Wang is a real estate salesperson, and each house he sold needs to be registered on the Internet by his Manager Li. Amy, the girlfriend of Manager Li is also a real estate salesperson. So Manager Li frequently took Wang’s sales performance in selling house as the sales performance of Amy. Wang explained the problem to the company, but the company needed Wang to prove that “the house was sold by Wang, but not Amy.” That makes Wang so frustrated. Because no one except Manager Li in the company can prove that he sold the house. At this time, the company sets up a WeChat group. Everyone including Wang and Amy who sells a house can send a sales message in the WeChat group in a timely manner, as well as look up previous sales records in the group.

This is the decentralized blockchain technology.

Likewise, public blockchain, as a type of blockchain, is like an open WeChat group that records a lot of information. The participators and writers of the WeChat group can be not only you, but also everyone you meet in your life. You can compile other people’s records as a writer. This open WeChat group is now commonly referred to as the public blockchain of the decentralized blockchain technology.

Every group is open and transparent. And everyone can compile the information in the group, download, view and record every record freely; but there is no way to edit the previous records that have been sent successfully. By this way, the information can not be tampered or bribed, and the consistency of data can also be ensured. And this method helps to reduce the risk and improve the security, as well as greatly improve the efficiency of work and reduce operating costs.

Anyone in the world can access to the system at any time to read data, send blockchains that can confirm transactions and compete for bookkeeping.

In this open and transparent group, group owners (i.e. developers) do not have the authority to interfere with anyone in the group, so the decentralization is achieved completely. And the requirements for joining a group are also very low. As long as there is a network, you can participated in the public blockchain, and do the following things such as choosing to hide or disclose your true identity, ensuring your own safety through publicity, and checking all the records.

We know that it’s easy to participate in “the group chat”, but about setting up “the group chat”?

Although many people have said that blockchain is a technology that can change the world, the power that can change the world by using a lever can not to be underestimated. Setting up a group chat (that is, developing a public blockchain) involves a lot of development work: such as building a test network, adjusting consensus algorithms, optimizing the development of node-side software, UI and wallet development that need to be solved one by one. Only for the design of data structure, great efforts are needed for the constant refinement and iteration of the structure. The biggest difficulty in developing a public blockchain lies in how to support enterprise application in technology. It not only needs the application cases and subsequent experiments on distributed database, but also a large number of tests to find out what critical points are easy to be forked, how much pressure can produce congestion and the simulation of the cost attack and defense. That sounds complicated.

The development of the public blockchain technology requires not only a few of professional technicians, but also a lot of basic work, data cases and experimental verification, so besides the competent technological strength, more business accumulation and time validation are much needed.

So far, the competent “group chat “providers, include Ethereum, Hyperledger, NEO, Qtum, Ruff Chain, etc., all of them have relatively mature and widely recognized public blockchain providing capabilities.

Among them, Ruff Chain claims to be a dominant power of the public blockchain system in the filed of the Internet of Things, because it has achieved the goal from building the underlying IOT operating system to the scene landing of the business end in the IOT. As a strong promoter and reform pioneer of the block chain in the field of IOT, Ruff Chain has been focusing on the implementation of the public blockchain in the IOT industry.

Ruff Chain combines the framework of IOT with the framework of blockchain, and extends the point-to-point network consensus mechanism in the virtual network world to the offline. That helps the implementation of the blockchain technology in the IOT world, at the same time promotes the upgrading of the industrial chain of traditional industry. Its real significance includes eliminating the defects of the traditional transactions such as being tampered or bribed; solving the problems of high costs of the central clearing and the difficulty of high technical pressure; greatly improving the security, reducing the operation cost, enhancing the work efficiency, and creating the new industry value greatly.

In the future world of the Internet of Things, the decentralization will be realized truly, and the real right transactions that are no longer be dependent on third-party platforms will also be realized completely. And all of these may be done by public blockchains such as Ruff Chain.

王先生是一名房地产销售员，他卖出的每一套房子都需要他的李经理在网上登记。李经理的女朋友艾米也是一名房产销售员。所以李经理经常把王某卖房的销售业绩当成艾米的销售业绩。王某向公司解释了问题，但公司需要王某证明“房子是王某卖的，不是艾米卖的”。这让王先生很沮丧。因为除了公司里的李经理，没有人能证明他卖掉了房子。此时，公司成立了微信群。包括王某、Amy 在内的卖房的人都可以及时在微信群里发销售信息，也可以在群里查询以前的销售记录。

这就是去中心化的区块链技术。

同样，公有区块链作为一种区块链，就像一个开放的微信群，记录了很多信息。微信群的参与者和作者不仅可以是你，还可以是你生活中遇到的每一个人。作为作家，您可以汇编其他人的记录。这个开放的微信群现在通常被称为去中心化区块链技术的公共区块链。

每个小组都是公开透明的。并且每个人都可以在群里编译信息，自由下载、查看和记录每一条记录；但是没有办法编辑之前发送成功的记录。通过这种方式，信息不能被篡改或贿赂，也可以保证数据的一致性。这种方法有助于降低风险，提高安全性，大大提高工作效率，降低运营成本。

世界上任何人都可以随时访问系统读取数据，发送可以确认交易的区块链并竞争记账。

在这个公开透明的群中，群主（即开发者）无权干涉群内任何人，因此完全实现了去中心化。而且加入群的要求也很低。只要有网络，你就可以参与到公有区块链中，选择隐藏或公开你的真实身份，通过公开确保自己的安全，检查所有记录等。

我们知道参与“群聊”很容易，但是设置“群聊”呢？

虽然很多人都说区块链是一项可以改变世界的技术，但通过杠杆改变世界的力量却不容小觑。建立群聊（即开发公链）涉及大量开发工作：如搭建测试网络、调整共识算法、优化节点端软件开发、UI和钱包开发等需要解决的逐个。只是对于数据结构的设计，对于结构的不断细化和迭代，还需要付出很大的努力。开发公有区块链最大的难点在于如何在技术上支持企业应用。它不仅需要分布式数据库的应用案例和后续实验，还要进行大量的测试，找出哪些临界点容易分叉，有多大的压力会产生拥塞以及成本攻防的模拟。这听起来很复杂。

公有链技术的发展不仅需要少数专业技术人员，还需要大量的基础工作、数据案例和实验验证，因此除了过硬的技术实力外，还需要更多的业务积累和时间验证。

迄今为止，能够胜任的“群聊”提供商，包括以太坊、Hyperledger、NEO、Qtum、Ruff Chain等，都具有相对成熟且被广泛认可的公链提供能力。

其中，Ruff Chain号称是公有链系统在物联网领域的主导力量，因为它实现了从构建物联网底层操作系统到业务端在物联网场景落地的目标。作为物联网领域区块链的有力推动者和改革先锋，Ruff Chain一直专注于公有链在物联网行业的落地。

Ruff Chain将物联网框架与区块链框架相结合，将虚拟网络世界中的点对点网络共识机制延伸至线下。这有助于区块链技术在物联网世界的落地，同时促进传统产业的产业链升级。其真正意义在于消除传统交易中的被篡改、贿赂等缺陷；解决集中清算成本高、技术压力大的问题；大大提高了安全性，降低了运营成本，提高了工作效率，极大地创造了新的行业价值。

在未来的物联网世界中，去中心化将真正实现，不再依赖第三方平台的物权交易也将彻底实现。而所有这些都可能由 Ruff Chain 等公链来完成。