Cleanchain

1. About blockchain

In this digital age, blockchain technology has the power to gather, filter and trace digital informations in order to create the right trust through a secure and decentralised net.

A blockchain is a distributed database: a digital register that publicly stores encoded informations on the internet. It is a very powerful and versatile tool, able to be adapted for different solutions in different environments and our goal is to improve transparency and efficiency of the food chain industry through its use.

2. Transparency, efficiency and more

Blockchain will be the driving factor of the ten-years plan proposed by the European Commission *From Farm 2 Fork* that will guide us through the transition towards a fair, healthy and respectful food system.

3. Italian models

In Italy we already have few entities that adopted this technology. For example in Campania *Flagchain* and *FLAG* have implemented a blockchain platform to enhance and promote the local fishing chain ecosystem. Meanwhile, last year in Sicily, the Region approved a law that regulate the use of blockchain to trace food farming products.

4. What about the others?

In France Carrefour began its project 4 years ago. Starting from the poultry industry, using a blockchain based system, the retailer linked all the counterparts working in the production chain of the Arvernia chicken, giving the consumer excellent transparency on its product.

5. What's the real deal?

We are certain that using a blockchain to implement a single utility is not worth the effort, especially in a well oiled machine as the food industry is. There's the need to couple this technology together with a vertical business solution to ensure efficiency and scalability.

Our idea is a distributed network platform as base system for the food chain industry, where everyone can add services as modules, tailored to the specific needs of the user.

6. Certifications and branding

Such a platform could be extended and used to create a brand too. Beneath a register symbol that represents a *Code of Conduct*, there would be gathered all the rules and regulations that ensure a clean and sustainable food production (together with all the european and national certifications already planned).

> *The result would be unprecedented: a decentralized, distributed certification mechanism synonymous of safety and quality.*

7. Free as in freedom

As computer scientists, it is important for us to address the copyright issue. This project, however it will take form, should be published with a free licence so that every pary involved could *share* and *adapt* the platform providing the community a better and more responsible service.