

# DIGITAL NATIVES' ATTITUDES TOWARDS BLOCKCHAIN TECHNOLOGY USAGE

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## Abstract

The widespread use of blockchain technology (BCT) and the growing awareness of the numerous opportunities it offers its users have been the focus of recent research. Digital natives are surrounded by technology from birth and are naturally inclined to embrace it, but previous research has not addressed their attitudes towards BCT. This paper aims to investigate digital natives' attitudes towards the use of BCT in Croatia. The survey method is applied and data from 518 questionnaires are analysed with PLS-SEM. Results show that privacy threat, social influence, trust in BCT and trust in the community of blockchain users have a statistically significant positive effect on intention to use BCT. The study identifies the importance of BCT use from the perspective of users who belong to the digital native category, developing a model to better understand behavioural intentions at the individual level and presenting a starting point for future research on this topic.

**Implications for Central European audience:** The research findings may be of interest to audiences in other Central European countries, where blockchain technology is an extremely important segment of emerging technologies and Central Europe in particular is experiencing exponential growth in the use of this technology. Policymakers in Central European countries can benefit from the findings of this study to formulate policies that support the growth and regulation of the blockchain industry, including information that can contribute to informed decision-making and policy formulation, ultimately contributing to the growth and success of the blockchain technology sector in the region. From a theoretical point of view, the research results represent a contribution to the study of consumer behaviour, especially from the perspective of the use of innovative technologies. The practical contribution is reflected in the possibility of applying obtained results in the development of adequate marketing strategies that help BCT providers improve the quality of their offer and thus meet the modern demands of the digital natives' segment.

**Keywords:** Digital natives; blockchain technology usage; social influence; trust in blockchain technology

**JEL Classification:** M30, M31, O10

## Introduction

Blockchain technology (BCT) is relevant in all disciplines of business management, as BCT is expected to transform business operations (Filimonau & Naumova, 2020), business processes (Tan et al., 2021) and marketing (Kumar et al., 2018). It is widely believed that BCT can revolutionize various industries as well as the entire economy and lead the global digital transformation of the future (Filimonau & Naumova, 2020; Iansiti & Lakhani, 2017). The use of BCT promises significant benefits, including a reduction in the number of general ledgers to be maintained by financial institutions and improved audit trail accuracy. Besides, it may revolutionize the capital market industry and lead to changes in business models, risk mitigation, cost savings and capital efficiency (Singh & Singh, 2016). According to Manski (2017), building blockchains requires a high level of technical expertise, making it inaccessible to the average user. To encourage user adoption, technology should ideally be user-friendly and aesthetically pleasing, which current blockchain technology often is not. However, the development of user-friendly interfaces is expected to progress, potentially leading to widespread blockchain application and adoption in the next decade.

Although previous research has analysed the benefits and challenges of BCT deployment (Hughes et al., 2019) in finance (Ali et al., 2020), human resources (Christ & Helliard, 2021), supply chains (Tsolakis et al., 2021), healthcare (Yue et al., 2016) and hospitality (Filimonau & Naumova, 2020), few academic studies address users' perceptions, attitudes and intentions regarding BCT deployment. Despite the clear knowledge about the benefits of BCT, only a small number of users, about 4% (Knauer & Mann, 2020), consciously use BCT. According to the latest official data (Statista, 2022), there are more than 81 million BCT wallet users in 2022. Given the continued growth and interest in BCT, users could benefit from a variety of applications based on BCT: improved security, application availability or cost reduction (Abramova & Böhme, 2016; Harvey et al., 2018). Due to users' general concern about the use and disclosure of their data, BCT is recognized as an important link to strengthen the sovereignty of users who anonymously share their data for specific purposes (Zyskind et al., 2015). Moreover, BCT provides users with new opportunities to choose beneficial social systems for their interactions with others by designing or selecting BCT-based solutions according to their preferences (Hayes, 2019).

Digital natives are people born after 1980 who have grown up with technology and have technological skills that differ from those of members of previous generations (Palfrey & Gasser, 2011). Having grown up in the presence of IT, digital natives have mastered the use of technology and can use it with ease (Akçayır et al., 2016). Despite the increasing need to understand digital natives (Nam & Jung, 2021; Kincl & Štrach, 2021), previous research has not addressed their attitudes, perceptions and intentions to use BCT. Therefore, this study aims to reveal the meaning of BCT usage, especially from the perspective of users who belong to the category of digital natives. The paper answers the call by Ter Ji-Xi et al. (2021), who suggested that more attention should be paid to behavioural intention (BI) to use BCT. The main objective of this work is to analyse and determine the relationship between social influence, trust in BCT, trust in blockchain users and perceived threat of personal data disclosure and intention to use BCT. The study aims to show that digital natives' positive attitudes towards BCT lead to future intentions to use the technology. In addition, the study

aims to show the importance of implementing BCT in all business processes, given the increasing development of a revolutionary, disruptive economy.

# 1 Literature Review

## 1.1 Digital natives

The term "digital natives" was coined in 2001 to describe a generation that has grown up with technology (Prensky, 2001). According to Palfrey and Gasser (2011), digital natives are people born after 1980 who have grown up with technology. They represent the generations that have grown up with modern technology, are familiar with digital devices and are different from previous generations (Palfrey & Gasser, 2013; Bracíníková & Matušinská, 2020). They have unique skills such as multitasking, rapid information processing and interactive and visual learning styles, but also lower levels of empathy and social skills and have difficulty with face-to-face communication (Rosen, 2012).

Evans and Robertson (2020) conceptualize the evolution of these terms and related ideas through four distinct phases of their meaning and importance: conception (1996-2006), reaction (2007-2011), adaptation (2012-2017) and reconceptualization (2017-present). As Helsper and Eynon (2010) noted, there is a significant gap between young digital natives and the previous generation, the so-called digital immigrants. On the other hand, various studies have concluded that not all digital natives are very competent in using technology (Thinyane, 2010; Thompson, 2013), or they rarely use technology (Somyürek & Coskun, 2013). According to Akçayır et al. (2016), however, digital natives actively use computers and the internet and there are no significant differences in their self-perception as digital natives.

Digital natives are the focus of academic research because they can provide a better understanding of how technology shapes society and offer valuable insights into how they interact with technology. Research based on digital natives can help identify gaps in digital literacy and develop initiatives to improve it.

## 1.2 Intention to use blockchain technology (BCT)

Blockchain technology (BCT) is defined as a "decentralized ledger that maintains transaction records on many computers simultaneously" (Ali et al., 2020, p. 3). The emergence of blockchain technology has introduced various elements and related concepts that are often confused when discussing its implementation. One such aspect is the concept of organizing and sharing transactions through various data structures known as blocks (Asharaf & Adarsh, 2017; Antoniadis et al., 2019). These blocks are cryptographically linked and distributed across a peer-to-peer network to prevent tampering with previously recorded transactions (Beck et al., 2018). Before being included in a block, transactions must be validated by nodes (miners). Consensus models determine which node gets the privilege of publishing the subsequent block. The ledger of every transaction performed in the blockchain is not kept centrally but distributed in all the participating nodes (Antoniadis et al., 2019). In addition, blocks can facilitate the integration of advanced smart contract capabilities by enabling the provision of code and data on the blockchain network through cryptographically signed transactions (Ali et al., 2020).

While blockchains and cryptocurrencies have often been associated with each other, blockchain technology has recently attracted significant attention from researchers (Ali et al.,

2020). It is argued that blockchain has the potential to be a breakthrough phenomenon beyond its application in bitcoin (Zhao et al., 2016). In a blockchain, the security and integrity of all transactions are ensured by the fact that each node in the peer-to-peer network maintains a complete record of the blockchain. In a blockchain system, the security and integrity of transactions are ensured through the collaborative maintenance of a complete blockchain record by each node within the peer-to-peer network. New blocks containing new transactions are added to the blockchain only after they have successfully passed through established verification protocols. Any unauthorized attempt to tamper with the blockchain requires an attack on all distributed copies of the blockchain throughout the network – a daunting challenge that is widely considered unfeasible (Seebacher & Schueritz, 2017). The blockchain represents both a technical and an economic transformation (Zyskind et al., 2015; Zhao et al., 2016). Technically, blockchain serves as a novel database system that is particularly suited to decentralized environments where trust is lacking. Economically, the blockchain provides tools for all areas where a reliable record of transactions is required and where parties cannot be completely trusted (Lindman et al., 2017).

According to Warshaw and Davis (1985, p. 214), behavioural intention is defined as the "degree to which a person has formulated conscious plans to perform or not perform some specified future behaviour". As the capacity of a user's subjective reasons to perform some particular behaviour (Fishbein & Ajzen, 1975), individual behavioural intention is the result of a motivational urge that arises from the individual's internal evaluation of the behaviour (Venkatesh et al., 2008). In an IT context, behavioural intention implies the user's perceived likelihood of engaging in some particular behaviour, i.e., trying a new technology (Albayati et al., 2020). However, the intention to use technology varies from user to user (Kabra et al., 2017) and only occurs when the user plans to actively use a particular technology (Tran & Nguyen, 2021). To reduce the risk of using bad technologies, behavioural intentions help determine different technology adoption measures in their early stages of development (Albayati et al., 2020).

To explain usage behaviour, most IT studies focus on usage intentions because they explain individuals' reactions to a particular technology, which then leads to actual usage (Kabir & Islam, 2021). Scholars agree that behavioural intentions are recognized as a strong predictor of the adoption of new technologies, i.e., BCT (Alalwan et al., 2017; Albayati et al., 2020; Almajali et al., 2022; Kabir & Islam, 2021; Queiroz and Wamba, 2019; Lim et al., 2019). Many studies have shown that in the context of insecurity and dependency, social influence, privacy and trust are the most important predictors of BCT use intentions (Ferri et al., 2020; Shin, 2019; Koroma et al., 2022). Therefore, users who trust their social community, technology and privacy mechanisms are expected to be more likely to intend to use BCT in the future.

## 2 Hypotheses

When a new technology is introduced, the social dimension has a major impact on user behaviour (Albayati et al., 2020). Moreover, one of the most important variables for BCT acceptance or rejection is social influence (Alazab et al., 2021), which refers to "the degree to which an individual perceives that important others believe he or she should use the new system," i.e., a particular technology (Venkatesh et al., 2003, p. 451). Consumer behaviour is directly influenced by the social environment, especially by their reference groups (Vitezić & Perić, 2021). In the context of our study, social influence indicates how well digital natives

understand the value of whether their family, friends and peers advise them to adopt BCT. Previous studies have shown the importance of social influence in technology adoption. For example, Queiroz and Wamba (2019) highlighted that social influence is one of the most important determinants of intention to adopt BCT, especially in emerging economies. Moreover, Ferri et al. (2020) found that the most important predictor of auditors' intention to use BCT is social influence. In a tourism context, a study by Nuryyev et al. (2020) confirmed that social influence has a strong impact on the intention to adopt new technology (e.g., cryptocurrency payments). Therefore, we propose that:

*H1: Social influence has a statistically significant and positive relationship with intention to use BCT.*

Trust and security are key factors that influence the adoption and promotion of IT use (Shin, 2019; Söllner et al., 2016). According to Kabir & Islam (2021), trust in BCT is based on a decentralized network structure that enables secure structures for storing and validating transactions. Ali et al. (2020) explained the importance of specific characteristics related to trust in BCT: (1) public and shared interaction, (2) verification of transactions by peers, (3) low friction in providing information, and (4) security through cryptography. In the context of a blockchain-enabled sharing economy, Hawlitschek (2018) highlighted that trust in BCT itself is an important driver of trust in blockchain-based platforms and rental intentions. To effectively support their users, many information systems also rely on third-party services or user-generated content (Söllner et al., 2016). Users often consider online communities as their main source of information, so trust is a key factor influencing the engagement of other users (Zheng & Boh, 2021). Liu and Ye (2021) and Koroma et al. (2022) have emphasized that in the interactions and relationships within the blockchain system, trust in the user community plays a crucial role because users rely on and trust the experiences of other users. Therefore, promoting the use of BCT depends on building trust through friendly partnerships, and mutual trust is central to commercial interactions. Recent research has examined trust and its impact on BCT attitudes and user adoption and has shown a relationship between the three concepts (Albayati et al., 2020; Shin, 2019). Kabir & Islam (2021) found that trust significantly increases the intention to use blockchain for supply chain finance. In addition, a study by Liu and Ye (2021) confirmed a significant positive effect between trust and intention to use BCT. Similarly, Almajali et al. (2022) showed that trust in BCT is a significant predictor of cryptocurrency usage. Therefore, we hypothesize the following:

*H2: Trust in BCT has a statistically significant and positive relationship with intention to use BCT.*

*H3: Trust in blockchain users has a statistically significant and positive relationship with intention to use BCT.*

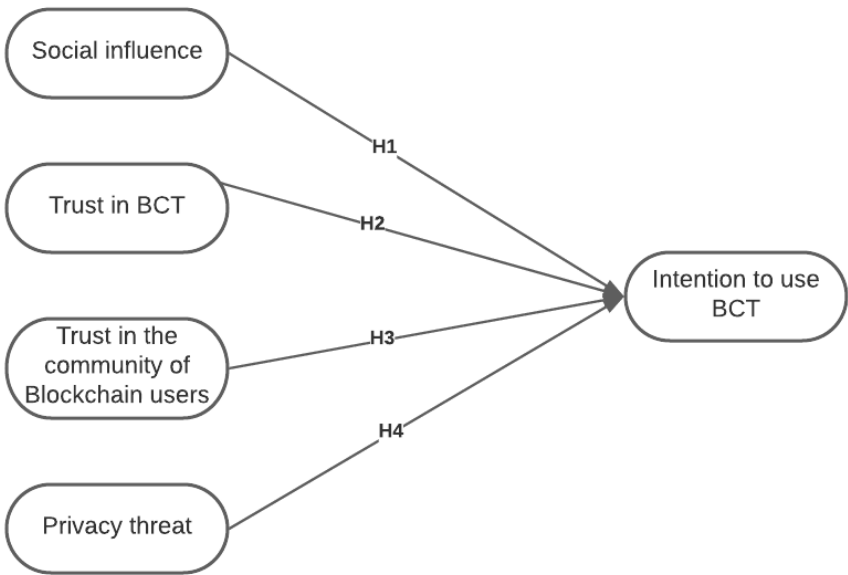
When communicating with information technology, users are not completely anonymous, as any form of digital communication allows collection, aggregation and analysis of personal data (Brinson et al., 2018). The concept of privacy refers to the "user's capacity to manage and manoeuvre the conditions by which his/her personal information is collected and processed" (Shin, 2019, p. 4). Previous research has shown that privacy issues influence users' behavioural intentions in various technological environments, such as location-based services (Zhou, 2011), online social networks (Kumar et al., 2018), mobile services and applications (Libaque-Sáenz et al., 2021) and internet-of-things (IoT) applications (Alraja,

2022). In the blockchain context, Marikyan et al. (2022) demonstrated a significant positive relationship between perceived privacy and intention to use blockchain-enabled services. Privacy not only directly affects behavioural intentions but also indirectly influences user behaviour. Shin (2019) found that consumers' perceived privacy affects their trust in and attitude towards blockchain, which in turn influences their intention to use the technology. Shin and Bianco (2020) found that users' perception of privacy affects their approval of blockchain media, which in turn affects their trust and satisfaction. Therefore, the following hypothesis is proposed:

*H4: The perceived threat of personal data disclosure has a statistically significant and positive relationship with intention to use BCT.*

Based on the hypotheses developed above, the conceptual model of the study is shown in Figure 1.

**Figure 1 | Study conceptual model**



Source: Authors

### 3 Methodology

To test the developed hypotheses, an empirical study was conducted using the survey method. The measurement instrument used was a self-administered questionnaire based on current literature and adopted from previous studies. The survey was conducted from March to September 2022 using snowball sampling for digital natives in Croatia. Snowball sampling is useful for identifying hard-to-reach populations, such as digital natives, who are not easily reached by traditional sampling methods (Etikan et al., 2016; Atkinson & Flint, 2001).

The first step in our snowball sampling was to identify 60 participants who met the criteria for the study. For this study, digital natives were defined as individuals born in the late 1990s or early 2000s who grew up with technology as an integral part of their lives (Helsper & Eynon, 2010). Once the initial participants were identified, they were asked to recommend additional individuals who met the criteria for the study. After a brief description of the study, the information was shared with peers who might be interested in participating. A link was provided to an online survey where potential participants could indicate their interest in participating in the study. When potential participants expressed their interest in the study, an initial screening was conducted to ensure that they met the criteria for the study. After the screening phase, participant selection was completed with a stratified sample of 550 participants to ensure a diverse sample representing different demographic groups and different levels of technology experience and use. After adjusting for errors and missing values, a total of 518 correctly completed questionnaires were used for further analysis.

The majority of the participants were female (61.77%), while 38.23% were male. Most of the respondents (42.3%) had undergraduate degrees, followed by respondents holding secondary school qualifications (39%) and graduate degrees (17.8%). Almost 38% of the respondents were employed, while 59% were students. The majority of respondents (32%) had a personal monthly income between 400 € and 800 €.

The design of the measurement instrument was based on the relevant literature and the questions were adapted to the needs of this study. According to the funnel principle, the questionnaire consisted of four groups of structured questions. The questionnaire opened with a series of questions about social influence on BCT, adapted from Vitezić and Perić (2021). In the second part, statements about trust in BCT and trust in the community of blockchain users were adopted from Hawlitschek (2019). In the third part, the participants were asked to rate their level of agreement with statements about the perceived threat of sharing personal information (Brinson et al., 2018), while six items for intention to use were adapted from Van Pinxteren et al. (2019) and Hu et al. (2019). The questionnaire ended with questions to collect socio-demographic data. Seven-point Likert scales were used in rating levels of agreement with items, anchored at 1 = strongly disagree and 7 = strongly agree.

Partial least squares (PLS) structural equation analysis (SEM) with SmartPLS 3 software was used to analyse the collected data because it allows the simultaneous analysis of the relationship among several latent variables.

## 4 Results

The measurement of the reflective construct model was established before hypothesis testing. For this purpose, all manifest variables were checked for outliers with values greater than  $\pm 3$  of the standard deviation from the arithmetic mean of a variable.

Internal consistency of reliability was assessed first, followed by convergent and discriminant validity of the reflective measurement models of each construct. To ensure internal consistency of reliability and convergent validity, the outer loadings, composite reliability indicator, Cronbach's alpha coefficient and average variance extracted indicator were calculated (Table 1).

**Table 1 | Measurement model analysis**

| Indicators and Items   | Code     | Outer loadings | t-value | Std. dev | Cronbach's alpha | CR    | AVE   |
|--|----------|----------------|---------|----------|------------------|-------|-------|
| Social influence   |          |                |         |          | 0.937            | 0.941 | 0.761 |
| People who influence my behaviour would want me to utilize BCT   | SOCIN F1 | 0.844          | 55.880  | 0.015    |                  |       |       |
| People in my social networks (e.g., friends, family and co-workers) who utilize BCT have more prestige than those who do not | SOCIN F2 | 0.877          | 64.959  | 0.014    |                  |       |       |
| People whose opinions I value would prefer that I utilize BCT  | SOCIN F3 | 0.897          | 92.067  | 0.010    |                  |       |       |
| Utilizing BCT is a status symbol in my social networks (e.g., friends, family and co-workers)                                | SOCIN F4 | 0.863          | 49.532  | 0.017    |                  |       |       |
| People who are important to me would encourage me to utilize BCT   | SOCIN F5 | 0.869          | 62.877  | 0.014    |                  |       |       |
| People in my social networks (e.g., friends, family and co-workers) who would utilize BCT have high profiles                 | SOCIN F6 | 0.882          | 77.100  | 0.011    |                  |       |       |
| Trust in BCT   |          |                |         |          | 0.828            | 0.829 | 0.853 |
| I feel good about how things go when doing activities on the blockchain  | TRUST B1 | 0.920          | 104.929 | 0.009    |                  |       |       |
| I feel assured that legal and technological structures adequately protect me from problems on the blockchain                 | TRUST B2 | 0.927          | 116.097 | 0.008    |                  |       |       |
| Trust in the community of blockchain users   |          |                |         |          | 0.891            | 0.894 | 0.821 |
| Information provided by other users of the   | TRUST C1 | 0.887          | 74.075  | 0.012    |                  |       |       |



|  |          |       |         |       |       |       |       |  |
|--|----------|-------|---------|-------|-------|-------|-------|--|
| blockchain is valuable   |          |       |         |       |       |       |       |  |
| Other users of the blockchain offer me help when I have questions                                      | TRUST C2 | 0.906 | 93.376  | 0.010 |       |       |       |  |
| In general, I can count on the information provided by other blockchain users.                         | TRUST C3 | 0.924 | 117.784 | 0.008 |       |       |       |  |
| Perceived threat I usually feel uncomfortable giving personal information to so many online companies. |          |       |         |       | 0.833 | 0.882 | 0.749 |  |
| Consumers have lost all control over how their personal information is used.                           | PRIV1    | 0.856 | 27.456  | 0.031 |       |       |       |  |
| It is very important for me to know how my personal information is being used.                         | PRIV2    | 0.924 | 54.515  | 0.017 |       |       |       |  |
| Intention to use I am ready to use BCT in the future.  | PRIV3    | 0.812 | 19.928  | 0.041 |       |       |       |  |
| I will definitely use BCT again in the future.   |          |       |         |       | 0.959 | 0.960 | 0.830 |  |
| I am willing to use BCT more often in the future.  | INT1     | 0.907 | 90.244  | 0.010 |       |       |       |  |
| I will definitely use BCT more frequently in the future.   | INT2     | 0.920 | 114.518 | 0.008 |       |       |       |  |
| I will recommend the positive use of BCT to others.  | INT3     | 0.932 | 127.452 | 0.007 |       |       |       |  |
| The use of BCT seems to be a good idea   | INT4     | 0.930 | 118.896 | 0.008 |       |       |       |  |
|  | INT5     | 0.905 | 94.014  | 0.010 |       |       |       |  |
|  | INT6     | 0.871 | 62.215  | 0.014 |       |       |       |  |

Source: Authors

As seen in Table 1, all the reflective indicator loadings are above the required threshold of 0.6, which ensures valid item reliability (Hair et al., 2019). The outer factor loadings for the analysed constructs ranged from 0.812 to 0.932 and were included in the further analysis.

The composite reliability (CR) and Cronbach's alpha were above the recommended value of 0.7 and AVE was above the threshold of 0.5 (Nunnally & Bernstein, 1994; Malhotra, 2010).

Therefore, the measurement model shows a satisfactory level of internal consistency of reliability and convergent validity.

Table 2 presents the discriminant validity, which was evaluated using the Fornell-Larcker criterion (Henseler et al., 2015).

Table 2 | Fornell-Larcker criterion

| Constructs                                 | Intention to use | Privacy threat | Social influence | Trust in BCT | Trust in the community of blockchain users |
|--|------------------|----------------|------------------|--------------|--|
| Intention to use                           | 0.911            |                |                  |              |  |
| Privacy threat                             | 0.182            | 0.865          |                  |              |  |
| Social influence                           | 0.614            | 0.059          | 0.872            |              |  |
| Trust in BCT                               | 0.667            | 0.045          | 0.785            | 0.924        |  |
| Trust in the community of blockchain users | 0.659            | 0.140          | 0.687            | 0.773        | 0.906                                      |

Source: Authors

The Fornell-Larcker criterion compares the square root of the AVE values with the latent variable correlations, where the square root of AVE for each construct (on the diagonal) is greater than its highest correlation with another construct, indicating that discriminant validity has been established (Table 2).

After achieving satisfactory internal consistency of reliability and convergent and discriminant validity, the formulated hypotheses were tested and the structural model was analysed. The  $R^2$  value for all the endogenous variables was 0.519. The standardized squared residual (SRMR) value of the saturated and estimated model was 0.045 ( $< 0.08$ ).

Table 3 shows the results of the structural model analysis, where all the hypotheses were accepted.

Table 3 | Structural model analysis

|    | Structural relationships                                      | Original sample-standardized coefficient ( $\beta$ ) | t-values | Standard deviation | $f^2$ -effect size | Hypotheses tested |
|----|---|--|----------|--------------------|--------------------|-------------------|
| H1 | Privacy threat → Intention to use                             | 0.118*   | 3.635    | 0.032              | 0.028              | Accepted          |
| H2 | Social influence → Intention to use                           | 0.166*   | 2.745    | 0.061              | 0.021              | Accepted          |
| H3 | Trust in BCT → Intention to use                               | 0.305*   | 4.258    | 0.072              | 0.254              | Accepted          |
| H4 | Trust in the community of blockchain users → Intention to use | 0.292*   | 4.825    | 0.062              | 0.067              | Accepted          |

Note: \*  $p < 0.001$

Source: Authors

The constructs of privacy threat ( $\beta = 0.118$ ,  $p < 0.001$ ), social influence ( $\beta = 0.166$ ,  $p < 0.001$ ), trust in BCT ( $\beta = 0.305$ ,  $p < 0.001$ ) and trust in the community of blockchain users

( $\beta = 0.292$ ,  $p < 0.001$ ) have a statistically significant positive effect on the intention to use construct.

In our study, we examined the relationships between different constructs and their effects on intention to use BCT. The results of our analysis revealed several important findings. Firstly, we found that the privacy threat construct had a statistically significant positive effect on intention to use BCT, which suggests that digital natives who perceive a higher level of privacy threat related to BCT are more likely to express an intention to use BCT. The social influence construct also showed a statistically significant positive effect on intention to use BCT. This means that peer influence positively influences intention to use BCT. Trust in BCT proved to be a highly influential factor with a statistically significant positive effect on intention to use BCT, which implies that respondents who have greater confidence in the technology itself are more likely to express an intention to use it. The construct of trust in the community of blockchain users also had a statistically significant positive effect on intention to use BCT. This suggests that digital natives who have confidence in the broader community of blockchain users are more likely to adopt the technology. Together, they explain 51.9% of the variance in intention to use BCT. In explaining the intention to use construct, the  $f^2$  effect sizes of all the constructs are considered small.

## 5 Discussion and Conclusions

The research contributes to a better understanding of digital natives' behaviour in relation to blockchain-enabled technology. The conducted empirical research examined the factors that influence intention to use BCT, i.e., it highlighted the positive attitudes towards this type of technology that influence future intentions to use it.

This study provides important insights for researchers and practitioners to better understand individuals' BCT adoption behaviour. The novel contribution of our study lies in its exploration of digital natives' attitudes towards blockchain adoption. By examining the relevant factors that predict BCT usage intentions, this study contributes to the blockchain and technology adoption literature in several ways. It presents a worthwhile direction by examining digital natives' attitudes towards BCT, which have not been explored before. Unlike previous studies that have focused primarily on examining BCT adoption and implementation across industries and organizations, this study developed a model to better understand behavioural intentions at the individual level. As digital natives represent the fastest-growing segment of FinTech innovation (Pham et al., 2021), this study provides valuable insights into young people's attitudes towards the intention to use blockchain technology. As far as we know, this study is the first to examine the intention to use BCT in the Croatian context, which is a starting point for future research on this topic.

The results point to the significant positive influence of social influence on intention to use BCT, which is consistent with the results of several studies (Almajali et al., 2022; Nuryyev et al., 2020; Queiroz & Wamba, 2019; Wamba & Queiroz, 2019). As Vitezić and Perić (2021) noted, if a person's social environment uses a particular technology, it is very likely that he or she will also use it. It has been proven that individuals use cryptocurrencies when they have experienced positive subjective norms from their reference group (Almajali et al., 2022). This finding is also consistent with research by Pham et al. (2021), who found that social influence is a very important predictor of intentions to adopt electronic wallets among Generation Z, to whom the authors referred to as "true digital natives", confirming the thesis that peer

recommendations in online communities directly lead to behavioural intentions among digital natives and boost perceived trust in FinTech innovations. In addition, Queiroz and Wamba (2019), when studying blockchain adoption behaviour in India and the USA, found that social influence has a significant positive effect only in India, implying that on emerging markets, peers and family members have an important influence on behavioural intentions.

This study also shows that trust in BCT and blockchain users has a positive impact on intention to use BCT. The results of this study highlight two key constructs (trust in blockchain technology and trust in the community of blockchain users) as fundamental factors influencing intention to adopt blockchain technology. As a key factor in predicting intention to use BCT, "trust can be seen as a factor promoting the intention to adopt a new technology" (Pham et al., 2021). Although the use of BCT has increased in recent years, consumers still have a certain degree of mistrust towards it (Albayati et al., 2020). This is evidenced by various cases of piracy, fraud and hacking related to the use of cryptocurrencies (Almajali et al., 2022). On the other hand, digital natives represent a generation that trusts technology and artificial intelligence more than humans and are willing to take risks in the online environment (McKinsey & Company, 2023). The respondents significantly agreed with trust in the legal and technological structures on which BCT is based and trust in the information provided by other members of the blockchain community. This is consistent with previous research by Almajali et al. (2022), who found that customers' trust levels have a positive impact on their intention to use cryptocurrencies. In addition, the present study confirms previous findings by Liu and Ye (2021), who indicated that higher levels of trust in BCT can lead to greater intent to use it. Also, Gao and Li (2021) proved that trust is a significant predictor of behavioural intentions to use blockchain-based games. The authors emphasized that users will not choose to transact within games if there is not sufficient trust between them.

Moreover, a significant positive correlation was found between privacy and behavioural intentions. Similar conclusions were also reached by Marikyan et al. (2022), who demonstrated a significant positive correlation between the perceived risk of personal data and intention to use blockchain-based services. The aforementioned authors conclude that users' fear of cybersecurity issues increases the likelihood of using BCT to avoid such threats. As Ali et al. (2020) suggested, BCT could be used to solve problems such as lack of mutual trust and fraud. As Maier et al. (2023) noted, digital natives are willing to take risks and disclose their personal information if the benefits outweigh the risks, although they generally have privacy concerns. Moreover, they rely heavily on the government's legal provisions, which can be linked to the intentions of BCT adoption in this research, as the elements of the European Commission's blockchain strategy are based on the General Data Protection Regulation (European Commission, 2023), which aims to provide the European population with enhanced protection of personal data related to the use of this innovative technology. In addition, Shin and Hwang (2020) noted that privacy can be viewed from a dual perspective: It can be both a promoting and a limiting factor for the adoption of a particular technology. With the rapid development of innovations in BCT, especially in the area of privacy protection, the perception of privacy is also likely to change and evolve.

Some practical implications can also be drawn from the results of this study. It is extremely important to raise awareness and educate potential BCT users, especially those who belong to the digital native category. The study results show that BCT is recognized as a trusted technology that can effectively protect privacy. Therefore, the focus should be on developing

and improving various privacy mechanisms and measures for BCT to enhance users' knowledge and trust. For example, when promoting various BCT-based applications, system features and privacy policies should be clearly explained and supported by short videos, e-books and user guides. As digital natives are a generation immersed in digital technology (Hoffmann et al., 2014), the aforesaid digital forms of education are extremely suitable for their characteristics. This is particularly relevant in the European context, where the proportion of this generation participating in online education doubled from 13% to 28% between 2019 and 2022 (Eurostat, 2023). In terms of social impact, it is important to present testimonials from BCT users who have had positive experiences and are familiar with the technology. This is of great importance in the context of the digital native segment, as they spend most of their time in the virtual world and trust online friends the most and rely on their experience (Autry & Berge, 2011). In addition, good collaboration among stakeholders is needed, especially between governments and BCT providers.

The results of this research may also be useful for blockchain service providers and the academic community to develop a set of specialized programmes for lifelong learning and training in BCT, especially since most digital natives have an academic education or are in the process of acquiring one. To increase interest in the use of BCT, there is a need to facilitate understanding of its use by developing simple interfaces that enable its use, especially for a broader audience that is not technically savvy. Understanding the attitudes and concerns of digital natives can help policymakers create an enabling environment for blockchain technology development, investment and innovation. Policymakers can use the study's findings to develop strategies that foster innovation and entrepreneurship in the blockchain sector and ultimately drive economic development. The study's findings can help Central European companies and policymakers position themselves competitively on the global blockchain market. Understanding users' attitudes and preferences can enable the region to develop and offer forward-looking blockchain solutions.

When considering the results of this study, certain limitations were noted. Although the findings of the study provide valuable insights, the data were obtained through a purposive selection of respondents. In addition, the sample included only citizens of the Republic of Croatia, whose characteristics may differ significantly compared with citizens of other countries. Therefore, the results of this study cannot be generalized. Accordingly, future studies should attempt to include international respondents who belong to the category of digital natives. In addition, our model measured intention to use BCT, not actual behaviour. Indeed, behavioural intentions and actual consumer behaviour can differ significantly. To support our findings, future research should use data on actual BCT usage. This study examined the influence of four different dimensions on behavioural intentions, namely social influence, trust in BCT, trust in BCT community users and privacy. As previous findings suggest, the security dimension is largely required for technology acceptance (Grover et al., 2019), which was not considered in our model. Future studies could examine the impact of other dimensions, such as security, perceived usefulness, perceived ease of use and facilitating conditions. The factors we highlighted as critical to BCT technology usage, such as privacy concerns, social influence and trust in BCT, have similarities to other areas of study. It should be noted that in the case of BCT, these factors could potentially have positive effects, as BCT provides solutions to privacy threats. Users around the world might be inclined to accept any technology, including blockchain, if it improves their lives in terms of security. Therefore, these factors may not be limited to BCT but can be applied to any

mechanism that enhances security. Further research could explore regional nuances and specific motivations for adopting BCT to shed light on different preferences and concerns, especially with regard to factors such as threat, hazard and risk associated with user settings. Another useful suggestion for future research would be to conduct studies that examine respondents who are not digital natives. This would enable a comparison of the results obtained and allow identification of differences in attitudes between digital natives and digital immigrants.

Finally, this study used a quantitative method. To gain deeper insights into the issues addressed in this study, a mixed method could be used in future studies. Our research was conducted on digital natives in Croatia, recognizing that their characteristics and behaviour may exhibit variations distinct from those of digital natives in other countries, which should be interesting to investigate. The adoption and use of blockchain technology (BCT) can often be influenced by external factors, including technological advances and market dynamics. To address this aspect, it would be useful to measure and test the availability of BCT in European countries. This could provide valuable insights into how the accessibility and diffusion of BCT solutions in a given region may influence user decisions and behaviour.

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