Real Estate in Blockchain

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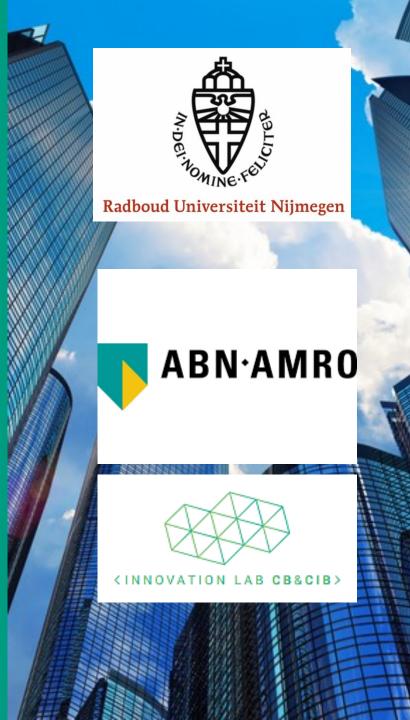
lector Blockchain and leading lector Saxion Blockchain Institute

Schools of Finance & Accouting, Creative Technology and School of Governance, Law and Urban Development (7.600 students)

Michel Vonk MSc

Innovation Manager, Innovation Lab CB& CIB ABN AMRO Bank





Research lines: Blockchain for Disruption Blockchain for Acceleration Blockchain for Finance Blockchain for Good

Lectoraat Blockchain & Saxion Blockchain Institute

Schools of Finance & Accouting, Creative Technology and School of Governance, Law and Urban Development





Veuger, J. (2017) A viable real estate economy with disruption and blockchain.







Veuger, J. (2018), *Trust in a viable real estate economy* with disruption and blockchain. Journal Facilities, subject area: Property Management & Build Environment. The fulltext of this document has been downloaded 1.950 times since 2018.

*c*emerald *insight*

blockchain

Author(s)

Abstract:

JOURNALS & BOOKS CASE STUDIES OPEN ACCESS

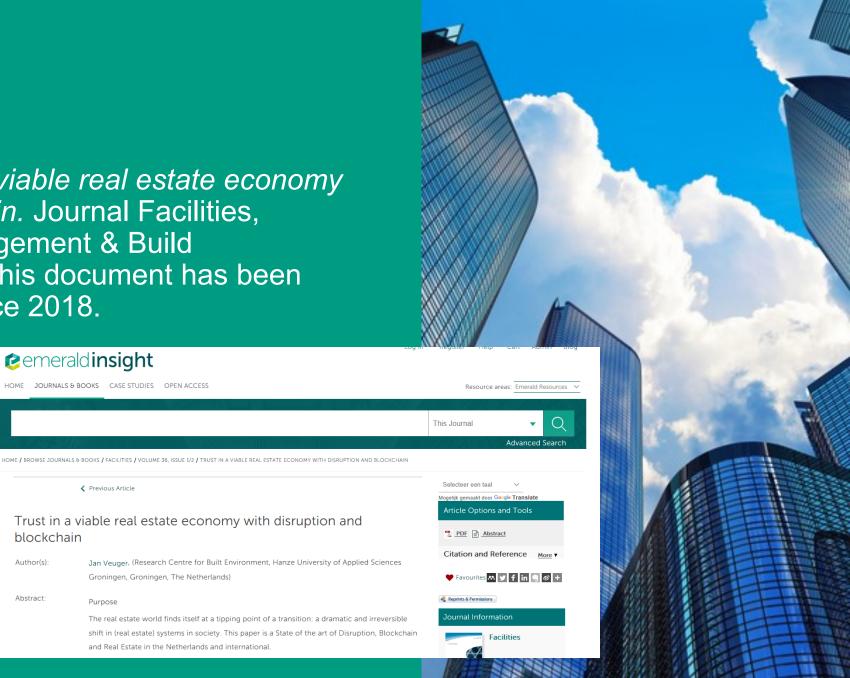
Previous Article

Purpose

Trust in a viable real estate economy with disruption and

Groningen, Groningen, The Netherlands)

and Real Estate in the Netherlands and international





Veuger, J. (2018a), *A real game changer in real estate: blockchain.* American Real Estate Society (ARES)2018. 34th ARES Annual Meeting April 10 - 14, 2018







Veuger, J. (2018a), *A real game changer in real estate: blockchain.* American Real Estate Society (ARES)2018. 34th ARES Annual Meeting April 10 - 14, 2018



2018 American Real Estate Society (ARES), 2018 ARES Manuscript Prize Competition in category Property/Assetmanagement.





Veuger, J. and D. Koeken (2018), *Business Case qklinker: a Digital Housing Corporation in the Netherlands*. American Real Estate Society (ARES).

Veuger, J. (2019), *Digitalization Real Estate on American Real Estate Society 2018.* Journal of Business and Economics (JBE).

Veuger, J. and K. Chafia (2019), *Digitalization of services within the housing corporation sector: state of affairs, statements and opportunities for the future.* Journal Facilities, subject area: Property Management & Build Environment.

Veuger, J. and A. Lubbers (2019), *A Roadmap for data-driven real estate management in the municipality of Groningen*. Journal of Management





Upcomming May 2019

Blockchain could have a huge impact on the value chain in our society. Examples are efficiency, transparency, ownership, value (transfer), automation, and service provision. When we want to understand the world of blockchain, we need to understand the innovation of the currency Bitcoin in 2009 that is built on underlying technology called Blockchain. Bitcoin is a combination of four individual elements: cryptography, a peer-to-peer network, an open source protocol, and a shared ledger. This makes it a phenomenon that people are enthusiastic about. The internet already makes it possible to transfer information quickly and cheaply without paper and without intermediaries being involved. Blockchain gives the same benefits for transferring values. Internet is used to transfer words and images, blockchain for transactions. Blockchain is a combination of two elements: a shared and distributed ledger with synchronized data spread over multiple sites and countries and/or institutions and a cryptography: digital token with a monetary value. This book provides an overview of the latest developments on blockchain technology and its applications with the following themes and with the assistance of experts from Austria, Brazil, China, Croatia, Georgia, Germany, Italy, Netherlands, Slovenia, Spain, and Switzerland. A guestion that remains is to continue to look at existing markets or to disruptive innovation newcomers in the blockchain market. The question is whether blockchain is only a technological disruption or a real game changer and whether the entire value chain of the market is going to embrace this. Confidence in blockchain is therefore a precondition for guiding that disruption where (new) companies use new technology to offer cheaper and superior alternatives in the market. But the big question is how quickly blockchain will develop, as well as all of its applications. Stephen Hawking writes in his book Brief Answers to the Big Questions about how we shape the future, "In the same way that the internet, our mobile phones, medical imaging, satellite navigation and social network would have been incomprehensible to the society of only a few generations ago, our future world beginning to conceive information on its own will not take us there, but intelligent and creative use will" (Hawking 2018: 207).

Blockchain Technology and Applications

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Veuger





COMPUTER SCIENCE, TECHNOLOGY AND APPLICATIONS

Blockchain Technology and Applications





NOVA

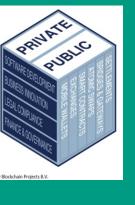


Research proposal, focus on:

- (1) the digitization of processes in housing corporations in the Netherlands in view of the developments of qlinker and ABN AMRO in this area;
- (2) organizations and sutaibility to implement new information systems as Blockchain by Kees Tesselhof, PhD candidate Open University Heerlen & Saxion;
- (3) a new PhD research Blockchain & Ethics by Chhay Lin Lim will start;
- (4) continue working on the Blockchain database of research, products and experts built on a Blockchain (FIBREE); and
- (5) Blockchain Projects.







Nederland bakermat van nieuw internationaal blockchainnetwerk voor vastgoed



Rabobank, Bouwinvest, Stekademy en DLA Piper hebben zich als eerste Nederlandse bedrijven aangesloten bij de Foundation for international Blockchain and Real Estate Expertise (FIRBEE). Het internationale platform is vorig jaar juli vanuit Nederland van start gegaan en in eerste instantie hebben zeven Europese landen waaronder Nederland zich bij dit initiatief geschaard. 11 januari 2019 om 10:48 3 minuten leestiid

Rogier Hentenaar

Jo Bronckers en Jan Veuger die beiden al enkele jaren actief zijn op het terrein van blockchain, hebben het initiatief tot de oprichting genomen. "Met FIBREE willen we



Research proposal, focus on:

(1) the digitization of processes in housing corporations in the Netherlands in view of the developments of qlinker and ABN AMRO in this area:

What methodology is most useful to develop smart contracts for housing associations and real estate investors?

What blockchain technology, and in particular, what smart contract technology is most useful?

How and when are smart contracts addressed as legally binding contracts?









Capacity consortium to be deployed



Name	Discipline & Role	Capacity	
Students Radboud en Saxion	researchers	Minimal 20 students pro year	
Erwin van der Krabben, Radboud	Professor Radboud University	0,1 fte	
Dr. Jan Veuger	Professor Blockchain Saxion & leading professor Saxion Blockchain Insititute	0,4 fte	
Edwin van den Berg MSc	Lecturer/Researcher on Blockchain Saxion Blockchain Instiitute	0,1 fte	
Dr. Timber Haaker	Professor Businessmodels Saxion	ntb	
Dr. Joris Heuven	Professor Fintech, Saxion Blockchain Institute	ntb	
Arthur Jansen MSc	Teacher FinTech & Blockchain, Saxion Blockchain Institute	0,1 fte	
Ronald Kramer MSc	Researcher on Blockchain and professional partner Saxion Blockchain Insititute	0,2 fte	
Chhay Lin Lim MSc	Lecturer/Researcher on Blockchain; speciality blockchain and ethics; PhD Candidate	0,5 fte during 48 months	
Kees Tesselhof MSC	PhD Candidate, Saxion Blockchain Institute, Saxion International Business School	0,5 fte during 48 months	
Ingrid Sinnema or colleque	Secretary and event management Saxion Blockchain Insititute	Additional, 0,5 fte for 24 months (see 3.2.1.)	
Michel Vonk MSc	(Blockchain) Innovation Manager ABN AMRO	1,0 fte	
Martijn Witvoet	(Blockchain) Innovation Manager ABN AMRO	0,4 fte	
Ernst van der Hoeven MSc	Blockchain development engineer ABN AMRO	1,0 fte	
Jasper Wevers	Managing Consultant Housing Corporations ABN AMRO	0,2 fte	
Danique Sterenborg Msc.	Project Manager at Blockchain Projects BV (Deventer office)	0,5 fte	
Dr. Ing. Fabian Schuh	CTO at Blockchain Projects BV; blockchain architecture Partner Friedrich-Alexander-Universität Erlangen-Nürnberg	Ntb	
Dr. Stefan Schießl	Senior Software Engineer at Blockchain Projects BV Partner Friedrich-Alexander-Universität Erlangen-Nürnberg	Ntb	
Jouke Hartman	Blockchain Consultant at Blockchain Projects BV (Deventer office) 0,5 fte	

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Professor Blockchain | Leading professor Saxion Institute for Blockchain

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