

The Libra on Blockchain

-- A platform for Facebook's Libra coin (and more)



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What is Libra?

最近，Facebook概述了其新加密货币天秤座的目标。Facebook已经开发这种加密货币一年多

Recently Facebook has outlined the objectives of its new cryptocurrency called Libra. Facebook has been developing this cryptocurrency for more than a year.

天秤座的设计是为了允许全球互联网支付处理。它将包括全世界17亿没有银行账户的人

Libra is designed to allow payment processing around the internet globally. It will incorporate 1.7 billion people all around the world who doesn't have a bank account.

On June 18, 2019, Facebook announced Libra. It is a virtual currency, or cryptocurrency, though some people don't agree with that definition.

In Facebook's vision, it should become a global currency for billions of people, especially those in developing countries who have no access to banks or financial services. In other words, Digital money which you can transfer to other people or simply use to buy stuff.

A bunch of Silicon Valley hotshots are also on-board with the plan.

Libra will be governed by the Libra Association, a Swiss group including 28 members – among which Facebook subsidiary Calibra, Uber, PayPal, Mastercard, Visa, Spotify, and many other household names in technology and finance.

- 2019年6月18日，Facebook宣布天秤座。它是一种虚拟货币，或加密货币，尽管有些人不同意这种定义。
- 在Facebook的愿景中，它应该成为数十亿人的全球货币，特别是那些在发展中国家没有银行或金融服务的人。换句话说，就是你可以转移给其他人或者只是用来买东西的数字货币。
- 一群硅谷的能人也加入了这个计划。
- 天秤座将由天秤座协会管理，这个瑞士组织包括28个成员，其中包括Facebook的子公司Calibra, Uber, PayPal, 万事达卡, Visa, Spotify以及许多其他在科技和金融领域家喻户晓的公司



The Method

Libra协议允许一组被称为来自不同权威机构的验证器的副本共同维护一个可编程资源的数据库。

毫无疑问，这个系统将由一组权威机构以自上而下的方式控制。然而，请注意，它说数据库是为可编程资源，而不仅仅是数字货币

The Libra protocol allows a set of replicas—referred to as validators—from different authorities to jointly maintain a database of programmable resources.

- There's no mincing of words here—the system will be controlled by a set of authorities in a top-down fashion. However, note that it says the database is for “programmable resources” rather than just [digital currency](#).

这些资源由经过公钥加密验证的不同用户帐户拥有，并遵守这些资源开发人员指定的自定义规则。

使用“资源”等通用词汇让我怀疑这不仅仅是一个稳定的货币

These resources are owned by different user accounts authenticated by public key cryptography and adhere to custom rules specified by the developers of these resources.

- The use of generic words such as “resources” makes me suspect that this is for far more than just a stablecoin.

交易是基于一种名为Move的新编程语言的预定义和未来版本的用户定义智能合约。我们使用Move定义区块链的核心机制，例如货币和验证器成员资格。

使用定制的智能合约语言会导致很多问题，比如该语言的特性有多丰富，以及该系统在对抗敌对合约时的健壮性有多强。关于开发者的友好性，以及Libra如何保护聪明的合同开发者不搬起石头砸自己的脚，也将是一个问题。

*Transactions are based on predefined and, in future versions, user-defined smart contracts in a new programming language called **Move**. We use Move to define the core mechanisms of the blockchain, such as the currency and validator membership.*

- Use of a custom-built smart contracting language will result in a lot of questions around how feature-rich the language is, and as a result, how robust the system is against adversarial contracts. There will also be questions around developer-friendliness and how well Libra can protect smart contract developers from shooting themselves in the foot.

这些核心机制能够创建一种独特的治理机制，这种治理机制建立在现有机构在早期的稳定性和声誉上，但随着时间的推移，会转变为一个完全开放的系统。

听起来天秤座协会将会是一个联盟，在投票系统和一些已有的名声的帮助下不断发展。

These core mechanisms enable the creation of a unique governance mechanism that builds on the stability and reputation of existing institutions in the early days but transitions to a fully open system over time.

- It sounds like the Libra Association will be a federation that can evolve with the help of a voting system and some sort of pre-existing reputation.

How will Libra work?

关于天秤座的谣言已经流传了一年多，不管天秤座是由Facebook开发还是管理的。最后，我们了解到天秤座是由天秤座协会管理的加密货币。它允许用户为天秤座兑换法定货币进行在线交易。为了联系更广泛的人，天秤座的用户不需要有银行账户。他们只需要为天秤座兑换金钱。

Rumors have been circulating about Libra for over a year, whether Libra is developed or managed by Facebook. Finally, we came to know Libra is a cryptocurrency managed by **Libra Association**. It lets the users exchange fiat currency for Libra for online transactions. To reach wider people, Libra does not need users to have a bank account. They simply need to convert money for Libra.

天秤座的白皮书——一种技术宣言——说它将以“区块链”运行。同样，在某些领域，这是一个有争议的定义，所以这里有一个快速而粗略的解释。区块链是用于进行加密货币支付的基础设施。它是一种数字的、不可更改的记录，记录了用特定加密货币进行的所有支付。

Libra's white paper – a sort of technical manifesto – says that it will run on a "blockchain". Again, that is a controversial definition in some quarters, so here's a quick and rough explainer.

A blockchain is the infrastructure on which cryptocurrency payments take place. It is a digital, unchangeable record of all the payments ever happened in a given cryptocurrency.

有一点很重要：区块链是分散化的。交易是由一群独立的计算机处理和验证的，而不是由单一的裁判或中央银行。这些独立的计算机称为节点。

这种分散的结构旨在增强安全性，因为没有—一个实体会被黑客攻击—，同时也保证政府不能仅仅通过威胁一个中央当局来阻止交易。Here's a crucial thing: a Blockchain is decentralized. The transactions are processed and verified by a swarm of independent computers rather than by a single referee or central bank. Those independent computers are called nodes.

That decentralized structure is intended to enhance security – as there is no single entity to be hacked – and also, to guarantee that governments can't block transactions simply by browbeating a central authority.

这是一个相当自由主义、反国家、反银行的工具。当然，第一个区块链就是支撑原始加密货币的比特币

It is a pretty libertarian, anti-state, anti-bank tool. The first blockchain ever is, of course, the one underpinning Bitcoin, the original cryptocurrency.



So Libra is a cryptocurrency?

Yes, but also no. 这就是分歧的开始。天秤座区块链不像比特币那样去中心化。
➤ 比特币区块链, 理论上任何人都可以运行一个节点, 即使那是昂贵的。

➤ 相比之下, 天秤座的节点将只在天秤座协会成员的服务器上运行——也就是说: Facebook, Uber, 贝宝和其他人。

This is where the disagreements start. The Libra blockchain is not decentralized the way the Bitcoin is.

➤ With the Bitcoin blockchain, anyone can theoretically run a node, even if that's expensive.

➤ In contrast, Libra's nodes will be only run from the servers of the Libra Association's members – that is: Facebook, Uber, Paypal and the others.

Now, none of these companies will individually have much of a say on how transactions are processed and verified – it will be a collective effort – which is good, according to the blockchain ethos.

Still, the more libertarian cryptocurrency fans resent that Libra will be controlled by a club of mega-corporations. They also fear that the Libra Association could buckle under pressure if, for instance, a government ordered it to block a transaction.

Facebook's official reason for this make-up is that a fully decentralized model would not be powerful or fast enough to deliver the “**global financial infrastructure**” Libra aspires to become.

现在, 在如何处理和验证交易的问题上, 没有一家公司将单独拥有很大的发言权——这将是集体的努力——根据区块链的理念, 这是好事。
然而, 更自由的加密货币粉丝对天秤座将被大型企业俱乐部控制感到不满。他们还担心, 如果一个政府下令阻止一项交易, 天秤座协会可能会在压力下屈服。
Facebook这样做的官方理由是, 一个完全分散的模式不足以提供天秤座渴望成为的“全球金融基础设施”



Why does Libra need to be centralized?

因为规模和速度

Because of scale and speed.

Decentralization makes the system less vulnerable to hacks or shutdowns, but takes time:

- Bitcoin blockchain, for instance, can only process about seven payments per second.
- By comparison, the centralized Visa payment network can support up to 24,000 payments per second.
- Initially, Libra should be able to handle about 1,000 transactions per second.

The white paper says that, over the next five years, Libra will shift from the current proposed model – also called “permissioned” blockchain – to a totally decentralized – or “permissionless” blockchain.

分散化可以降低系统受到黑客攻击或关闭的风险，但这需要时间：

- 例如，比特币区块链每秒只能处理大约7次支付。
- 相比之下，Visa的集中支付网络每秒最多可支持24000次支付。
- 最初，Libra应该能够每秒处理大约1000个事务。

白皮书说，在未来的五年里，天秤座将从目前提出的模式——也被称为许可区块链——转变为完全分散的，或无许可的区块链。

Of course, there is no guarantee that will ever happen.

当然，这并不能保证一定会发生



比特币的波动性很大，这不是问题吗

Bitcoin is really volatile, isn't that a problem?

· 2017年，比特币的价格在920美元到2万美元之间波动。如果你是一个投机者，这是个好消息，但如果你想为Facebook的24亿用户推出一个全球支付网络，这就不太理想了。
· 这就是为什么天秤座被设计成所谓的稳定。

当然是
Absolutely.

· 这意味着天秤座的价值将与现实世界资产的价值挂钩。本质上，天秤座协会将储备一篮子货币（如美元、欧元和英镑）和低风险的政府债券。这个篮子的价值将决定在流通中的所有天秤座单位的价值。每次用户通过交易所为天秤座交易现金时，该现金将被添加到天秤座协会的储备金中。

· 在这个阶段，我们对天秤座了解不多。我们知道Facebook Calibra将启动一项Libra钱包来允许用户通过Messenger, WhatsApp或一个独立的应用程序以交换Libra，但我们不知道哪些企业将接受天秤座，我认为Uber和Ebay很有可能会这样做，因为它们都是天秤座协会的成员。

Over the course of 2017, the price of Bitcoin swung between £920 and \$20,000. That is great news if you are a speculator, but it's not ideal if you want to launch a global payment network for Facebook's 2.4 billion users. That's why Libra has been designed as a so-called "stablecoin".

That means the value of Libra will be tied to the value of real-world assets. Essentially, the Libra Association will store a basket of currencies (like dollars, euros and pounds) and low-risk government securities. The value of this basket will determine the value of all the Libra units in circulation. Every time a user trades cash for Libra through an exchange, that cash will be added to the Libra Association's reserves.

At this stage, there is not much else we know about Libra. We do know that Facebook Calibra will launch a Libra wallet allowing users to exchange Libra through Messenger, WhatsApp or a standalone app. But we don't know which businesses will accept Libra yet, though it's probable that both Uber and Ebay will because they are both members of the Libra Association.



What do central banks think about Libra?

Libra doesn't launch until 2020 but that doesn't mean that people aren't already fretting about the whole affair. Facebook has promised that it won't use payment data in order to target adverts – but people don't trust Facebook, for notorious reasons.

And regulators are also frowning upon the move. France has underlined that only governments can mint money, and has warned against Libra's potentially nefarious uses. The bank of England said that Libra will have to meet very high financial standards to be allowed in the UK.

And, of course, lawmakers in both the US and the EU are concerned about Facebook's expansion to the financial domain. For a company which is increasingly depicted as an oversized, unaccountable, arrogant monopoly, is launching a currency really the best way to avoid scrutiny?

· 天秤座要到2020年才会推出，但这并不意味着人们就不会为此而烦恼了。Facebook承诺不会使用支付数据来定向投放广告，但由于一些臭名昭著的原因，人们并不信任Facebook。
· 监管机构也对此举表示不满。法国强调只有政府才能创造货币，并警告天秤座提防潜在的邪恶用途。英国央行表示，天秤座必须符合非常高的金融标准，才能获准在英国上市。
· 当然，美国和欧盟的立法者都对Facebook向金融领域扩张感到担忧。对于一家日益被描述为规模过大、不负责任、傲慢的垄断企业的公司来说，推出一种货币确实是避免审查的最佳方式

We'll find out in 2020.



Libra vs. DCEP



◆ The Libra Association said its libra would not be a single currency that was backed by a basket of national currency but would now be a model of numerous individual fiat-pegged currencies.

天秤座协会表示，其“天秤座”将不会是一种由一篮子国家货币支撑的单一货币，而是将成为众多个体与fiap挂钩的货币的模型。

· 虽然最初的模型类似于约翰·梅纳德·凯恩斯(John Maynard Keynes)关于全球一篮子货币(他称之为“bancor”)的原始概念的颠覆性实施，但这个模型似乎更倾向于帮助现有央行将其货币数字化

- While the original model was akin to a disruptive implementation of John Maynard Keynes' original concept for a global basket currency (which he called a “bancor”), this model seems more to position libra to help existing **central banks digitize their currencies**.

与此同时，中国正在推进其数字货币和区块链计划。中国农业银行的一款应用的截图显示了数字货币电子支付(DCEP)目前正在测试中，这让我们了解了其功能、地域和参与的人员

◆ China, meanwhile, steamed forward with its digital currency and blockchain plans. Screenshots of an app from the Agricultural Bank of China show how the **DCEP (Digital Currency Electronic Payment)** is currently being tested, giving us insight into functionality, geographies and players involved.

中国还宣布了全国区块链理事会的71个成员，并开始直播区块链服务网络。BSN在世界范围内具有潜在的重要意义，因为中国试图建立和控制全球数字基础设施的一个关键部分。

◆ China also announced the 71 members of its National Blockchain Council and went live with its **Blockchain Service Network**. The BSN in particular has potential significance on a world scale as China tries to build and control a key piece of global digital infrastructure.

完

धन्यवाद

Hindi

多謝

Traditional Chinese

ขอบคุณ

Thai

Спасибо

Russian

Gracias

Spanish

شكراً

Arabic

Thank You

English

Obrigado

Brazilian Portuguese

Grazie

Italian

多谢

Simplified Chinese

Danke

German

Merci

French

நன்றி

Tamil

ありがとうございました

Japanese

감사합니다

Korean