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**Get Tokenized... The Specificity of Personal Tokens
in the Context of Tokenization and Axiological Categorization**

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Abstract

One of the types of services offered by fintech is tokenization, with personal tokenization being a special category – arousing a reflection on the values to which it refers. The purpose of the study is to define the specificity of personal tokens as one of token types and to present the axiological context to which personal tokens refer. Two research questions were formulated: (1) What is it that distinguishes personal tokens from other types of tokens?, (2) What values did the users of the personal token platform refer to when creating their own token? In order to better understand the functioning of personal tokens as an innovative and competitive solution with regard to traditional financial services, data from the first personal token platform (personaltokens.io) in Poland were analysed – the project's objectives, investment, execution form and value system were reconstructed. A case study was used as a qualitative test method; the data under analysis was collected from the personaltoken.io platform. The test methods used are data analysis and humanistic interpretation based on an explanatory procedure used in humanities, enabling the reconstruction of the axiological context behind human driving factors. Particular criteria have been selected to determine the specificity of personal tokens from other types of tokens. Research findings lead to the following conclusions: (1) there are two ways of personalisation: individual and community; (2) users assume two types of recipient/purchaser of the personal token – “mine” and “foreign”; (3) two spheres of emphasis can be distinguished – the private and professional ones.

Keywords: personal tokens, fintech, values, axiology.

JEL Classification: G10, Z13

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1. Introduction

Tokens are no new thing. In the real world, they are used as substitute for money, e.g. in casinos or lotteries. In the virtual world, tokens are mainly used in computer games. Tokens as financial innovations, called cryptoassets, that emerged alongside the blockchain technology³ (or the more broadly applied concept of “distributed ledger technology” – DLT). At present, numerous analyses are being carried out into the ever emerging new types of digital tokens and the process of tokenization as the procedure for their creation (or issuance) in the context of the application scope, safety and the regulatory function. Attempts to define and categorise tokens have been made, among other institutions, by ECB, BIS, ESMA, OECD.

One of the less known types of digital tokens is the so-called personal token. At present, we are lacking in a sufficient amount of analyses of this solution which brings together financial, technological and philosophical (ethical) issues. Personal tokens rely on the already existing (and currently intensified) processes of service and product personalization applied in marketing, trade and banking.

Partially, personal tokens also fit within the concept of private money, possibly being its further development stage. All in all, they are part of the so called decentralized finance (DeFi).

The purpose of the study is to define the specificity of personal tokens as one of token types and to present the axiological context to which the personal tokens refer.

2. Literature Review

Basically, digital tokens are a financial category, currently classified as cryptoassets. They are the next stage of the development of this category of instruments initiated by the cryptocurrency Bitcoin created by S. Nakamoto in 2009. In his articles, the creator of Bitcoin repeatedly stresses that the major problem of conventional currencies is trust which safeguards the smooth functioning of the contemporary system (Nakamoto, 2009). However, the author does not challenge the existing solutions directly. He agrees that the system is well suited for most transactions with its major weakness being only the adopted model of trust (Nakamoto, 2008). In practice, the launch of Bitcoin paved the way for the development of the blockchain technology, too.

In a certain opposition to S. Nakamoto is G. Selgin, the author of “Money Free and Unfree” (2017), who also coined the concept of “synthetic commodity money” to describe a new type of money with the properties of both commodity (absolutely

³ Blockchain is a distributed register in the peer-to-peer network, made up of nodes, which is recorded identically in a number of places at the same time. Anyone can have an insight into it. The register allows recording transactions in blocks which are connected with each other by means of cryptographic methods. Blocks create a chronological chain of transactions. The safety of the blockchain technology is safeguarded by the irreversibility of transactions and impossibility of changing transaction history.

rare) and money (store of value). However, this type of money is not the same as cryptocurrencies, and trading in it does not have to rely on the blockchain technology (Selgin, 2015).

Based on the development of cryptocurrencies, a social movement and the concept of the so-called decentralized finance (DeFi) emerged. DeFi is, at its core, as its name suggests: infrastructure, markets, technology, methods and applications enabling decentralized provision of financial services. Frequently, such systems are based on the distributed ledger technology as the basis for token-based ecosystems, in many cases extending even beyond the realm of finance (Zetzsche, Arner, Buckley, 2020). DeFi is also the realization of the broader concept of the distributed democratic economy and the implementation of the essence of the sharing economy.

In the broader context, personal tokens fit into the discussion on trust in money and the broadly construed democratization of finance. In a narrower sense, the issues of axiological dimensions of tokens are mainly brought up in the context of the ethical considerations on fintech and cryptocurrencies. In particular, it is about risk assessment and the moral dilemmas concerning risk (Lynn, 2019; Dembinski 2017, Lapointe i Fishbane, 2018, Dierksmeier & Seele, 2016). Most discussions are on the value of trust (DeBriun, 2015; Ghosh, 2008).

Authors also postulate the universalization of normative standards aimed at determining either the moral ideals of business players (Kucz, 2019) or the normative theory of cryptocurrencies and blockchains (Coeckelbergh & Reijers, 2016). The axiological dimension of the functioning of cryptocurrencies and tokens as if “built” upon them is also taken into account in relation to the ethically doubtful (social justice) polarization of societies into those taking advantage of digitization and those failing to do so due to the “digital divide” (Hughes 2017). However, there are no deeper axiological analyses into particular types of tokens, such as personal tokens.

3. Research Questions

In the article, two research questions are formulated by the authors:

- (1) What is it that distinguishes personal tokens from other types of tokens?
- (2) What values did the users of the personal token platform refer to when creating their own token?

4. Research Methods

The research takes the form of a case study (qualitative research). The applied research methods are data analysis and humanistic interpretation in accordance with the Poznań Methodology School (an explanatory procedure applied in humanities, enabling the reconstruction of the axiological context of human behaviour).

The broad methodology framework, adopted for the purposes of this article, is determined by a particular cultural perspective, in which culture is recognized as

the mental reality, regulating the behaviour, actions, activities taken by people on the above-individual basis (socially) (Kmita, 1994). This mental reality is made up of two-fold types of beliefs: normative and directivable. The former determine values as the drivers of our actions; thus, values represent the meaning of the activities undertaken – an individual will undertake a specific activity because he or she is convinced that the activity outcome will yield a particular value. Directivable beliefs concern the ways of achieving the normatively determined value. Thus, the values embraced within the cultural context are a kind of beacon for human actions; thus, they are both a creation of people and a regulator of their actions. Under this theory, values are not dealt with in an absolute way – they are historically changeable, they are subject to temporary and situational contexts, they are relativized culturally. This particular research perspective was selected due to its usefulness in the axiological analysis of the actions taken by network users in the process of tokenizing themselves. The reconstruction of the beliefs about personal tokens allows comparing the values (determining the axiological basis) that token issuers refer to. A humanistic interpretation was applied as the explanatory procedure. It consists in constructing such an answer that explains the reason for taking a particular activity (own token issuance). This kind of explanatory procedure depends on the assumption of the rationality of the subject (assuming that the individual acts in a rational way). The humanistic interpretation of data (the reconstructed system / hierarchy of values, as the axiological background behind the actions of the issuers) allowed an axiological categorization of personal tokens.

The humanistic interpretation was applied with regard to the data derived from one of the first (first in Poland) platforms for personal tokenization – www.personaltokens.io. The platform was built in 2017 and its aim is to allow individuals to issue, manage, describe, distribute and trade in their personal tokens, issued through Ethereum under the ERC-20 standard. The number of created tokens is 21 million, divisible to four decimal places. Platform users are verified three times: one mandatory account with MetaMask (linking issuers to Ethereum) and two accounts with social networking websites (either Facebook, LinkedIn or Google). The data under analysis was accessible on the platform between April 1st, 2020 and July 16th, 2020. 443 personal token profiles were studied.

5. Findings

Digital tokens are alternatively called coins (or altcoins). Basically, they are defined as a type of cryptoassets with the very concept of cryptoassets still being debated (Castrén, Kavonius, Rancan, 2020). At present, there is no single legal definition of digital tokens. On the whole, it is universally accepted that digital tokens are within the concept of cryptocurrency; however, depending on functional interpretation, some studies separate them out. Many international institutions are striving to work out best practice in terms of defining digital tokens (BIS 2018; ESMA 2019; OECD 2019, ECB 2019). On that basis, the authors favour the broad

definition under which digital (or virtual) tokens are a digital record of specific rights that can also be a representation of particular assets.

A great range of types of tokens have already been well identified in terms of technology and economy. Of these, the least known kind of tokens is personal tokens. Thus, considering the classification of digital tokens presented below, it is possible to point to several most important features of personal tokens (Table 1).

Table 1. Classification of digital tokens

Criteria	Type of tokens
Type of the creating (issuing) entity	Institutional tokens (or corporate tokens, brand tokens) Personal token (or individual tokens)
Method of technological link	Native tokens (or protocol tokens) Non-native tokens (or application tokens, app tokens, platform tokens)
Rights represented	Exchange-type tokens (or currency tokens, payment tokens, token-based money) Investment-type tokens (or asset tokens, asset-backed tokens, security tokens, equity tokens) Utility tokens
Price/value stability	Stablecoins Non-stable coins
Digital contract standard	Fungible tokens Non-fungible tokens

* In brackets: alternative names applied to particular token types

Source: own elaboration

Personal tokens are separated out under the subjectivity criterion as they are created at the initiative of private individuals, who they represent, rather than institutional entities (e.g., corporations or banks). Examples of tokens issued by the latter ones are the foretold Libra coin and JP Morgan coin.

Under the manner of technological link criterion, personal tokens are non-native tokens. They are not directly “built” in the distributed ledger but in platforms based on the ledger. In turn, native tokens are an integral part of the distributed ledger (e.g., Blockchain, Ethereum) and allow any type of transfers and transactions. Native tokens can also be defined as cryptocurrencies of the particular distributed ledger. Examples of native tokens include Bitcoin, Ether and Neo.

Under the legal representation criterion, personal tokens have a wide range of application. Their owners (issuers) can declare the exchange of their tokens for various services. In this context, personal tokens preserve their payment function (exchange-type tokens). The issuers of personal tokens can also offer shares and potential profits in specific undertakings. Thus, this type of personal tokens

can also perform the investment function (investment-type tokens). Personal tokens can also act as collateral against obtaining a specific service in the future or be of specifically promotional (marketing) character. Therefore, they can also perform utility functions (utility tokens).

Another criterion, the stability criterion, means that the owner of the token guarantees its credibility and exchange stability over time. Thus, under the assumption that token “stability” means (Samman i Masanto, 2019):

- the possibility of purchasing a similar basket of goods and services from one day to the next;
- being easily redeemable for the corresponding amount of assets to which the stablecoin is pegged;
- being easily predictable with respect to price outputs;
- growing at the rate of local inflation – which means maintaining value in real terms;
- being relative versus the volatility of other currencies,

personal tokens should be regarded as non-stable coins. On the other hand, examples of typical stablecoins include Theter, Dai and BridgeCoin.

Personal tokens are usually of non-homogeneous and unique nature, attributed to them by their owner. In principle, they are not exchangeable for other tokens and they can have different value (denomination). In the light of the above, they are non-fungible tokens. Protocol standards, applied during the issuance of personal tokens on blockchain, include ERC-721 (individual value of each token), ERC-20 (token features limited to, for e.g., its name, abbreviation/acronym, total issuance value, etc.). Examples of fungible tokens include Litecoin and Monero.

The underlying value category, being both the foundation for the platform organization or its structuring and the specificity of personal tokens that can be thus reconstructed, is the Centrality of the Person. Under this concept, developed under the philosophical personalism (here as defined by Emmanuel Mounier, 1952) the human person is an ontological and epistemological starting point for any type of human reflection and activity. The value of a person is placed in the focal point of creating personal tokens and forms the basis for all their future characteristics. The centrality of the Person manifests itself in all the afore-distinguished features of personal tokens – it is the Person who issues, creates their token (the ontological dimension), it is the Person who connects to the Ethereum network through setting up an account with MetaMask (thus giving themselves existence, ontological anchorage, in the specific decentralized blockchain network), it is the Person who decides about legal representation (the ontological-epistemological dimension), it is the Person who guarantees the credibility of their token (the cognitive dimension), and it is the Person who attributes their token with uniqueness (the ontological-epistemological dimension).

Furthermore, the axiological categorization of personal tokens, reconstructed on the basis of the platform under study, allows specifying the human person as an autonomous subject. Subjectivity, built upon the awareness of one’s own self, allows the Person to refer to the external environment. It is construed as the

connection of the sustainable “me” (the conscious “me” with the dynamic “me” (that is the actions in response to new circumstances, newly discovered needs or values). An analysis of the data obtained from the Info-About-Me platform reveals three ways of how issuers relate themselves to the environment: 1. Cognitive (presenting oneself through profession, education, interests, e.g. KAMIL KOSTRZEWSKI TOKEN [FULOFMO]), 2. emotional (revealing emotional attitude towards new technologies, e.g. ROBERT WESKER TOKEN [RAW]), and 3. psychic, on the phenomenological level (refer to certain life experience), e.g. CZESŁAW SKAWAREK TOKEN [ARTCOIN]). The axiological categorization of personal tokens in terms of subjectivity primarily depends on two classification criteria of digital tokens: 1. the stability criterion – “revealing” one’s own self (through publicizing one’s profession, feelings, track record) is meant to give credibility to the token, 2. the criterion of digital contract standard – attributing the token with unique features.

The third axiological criterion of personal tokens (distinguished on the basis of platform features) is their reliance on the idea of community. The human existence is an existence within communities governed by relationships. However, platform data analysis reveals that it is not about community in the personal sense⁴, but about the community of exchange and usefulness (primarily, in terms of services, but also interactions, markets, know-how, or investments)⁵. Thus, this criterion gives the legal representation criterion a certain colouration. Issuers create a community of exchanging tokens for various services, e.g., business consulting (e.g., PAWEŁ KORZENECKI TOKEN [ROOTCOIN]), projects management (e.g., MARCIN ZAWIEJA TOKEN [ZAW]), photography services (e.g., MARCIN HERNIK TOKEN [MH]), language courses (e.g., KASIA SZCZYGIEL TOKEN [MAK]), tennis coaching (ANDRZEJ MISIEK TOKEN [MISCOIN]), road transport (SŁAWEK PANDEL TOKEN [SEDI]), consultancy in health and wellness (ROBERT WESKER TOKEN [RAW]), dog training (MEGHAN JEROLAMAN TOKEN [LAVAPAWS]), artistic activity (e.g., FIVE EIGHT TOKEN [ART.]), construction services (POGOTOWIEBUDOWLANE COM TOKEN [PBC]), painting, cleaning (WITOLD SZUP TOKEN [VHR]), carpentry (MARCIN WNUK TOKEN [MONTI]), physiotherapy (DAWID MATKOWSKI TOKEN [MAT]). The community of profits and shares can be found in the

⁴ In personalistic ethics (e.g., at the Christian personalism level), being a person entails offering oneself to others; community means a unity of persons based on individuality (every person is unique, but owing to common solidarity the person’s behaviour is at the same time free and moral) rather than individualism (egocentric attitude isolating the person in the atomistically created social reality based on defining social relationships in the form of limiting rights, creating interpersonal tensions).

⁵ All these aspects of exchange are enumerated in the five reasons for issuing personal tokens, as accessible on the platform. 1. Personal token may help in representing your value and price your services in a better way, 2. Access to new markets, 3. Interacting with your community/customers/fans in an innovative way, 4. Personal token can allow others to invest in you and to be engaged in your success, 5. Implementing modern global technology to your business model.

description of the following tokens: property tokenization (BARTOSZ GENERT TOKEN [GEN]), barn construction and starting a herd of seventy A2 gene cows ((RADEK GORZKOŚ TOKEN [GOR])). The community of the utility functions of tokens is found in the context of loyalty tokens (e.g., NIKODEM ZEGZDA TOKEN [NZC], KRZYSZTOF BYTNAR TOKEN [BYTCOIN]).

6. Conclusions

Personal tokens are a new and interesting category of tokens both from the financial and philosophical points of view.

Based on a humanistic interpretation and an analysis of empirical data collected on the platform, the following conclusions have been formulated.

Firstly, at the philosophical level, platform users follow two different ways of personalization: individual and community. Individual personalization means the “turn inside”, i.e. accentuating one’s own subjectivity, regarded as the final resort, generating the token value (e.g., relying on one’s own experience). Community personalization manifests itself in the token value being “anchored” to the created relationships with the outside world (the ontological unity with one’s social networking website account). The philosophical sources of this type of “recognition” of the personalization process are: 1. the vision of the human being in the categorical imperative of Immanuel Kant (human being is a combination of commonality and uniqueness), 2. Emmanuel Mounier’s concept of two threats to the Person and his development (focus on the internal world, i.e. Narcissus alienation; focus on the external world, i.e. Hercules alienation).

Secondly, there are two stipulated types of recipient/purchaser of personal token – “own person” and “stranger”. In the description of the token and/or token owner, a great number of the researched token profiles refer to social networking websites, with only some providing a detailed address on the website. Thus, it can be concluded that the token was issued specifically for those individuals with whom the token owner had already established relationships on the networking website (the individuals recognize whose token it is).

Thirdly, there are two realms of accentuating the validity of token – private and professional. In referring to social networking websites (the platform distinguishes four websites, i.e. FaceBook, Google+, LinkedIn, and the mandatory Metamask – the blockchain app), a surprisingly great number of individuals neglected LinkedIn which, after all, is specifically a professional-business dedicated website.

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