Intelligence Mobile Blockchain-based fraudulent and risky behaviour prediction for personal financial applications Summary Report.

So far the project is running smoothly, and achieve several targets as follows:

Impact and Funding has been awarded:

£90k, 1 ESRC PhD scholarship on SmartApp-based Risk Analysis and Financial Risk Management.

£90k, 1 ESRC PhD scholarship on Cyber Risk, Privacy, Reputation and Financial Optimisation (but the candidate is not selected by ESRC).

£10k, NG donation grant on Cyber Security Risk Management Business Case Studies

£120k, CSC PHD Scholarship on Machine learning algorithms for financial risk management.

£260,000, Developing an innovative, cloud-based risk management framework, funded by Seven Investment Management (7IM) Ltd

£174,000, funded by Huawei Ltd to enhance the resilience of Huawei's distributed network infrastructure

Dr. Ma has been appointed as a leader of the Risk Management Research and Thought Leadership Committee, Institute of Faculty of Actuary.

Dr. Ma has been the chair for the second EU-China Big data and FinTech Symposium and given one of the keynote talks. **Impact Statistics:** Over **100 guests** (including **20+** CEO/CTO/VP/government officials) from **100+** academic/industry/government organisations attended the symposium.

Dr. Ma has been awarded as one of the Winners of Lenovo Supercomputing AI Innovation Challenge, I was sponsored to present on the premier Supercomputing conference for my research on AI aid Financial Risk Analysis in Nov. SC17.

Journal publications:

T. Ma, Cyber Data Breach What Cost Reputation, The Journal of ALARM, Summary ISSUE1, 2017.

T.Ma., and F.McGroarty, Social Machines: How recent technological advances have aided financialization, Journal of Information Technology (**ISI impact factor: 4.775, ABS 3***)

Yang, Y., Lessmann, S., Sung, M., **Ma, T**., and Johnson, J.E.V, Can deep learning predict risky retail investors? A case study in financial risk behavior forecasting, European Journal of Operational Research 2018 (**SI impact factor: 2.679, ABS 4*,**under review).

Additional proposal has been submitted and prepared:

An ESRC IAA proposal on Big data and AI added Financial Risk Management proposal has been submitted.

An ESRC SCDTP Proposal on Enhanced responsible financial risk management through cooperative deep learning and blockchain techniques has been submitted.

A GCRF Proposal on Smart technology related risk taking and decision making behaviour Research Challenge EOI/Proposal has been submitted (recently has been sponsored to attend the GCRF Mathematical Science Workshop in Edinburgh for further proposal development)

In addition, I have established links with IFoA risk management committee regarding applying AI and Blockchian enabled insurTech. I have also established links with CMG Ltd, a leading financial trading firm, which wanted to develop blockchain based transaction management system for possible collaboration/partnership and funded projects.