IPBank

IPBank is committed to building a series of infrastructure for the IP industry ecosystem, providing IP rights registration, IP rights digitization, transactions, crowdfunding and smart brokerage functions to help the content industry adapt to the characteristics of community-based development under the new form of communication.

WhitePaper

V1.0

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1. General Description

1.1 Prospect and challenges for the cultural industry

With development of economic and social, the rapidly-growing middle class has ever-increasing demands for quality and spiritual improvements. The ratio of material consumptions keeps declining and the demands for value-based information, cultural, entertainment, knowledge and other spiritual consumptions are booming.

The IP industry (IntellectualProperty, intellectual property) coincides with its needs to cater to the needs of consumption upgrades. With the support of Internet technology, the production and dissemination mode of content has undergone tremendous changes, and everyone can become a producer and discoverer of content, communicators and consumers. With high-quality IP as the core, a diversified business system spanning the fields of film and television, literature, games and peripherals is taking shape. With the support of many core users, its industry scale can reach billions of dollars. Take the comics market as an example. About one billion magazines and single books are sold in Japan each year. The market scale is more than 400 billion yen, covering more than 50 million people, accounting for about 40% of the Japanese population. South Korea has developed a series of related policies based on the "culture-based country" strategy. It has successfully combined the "Korean Wave" with Korea's advanced IT and promoted Korea's international status. South Korea's content industry sales exceeded 70 trillion won, and the core level of the domestic idol industry market + derivative layer market exceeded 3 trillion won in 2016.

Internet technology has upgraded the productivity of the IP industry, but the production relationship has remained in the model of the last century. The complicated marketing model has led to a long industrial chain, low operating efficiency, and unable to carry new content production methods, which has brought a series of urgent solutions. The problem:

> The cost of ensuring rights is high. In the face of chaotic copyright usage and frequent piracy, it is difficult for IP holders to provide sufficient ownership certificates to protect their rights;

> The market's attention is focused on the creators and mature, and early creators lack liquidity channels and are unable to obtain financial support;

> The process from product creation to sales is too long, and a lot of intermediate links consume a lot of time and money;

> The settlement involves many parties, the procedures are cumbersome, and disputes are frequent;

> ......

1.2 Blockchain

Blockchain is a distributed ledger technology based on cryptographic algorithms. It can build a inalterable and unforgeable ledger in a multi-center system by relying on the consensus mechanism implemented by machine language. For the first time, the blockchain technically solves the point-to-point trust problem in untrusted networks. It is based on cryptographic algorithms to ensure that the value cannot be tampered, based on the chain structure value and time stamp mechanism to ensure data traceability, based on consensus algorithms and

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P2P networks, ensuring data consistency between nodes. With the support of the above features, the blockchain realizes the value transfer of trust. As the earliest blockchain system, the booming development of Bitcoin in the past ten years is the best comment. The emergence of smart contracts provides the basis for more complex operations on the chain, which enabled the beginning of the smart economy. The combination between trustless value network and the existing industry will collide with the sparks, which will provide the possibility of industrial efficiency improvement and production mode change.

1.3 Visions

IPBank hopes to build a decentralized IP industry infrastructure, enhance the liquidity of IP through the certification of rights, establish an economic system in which IP assets are fully circulated, explore resource organization forms that adapt to the socialized characteristics of content industries, and promote the IP industry's healthy and rapid development. At the same time, this will also give many IP audiences the opportunity to get in touch with and familiar with the blockchain industry, which is of great significance to the popularization and development of the industry.

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2. Ecological architecture

2.1 General Descriptions

IPBank is committed to aggregating ecological resources, building a series of convenient and easy-to-use commercial infrastructure, providing functions such as IP confirmation, equity certification, trading, crowdfunding and intelligent brokerage to realize the certification of IP rights and provide flexible circulation. The program adapts to the characteristics of decentralized development under the new form of communication, achieves a win-win situation among participants, and promotes sustainable growth of the whole ecology.

2.2 Ecosystem participants

The main activities in the ecology can be divided into the following categories: production, sales, consumption, in which production can be subdivided into creative production (IP original, mobile games, animation, film and television production, peripheral derivative design, etc.) and non-creative Production (mechanical work such as industrial production of printed matter and derivatives). This has led to several roles: creators, non-creative producers (hereinafter referred to as producers), sellers (organizations and individuals who work through institutions or channels to help users acquire products, ultimately achieve revenue and cash, such as Book publishing companies, film propaganda publishers, and consumers (investors) are connected to each other through transactions.

Each individual or institution in the IP ecosystem has one or more of the above attributes. For different attributes, IPBank analyzes its characteristics and needs.

Creator：as the origin of the IP industry, creators play an irreplaceable role and constitute the supply and demand sides of the ecosystem together with consumers. They are undoubtedly the core of the ecosystem.

1、**Difficulty in IP confirmation.** Upgraded transmission mode provides a bigger stage for the creators but the problem of piracy is increasingly severe. Most of the current IP confirmation means have too complicated and costly and can hardly support the creators to safeguard their legal rights and interests.

2、**Difficulty in monetization.** Investors are primarily concerned with the head of the IP industry. Most creators (particularly the hardly known small and medium-size creators) lack the effective means of monetization so that they can hardly acquire economic incomes and public supports at the early stage of creation. Some even are forced to give up the creation work, thus resulting in the abortion of a number of IPs with enormous potentials.

3、**Long creation time and heavy financial pressure.** Most IP products are not created at a time. Film and TV productions take considerable time and efforts and the creators must bear heavy expenses. at the early stage.

4、**Lack of trusts and considerable transaction disputes.** IP must undergo a series of complicated intermediary stages for monetization. The payment period is long, and the credit can hardly be guaranteed, thus leading to considerable disputes.

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Producers, sellers： As a channel, they have a significant influence on traffic, and thus gain the main voice and most of the benefits in the ecology. But the cost of communication continues to decrease as technology evolves, and lasting traffic ultimately depends on good content. The transparency and flattening of the industry are conducive to the development direction of the ecology, and the dilution of the role of the middlemen is almost inevitable. How to complete the transformation of identity, become the infrastructure of distributed business, provide standardized and modular services for creators, and promote the expansion of content ecology, is a problem they must think about.

1、 **Complicated clearing and frequent dispute.** In the current IP ecosystem, product creation, production and sale involve multiple parties and the clearing procedure is rather complicated. As such, there are frequent transactional disputes which consume massive human and time costs and lower the productivity.

2、 **Unforeseeable market and heavy undertaker pressure.** IP products are based on the strong value and aesthetic identification of their consumers. The products that don't satisfy this standard won't arouse any desire of consumption among them. Traditional sales mode can't accurately judge the scale of target consumers and therefore substantially increases the uncertainty of production and undertaking.

Consumer： ultimate target consumers of products.

Sense of engagement and social demands. With the upgrading of transmission and interaction modes, consumers are no longer satisfied with passive acceptance of IP products. Instead, they are eager to acquire better interaction experiences and sense of engagement, perform spontaneous spreading, interaction and even secondary creation activities and thus form a community with common values and senses of aesthetics and promote the development of relevant IP system.

2.3 Functions

2.3.1 Infrastructure

As an infrastructure for the IP industry, IPBank will provide the following functions for ecological participants:

1、 **IP registration confirmation.**

Blockchain-based copyright deposits help creators to complete copyright claims easily and at low cost.

2、 **Smart brokerage.**

Profit sharing and settlement system based on parameterized smart contracts, effectively avoiding disputes and protecting the rights and interests of all parties.

3、 **IP authorization and transfer.**

IP holders can authorize or transfer IP to other agencies and individuals through modular smart contracts.

4、 **The tokenization of IP rights.**

Through a modular issuance contract, IP benefits are converted into standardized tokens that enable them to be transfered and traded on the blockchain.

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5、 **Crowdfunding.**

Using equity tokens, crowdfunding is initiated for users.

6、 **Circulation and trading of equity tokens.**

7、 **Community.**

The IPBank platform will build a community ecosystem where creators and enthusiasts communicate. With the development of the ecosystem, IPB (IPBankToken) will gradually be applied to this social network, inspiring community members to gain revenue through content creation and re-creation, so to enhance their sense of participation and promote ecological development.

2.3.2 Workflow

supported by the above functions, a complete business process is as follows:

1、 **IP registration.**

The IP holder (if not the original holder, it is required to provide a legally binding intellectual property authorization document) to initiate an application, and after the IPBank Audit Evaluation Department or the verification node audit, use the hash value of the IP and the current time to obtain one. The timestamp is written to the underlying blockchain. By means of the non-tamperable and unforgeable features of the blockchain technology, the holder can control the IP at this moment and provide strong legal evidence for the original creator to resolve future copyright disputes. IP content is stored through decentralized storage such as IPFS, SC, etc., which is convenient for IP holders to manage. In order to quickly complete the cold start of the project and obtain sufficient traffic and attention, IPBank will give IPB (IPBankToken) to the high-quality IP that is stationed, actively promote the participation of high-quality IP, and then attract its community to join the project ecology; meanwhile, the early registration IP You will also receive a certain number of IPBs.

At the beginning, Ipbank copyright review committee will review the originality of the IP. However, the validation work will be gradually transferred to the corresponding review node with the development of the ecosystem. The review node acquires a token after validation and endorse the review results. It has to pay the corresponding penalty if the review results are wrong. IP creator and review nodes need real-name authentication and a credit system has to be established according to the history of operations.

In order to quickly acquire traffic and attract adequate attention, Ipbank foundation will donate IPB (Ipbank Token) to the registered quality IP and thus attract more quality IPs. Meanwhile, the IPs registered earlier will also receive a certain quantity of free IPB.

2、 **IP authorization and transfer**

After the IP holder completes the IP registration, the IP license and transfer can be made to other institutions or individuals through the modular smart contract. The result of the transaction will be recorded on the blockchain, with immutable features as proof of authorization. In addition, IP holders can obtain a complete authorization list by querying the authorization record for authorization management. For high-value IP, IPBank will customize the corresponding smart contract according to the individual needs of the holder, define rights and obligations, match transactions, complete transfer and authorization. IPBank will charge a certain percentage of the matching fee based on the transaction amount.

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3、 **IP equity tokenization**

Ipbank classifies IP rights (products) into time (ticket alike) and permanent IP. Permanent IP is further classified into non-consumptive (online watching, book, peripheral product, etc.) and consumptive (creator time, etc.). The corresponding standard contract templates are also designed to turn it into a special token (indivisible) and make it a target of crowdfunding which can be transferred and traded on the chain. Within the validity period, the token holder can request the issuer for cashing at any time. Ipbank will integrate offline resources to provide smooth channels of cashing for the tokens and thus realize the online and offline transmission of assets.

4、 **Crowdfunding**

After digitalization of different types of IP equity, Ipbank will provide a modular crowdfunding solution for consumers. Diversified pricing modes may be adopted for a crowdfunding product, e.g. Fixed pricing and floating pricing. Fixed pricing refers to a fixed price during the period of crowdfunding. Fixed pricing mode is applicable for scenes of duplicable products, e.g. Film crowdfunding where the corresponding film ticket price remains fixed; floating pricing refers to a price that increases with the increase of investors during crowdfunding. Floating pricing mode is applicable for scenes with rare resources, e.g. Crowdfunding for concert tickets.

To the creator, it offers another channel of cashing other than direct sale of IP. The raised funds can be used to finance the production work or authorize infrastructures (producer and releaser) to produce, sell and engage in other commercial operations. If the producer lacks commercial experiences, it may cooperate with or authorize the infrastructures (platform or releaser) to initiate crowdfunding. The parties may sign a smart contract on the transfer mode and the earning distribution mode and ratio.

The producer and releaser that owns IP use right may also save capital costs and increase sales efficiency through crowd funding.

5、 **Trading and circulation**

Trading is the main channel connecting the ecological parties and promoting the full flow of resources. In the traditional circulation process, the forms are various, resulting in a long industrial chain, complicated procedures, and high transaction friction costs. After the equity is tokenized, it can be transferred between wallets and traded in IPBank's decentralized exchange, laying the foundation for low-friction fast trading, providing IP holders with great liquidity and flexibility.

6、 **Equity cashing and settlement**

After the IP product is released, equity token holders can use the token to redeem the product at the crowdfunding initiator at any time. All settlements are carried out through pre-set smart contracts, which is convenient and quick to avoid disputes.

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Business flow chart：

IP authorization and transfer

Smart brokerage.

Trading / crowdfunding

Broker

User

IP registration confirmation.

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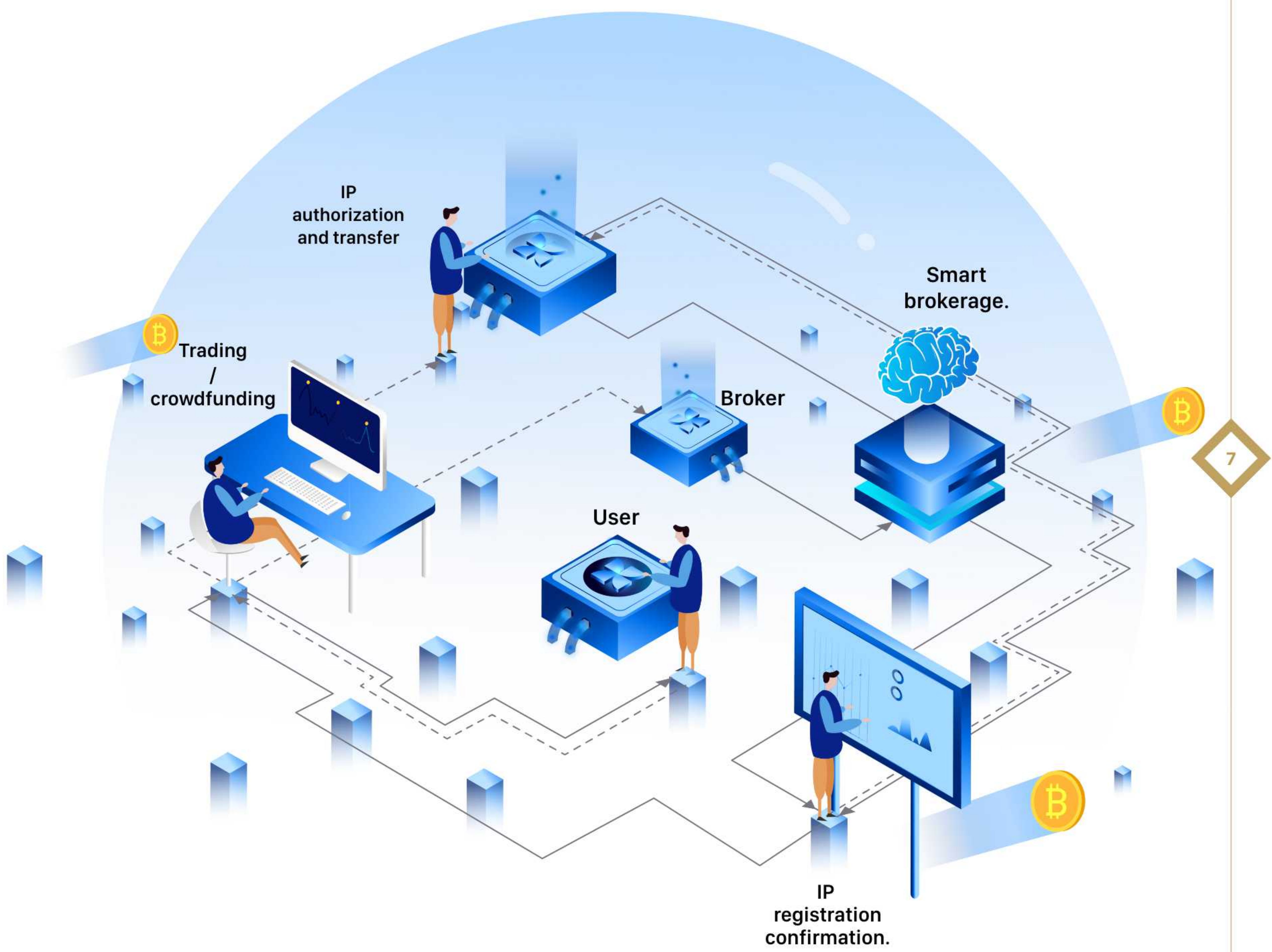
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2.4 Ecological gains

The foregoing steps constitute a complete operating cycle. During this process, Ipbank eliminates the redundant industrial chains and establishes point-to-point direct contacts between different parties to maximize the use of funds to support IP content production. The formalities and friction-related expenses incurred in this process will be fully used for ecosystem expansion. Each role will benefit from it.

Creator：

IP right confirmation. With the traceability and non-tamperable technical features of the blockchain, combined with encryption algorithms and timestamps, it is easy to prove the IP ownership and provide strong legal evidence for the original.

Smart brokerage. Based on the smart contract-based profit splitting and settlement system, the sales are completed immediately, saving a lot of manpower and time costs, effectively avoiding disputes and protecting their rights and interests.

Early-stage capital support. For small and medium creators, even if a certain amount of traffic is gathered, the existing mechanisms cannot bring in revenue quickly, and lack of economic support affects their continuous creation. Through crowdfunding, they can raise a certain amount of funds in the early stage, and the convenient infrastructure in the ecology can also provide them with quick monetization channels to solve worries and peace of mind.

Community. Compared with the ordinary fan economy, crowdfunding brings a stronger sense of substitution to users and helps to form a core community. The platform also aggregates a large amount of traffic, providing creators with more opportunities to showcase.

Producer and seller :

The development of technology has made the irreplaceability of producers increasingly decreasing, and the seller's right to speak to traffic has gradually decreased as the cost of transmission has decreased. The transparency and flattening of the industry have become an inevitable trend, and the importance of producers and sellers is decreasing and tending to be thinner. After all, traffic is still derived from high-quality content. How to help more high-quality IP growth and then enjoy the dividend of ecological development is more important for both. The contract and settlement of smart contract control can effectively reduce intermediate links, avoid disputes, and save a lot of manpower and material costs. The crowdfunding model can delineate core users in advance, effectively reducing the issuer's cost of sales. With IPBank, all parties in the ecology can establish a peer-to-peer distributed business collaboration relationship, with a clearer division of labor, improve work efficiency, and thus gain more benefits.

Consumer:

The value-based community can increase the consumers' degree of engagement and immersion experience and bring more gains through transmission and secondary creation.
Equity digitalization and transaction offer adequate capital operability and liquidity so that the equities can be cashed in at any time.

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IP ecosystem :

Content is always the core of the IP ecosystem. The creators can acquire the fullest support and equity assurance at Ipbank. They can focus on creation and ignore all other factors and thus can grow with their products in a real sense. It is going to attract more creators to join the ecosystem, generate quality IPs, attract more fans and thus promote the booming development of the whole ecosystem.

Blockchain industry：

Limited people know about block chain due to its technical threshold. In the information society today, almost everyone is the fan of one or several IP. Some famous IPs even have numerous fans. Attracting more IPs and thus allowing more people to have a closer contact with the world of block chain will undoubtedly promote the development of this industry.

2.5 Token mechanism

Tokens are a bridge to deliver ecological value. The tokens in the IPBank ecosystem fall into two categories: IPB (IPBankToken) and equity tokens.
As the common currency in the system, IPB is the medium of value transmission and the fuel to promote the execution of smart contracts. The value attribute brought by the extensive application of IPB makes it also have the function of value storage.
In different business scenarios, IPB has the following features:

IP registration confirmation

When IP holders register IP, they need to pay a certain IPB as fuel, execute the contract, and issue unique IP copyright tokens. The IP holder needs to pay a certain IPB to the authentication node as a service fee for authentication and confirmation.

Equity tokenization

IP equity producers need to pay a certain amount of IPB as a fuel for the execution of tokens when they are tokenized.

Equity crowdfunding

IP equity producers use equity tokens as the target to initiate crowdfunding for users and need to pay a certain IPB as a fuel for crowdfunding contracts.
IPB is the base currency for crowdfunding. Participants need to transfer IPB to crowdfunding contracts in exchange for corresponding equity tokens.

Transaction flow

Equity tokens can be traded on the IPBANK platform exchange, IPB is the base currency of the transaction IPBANK will charge a certain fee for each transaction, and if you pay with IPB, you will receive a discount.

Equity tokens include, but are not limited to, IP copyright tokens, dividend rights tokens, electronic tickets, online products and service tokens, which are representations of IP rights (products), and IPBANK will build a complete redemption mechanism for them. With the development of ecology, more types of equity tokens may appear, bringing more possibilities for the digitization and circulation of IP assets.
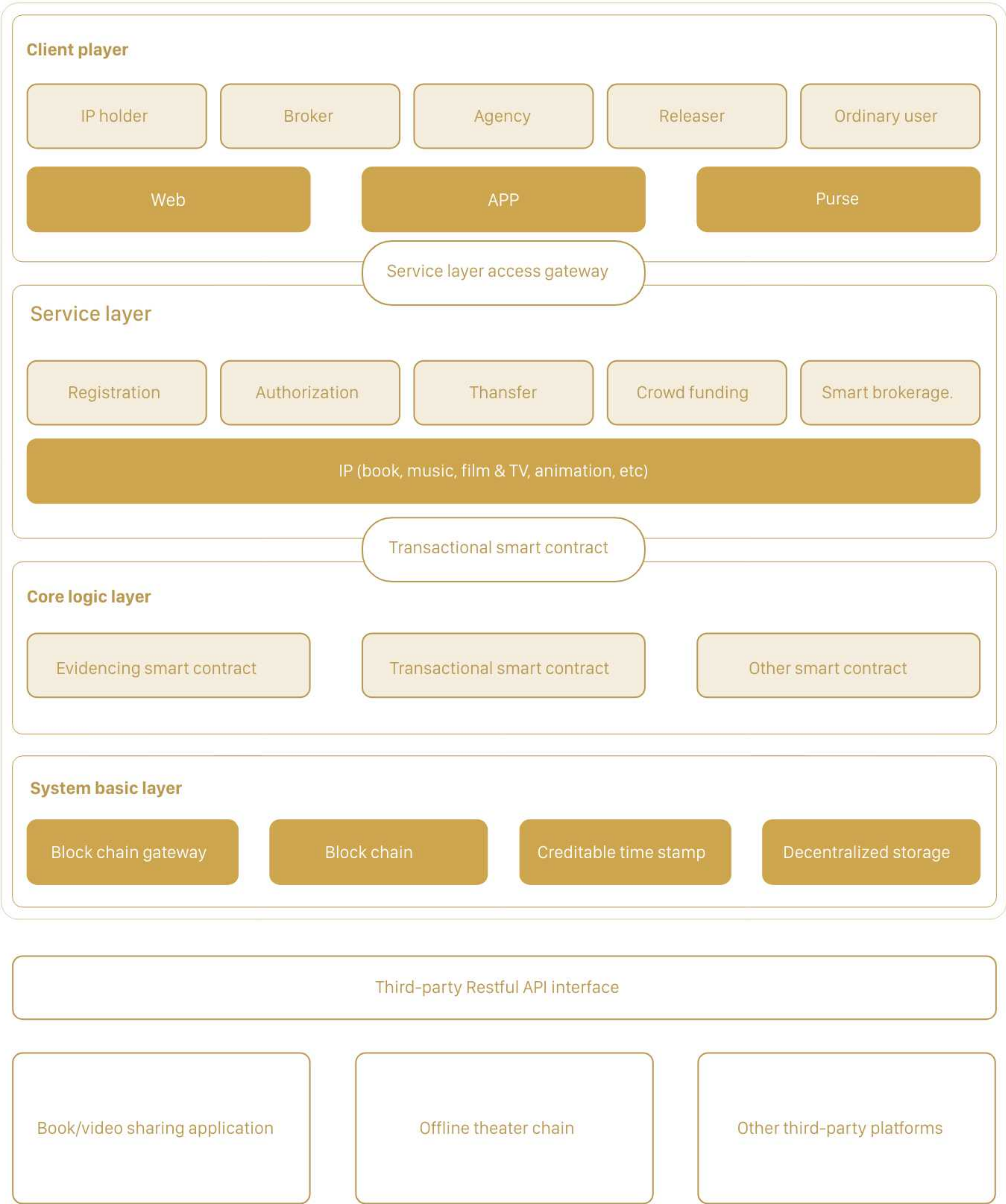
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3. Technical solution

3.1 Technical architecture

Ipbank is an App constructed on block chain and it enables IP registration, release, transaction and authorization. Compared with the conventional IP release platform with a decentralized technical architecture, the decentralized, open, transparent, inalterable and unforgeable Ipbank that quotes the block chain technology can better protect the equities of IP holders and realize value transfer; the block chain-based smart contract can complete IP release transactions and series of operations at a lower cost and higher efficiency.

In technical architecture, Ipbank adopts the concept of layered design. Each layer completes various independent jobs and different layers are fully decoupled to flexibly support business development. Ipbank has four layers in total which are the basic layer, core logic layer, service layer and client layer from the top down.

Client player

IP holder	Broker	Agency	Releaser	Ordinary user

Web	APP	Purse

Service layer access gateway

Service layer

Registration	Authorization	Thansfer	Crowd funding	Smart brokerage.

IP (book, music, film & TV, animation, etc)

Transactional smart contract

Core logic layer

Evidencing smart contract	Transactional smart contract	Other smart contract

System basic layer

Block chain gateway	Block chain	Creditable time stamp	Decentralized storage

Third-party Restful API interface

Book/video sharing application	Offline theater chain	Other third-party platforms

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The features of each layer are introduced as follows:

System basic layer is the infrastructure of Ipbank and works to support the service logic of the upper layers. System basic layer primarily includes creditable time stamp, block chain gateway, block chain and decentralized storage. Ipbank is established on the basis of Ethernet. It is planned to access to different block chains via block chain gateway as per actual needs in the future;

Core logic layer realizes primary logic rules of the system. The core logic layer of Ipbank is established on the basis of smart contract. Smart contracts are classified into evidencing smart contract for establishment and evidence storage of IP in the system; transactional smart contract for the authorization and transaction of various types of IPs; other smart contracts for issues other than evidencing and transactional purposes.

Service logic layer is the system's service layer which processes specific services of Ipbank, e.g. IP registration, authorization, release, transaction and crowd funding. The service logic layer is connected downward to the core logic layer via the smart contract gateway and provides services to the upper layer via the access gateway.

The client layer is the tool by which a user accessesIpbank. The user completes various operations of Ipbank via the client. Ipbank provides complete Web and App clients which bring convenience to various users, e.g. IP holder, broker, agent, releaser and consumer, in the use of various services of Ipbank. Meanwhile, the client is further integrated with purse features for management of the client's token.

Moreover, Ipbank also provides complete third-party interfaces for convenient integration with book, video sharing and theater chain and other existing systems. Standard restful interface is adopted as third-party interface to reduce the cost of access.

3.2 Service system

Users of Ipbank primarily includes IP holder, seller (broker, agency, releaser, etc.) and consumer (end user). IP holder registers an IP with Ipbank; IP holder may authorize its broker, agent and releaser to use the IP and acquire a IpbankToken. The releaser releases the IP to the end users who acquires the IP products released by the releaser by transferring the IpbankToken, e.g. Film ticket, electronic book, etc. IP holder may also initiate crowd funding with the end users; meanwhile, the consumers may also trade various IP products with each other.
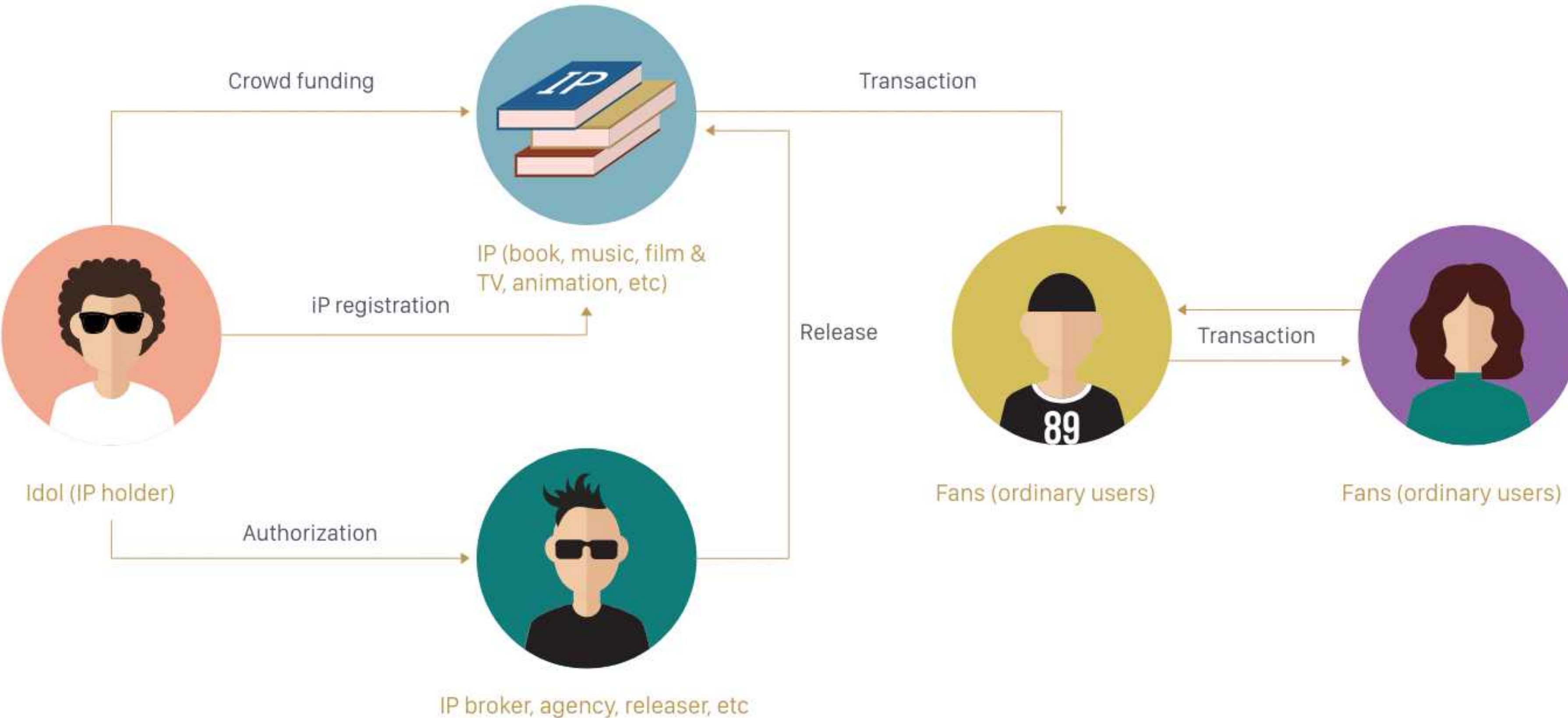
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Main service modules of Ipbank are introduced as follows:

1、 Registration

IP registration refers to the IP holder's registration of the IP with Ipbank. One creditable time stamp is acquired via IP hash value and current time and written into the block chain at the bottom layer upon IP registration. Rely on the inalterability and unforgeability of block chain technology to save the evidence of the holder's control right over the IP right at that moment, thus providing strong legal evidences for settlement of IP copyright disputes. Via decentralized storage system (IPFS), IP contents will be uploaded to the decentralized storage at the bottom layer of Ipbank for the convenience of the IP holder's IP management.

IP
(book, music, film & TV, animation, etc.)   Only hash value   Creditable time stamp

Decentralized storage   Block chain
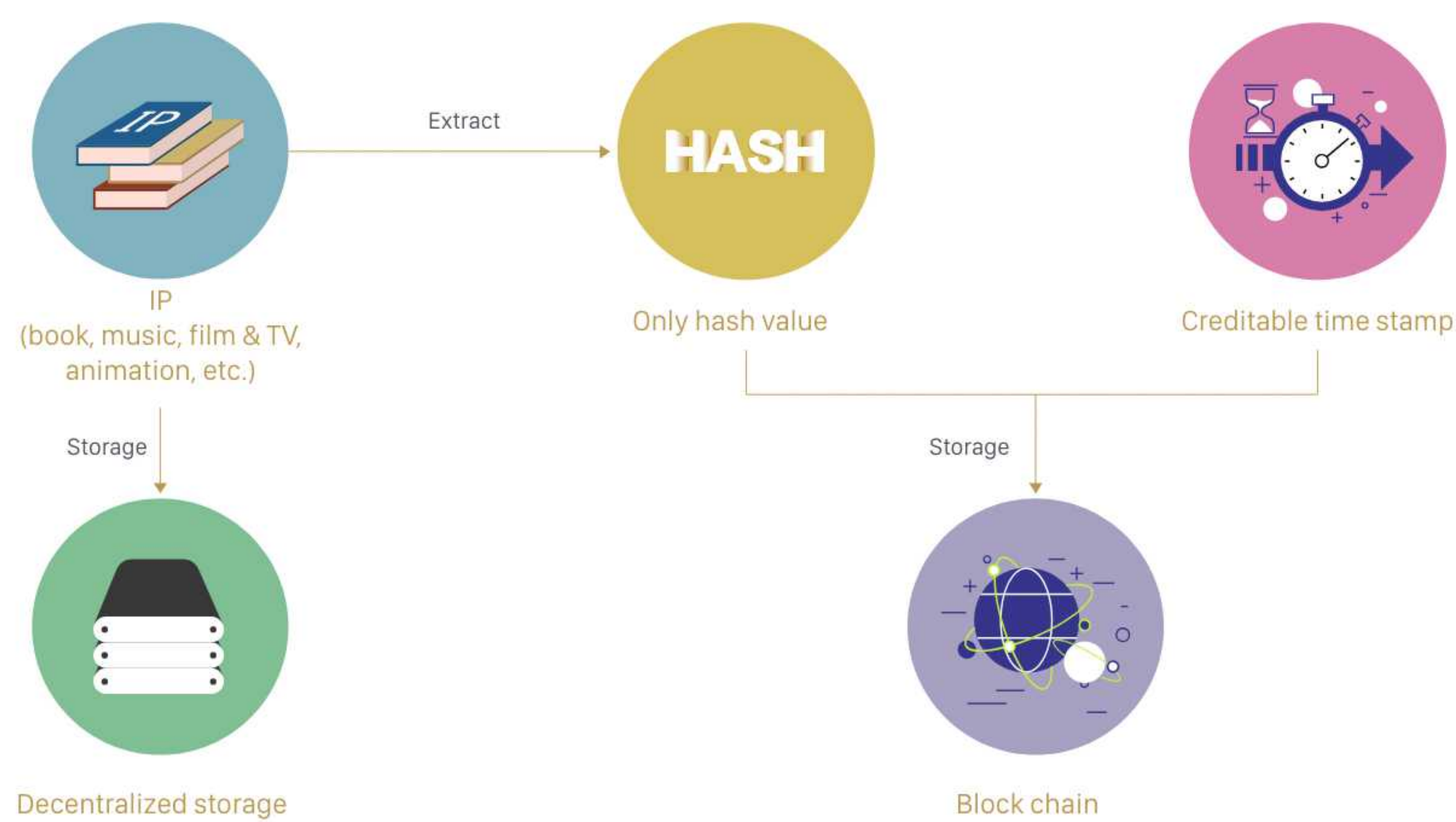
2、 IP authorization

IP authorization refers to the process by which an IP holder authorizes a purchaser to use IP or transfer IP ownership through a transaction. As a proof of authorization, the process of IP authorization will be recorded on the blockchain, open and transparent, and cannot be tampered with. In addition, IP holders can obtain a complete authorization list by querying the authorization record for authorization management.

3、 Transaction

Transaction refers to the process involving the IP seller's exchange of IP equity and IpbankToken with the end users and the end users' mutual exchange thereof. IP's tradability offers enormous liquidity for the IP equity holder and thus reduce the risk of IP equity ownership. Meanwhile, the transactions of IP equity will be fully recorded on the block chain to completely substantiate the holder's title to the copyright.

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4、 **Smart brokerage.**

The IP registered and registered on the IPBank can automatically handle various transaction rules through smart contracts. Each time a transaction is completed, the proportion of each participant's distribution is automatically allocated, and the transaction is settled, reducing friction costs.
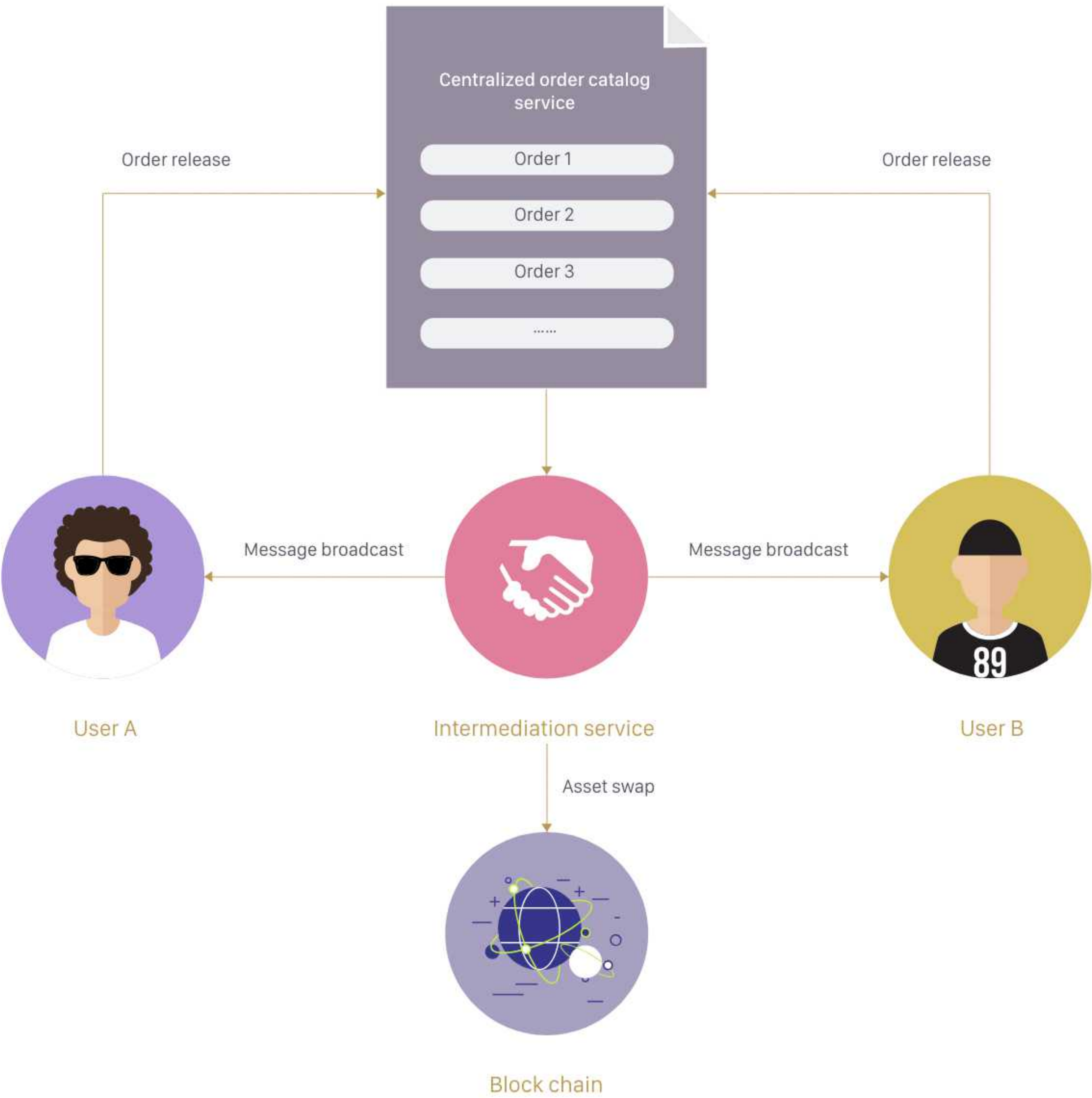
5、 **Crowdfunding**

IP creators or publishers have the flexibility to set up crowdfunding methods, pricing methods, and crowdfunding amount. Through crowdfunding, IP creators or issuers can get funding for development in the early stages and pinpoint the user population. At the same time, the tokenization of equity can enable the products to be traded on the IPBank platform before delivery, greatly improving the liquidity of IP rights.

3.3 Critical technical components

3.3.1 Decentralized trading market

In order to provide liquidity, IPBank provides a trading market IBEM (IP Bank Exchange Market), which is convenient for sellers and end users to trade IP equity tokens. IBEM uses a decentralized design, and transactions are completed point-to-point through smart contracts, avoiding the moral hazard of centralized trading and the technical risks of being vulnerable to hacking.

IBEM adopts a centralized order matching service, on-chain settlement, and a chain-based transaction model to achieve a balance of transaction performance and security.

Centralized order catalog service

Order release

Order 1

Order 2

Order 3

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Order release

Message broadcast

Message broadcast

User A

Intermediation service

User B

Asset swap

Block chain

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3.3.2 Creditable time stamp

Time is a key concept in the identification of the rights of IP. The earliest published by law is the property owner of IP. In IPBank, the timestamp attached to the IP hash value is taken from the state authority's timestamp server, with a digital certificate, cannot be forged or falsified, so it can accurately represent the time of IP issuance, and has legal effect.

The technical principle is to bind the hash value of IP to the authoritative time data source, and the national time-issue center is responsible for timing and punctuality, and the IP hash is performed by a trusted third-party time stamp service organization (such as Warton CA, UniTrust). The value and the authoritative time record are digitally signed to generate a timestamp, and the trusted timestamp can be used to determine the exact time of IP generation.
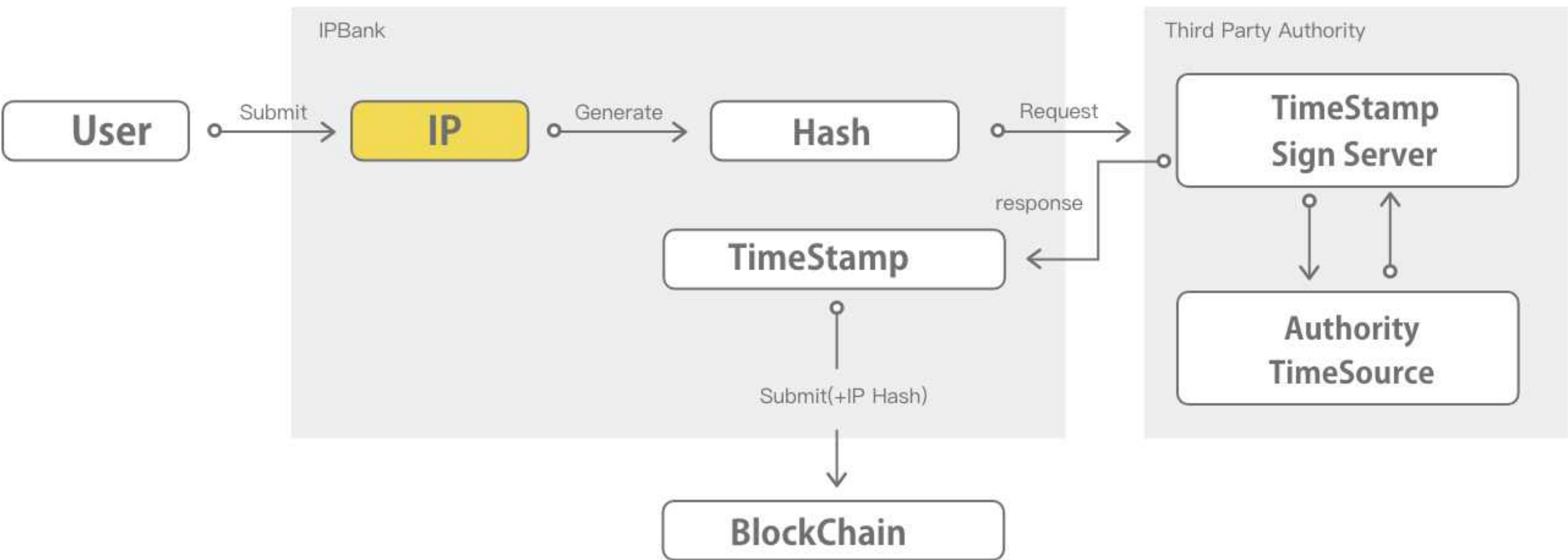
3.3.3 Decentralized storage

For secure and reliable storage IP, IPBank provides a decentralized storage service IBDS (IP Bank Decentralize Storage). The underlying IBDS is built on decentralized storage technology and is adapted to the IPBank business scenario by encapsulating rights management and cryptographic components. Existing decentralized storage solutions include IPFS, SC, Storj, etc. We use IPFS as an example to introduce the way IBDS is built.

InterPlanetary File System (IPFS) is a distributive peer-to-peer hypermedia distribution protocol. It integrates the best distributive system concepts of the past years and provides a globally uniform addressable space for all. IPFS is expected to address the problems of excessive centralization, low transmission efficiency and easy data loss of the current HTTP-based network services

Compared with the current HTTP protocol, IPFS is capable of following features:

1、 **Decentralization：**

IPFS file system has no centralized server. The files in IPFS are divided into multiple small data blocks and distributivity stored on multiple nodes in the P2P network of IPFS. Meanwhile, multiple copies of one file may be stored at different nodes in order to ensure the storage reliability of the file. IPFS will automatically manage these backup files and ensure optimal balance between the reliability and efficiency of file storage.

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2、 **Content addressability:**

IPFS has content-based address to replace domain name-based address, i.e. The user is looking for the content stored at a particular space instead of a particular address. In the HTTP protocol system, the user has to find the location of the server where the file is stored (IP address) and then ask the server for the file according to the routing thereof. In this system, the file location is determined by the server administrator and the user is not sure if the file is relocated or the server is closed. In the IPFS system of content-based addressing, the user doesn't need to care where the file is stored at the server, nor consider the name and routing of the file. It only has to care about the file content.

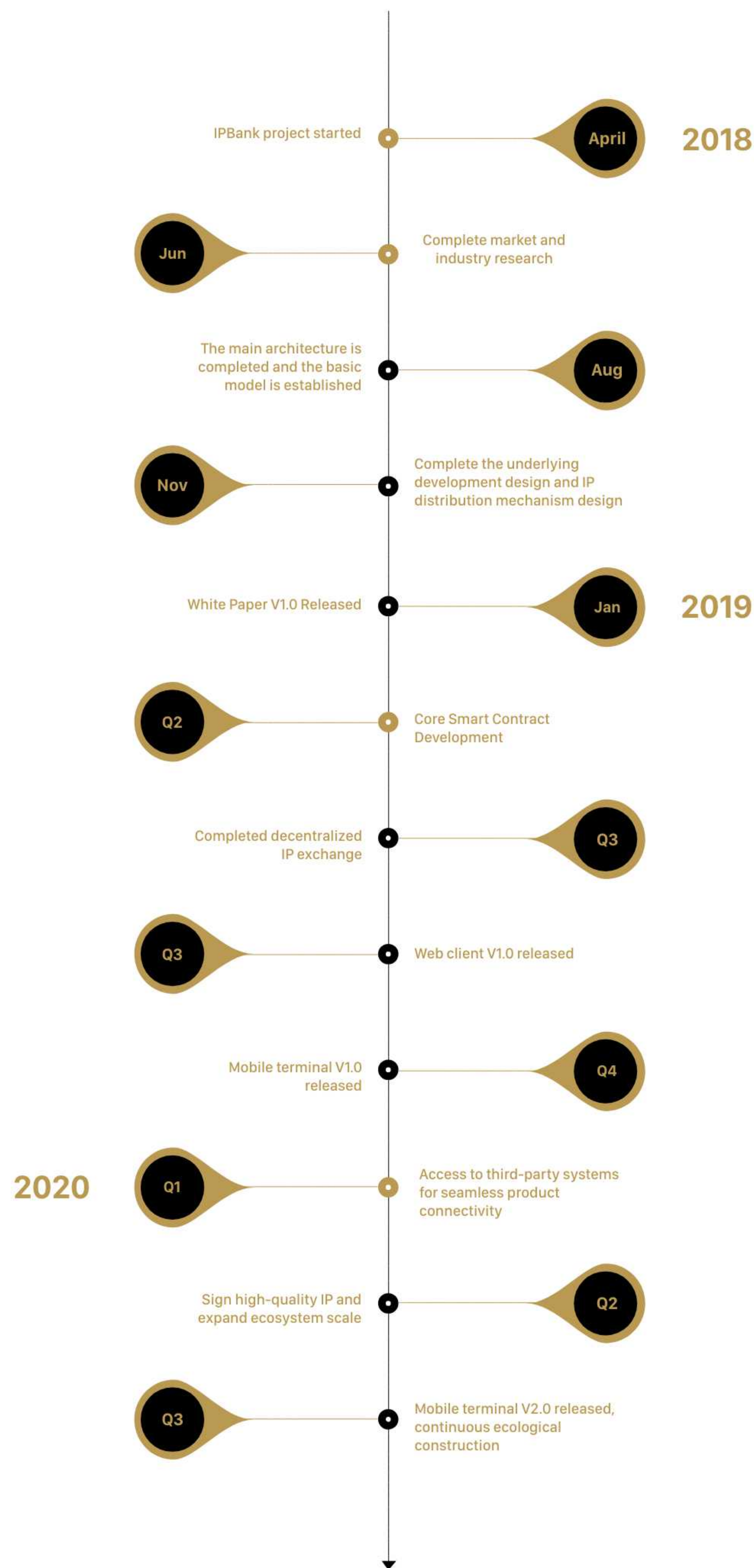**3、** **High transmission efficiency:**

in a centralized HTTP protocol, the user needs to request for one file from the remote server. In IPFS, the user firstly checks with adjacent node if the file is in the cache. The transmission efficiency is higher if the same file is requested by more users. Such P2P video transmission can save 60% bandwidth.

4、 **High safety:**

In IPFS, the decentralized storage of a file exempts the need to worry about the loss of file due to collapse or closure of the centralized server and reduces over-dependence on the trunk network of the Internet. Moreover, the file is permanently stored on IPFS. Any amendment to the file would lead to the creation of a file version. Meanwhile, IPFS provides a historic version controller for the file so that different versions of the file can be stored at multiple nodes.

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4. Roadmap

IPBank project started — **April 2018**

Jun — Complete market and industry research

The main architecture is completed and the basic model is established — **Aug**

Nov — Complete the underlying development design and IP distribution mechanism design

White Paper V1.0 Released — **Jan 2019**

Q2 — Core Smart Contract Development

Completed decentralized IP exchange — **Q3**

Q3 — Web client V1.0 released

Mobile terminal V1.0 released — **Q4**

2020 **Q1** — Access to third-party systems for seamless product connectivity

Sign high-quality IP and expand ecosystem scale — **Q2**

Q3 — Mobile terminal V2.0 released, continuous ecological construction

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5. Organizational structure

IPBank's operating entity is registered in the British Virgin Islands (BVI) as IP Management Ltd. Its organizational structure includes the board of directors and daily operators. Among them, the board of directors is the decision-making body, which determines the company's business development planning and deliberation of important proposals. The departments under the Board of Directors include the Technology R&D Department, the Audit Evaluation Department, the Business Cooperation Department, and the Marketing Department.

6. Distribution plan

6.1 Token distribution

The total amount of IPB is 1 billion, which is the token of ERC20 standard in front of the main online line. The distribution ratio is as follows:

20%： Institutional investors

10%： Marketing

40%： Ecological construction, quality copyright incentives, incubation

20%： Strategic cooperation & industry investment

10%： Team (locked for one year)

Marketing
10%

Team (locked for one year)
10%

Institutional investors
20%

Ecological construction, quality copyright incentives, incubation
40%

Strategic cooperation & industry investment
20%

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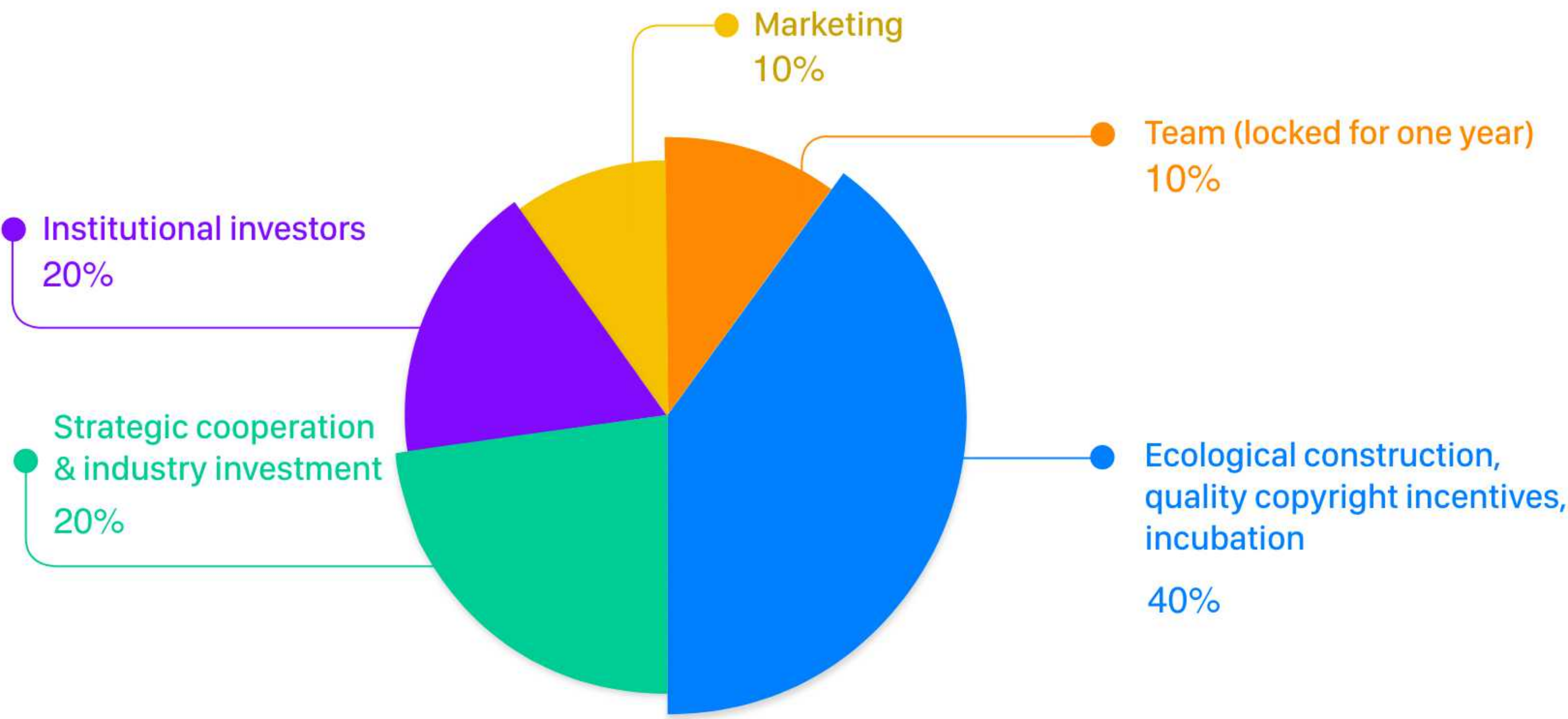
6.2 Capital budget

This budget is formulated on the precondition of reaching the hard ceiling. If the raised funds are lower than expected, the budget ratio may be adjusted to guarantee the completion of technical R&D and infrastructure construction.

Technology R&D 40%

Design of IP registration ad release mechanism, development of core smart contract, establishment of IPFS storage network, bottom layer design and development of decentralized IP exchange and third-party system access.

Ecological construction and commercial operation 30%

Attraction of quality IP copyrights and creators, integration of transmission platform, early-stage community construction, publicity and promotion, marketing and business cooperation with various mainstream exchanges.

Routine operation and maintenance 15%

Routine maintenance and safety, office rental, staff recruitment and legal and financial counseling after product launch.

Revolving fund 15%

Part of the funds will be reserved for emergency response and the financial expenses other than those mentioned above, and the community construction work undertaken by the Foundation.

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7. Team

Malcolm Tan
IPBANK CEO

A senior legal expert with extensive experience in the IT and financial industry. He served as a global and regional legal advisor in the Asia Pacific region, the Middle East, North Africa, and North America. As an early investor and evangelist of blockchain, Tan has an in-depth understanding of industry-related legal and regulatory policies. Founded Gravitas.Financial (Challenger Bank), Malcolm Tan Chambers LLC and other consulting services companies, providing technical, legal and other support services for the digital asset industry, including Dapp development, legal advice, e-wallet, asset custody, insurance and so on.

Mark Friedler
IPBank CTO

With experience in media, games, enterprise cloud services and blockchain, he was founder/CEO of GameDaily (acquired by AOL/Time Warner), senior director of Oracle Data Cloud and Marketing Cloud, provide professional technical and operational guidance for Swarm.fund, XTrade, Cappasity, Cashbet, Pryze and Bobs Repair, Vertex Market, Aegis Custody and other projects. As the head of the blockchain technology community, He organizes SF CryptoMondays and has in-depth cooperation with CryptoOracle.

Maarten van den Bos
IPBANK COO

An experienced marketing leader who has worked in management and marketing for large international companies in Europe, Africa, North America, and Asia. He has quickly established a global international business network for multiple companies, with unique understanding of team dynamics and diversity. He is also an expert in industry and resource integration.

Alexandre Geurreau
IPBANK CPO

Senior lawyer, and holds legal qualifications in French (LLB and LLM) and English (LLM). He is familiar with MAS regulations and AEI, FATCA and USPP regulations, and has in-depth knowledge of copyright industry operating rules and legal solutions.

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8. Risk disclosure and disclaimers

This White Paper is only a conceptual file and it describes the IP asset ecosystem and IPB (IpbankToken) proposed by Ipbank and shall not constitute any opinions on the transaction of IPB. The information and analysis contained herein shall not be deemed as a proposal for investment, an intent on investment or an instigation for investment. Relevant interested users shall have a clear knowledge of the risks of Ipbank/IPB and participation in the project shall be equivalent to the investor's knowledge and acceptance of such risks. With the continuous change in the external environment and the R&D work, the content described herein may be amended or replaced from time to time. We are not obligated to notify you of such amendments or replacements. Please keep yourself updated via relevant channels.

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This White Paper is not reviewed by any regulatory body within any jurisdiction and shall not constitute any investment proposal, nor shall it be taken as the base of any contract or procurement decision.

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You must listen to all necessary professional advice, including taxation and accounting professionals.

We hope Ipbank can be a success, but we can't guarantee it. Moreover, digital asset investment involves considerable risks. Please be sure to evaluate the risk level and your tolerance thereof.

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