# Netflix for the \$360 Billion Professional Development Market

v4.3

# **Abstract**

Education Ecosystem is a decentralized peer-to-peer project-based learning platform for people to improve their job skills in future technologies. The blockchain project is building Netflix for professional development and targeting the \$360 billion professional development market. Education Ecosystem is developing a project-based learning platform to help students and professionals advance their careers. The main participants in the ecosystem are project creators, viewers, moderators, API developers, colleges, schools, libraries, businesses, and other online education companies. The learning ecosystem is building the world's largest project-based learning network starting with the six topics: artificial intelligence, blockchain, cybersecurity, data science, game development, and programming. The ecosystem will be expanded by adding more topics in the future, with the aim of building a decentralized professional development ecosystem focusing on gaining practical career skills through building real products rather than relying on learning theory. Project creators create educational projects and are paid with LEDU and cash for teaching viewers. This white paper explains the token mechanics for the LEDU smart contract blockchain tokens and how LEDU social tokens are used in internal and external networks.

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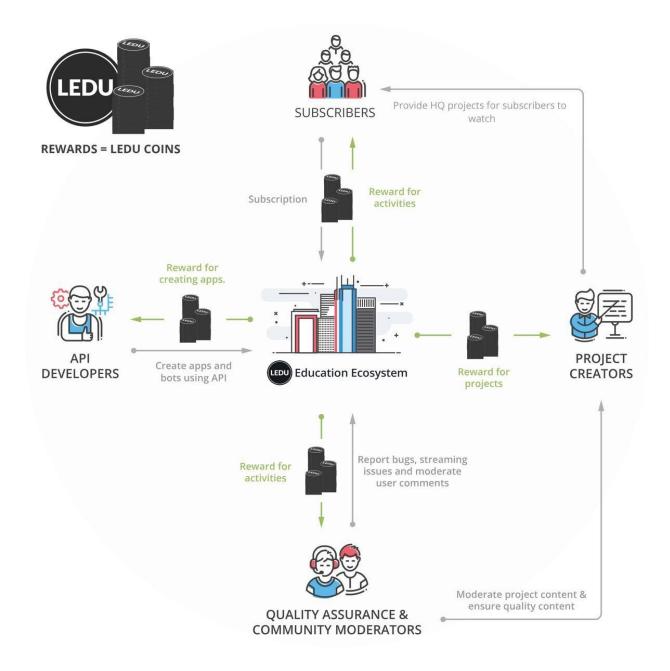
# 1. Introduction and Executive Summary

# 1.1. Executive Summary

Education Ecosystem is a decentralized peer-to-peer project-based learning network for people to improve their job skills in future technologies. In building the Netflix for professional development, the company is targeting the \$360 billion professional development market. The blockchain project is developing a viewer-based platform to advance the careers of students and professionals. The ecosystem consists of the internal and external networks. The internal ecosystem participants are project creators, viewers, community moderators, project quality moderators, and API application developers. The external ecosystem participants are businesses, schools, libraries, colleges, and other professional development companies. Over 5 million people from 194 countries have used the product since the alpha version was launched - with a focus on software development projects - at the end of 2015. The beta product soon followed and more than 13,000 project creators have created over 200,000 pieces of video content. The project launched free projects in the areas of artificial intelligence, blockchain, cybersecurity, game development, data science, and programming. In the future, a pay-per-view monetization model will be implemented. Viewers will pay for the video projects they watch to build complete products.

There is no online project-based learning platform that teaches professionals and college students who have passed the beginner stage how to build complete products. Education Ecosystem does not target beginners but those who have more than basic introductory knowledge - intermediates and experts - of a field. College students and professionals working in artificial intelligence, blockchain, cybersecurity, data science, game development, and programming use the project-based platform to advance their career prospects. Viewers based in the US, China, Europe, Brazil, and other regions utilize video projects to learn how to build complete products.

Education Ecosystem is building a blockchain smart contract technology on top of the Ethereum blockchain using ERC20 tokenization mechanics. LEDU smart contracts will be used for payments and rewards in the ecosystem. A <u>native protocol</u> will be launched when the development of the external ecosystem is complete.



The Education Ecosystem network is a classic model <u>highly suitable</u> for blockchain smart contract tokenization. The blockchain will decentralize key product development decisions that are made on both the supply and demand sides of the ecosystem. Tokenization will help the startup build its network faster on both the demand and supply sides.

#### Supply-side

- The company does not create projects itself but provides a peer-to-peer network that connects project creators with viewers around the world.
- The project-based platform plans to use tokenization as a key approach to solving the chicken-and-egg marketplace problem by incentivizing early project creators with a mix of LEDU social tokens and cash.
- Tokenization will enable the project to bind project creators because they will have a shared interest in the long-term success of the project.
- The project plans to use token buyers, who have subject matter domain expertise, to create projects. Token holders are interested in the six technical categories the project focuses on. The plan is to use some token holders for project creation.

#### Demand-side:

- The success of the platform will depend on creating content that viewers want to watch. So far, project creators have decided which projects to create, frequently deviating from what viewers want to watch. Tokenization will empower viewers who are token holders to vote on which topics and product features to add next. This will transform the platform from a supply-side-driven marketplace to a demand one.
- Tokenization will enable the project-based platform to launch a native payment currency embedded into the product and used for all payment transactions.
- Tokenization will enable Education Ecosystem to reward site supporters, moderators, and API developers. Using LEDU social tokens without spending large sums of fiat upfront reduces business risk.

#### LEDU token holders benefit from:

- The ability to use LEDU tokens for voting on key decisions in the network.
- Expansion of the project into Chinese, Russian, and Portuguese markets
- Growth of the LEDU network by adding more categories in the future.

Education Ecosystem does NOT compete directly with existing professional development platforms, as it focuses on practical projects (project-based learning) and users who have passed the beginner stage (intermediates and experts).

	Education Ecosystem	lynda.com*	PLURALSIGHT
Learning model	Projects	Courses	Courses
Complete products	<b>/</b>	×	×
Learning type	Real practical, production level work	Theoretical	Theoretical
Content creation cost	Low	High	High
Content creation speed	< 1 week	3 months	3 months
Target users	Intermediates, experts	Begginers, intermediates	Begginers, intermediates
Descentralized peer-to-peer	<b>✓</b>	×	×

Compared to the indirect competitors Lynda, Pluralsight, and Udemy:

- Education Ecosystem does not have expensive project production costs (< \$500 per project).</li>
- Project completion speed on Education Ecosystem is faster (< 1 week).</li>
- Education Ecosystem uses only project-based learning.
- Real practical projects and real production level work.
- Viewers watch how to build a complete product.
- Education Ecosystem is a peer-to-peer (decentralized) network, which gives it access to a bigger project creator pool.

The seasoned team is led by co-founder and CEO Michael J. Garbade. As a young team of business-oriented professionals, educators, back-end engineers, front-end developers, and tech marketers with work experience from Amazon, General Electric, Photobucket, Rebate Networks, and more; the team has extensive sector domain expertise in the education and video streaming spaces. Moreover, the team spent several years building Education Ecosystem and has gathered enormous insights on user acquisition, content management, monetization models, non-monetizable use cases, and market data. The project has gathered a group of advisors who include CoinAgenda Founder Michael Terpin, Starbase founder Tomoaki Sato, serial entrepreneur Oli Slipper, co-founder of Perform Group and Masomo; Founder and CIO of Coinhills, Francisco Jo; and Founder and COO of KR Token Isaac Lee.

The shift from non-structured casual streaming (free projects) to focus on monetizable projects (paid projects) represents the only change to Education Ecosystem's business

model. The project managed to scale the network and business right after the token sale:

- Established team with experience in building education and video streaming products.
- The project is supported by a technically-strong team. The entire video streaming infrastructure was built from scratch with 50 edge servers worldwide.
- Extensive data on cost-effective user acquisition channels.
- Completed experiments on monetization models.
- Over 13,000 project creators with no paid marketing.
- Existing users will be retained with an attractive economic model.
- Strong viewer base interested in projects that meet their needs.

The project target users are very familiar with live and video streaming. It is part of their everyday activity. Media streaming platforms like Twitch, YouNow, and Meerkat popularized live streaming, while YouTube popularized video streaming. These media streaming channels provide online entertainment; while, very distinctively, Education Ecosystem focuses on professional development.

The ecosystem is building the world's largest project-based learning network. The project-based platform mission is audacious and targets the \$360 billion professional development market.<sup>1</sup> The project aims to develop a decentralized professional development ecosystem that is not reliant on learning theory but gaining practical career skills through building real products. The peer-to-peer network connects project creators and viewers from all over the world. Project creators create educational projects and earn a LEDU tokens and cash fee when viewers watch their projects.

Education Ecosystem also seeks to bring cryptocurrency to the masses by educating college students and professionals about blockchain; through practical projects covering cryptocurrency basics, blockchain mining, Bitcoin, Ethereum, security and hacking, and token sales.

The company's token is called "Education token", having the abbreviation "LEDU" and based on the Ethereum ERC-20 standard. LEDU social tokens will be fully integrated into all core modules and transactions on Education Ecosystem. LEDU tokens are the payment method for financial transactions that reward project creators, viewers, site moderators, and API developers.

<sup>&</sup>lt;sup>1</sup> Size of the Training Industry. Training Industry. April 20, 2017. https://www.trainingindustry.com/blog/outsourcing/how-big-is-the-training-market/.

The peer-to-peer network has been featured in Mashable, Venturebeat, TechCrunch, Habrahabru, Spiegel, Opensource.com, Pingwest, Business Insider, and many leading tech blogs in China, Brazil, and Russia.

#### 1.2. Team and Partners

Education Ecosystem runs its blockchain project through the legal entity Livecoding Ltd with the company registration number 09346459, incorporated in London, England.

Dr. Michael J. Garbade is a serial entrepreneur, hybrid business executive and Python engineer who enjoys building applications in Python, Django, and Sencha Touch. He co-founded and exited the e-Commerce cashback platform Kyuda and ran business operations for multiple start-ups at Rebate Networks. He previously worked at Amazon, GE, and Photobucket. From past projects, he is experienced in building live music and video streaming applications using Wowza, NGiNX RTMP and Red5. He has a Masters in Business Administration and Physics and a Ph.D. in Finance. He speaks English and German and has worked in the US, Europe, and Asia. At Education Ecosystem, he is the CEO and runs software development business operations. He has been involved with multiple bitcoin and blockchain startups. A few years ago, he built the Bitcoin education quiz app Bitcoinmillionaire on Android, iOS and the Web.

Ilya Toka is an experienced JavaScript developer with experience building React.js applications. As a self-taught programmer, he worked in different positions at several companies including Criterion and NGO. At Education Ecosystem, he develops the front end part of the application.

Artem Merkulov is an accomplished software developer with years of experience in developing applications using Python and Django. He has experience as a project management lead and Linux server administrator. Prior to joining Education Ecosystem, he worked on software for enterprise-level and e-commerce companies. Since joining the company, Artem has been involved in backend application development with Python/Django, deployment and scaling of apps and administering development tools and infrastructure. Artem works with other engineers to integrate blockchain technology into Education Ecosystem's products and power the network with LEDU tokens.

Asad Zeeshan is a MBA (MBA in Finance & Management - Pakistan, MBA Global marketing, Cyprus) qualified Business professional / Start Up specialist, with 16 years of

successful experience in business marketing, Digital marketing, cryptocurrency marketing etc. Asad has been a startup specialist, with 129 U.S & European Startup launches, securing successful results and rapid growth. He has 8 years of experience in cryptocurrency based project marketing in both CeFi & DeFi projects.

Asad has played his role in ICO / Cryptocurrency management as ICO advisor & ICO director by supporting, managing, analyzing, and scaling the success of Crypto projects both in CeFi & DeFi. ChargCoin, Cloudmind, Creunite, Finxflo, and Kittiefights are the major cryptocurrency projects where Asad has played his role in getting success. Asad is working as Marketing manager with Education Ecosystem.

Muhammad is an active researcher, teacher, and freelancer. He is an MBA graduate, also completed master's by research in Marketing and master's in clinical psychology. Muhammad has eight years of experience working with startups in different roles, i.e. Operations management, Digital marketing, business development and. He also enjoys doing big data analytics using Python and Matlab.

Muhammad is working with Education Ecosystem as a Head of Streamers, and he ensures smooth project creation and manages project creator relations.

The company's group of advisors include CoinAgenda Founder Michael Terpin, Starbase founder Tomoaki Sato, serial entrepreneur Oli Slipper, co-founder of Perform Group and Masomo; Founder and CIO of Coinhills Francisco Jo; and Founder and COO of KR Token Isaac Lee.

#### 1.3. Problem and Product Solution

Many students and professionals dream of building real products. However, not many achieve this goal because they lack the real skills needed to build a product from the fields of artificial intelligence, cybersecurity, game development, data science, blockchain, or programming. It is easy for anyone to take introductory courses on a topic online and claim to have completed it. Udemy and Lynda do not teach how to build real products from beginning to end. Many people give up on these sites after learning the basic curriculum because they cannot build real-world applications after completing the basic theoretical modules. Beginners can easily find places online to learn basic introductory courses on Udemy, Pluralsight or Lynda.com. Those courses are basic and do not necessarily teach the practical skills needed to build a real product. Students get stuck and give up after they have finished beginner courses and want to build real

products. There is no platform that teaches intermediates and experts on how to build real products. This is the exact problem Education Ecosystem solves. Focused on viewers who already have basic knowledge on a topic, the platform uses practical projects to teach them how to build real products from scratch and gives them project files to download and practice with. Education Ecosystem does not create content itself but provides a monetization network for project creators to teach projects. Viewers are able to:

- Watch and learn how to build complete products.
- Download videos and project files to practice with.
- Be in a supportive peer-to-peer knowledge-sharing community.
- Improve their job market skills and make more money in their careers.

#### 1.4. Market and Competition Analysis

"The global market for training expenditures in 2017 was about \$360 billion." North America dominates this market with 44%. Companies and individuals continue to spend large amounts of money on professional development.

More people worldwide are using learning platforms in order to improve their skills and meet the practical requirements for new jobs and to satisfy their own learning ambitions. Trends emerging in the industry include live streaming learning, peer-to-peer learning, advanced self-learning, project-based learning, mentorship-based learning, gamified learning, and group-based learning. Note that the market for AI and blockchain education is nascent and not dominated by any player yet. Education Ecosystem does NOT compete directly with existing professional development platforms as the focus is on practical projects (project-based learning) and users who have passed the beginner stage (intermediates, experts). Education Ecosystem is expanding due to the coronavirus pandemic which has pushed some students out of the classroom to the e-board. Some developers have lost their jobs while others are thinking of career changes. With the growing freelance industry, many people are not only switching to online learning, but are using Education Ecosystem to upskill so that they can be competitive in the job market.

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<sup>&</sup>lt;sup>2</sup> Size of the Training Industry. Training Industry. April 20, 2017. https://www.trainingindustry.com/blog/outsourcing/how-big-is-the-training-market/.

# 2. Education Ecosystem Network and API

# 2.1. List of Topics and Categories

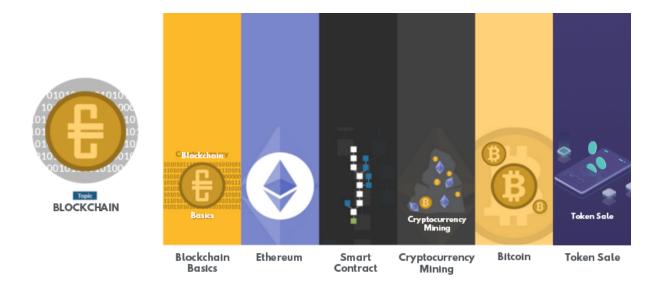
Education Ecosystem currently covers six topics: artificial intelligence, blockchain, cybersecurity, game development, data science, and programming. Each of these six topics contains its own sub-categories. The company initially focused on building projects for the programming category. Programming currently has the largest content volume.











#### 2.2. Main Product Features: Videos and Chat

Content on Education Ecosystem is organized around projects. Each project is delivered in video format. The platform is currently centered around free projects. This will change to paid projects in the future when the content volume has increased. Videos can be watched in HTML5 or flash and are delivered in three quality formats 480p, 720p, and 1080p. Even though the company does not yet have native mobile apps, video projects can be watched in HTML5 on smartphones and tablets. The platform does not currently offer a mobile app due to product development uncertainties worsened by Google Playstore and Apple Appstore who have adopted a hostile stance on blockchain startups. The vague app submission policies do not explicitly draw the line between what leads to the acceptance or rejection of mobile apps on app stores.

# 2.3. Projects

Projects are created with the sole intention of teaching viewers. They are fully narrative, structured, contain well-drafted project descriptions, and have downloadable project resources. The creation of projects undergoes a strict content moderation process to ensure the highest quality standard. Creating a project requires the project creator to spend time preparing the content. Project creators selected for projects have real industry experience and have spent at least four years working in their fields. Project creators love teaching and sharing their skills to train and educate the next generation to improve their practical career skills. In order to decide which projects to create, Education Ecosystem has a project request board, where viewers submit project suggestions and then other viewers upvote or downvote the idea. Listed below are

examples of projects, from the fields of data science and programming, that expand on how peer-to-peer platform teaches viewers how to build real products:

#### Project Title: Python Data Analytics and Visualization

Ryan Schuetz, a developer from Minneapolis, United States, with over eight years of experience; covers all facets of building a complete and operational analytical dashboard. Viewers are guided through all the steps and concepts, starting from setting up a new Django project, building an ORM model, business logic, math functions, and visualizing data using JS libraries (D3, NVD3, Charts.js). Ultimately, viewers will be able to create their own data analytics and visualization application.

#### Project Title: How to Create a Dating Web App in Node.js

Igor Kuzmenko, a software engineer from Odessa, Ukraine who resides in Basel, Switzerland; explains in detail how viewers can use Node.js, MongoDB, and React.js to quickly build products. He has about eight years of experience shipping products and has founded two startups. Throughout this highly educational project, Igor covers all the details of creating a dating website so a viewer can build it from scratch, add their own features, and adapt it to their specifications.

#### Project Title: Machine Learning Model: Python Sklearn & Kera

Andrey Bulezyuk, a data science expert from Nuremberg, Germany with over five years of experience in Python; teaches viewers how to create two simple machine learning applications to solve a classification problem. Though simple, it is one of the most complex problems in the world since it is about 'predicting' stock market data. Viewers can take a look at two completely different libraries; Sklearn and Keras. Before they dive into the main task, they can see what a "Hello World" in Machine Learning looks like. After that, they learn numer ai and use their pre-defined data sets.

The platform now focuses on 'projects' because they provide the maximum educational value to viewers compared to casual streaming. In addition, viewers are willing to pay for the projects because they offer huge educational value. Viewers can watch all the projects in the categories they are interested in. Education Ecosystem's monetization is centered on consumers using a B2C model and project viewership by public institutions (high schools, libraries, colleges), businesses (B2B) and other established online education companies (boot camps, Udemy, Lynda, Codecademy, and Pluralsight).

### 2.4. Education Ecosystem API and Third-party Apps

As Education Ecosystem seeks to position itself as the dominant professional development platform in the world, an API supports making this a reality. Authentication and access controls are performed using standard and widely supported OAuth2 protocol. The API is available over HTTPS and follows RESTful conventions. Third-party developers can build their own complete applications on top of Education Ecosystem's API. These can be bots, mobile apps, websites, widgets or plugins. Giving software developers access to the API provides a way to empower end-users to do things the network was not built to do. One example of this is the platform's project creator, lamvalerio, who is using the API to build an Education Ecosystem Android app.

# 3. LEDU Token Model

# 3.1. Decentralization of Learning and Professional Development

Decentralization of learning is an educational shift from conventional learning to an approach where knowledge is gained from project-based learning, peer-to-peer learning, practical learning or learning-by-doing. In contrast to traditional teacher-to-student learning, decentralized learning is multidimensional.<sup>3</sup> Due to the shift in learning from formal institutional training at universities to informal career-oriented learning, students and professionals are seeking practical modes of learning. According to a 2016 report by Online Learning Consortium, more than 5.8 million people have been signing up for online education each year for the last decade.<sup>4</sup> In a study by Class Central, it is stated that the number of students worldwide who have signed up for at least one course is 58 million.<sup>5</sup> Another facet of decentralized learning can be attributed to high college tuition costs. In a news report by The Washington Post, increasing college fees have driven students to seek alternative degrees. Students and professionals are instead opting towards more concise and skill-oriented training like online courses and boot camps.<sup>6</sup> For nascent high in-demand professions in the fields of programming, game development, artificial intelligence, and blockchain; informal learning is the only way for students to acquire the necessary skills.

³https://www.european-agency.org/sites/default/files/Decentralisation%20in%20Education%20Systems.pd

<sup>4</sup> https://onlinelearningconsortium.org/news item/report-one-four-students-enrolled-online-courses/

<sup>&</sup>lt;sup>5</sup> https://www.class-central.com/report/mooc-stats-2016/

<sup>6</sup> https://techcrunch.com/2016/02/26/linkedin-and-the-golden-age-of-american-education/

A research paper by John W. Thomas, explains peer-to-peer learning as a way in which students, through mutual feedback, learn from one another to abandon misconceptions and search for better solutions<sup>7</sup>. A learning network like Education Ecosystem is focused on project-based peer-to-peer learning and enables users from all over the world to exchange ideas and learn from each other.

Project-based learning is a mode of informal education, where you learn either by directly participating or by watching a video project. A research paper by two Australians Julie Mills and David F. Treagust found that projects linked to programming and design require a lot of people working in unison. For any learner, there is a very comprehensive and practical source of knowledge if they can learn from real-time projects.<sup>8</sup> Decentralized learning is probably best manifested by the process of learning by doing. A research report by Anzai, Yuichiro and Simon H.A, asserts that the 'Learning by doing' approach makes viewers acquainted with real tasks and not just some theoretical models.<sup>9</sup>

#### 3.2. Use-Cases for LEDU Smart Tokens

Education Ecosystem uses the proof-of-work concept for issuing tokens on the platform. Each positive activity a viewer, project creator, site moderator or ecosystem participant completes on the network is rewarded with LEDU social tokens. LEDU tokens will be fully integrated into all core modules and transactions on the learning platform. LEDU tokens are used as a payment method for all financial transactions such as rewarding project creators, positive viewer behavior, site moderators, and API developers. When LEDU tokens fully roll out and integrate into the learning network, the diagram below shows how LEDU tokens will be used in the internal ecosystem.

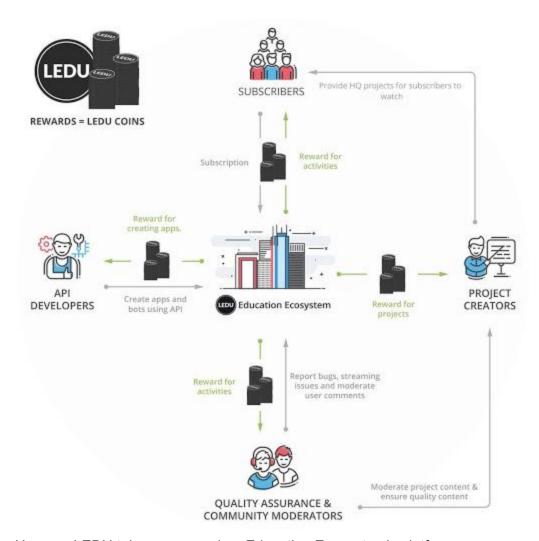
All new and existing Education Ecosystem users will be assigned a LEDU token wallet. Each user will receive a small free token amount as a starting balance. For each new user that creates an account on site, a wallet will be automatically created to store their tokens. The wallet will also be used for incoming and outgoing user token transactions.

<sup>7</sup> 

https://www.researchgate.net/profile/William\_Damon2/publication/223299779\_Peer\_Education\_The\_Untapped\_Potential/links/563a44cb08ae337ef29841e3/Peer-Education-The-Untapped-Potential.pdf

https://www.researchgate.net/publication/246069451\_Engineering\_Education\_Is\_Problem-Based\_or\_Project-Based\_Learning\_the\_Answer

<sup>&</sup>lt;sup>9</sup> Anzai, Yuichiro and Simon H.A , 1979, "The theory of learning by doing" The Journal of Psychological Review



How are LEDU tokens are used on Education Ecosystem's platform

#### 3.2.1. Payment Method for all Financial Transactions

LEDU social tokens will replace fiat payment methods as the main method of payment by users for paid projects. All payment methods that are non-LEDU are converted to LEDU since LEDU is the ecosystem's native currency.

Paid project prices on Education Ecosystem will be denominated in USD\$ and not LEDU units. The total number of tokens a user will get at the time of purchase will depend on the LEDU token market price at that time.

Viewers will use the social tokens for:

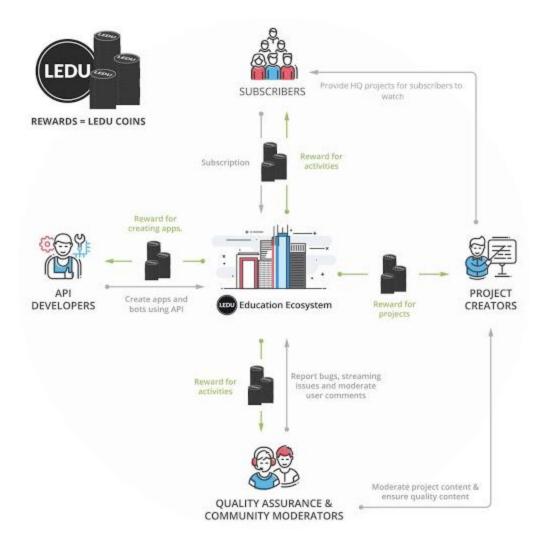
downloading project files,

- sending messages,
- voting on projects,
- submitting project requests,
- requesting custom projects,
- sending personal Q&A to project creators.

Projects are currently free to watch while the platform scales up the content volume.

# 3.2.2. Paying Project Creators

As shown in the Education Ecosystem token utility model (see section 3.2), project creators are rewarded LEDU tokens as partial compensation for their work. 13% of all tokens minted are reserved for project creators and will be distributed over a 5-year period until all project creator tokens are allocated.



**Education Ecosystem Token Utility Model** 

A fixed amount of 2.8 % (1/36 months = 2.8%) of the original total project creator tokens will be distributed each month. The amount of LEDU social tokens allocated monthly to each project creator is calculated based on their proportional view-time. The proportional view time of a project creator is their total view time divided by total Education Ecosystem view time. Total Education Ecosystem view time is the sum of the view time of all videos on the platform for a given month. The total project creator view time is the sum of the view time on all of their videos for a given month. The number of tokens to be allocated is simply calculated by multiplying the proportional view time by the total number of fixed monthly tokens.

$$T_{PC} = (T_{PCVT}/T_{EEVT}) * T_{FMT}$$

T<sub>PC</sub> = total number of tokens allocated to a project creator monthly

 $T_{PCVT}$  = total monthly project creator view time

 $T_{EEVT}$  = total monthly Education Ecosystem view time

 $T_{FMT}$  = total number of fixed monthly tokens

#### 3.2.3. LEDU Token Utility Activities for Viewers

Viewers on Education Ecosystem will be rewarded for each positive learning activity they complete. The activities include:

- watching project video playlists,
- total monthly view time,
- submitting project suggestions,
- inviting friends and
- following projects.

For each activity a viewer completes successfully, a tiny token fraction will be allocated. The total number of tokens to be allocated to a viewer at a given period (e.g monthly) is the sum of all tokens the viewer has earned:

$$T_{TS} = \sum_{i=1}^{n} T_S$$

 $T_{TS}$  = total tokens allocated to the viewer

T<sub>s</sub> = sum of tokens for each desired viewer activity completed

# 3.2.4. LEDU Token Rewards for Quality Assurance and Site Moderation

Quality assurance encompasses reporting bugs, technical streaming issues, video quality issues, and content moderation. The platform's users will be allocated tokens for each quality assurance activity. Quality assurance is important as it improves the user experience for all viewers and project creators. Site moderators represent an integral part of the Education Ecosystem community and without them, the site cannot run. Paying site moderators with LEDU tokens for their time will motivate them to carry out site moderation weekly.

$$T_{TMQ} = \sum_{i=1}^{n} T_{MQ}$$

 $T_{TMQ}$  = total tokens for site moderation or quality assurance

 $T_{\text{MQ}}$  = sum of tokens for each moderation or quality assurance activity completed

#### 3.2.5. LEDU Token Rewards for Education Ecosystem API Developers

LEDU tokens will be allocated to developers for each application developed on top of the Education Ecosystem API that is deployed and used by at least 1000 end users. The best apps and bots will be endorsed by Education Ecosystem and shared with all users. The amount of tokens for each app developed is the sum of the base amount plus additional tokens depending on popularity, quality of the app, and availability of source code for others:

$$T_{AD} = BTA + \sum_{i=1}^{n} TA_{API}$$

 $T_{AD}$  = total tokens per app developed

BTA = base token amount

 $TA_{API}$  = sum of tokens for each API development activity completed.

# 4. Technical Implementation of LEDU Tokens

# 4.1. Smart Contract Implementation

The LEDU smart contract is fully implemented and set up by the experienced blockchain advisory firm New Alchemy, as mentioned in section 1.2. The social token is based on the ERC-20 standard with minimal deviations.

# 4.2. Crowdsale Objective and Token Allocation

For the token distribution, the fixed percentage split is displayed in the table below.

Token Allocation	Percentage
Crowdsale to buyers	50%
Subscription pool (user token purchases)	10%
Project creators	13%
Team	13%
Token sale Legal and Technical Advisory, Bounty Program, Token sale Marketing	6%
API Developers	3%
Supporters (Quality Assurance and Site Moderation)	3%
New Viewer Tokens	2%
Total	100%

If after five years all the project creator, supporter, and API tokens run out; all future token incentives for them will be funded from a new pool using a blockchain smart contract. The smart contract is audited by the smart contract guru <u>Bok Pooh</u>.

Because the Education Ecosystem team has worked on the product for some time, the vesting schedule for team-member LEDU tokens is as follows: twenty-five percent (25%) will be allocated immediately and seventy-five percent (75%) over the next eighteen-month (18) period. Team members cannot sell more than twenty-five percent (25%) of their tokens per year, in the first two years.

Education Ecosystem will ultimately succeed or fail, based on the content quality of the projects created by project creators. If the projects are educational, structured, and of high quality, viewers will pay for them. The ecosystem wants to attract the best project creators. As with building any marketplace business, the supply side (content) needs to be built first. Thus, Education Ecosystem needs to quickly build a huge initial project library by incentivizing project creators generously. There are three possible ways

Education Ecosystem can cover the initial project creator acquisition cost: i) cash ii) LEDU social tokens iii) mix of cash and LEDU tokens. Option 1 requires the company to raise a huge amount of cash just for content generation. This option is not ideal because it does not intrinsically enforce project creator loyalty. Option 2 will not be very attractive to project creators because at launch there will neither be a huge organic demand for tokens nor trading on exchanges. Option 3 is the best approach for Education Ecosystem to incentivize project creators to create exclusive quality content.

13% of tokens minted during the token sale were used to partially fund the project creator acquisition cost. This will be distributed to them over a five-year period. The monthly allocation will follow the formula defined in section 3.2.2.

Token holders will have voting rights for key decisions in the ecosystem; for example, advising on which new categories or product features to add.

#### 4.3. Use of Funds

The learning network plans to use proceeds in the following way:

- Building Projects (15%).
- Team Member Expansion (35%): Hiring new team members: engineers, product manager, marketing officer, head of curriculum, and head of sales.
- Network Development and Server Costs (25%): Integration of LEDU token into the ecosystem.
- Marketing (15%).
- Overhead (10%).

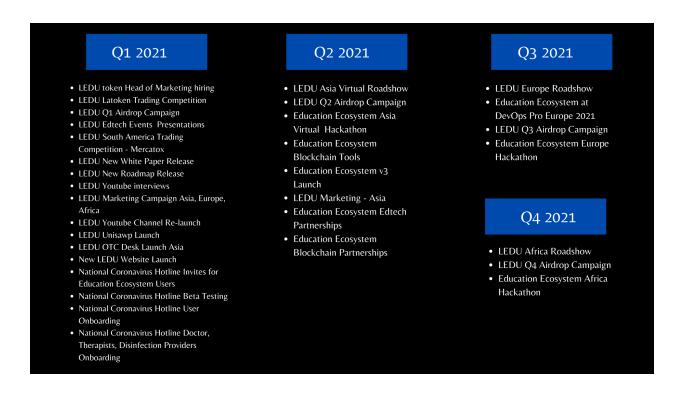
# 5. Roadmap and Future Potential Developments 5.1. Roadmap

The roadmap outlines the planned milestones for the company in the next four quarters ahead.

The purchase of LEDU social token does not represent a right of equity ownership of the company itself. There are typically a variety of risk factors associated with tokens. Education Ecosystem does not guarantee any profits or that there will be a successful exit via an IPO or trade sale. The company does not have control over the token price and all token buyers are to be aware that the price can drop to zero or lose over 90% in

value due to the high volatility of the leading cryptocurrencies Bitcoin and Ethereum which have a huge leverage impact on all other smaller cryptocurrencies.

The project is running its blockchain operations through its legal entity Livecoding Ltd registered in London with the company registration number 09346459.



# 5.2. Future Potential Development

Education Ecosystem cannot predict the future but has the following ideas in mind:

- Localized projects for the Chinese, Korean, Japanese, Spanish, German, Portuguese, and Arabic markets.
- Project catalog expansion to include more topics just as YouTube and Spotify did.
- The company's billboard screens in big metropolitan cities around the world where people can watch video projects. The targeted major cities are San Francisco, New York, Toronto, Dubai, London, Berlin, Paris, Moscow, Beijing, Seoul, Tokyo, and Sao Paulo.

# 6. National Coronavirus Hotline

#### 6. 1 National Coronavirus Hotline Introduction

The <u>National Coronavirus Hotline</u>, or NCH for short, is an information resource and treatment center for coronavirus. NCH is designed to give eligible users access to free medical teleservices, mental health, and disinfection. The coronavirus pandemic struck, the Education Ecosystem project was put on hold because a few of its developers contracted the virus and others were indirectly affected. Team members could not travel due to the lockdowns and shutdowns.

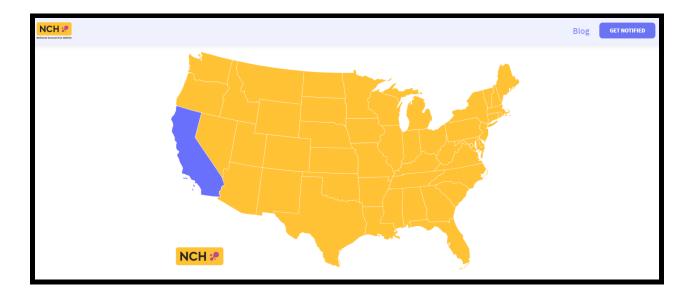


# 6.2 How Education Ecosystem Developed NCH

As few of Education Ecosystem's community members contracted the coronavirus, the pain of the millions of lives lost to the coronavirus pandemic hit home for the project. As the project endured the tragic passing of its community members, it realized that the coronavirus pandemic wasn't an abstract threat but an all-too-real danger. In addition, two of the team's members in California tested positive for coronavirus and were quarantined for months. The project no longer considered the coronavirus pandemic as a political crisis, but as a personal one that affected families, friends and loved ones. It was out of this sombre understanding that Education Ecosystem's team decided to help family, friends, and community affected by coronavirus through a hotline.

This is how the idea for National Coronavirus Hotline (NCH) was conceived. It was designed, developed, and launched as a community-based response to an invisible enemy that within a space of a few months, had turned the world upside down. More than 2.4 million people have succumbed to the coronavirus pandemic, with a half a million of them recorded in the U.S.

NCH provides information-based services through the hotline that reduces the spread rate of coronavirus. NCH is focusing on San Francisco, Los Angeles, Bakersfield and Long Beach at the start and will soon reach out to every region.

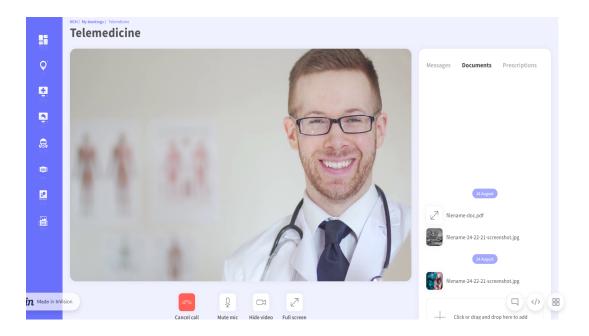


# 6.3 Services

#### 6.3.1. Telemedicine

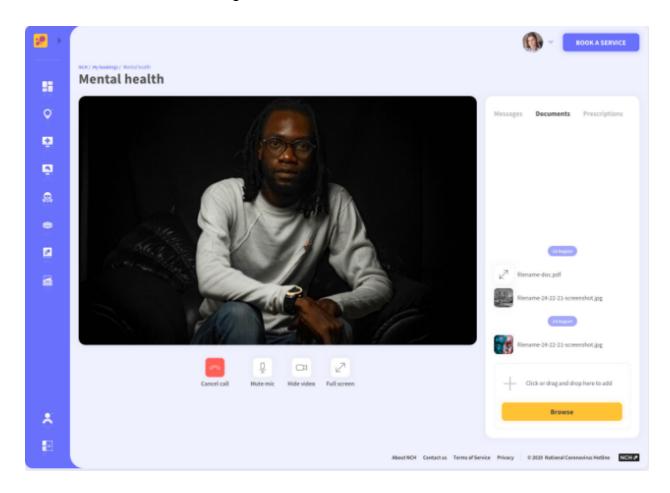
NCH offers users video meetings with trained professional doctors for Coronavirus. Users can speak with physicians one-on-one from their homes. Since Coronavirus is contagious, telehealth has become a preferred way for many people to visit a doctor. NCH's easy-to-use video visits allow users to:

- 1. Talk to a doctor one-on-one for 15-minute appointments
- 2. Assess symptoms
- 3. Get advice on whether one should receive a Coronavirus test
- 4. Order lab tests
- 5. Have physicians send prescriptions to a local pharmacy
- 6. Obtain referrals to local doctors if there is a need to be seen in-person
- 7. Get advice on whether or not the person should receive a Coronavirus test
- 8. Order lab tests
- 9. Have a physician send prescriptions to a local pharmacy



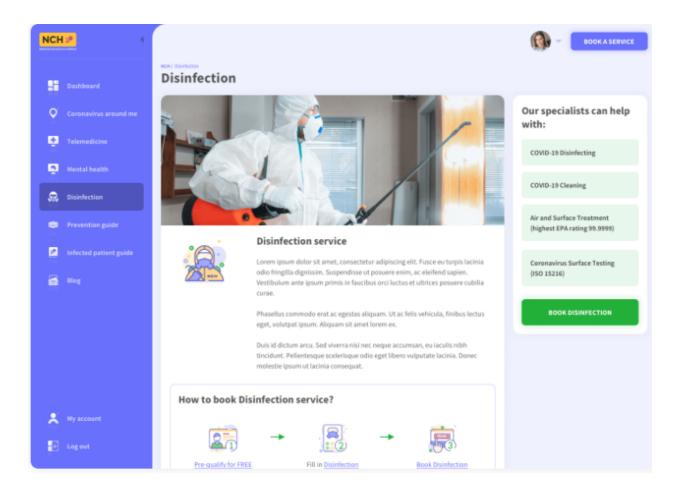
### 6.3.2 Mental health

NCH offers virtual Mental Health Services for users experiencing mental illness, depression, anxiety, insomnia, or distress due to Coronavirus. Engaging in talk therapy with a licensed telehealth therapist can give people the support and advice they need to take care of themselves during this difficult time.



#### 6.3.3 Disinfection

NCH provides professional disinfection services to eligible users by sending a professional team to inspect and disinfect homes and communities. To book disinfection service, users must sign up on NCH and check their eligibility.



#### 6.3.4 Education and Prevention Guide

NCH also provides handy coronavirus <u>prevention guides</u> that help protect individuals, families, and communities. Knowledge is the best preventative medicine for Coronavirus at this time. The best way to prevent this illness is to avoid being exposed to the virus.



#### 7. Conclusion

Education Ecosystem is building a global professional development ecosystem, the Netflix for professional development. The learning network is developing a project-based platform for improving career skills for intermediates and experts, targeted towards the \$360B professional development industry. The ecosystem's mission is to be the place on the web for project-based learning. LEDU social tokens are the ecosystem's native currency. The tokens are integrated into the product to manage incentives in a way that benefits all network participants.