

Exploring How Smart Contracts Will Impact on the Role of Construction Professionals

Jim Mason and Hollie Escott, Quantity Surveyor (United Kingdom)

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SUMMARY

Smart contracts and blockchain technology are at the forefront of technological advancement in the financial services industry. The basic premise involves the creation of an automated contract capable of satisfying common conditions and reducing the need for intermediaries in the process. The blockchain is a means by which the transactions can be recorded on a distributed ledger.

The enquiry carried out in this paper discusses whether these technologies are capable of being transposed into the United Kingdom's (UK) construction industry. Technological progression is much slower in construction than in other industries as evidenced by the slow take up of UK government-backed initiatives such as the introduction of Building Information Modelling (BIM) and collaborative working agendas.

A survey questionnaire was designed and distributed to investigate attitudes towards technology and collaborative working. A variety of professions across various organisations including clients, main contractors, consultants and law firms returned 117 responses mainly from senior management or commercial staff. There were divisions between participants believing technology and innovation are important, exciting and the future and those who believe automation is an impossible task in such a complex industry as construction.

Key findings reveal a fear of the unknown and the overwhelming doubt from participants that full automation is possible. There was an acknowledgement that the technology could benefit simple supply-type contracts and that it would be beneficial to reduce the amount of paperwork involved in contract administration. There is a view throughout the industry that disputes cannot be solved with a computer. Opinions were further split along the lines of whether human interaction and relationships are key and technology would detract from or enhance the position.