



## COMPANY OVERVIEW

### UrbanChain Ltd

Founded by Dr Somayeh Taheri

Researcher in Environment, Education and Development,  
Faculty of Humanities

Funding Received: £5,000 UMIP Innovation Optimiser

[www.theunitel.com](http://www.theunitel.com) | [contact@theunitel.com](mailto:contact@theunitel.com)

**Three words to describe your journey so far...** Innovative, Stimulating, Challenging!



**Tell us a little bit about yourself, the Enterprise and your journey so far.** My name is Somayeh and I got my PhD in Planning & Data Science in 2015 from The University of Manchester. I had an interest in blockchain technology, so following the completion of my PhD and after some research and work on this topic, I found a huge potential of this technology in urban service provision considering devolution deals and smart cities movement happening in the UK. As a result, I established UrbanChain Ltd to specifically work on the use of blockchain technology in different urban service provisions such as energy sector, integrated healthcare services, multimodal transport, VAT claims, and logistics. In the energy sector we are working with Ofgem in the Innovation Link programme to link the wholesale energy market to households' smart meters. Households will be able to switch to the best deal in real time and our target is to halve households' annual energy bills. We have the interests of Ofgem, DWP, BEIS, LCR 4.0, UMIP, Innovate UK, University of Manchester Business Engagement Team, and Carbon Co-op for the project.

**How was your idea conceived?** The idea came from my parallel research on planning policies and the devolution deals in England, and the nature of blockchain technology, peer-to-peer networks and distributed networks. As we are devolving the power from Westminster to regions, we need a distributed system for urban services. Blockchain technology offers a huge opportunity to eliminate middlemen in urban service provision, automate some processes, and provide security, transparency and trust to the urban systems.

**What is your company mission?** The UrbanChain mission is:

- 1) To translate and transform the existing developments of blockchain technology from banking systems (Fintech) to different sectors of urban service provision
- 2) To redesign the existing markets in the UK and beyond to eliminate middlemen from the system of urban service
- 3) To minimise service costs for end users and improve their quality of life

- 4) To raise service providers, regulators and the public's knowledge of the technology and potential applications

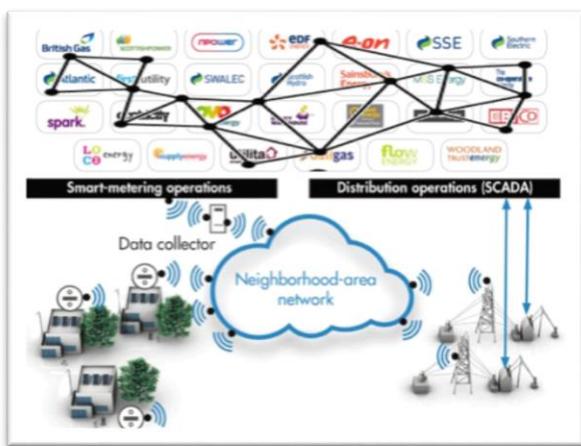
Our vision is:

- 1) To reduce the cost of using urban services such as energy, transportation and health for UK and global users
- 2) To improve trust and transparency between regulators, service providers and consumers by providing repositories and actors' accessibility to data
- 3) To increase security and privacy of end users' identity in digital environment by minimising the probability of fraud via making the blockchain technology as an immutable repository of information

**At what point, did you realise that the idea had commercial potential?** My interest in business initiated from the dialogue I had with traders and businessmen about the blockchain technology. I presented my ideas about how to use this technology in Enterprise Resource Planning (ERP). The

concerns of traders and businessmen were how to optimise their supply chain, operations and reporting. I suggested a blockchain platform where all people from supply and demand side, as well as managerial roles could join. As soon as a new demand comes to the platform, managers and potentials suppliers will get a notice of the demand. Then, when a supplier accepts to provide the service/product, all actions will be facilitated with smart contracts.

I talked to consumers and regulators from different backgrounds, and I constantly followed business news about the issues in the energy sector. I presented the idea to people and measured their interest in the service. I also measured the value of the market and designed a business model relating to the principles of a trusted and transparent market based on blockchain technology.



**What approaches did you first employ to develop the idea?** I believe in a bottom up approach to the issues. I started with the value proposition model for the energy sector. I looked at what energy consumers wanted from the market, what their needs were, and how they felt about the current issues such as high energy bills, fuel poverty and the types of services they got from the energy companies. I also looked at what other solutions had been proposed in the market and used by consumers such as price comparative websites and smart meters. I then defined and envisaged the features, benefits and experience for the consumers if they were to use the blockchain platform. This gave me a very strong ground to work with from the social point of view. From the technical point of view, I started looking at the principles of blockchain technology, the current examples of its implication, and learning from others. I then simultaneously worked on both sides to design and develop my product.

**How did you get involved with the Innovation Optimiser?** I heard about the Innovation Optimiser programme from

Martin Henery in the Manchester Enterprise Centre who mentioned its success in attracting innovative researchers. When I heard about the programme and the support you could get, I was sure I needed to apply for a place. I was accepted on to the Roadmap programme and attended all five sessions. I then applied for the Innovation Optimiser fund. The fund is a great help for any entrepreneur. It gives you motivation to do what you are passionate about.

**How did this engagement help you?** The Roadmap sessions were very useful in helping me understand what business means, how it works and what to expect in your business adventure. Two important points I learned were; the Business Model Canvas and the Lean Startup process. I drafted more than 10 business models to design the right one. The Lean Startup process showed me how to work in the business environment and measure my success. The funding support has given me confidence and motivation to take things forward. I can also get support in finding new markets for the product I am developing. These are very important issues when you play in a high-tech market.

**How has being involved with Entrepreneurial activity benefitted you?** Now, I am not only a researcher, but also an entrepreneur. I can see things and issues from two angles and this has boosted my confidence. In Humanities research, there is not that much funding around, but I have always been interested in seeing my research make an impact on real people to make their lives better. Since I set up UrbanChain Ltd, I have learnt how to make money outside academia, and how to use research to solve issues and have positive impacts on people's lives.

**What future support are you looking for to progress your business?** We are planning to set up the IT infrastructure and design our Minimum Viable Product (MVP). We are identifying possible neighbourhoods and communities with our industry partner, to design and implement the blockchain platform for them. With the platform in place, the selected community will benefit from a lower rate of energy, and will be able to switch to the best deal in real time. We are also looking for venture funds to develop our system infrastructure. This is our focus at the moment.

**Would you encourage other staff, academics and research students to seek support for their ideas through the Innovation Optimiser?** Yes! If you have an innovative idea, the Roadmap sessions will help you develop your idea into a business case and give you opportunities to grow.