

Cryptocurrencies and Service Ecosystem Transformation

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Purpose – In 2008, Satoshi Nakamoto developed the cryptocurrency Bitcoin in response to the global financial crisis. Today, the Bitcoin market alone is worth \$70 billion dollars, and cryptocurrencies represent a prime example for how information technologies (IT) transform service ecosystems like banking. However, despite the emerging technological advancements associate with cryptocurrencies, existing knowledge pertaining to its transformative impact on service ecosystems is very limited. Specifically, no existing work to date has analyzed how the role of actors, value propositions and value cocreating processes are transformed. Here, we address this gap in knowledge.

Approach – We conducted an in-depth ethnography of Agnes Water in Queensland, Australia, which established itself as the first ‘crypto town’ in Australia. The cryptocurrency initiative in Agnes Water involved the complex integration of dedicated cryptocurrency payment platforms, external infrastructure providers, as well as the local business communities to transform the value proposition associated with tourism services in the Southern Great Barrier Reef region of Australia. We analyse the impact of cryptocurrencies in Agnes Water by adopting a service ecosystem perspective on macro (i.e., state government), meso (i.e., local businesses), and micro (i.e., customer) levels of analysis, and inductively build theory to identify and reveal the complex transformative processes associated with cryptocurrencies.

Findings – Our present work empirically maps the transformative journey of the service ecosystem represented by Agnes Water for the actors, resources and processes involved. We empirically identify four archetypical pathways towards a new crypto value proposition development, and explain how Agnes Water’s community engaged in market shaping by developing a crypto-tourism niche-market. In addition, we also show that value-in-use in cryptocurrency contexts is impacted by customer-learning and introduce ‘value-in-trial’ as a novel conceptualization that helps understand interactions in emerging decentralized cryptocurrency systems.

Limitations – While our work addresses substantial gaps in knowledge within the Service Science literature related to digital transformation and cryptocurrencies, generalizability is limited to the unique context and case of Agnes Water, QLD, Australia.

Practical implications – This work provides guidelines for regulators, government agencies, as well as organisations aiming to implement and benefit from, cryptocurrencies in financial service ecosystems. In addition, this study demonstrates the transformative opportunities cryptocurrencies can bring.

Originality – Understanding how digital technologies transform service businesses more generally, and financial services more specifically, is an ongoing research priority for Service Science. In an effort to gain insight to this problem, we present, to the best of our knowledge, the first in-depth ethnographic study investigating the transformative impact of cryptocurrencies on an entire service ecosystem. Our work provides important theoretical and empirical contributions by bridging the emerging discourse associated with cryptocurrencies, SD logic, and Service Science, thus explaining how service ecosystems are transformed by technology.

Key words – Bitcoin, cryptocurrencies, digital transformation, service ecosystem

Paper type – Research paper

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