Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-</u> <u>BK@tudelft.nl</u>), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information		
Name	Stella Papathanasiou	
Student number	5632854	

Studio			
Name / Theme	MBE Graduation Laboratory / Sustainability transitions and		
	the transformation of (port) cities		
Main mentor	Dr. Daniel M. Hall	Design & Construction	
		Management	
Second mentor	Dr. Ranjith Soman	Civil Engineering & Geosciences	
Argumentation of choice of the studio	Sustainable transitions and more specifically digitalization has the potential to transform traditional practices in the AEC industry		

Graduation project				
Title of the graduation project	Project management in Decentralized Autonomous Organizations (DAOs)			
Goal				
Location:		Global, Metaverse		
The posed problem,		Emergence of Web 3.0 technologies		
research questions and		Decentralized Autonomous Organizations (DAOs), blockchain-based organizations that may operate independently without a centralized authority		
design assignment in which these result.		research on management and governance frameworks needed for collaborative and distributed architectural design		

The emergence of Web 3.0 technologies, specifically blockchain, holds the potential to completely transform conventional architectural design methodologies. The creation of Decentralized Autonomous Organizations (DAOs), blockchain-based organizations that may operate independently without a centralized authority, is one fascinating development in this field. However, there is still a large body of unaddressed research on management and governance frameworks needed for collaborative and distributed architectural design

Process Method description

The study is a qualitative, extended single case study research with mixed methods consisting of literature review, ethnographic observation and semi-structured interviews

Literature and general practical references

The literature includes research on DAOs, blockchain and leadership. At the same time, the case study provides a plethora of data to answer the research question.

Reflection

Management in the Built Environment and more specifically the field of Design and Construction Management is now undergoing major transformations through digitalization. New technologies can provide opportunities for new ways of practice in the ACE industry and DAOs could be ne example of it.

The relevance of the study is not only scientific, as it has the possibility to offer a comprehensive understanding of the operational dynamics of blockchain in business models, the complexities of project management in a DAO, but also societal, as it presents a potential transformation in organizational structures that could extend beyond the ACE industry to influence broader societal discussions on corporate governance.