Now I will talk about blockchain platform and the roles of blockchain. In terms of blockchain platform, we take three platforms into consideration: Bitcoin, Ethereum and Hyperledger Fabric. Obviously, Bitcoin is not suitable since Bitcoin does not offer support for complex smart contracts. On the other hand, Ethereum and Hyperledger Fabric has a built-in Turing complete language so it can achieve much more sophisticated smart contracts. While Ethereum is public and permissionless that everyone can access to information in any block, Hyperledger Fabric is a private and permissioned platform, which can protect private information of baby formula companies and other parties. Therefore, Hyperledger Fabric is proper for our team to deploy on.

A main role of blockchain is to be a platform of transaction, including processing trades, exchanging information, invoking functions and so on. Besides, blockchain is a perfect ledger to record and trace back any history because of its characteristics. Additionally, blockchain is used as a database for all kinds of public data storage, such as public keys of companies, delivery status, and product information. In terms of interactions between parties, blockchain plays a role of notifier and processor. For example, smart contracts can be used to update baby formula status. International laws can be coded into smart contracts for legality.

Now I will hand over to Bill Xie to talk about Architectural Diagram