

## Cover letter

# The application of Blockchain in food supply chain management

### Research background

Blockchain has been a hot topic in recent years. More companies tend to use blockchain to address their company issues. A few blockchain based applications have been successfully implemented, such as bitcoin. Apart from the financial area, blockchain is found to be beneficial in other areas such as recycling, property management, voting system and supply chain management. Blockchain applications in supply chain is relatively new, however which is emerging.

In this research, I aim to investigate why and how companies choose blockchain over other innovations to improve food supply chain, how to implement blockchain and what are the benefits and challenges.

### Format/time scale

Face to face/telephone one to one interview lasting about 1 hour with key individuals involved in blockchain and food supply chain management.

### Project contact and interviewer

Miss Chen Zhang, MSc (Southampton, UK), BSc (Plymouth, UK)  
PhD researcher  
Southampton Business School  
University of Southampton  
Email: cz2g16@soton.ac.uk  
Tel: +44 7456662591

Miss Chen Zhang is a PhD researcher specializing in blockchain applications in food supply chain management at the University of Southampton, UK. Chen obtained her Master in Supply Chain Management and logistics from University of Southampton in 2018.

### Deliverable

I would like to produce and share with you a case report and my final thesis.

### Sample interview questions:

- What is your understanding of blockchain?
- How does your company link blockchain with supply chain management? Please specify by examples.
- Which department leads blockchain projects internally? What other departments/functions have been involved and what role do they assume?
- How do your stakeholders (customers and suppliers) accept blockchain? How does your company help them during blockchain implementation?

## **Interview protocol**

### **Interview protocol for technology support team**

#### **Blockchain related questions**

1. How does your company understand blockchain?
2. How many blockchain projects does your company have on progress so far? How are they doing so far?
3. How the blockchain projects have been designed for food supply chain? How does it work? Please explain in details.
4. What do you see blockchain in the future in food supply chain?

#### **Food supply chain related questions**

1. What motivates your clients adopting blockchain? What are your clients expecting from using blockchain?
2. Do you think blockchain is the right and only “remedy” for your clients’ companies?
3. What do you think of your clients adopting blockchain? Do you think they adopt blockchain to fix the issues, or to follow the blockchain “hype”?
4. Do you think your clients have sufficient level of understanding of blockchain?

#### **Innovation related questions**

1. What other innovations do you think that can replace blockchain to fix the company issues?
2. Compare to the other innovations, what do you think of the benefits and challenges of blockchain? Are there any benefits or challenges happening unexpected?

## **Interview protocol for focal company**

#### **Food supply chain related questions**

1. What are the issues in the company’s supply chain? Can you explain and give examples please?
2. Are the issues mentioned above exist in general in related industry, or just in your company?
3. What are the possible reasons behind the issues? How the issues can be solved? What strategies need to be adopted to solve the issues?

#### **Blockchain related questions**

1. How does your company understand blockchain? What is your company blockchain strategy? How do you position your company’s blockchain strategy when compared with others?
2. What motivated you to adopt the blockchain, risk mitigation-orientation or opportunity-orientation? Could you specify with examples?
3. Which department leads the projects internally? What other departments/functions have been involved and what role do they assume? Please specify with real examples.
4. What are the challenges when your company implements blockchain projects? How do you solve them? Please specify by examples.
5. What do you see of blockchain in the future in food supply chain?

### **Innovation related questions**

1. What other innovations your company has adopted or has considered to adopt? What are the issues can be fixed by the innovations? Please specify with examples.
2. What kind of innovations are still in use? And what innovations are replaced by blockchain?
3. Compare the innovations and blockchain, what are the key benefits and challenges of blockchain? What makes your company keep using blockchain?

### **Interview protocol for upstream suppliers**

#### **Food supply chain related questions**

1. How do you think of your current food supply chain? Explain both good aspects and challenges. Give examples and explain in details.
2. How do you think that innovations may help to improve food supply chain?

#### **Blockchain related questions**

1. How does your company understand blockchain? How was the process of adopting blockchain?
2. How do you think blockchain can change current food supply chain? Explain in details.
3. Do you think blockchain can benefit your company? In which way? Explain in details.
4. Have you received any help of blockchain adoption from focal companies?
5. How do you think of blockchain in the future in food supply chain?

### **Interview protocol for downstream customers**

#### **Food supply chain related questions**

1. Do you have any worries about current food supply chain? Explain in details.
2. How do you think that innovations may help to improve food supply chain?
3. How do you think of food supply chain in the future?

#### **Blockchain related questions**

1. How do you understand blockchain? How did you hear blockchain?
2. What do you think that blockchain can change current food supply chain? Explain in details. Do you think blockchain can well solve your worries that mentioned above?
3. How do you think of blockchain in the future in food supply chain?