affective, psychological and emotional nature that can affect the performance and behavior of students and teachers.

Such obstacles result in acute and persistent problems. The first and most serious consequence is the widening of the social gap that separates rich and poor. On the one hand, people with access to high-level education. On the other hand, people without the same rights and without the same opportunities.

For the Inkluziva project, the biggest challenge in education is the inclusion of people. It is the fundamental principle that every individual has the right to education and the opportunity to reach a level of learning that allows the full exercise of citizenship and the use and development of their talents.

From the technological frontiers glimpsed with the advent of Web 3.0, especially the concepts of Distributed Ledger Technology (DLT) and Metaverse, an important space opens up for reaching those social challenges. These challenges were broken down into the following questions that became vectors of the Inkluziva project.

- How to provide quality education in countries with different types of challenges and inequalities?
- How to attract individuals living in absolute poverty and, in many cases, starving to school?
- How to combat high dropout rates and low performance in education; mitigate the impacts of the pandemic on education and promote new education models?
- How to adapt curricula and education content to the demands for qualified labor; to the effective development of human potential and the construction of social happiness, especially as a result of the transformations underway with the new digital economy?
- How to value education professionals, improve their working conditions and enhance their skills in achieving education goals?
- How to adapt education models to the new digital scenario, in order to create and boost their relationship with the economy based on digital assets?
- How to explore the potential of immersive technologies to build innovative teaching tools in the context of the metaverse?
- How to provide meaningful learning experiences to students, especially considering the socio-cognitive profile of each individual?
- How to make models and infrastructure available to Inkluziva partners and investors that allow them to invest, generate wealth and, at the same time, contribute to the realization of social impact projects?

The Inkluziva project has Oros, an ISG group company specializing in technology-mediated education, as its home environment. Its purpose is to deliver excellent education content to tens of thousands of students from schools in poor regions, where the vulnerabilities of formal education are worrying.

The company provides education institutions with an education model based on technological mediation. In this teaching modality, live classes are broadcast from central studios. Excellent content arrives wherever there is demand for education. School environments, in which students attend classes, are equipped with all the

necessary resources so that the contents arrive in high definition and for the necessary interaction between teachers and students to take place. The school environments supported by Oros have technological laboratories that provide computing resources for continuing education activities with immersive experiences. As a result, the TME modality has made it possible to bring quality education to the most remote regions, which used to be lacking in education, even in places devoid of internet connectivity, since schools are equipped with two-way antennas capable of generating satellite connectivity. The results of Oros confirm that it is possible to guarantee inclusive and quality education for all, which is definitely the way to face social inequalities.

Despite the observed advantages, the TME modality is still not capable, however, of solving all the factors that impair learning in schools. In fact, as formal education reaches the most remote regions, other problems are revealed. Some are in the school environment, but most of the limiting factors of education development, without a doubt, are in the economic and social condition of the student. In the family environment, for many students, the problems are even more serious. The reality of each family cannot be ignored if education is to become a transforming element.

Housing, sanitary, financial, hygiene and nutrition conditions, in many cases, end up driving the student away from school or, if they do not, harm, to a greater or lesser degree, their learning. Students living in unhealthy conditions are more prone to physical, affective, psychological and emotional deficiencies and illnesses. In the school environment, the lack of face-to-face teachers is another challenge to be overcome. It is important to encourage and offer appropriate conditions for the professional development of teachers in the region. The teacher, even with all technological mediation, has always been and will be the necessary reference for achieving the student's learning objectives.

Without the perception and consideration of these factors, education will also be harmed. Oros' experience with TME has shown that it is not enough to bring quality education to schools. It is necessary, rather, that each school is an environment of social transformation. Schools can and should have an impact on the lives of those who work there and the lives of those who study there.

- Since the beginning of the TME provided by Oros, in 2015, more than **500,000 (five hundred thousand) students** have been served at primary, secondary, higher, vocational education and youth and adult education levels. All with access to the same education standard. Dealing with education bottlenecks has been a revolutionary experience for the community that gravitates towards Oros and allows us to observe how beneficial and innovative its teaching model is. The most significant results can be summarized as follows:
- Increase offer of classes and content for all levels;;
- Greater education and social inclusion, with a reduction in the rates of young people out of school;
- Improvement of teaching quality indices;
- Discovery of new talents;
- Improvement of economic indicators in the region;
- Continuing education of teachers, raising the quality indices of classes.

Also in 2021, the ISG Group submitted to the Financier of Innovation and Research (Finep) a request to encourage innovation in order to expand the scope of Oros' operations. Approved, the project brought resources in the order of 68 million reais (approximately **15 million US dollars**), used with the purpose of offering a solution based on artificial intelligence for public and private schools to meet the legal requirements of personalized and individualized teaching. In this sense, mathematical models will be offered for the suggestion of learning paths, as well as helping in the identification and diagnosis of several factors that affect the students' cognitive capacity.

The development environment of the Finep project was the ground where the idea of the Inkluziva project germinated. Inkluziva, as an innovation project, can

be considered an extension of the Oros Finep Project. Part of the products resulting from the Finep Project will be integrated into the Inkluziva Platform, according to the schedule of commitments detailed in the roadmap of this whitepaper.

Oros is committed to being the pilot customer of the Inkluziva Platform. All education networks served by Oros will also be Inkluziva customers. This means that the first members of the Inkluziva ecosystem will be the students and employees of the schools served by Oros.

To deal with the context presented, the Inkluziva project intends to create a unique space so that all actors involved in the education process, at any level, can effectively participate in a decentralized finance ecosystem that provides them with financial inclusion and the experience of living of valuing the individual. All actors directly or indirectly involved in the education process will be able to interact with the Inkluziva token economy. In the Inkluziva ecosystem, the journey of those actors will be measured and managed based on criteria with due scientific and conceptual foundations. It is proposed, in this project, the study of the use of tokens as an instrument for the valorization of knowledge.

With Inkluziva, it is possible to bring know-how and expertise in business management and education to the world of Web 3.0 and decentralized finance (DeFi). A complete blockchain will be made available that will enable the tokenization of services and businesses in the education area, enabling Inkluziva partners and customers to develop their institutional mission and purpose, through the new resources and possibilities of the so-called tokenomics.

Each school or education network will be able to issue and transact its cryptoassets, of different natures (NFT, utility tokens, network tokens, payment tokens, security tokens and equity tokens, among others) on the Inkluziva blockchain (ZiChain). The initiative is expected to be the main standard of decentralized finance and metaverse for education in the world, and the financial resources raised with governance tokens, blockchain and marketplace fees will mostly serve for the development and maintenance of the technological platform, marketing, remuneration of Holders and implementation of the policy of incentives for teaching and learning acts.

The Inkluziva project essentially implies the creation of a new business anchored in tokenomics. The funds raised will be used to build the Inkluziva platform, as will be demonstrated in this document.

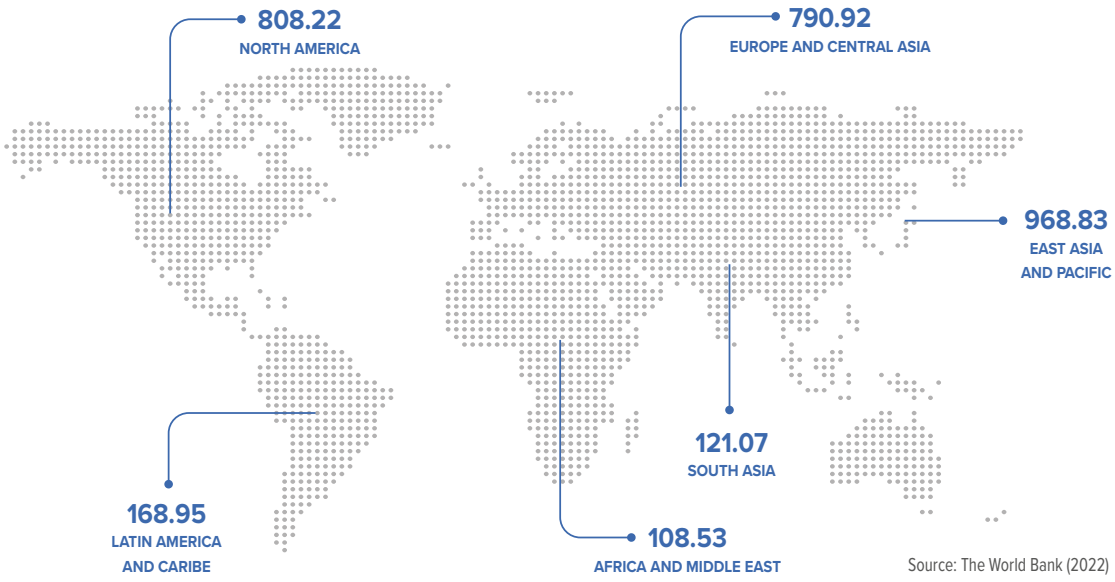
In addition to Oros, a pilot partner, Inkluziva will work alongside public and private education institutions, in solving the main challenges of education, in order to bring knowledge and qualification to those who need it, with the certainty that it is possible to grow and consolidate, at a global level, a business model of evident added value and in compliance with the appropriate standards of a company committed to social and environmental impact.

2. TARGET MARKET

Inkluziva is a decentralized finance business focused on the education market. In a complementary way, and always aiming to achieve the strategic purposes of the project, Inkluziva will incorporate offers from other markets to the platform, such as the games market, the financial market and the digital retail market. It is an agnostic platform, capable of accommodating numerous technologies and services aimed at education.

To know the size of the education market, about 3.5% of the world's GDP is destined annually for investments in education, which gives it a nominal value of more than **3 trillion dollars**. The following figure illustrates the distribution of this market in six macro-regions.

Global Education Market Distribution by macro-regions (in billions of dollars)



Source: The World Bank (2022)

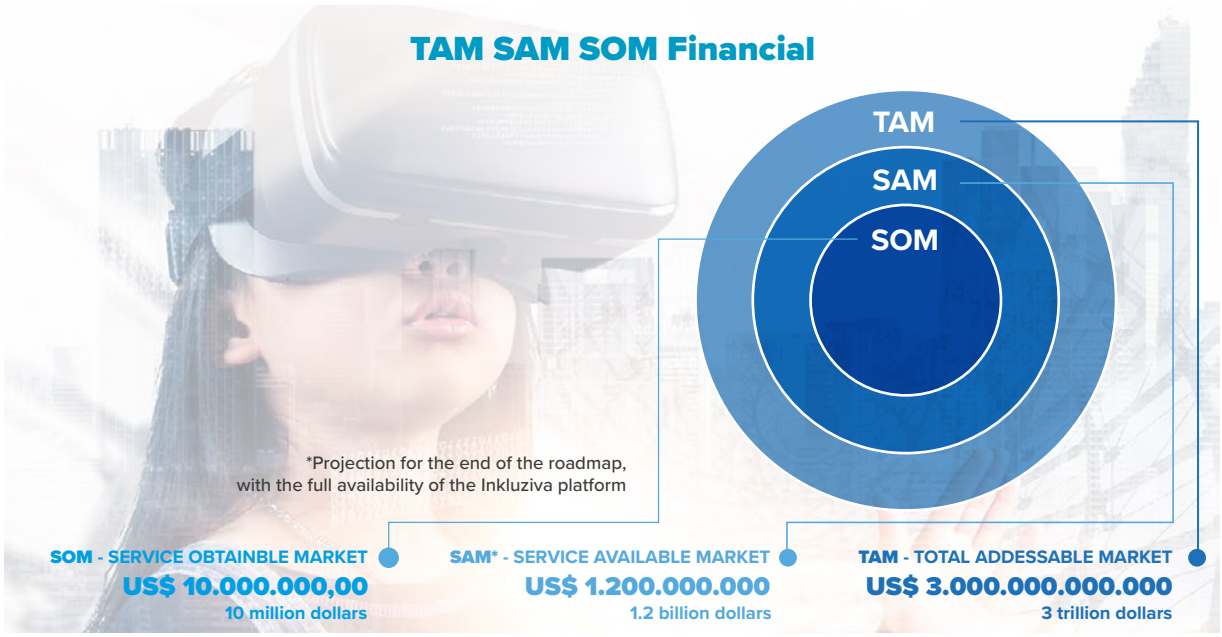
Inkluziva will prepare for global operations, with an initial focus on countries marked by great social inequalities located in the southern hemisphere, having as guidelines for identifying market reach the metrics Total Addressable Market or Total Addressable Market (TAM), the Serviceable Addressable Market or Recoverable Addressable Market (SAM) and Serviceable Obtainable Market (SOM). So the corresponding values are:

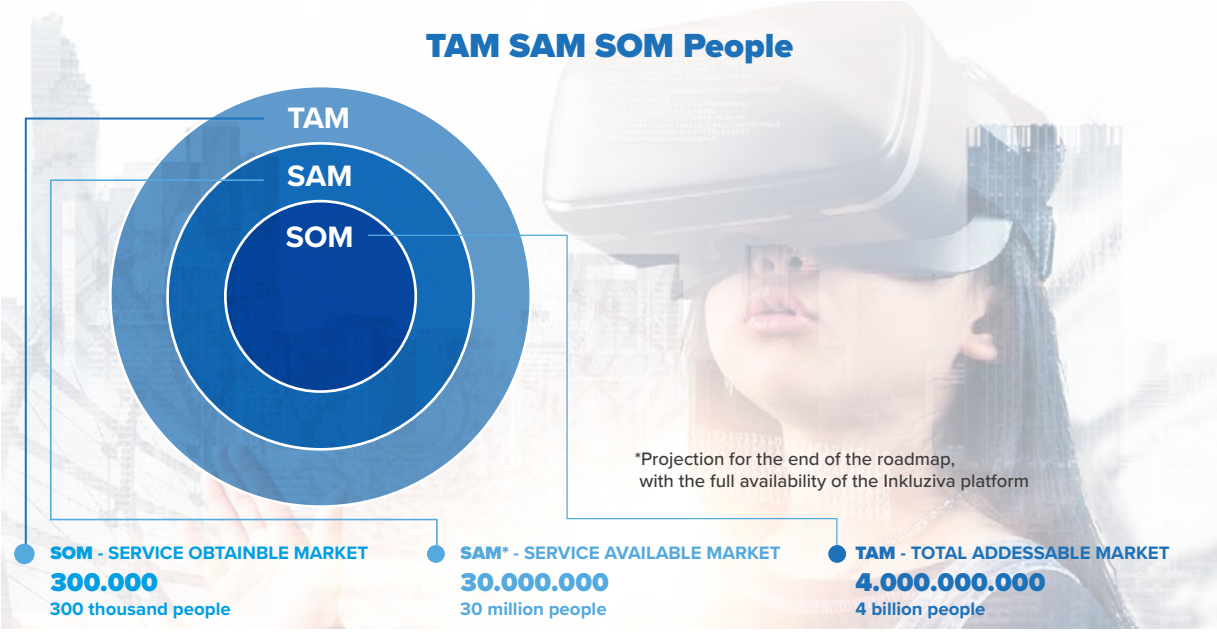
3. THE INKLUZIVA BUSINESS

For market positioning purposes, Inkluziva will act as the Education Economic Ecosystem Supported by Decentralized Finance Network and Metaverse. Its main purpose is to expand the reach, excellence and scalability of education services offered to the education market. The business is anchored in the token economy and aims to make schools, focal points of social impact in communities, as cells of an economic ecosystem based on decentralized finance.

Inkluziva should be understood as an agnostic platform for education services. On the one hand, demanders of education services. On the other hand, providers of education services, in addition to other related services that may influence the results of full education.

The value of the ecosystem will be in the set of participants. A large community of people and entities involved in education, all integrated into the token economy. Millions of students, mothers, teachers and servers from partner schools will receive and use their tokens to consume services from the Inkluziva Platform.





The financial sustainability of the business will come from the following sources: taxation on financial transactions on the blockchain, taxation on consumption of games and content, administration and management of resources, management of funds to encourage education, Marketplace and, above all, by the offer of tokens, NFTs and spaces in the metaverse.

The projections of financial results in the first years of operation point to the following growth curve:

Inkluziva intends to achieve financial self-sufficiency in its third year of operation and has the ambition to reach annual financial turnover of more than US$ 1 billion before the end of this decade. From the third year of operation, the revenues obtained will have the following destinations:

The economy of the Inkluziva Platform will be based on ZiCoin, a cryptocurrency that will be used for all transactions within the platform. Through the token mechanism and DTL technology, it will be possible to guarantee the privacy of transactions and the governance of the environment. The use of Smart Contracts will make it possible to direct a certain set of ZiCoins to specific purposes, increasing the effectiveness of the application of resources aimed at education improvement. Other sets of ZiCoins may be used more openly or subject to other types of Smart Contracts.

The most objective argument to convince investors to acquire ZiCoin tokens is the prospect, not only of currency appreciation, but also of the benefits, rewards and participation in the results generated by the ecosystem. However, in addition to the economic factor, there are other reasons to be considered.

The technological platform. The innovative digital services platform constitutes a concrete asset.

The economic ecosystem. The Inkluziva community is already born with important members and will grow, aiming to become the broadest and most influential economic ecosystem focused on the education market.

Student funding. The Inkluziva project will have a platform that will give ZiCoin partners and investors the opportunity to allocate resources to finance the education of poor people.

Talent mining. Through our database, investors will be able to register, search, interact and hire individuals with a professional profile adhering to their business.

Support for applied research. We will invest in applied research, especially in data science. The objective is to build innovative models applied to education, enabling the generation of patents and intellectual property records.

4. PLATFORM ENVIRONMENTS

The environments of the Inkluziva Platform were initially organized into two distinct sets. The first set is Inkluziva's original offerings, to be built according to the schedule set out in the roadmap. The second set are the offers developed by Oros within the scope of the FINEP Project and which will be incorporated into the Inkluziva Platform.

4.1 ORIGINAL OFFERS FROM THE INKLUZIVA PLATFORM:

Decentralized Finance Environment (DeFi)

- The Decentralized Finance Environment (DeFi) is the solution for managing financial transactions carried out in the decentralized finance ecosystem that includes smart contracts, cryptocurrency movements, financial transactions and rewards management. It will be the main instrument for enabling the valorization of the acts of teaching and learning. It will offer, among others, the following facilities:
- Availability of each ecosystem member's token wallet;
- Currency movement history;
- Inventories of agent possessions, whether of NFT, governance tokens or other virtual assets;
- Implementation of the smart contracts established for each member of the ecosystem, especially the rewards mechanisms;
- Staking, lending, farming, burning, borrowing and liquidity pools, among others;
- White label functionality for token creation and NFT;
- White label environment for creating spaces in the metaverse.

Incentive Management Environment

The Incentive Management Environment addresses the challenge of effective participation of people in community activities, which can be observed in the most diverse societies and human cultures of all times. It is no different with the teaching and learning process, and in fact, in this context there are even more complex detours of the

dynamics of an information-based society, where communication and participation are very stimulated, whether in the real world or in the virtual world.

In this scenario, the incentive is configured as an important tool for the awakening of conscience and the formation of individuals with technical and interpersonal skills that can result in dignity and the capacity for effective social participation. Thus, the incentives for teaching and learning are important differentials of the Inkluziva Platform and are certainly the main instrument for promoting the positive social impact that we want to achieve.

In light of this, the Incentive Management Environment provides incentive mechanisms that are characterized by trust and precision in the incentives granted. This is done through technologies such as artificial intelligence, which can generate recommendations for mathematical models, which guide the categorization of students according to their abilities, profiles and contexts. The transparency and veracity of the information obtained about the learning journey and experiences of individuals – definitively recorded in blockchain, respecting the rules of privacy and data protection – will serve as a guarantee for the entire process.

In order for incentives to actually play a positive and virtuous role in the teaching and learning process, the Inkluziva project provides studies and research in the findings of scientific evidence and didactic-pedagogical models that contribute to this education stimulus mechanism. The three incentive mechanisms foreseen are: (I) appreciation of the individual's journey; (II) formation of the basis for the mitigation of socio-environmental risks of the participants on the Platform; and (III) construction of simulated spaces for experiences based on gamification, among other related techniques.

The incentive mechanism I is guided by the appreciation of the learning journey and experiences of each participating individual. The idea is to provide inclusion through education, highlighting the financial education of the participant, from its fundamentals to the sophistication of the token economy, with the participation of all actors in the school environment. At the same time, it is intended to encourage individual growth, with the recognition of the value of shares and positive results, through the use of tokens. The model for using these tokens and the incentive rules will be personalized by each respective education network, following their own pedagogical models and considering the conceptual and scientific foundations offered by Inkluziva. The financing of the incentive mechanism I will be the responsibility of each education network contracting the Platform's service.

Incentive mechanism II is guided by socio-environmental issues. The focus will be on families of students who are eventually subject to different vulnerabilities. In this scenario, there will be a process of financial inclusion of the mother or guardian of that student, through the token economy. This initiative is intended to mitigate risks to survival and, if possible, to stimulate human growth, through the achievement of goals and agreements to be established in each case. The model will be financed in the first two years by public entities and investors, depending on the investments made. As per

the third year, it will be financed, in part, by Inkluziva's revenues, by public entities and by investors, depending on the resources obtained.

Finally, Incentive Mechanism III is driven by the learn-to-earn concept in metaverse learning games and funded solely by the revenues earned from these games.

NFT Management Environment

The NFT Management Environment is the solution to support the creation, storage and management of NFT contracts based on unique and personalized digital assets created by ecosystem members and refers to the registration of the contract and the storage and availability of the NFT.

Learning Games Environment Learn to Earn

- The Learning Games Environment, in the Inkluziva metaverse, brings the menu of learning games available to members of the ecosystem. Access to games will be based on the consumption and gain of digital currencies, depending on the performance of each player.
- Games to support formal elementary education in VR format;
- Games to support formal high school education in VR format;
- Games to support training and professional development in the new digital economy in VR format;
- Games to support the generation of social impact in VR format.

Immersive Content Environment

- The Immersive Content Environment, in the Inkluziva metaverse, brings the menu of content and games made available to ecosystem members in 3D format with virtual reality resources, such as:
- Classes of the various disciplines of formal elementary education in Virtual Reality (VR) format;
- Classes of the various subjects of formal high school education in VR format;
- Courses for training and professional development in the new digital economy in VR format;
- Courses on generating social impact in VR format.

Social Network Environment

The Social Network Environment is based on immersive experiences to regulate data on the behavior of individuals, especially students and teachers, in relation to aspects of socialization and community life. Interactions on the social network of the

Inkluziva platform will privilege teaching and learning actions and others that will serve as support and subsidy.

Marketplace environment

Marketplace environment is the space for trading and exchanging cryptocurrencies for products and services of various natures, including basic consumer goods such as food, clothing, medicine and school supplies, among others. It is the environment for the sale of NFT or other types of tokens (governance, cryptocurrencies, etc.) and products and services of Inkluziva and its partners.

The marketplace environment will provide mechanisms for offering products and services related to other agents, who will be able to create, upon payment of specific fees, digital spaces for the commercialization of their products, provided that they comply with the project's objectives and related to education purposes desired.

4.2 INKLUZIVA OFFERS FROM THE OROS-FINEP PROJECT

Learning Management System Environment (LMS)

- The Learning Management System (LMS) environment with public data integrity on blockchain is the solution to support academic management and monitoring of school activities. It will offer the following facilities:
- Registration of the school and family profile of each student;
- History of participation in face-to-face classes;
- History of use of the other tools available on the platform;
- History of the performance evaluations of each student registered in blockchain and obeying the conditions of the LGPD;
- Hssessment, adaptation and improvement of learning paths to meet the specific needs of students by creating a personalized learning environment.

TME Services

Currently available by Óros, these services from the traditional economy will also be migrated to the INKLUZIVA Token economy:

- State-of-the-art School Studios for preparing and recording lessons, with facilities for interaction between teachers and students;
- Telecommunication means (internet and satellite) for transmission and reception of education content;
- Equipping and maintaining the network of remote classrooms to host live classes;
- Equipment and maintenance of the network of remote computer laboratories for the exercise of continuing education activities;

TME Management Structuring Services

For a school to be able to operate TME services, prior structuring of that teaching modality will be required. To this end, the following services will be offered:

- Design new operational and management processes considering the adoption of the TME modality;
- Train managers, pedagogues and teachers of the Education Network in the concepts, processes, technologies and pedagogical models adopted;
- Offer monitoring and support services for the implementation of the new management model;

Predictive Analytics Environment

The Predictive Analysis Environment is the solution to support academic management based on the use of mathematical models that seek to map behavioral characteristics of students, teachers and other participating agents, based on the analysis of data from activities carried out, performance obtained and presence in networks relationships available, always observing the limits established by the rules for the use of personal information. Refers to:

- Mapping of symptoms of learning disorders: dysgraphia, dyslexia, dyscalculia, attention deficit hyperactivity disorder;
- Mapping symptoms of depression and suicidal ideation;
- Suggestion of learning paths for students and teachers;
- Mapping of teaching demands;
- Mapping of resource and asset needs to support teaching and learning actions;
- Difficulties encountered by agents in interacting with the environment or access interfaces;
- Personalized reports with indications of difficulties and overcoming itineraries for students and teachers.

Pedagogical Models

- Customization and implementation of specific pedagogical models, aimed at technology-mediated education.
- Offer a pedagogical model oriented to the personalization of teaching and specialized in the TME modality;
- Offer a pedagogical model oriented to the individualization of teaching;
- Offer a pedagogical model aimed at mapping the behavioral profile of students;
- Offer a pedagogical model oriented towards vocational research;
- Offer a pedagogical model oriented to performance evaluation.

Contents for Vocational Technical Education in Technologies 4.0

The contents available in the metaverse and Inkluziva platform will be oriented to meet the main demands of the job market, especially in relation to the professional profiles that emerged with the new digital economy. Some examples of early content:

- Vocational technical course on digital entrepreneurship in the 4.0 economy;
- Professional technical course in data science and artificial intelligence;
- Professional technical course on developing solutions in web 3.0 and blockchain.

Content for Teacher Training and Professional Development: Education 4.0

The teacher is an important focus of the Inkluziva project. The new technologies impose a new teaching, marked by innovations in the pedagogical models, in the interactions with the student and in the ways of evaluating performance. Some examples of early content:

- Technical course on education in a metaverse environment;
- Technical course on education in an TME environment;
- Technical course on teaching-oriented 4.0 concepts and technologies.

The following table summarizes the topics of Chapter 4.

ORIGINAL OFFERS FROM THE INKLUZIVA PLATFORM	INKLUZIVA OFFERS FROM THE OROS-FINEP PROJECT
Decentralized Finance Environment (DeFi)	Learning Management System (LMS) Environment
Incentive Management Environment	EMT Services
NFT Management Environment	EMT Management Structuring Services
Learning Games Environment Learn to Earn	Management Support Environment and Predictive Analysis
Immersive Content Environment	Pedagogical Models Oriented to the Personalization of Teaching
Social Network Environment	Contents for Technical Vocational Training in Technologies 4.0
Marketplace Environment	Contents for Technical Vocational Training in Technologies 4.0

5. SOCIAL IMPACT AND GOVERNANCE

In addition to the financial viability of the business and promising prospects, Inkluziva intends to stand out for solid and clear commitments to positive transformations for society. All of Inkluziva's actions will be oriented towards making schools not just a place for teaching and learning. First and foremost, we want to offer means for our partners to transform school environments into poles of impact generation. From the perspective of environmental, social and corporate governance, translated by the ESG concept, Inkluziva will be guided by the following commitments.

Impact on Social and Environmental Governance

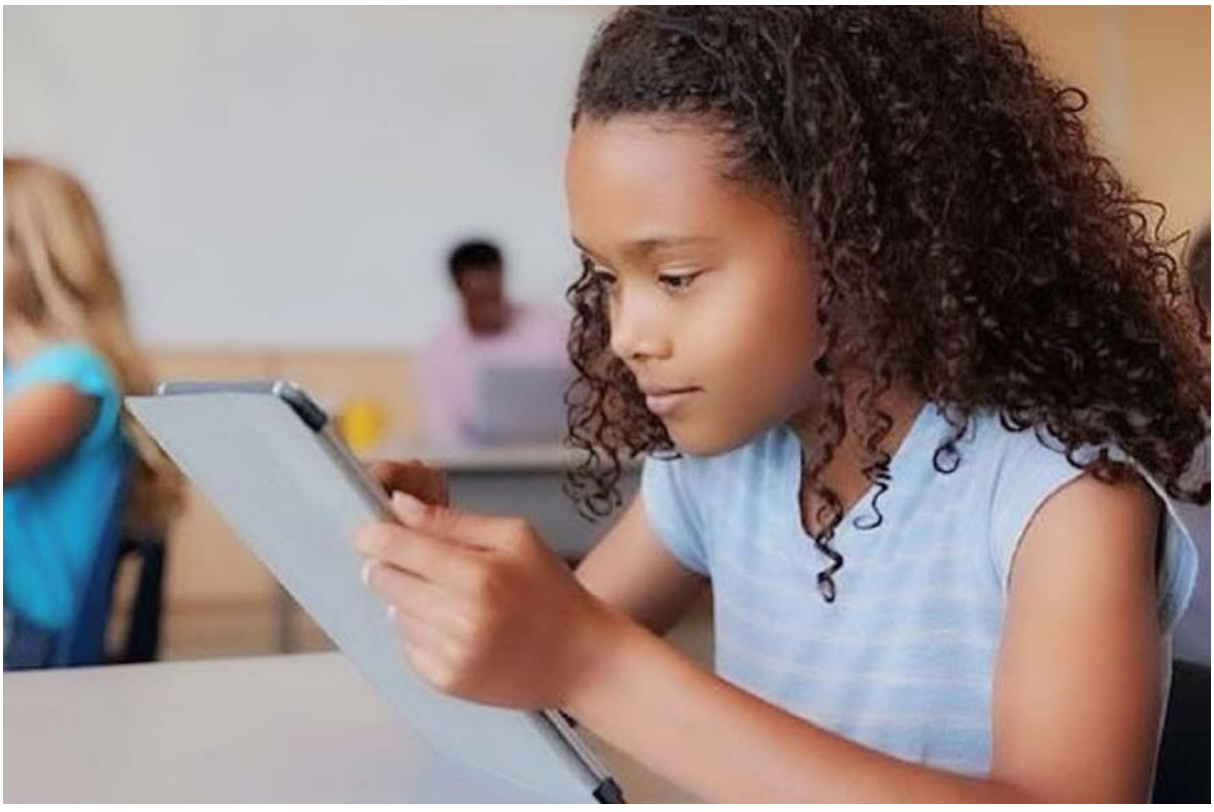
- Offer incentives for all actors involved with the acts of teaching and learning, especially students and teachers.
- Offer supplementary income to the family of students in conditions of social and food vulnerability.
- Offer knowledge and training programs guided by the lack of professional qualification in each region.
- Valuing the career and qualification of the teacher.

Offer instruments for mapping symptoms of learning disorders and emotional illnesses that may be affecting the performance of individuals participating in the ecosystem, especially students and teachers.

Impact on Corporate Governance:

- In order to ensure maximum transparency towards the investor community and also to comply with rules and principles of trust in relation to project management, the Inkluziva Project provides for the following management guidelines:
- Auditing: a company specialized in auditing, with global operations, will be hired to fulfill the role of auditing the processes and financial statements of the operation.
- Decision-making process: Inkluziva will comply with the principle of decentralized decisions. From the first moment, investors will have the right to vote in proportion to the ZiCoins they have at the time of strategic decisions. The project roadmap also includes the structuring of the DAO (Acronym for Decentralized Autonomous Organization) model, at which point the decision-making process will be described in the form of Smart Contracts on the Inkluziva blockchain.
- Data: All data obtained from environments external to the platform, especially data from the school environment, will be treated by distributed oracle protocols and by mathematical models especially oriented towards the quality and reliability of the information collected.

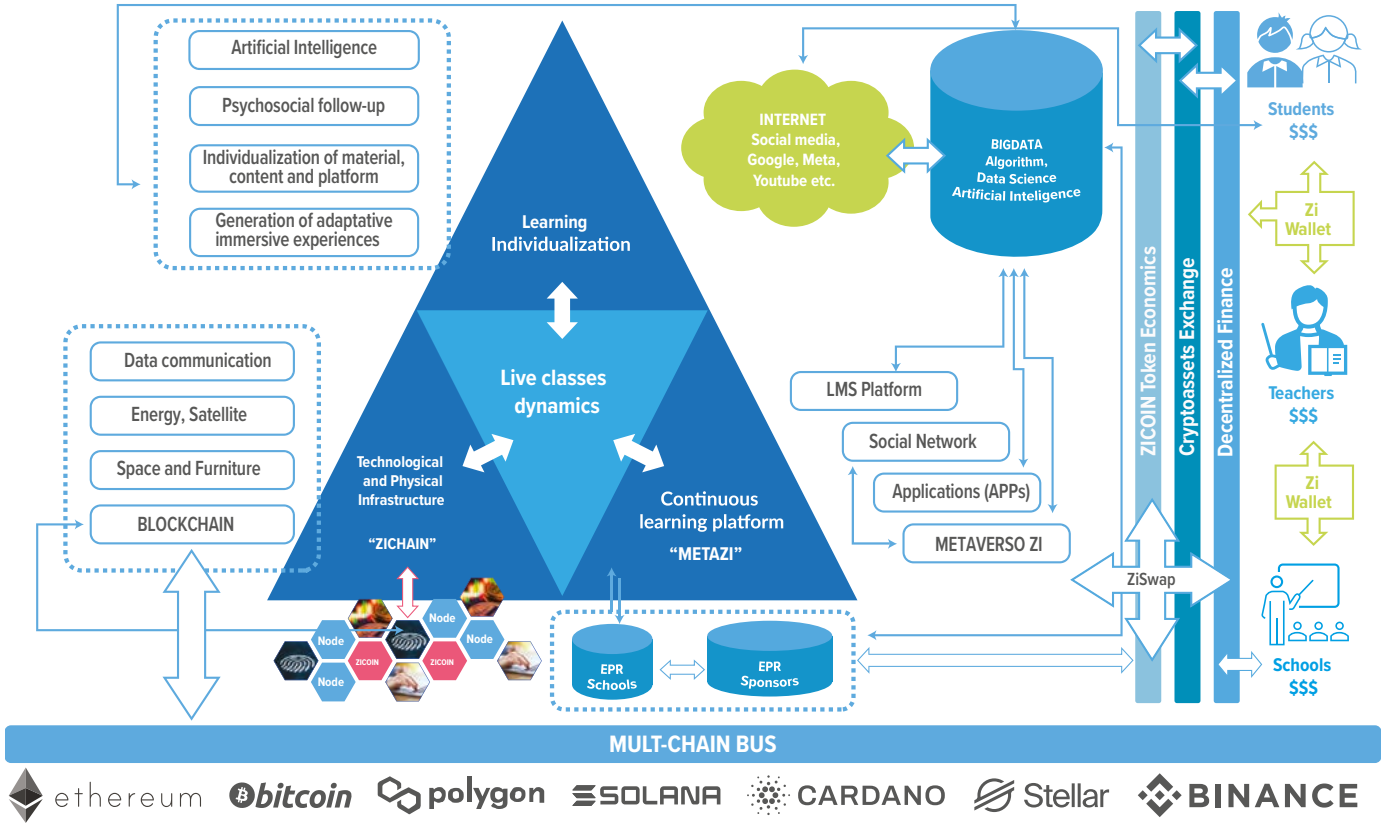
Multilevel Governance: Governance model geared towards complex organizations will be adopted, with forecast of typical management processes of education environments, as detailed in Appendix A of this document.



6. TECHNOLOGY STRUCTURE

INKLUZIVA CONCEPTUAL MODEL

EDUCATION ECONOMIC ECOSYSTEM SUPPORTED BY DECENTRALIZED FINANCE NETWORK AND METAVERSE

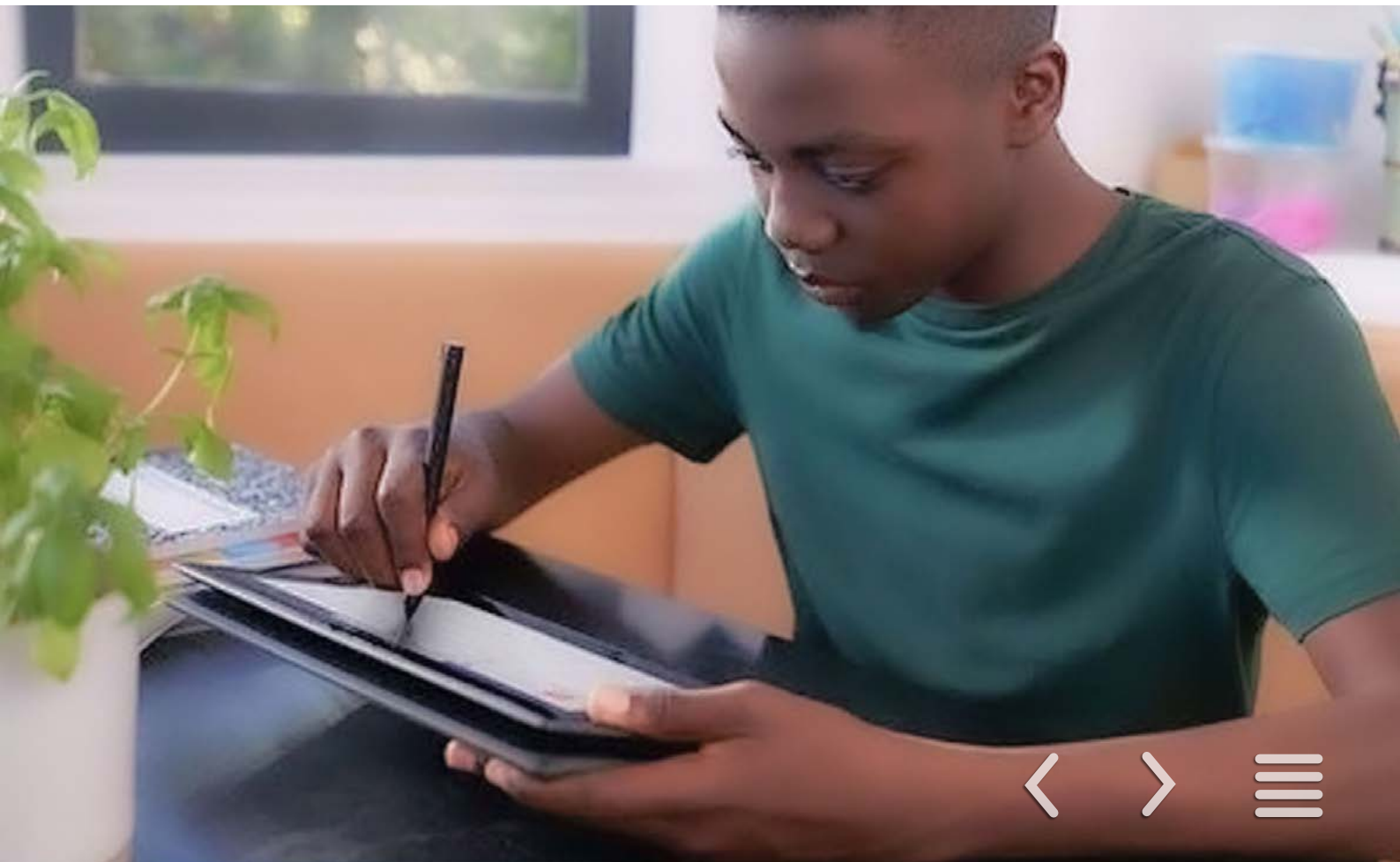


Explaining the Conceptual Model

1. It is an interoperable platform that integrates education solutions and services distributed in a decentralized manner and based on the concepts of DeFi and Web 3.0;
2. The currency in this economic ecosystem is Zicoin, which will be the network and governance token;
3. All offers of education and financial products and services will be made based on Zicoin, which can be converted into other crypto-assets, or even converted into fiat currency (FIAT), through Native Exchange (Zichain), centralized exchanges and through DEX's (decentralized exchanges);
4. The pyramid is Inkluziva's core platform, having as support areas: the physical and technological infrastructure, based on its own blockchain (ZICHAIN); and the continuing learning platform, which will be a social environment created in the Inkluziva metaverse (METAZI);
5. Below the pyramid are the school management and macro-management systems of the sponsors (public and private education networks) that will work in an integrated way with the blockchain;
6. As a central figure in the pyramid, the dynamics of live classes are included, bringing all the advantages of TME to the Inkluziva platform (for priority application in the poorest regions);
7. At the top of the pyramid are, conceptually, the individualization and personalization of teaching, characterizing the importance of an adaptive teaching approach for all participants of the Inkluziva ecosystem;
8. The entire Inkluziva economic ecosystem will work interoperably through a multi-chain bus that will enable asset exchange and access to liquidity with other

blockchain networks, in particular Ethereum, Biticoin, polygon, Solana, Cardano, Stellar and Binance Smart Chain;

9. All data and transactions generated on the network will be enriched with external sources through artificial intelligence algorithms, forming a Bigdata that, among other possibilities, will enable the generation of insights for behavioral monitoring of network users, especially students, automatic generation learning paths focused on adaptive teaching and the generation of adaptive immersive experiences;
10. The buses to the right of the model separate the various layers of interaction and participation in the Inkluziva economic ecosystem. All actors involved, directly or indirectly, teaching and learning, can be part of the exchanges and processes of generating wealth and income on the Inkluziva platform, both in a centralized and decentralized manner;
11. Students, families and their communities, teachers, schools and education networks, private, public and government institutions, all will be able to offer, under specific rules of smart contracts, education products and services running on ZICHAIN and transacting with ZICOIN;
12. All these actors will be able to create secondary crypto assets within ZICHAIN, in particular Fungible Tokens and NTFs.



7. ROADMAP

Q2 – 2022

- Elaboration of the tokenization project - Preliminary version of the Whitepaper
- Team and Partners: Legal, Blockchain Technology, Metaverse
- Alternatives to the legal structure of the Inkluziva token
- Formalization of strategic partnerships
- Creation of ZiCoin
- Creation of ZiWallet
- Choice of the tokenization technological model
- Choice of the Inkluziva metaverse white label partnership

Q3 – 2022

- Presence in digital communication channels
- Launch of ZiCoin
- Launch of ZiWallet
- Consolidation and publication of the Whitepaper
- Token launch event held

- Private offer of Inkluziva tokens
- Capture of the first investments
- Legal structure of Inkluziva tokens
- Technological environment of Inkluziva tokens
- Launch of the NFT Marketplace
- Pre-sale 1 - ZiCoin on the Inkluziva platform
- Pre-sale 2 - ZiCoin on the Inkluziva platform
- List ZICOIN on Pankcake Swap
- List ZICOIN on CoinMarketCap and Coingeko
- Pilot implementation of the incentive management environment

Q4 – 2022

- Structuring Inkluziva International Foundation
- Structuring Inkluziva Labs
- Structuring DAO (Decentralized Autonomous Organization)
- Initiate decentralized governance protocols
- Perform ZiCoin audit
- Activation of the reward mechanism for platform results
- Activation of the Staking Mechanism
- Presentation of a possible partnership with UNESCO and/or the World Bank
- Inkluziva community consolidation campaign
- Beta version of MetaZi (Inkluziva Metaverse)

Q1 – 2023

- Start of immersive content offers
- Start of offers of initiation and training courses in 4.0 technologies
- Availability of the initial version of MetaZi
- Alignment with public education network for tokenization pilot project
- Alignment with the private education network for a tokenization pilot project
- MetaZi game economy alternatives
- Launch of Inkluziva Exchange
- Launch of DEX Inkluziva
- List in one or more top 10 international Exchanges

Q2 – 2023

- Launch of MetaZi (Inkluziva's Metaverse), with environments, games, content, social network and markeplace
- Make donations to registered institutions
- Launch of the new Inkluziva LMS
- Launch of the Inkluziva predictive analytics environment
- Release scholarships for partner offers on MetaZi and LMS Inkluziva
- Request intellectual property and patents on innovations obtained

Q3 – 2023

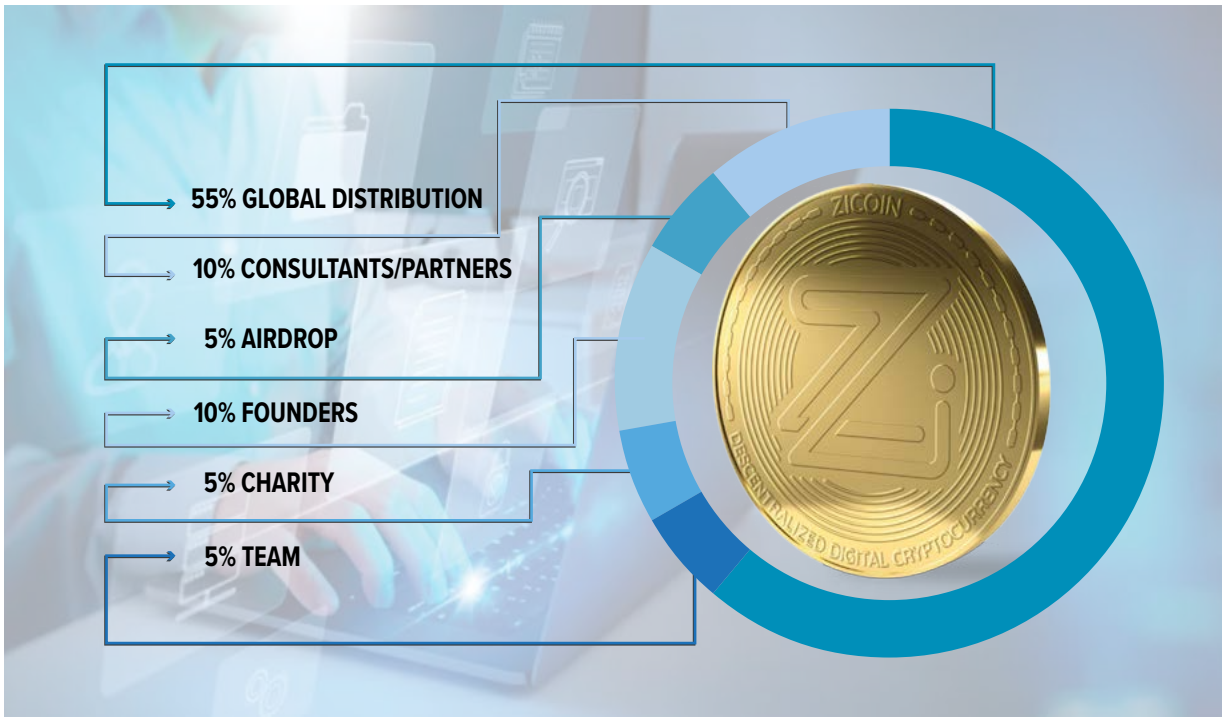
- Pedagogical Model of Teaching Personalization based on AI (Artificial Intelligence)
- Online content production environment
- Launch ZiChain 2.0 (BlockChain Inkluziva with innovative AI features)
- Availability of Inkluziva's Governance Model

Q2-2024

- Launch MetaZi 2.0 Platform (Inkluziva Metaverse with innovative AI features)

8. ABOUT THE TOKEN

Inkluziva will launch its native token, the ZiCoin (ZI), whose protocol will be equipped with protection and distribution resources, aimed at safeguarding its economic integrity and, consequently, the financial health of Inkluziva, such as blocking balances that are intended for team, founders and partners, with gradual unlocking, burning mechanism, reward and staking. The initial issuance of the tokens was 5 billion units, out of a total supply of 20 billion ZiCoin, distributed as follows:



The availability of the 20 billion units destined for global distribution, via blockchain, will be gradual, in order to have greater control over the fluctuation of its value, as well as to curb the concentration of currency in the power of large investors (whales).

The first process of ***mint***[1] from ZiCoin will be 5 billion units distributed in private sale shares, online presale shares and through listing on decentralized and centralized brokerages. The purpose of pre-sales is to ensure the first resources, intended for project actions, in particular, the development and maintenance of the technological platform, management, marketing and implementation of the policy of incentives for teaching and learning acts.

The rest of the supply will be released annually, at an average of 10% p.a. During this period, airdrop campaigns will be launched with the aim of encouraging new members to join the community. Tokens destined for the team, partners and founders will be released after 24 months, at an average of 5% per year, or upon achievement of goals, as regulated in Appendix B.

- Other features of the Inkluziva token are:
- The ZiCoin coin will be used as a network token within the proprietary blockchain for the functioning of its ecosystem.

Availability of an interoperable blockchain platform with multichain bus, communicating with the main networks in the market, including: Bitcoin, Ethereum, Solana, Stellar, Cardano, Binance Smart Chain and Polygon.

- ZiCoin tokens can be used, among other possibilities, to:
- Allow any person or institution to contract the education services offered by Inkluziva's partner public or private education networks;
- Allow education networks to contract Inkluziva services;
- Allow education networks to offer their education services;
- Allow any person or institution to contract access to Metaziva;
- Reward gamers and game developers;
- Advertise, market and purchase products and services on the Inkluziva marketplace;
- Allow the acquisition of products and services from the marketplace;

1 minting

The allocation of funds raised will occur as follows:

	Cost Center	Total CC [US$]	%
1	School Management and Personalization Model (Finep Project)	10.000.000,00	17%
2	Platform Construction	25.000.000,00	42%
3	Search	3.000.000,00	5%
4	Operational Management	4.000.000,00	7%
5	Marketing	8.000.000,00	13%
6	Incentives	10.000.000,00	17%
Total		**60.000.000,00**	**100%**

REFERENCES

ANTE, Lennart. **Non-fungible token (NFT) markets on the Ethereum blockchain**: temporal development, cointegration and interrelations. SSRN 3904683, 2021. https://dx.doi.org/10.2139/ssrn.3904683

INSTITUTO NACIONAL DE ESTUDOS E PESQUISAS EDUCACIONAIS ANÍSIO TEIXEIRA (INEP). Índice de Desenvolvimento da Educação Básica (**Ideb)**. Brasília: Inep, 2022. Available at https://www.gov.br/inep/pt-br/areas-de-atuacao/pesquisas-estatisticas-e-indicadores/ideb

ANTE, Lennart. The non-fungible token (NFT) market and its relationship with Bitcoin and Ethereum. **FinTech**, v. 1, n. 3, p. 216-224, 2022.

BÖHME, Rainer; CHRISTIN, Nicolas; EDELMAN, Benjamin; MOORE, Tyler. Bitcoin: economics, technology, and governance. **Journal of Economic Perspectives,** v. 29, n. 2, 2015

JOHN, Kose; O'HARA, Maureen; SALEH, Fahad. Bitcoin and beyond. **Annual Review of Financial Economics**, v. 14, 2021.

KONG, De-Rong; LIN, Tse-Chun. **Alternative investments in the fintech era**: the risk and return of Non-Fungible Token (NFT). SSRN 3914085, 2021. https://dx.doi.org/10.2139/ssrn.3914085

MONRAT, Ahmed Afif; SCHELÉN, Olov; ANDERSSON, Karl. A survey of blockchain from the perspectives of applications, challenges, and opportunities. **IEEE Access**, v. 7, 2019.

OLIVEIRA, Cledinalva; ROCHA, Andréia. Technological mediation program is an ally in the education model in the state of Piauí. Revista TIC Brasil, Brasília, V.2, n.4,

2018. Available at https://www.ticbrasil.inf.br/posts/inovacao/programa-de-mediacao-tecnologica-e-um-aliado-no- model-of-education-in-the-state-of-piaui-17.html Accessed on 5 Aug. 2022.

PARK, Sang-Min; KIM, Young-Gab. A metaverse: taxonomy, components, applications, and open challenges. **Ieee Access**, v. 10, 2022.

PORTAL do Canal Educação. **Programa de mediação tecnológica**. Disponível em https://www.canaleducacao.tv/ Acesso em 5 ago. 2022.

SWAN, Melanie. **Blockchain: blueprint for a new economy**. Sebastopol, CA: O'Reilly Media, 2015.

THE WORLD BANK. **World Bank open data**: indicators. Washington, D.C, [2022]. Disponível em https://data.worldbank.org/indicator Acesso em 25 jul. 2022.

UNICEF. **Cenário da exclusão escolar no Brasil**. New York; Brasília: Unicef, 2022. Disponivel em https://www.unicef.org/brazil/relatorios/cenario-da-exclusao-escolar-no-brasil Acesso em 25 jul. 2021.

WANG, Fei-Yue; QIN, Rui; WANG, Xiao; HU, Bin. Metasocieties in metaverse: metaeconomics and metamanagement for metaenterprises and metacities. **IEEE Transactions on Computational Social Systems**, v. 9, n. 1, 2022.

WANG, Qin; LI, Rujia; WANG, Qi; CHEN, Shiping. **Non-Fungible Token (NFT)**: overview, evaluation, opportunities and challenges. arXiv preprint arXiv:2105.07447, 2021.

YANG, Qinglin; ZHAO, Yetong; HUANG, Huawei; XIONG, Zehui; KANG, Jiawen; ZHENG, Zibin. Fusing blockchain and AI with metaverse: a survey. **IEEE Open Journal of the Computer Society**, v. 3, p. 122-136, 2022.

YERMACK, David. Is Bitcoin a real currency? An economic appraisal. *In*: CHUEN, David Lee Kuo. **Handbook of digital currency**. Cambridge (MA): Academic Press, 2015. p. 31-43. ISBN 9780128021170,

YLI-HUUMO, Jesse; Ko, Deokyoon; Choi, Sujin; Park, Sooyong; Smolander Kari. Where is current research on blockchain technology? A systematic review. **PloS One**, v. 11, n. 10, 2016.

GLOSSARY

A

AirDrop. Distribution, usually free of charge, of tokens to acquire audiences and assign value to digital currencies.

AltCoins. Cryptocurrencies Alternative to Bitcoin.

Fungible assets. Movable goods that can be replaced by others of the same kind, quality and quantity.

Non-fungible assets. Goods that cannot be replaced by others of the same kind, quality and quantity, such as works of art, mass-produced goods that have been personalized, or rare objects with a single copy.

whales. Large investors, whether banks, investment funds, companies or individuals with sufficient capital to move a large amount of assets, to the point of changing the market trend.

Multichain communication bus. It is a bridging platform for cryptocurrencies and NFTs from different blockchains.

Binance smart chain (BSC). Blockchain platform with support for Smart Contracts, launched by Binance (one of the largest crypto exchanges in the world).

Blockchain. Technology that uses publicly distributed and shared databases, which keep permanent records of transactions, with decentralization as a security measure, tamper-proof.

Burning. Permanently removing a digital asset from circulation and reducing its supply, typically accomplished by transferring tokens to a wallet from which they can never be recovered. Operation generally described as token destruction.

Cardano. Public open source blockchain platform, developed with a scientific approach, in order to solve problems of scalability, security and robustness, which consumes less energy than bitcoin. Trade the ADA cryptocurrency.

Crypto assets. Digital economic assets traded on blockchain platforms, used to invest, speculate, transfer values or access various services. Examples of crypto assets are: cryptocurrencies, stablecoins, fungible tokens, non-fungible tokens (NFTs).

Token economy. Savings supported by token-based transactions.

Education ecosystem. Interactive space that integrates the different actors and components of an education system.

Technology-Mediated Education (TME). Innovative teaching modality, which allows classes to be held, face-to-face or recorded, from a broadcast studio, to rooms located anywhere in the country.

Equity token. Tokens that entitle a share of profits and voting rights within an organization.

ESG (Environmental, Social, and corporate Governance). A set of environmental, social and governance principles and good practices that should guide business and government actions, with the aim of promoting positive and significant social impacts.

Ethereum. Open source decentralized blockchain platform, with functionality to support smart contracts, and which has Ether as its native cryptocurrency.

Farming or Yield Farming. Device for decentralized finance transactions, with the locking of cryptocurrencies in smart contracts to form pools of liquidity in exchange for interest and other rewards.

Decentralized Finance (DeFi). System based on blockchain technology that allows creating payment mechanisms, contracting loans and carrying out various financial transactions, without the need for intermediaries.

holders. Cryptoinvestors who hold assets indefinitely or for a very long time.

Institution of Science and Technology and Innovation (ICT). Non-profit public or private entity, which includes in its social or statutory objective the teaching and basic or applied research of a scientific or technological nature, in the development of new products, services or processes.

Artificial intelligence. Computer systems based on pattern recognition. Field of Data Science, whose purpose is to study and develop technological solutions, using computers and devices for the acquisition of data, to carry out human activities in an autonomous or semi-autonomous way.

Learning Management System (LMS). Software platform that provides a set of functionalities for administration, organization, documentation, tracking, creation and delivery of training materials, courses and education programs.

Lending. Lending of crypto assets, with interest or additional fees.

Marketplace. A commercial virtual environment space, where product and service providers interact with customers.

Metaverse. Immersive virtual environment, based on augmented reality technology, that integrates the real and virtual worlds, allowing the simultaneous interaction of multiple actors.

Metazi. The metaverse of Inkluziva, mediating, among others, the student-teacher-school relationship.

Networking Token.

NFT (Non-Fungible Token). The non-fungible token represents a specific, individual digital asset linked to ownership of unique physical or digital items such as artwork, real estate, music, etc.

Payment tokens. Tokens used for payments.

Liquidity pools. Reserves to guarantee liquidity in case of shortage of crypto assets.

Polygon. Formerly called the Matic Network, it is an Ethereum token that powers the Polygon Network, and aims to provide faster, lower-cost transactions. MATIC is the native cryptocurrency used on the Polygon platform to broker transactions between cryptocurrencies.

roadmap. Product or service evolution planning, with improvements and additions of functionalities, distributed in the short, medium and long term.

Security tokens. Tokens based on physical assets, such as real estate.

Smart Contract. Protocol for electronic transactions, based on blockchain, which is intended to automatically execute, control or document events and actions foreseen under the terms of a contract or agreement.

Solana. Blockchain platform with support for smart contracts, and which has SOL as a native cryptocurrency.

Staking. A process that involves locking cryptographic assets to support a blockchain network and confirming transactions, in exchange for rewards such as additional tokens or voting rights.

Stellar. Low operating cost blockchain platform, supporting open source decentralized protocol, which allows international transactions between any currency pair.

tokens. Representation of a digital asset on a blockchain platform.

Utility tokens. Credits or benefits, in digital format, stored on public BlockChain that allow access to some service or product;

White Label. Market concept that refers to the creation of products, services and platforms that can be used and marketed by other companies with their own brand.

Zi smart contract. Smart Contract by Inkluziva.

Zichain. Blockchain by Inkluziva.

ZiCoin. Inkluziva cryptocurrency.

APPENDIX A. MULTI-LEVEL GOVERNANCE

The organizational conjuncture of the Inkluziva environment is multilevel governance, which considers at its foundation the intrinsic characteristics of current work environments: complex, dynamic and intensely connected. In these circumstances, organizational and governance arrangements to achieve objectives occur at different levels, in different functions, in different activities, in different structures, in different institutions and between the public and private sector, coordinated by multiple actors, holders and stakeholders.

The expression multi-level governance and its understanding has spread in several areas of knowledge from political science, international relations, political economy and public administration. The arrangement, composed primarily of private actors, is also conceivable for public multilevel corporate governance, and in this case, the public entity is the dominant actor in this arrangement. (ZÜRN; WÄLTI; ENDERLEIN, 2010[2]). In the case of corporate governance of private organizations, it is important to reinforce that it is necessary to connect similar and distinct fields around a common interest, including private solutions to public problems, as advocated by Elinor Ostrom in 1990[3]. Indeed, Ostrom's governance model has become the new paradigm since the author won the Nobel Prize in Economics in 2009.

2 ZÜRN, M.; WÄLTI, S.; ENDERLEIN, HENRIK. Introduction. In: ENDERLEIN, H.; WÄLTI, S.; ZÜRN, M. (org.). Handbook on multi-level governance. 1. ed. Northampton, Massachusetts: Edward Elga r, 2010. p. 504.

3 Elinor and Vincent Ostrom founded the Workshop on Political Theory and Policy Analysis at Indiana University in 1973, with the aim of creating an academic environment for discussion on "governance processes at the local, national and global levels [that] can be designed to improve human well-being, while promoting democratic and sustainable principles of resource management". *(governance processes at the local, national, and global level can be crafted to enhance human well-being, while promoting democratic principles and sustainable resource management*). (INDIANA UNIVERSITY BLOOMINGTON, [20--?])

The actors involved in multilevel governance, coherently, act on behalf of the common good, Inkluziva envisions the common good, Inkluziva's partners seek a common good, it is the element that distinguishes multilevel governance from other governance models and presents it as a continuum that can range from purely private goals to coordinating transnational planning and development efforts. These actors will act from political, economic, cultural, social or scientific coalitions, as for example, in co-production, defined by Ostrom (1996, p.1073[4]) as "the process whereby the inputs used to produce a good or service are contributions from individuals who are not in the same organization[5]".

To proceed with the definition of multilevel governance, it is worth mentioning the contribution of Friedrich (1968) with the definition of multilayer structures that emphasizes the continuous interaction between different autonomous entities without attributing sovereignty to any of them. The study shows that to advance the concept of multilevel governance, it is essential to define what constitutes a level in this context. According to the author, "the decisive criterion for the existence of a level is autonomy, which means the legitimate decision of one level cannot be reversed by other levels without triggering a political, institutional or even constitutional crisis.[6]" (FRIEDRICH, 1968, p. 3[7]). In addition to decision autonomy, a level of its own requires a certain degree of organizational identification, which results in having a specific level of understanding of the collective good and the process for achieving it.

Autonomy is intrinsically related to decision-making, which in multi-level governance is shared by many public and private actors, at different levels rather than monopolized by a central actor, as Friedrich (1968) states, "no one has the last word".[8]" (FRIEDRICH, 1968, p. 7). As a result, any multi-level governance system consists of at least three components: (i) the top level, (ii) the level of constituent member organizations, and (iii) the level of individuals and social actors that are affected by decisions. With this preamble, it is possible to define multi-level governance "... as a set of general-purpose or functional domains that enjoy a certain degree of autonomy within a common governance arrangement and whose actors claim to engage in a lasting interaction in pursuit of of a common good.[9]" (ZÜRN; WÄLTI; ENDERLEIN, 2010, p. 4)

This approach is very relevant when considering how complex contemporary organizations are, especially those that work in the metaverse. Teisman, Van Buuren and Gerrits (2009, p. 2[10]) develop this type of arguments in relation specifically to the management of complex systems of governance. They remark:

---

4 OSTROM, E. Crossing the great divide: coproduction, synergy, and development. World Development, v. 24, n. 6, p. 1073–1087, 1996.

5 *the process through which inputs used to produce a good or service are contributed by individuals who are not "in" the same organization.*

6 *the decisive criterion for a level to exist is autonomy, which means one level's legitimate decision cannot be reversed by other levels without triggering a political, institutional or even a constitutional crisis.*

7 FRIEDRICH, C. J. **Trends of federalism in theory and practice**. New York: Frederick A. Praeger, 1968.

8 *No one has the last word*

9 *as a set of general- purpose or functional jurisdictions that enjoy some degree of autonomy within a common governance arrangement and whose actors claim to engage in an enduring interaction in pursuit of a common good.*

10 TEISMAN, G.; VAN BUUREN, A.; GERRITS, L. M. **Managing complex governance systems**. London: Routledge, 2009.

> Our starting point is the empirical observation that governance systems and networks are often in states of change that make them difficult to analyze, let alone manage. Stability of governance systems seems to be the exception rather than the rule. Furthermore, any changes that occur are often fickle. Processes seem to unfold in unique and non-replicable ways, making it difficult to learn from successes and failures and develop general theories. This then raises the question of how to develop knowledge about such an elusive research object. An attempt is made here starting from a complexity theory perspective, with the assumption that interactions in governance networks are complex: the results of interactions between parties not only result from the intentions and actions of these two parties, but also from interferences of the context in which the interaction takes place and the results emerging from such interactions. This means that the output and outcome of the same interaction may differ in different places and at different times. A governance approach or organizational arrangement applied in two different contexts can result in very different outcomes.[11]

The statement refers, *sine dubio*, to the multilevel perspective, refining to the inter and intraorganizational level the three components of multilevel governance presented above: individuals, groups and organizations. For Lindsley, Brass and Thomas[12] (1995), The advantage of a multilevel perspective lies in the recognition that "individuals, groups and organizations are not separate conceptual categories but parts of a whole, each affecting and being affected by that of others"[13] (p.647). Effectively, organizational relationships encompass a wide range of arrangements for achieving common goals, at the core of which is collaboration, "an ongoing negotiation of relationships by individuals who are both participants in the collaboration and, at the same time, accountable to and representative of various organizations and communities involved within and affected by it[14]" (LOTIA; HARDY, 2009, p. 596[15])

Collaboration that involves individuals playing the role of members of the organization and collaborating in roles that emerge, evolve and change over time

---

11 *Our starting point is the empirical observation that governance systems and networks are often in states of change which make them difficult to analyze, let alone manage. Stability of governance systems seems to be the exception rather than the rule. Furthermore, any changes that do take place are often capricious. Processes seem to unfold in unique and non-replicable ways, making it difficult to learn from successes and failures and to develop general theories. This then begs the question of how to develop knowledge about such an elusive subject of research. An attempt is made here by starting from a complexity theory perspective, with the assumption that the interactions in governance networks are complex: the outcomes of interactions between parties do not only result from the intentions and actions of these two parties, but also from interferences from the context in which the interaction takes place and the emerging results of such interactions. This means that the output and outcome of the same interaction can differ in different places and at different times. A governance approach or organizational arrangement applied in two different contexts can result in very different outcomes.*

12 LINDSLEY, D. H.; BRASS, D. I.; THOMAS, J. B. Efficacy-performance spirals: a multilevel perspective. **Academy of Management Review**, v. 20, n. 3, p. 645-678, 1995.

13 *individuals, groups, and organizations are not separate conceptual categories, but parts of a whole, each affecting and being affected by the other.*

14 *ongoing negotiation of relationships by individuals who are both participants in the collaboration and, at the same time, accountable to and representative of the diverse organizations and communities involved in, andaffected by, it.*

15 LOTIA, N.; HARDY, C. Critical perspectives on collaboration. *In:* CROPPER, S.; EBERS, M.; HUXHAM, C.; SMITH RING, P. (org.). **The Oxford handbook of inter-organizational relations.** Oxford: Oxford University Press, 2009. p. 595–637.

(PERRONE; ZAHEER; MCEVILY, 2003[16]). And it is in this complexity of behaviors and attitudes over time that solutions can be found arising from the potential for intrinsic benefits of collaboration, which among the forms it takes, can be multilevel governance, incorporating the visions of the organization, groups and individuals in a non- marginal.

Collaboration is particularly timely in problem solving, to address common concerns, "involves a joint decision-making process among key stakeholders in a problem domain about the future of that domain"[17]" (GRAY, 1989, p. 11[18]), in order to develop a comprehensive approach to understanding a problem and then acting collectively to solve it. According to Vangen and Huxham[19] (2003) Working collaboratively across intra- and inter-organizational boundaries is an indispensable component of organizational life in the metaverse, a way of dealing with issues that cannot be addressed by any one organization acting alone.

In summary, in multilevel governance, integrated mechanisms and components are established, where decisions become the result of a complex process of cooperative adjustment that works in multiple directions and levels, focusing more on the autonomy of creation and innovation, respecting the very common. It can be defined as a complex system of governance of networks of multilevel and multidimensional interactions and collaborations, which transcends borders between autonomous, responsible actors engaged in collaborative decision-making processes; cohesive and transparent in the search for collective solutions for the common good (KEMPNER-MOREIRA; FREIRE, 2020[20]). This multilevel governance model is like a framework that (i) enables horizontal, vertical and diagonal relationships between different bodies; (ii) projects collaboration for the elaboration of strategies, policies, controls and monitoring and feedback channels; (iii) maintain the collective coherence of the organizational system through a dynamic balance between autonomy, insertion and regulation of multiple actors; (iv) promotes homogeneous adaptation; (v) monitors the results of the multilevel assessment for continuous improvement of the organizational system; and (vi) creates co-production environments for system innovation (FREIRE; KEMPNER-MOREIRA; HOTT JR., 2020[21]).

16 PERRONE, V.; ZAHEER, A.; MCEVILY, B. Free to be trusted? Organizational constraints on trust in boundary spanners. **Organization Science**, v. 14, n. 4, p. 422–439, 2003.

17 *Collaboration involves a process of joint decision making among key stakeholders of a problem domain about the future of that domain*

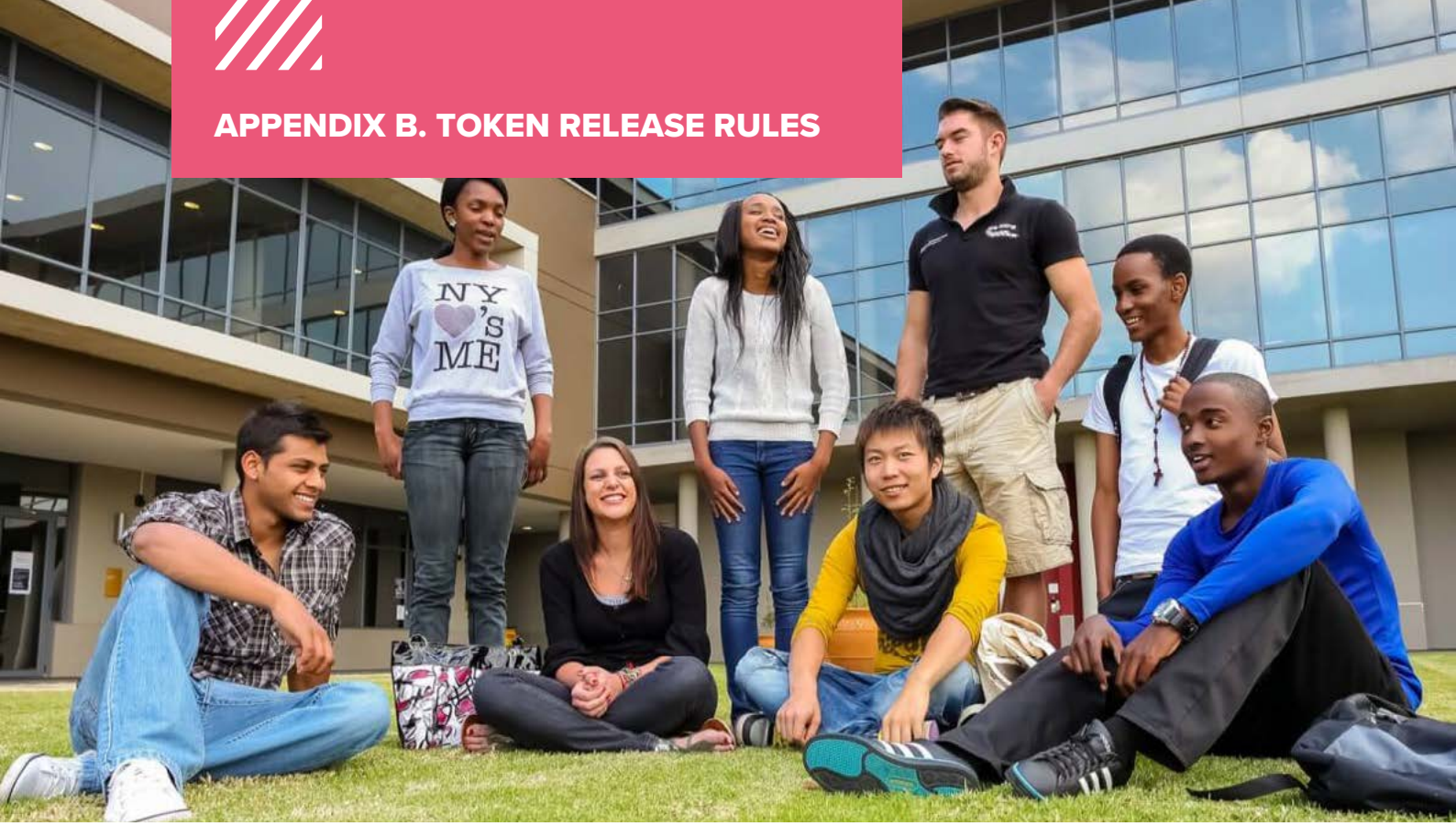
18 GRAY, B. **Collaborating: finding common ground for multiparty problems**. Hoboken, Nova Jersey: Wiley, 1989.

19 VANGEN, S.; HUXHAM, C. Nurturing collaborative relations: building trust in interorganizational collaboration. **The Journal of Applied Behavioral Science**, v. 39, n. 1, p. 5–31, 2003.

20 KEMPNER-MOREIRA, F.; FREIRE, P. de S. The five stages of evolution of inter-organisational networks: a review of the literature. **Journal of Information & Knowledge Management**, v. 19, p. 2050038-1-2050038-19, 2020.

21 FREIRE, P. S.; KEMPNER-MOREIRA, F.; HOTT JR, J. L. Networked multilevel governance: reflections on a new governance model for public security. In: VII BRAZILIAN MEETING OF PUBLIC ADMINISTRATION. **Anais [...]**. 2020.

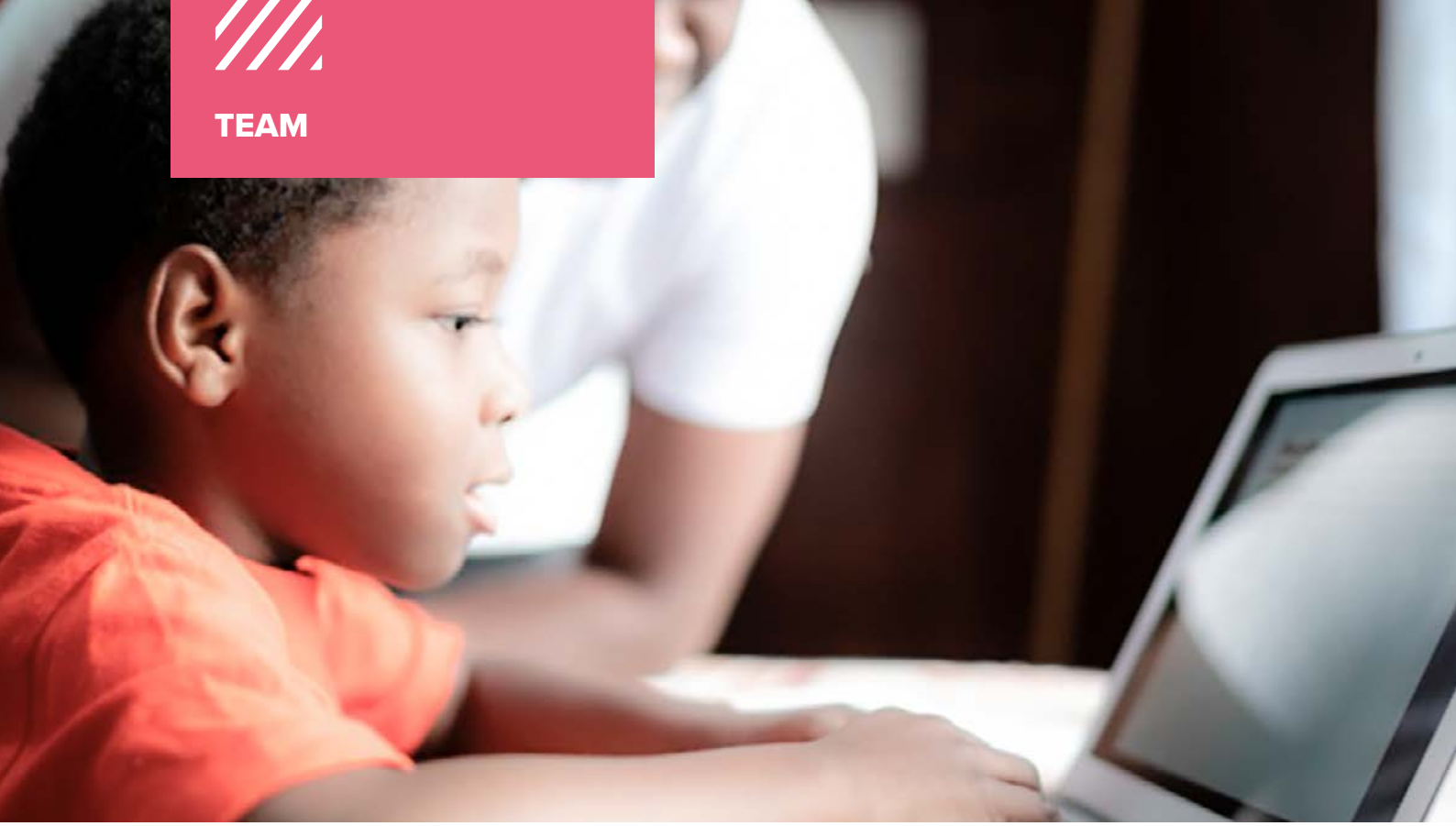
APPENDIX B. TOKEN RELEASE RULES



Regarding the amount of tokens destined for the team, there will be a blockage for 24 months. After this period, a percentage of 5% of the tokens will be released annually, however, with the achievement of goals, other percentages will be unlocked as follows:

- 5% (five percent) of tokens when the Inkluziva Project exceeds US$ 20,000,000.00 (twenty million dollars) in Market Cap;
- 5% (five percent) of tokens released when the Inkluziva Project exceeds US$ 40,000,000.00 (forty million dollars) in Market Cap;
- 5% (five percent) of tokens released when the Inkluziva Project exceeds US$100,000,000.00 (one hundred million dollars) in Market Cap;
- 5% (five percent) of tokens released when the Inkluziva Project exceeds US$ 200,000,000.00 (two hundred million dollars) in Market Cap and
- 5% (five percent) of tokens released when the Inkluziva Project integrates the ranking of the 100 (one hundred) largest companies in Market Cap by the CMC (CoinMarketCap).

TEAM

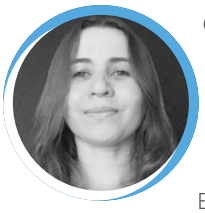


Carlos Jacobino MSc., PMP | Founder and CEO

Founder and CEO of Inkluziva. Founder and Shareholder of Intelit Smart Group Participations (ISG). Master in Information Science from UnB. Specialist in Project Management with an MBA in Information Technology Management in the Public Service from Faculdade Omni. It has the certifications: (i) Project Management Professional (PMP) and Certified Associate in Project Management (CAPM), granted by the Project Management Institute (PMI), (ii) IPMA-C, granted by the International Project Management Association (IPMA), (iii) Certified Scrum Master (CSM), granted by the Scrum Alliance, (iv) Certificate in Information Technology Service Management, granted by the ITILF Foundation and (vi) Microsoft Certified Professional (MCP), granted by Microsoft. Professor of project management and one of the oldest members of PMI DF. In 2015, he received an international award for excellence in the training of project managers in Timor-Leste.

Anderson Camelo | Chief Product Officer

Systems Analyst with more than 15 years of career and experience in large multinationals in the information technology sector, with emphasis on Capgemini and SAP. Since 2017, he has been Executive Director of Oros Soluções Educacional, having been one of the main responsible for and consolidating the Technological Mediation Program of the Secretary of Education of the State of Piauí, Canal Educação. He is an audio engineer, music producer and specialist in distance education and technology-mediated education projects.



Cleidinalva Oliveira | Head of Education

Pedagogue, Master in Education, with experience in higher education as a researcher, coordinator and teacher in the areas of Pedagogical Practice, Education Research, Entrepreneurship, Didactics, Education Technology and Guidance for Course Conclusion Papers. In elementary and high school as a researcher, advisor and coordinator, working in the planning, elaboration, training and implementation of programs and projects involving teaching methodologies with technologies. Experience in face-to-face teaching, distance education and technological mediation.

Dora Gomes | Public Policies Advisor

In strategic positions in the Federal Government, he worked with international organizations, chambers of commerce, agencies and associations, in the area of institutional and international relations, in the ministries of Health, Defense, Education and Infrastructure. In the private sector, Dora Gomes acts in the intermediation of business in Brazil and abroad, consulting in strategic planning and presided over global, technical, scientific and B2B corporate events. She is the founder of the É Possível project, a project dedicated to connecting opportunities with people willing to contribute to economic development through entrepreneurship.

Gilberto Fernandes, MSc. | Specialist in Applied Research

Master in Information Science from UnB. Specialist in Artificial Intelligence and Neural Networks by UFRJ. Graduated in Electronic Engineering from UFRJ, with specialization in Software Engineering. Founding member of PMI's Chapter DF. With more than twenty years of experience in the software industry, he has worked in the implementation and automation of application development processes, including preparation for CMMI/SEI certification. Develops, adapts and applies methodologies for risk mitigation in R&D and digital transformation projects.

João Aureliano Neto | Chief Financial Officer

Graduated in Business Administration and post-graduated in the financial area, he has more than 10 years of experience in the implementation of new businesses, financial feasibility studies, strategic cost reduction actions, optimization of financial results and reduction of operational risks. He is a specialist in the formulation of economic feasibility studies, financial statements, preparation of business plans, valuation of companies and preparation of due diligence of economic information. It operates in the financial market, together with investment and commercial banks, in the preparation of structured operations for raising funds. In 2019, he served as Financial Director of Junior Achievement do Distrito Federal.

Katia Motta | Chief International Relations Officer

Specialist in International Business, Katia was born in Brasília and has lived most of her life abroad (Russia, United States and Ecuador). Fluent in Portuguese, English and Spanish. Graduated in Economic and Administrative Sciences with a specialization in International Business. Katia has more than 20 years of experience in business management and international cooperation, holding positions of trust in the Private and Public Sectors, Diplomatic Missions, International Organizations and the United Nations.

Lucia Soares | Chief Social Worker

Plans and coordinates the execution of projects and corporate events for over 30 years. He was superintendent of Creci for 15 years. For 20 years, he has been the superintendent of Sinfor (DF). In the private sector, it operates in the prospection of new business for partner investors. She is the owner of the School of Programming and Robotics, SuperGeeks, Jardim Botânico unit. She was the owner of the Seu Evento.net franchise for five years. In the third sector, he has been working for ten years in fundraising projects for philanthropic institutions. Director and co-founder of the Casa Abraço institute, located in Cavalcante (GO), an initiative aimed at supporting children and adolescents descendants of Calungas.

Marcello Santos | Co-founder and Chief Innovation Officer

Specialization from PUC-RJ in Information Technology Consulting, Graduation from UnB in Data Processing Technologist. Consultant in Process Management, Business Modeling and Innovation Culture. He was a founding partner of the companies Domain Relational Technology and Memora Processes Inovadores. He is currently a founding member of the Nutech Institute for Applied Research (Inutech), where he is dedicated to articulating and leveraging new projects within the Brazilian innovation ecosystem.

Marco Bettini | Chief Operation Officer

With more than 29 years of experience in finance, business and management in companies such as Credicard, Universidade de Brasília, Banco do Brasil and several in the information technology sector, creating and promoting business connections, in partnership with the core business to increase market presence and expansion. Graduated in business management from Unisul, and improvement in entrepreneurship and leadership. Elected Director of Market Relations and Search for Competitiveness of the Union of Computer Services Workers of the Federal District from 2007 to 2011. Nominated for the Service Excelence Award, from Citygroup. Designated Compliance *Officer* of the company Credicard and awarded at Credicard for promoting benefits such as quality and cost reduction in business.

Mayana Valli | Education Solutions Advisor

Business Manager with extensive experience in the information technology and services sector and strong performance in sales specializing in business processes, project management, sales management and IT services and education solutions.

Pablo Lima | Chief Marketing Officer

Professional with training in Advertising and Marketing, with 19 years of experience. Producer and screenwriter, he acted as leader of the Communication and Marketing area in companies from various sectors, such as information technology, civil construction and shopping malls. He coordinated entrepreneurship programs at UnB, aimed at stimulating the entrepreneurial capacity of students and researchers. Provided training in marketing and business plan in business incubators. Since 2018, he coordinates the ISG Communications Department. In 2021, he started to accumulate the role of People Manager, being responsible for the implementation of endomarketing programs and the dissemination of organizational culture.

Pricila Menin | Social Impact Advisor

Lawyer, journalist, publicist, postgraduate in electoral law at Escola Paulista de Magistratura (Escola Judiciária Eleitoral), president and founder of Instituto InvestBrasil, and executive secretary of the Front in Support of Foreign Investments for Brazil in the Federal Senate. Vice-president of the Foreign Trade Commission of the OAB/RJ (year 22/24) and honorary president of the Brazilian Association of Press and Electronic and Digital Media (Abime).

Dr. Roberto Silveira

Psychologist. Specialist in decentralized finance system. He acted in several launches of defi projects in Brazil and around the world. As a partner, advisor and as an investor. Professor in the field of psychology. Social communicator. He has worked and works in the marketing and public relations area of several Brazilian Blockchain projects.


inkluziva