



Online-Appendix zu

„Blockchain Technology Adoption among Consumers: An Analysis of Usage Intention and Application Usefulness”

Dennis Henning

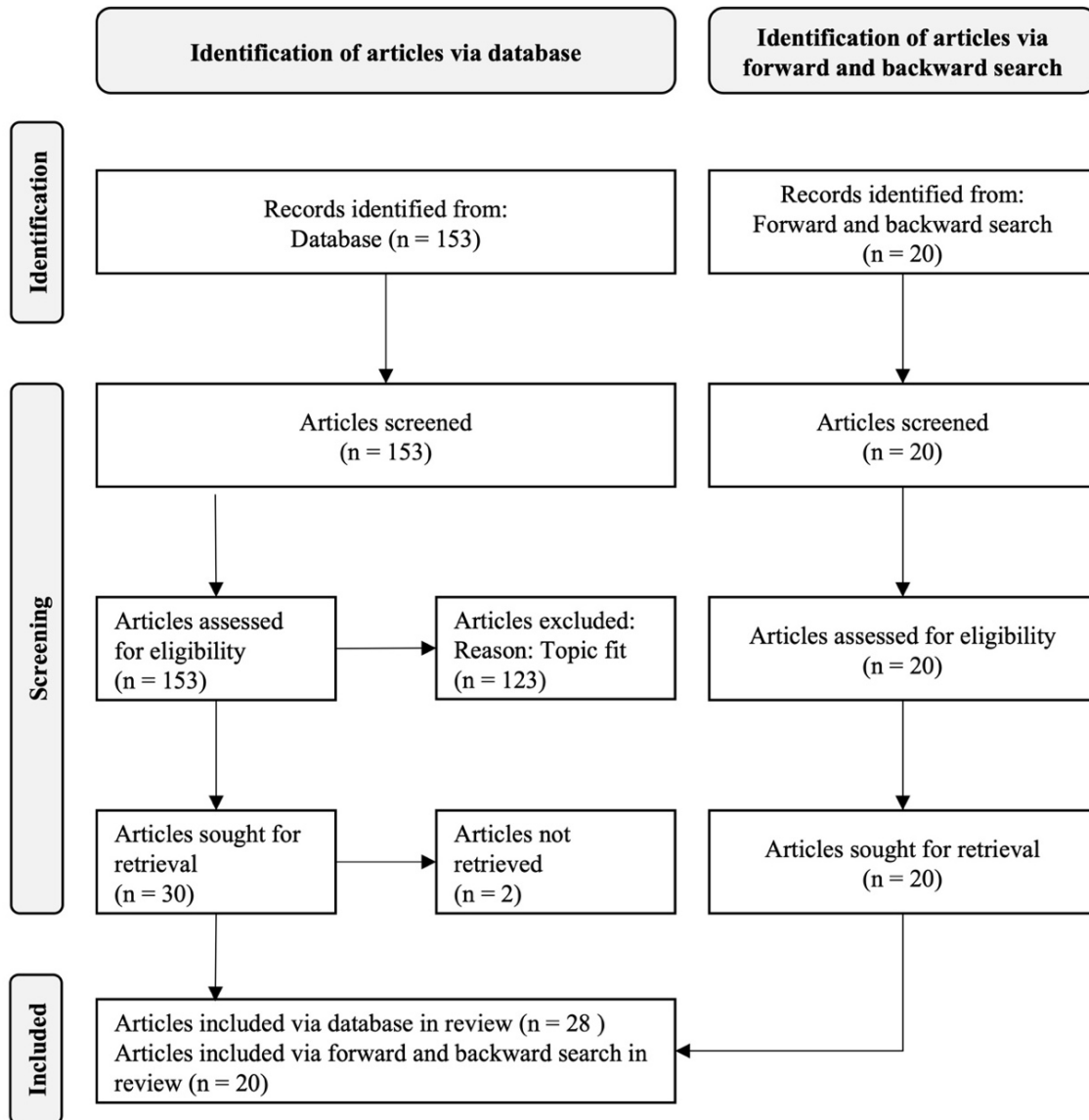
Technische Universität München

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Appendix

Appendix 1:

Literature review methodology



Note: This design was adapted from the PRISMA flow diagram by Page et al. (2021).

Appendix 2:

Frequency of literature on specific blockchain applications

Specific blockchain application	Frequency of articles covering or relating to the specific blockchain application	
	n	%
Self-sovereign identity	9	19%
Tokenization of assets	16	33%
Fractional ownership	4	8%
Micropayments	7	15%
Smart contracts	31	65%
Anonymous transactions	11	23%

Note: N = 48.

Appendix 3:

Constructs and items

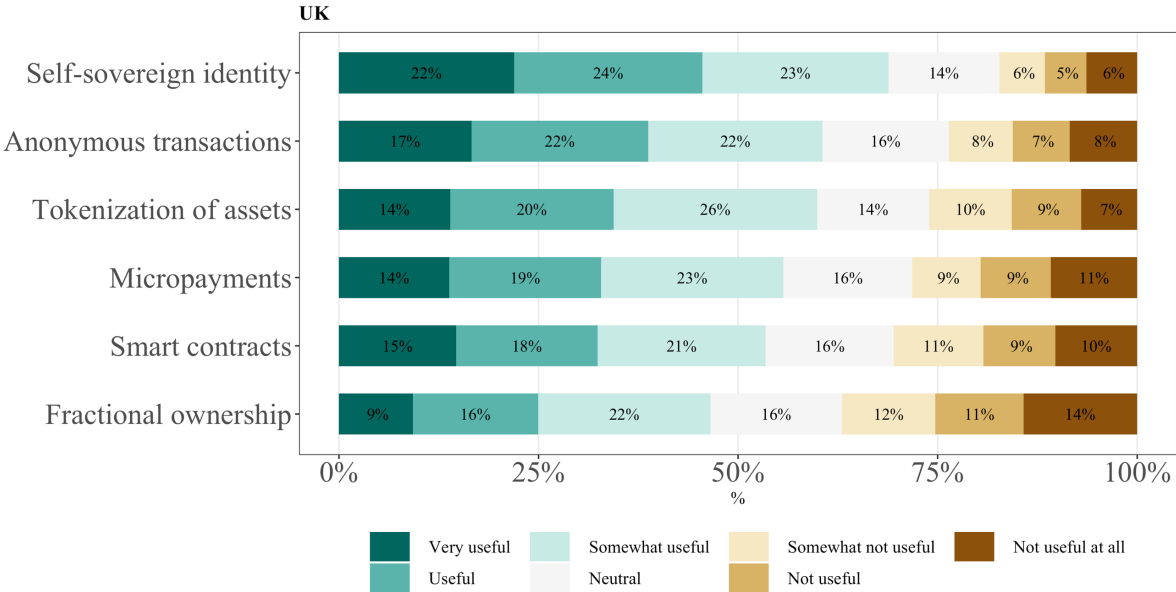
Construct	Item		Source
Optimism	OPT1	New technology gives me more freedom of mobility.	Parasuraman, 2000
	OPT2	New technology makes me more productive.	
Innovativeness	INN1	Other people come to me for advice on new technologies.	Agarwal & Prasad, 1998; Parasuraman, 2000
	INN2	In general, I am among the first in my circle of friends to acquire new technology when it appears.	
	INN3	I keep up with the latest technological developments in my areas of interest.	
Discomfort	DIS1	I can usually figure out new high-tech products and services without help from others.	Parasuraman, 2000
	DIS2	Sometimes, I think that technology systems are not designed for use by ordinary people.	
Insecurity	INS1	People are too dependent on technology to do things for them.	Parasuraman, 2000
	INS2	Too much technology distracts people to a point that is harmful.	
	INS3	I don't feel comfortable doing business if the other party is only available online.	
Social influence	SOC1	Would your circle of friends and acquaintances believe that you should use Blockchain Technology?	Venkatesh et al., 2003
Disposition to privacy	DTP1	Compared to others, I am more sensitive about the way other people or organizations handle my personal information.	Y. Li, 2014
	DTP2	Compared to others, I see more importance in keeping personal information private.	
	DTP3	Compared to others, I am less concerned about potential threats to my personal privacy.	
Trust	TIN1	Blockchain Technology provides reliable information.	Hawlitschek et al., 2016; Lu et al., 2010
	TIN2	Blockchain Technology is honest in dealing with my private data.	
	TIN3	Blockchain Technology adheres to rules and principles.	
	TBE1	Blockchain Technology acts in the interests of its users.	
	TBE2	In general, Blockchain Technology is not malicious.	
	TBE3	Blockchain Technology has no bad intentions towards its users.	
	TAB1	Blockchain Technology serves its purpose.	
	TAB2	Blockchain Technology operates flawlessly.	
	TAB3	Blockchain Technology is capable to offer me a good service.	
Perceived risk	RIS1	In general, it seems risky to use Blockchain Technology.	Koohikamali et al., 2015
	RIS2	I would feel unsafe using Blockchain Technology.	
Perceived benefit for society	BSO1	Using Blockchain Technology has many advantages for society.	Koohikamali et al., 2015
	BSO2	Using Blockchain Technology has many disadvantages for society.	

Appendix 3 continued

Construct	Item		Source
Potential of disruption	PDI1	Your Feeling: Blockchain Technology has great potential to disrupt the business world.	Aydiner, 2021; Frizzo-
	PDI2	Your Feeling: Blockchain Technology has great potential to disrupt everyday life.	Barker et al., 2020
	PDI3	Your Feeling: Blockchain Technology has great potential to be as disruptive as the introduction of the internet.	
	PDI4	Your Feeling: Blockchain Technology has no disruptive potential at all.	
Usage intention	UIN1	Given the chance, I would use Blockchain Technology applications.	Venkatesh et al., 2003;
	UIN2	Given the chance, it is very likely that I would use Blockchain Technology.	Warshaw & Davis, 1985
Experience	EXP1	Currently, my contact with blockchain technology (or cryptocurrency) in my professional (job, uni, school) life is...	Blut et al., 2022;
	EXP2	Currently, my contact with blockchain technology (or cryptocurrency) in my personal life is...	Venkatesh et al., 2003
	EXP3	How would you rate your knowledge of Blockchain Technology?	
Possession of cryptocurrency	POC1	Are you currently, or have you ever been, in possession of any cryptocurrency? (e.g., Bitcoin, Ethereum or others)	Steinmetz et al., 2021; Toufaily et al., 2021
Application usefulness (Tokenization of assets)	USF1	How useful do you find this possibility?	Venkatesh et al., 2003
Application usefulness (Fractional ownership)	USF2	How useful do you find this possibility?	Venkatesh et al., 2003
Application usefulness (Self-sovereign identity)	USF3	How useful do you find this possibility?	Venkatesh et al., 2003
Application usefulness (Smart contracts)	USF4	How useful do you find this possibility?	Venkatesh et al., 2003
Application usefulness (Micropayments)	USF5	How useful do you find this possibility?	Venkatesh et al., 2003
Application usefulness (Anonymous transactions)	USF6	How useful do you find this possibility?	Venkatesh et al., 2003
Perceived usefulness	USF1-6	How useful do you find this possibility?	c.f. Performance Expectancy Venkatesh et al., 2003

Appendix 4:

British consumers' usefulness assessment of specific blockchain applications



Note: N = 898.

References

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, n71. <https://doi.org/10.1136/bmj.n71>