



The Blockchain Game Platform for Emerging Markets
针对新兴市场的区块链游戏平台

alax.io

Whitepaper v1.2 - February 2018

Abstract

摘要

ALAX is a Mobile Game Distribution Platform based on blockchain technology with the intention of bringing fresh air to the gaming industry around the world. DECENT and Dragonfly join forces to bring games to everyone including people that are unbanked (over 2 billion according to Findex¹) but have access to cash and 3G/LTE smartphones. Their aim is to provide a platform for content creators and gamers alike.

ALAX 是一个基于区块链技术的手机游戏分发平台，旨在为全球游戏产业注入新鲜血液。DECENT 和 Dragonfly（手游市场）联手将游戏带入千家万户，包括无银行账户但有现金和 3G/LTE 智能手机的人群。他们的宗旨是为游戏开发商和游戏玩家提供一个共同的平台。

Customers will be able to access the ALAX Store using an application built using DECENT's library that will provide blockchain functionality. While content providers will have access to the ALAX Android SDK allowing them to include a range of features such as in-app purchases, rewards and more. Hence, consistency is secured across all the applications utilizing ALAX.

ALAX商城是基于具有区块链功能DECENT程序库创建的应用，消费者可以直接进行访问。而内容提供方们有权通过ALAX安卓SDK增加一系列功能，比如内置APP购买、奖励等等。因此，所有使用ALAX的应用的一致性得到了保证。

During the TGE ALAX will generate ALX tokens. These tokens can be then exchanged for ALA tokens, which can be used in the ALAX store. They will be offered to end users via internal exchange or using an existing reseller network of brick and mortar stores and mobile operators.

在TGE期间，ALAX将生成ALX代币。然后，这些代币可以兑换成ALA代币，ALA代币可在ALAX商城中使用。这些代币将通过内部的兑换渠道或通过实体商城和移动运营商等现有的经销商网络提供给终端用户。

ALAX's four architectural layers manage all of these tasks. The transaction layer is responsible for managing all blockchain transactions between clients, publishers and the ALAX Store. The data layer stores all the content securely and reliably, while the ALAX Store itself provides the basic business logic on top of the data and transaction layers managing entities available in ALAX.

The final layer, the application layer, is an interface for gamers and game developers.

ALAX的四层架构可以管理所有这些任务。交易层负责管理客户、内容发行公司和ALAX商城之间的所有区块链交易。数据层负责存储所有内容，并保证安全性和可靠性，而ALAX商城则在数据和交易层之上提供基本的业务逻辑，管理入驻在ALAX商城内的实体。最后一层是应用层，它是玩家和游戏开发商之间的交互界面。

¹ <http://www.worldbank.org/en/programs/globalindex>

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Introduction

引言

Emerging Markets have a substantial amount of unbanked people. According to the World Bank's Global Findex 2014², 2 billion adults were unbanked. Hence, most of them do not have access to credit and debit cards. However, they have an easy access to cash and 3G/LTE smartphones.

新兴市场国家有大量没有银行账户的人口。根据世界银行发布的《全球Findex2014报告》²，全世界有20亿成年人没有银行账户。因此，他们中的大多数没有信用卡和借记卡。但是，他们可以轻易获取现金和3G/LTE智能手机。

Thus, the market constituted of mobile game developers and emerging markets residents faces the following challenges:

因此，由手机游戏开发商和新兴市场国家居民组成的这个市场就面临以下挑战：

As some people do not have access to credit cards or other means of payment via banks, but resort to paying only by cash, their access to some services can be severely limited. This creates a set of problems that although they are solvable tend to be exploited. If an unbanked end-user wants to purchase a game from a developer, a payment intermediary can set a high processing fee. Since there is no alternative for both sides, they have to accept the terms which can amount to up to 70% of the price of the game. This means that developer will make a lower profit and hence raises the price and the end user has to pay more for the app. Similarly, the provider has a longer time to settle the payments to the developer which can take up to 6 months and the developer has no choice but wait.

由于一些人无法通过银行获得信用卡或其他支付方式，只能通过现金支付，他们获取某些服务的通道可能严重受到限制。这带来了一系列问题。尽管这些问题有办法解决，但是这一群体往往会被剥削。如果一位没有银行账户的终端用户想要从一家开发商那里购买一款游戏，那么就可能有一家支付中介收取高额的手续费。因为直接交易的双方都没有其他选择，他们只能接受这些条款，导致中介费可能高达游戏价格的七成。这减少了游戏开发商的利润，因此他们只能提高售价，最终导致终端用户不得不花更多的钱购买这款APP。与此类似，中介与游戏开发商之间的支付结算周期较长，可能长达六个月，而开发商除了等待别无选择。



High fees

(SMS payments, scratch cards, ...)
up to 70%

高昂的费用

（短信支付、刮刮卡…中介费高达70%）



Long settlement times

Up to 6 months until a payment
is settled

长结算周期

长达六个月的结算周期



Unbanked users

Little to no access the means
of electronic payments

没有银行账户的用户

电子支付渠道有限甚至没有

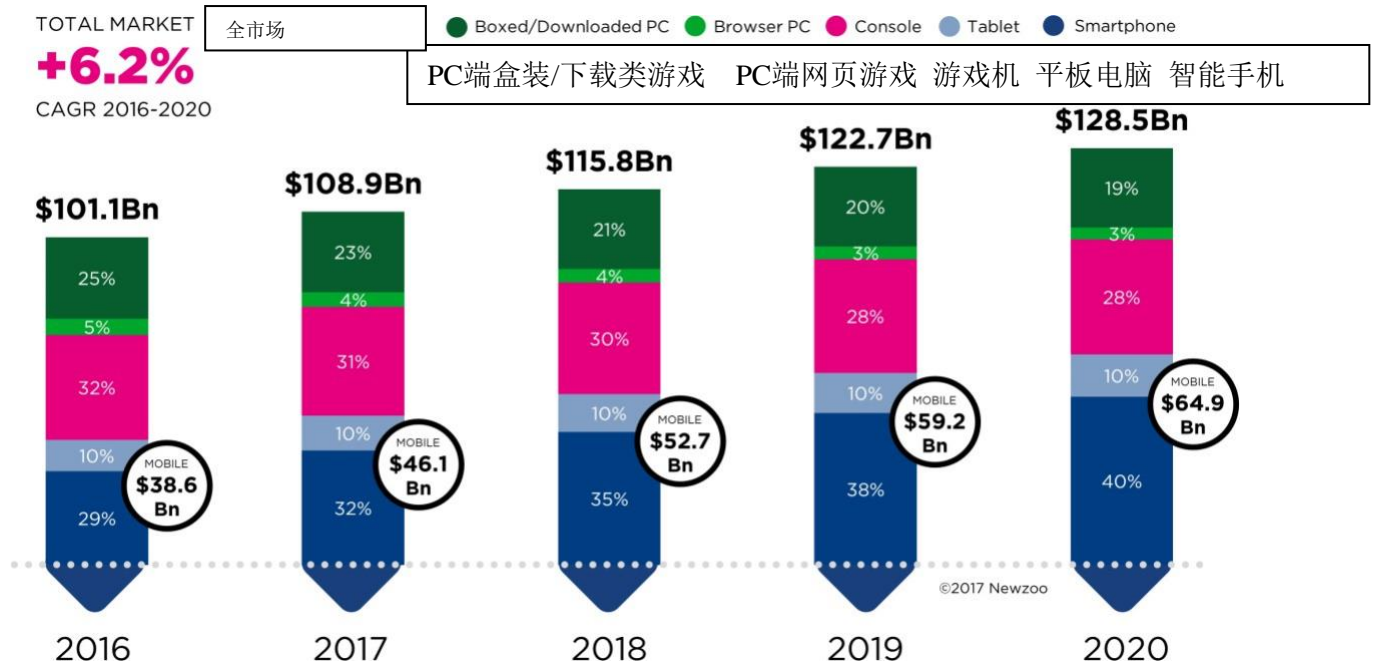
² <http://www.worldbank.org/en/programs/globalindex>

Market and Industry

市场和产业

2016 – 2020 Global games market - forecast per segment toward 2020

2016-2020年全球游戏市场 – 按细分市场预测，直到2020年



数据来源: © Newzoo | Q2 2017 更新 | 全球市场报告

newzoo.com/globalgamesreport

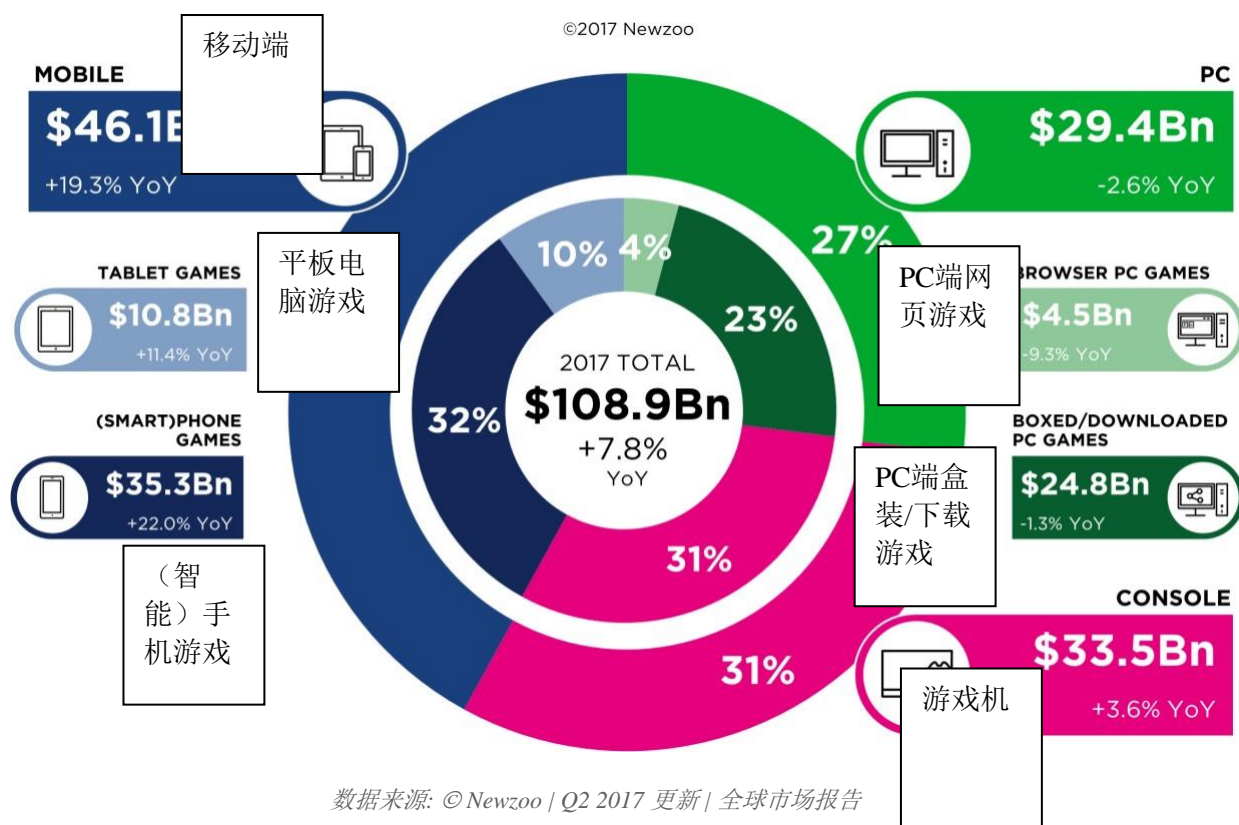
Mobile 手机 CAGR 年复合增长率

The global mobile games market is going to reach \$64.9 billion by 2020. This represents almost a double compared to 2016.

到2020年，全球手机游戏市场规模将达到649亿美元。这个规模与2016年相比几乎翻了一番。

2017 Global games market – per device & segment with year-on-year growth rates

2017年全球游戏市场 – 按设备&细分市场同比增长率

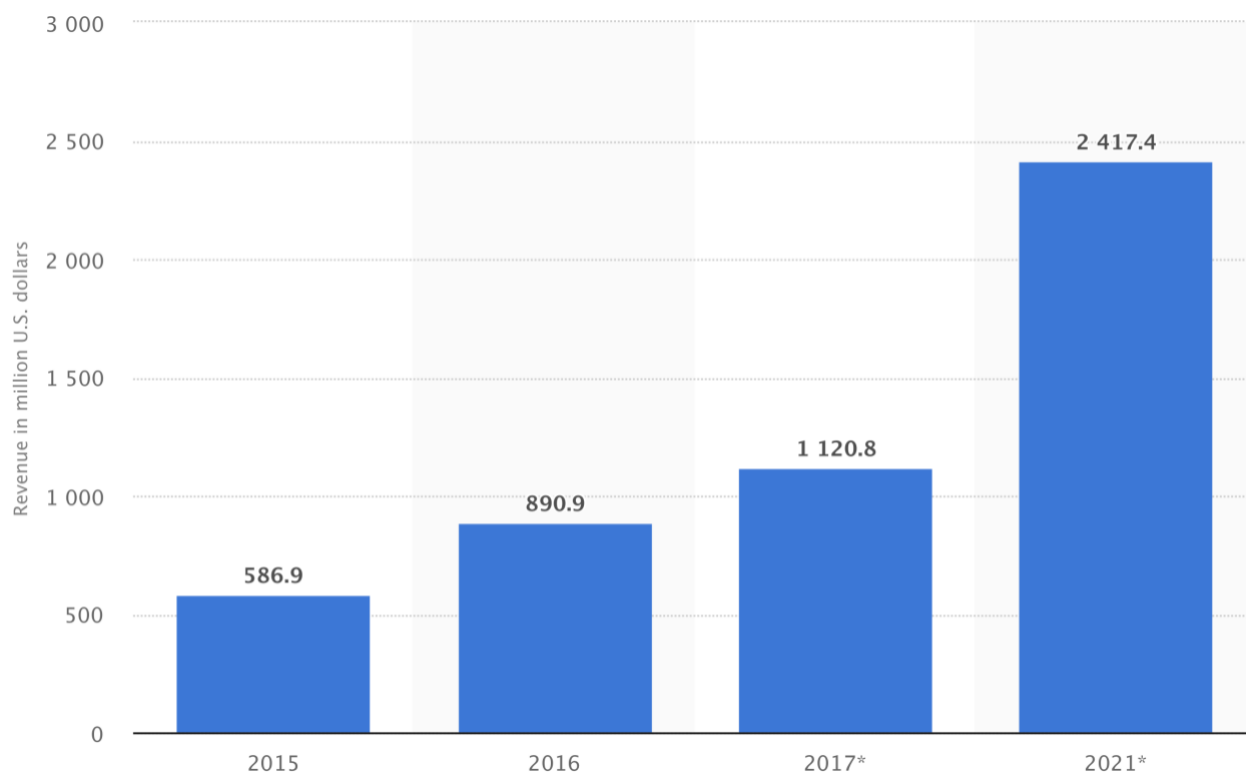


In 2017, mobile games generated \$46.1B, which constitutes 42% of the global market.

2017年，移动端游戏产值461亿美元，占全球游戏市场的42%。

Mobile games revenue in Southeast Asia from 2015 to 2021 (in million U.S. dollars)

东南亚2015至2021年移动端游戏收入（百万美元）



数据来源: © Statista 2018 | 传媒&广告 | 视频游戏&游戏 | 东南亚移动端游戏营业额 2015-2021

<https://www.statista.com/statistics/631514/southeast-asia-mobile-games-revenue>

Mobile games revenue in South East Asia was \$586.9 millions in 2015 and is expected to grow to \$2.4 billion in 2021. Emerging markets consist of countries such as Thailand, Indonesia, India, Vietnam, the Philippines and some African, Latin American and Eastern European states.

2015年，东南亚市场的移动端游戏营业额为5.869亿美元，到2021年预计增长到24亿。新兴市场国家包括泰国、印度尼西亚、印度、越南、菲律宾以及一些非洲、拉丁美洲和东欧国家。

Top 10 Android app stores in China – November 2017

中国市场10大安卓应用商城-2017年11月

IMAGE	RANK	APPSTORE	APPSTORE IN CHINESE	COVERAGE	CHANGE
图标	排名	应用商城	应用商城中文名	覆盖率	变化
					
	2	360 Mobile Assistant	360手机助手	16.1%	-
	3	Xiaomi App Store	小米应用商店	12.5%	-
	4	Xiaomi Game Center	小米游戏中心	11.9%	-
	5	Huawei App Market	华为应用市场	10.1%	-
	6	Baidu Mobile Assistant	百度手机助手	9.9%	-
	7	Oppo App Store	OPPO软件商店	7.9%	-
	8	Sogou Mobile Assistant	搜狗手机助手	4.4%	-
	9	Vivo App Store	VIVO应用商店	3.6%	-
	10	Vivo Game Center	VIVO游戏中心	3.6%	-

数据来源: © Newzoo | 洞察 | 排名 | 中国10大安卓应用商城

<https://newzoo.com/insights/rankings/top-10-android-app-stores-china>

Google Play is not available in most of the Android phones bought in China. This includes mobile phones from non-Chinese brands, such as Samsung, Sony or HTC. The 4 main players in the mobile game and app store ecosystem cover 65.6% of the market. The total cost for the game developer can easily get over 70% of the fee charged when publishing mobile games in China and emerging markets³. This is well over the 30% charged by Google Play⁴.

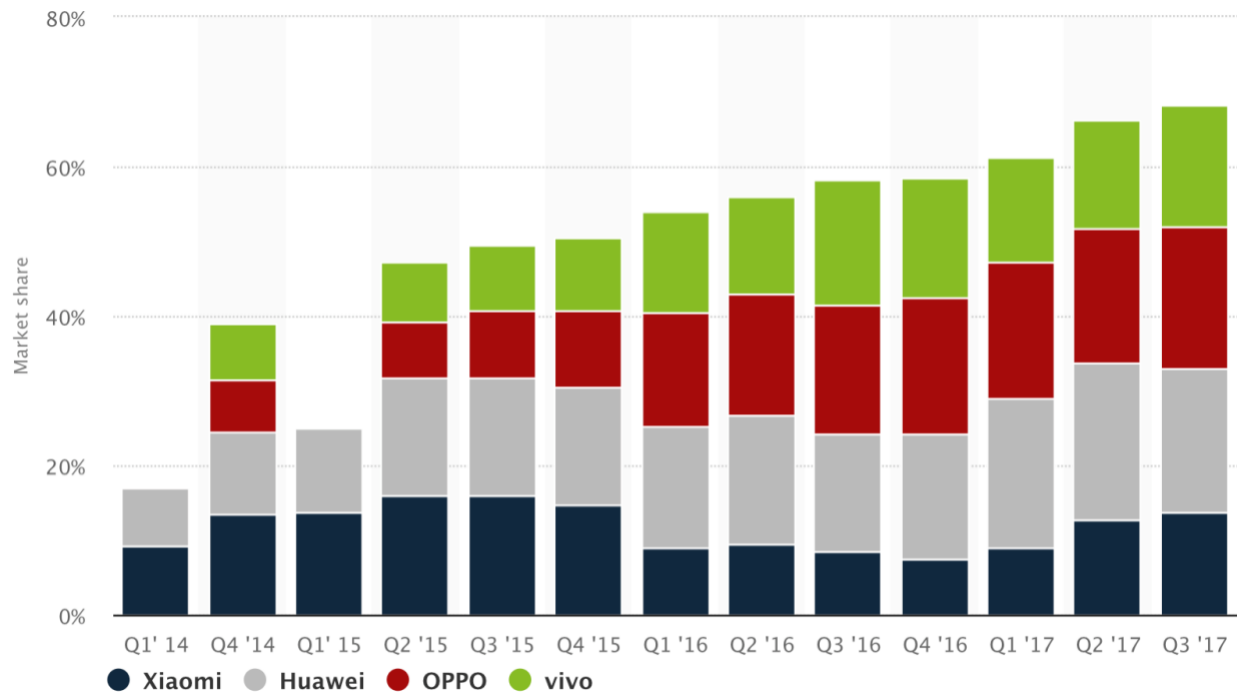
中国市场购买的大多数安卓手机无法使用Google Play。这也包括非中国品牌的手机，比如三星、索尼或HTC。4家最大的手机游戏和应用商城生态系统覆盖了65.6%的市场份额。如果要在中国和新兴市场发布移动端游戏，游戏开发商需要支付的平台成本可能很容易超过APP价格的七成。远远高于Google Play收取的30%。

³ <http://wnmag.com/2016/06/15/publish-mobile-game-china>

⁴ <https://support.google.com/googleplay/android-developer/answer/112622?hl=en>

Vendors' market share of smartphone shipments in China in 1Q'14 to 3Q'17

2014年第一季度到2017年第三季度中国智能手机出货量市场份额



数据来源: © Statista 2018 | 技术&电信 | 中国智能手机出货量市场份额

<https://www.statista.com/statistics/430749/china-smartphone-shipments-vendor-market-share>

Market share 市场份额

Xiaomi 小米

Huawei 华为

79% of the China smartphone market is dominated by 5 companies: Huawei, Xiaomi, Apple, Vivo and Oppo⁵. In Q1 of 2017, Vivo had a global market share of 5.2% in the smartphone market⁶. Oppo had an 8.2% global market share in Q3 of 2017⁷.

5家公司占据了在中国智能手机市场79%的份额，它们是：华为、小米、苹果、Vivo、和Oppo。2017年第一季度，Vivo占全球智能手机市场5.2%的份额。2017年第三季度，Oppo占全球智能手机市场8.2%的份额。

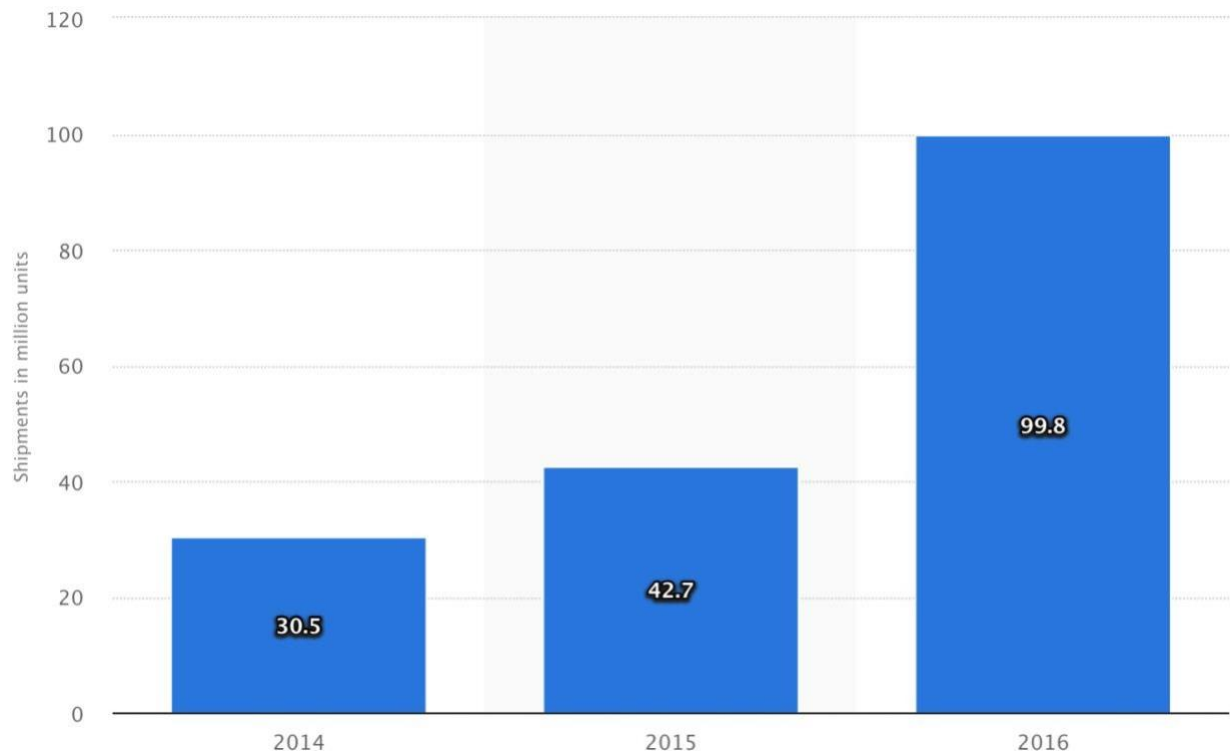
⁵ <https://www.theverge.com/2017/12/6/16741142/china-smartphone-market-stats-android-oem-2017>

⁶ <https://www.statista.com/statistics/628558/global-market-share-held-by-vivo-smartphones/>

⁷ <https://www.statista.com/statistics/628545/global-market-share-held-by-oppo-smartphones/>

2014到2016年中国智能手机品牌OPPO的全球出货量

Chinese smartphone brand OPPO's shipments worldwide from 2014 to 2016 (in millions)



数据来源: © Statista 2018 | 技术&电信 | OPPO 全球出货量2014 – 2016

<https://www.statista.com/statistics/729562/china-oppo-smartphone-shipment-volume/>

Vivo had **77.3M smartphones shipments** in 2016⁸, which constitutes almost a 2-fold increase compared to 2015 and almost a 3-fold increase compared to 2014. Oppo had **99.8M smartphones shipments** in 2016⁹ and a cumulative number of shipments equalling to **84.1M in Q1-Q3 of 2017**¹⁰. If one uses arithmetic mean, this will constitute to **112.1M smartphones shipments in 2017**.

VIVO2016年的出货量为7730万台，与2015年相比将近翻了两番，与2014年相比翻了三番。**OPPO2016年出货了9980台智能手机**，**2017年前三季度累计出货量达到8410万台**。如果取算术平均值，预计2017年总出货量将达到1.121亿台。

⁸ <https://www.statista.com/statistics/541618/vivo-smartphone-shipments-worldwide>

⁹ <https://www.statista.com/statistics/729562/china-oppo-smartphone-shipment-volume/>

¹⁰ <https://www.statista.com/statistics/541609/oppo-smartphone-shipments-worldwide/>

The ALAX Blockchain Game Platform for Emerging Markets

针对新兴市场的ALAX区块链游戏平台

ALAX is a project with an intention to bring fresh air to the Gaming Industry around the world. The purpose is to develop and support Mobile Game Distribution Platform in emerging markets. ALAX is a Joint Venture (JV)¹¹ of DECENT¹² and Dragonfly¹³.

ALAX项目的目的是为全球游戏产业带来新鲜空气。它的目的是在新兴市场发展和支持手机游戏分发平台。ALAX是由DECENT和Dragonfly联合创建的一家合资企业（JV）。

About Dragonfly

关于蜻蜓科技

Dragonfly is a distribution platform for apps and games, committed to serving the global community with a special focus in emerging markets (2.5 billion and growing). It was established in 2006 launching a Push news platform for mobile users, later on advancing into mobile gaming development and operations. In 2012 Dragonfly sets up offices in Shanghai, Beijing, Shenzhen and Taipei to keep up with the demand for its products. From 2014 up to 2016 it launched PayPal payment in more than 70 countries and expanded to other parts of Asia, as well as South America and Africa. They've pioneered an integrated mobile gaming application marketplace which now reaches more than 100 Million Active Users worldwide. Today it maintains consumer reach and steady growth with conveniently pre-installed mobile marketplaces on their channel partners' devices. (Vivo, Oppo, Huawei, Gionee, True, Jio, MMX, Advan, Mito and more.)

蜻蜓科技是一家应用和游戏分发平台，立志于服务全球市场，并专注新兴市场（25亿用户并且在不断增长中）。该平台创建于2006年，最初是一个给移动用户推送新闻的平台，之后进入手机游戏开发和运营行业。2012年，蜻蜓科技在上海、北京、深圳和台北成立办事处，以满足市场对其产品的需求。从2014到2016年间，它已经在超过70多个国家推广了PayPal支付，并扩张至亚洲其他国家，还有南美和非洲。他们已经在综合手机游戏应用市场开辟了稳固的地位，目前全世界范围内已经有超过1亿活跃用户。今天，它凭借渠道合作伙伴(Vivo, Oppo, 华为, Gionee, True, Jio, MMX, Advan, Mito 等.) 在预装手机应用市场建立了稳固的市场地位，保持着较高的消费者达到率和稳定的增长势头。

About DECENT

关于DECENT

DECENT has created an innovative and customizable adaptation of blockchain technology, called DCore. Their blockchain takes advantage of the Delegated Proof of Stake algorithm for fast, energy efficient transactions with native protocols for file sharing and decentralized storage rewards. This functionality, plus the strong cryptography and trustless transactions native to blockchains, will allow DCore to revolutionize the way digital items are exchanged worldwide. DCore is an open source solution for companies looking to fast-track their own blockchain-based ideas.

DECENT创建了一种创新的可定制的区块链技术--DCore。他们的区块链充分利用DPOS算法的优势，实现快速、低成本的交易，并且开发了本地文件的分享和分布式存储奖励机制。这个功能，加上区块链技术的强大密码算法和能够进行去信任中介交易的特质，使得DCore有潜力变革全球范围内数字商品交易的方式。DCore是一个开源解决方案，适用于那些需要快速实现其区块链理念的公司。

¹¹ <https://decent.ch/en/decent-and-dragonfly-to-bring-blockchain-to-100-million-gamers/>

¹² <https://decent.ch/>

¹³ <https://dmobi.cn/>

Utility Tokens

应用型代币

ALAX is going to issue two tokens – ALX and ALA. While the ALA token will be used directly in platform (app-store) to pay for content (games and in-app purchases), ALX will be used to acquire ALA tokens on the one-way ALAX exchange.

ALAX将发行两种代币 – ALX和ALA。ALA代币将直接在平台（应用商城）上使用，用于购买内容（游戏和app内购买），ALX将用于在ALAX交易平台单向兑换ALA代币。

ALA's value will be pegged to FIAT and therefore only ALX can be accessible on public exchanges.

ALA的价值将与法币挂钩，因此在公共交易平台只能买到ALX。

ALA/ALX value will be set according to ALX/FIAT value on major public exchanges. To ensure market demand for ALX, there will be a 20% discount on ALA purchases using ALX tokens.

ALA/ALX价值将根据主要公共交易平台的ALX/法币价值确定。为了确保ALX的市场需求，使用ALX代币购买ALA将得到20%的折扣。

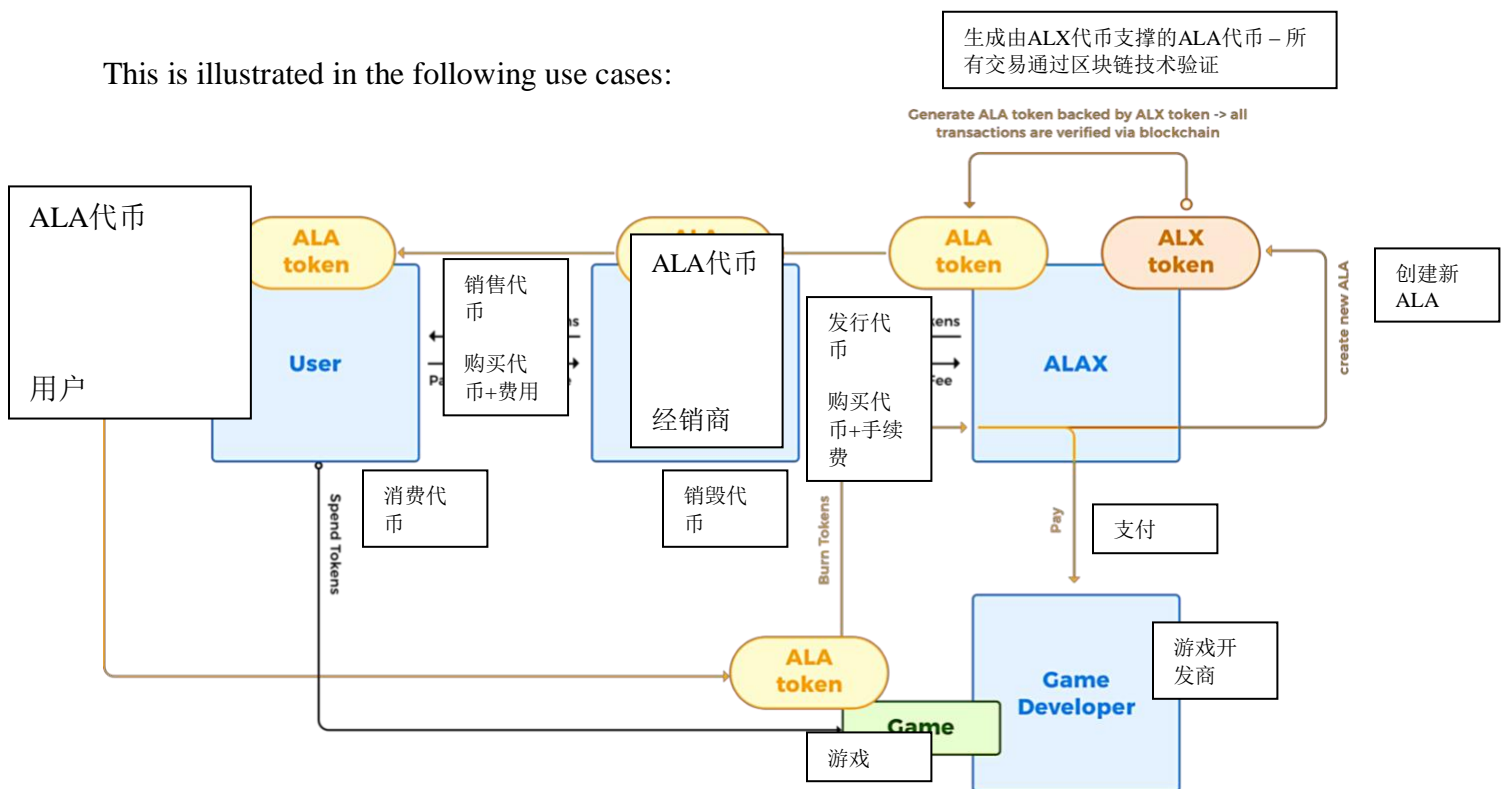
Use Cases

使用案例

ALA tokens are going to be offered to end users via internal exchange, or an existing reseller network (brick and mortar store or mobile operators). End users can purchase games or use ALA for in-app purchases. Game developers can request payouts from ALAX, or use received ALA tokens as a reward for end users.

平台将通过内部兑换系统或现有的代销网络（实体商店或手机运营商）为终端用户提供ALA代币。终端用户可以购买游戏或使用ALA代币进行应用内购买。游戏开发商可以要求ALAX支付，或使用收到的ALA代币作为给终端用户的奖励。

This is illustrated in the following use cases:



使用案例图解如下

End user

终端用户

The End user can obtain ALA tokens in a number of ways. A QR code card can be obtained in exchange for cash, the QR code from the card is then paired with the ALAX app, the tokens are

then charged to the end user's account and can be exchanged for games or in-app content. The other way tokens can be obtained is through the app itself, either by using ALX tokens and obtaining a bonus or using a local payment method.

终端用户可以通过多种方式获取ALA代币。他们可以用现金购买一个二维码充值卡，充值卡上的二维码与ALAX App匹配，然后把代币充值到终端用户的账户内，并可以用来购买游戏或应用内内容。另一种获取代币的方式是通过app本身，既可以通过使用ALX代币获取并得到奖励，也可以通过本地支付方式。

Game developer

游戏开发商

After integrating the ALAX SDK into their app, the developers have a number of advantages. ALAX will take care of distributing their game through the existing pre-installed channels. After each transaction ALA tokens are transferred to the developer's account. The obtained ALA tokens can be used by the developer in a variety of ways: As a reward for the players to motivate them, for marketing purposes or it can be transferred to FIAT and paid out.

把ALAX SDK整合到他们的应用内之后，游戏开发商会拥有许多优势。ALAX将负责通过现有的预装渠道分发他们的游戏。在每次交易后，ALA代币会被汇入开发商账户。获取的ALA代币可以有多种用途：比如作为激励玩家的奖励、用来营销或转成法币之后提现。

Reseller

经销商

There will be two types of resellers, brick and mortar stores or mobile operators and the app itself. Brick and mortar stores will receive ALA tokens from ALAX for a fixed price to which they can add an additional fee and then distribute them to the end users. On the other hand, if the reseller is the App itself there is no additional fee but a bonus if you use ALX tokens to obtain ALA tokens, there is also the possibility to use a local payment method, but in that case there is no bonus.

将有两种类型的经销商，一是实体商店或移动运营商，二是应用自身。实体商店将以固定价格从ALAX收到ALA代币，他们可以加一笔额外费用，然后分销给终端用户。另一方面，如果该经销商是应用本身，那么就没有额外费用，但是如果用ALX代币购买ALA代币的话，你将得到奖励。另外，用户也可以使用本地支付方式，但是这种方式没有奖励。

ALAX

ALAX will issue ALA tokens that will not be limited in number and their value is pegged to FIAT. If a game developer requests the pay-out of their ALA tokens then ALAX pays out the corresponding amount in FIAT, a certain fixed amount will be deducted as a processing fee.

ALAX将发行ALA代币，发行数量没有限制，但是价值与法币挂钩。如果一家游戏开发商要求提现ALA代币，那么ALAX会用法币支付相应金额，从中将扣除一笔固定费用作为手

续费。

Architecture

技术架构

Underlying blockchain technology

区块链底层技术

Game developers would like to have a precise overview of the sales of their games and be able to ensure they are getting a fair deal for every purchase. In order to ensure the transparency between all parties in the process of purchasing digital content, blockchain is a good choice.

游戏开发商们都想对自己的游戏销售额有一个精确的了解，并能够确保他们能从用户的每次购买中得到一个合理的价格。为了确保各方之间在购买数字内容过程中的透明度，区块链是一个很好的选择。

DCore blockchain developed by DECENT is a digital content oriented blockchain with fundamental support of purchase and distribution of digital assets such as mobile games. Moreover, DCore blockchain architecture is designed to have high transaction speed and the ability to process a high volume of transactions that is expected in marketplace applications such as ALAX. For content distribution, it is very important to be able to split revenue in a fair way between multiple parties involved in the development and production of digital content. DCore blockchain already has a unique build-in feature that supports automatic revenue splitting based on predefined rules. The combination of these features makes DCore able to provide the underlying layer on which the ALAX infrastructure can be built on.

由DECENT开发的DCore区块链技术是一种以数字内容为导向的区块链技术，为数字资产（比如手机游戏）的购买和分销提供基础性支持。此外，DCore区块链架构的交易速度快，能够处理诸如ALAX这种应用商城内产生的大量交易。针对内容分销，非常重要的一点是要能够以公平的方式在参与数字内容开发和生产的各方之间进行收入分割。DCore区块链已经拥有一个独一无二的内置功能，可基于预定义规则支持自动收入拆分。这些功能组合在一起，使DCore能够为ALAX提供基础架构。

DCore blockchain uses a Delegated Proof of Stake (DPoS) mechanism in order to achieve the consensus of various nodes in the network. Delegated Proof of Stake (DPoS) is one of the fastest,

most efficient, and most flexible consensus model available. DPoS leverages the power of stakeholder approval voting to resolve consensus issues in a fair and democratic way. Deterministic selection of block producers allows DCore to decrease the block production time to 5 seconds. The principal miners' delegation is covered by a community of voters.

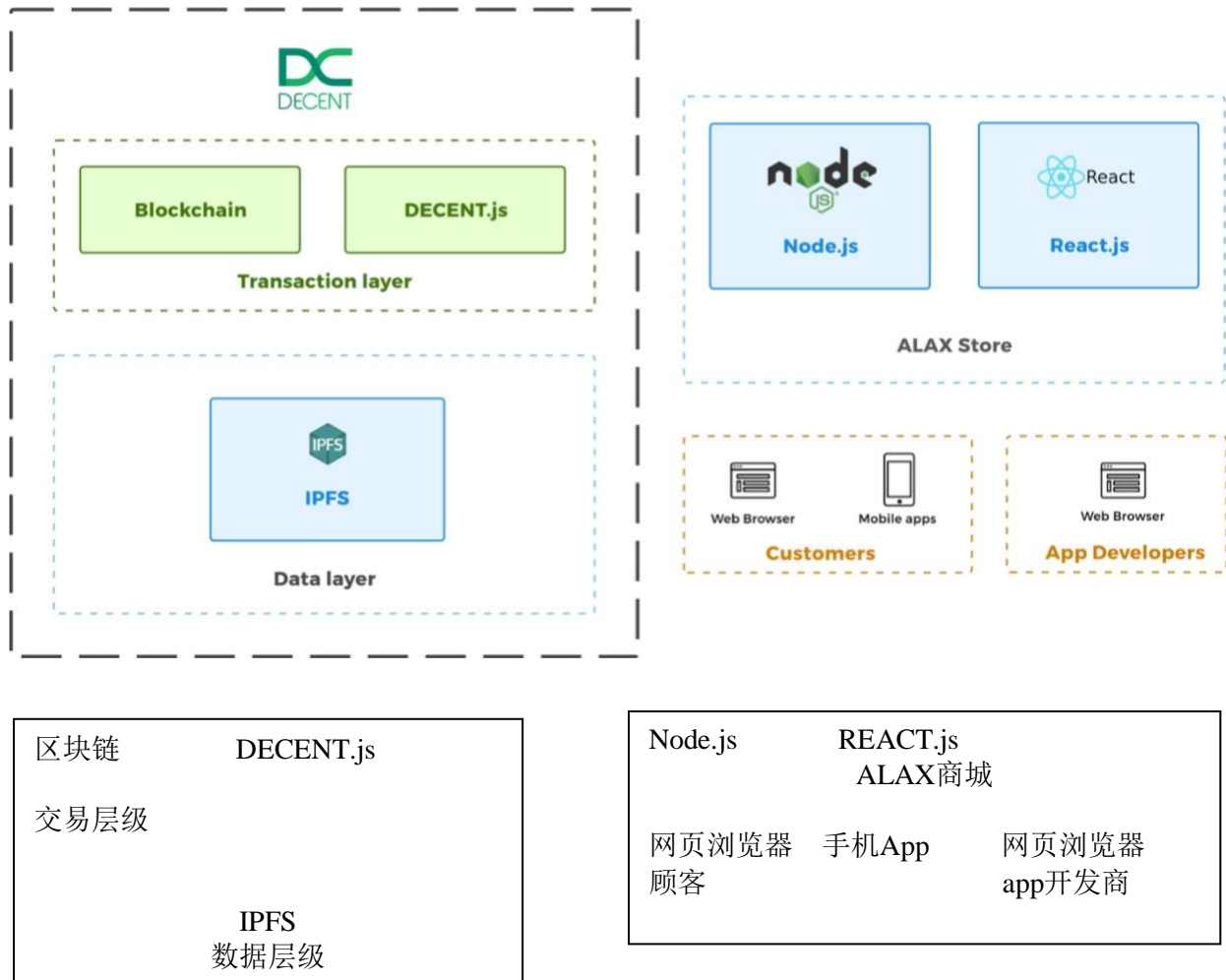
DCore区块链使用一种股份授权机制（DPoS）,实现网络内多个节点的一致。DPoS是速度最快、最高效、和最灵活的共识模型之一。DPoS利用利益相关方审批投票权力的机制，以一种公平和民主的方式解决共识问题。区块生产者的确定性筛选让DCore可以把区块生产时间缩短到5秒。对矿工授权的原则由社区投票人决定。

Application Layers

应用层级

In order to provide all features described in the use cases, ALAX consists of four basic layers: Transaction Layer, Data Layer, ALAX Store and Application Layer.

为了提供使用案例中描述的所有功能，ALAX由四个基础层级组成：交易层级、数据层级、ALAX商城和应用层级。



Transaction layer

交易层级

The transaction layer is responsible for managing all blockchain transactions between clients, publishers and the ALAX Store.

交易层级负责管理客户、发行商和ALAX商城之间的所有区块链交易。

Data layer

数据层级

The data layer is responsible for storing all content published by game developer partners in a secure and reliable way.

数据层级负责以安全和可靠的方式存储游戏开发者合作伙伴发布的所有内容。

ALAX Store

ALAX商城

The ALAX Store provides basic business logic on top of the data and transaction layers and provides management of entities available in the ALAX service.

ALAX商城在数据和交易层级之上提供基础业务逻辑，并管理ALAX服务内可用的所有实体。

Application layer

应用层级

The application layer is an interface for consumers and publishing partners (game developers). Consumers can access the ALAX service using web and mobile access. Publishing partners are able to access the ALAX Store infrastructure using web access where they manage their accounts and publish new mobile content (games).

应用层级是消费者和发布合作伙伴（游戏开发者）之间的交互界面。消费者可以通过网页和手机获得ALAX服务。发布合作伙伴能够通过网页权限进入ALAX商城架构，管理他们的账户和发布新的移动内容（游戏）。

Components

组件

In order to secure maximum modularity and scalability, ALAX is a composition of standalone components. Each component encapsulates part of the application layers described in the previous chapter.

为了确保最大模块性和可扩展性，ALAX是由独立的组件构成的。每个组件内包含部分上文所述的应用层级。

Transaction

交易

ALAX uses a custom ALAX blockchain as a transaction component that is based on top of the existing DCore blockchain technology and can leverage all features and operations currently available in the DECENT network.

ALAX使用一个定制的ALAX区块链作为交易组件。该组件基于现有的DCore区块链技术，并可使用DECENT网络内当前可用的所有功能和操作。

Storage

存储

All published content is securely stored on IPFS infrastructure that will provide decentralised storage. Content stored on IPFS is encrypted in order to ensure that only clients with authorisation

have access to it.

所有发布的内容都能安全地存储在IPFS系统内。该系统提供分布式存储方式。存储在IPFS上的内容将进行加密，确保只有获得授权的客户才能访问。

ALAX Store

ALAX 商城

The ALAX Store is a Node.js application that provides an interface for client's applications and handling management of entities in the application store. The ALAX Store communicates with the transaction service using DECENT's JavaScript library and providing content from the IPFS infrastructure.

ALAX商城是一个Node.js应用，为客户的应用提供一个交互界面，并管理应用商城内的实体。ALAX商城通过DECENT的JavaScript库提供的交易服务进行通信，并从IPFS系统内提供内容。

Customer

顾客

Customers access the ALAX Store using web browsers or mobile applications. The web application is built on the React JavaScript library and uses the DECENT library that will provide blockchain functionality directly.

顾客可以通过网页浏览器或手机应用访问ALAX商城。商城应用基于React JavaScript库开发，使用DECENT库直接提供区块链功能。

Mobile App

手机应用

As part of ALAX, content providers have access to the ALAX Android SDK. Depending on the needs of a particular project, developers can use some or all of the features of our library of the ALAX blockchain. This will enable developers to include features such as in-app purchases, rewards, etc.

作为ALAX的一部分，内容提供者有权限使用ALAX安卓SDK。根据特定项目的需求，开发者们可以使用我们的ALAX区块链库内的部分或全部功能。这将使开发者们可以增加应用内购买、奖励等功能。

API structure

API结构

In order to secure consistency across all the applications utilizing ALAX, all applications will communicate with the ALAX protocol via API.

为了确保所有使用ALAX的应用的一致性，所有应用将通过API与ALAX协议进行通信。

Token Structure

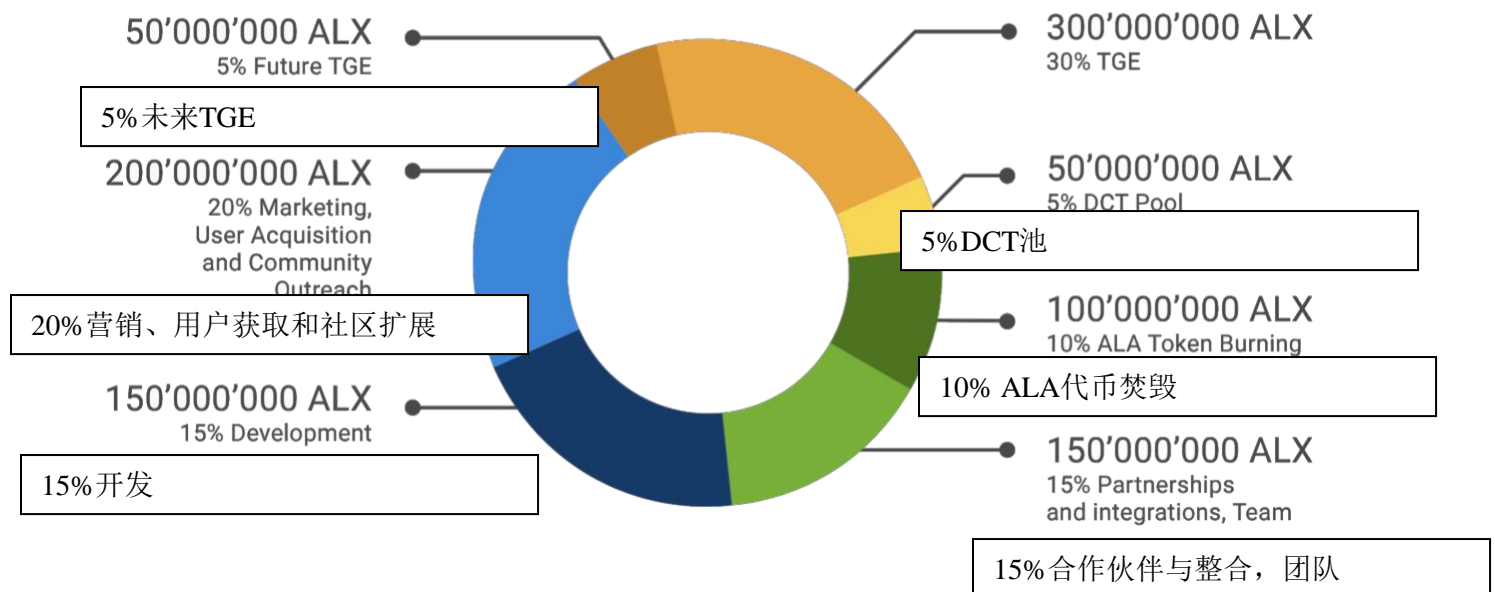
代币结构

The total number of tokens is 1'000'000'000 ALX (one billion ALX).

代币总数量为1,000,000,000 ALX（10亿ALX）。

ALX token structure is the following:

ALX代币结构如下：



50% of the ALX tokens not dedicated to the TGEs are going to be locked in for 12 months following the TGE.

不用于TGE的50%ALX代币将在TGE后锁定12个月。

Token Generation Event

代币生成事件

ALX are going to be generated during the ALAX Token Generation Event (TGE). The TGE hard cap is set to **30'000 ETH**. **30%** of the total number of ALX are going to be available during the ALAX TGE. This corresponds to **300'000'000 ALX**. The initial ALX value is: **1 ETH = 10'000 ALX**.

ALX将在ALAX代币生成事件（TGE）期间生成。TGE硬顶为30,000ETH。ALX总数的30%将在ALAX TGE期间分发。相当于300,000,000ALX。初始ALX价值为：1ETH=10,000 ALX。

The following coins and tokens are accepted during the ALAX TGE for contributions:
ALXA TGE期间接受以下币和代币：



BTC



ETH



BCH



LTC



DCT

SophiaTX

SPHTX

and more...

及其他....

Solely **ETH** value is determinant.

Start of the TGE is planned for Tuesday 17 April 2018, 10:30AM UTC.

只有ETH价值是决定基准。

TGE计划于2018年4月17日周二，世界调整时间上午10:30开始。

The duration of the ALAX TGE is 6 days. This means that the TGE ends on Monday, 23 April 2018 at 10:30AM UTC. No ALAX TGE contributions are going to be accepted after this date. The ALAX TGE is made up of 2 rounds. First round is going to last from the beginning of the ALAX TGE until 165'000'000 ALX are distributed. There is a 10% bonus for the first 150'000'000 ALX in this round.

ALAX TGE将持续六天。这意味着TGE将于2018年4月23日周一，上午10:30（UTC）结束。

此后将不再接受任何ALAX TGE捐赠。ALAX TGE有两轮。第一轮将从ALAX TGE开始一直持续到165,000,000ALX完成分销。此轮首批150,000,000ALX将得到10%奖励。

Second round starts after the first 165'000'000 ALX are distributed. There are 135'000'000 ALX dedicated to this round.

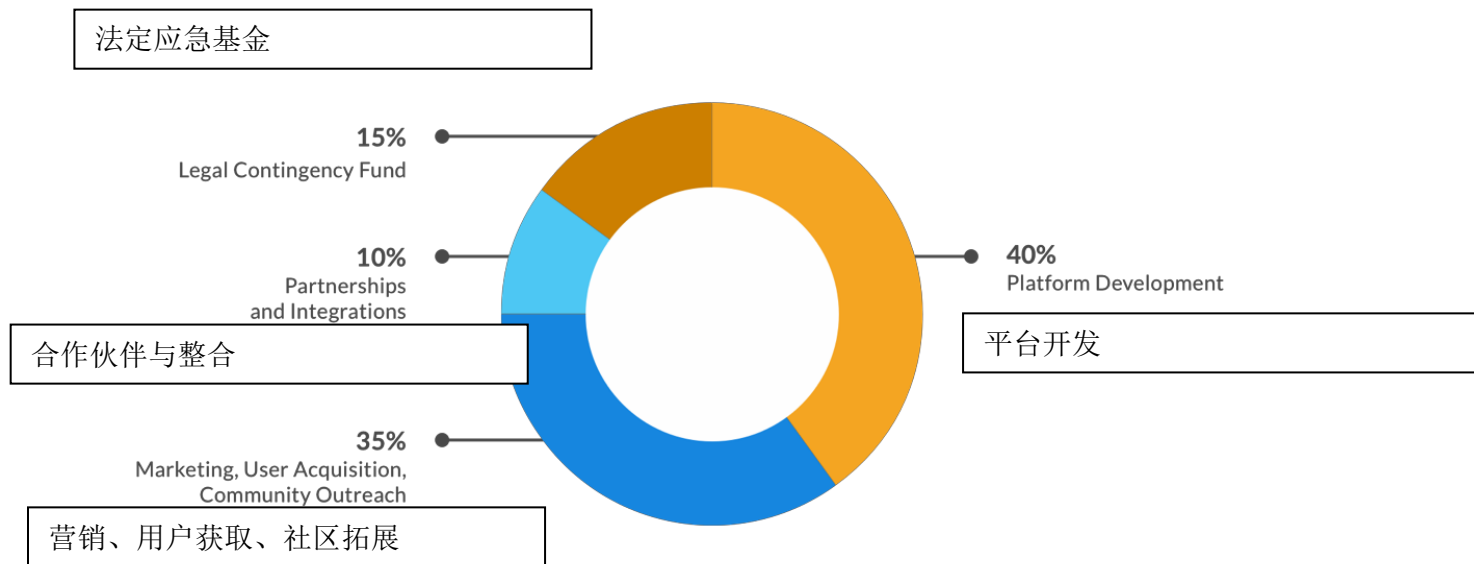
第二轮在首轮165,000,000ALX分销完成后开始。此轮将有135,000,000ALX。

In case not all ALX tokens are generated during the ALAX TGE, they are going to be distributed to the existing TGE participants according to their stakes. No tokens will be burned.

万一ALAX TGE期间无法生成所有ALX代币，将按权益把它们分销给现有的TGE参与者。不会焚毁任何代币。

The TGE proceedings are going to be used in the following way:

TGE流程将通过以下方式进行：



ALX tokens are going to be initially ERC-20 tokens. At the Mainnet launch, they are going to be replaced by DCore based assets.

初始ALX代币将是ERC-20代币。在主网上线后，它们将由基于DCore的资产代替。

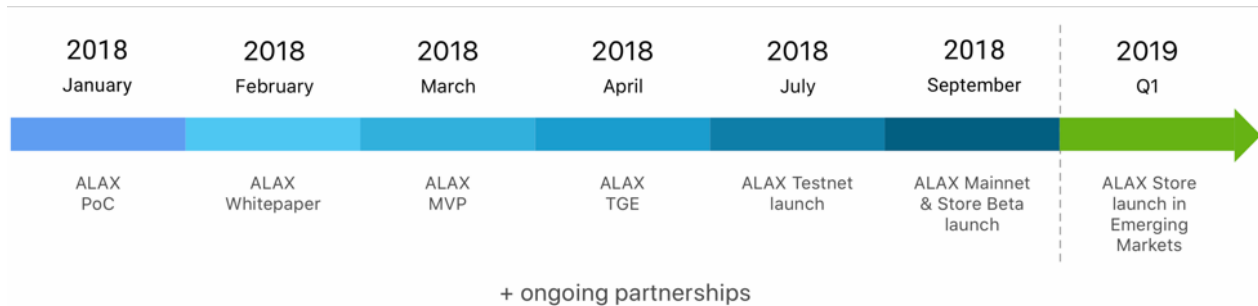
If you are interested in the private round of the TGE please visit our website (alax.io) for more information.

如果您有兴趣参与TGE的私募，请访问我们的网站(alax.io)获取更多信息。

Roadmap

一月 二月 三月 四月 七月 九月 2019Q1

路线图



ALAX PoC ALAX白皮书 ALAX MVP ALAX TGE ALAX测试网上线 ALAX主网&存储Beta上线 ALAX商城在新兴市场上线

Ongoing partnership: 不断拓展的合作伙伴

In the beginning of 2018 we had a working proof of concept. In February we released the whitepaper which you are currently reading. In March we will update our working PoC to a MVP after conducting thorough research and revision of the PoC.

2018年初，我们已经有了一个可使用的概念验证版本。二月份，我们发布了白皮书，也就是各位正在看的这份材料。三月份，我们将对PoC进行全面研究和改版，然后升级为最简化可实施产品(MVP)。

The ALAX TGE will take place in April with a hard cap of 30'000 ETH, there will be no soft cap and the project will go ahead regardless of the amount raised.

ALAX TGE将在四月份进行，硬顶为30,000ETH。届时将不会有软顶，无论筹集多少金额，该项目都会继续进行。

In July we will be testing out the app in the final version before releasing it. After the successful tests are concluded the Mainnet is launched and the store is available in beta to the wider public.

七月份，我们将测试最终版本的应用，然后发布。测试成功后，主网将上线，Beta版商城将向更大范围开放。

In the first quarter of 2019 the ALAX Store will be fully operational and launched in Emerging markets.

2019年第一季度，ALAX商城将全面运行，并在新兴市场上线。

Team

团队



~~Matej Michalko - Co-founder~~

联合创始人

Blockchain pioneer with 7+ years of Bitcoin, Blockchain and Cryptocurrency experience. He founded and is the CEO of DECENT. Matej organized China's first international Bitcoin Conference and also founded and led many Bitcoin, Blockchain and Cryptocurrency conferences such as BitcoinExpo, Central European Bitcoin Expo and BTC2B Congress. Matej founded the world's first Bitcoin Marketing agency in the world. He also founded the first Cryptocurrency e-Gaming Consulting Firm and served as a consultant on the Isle of Man.

马杰

联合创始人

区块链先驱，在比特币、区块链和虚拟货币领域有超过7年的经验。他成立了DECENT并担任CEO。马杰组织召开过中国首届国际比特币大会，还成立并主持了许多比特币、区块链和虚拟货币大会，比如比特币博览会、中欧比特币博览会和BTC2B大会。马杰成立了世界首个比特币营销机构。他还成立了首家虚拟货币电子游戏公司，并且担任曼岛咨询师。



Calvin Feng - Co-founder

联合创始人

After gaining vast experience by working for global foreign companies, Calvin founded Kason Technology, Inc., where he gained extensive knowledge in R&D, marketing and marketing of notebook computers, electronic components and mobile phones. He currently serves as the CEO of Dragonfly, a company dedicated to software, advertising and content development and big data analysis.

在为全球跨国公司工作过程中积累了丰富的经验。Calvin创建了Kason技术公司，期间积累了笔记本电脑、电子组件和手机的研发、营销的大量经验。他目前担任Dragonfly的CEO，这是一家专注于软件、广告和内容开发以及大数据分析的公司。



Tomas Koprusak – Project lead

项目负责人

With over a decade of experience in web development, marketing and product management at Sygic, Smart Media Star, IBM, and freelancing as well, Tomas is the perfect team leader to oversee the smooth operation of any project.

在Sygic、Smart Media Star和IBM积累的网页开发、营销和产品管理经验以及自由职业经历，Tomas是完美的团队领袖，善于管理任何项目的顺利运营。



David Martinec - Operations manager

运营经理

While at Aalborg University, David already began to delve into the world of Blockchain and after graduating he was ready to get hands on experience. He efficiently used this experience as the project manager of SophiaTX.

在Aalborg大学期间，David已经开始钻研区块链的世界。毕业后，他已经做好大显身手的准备。他在SophiaTX担任项目经理的经验得到了有效地应用。



Zuzana Gonova - PR manager
公关经理

Zuzana started out as a PR rep at a healthcare company and then was whisked away by DECENT impressing them by her formidable skills and forward-thinking while bringing SophiaTX to public awareness. This makes her an ideal fit to be the PR lead on ALAX.

Zuzana从一家医药公司的公关代表起步，在帮助SophiaTX打开名声的过程中展现了高超的工作技巧和前瞻性的思维能力，并且因此给DECENT留下了深刻的印象。这使她成为ALAX的理想公关经理。



Matej Nemcek - Blockchain and backend engineer
区块链和后端工程师

With Matej's background as a brilliant backend engineer and his enthusiasm for blockchain technologies, his know-how will be perfectly suited for developing the ICO platform. He founded the first Slovak hackerspace Progressbar which he runs in his spare time.

凭借其作为一流后端工程师的背景和对区块链技术的热爱，Matej的专业知识非常适合负责ICO平台的开发。他成立了斯洛伐克首个黑客空间Progressbar，并在业余时间运营。



Peter Student – Solution Architect
解决方案架构师

Head of software development at a Digital agency, leading IoT initiatives, those are just a few roles that Peter has held over his 11 year illustrious career in various IT fields.

曾经担任Digital机构的软件开发负责人，主导IoT项目。这些知识Peter在各个IT领域11年辉煌生涯的其中几段履历。



Marian Vanderka - Android developer
安卓开发者

As one of the Android developers in DECENT he is an expert in developing applications in a number of languages such as Kotlin/Java/Scala/C++/Python and backend frameworks. His developer CV includes positions at companies such as Sygic, eGLU and Shizaru.

作为DECENT的安卓开发者之一，他专于用多种语言开发应用，比如Kotlin/Java/Scala/C++/Python和后端框架。他的开发者CV包括在多家公司的供职经历，比如Sygic、eGLU和Shizaru。



Michal Grman – Software developer
软件开发

Michal started his career as a web developer. Later on when Apple announced the iPhone 3g, he switched to mobile development, which he solely focused on until he started working for Electrolux Global Connectivity. While there he switched to the field of IoT switching from pure mobile to full-stack and then to cloud development and architecture.

Michal从网页开发开始职业生涯。之后，当苹果发布iPhone 3g的时候，他开始从事移动开发，并把所有精力都放在这上面，直到他开始为Electrolux Global Connectivity工作。在该公司期间，他转到物联网领域，并从纯手机软件开发转到全栈，然后转到云开发和架构。



Gabriel Malicky - QA analyst
QA分析员

With a degree in radio-electronics and wireless tech, Gabriel decided to expand his knowledge to include IT. With an interest in cryptography and security he currently works as a QA Analyst at DECENT.

凭借无线电和无线技术专业的学历，Gabriel决定拓展IT方面的知识。凭借对密码学 and 安全的兴趣，他目前在DECENT担任QA分析员。



Ronald Filo - Technical Evangelist
技术专员

With over 15 years of experience in various areas of IT, Ronald uses his extensive knowledge in providing the best possible solutions to software problems.

在多个IT领域有超过15年工作经验。Ronald利用他的丰富知识，为软件问题提供尽可能最佳的解决方案。



Patrik Csokas - IT Manager
IT经理

Patrik holds multiple internationally recognized certifications, such as Project Management Professional and Professional Scrum Master. Thanks to his knowledge of SW development life-cycles he holds the position of IT manager at DECENT.

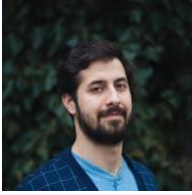
Patrik持有多个国际认证证书，比如项目管理专业证书和职业流程管理员证书。凭借软件开发周期的经验，他在DECENT担任IT经理。



Juraj Jurik - Graphic Designer
美术设计师

Juraj has over 6 years of experience in UX, UI and Graphics design and cites Dieter Rams, Massimo Vignelli and Jonathan Ives among his inspirations.

Juraj在UX、UI和图形设计领域拥有超过六年从业经验。并从Dieter Rams, Massimo Vignelli 和 Jonathan Ives等大师处借鉴灵感。



Amer Owaida – Copywriter

文字撰稿人

Speaking four languages and living in five different countries Amer 's overview of different cultures and their nuances makes him uniquely equipped to handle any writing task you throw at him. He also holds a degree in translation and interpretation studies.

能说四国语言，而且曾在五个不同国家居住。Amer对不同文化及其细微差别的见解让他在完成任何撰稿工作时具备独具一格的视角。他还拥有翻译和口译研究专业的学位。



Martin Hassler - Community manager

社区经理

Martin has worked in different startups and currently is one of our community managers. His knowledge of marketing and business provides him with unique insight when responding to our community.

Martin曾在多家初创企业工作，目前是我们的一位社区经理。他有丰富的营销和业务知识，能让他在处理社区事务时独具慧眼。



Veronika Pilzova - Community manager
社区经理

As the beloved community manager of SophiaTX, Veronika has ample experience in handling a vast influx of messages, while expertly dishing out just the right amount of information to her audience.

作为受到SophiaTX重用的社区经理，Veronika凭借丰富的经验，在处理大量涌入的信息时，能专业地为客户筛选有用的信息。



Dong Seob Choi - Community manager
社区经理

Before ALAX Choi was working for CO Dep. of Samsung Electronic Slovakia. He graduated from the University in South Korea with a degree in Civil engineering and studied computer design in Tokyo, Japan. Choi has been an active volunteer for Korean Society of Slovakia for 5 years and he published 4 magazines and a story book in Korea.

在加入ALAX前，Choi在三星电子斯洛伐克公司的CO部工作。他在韩国的大学拿到了土木工程专业学位，并在日本东京学习了计算机设计。Choi已经在斯洛伐克韩国社团担任了五年的志愿者，并在韩国出版了四本杂志和一本故事书。



Karen Ohara - Community manager
社区经理

Karen joined ALAX as a Japanese speaking support team member. She has studied psychology at the Waseda University in Tokyo and now she doing a postgraduate in Europe. Karen is fluent in Japanese or English.

Karen最开始加入ALAX时担任的是日语支持团队成员。她在东京早稻田大学学习了心理学，现在她在欧洲进修研究生学位。Karen能流利地讲日语和英语。



Marian Podmajersky - Blockchain Consultant/Engineer
区块链咨询师/工程师

With a doctorate and a vast experience in software design and development, and concept proofing of applications for Blockchain, Marian proves to be an extraordinary technical lead for the project.

持有博士学位，并在软件设计和开发以及区块链应用概念验证方面有丰富经验。Martin是一位出色的项目技术负责人。

Advisors



Xiaomin Wang – Advisor

顾问

Xiaomin is an experienced lawyer, engineer and Blockchain expert, with 5+ years of experience in the industry. She was part of the organization team of BitcoinExpo Shanghai 2014, BTC2B Congress Brussels and BitcoinExpo London 2015.

王晓敏

晓敏是一位经验丰富的律师，也是工程师和区块链专家，拥有超过五年的从业经验。她是2014年上海比特币博览会、布鲁塞尔BIC2B大会和2015年伦敦比特币大会组委会成员。



Tomas Varga – Advisor

顾问

Tomas is an experienced business professional with a strong track record of projects including four years in Management Consulting at KPMG. His responsibilities include business intelligence, development and partnership initiatives.

Tomas是一位经验丰富的业务员，拥有辉煌的项目经历。包括在KPMG从事过四年管理咨询工作。他的职责包括业务智能、开发和合作伙伴项目。



Peter Pongracz – Advisor

顾问

Peter is a seasoned business developer with a proven track record in Big Pharma, Venture Capital and Online advertising. He is a passionate blockchain evangelist who strongly believes that blockchain can truly disrupt traditional industries and reinvent the meaning of innovation as we know it today.

Peter是第二位有丰富履历的业务开发员，在Big Pharma、风投资本和在线广告领域从业多年。他是一位非常有激情的区块链专员，坚信区块链技术真的可以颠覆传统产业，重新发明创新的意义。

Glossary

术语

3G - third generation wireless network

3G - 第三代无线网络

ALA -Non-volatile in-store token

ALA - 非挥发性商城内代币

ALX - TGE token

ALX-TGE代币

API - Application Programming Interface

API-应用编程界面

DApp - Decentralized application

DAPP-分布式应用

DCore - Proprietary blockchain

DCore-专有区块链

DPoS - Delegated Proof of Stake

DPos-委托权益证明机制

FIAT - Currencies such as USD, EUR, GBP, etc.

发币-如美元、欧元、英镑等货币

IPFS - InterPlanetary File System

IPFS - 星际文件存储系统

LTE - Long-term Evolution wireless network

LTE - 长期演进无线网络

Node.js - JavaScript runtime environment

JavaScript运行环境



QR code - Quick Response code

快速反映码

TGE - Token Generation Event

代币生成事件

References

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