

JLL

教链



2018

CHAIN

# 教链 JLL CHAIN

- 全球首条教育产业公有链 -  
重塑教育价值 • 重建教育信任

**JLL使命:**  
成为分布式创新教育的缔造者

**JLL MISSION:**  
BECOME THE FOUNDER OF THE  
DISTRIBUTED INNOVATION EDUCATION

**JLL愿景:**  
重塑教育产业，共建分布式教育生态

**JLL VISION:**  
RESHAPE THE EDUCATIONAL INDUSTRY AND  
BUILD A DISTRIBUTED EDUCATION ECOLOGY



# Contents

|   |    |
|---|----|
| <b>1. Introduction</b> .....  | 1  |
| 1. What is Master Chain (JLL)?.....   | 1  |
| 2. Master chain (JLL)'s mission, vision and goal.....                       | 1  |
| 3. Master chain (JLL)'s values .....  | 1  |
| <b>2. The market background of JLL</b> .....                                | 2  |
| 1. Education market background.....   | 2  |
| 2. The pain spots of traditional education industry .....                   | 3  |
| <b>3. JLL's innovation and changes</b> .....                                | 5  |
| 1. The core of change.....  | 5  |
| 2. Reshape market models with technology.....                               | 5  |
| 3. Definition of behavior.....  | 5  |
| 4. The results of education industry block chain changes.....               | 5  |
| <b>4. JLL's technology system</b> .....                                     | 6  |
| 1. Technology system.....   | 6  |
| 2. Application trust system.....  | 6  |
| 3. The Technical Architecture .....   | 8  |
| 4. Multiple Certification System .....                                      | 10 |
| 5. Data transaction system.....   | 10 |
| 6. Mass storage.....  | 11 |
| 7. Massive IP data storage.....   | 14 |
| <b>5. JLL solution</b> .....  | 15 |
| 1. Master chain (JLL) community tribe .....                                 | 15 |
| 2. JLL DAPP applications .....  | 15 |
| 3. JLL exchange for contents .....  | 16 |
| 4. JLL smart contract protocol .....  | 16 |
| <b>6. JLL issue scheme</b> .....  | 18 |
| <b>7. Development path of JLL</b> .....                                     | 19 |
| 1. Grand Brahma (Project).....  | 19 |
| 2. Indra (Project) .....  | 19 |
| 3. Surya (Project) .....  | 19 |
| 4. Varuna (Project) : .....   | 19 |
| 5. Calura (Project) : .....   | 19 |
| <b>8. JLL's core members, consultants and investment institutions</b> ..... | 21 |
| 1. Operation team.....  | 21 |
| 2. Consultants and investors.....   | 24 |
| <b>9. Investment institutions</b> .....                                     | 27 |
| <b>10. Estimated schedule</b> .....   | 28 |
| <b>11. Eleven Foundation</b> .....  | 29 |
| <b>12. Project risks</b> .....  | 30 |
| 1. Policy risks.....  | 30 |
| 2. Team risk.....   | 30 |
| 3. Competition risk.....  | 30 |

|                         |           |
|-------------------------|-----------|
| 4. Hacker risks.....    | 30        |
| <b>Conclusion</b> ..... | <b>31</b> |

# 1. Introduction

## 1. What is Master Chain (JLL)?

Master chain (JLL) is an open source decentralized distributed protocol of education industry based on block chain technology. With JLL intelligent protocol, the master chain introduces block chain technology into the education industry. It will disrupt the traditional education industry and create the world's first education public chain. **Its future blueprint include many distributed DAPP applications in education, a public chain of education industry, and a decentralized exchange of contents.**

## 2. Master chain (JLL)'s mission, vision and goal

Mission: be the founder of distributed and innovative education

Vision: remodel the education industry and build a distributed education eco-system

Goal:

- 1) Construct a public chain of education industry
- 2) Create a distributed education ecosystem
- 3) Set up the first decentralized exchange of contents and copyrights
- 4) Promote an "autonomous" education community
- 5) Become a trusted education platform worldwide

## 3. Master chain (JLL)'s values

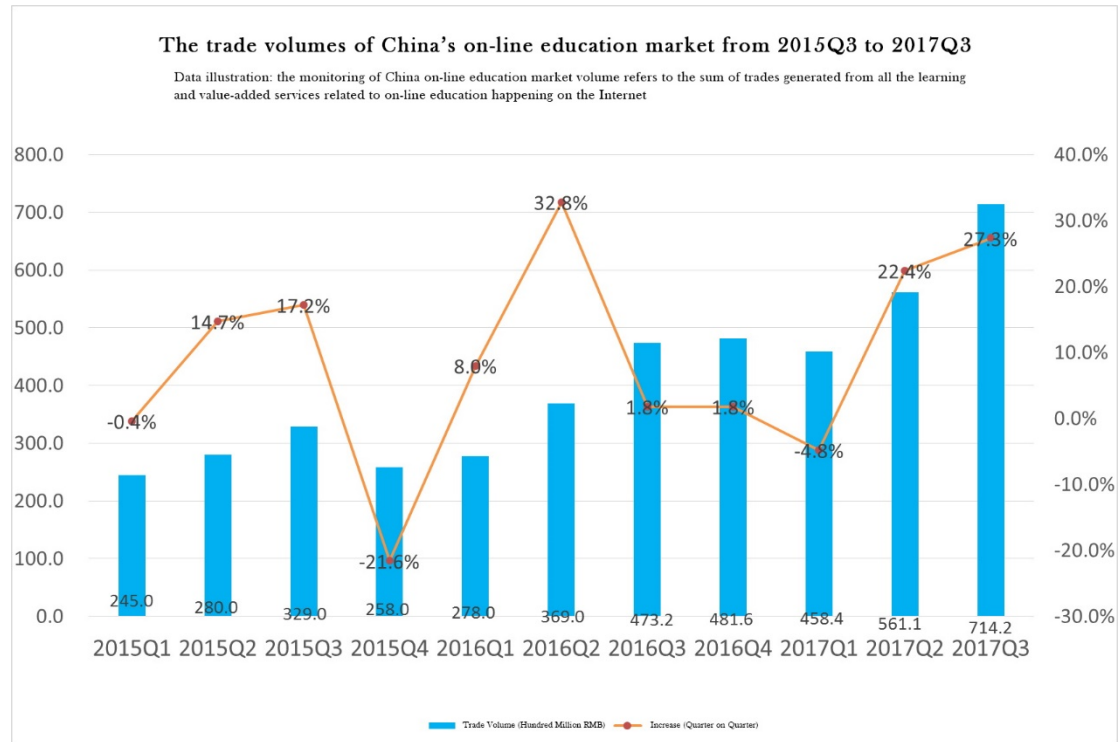
At the beginning of the master chain (JLL), the following core values have always been implemented:

1. Education industry will exist in a distributed form; decisions are jointly made by all the stakeholders (e.g., content producers, students, enterprises, institutions, and community); meanwhile, Tokens will be used to comprehensively motivate the participants in the master chain (JLL).
2. The master chain (JLL), by using Mozilla open source license, is supervised by all the participants. With its transparent and tamper-proofing operation rules, JLL will reward the contributions made by the talents and content creators in the education industry as long as they follow the rules. In this way, individual value will be transformed into digital assets.
3. All content uploaded by teachers, students, institutions and others will be uniformly quantified by the consensus algorithm. For example, the time a student devoted into study and his/her results, and the teaching content uploaded by teachers and institutions will be recognized, recorded and rewarded by the system.
4. Education and content producers are the focus of the system. With its decentralized nature of the master chain, the power of huge capital will be reasonably limited and individual value is appreciated in the whole system.
5. As a self-organizing institute run by a non-profit foundation, JLL's fundamental purpose is to serve students, education workers, institutions and employers, rather than creating profits. Participants in the JLL will also benefit from the prosperity brought about by the growth of the JLL chain token.

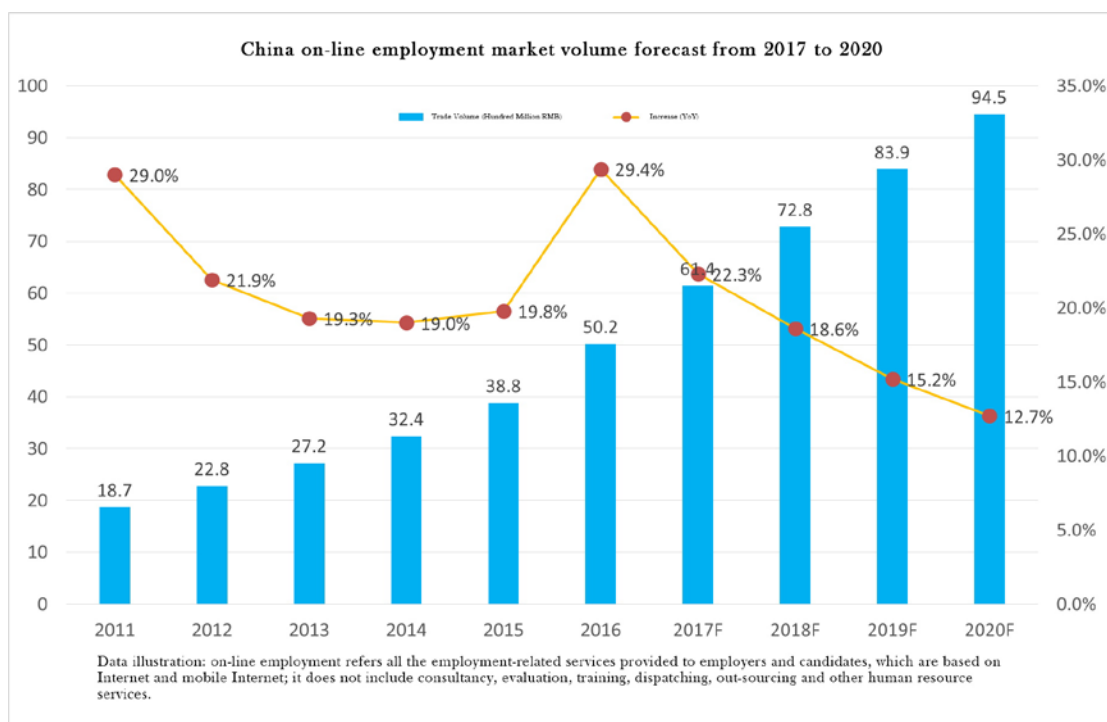
## 2. The market background of JLL

### 1. Education market background

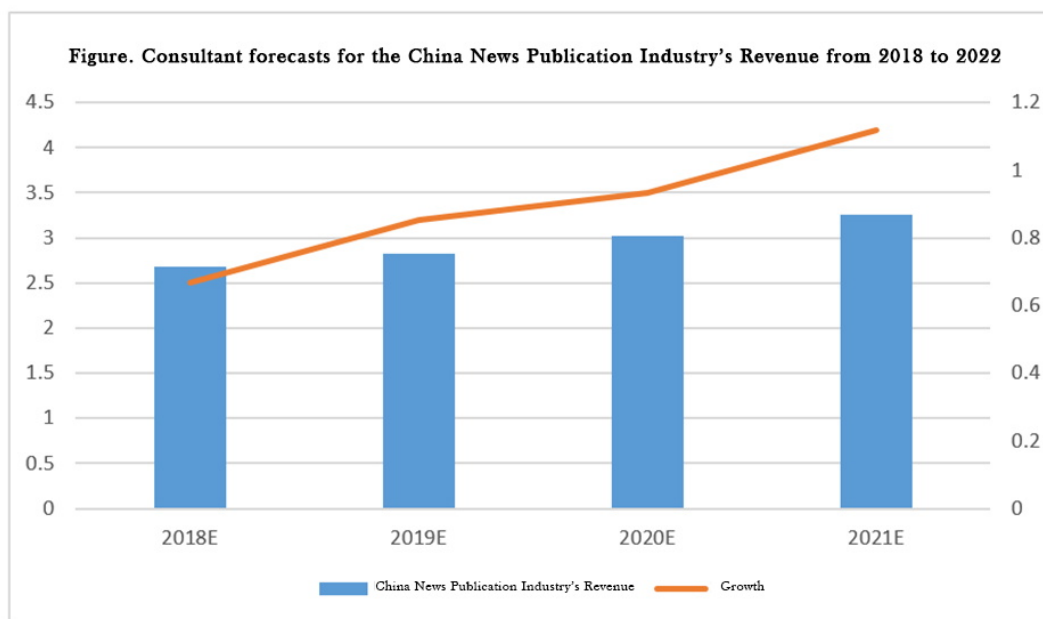
The Master chain (JLL) is an open source decentralized distributed protocol for the education content industry based on the block chain technology. In the three trillion-dollar markets of education, on-line employment, and content publication, the JLL intelligent protocol will facilitate cross-industry and interdisciplinary trade structure by applying the decentralized block chain DAPP.



The Internet education market in 2016 registered a revenue of 160 billion (see above figure). With the popularity of mobile Internet and the application of new technologies, plus the extension of users habits, this market is expected to grow by 30% each year. With this growth, the market scale will reach 370 billion in 2019.



In 2018 (as shown above), China's on-line employment market will reach RMB 7.28 billion, an 18.6 percent increase from the previous year. This market is expected to reach 9.45 billion yuan by 2020.



数据来源：中投顾问产业研究中心

In 2016, China's press and publication industry revenue was 2,355.58 billion yuan, an 8.96% year on year increase. According to the data, we expect that China's press and publication industry revenue will reach 2.68 trillion yuan in 2018. With an average compound annual growth rate of 5.03% in the next five years (2018-2022), the market will reach 3.26 trillion yuan in 2022.

## 2. The pain spots of traditional education industry

Since education behavior was transferred on-line, the media and network have changed the carriers of education. The changes in the forms of education have ushered new opportunities in the education

industry. The always lagging knowledge transfer in the traditional education industry had become an anachronism. Before the emerging of the Master chain, practitioners had made attempts, from online education to curriculum live, to bring something new to the industry. However, the disadvantages of traditional education did not disappear because of these progresses.

There is no doubt that one indeed can learn in a more convenient manner: by listening to a section of audio course with his smart phone while he is taking the subway, or by attending on-line public curriculum offered by world renowned universities, etc. The prosperous information network has partially offset the geographical limitations on knowledge dissemination. These are shallow changes in the early stage. In other words, all the attempts made in the education industry are merely innovations in expression modes. The core of the education industry has not witnessed any promising progress. A boring film was not the fault of the brand of projector. Similarly, the problems in the education industry are not caused by the difference in teaching modes.

First, let's take a look at the long exposed problems in the education industry:

1. What one has leaned cannot be put into practice: the teaching contents of traditional colleges and universities are backward and old, therefore are poorly aligned with the needs by employers.
2. Traditional education costs too much: traditional education is not exclusive, resulting in rocketing cost of choice and time.
3. Poor learning motivation and stickiness: without interest incentive, students rely on self-consciousness in learning, resulting in low learning motivation and weak stickiness.
4. The copyright of content creators cannot be protected: there is no cross-platform and transparent copyright supervision mechanism under traditional circumstances.
5. The value of content creators cannot be activated: at present, unauthorized reproduction and sales are rampant on the Internet. This has undermined the rights and interests of content creators and discouraged their creation.
6. The lack of education credit system: the frequent exposure of low quality kindergarten teachers, as well as the lack of higher education credit.
7. It is impossible to establish an accurate talent data system: the existing resume and education background system cannot accurately and truly reflect the value and ability of talents.
8. The centralization of traditional education: the traditional education mode is centered on individual schools, which seriously blocks the disclosure of data and the circulation of value.
9. Data oligopoly: Currently, the value of individual data is monopolized by education and employment oligopoly.
10. Data transaction is difficult to secure: the personal data leakage is serious, the oligarch database is huge and is continuously expanding with capital power.
11. Reputation evaluation is difficult to be integrated: it is difficult for the society to integrate individual evaluations and achieve transparency and authenticity.
12. Data fragmentation: data is industry-centric but not human-centric.

As you can't increase the value of beads by changing the case's material, all these problems cannot be addressed by advanced education modes.

However, as the population with consensus of decentralized ideas expands, the value of digital assets (e.g., Bitcoin, Ethereum) is increasingly recognized by the market. The core of education industry will witness a fundamental change.

### **3. JLL's innovation and changes**

#### **1. The core of change**

The decentralized applications based on block chain will achieve cross-industry redefinition. The exchange structure among content creators, students, education training organizations, and employers will be transformed to abrogate intermediate links. As a result, the information asymmetry will be mitigated and credit cost reduced. The rational distribution of interests will be achieved with token incentives;

#### **2. Reshape market models with technology**

Through token and DAPP economic models and rules, content creators, students, education organizations and employers will behave economically. The cross-industry trade trust mechanism will be reshaped by implementing distributed smart contract protocol of block chain;

#### **3. Definition of behavior**

Content creators, students, educational organizations and employers can create value by using DAPP, and implement the incentive mechanism through the quantification and certification of consensus algorithm. A token economy system associated with user behaviors (e.g., learning and content creation) will be constructed to realize rational income distribution;

#### **4. The results of education industry block chain changes**

The decentralized and cross-section applications based on DAPP will enable the changes in the education industry.

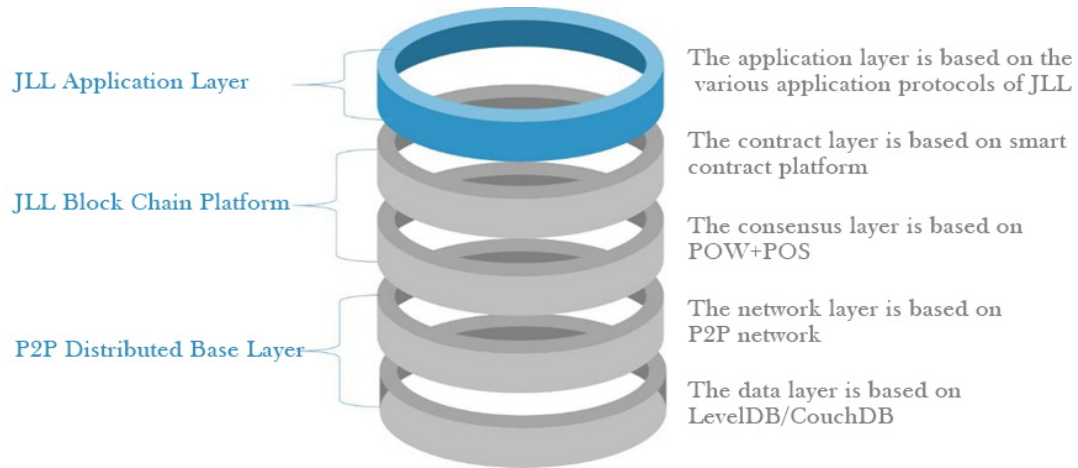
The desired results are as follows: the cross-section trade technology will be reshaped by implementing JLL smart contract in the distributed block chain ecosystem; all the links in the education industry chain, driven by token incentives and income distribution, will operate in the most reasonable manner. The efficiency of the industry chain will improve remarkably as all the intermediate links will be replaced by large number of automated smart contracts; at the same time, all kinds of undesired interference and value losses will be mitigated as much as possible; all parties will meet each other's demands by reshaping their behavioral roles, and value will be definitely rewarded in a rational way.



## 4. JLL's technology system

The industry barriers will be broken through by using distributed block chain technology; besides, one will be enabled to define the rules by implementing JLL smart contract, so as to reform the income distribution rules in the education industry.

### 1. Technology system

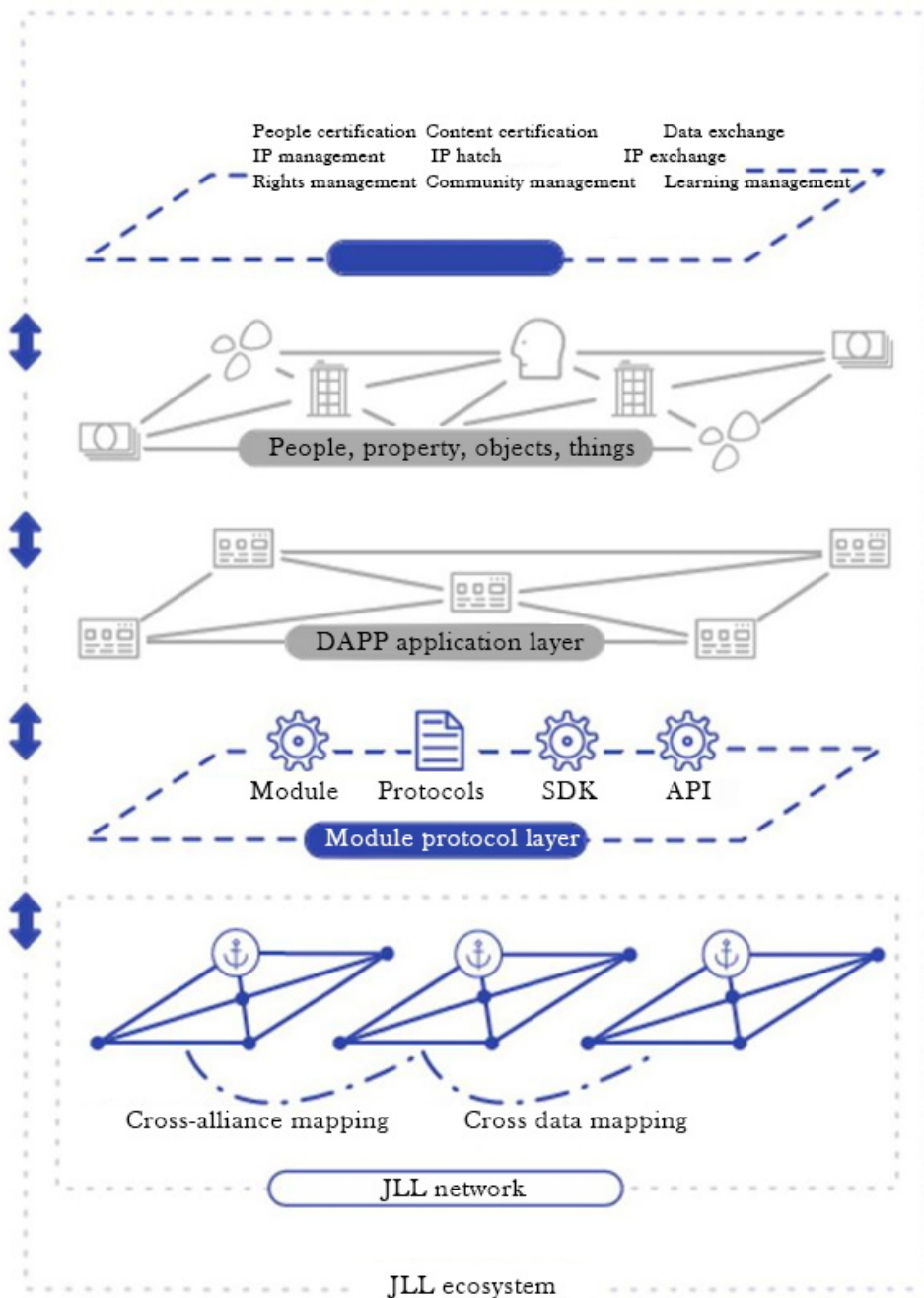


Layered structure will be adopted in the overall technology system of JLL. The application layer and the data layer will be separated from each other. The synchronous and specific updates of the applications on public chain will be avoided by using preliminary protocol.

|                   |  |                                    |
|-------------------|--|------------------------------------|
| Community layer   | Decentralized university, distributed education, open education, autonomous education community    | Distributed block chain technology |
| Application Layer | Multiple certification system, decentralized system, education basic chain, decentralized exchange |                                    |
| Trade layer       | P2P trade, 24h/365d token payment, security and traceability                                       |                                    |
| Consensus layer   | POW+POS global nodes   |                                    |
| Data layer        | Valuable data, quantified learning and contents, accurate data                                     |                                    |

In our design, the consensus layer and the network layer will also be at different levels. All the POW+POS token incentive mechanism owned by the consensus layer will not affect the stability of P2P network.

### 2. Application trust system

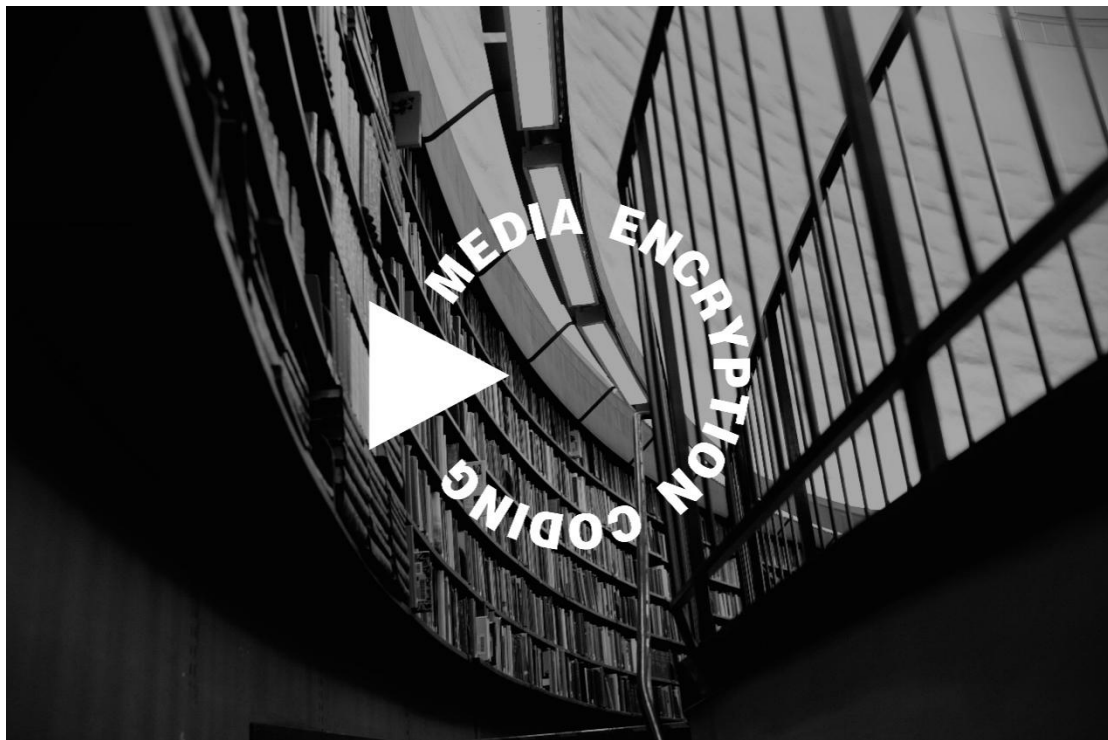


We have created an integrated infrastructure connector for the distributed trust network protocol and the education credit ecosystem. The JLL trust network is an education protocol network integrating basic applications and ecosystems from multiple parties. The vertical education business systems are supported by applications and systems from different parties, and are coordinated through the JLL protocol.

The architecture system provides loosely-coupled design which is modular, pluggable, and flexibly extensible, so as to support the needs of different business sectors. Such design could be flexibly extended to support various business applications.

The master chain protocol network will always combine the development of relevant block chain/distributed ledger technologies with the applications in vertical education ecosystem applications. It will provide a number of interfaces at the protocol's basic and application layers, such as distributed ledger, smart contracts, distributed entity management and authentication protocols, and distributed data transaction protocols, etc. Any application provider will be enabled

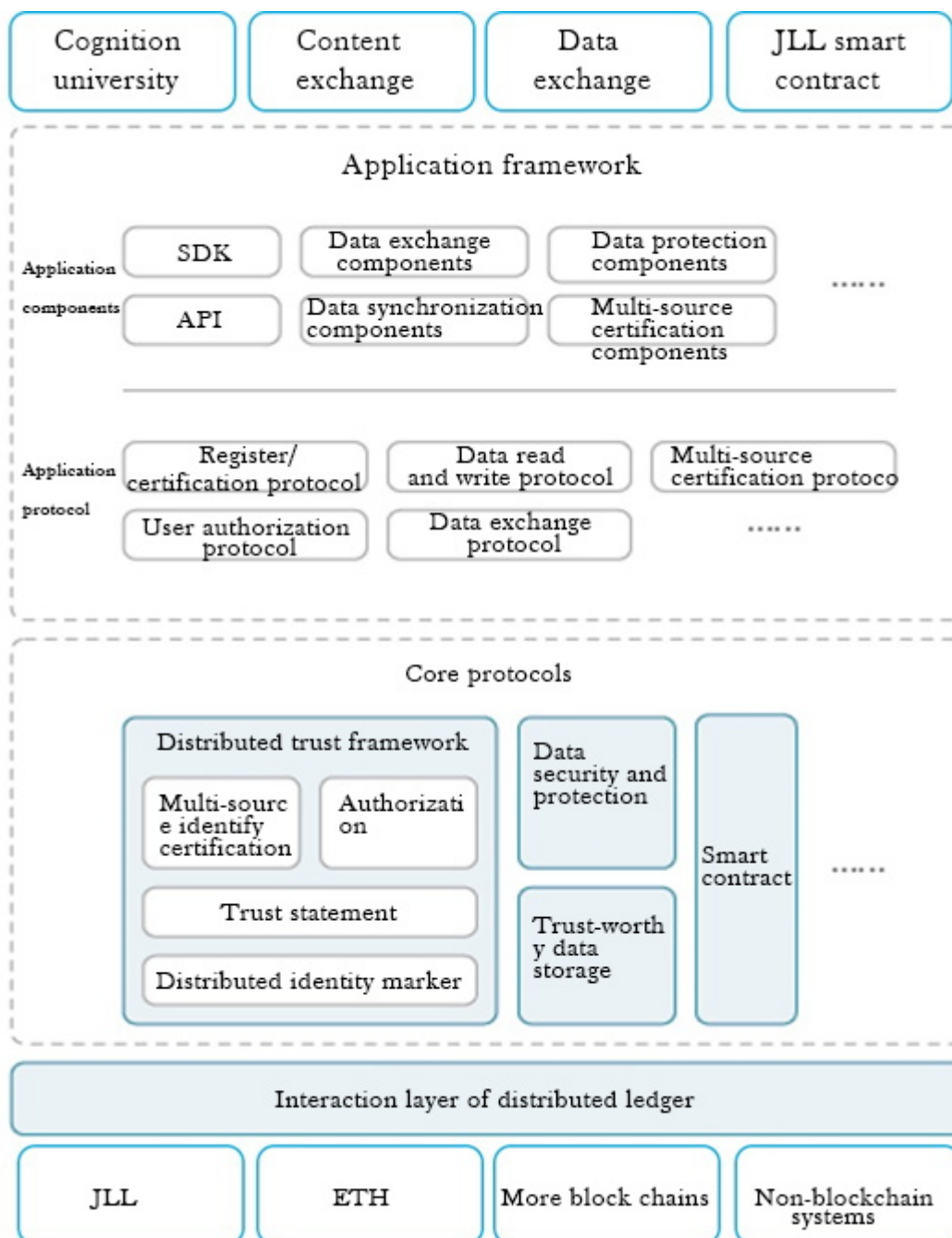
to directly offer distributed services based on the master chain even if they don't have the capability to develop distributed layers.



As a new trust system built on the effective coordination of authentication sources, the connectivity of data sources, and the underlying technologies of various distributed services, JLL could be described as a huge consensus trust system covering talents and contents. Education workers will upload the teaching contents to the underlying database of LevelDB/CouchDB, including text, audio, video, and all storable streaming media elements. After the completion of the upload, the characteristics of media information will be coded to generate encrypted codes which are unique and tamper-proof across the network. As a result, the data recorded in the JLL block chain system are strictly sorted in terms of both time and code. In the case of any copyright conflict, the system will review the chronological encryption codes and determine the final ownership at the same time. Whenever any infringing content is published, the system will accurately record the time of publication, the publisher and the content. Streaming media works, copyright information, operation logs are stored in the underlying database of LevelDB/CouchDB and will not be tampered. It will fundamentally protect the interests of the education content creators, and help to stimulate their enthusiasm to share and circulate. The super-large copyright trust system is committed to establishing a systematic, streamlined, integrated and quantifiable copyright trust ecological model.

Based on this, the master chain will serve as the infrastructure and connector of education trust ecosystem to benefit the vertical education sector. Meanwhile, it will improve the infrastructure of various education scenarios.

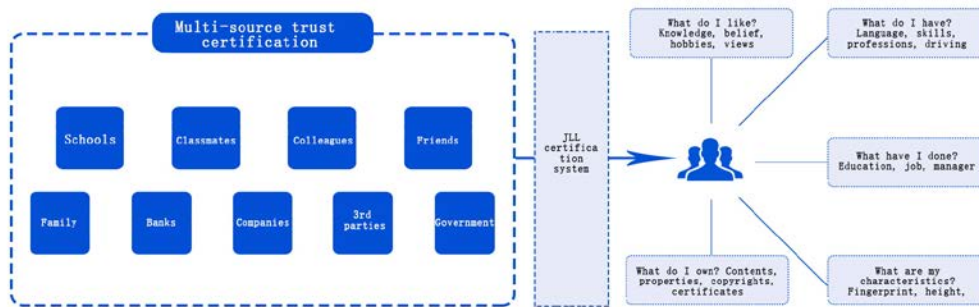
### 3. The Technical Architecture



JLL provides a complete distributed data recording system, including the latest smart contract system and data security system. At the same time, JLL has unified the technical system of underlying statistical algorithms and the heterogeneous systems, so as to be compatible with various kinds of protocols, encryption standards, distributed entity management, and multi-dimensional authentication functions. It supports cross-chain and cross-system mapping of heterogeneous block chains and traditional information systems. It also provides technical systems such as secure data storage, heterogeneous smart contracts, hardware key management, and encrypted data analysis. As an application platform, the entire master chain network can support the construction of various application services, especially decentralized applications.

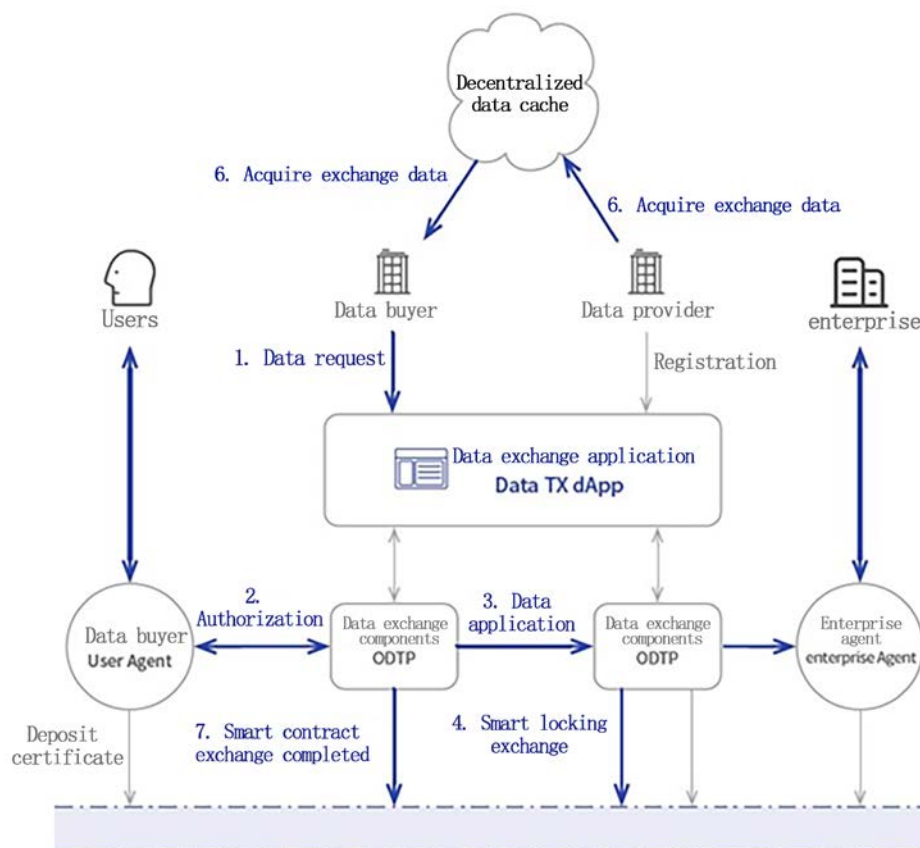
On this basis, JLL also provides a series of services, including application frameworks, distributed data transaction protocols, distributed process management, etc. It will fundamentally address the connectivity between upper layer applications by using API, SDK and a variety of application components.

## 4. Multiple Certification System



The interpersonal relationship map in modern society will become more and more complex. Everyone will interact with a variety of social relations. Therefore, any organization or institution associated with anyone will possess the information related to him/her. Through the master chain, users can link and authorize all education data related to themselves. Enterprises and institutions (e.g., government organs, schools to banks), and individuals (e.g., family members, friends, colleagues, leaders, and partners, etc.) will become certified data sources, which will be flexibly utilized in an integrated manner under the protection of privacy and authorization. With multi-source authentication in all aspects and complete personal education portrait, the data tracking will not only be tamper-proof, but also trustworthy.

## 5. Data transaction system





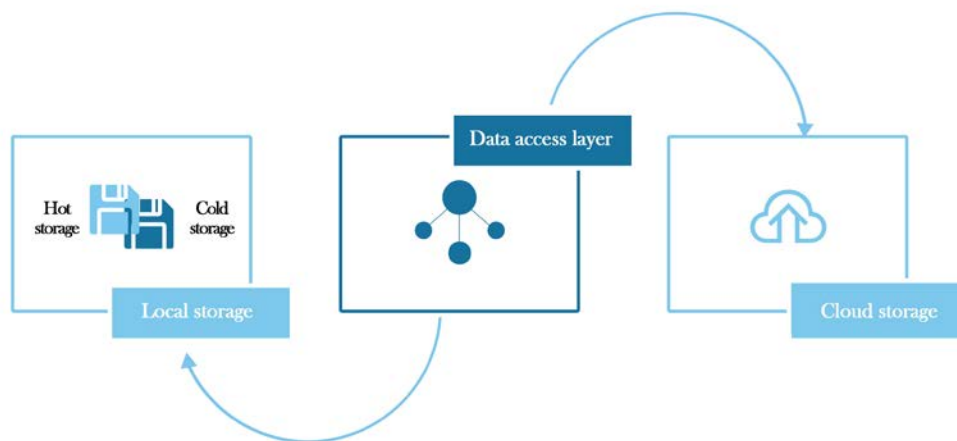
### (1) Data access authorization

Applications that need to use data are no longer required to connect to data sources one after another. Instead, they will access users' data directly by applying for authorization according to user ID. Whereby users can find more dimensions of the education data in a larger scale. In this sense, they will be able to fully understand the users, so as to provide more specific courses or service and product features.

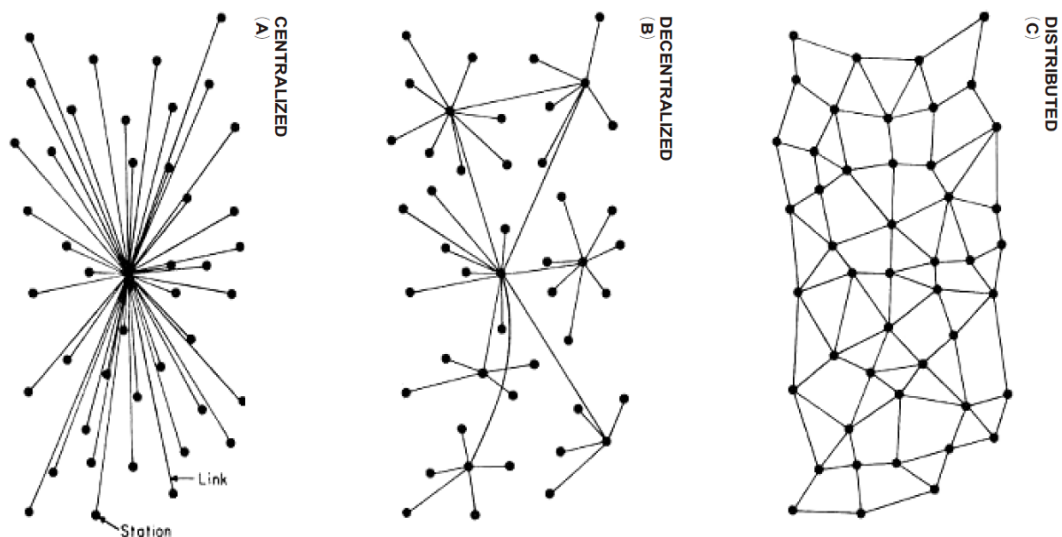
### (2) Data transaction model

The using party retrieves the access address of user's data through the latter's identity ID and requests to get the data. The request is firstly sent to the user's client for confirmation and authorization. Only requests authorized by the user can be further processed. The master chain is designed to enable users (e.g., data producers) to obtain the right to be informed and to earnings.

## 6. Mass storage



IPFS is a peer-to-peer distributed file system that tries to connect all computing devices to the same file system. IPFS is similar in some ways to the World Wide Web, but it can also be thought of as a separate BitTorrent group, exchanging objects in the same Git repository. In other words, IPFS provides a high throughput, content-addressable block storage model, and content-related hyperlinks. This forms a generalized Merkle Directed Acyclic Graph (DAG). IPFS combines distributed hashables, encouraging block exchange and a self-validating namespace. IPFS has no single point of failure, and its nodes do not need to trust each other. Distributed content transmission can save bandwidth and prevent DDoS attacks that HTTP solutions might encounter.



Powerful network data distribution mechanism:

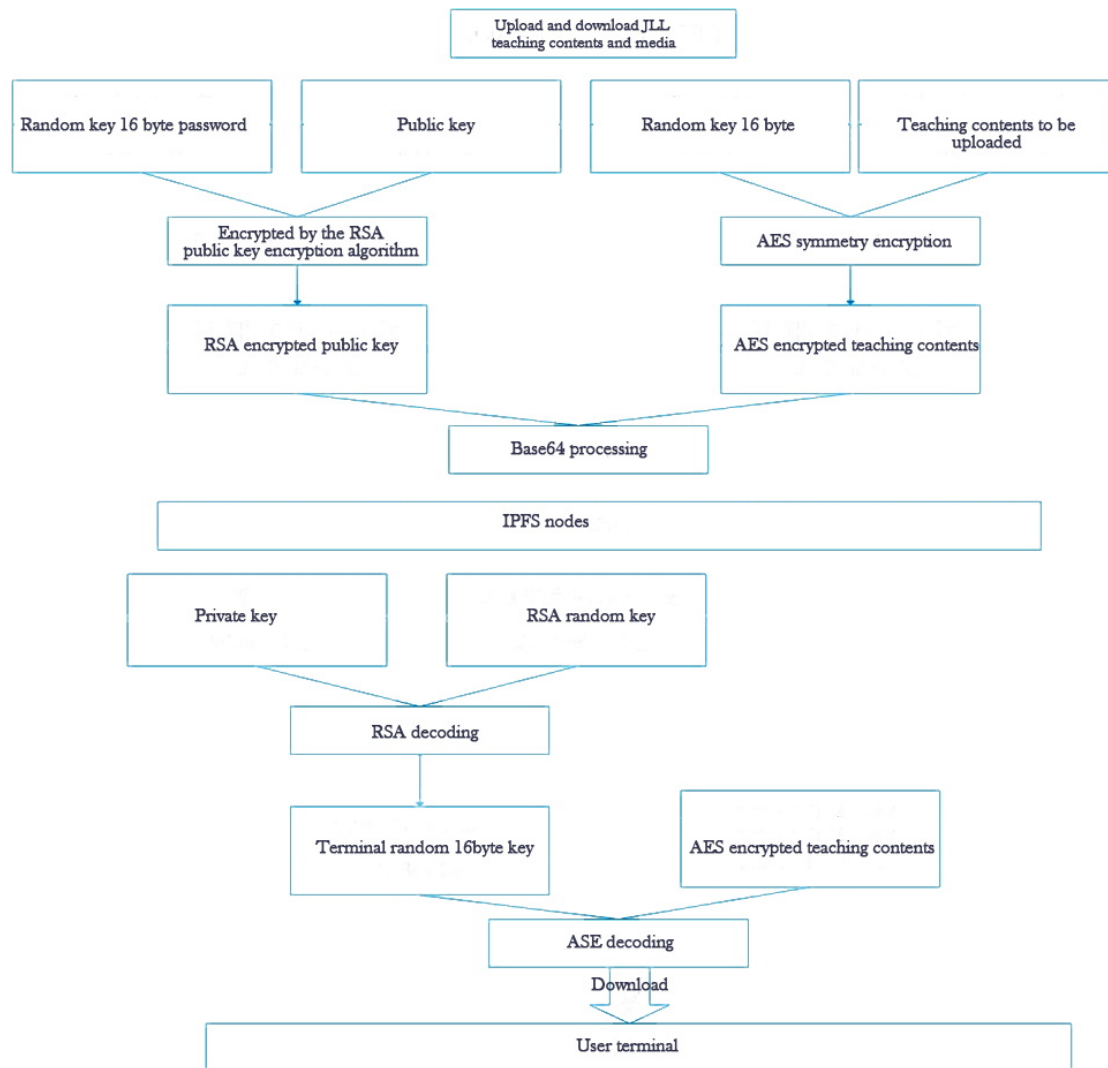
A hash fingerprint refers to each file and all the data blocks it contains, which will be converted to a hash string. Each node maintains a DHT (distributed hash table) containing the corresponding mapping relation between the data block and the target node. The entire hash table is organized into a binary tree, and the average complexity of querying the contact nodes is  $O(\log_2 N)$ . For example, it only takes 20 hops to query 10,000 nodes. Addressing is based on contents rather than domain names. IPFS automatically finds the nodes with the blocks in the whole network and pulls the data off the nodes by simply using the hash values of the files or data blocks. IPFS uses a distributed naming system called IPNS to map hard-to-remember data hash values to easy-to-remember strings. This is analogous to mapping a domain name to an IP address.

IPFS has the following features:

- The same data content is given a unique hash fingerprint, one can judge whether the data blocks are consistent by comparing the hash fingerprint.
- The node itself uses a version control system similar to git to manage local files and data blocks. This not only ensures the de-redundancy of data blocks, but also provides a traceable historical version.
- IPFS nodes need to use block chain technology to maintain the consistency of hash routing tables and accounts. On the one hand, it reaches consensus with the whole network in terms of dynamic increase and decrease of content and nodes. On the other hand, it is a basic platform for JLL TOKEN issuance and accounting management in JLL incentive mechanism.
- Nodes are encouraged to store rare data blocks by issuing JLL TOKEN. A node can not only pull the required data from its peers, but also store the new data in its own node for others to download.

IPFS is a hypermedia protocol based on content and identity addressing. Unlike traditional location addressing at the IPFS protocol level, this system is completely transmission-neutral. This means that the node can run on any transmission protocol. In fact, IPFS nodes do not need to reference a centralized IP. IPFS nodes can run in a variety of network architectures, and is an innovative paradigm for transferring decentralized storage. No part of the platform is stored on a centralized server. As a result, no organization, no one, or not even the chain JLL, can check or restrict the release of a work by the creator on the IPFS platform. The identity information generation and verification node is uniquely identified by the NodeId. It is typically a public key created using the static encryption problem of S/kademlia. The node stores its public and private

key pairs. Users can register as a "new" node each time they initialize it, but this results in the loss of the accumulated network benefits.



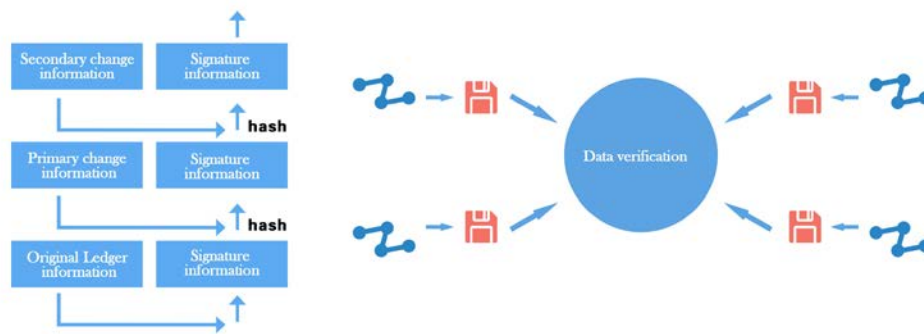
```

type NodeId Multihash
type Multihash []byte // self-described encryption hash summary
type PublicKey []byte
Type PrivateKey []byte /// self-described PrivateKey
type Node struct {
  NodeId NodeID
  PubKey PublicKey
  PriKey PrivateKey
}
Difficulty = <integer parameter> // IPFS identity generation based on S/Kademlia:
n = Node{}
do {
  n.PubKey, n.PrivKey = PKI.genKeyPair()
  n.NodeId = hash(n.PubKey)
  p = count_preceding_zero_bits(hash(n.NodeId))
} while (p < difficulty)

```

At the first connection, the peer nodes exchange the public key and check if the NodeId of the peer is equal to the hash value of the public key. If not, the connection is terminated.

## 7. Massive IP data storage



JLL block chain ensures that business requests are not tampered in the transmission process through asymmetric encryption of digital signature technology, and guarantees the data consistency of all nodes through a consensus mechanism. For the stored data records, the self-verification system and the quasi-real-time multi-node system in the nodes are used to verify them, so as to ensure that these records cannot be tampered with.

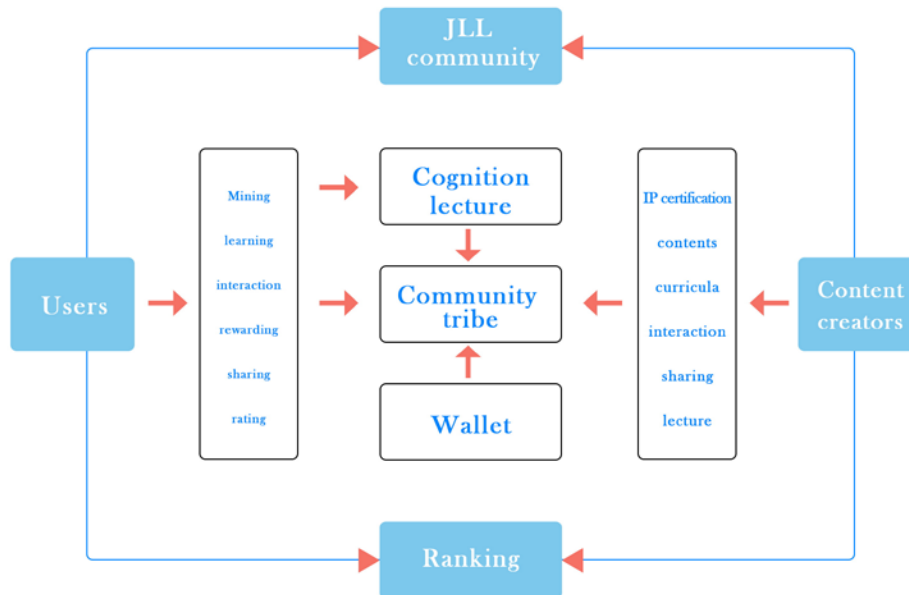
By self-verifying nodes, JLL block chain stores data records by using chain structure. The integrity of chain structure will be undermined by tampered data, which will be quickly verified and recovered from other nodes. In addition, each billing node of JLL block chain has its own private key. The signature of this node's private key is recorded in each block, and the data modification in the block can be verified by signature.

Punctual multi-node data verification: when the private key of a node is stolen, the malicious user will probably alter all the data on the ledger chain. JLL block chain provides a punctual multi-node data contrast mechanism, which can timely detect the tampering of a node's ledger data.

## 5. JLL solution

The master chain (JLL), a public chain platform & distributed ecosystem for the education industry based on the concept of "open source, openness, and happiness", will construct block chain infrastructure and open its internal capabilities to promote the development of a multi-win-win ecosystem by joint governance and sharing with the education industry.

### 1. Master chain (JLL) community tribe

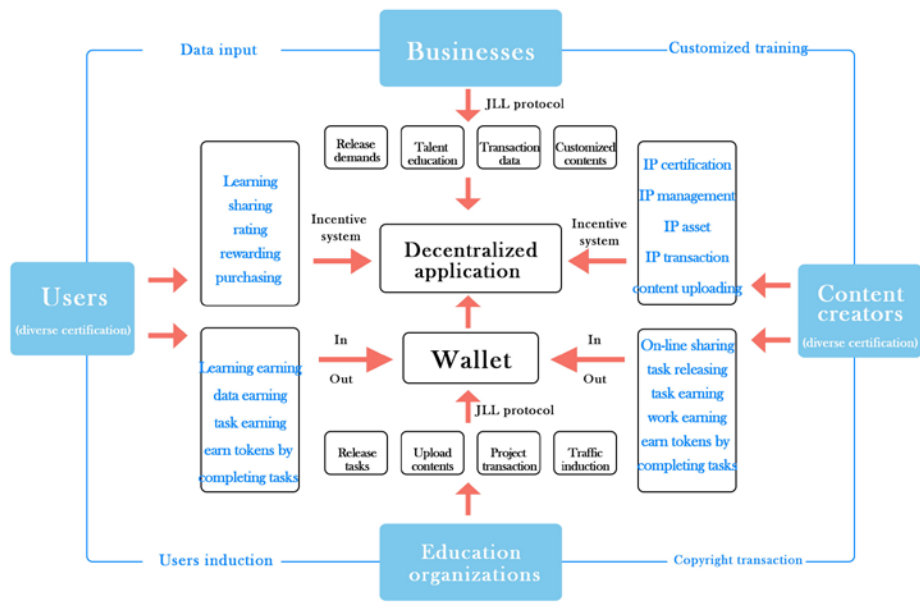


The whole ecosystem of JLL consists of five elements: users, cognition lectures, master chain community, mining and ranking. A community comprises of users, who obtains tokens through mining mechanism and other programs with which JLL has forged strategic partnership. Mining is one of the ways to obtain tokens and an important part of the whole ecosystem. There are a lot of co-building manners in the community: a teacher will use the cognition lecture as the platform to demonstrate himself and his teaching contents--he will upload related contents to the cognition lecture. Community users vote for or reward the preferred educators and their contents with tokens. The community will rank the teachers and their contents based on the votes, motivating the teachers to obtain user rewards and community incentives.

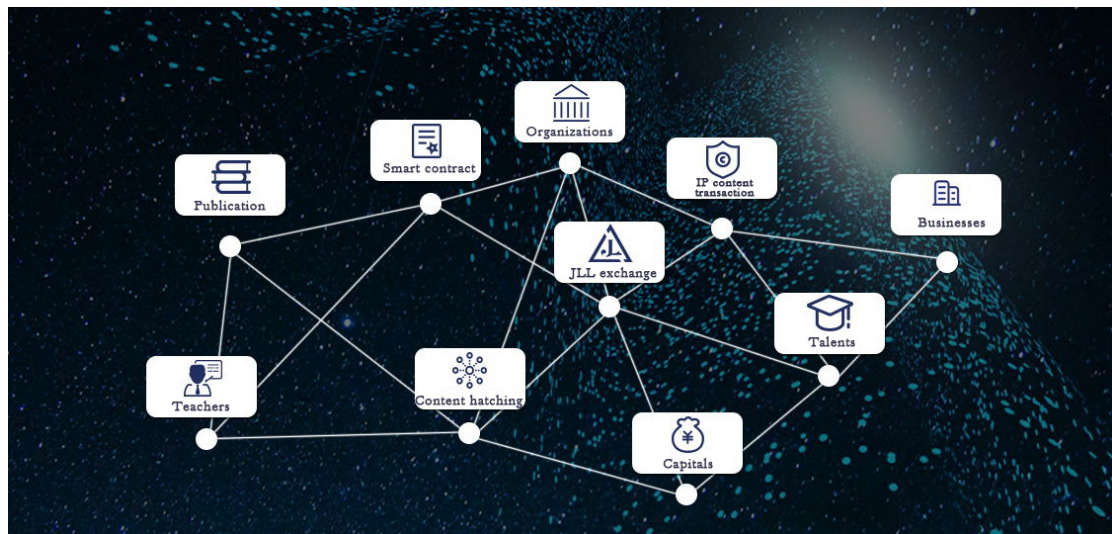
### 2.JLL DAPP applications

Teachers and education organization realize all kinds of teaching contents, such as the certification of courses, books, audio and others, through JLL protocol; an education organization find and purchase the teaching contents provided by teachers through JLL protocol and its certification; talents can also enjoy a variety of JLL certified teaching content provided by teachers and educational organizations. All transactions, training and teaching content information are stored as data on distributed ledgers. A company can send a validation request to a talent. By doing this, the company gets all his information recorded on the platform, accesses to his comprehensive education portrait, and supports the decision making of employment.





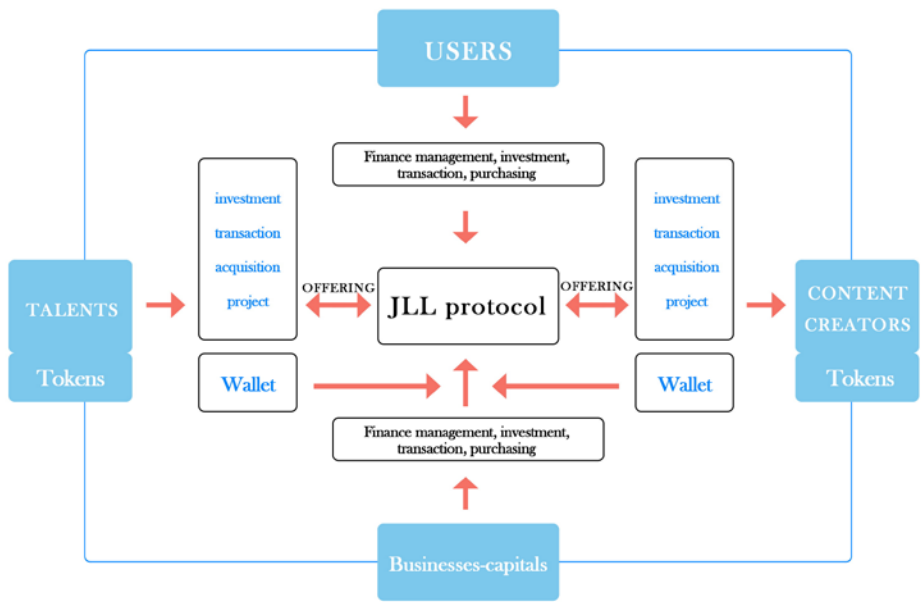
### 3.JLL exchange for contents



It also enables the certification, management, and hatch of IP contents based on individual teachers, and the copyright trades among presses, education organizations, and capitals. When the above trading volume is sufficient, the talent and content exchange can also be implemented.

### 4.JLL smart contract protocol

The JLL public chain is based on the consensus of smart contract protocols and distributed over “talents”, “teachers”, “capitals” and “users”. The JLL protocol will convert the IP contents, talents and capitals into digital assets. It will also hatch new tokens and votes at the same time. While benefiting users, it will maximize the value of IP contents, talents and capitals and enable their liquidity in the talents and contents exchange and ecosystem.



## 6. JLL issue scheme

JLL issues Token - JLL (a property utility token) based on the Ethereum ERC20 standard. As an important economic instrument in the vertical education industry, JLL will be applied in many scenarios, such as: on-line education, talent recruitment, content publication, and exchanges for talents and teaching contents, etc. The total amount of JLL is 200 billion, of which 100 billion lockers are used for POW, as shown in the following figure:

| The total JLL is 200 billion |       |                      |                      |           |                  |        |
|------------------------------|-------|----------------------|----------------------|-----------|------------------|--------|
| Private placement            | Team  | Angel & Cornerstones | Business cooperation | Community | T&S Charity fund | Locker |
| 10%                          | 12.5% | 7.5%                 | 5%                   | 5%        | 10%              | 50%    |

10% will be offered to private placement. The proceeds from the offering will be used to support JLL's operations in the next few years, including technology development, market development, legal advice, etc.

12.5% will be assigned to the founding team and extremely early contributors. They provided resources and technical supports for the early development of JLL;

7.5% Angels and cornerstones will be offered to JLL special contributors;

5% will be used for commercial cooperative promotion. Mainly used in cooperation with trading platforms and media;

5% for community building. It mainly includes brand building, community ecosystem construction, community cognition university, etc.

10% token held by the foundation is used for global education charity fund. Token use shall be jointly decided by the foundation management committee.

## 7. Development path of JLL

For JLL, the implementation of its entire system is expected to be a five-year, five-step project. Specifically, the implementation path is as follows:

### 1. Grand Brahma (Project)

Reshape the learning scene -- Token encourages all parties in the community to win

Below activities are included in this stage: the establishment of JLL communities; the realization of POW mining applications; the creation of decentralized mind hall; the realization of income incentives; learning sharing; community interactions; value ranking; co-governance by the platform and the community; and the provision of a decentralized ecosystem through users' engagement, learning, voting, sharing, and collaboration.

### 2. Indra (Project)

Reshape education structure -- based on DAPP decentralization and cross-alliance Token payment

The ecological construction of the JLL chain is based on the educational public chain, the content transaction, the talent management, the copyright protection, the education IP, the teaching service, the education hatching and the education management, and the construction of the basic infrastructure of the teaching chain by using the distributed data encryption storage technology to build a new multi win education ecology which is centralization.

### 3. Surya (Project)

Reshape education trading -- build the trading ecosystem of talents and education

JLL will build an exchange for talents and contents comprises of "talents", "teachers", "institutions" and "capitals". All participants will be enabled to certify, manage, hatch, and trade IP education contents, thus facilitating the circulation of content publication, trade, and high-end talents.

### 4. Varuna (Project) :

Touch education in the future -- talent IPOs and education content creators will be converted into digital assets.

The self-value of talents and content creators are quickly realized through digital assets. Value creation activities are enabled through trade and investment volume. Such activities include the selection, evaluation and risk management of projects; leading investment; private financing; token issuing; on-line trading and after-market service, etc. During this process, more and more education innovation projects are empowered by block chain technology; by adopting a value model based on distributed and decentralized ledger management and digital assets, these education innovation projects will address the current sore points and optimize their industrial structures.

### 5. Calura (Project) :

The organizer of education block chain ecosystem-- the operation mode of education content block chain platform system

Election is the core element of JLL mechanism. The holders of primitive tokens in each system (e.g., the holders of JLL token in the education content block chain platform) are entitled to join the election, with their JLL balance being voting weights. They will either elect council members by voting, or state their attitudes towards the topics concerning the development

direction of the platform. All these have constituted the foundation of JLL community autonomy. The council is elected by the community and is the power organ of the JLL Chain. The council members have the rights to initiate and vote for bills. In the future, a world-class decentralized and distributed education ecosystem can be truly realized through the decentralized community management mechanism.



## 8. JLL's core members, consultants and investment institutions

### 1. Operation team



Tang Jingjie  
Sponsor of JLL China  
Blockchain Application Architect  
Blockchain Angel Investor



Lei Zi  
Co-founder of JLL  
Blockchain Technologist  
Digital Currency Wallet Technologist



Liu xu  
All stack Development Engineer  
Advanced Algorithmic Engineer  
Proficient in java/C/C++/Python  
Research Fellow of the ETH, EOS block chain system



Wu yu rong  
All stack Development Engineer  
Block chain technology enthusiasts  
Early holders of digital money



Shen Xiaoyu  
Blockchain senior architect  
Encryption algorithm senior engineer  
A research fellow of the blockchain  
consensus algorithm  
Research Fellow of the ETH, EOS blockchain  
system



Tian Xu  
JLL Project Operation Officer  
Early investors in digital assets  
Digital Asset Quantifier



Yan Yuhan  
Community Operation Officer  
Community Practitioners  
Jingdong Internet Community Operation  
Expert



Xu Zhiqing  
Community Operation Supervisor  
Tencent Community Management Expert



ChenKai  
Content Operation Officer  
New media operation  
Former content writer of an Alibaba company

## 2. Consultants and investors



Zhang Ai  
Digital Currency Angel Investor  
Co-founder of Biqu  
Consultants for many exchanges



Wu Ji  
JLL investors  
Chairman of Hua Ying holding group



Zhang Tao  
JLL investors  
Block chain investors



Liang Kaien  
Asia's top orator  
Board Chairman of Beyond the Limit



Zhu Shao-ping

Former Director of the Financial and  
Economic Commission of the NPC  
The Author of several policy and legal

document



Wu Zhengkuan

China marketing guru  
Superspeaker



Shi Yan

China's top 10 planning lecturers  
Brand China Deputy Secretary General  
Founder of Dream Works Project



Ji JianJing

Speaker, Writer, Philanthropist, Entrepreneur  
Chairman of Xuanyuan International  
Industrial Group



Zhao Zixiong  
JLL investors  
ZhongJu Blockchain CEO



## 9. Investment institutions



## **10. Estimated schedule**

### **Grand brahma**

Reshape the learning scene -- Token encourages all parties in the community to win  
From April 2018 to October 2018

### **Indra**

Reshape education structure -- based on DAPP decentralization and cross-alliance Token payment  
From October 2018 to October 2019

### **Surya**

Reshape education trading -- build the trading ecosystem of talents and education  
From October 2019 to September 2020

### **Varuna**

Touch education in the future -- talent IPOs and education content creators will be converted into digital assets.

From September 2020 to October 2021

### **Karura**

Education block chain ecosystem -- the operation mode of education content block chain platform system

From November 2021 to December 2022

## **11. Eleven Foundation**

The Master Foundation Master Foundation is a legal non-profit public welfare organization protected by the Singapore government. Its non-profit means that the funds raised through the JLL project (including the Token) will be used for the research and development of the JLL project. For yourself.

The Master Foundation is committed to making use of advanced blockchain platform technology to continuously transform and optimize the global education industry and promote the global education application and development of the JLL project.

## **12. Project risks**

### **1. Policy risks**

At present, the blockchain is still at an early stage and the national regulatory policy on blockchain projects is not clear, which may have uncertain impacts on the development and liquidity these projects. At present, the value of digital assets fluctuates dramatically, and there is a risk of inflation and collapse and manipulation by the makers. Investment risk is relatively huge. Participants may lack market experience and are unable to grasp market uncertainty. This may impact the assets and generate psychological pressure. Investors need to have a strong resilience. Therefore, investors are advised to be cautious before participating in the investment.

### **2. Team risk**

JLL currently has a team comprises of experts experienced in on-line education and block chain. The team is stable and cohesive at present. In the future development process, core personnel might leave and there might be conflicts within the team. This will pose negative influence on JLL.

### **3. Competition risk**

At present, there are many projects in the blockchain industry, and the competition is very fierce. JLL is now developing rapidly with the efforts of its core team members. Fierce market competition will bring pressure to the project. Whether the project could be the winner among all these outstanding competitors on the market is not only subject to the team's work, but also impacted by its competitors. In other words, the project might be faced with vicious competitions.

### **4. Hacker risks**

In terms of security, we have been demanding ourselves to the highest standards. We have addressed all the previous threats from hackers. However, hacker attacks are still inevitable. As the value of JLL's digital assets increases, it is more likely to become the target of criminals. Besides, there are some unpredictable risks.

## **Disclaimer**

This white paper is only used for product introduction and information transmission. One shall not regard it as investment reference. This document does not constitute, nor is it construed to provide, any guidance on the conduct of swaps, all of which are voluntary. Interested users should clearly understand the risks of JLL. Once investors participate in the investment, they will accept the risks of the project and are willing to bear all the corresponding consequences.

The foundation shall not be liable for any direct or indirect asset losses caused by any participation in JLL project.

## **Conclusion**

### Teaching · Chain

JLL desires to empower the development of education industry by using block chain technology. Meanwhile, it expects to facilitate better circulation and integration among all participants in the vertical education industry and their underlying value through the implementation of JLL education protocol. As a team who embrace technological changes, we also expect to contribute to the accumulation and progress of blockchain technology through JLL, especially JLL education protocol.