



## Regular Article

# The growing significance of cryptocurrency acceptance research: A systematic review and bibliometric analysis

Márk Recskó <sup>a,b</sup> <sup>a</sup> Corvinus University of Budapest, Budapest, Hungary<sup>b</sup> Ghent University, Ghent, Belgium

## ARTICLE INFO

## Keywords:

Cryptocurrency  
Acceptance  
Bibliometric analysis  
Systematic review  
Technology acceptance  
Consumer behavior  
Bitcoin

## ABSTRACT

The adoption of cryptocurrencies has accelerated rapidly over the past decade - particularly in recent years - yet consumer acceptance remains one of the least explored and understood dimensions in the field. This study conducts a comprehensive bibliometric analysis and systematic literature review to assess the development of consumer-focused cryptocurrency research up to 2024. Drawing from 152 peer-reviewed articles and conference proceedings indexed in Scopus and Web of Science, the paper identifies dominant research trends, methodological patterns, and theoretical frameworks. Findings indicate a rise in publication activity beginning in 2019, with a marked peak in 2023, signaling the emergence of cryptocurrency acceptance as a standalone research field. Despite this growth, the review uncovers substantial gaps in regional coverage, conceptual diversity, and empirical focus, underlining the need for targeted future research. There is a clear shift from Bitcoin-centric research to broader cryptocurrency applications, including alternative coins, hypothetical systems, and practical use cases like tourism or payment solutions. In addition to mapping thematic trends, the study synthesizes methodological practices related to sampling strategies, data collection techniques, analytical tools, and software use, offering a holistic overview of how this topic is researched. By synthesizing these insights, the study offers strategic implications primarily for researchers by outlining concrete directions for future investigations and suggesting how the field could be shaped moving forward. At the same time, the findings also provide valuable insights for regulators and businesses aiming to better understand the broader adoption of cryptocurrency technologies.

## 1. Introduction

The popularity of blockchain-based cryptocurrencies has grown steadily, albeit not uniformly, in recent years (ElBahrawy, 2017). This growing prevalence and significance are supported by various statistics and research. For instance, in April 2025, the number of global cryptocurrency owners reached 700 million (Statista, 2025). The market capitalization of cryptocurrencies has also risen significantly, approaching \$4 trillion (Statista & CoinGecko, 2025). Additionally, the leading cryptocurrency, Bitcoin, continued to reach new record levels; on October 6, 2025, its price exceeded \$126,000 (Edwards, 2025). Recent market developments further highlight the dynamic nature of the field. Following the significant market fluctuations observed after 2024, alongside ongoing regulatory discussions surrounding central bank digital currencies (CBDCs), the broader cryptocurrency ecosystem continues to evolve rapidly (Polizu et al., 2026).

Cryptocurrencies were introduced as decentralized, blockchain-

based alternatives to traditional financial systems (Nakamoto, 2008), particularly following the global financial crisis of 2008, which highlighted structural weaknesses in existing institutions (Nofer et al., 2017). By enabling peer-to-peer transactions without centralized intermediaries, blockchain technology has the potential to increase transparency and efficiency in financial exchanges (Crosby et al., 2016). At the same time, cryptocurrencies are associated with several challenges, including high volatility, regulatory uncertainty, and potential misuse in illicit activities such as money laundering (White et al., 2020). For most people, they are seen primarily as investment assets, driven by volatility and limited practical use.

The exploration of consumer behavior related to cryptocurrencies remains relatively underdeveloped compared to other fields (Arias-Oliva et al., 2019). While in recent years, there has been a significant surge in the number of studies focused on cryptocurrency (Casino et al., 2019; Steinmetz et al., 2021; Yuan & Wang, 2018), and since 2015, the occurrence of terms like Bitcoin and cryptocurrency has

E-mail address: [mark.recsko@stud.uni-corvinus.hu](mailto:mark.recsko@stud.uni-corvinus.hu).

<https://doi.org/10.1016/j.ssaho.2026.102976>

Received 27 September 2025; Received in revised form 21 May 2026; Accepted 22 May 2026

Available online 4 June 2026

2590-2911/© 2026 The Author. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

grown substantially in academic literature (Miau & Yang, 2018), the majority of academic sources continue to focus on the computational, legal, regulatory, and financial aspects of this technology (Armani Dehghani et al., 2025; García-Corral et al., 2022; Sousa et al., 2022). Although early studies highlighted the lack of research on cryptocurrency adoption (Baur et al., 2015), empirical work on the topic has expanded in recent years, frequently applying established technology acceptance models such as TAM and UTAUT (Mendoza-Tello et al., 2018). At the same time, differences between user and non-user behavior, as well as contextual variations across countries and regions, also remain insufficiently explored (Arias-Oliva et al., 2019; Armani Dehghani et al., 2025; Palos-Sanchez et al., 2021; Yeong et al., 2019). Moreover, within the field of adoption, various topics can be distinguished with different focal points, which should be examined separately and categorized to gain a deeper understanding of the subject (Marikyan et al., 2019).

From a research perspective, a key objective for a trending technology is to explore as many of its aspects as possible. This includes adequately mapping, summarizing, and analyzing the growing body of literature and existing knowledge on consumer acceptance, in order to foster further scientific development (Ancillai et al., 2023; Behl et al., 2022). Since cryptocurrency adoption research is still relatively young, the body of literature continues to expand rapidly. At the same time, many empirical studies rely heavily on established technology acceptance models, often applying similar frameworks to different samples or extending existing models with additional variables. While this has generated a substantial body of empirical work, it has also resulted in a proliferation of isolated findings with limited synthesis across studies. This fragmentation makes it increasingly difficult to build cumulative knowledge and may contribute to a degree of theoretical stagnation, as similar models are repeatedly tested without sufficient integration or conceptual advancement. As a result, the challenge is no longer the lack of empirical evidence, but rather the lack of structured synthesis and conceptual consolidation within the field.

Therefore, it becomes more difficult to identify new research gaps and move the scholarly dialogue beyond repeated model testing. In this context, systematic literature reviews and bibliometric analyses play a crucial role in synthesizing existing evidence, identifying patterns, and outlining future research directions.

Although several review studies have examined aspects of cryptocurrency adoption, existing reviews differ considerably in scope, focus, and methodological approach. For instance, a 2019 analysis by Al-amri et al. (2019) took a broader interpretation of the concept of adoption, while a 2022 paper focused on consumer trust (Sousa et al., 2022). A 2023 publication centered specifically on consumer acceptance of cryptocurrencies, but it mainly highlighted studies using technology acceptance models, quantitative methodologies, and large sample sizes. However, no meta-analysis or bibliometric analysis was conducted (Bommer et al., 2023). In addition, many existing reviews rely on data collected prior to the recent surge in cryptocurrency-related research, limiting their ability to reflect the current structure and dynamics of the field (Al-Amri et al., 2019; Bommer et al., 2023; Sousa et al., 2022). As a result, despite the rapid expansion of empirical studies, the field still lacks a comprehensive and structured overview that connects publication trends with methodological and theoretical developments.

In response, this study aims to provide not only a structured overview of the literature but also a more integrated understanding of how the field is currently organized and where further development is needed.

More specifically, the study aims to:

1. map and critically examine the evolution and structure of cryptocurrency acceptance research, with a particular focus on how adoption and usage intention have been conceptualized,

2. systematically synthesize and compare the dominant methodological approaches, theoretical frameworks, and research contexts applied in the literature, and
3. identify recurring patterns, conceptual limitations, and structural gaps, in order to provide a more integrated understanding of the field and outline theoretically grounded directions for future research.

Since the research aims to interpret studies on cryptocurrency acceptance from a structured perspective, the research questions (RQ) are designed to clearly address these aspects (Bhimani et al., 2019; Cruz-Cárdenas et al., 2021; Siddaway et al., 2019):

RQ1: How is existing research on cryptocurrency acceptance distributed across time, geography, and key analytical dimensions??

RQ2: What common characteristics and relationships can be identified across these studies??

RQ3: What are the dominant research methodologies, theoretical frameworks, sampling techniques, data analysis methods, and software tools used in the field?

RQ4: What types of participants and research focuses are most commonly examined, and what recurring patterns or application areas emerge?

RQ5: What research gaps can be identified, and what directions for future research can be proposed?

By combining bibliometric analysis with a systematic literature review, this study seeks not only to update existing knowledge but also to address the fragmentation of prior research by providing an integrated perspective on how the field is structured and how it may evolve.

## 2. Research methodology

A well-structured and properly conducted literature review can provide new ideas and directions for a research field. However, both data collection and evaluation can present significant challenges, which is why it is important to build on guiding works to ensure that truly valuable and applicable results are provided for future research (Page et al., 2021; Snyder, 2019).

A literature review is a systematic process of identifying, evaluating, and synthesizing existing research on a particular topic to establish a knowledge base, highlight gaps, and inform future research or practice (Behl et al., 2022; Snyder, 2019; Tranfield et al., 2003). In this study, both a bibliometric analysis and a systematic literature review are employed to examine the current state of knowledge regarding consumer acceptance of cryptocurrencies. The rationale for the selection and combined application of these methodologies is elaborated in Appendix A1. The combined use of bibliometric analysis and systematic literature review enables a more comprehensive understanding of the field by linking macro-level publication trends with micro-level analytical insights. This integrated approach allows for identifying not only how the field has evolved, but also how it is structured in terms of methods, theories, and research focus.

I conducted both the bibliometric analysis and the systematic literature review following the methods applied and recommended by others (Behl et al., 2022; Bhimani et al., 2019; Chauhan et al., 2022; Cruz-Cárdenas et al., 2021; Donthu et al., 2021; Fisch & Block, 2018; Tranfield et al., 2003; Zupic & Čater, 2015), with special attention to the precise documentation of the literature review process (Snyder, 2019). At the same time, in designing the methodology and evaluating the results, I placed particular emphasis on similar analyses previously conducted on the topic (Al-Amri et al., 2019; Bommer et al., 2023; Sousa et al., 2022). In my methodology, I adhered to the PRISMA guidelines (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) (Moher et al., 2009; Page et al., 2021), ensuring that the research was built on the broadest and most reliable foundation possible. In line with the PRISMA framework, the review process followed a structured

workflow including identification, screening, eligibility assessment, and final inclusion of studies.

This review is structured according to 5 main steps (Bejjani et al., 2023; Cruz-Cárdenas et al., 2021; Echchakoui, 2020; Tranfield et al., 2003): (1) planning, (2) data collection, and analyzing the results, first (3) in a bibliometric analysis, and then (4) in a systematic literature review. Finally, (5) drawing the combined conclusions and making recommendations (Donthu et al., 2021; Snyder, 2019; Zupic & Čater, 2015). These steps correspond to the main phases of the PRISMA framework, ensuring a transparent and replicable study selection process. Table 1 summarizes the overall research design and analytical workflow of the study.

As part of the first step (1), I examined which database provides the most reliable and comprehensive results (Martín-Martín et al., 2021). A bibliometric data source and tools for interpreting quality are critical to guarantee their reliability. Both are provided by large bibliographic databases, whose importance has significantly increased in recent years (Pranckutė, 2021).

A more detailed justification for the selection of databases is provided in Appendix A2. In this study, the analysis is based on a combined dataset extracted from Scopus and Web of Science. Although this decision is strongly supported by the literature (Ancillai et al., 2023; Bejjani et al., 2023; Caputo & Kargina, 2022), few people have chosen this approach (Echchakoui, 2020).

Following the identification of databases, I established the method for data extraction. In determining the keywords, I considered prior related research (Al-Amri et al., 2019; Bommer et al., 2023; Sousa et al., 2022). Accordingly, the search process employed the terms cryptocurrenc\* AND accept\* and cryptocurrenc\* AND adoption\* (Siddaway et al., 2019). The use of the asterisk (\*) allowed for the inclusion of various keyword variations. Additionally, the search scanned the titles, abstracts, and keywords of the documents (Cruz-Cárdenas et al., 2021). The selection of keywords was also supported by asking for the opinion of experts (Chauhan et al., 2022).

Within this stream of research, related constructs such as acceptance, adoption, and continuance are often used in overlapping or inconsistent ways. Acceptance generally refers to users' attitudes and behavioral intentions toward a technology, adoption captures the initial decision to use or engage with it, while continuance focuses on sustained usage over time. To reduce conceptual ambiguity, this review focuses primarily on consumer acceptance, while also considering studies addressing adoption- and continuance-related intentions where these are directly linked to adoption behavior.

As part of the search strategy, filters were defined to ensure consistency and relevance. The search was restricted to the "topic" category (title, abstract, and keywords), and limited to publications in English, including both journal articles and conference proceedings (Bhimani et al., 2019). Conference proceedings were included due to the rapidly evolving nature of the field. Although the citation impact of conference papers has increased in some fields, they are generally considered less

**Table 1**  
The 5 main steps of the review.

(1) Planning
Objectives definition
Database selection
Methodology design (keywords, criteria)
(2) Data collection
WoS and Scopus databases
Inclusion criteria and keyword search
PRISMA-based screening
(3) Bibliometric analysis
Publication trends, citations, journal metrics
(4) Systematic review
In-depth analysis (samples, methods, focus)
(5) Conclusion
Synthesis of findings and research directions

**Table 2**  
Inclusion and exclusion criteria.

Criteria Type	Details
<b>Inclusion</b>	<ul style="list-style-type: none"> <li>✓ Peer-reviewed research articles (including articles in press) and conference proceedings</li> <li>✓ Papers published in English (not just the abstract)</li> <li>✓ Empirical research examining consumer behaviors</li> <li>✓ Studies focused on cryptocurrencies, either in general or with a specific focus on a particular coin</li> </ul>
<b>Exclusion</b>	<ul style="list-style-type: none"> <li>✗ Books and book chapters</li> <li>✗ Papers not published in English</li> <li>✗ Studies that do not focus on consumer behavior regarding cryptocurrencies, such as country adoption, financial systems, or technological integration</li> <li>✗ Research that does not use primary data collection, does not specifically gather consumer behavior data, and only provides literature reviews or uses secondary data</li> <li>✗ Studies where cryptocurrencies are not the main subject of the research, but rather topics like digital currencies, mobile wallets, or NFTs (Non-fungible tokens)</li> </ul>

influential and more short-lived than journal articles (Lisée et al., 2008). At the same time, in emerging research areas, conferences play an important role in disseminating early findings and facilitating academic exchange (Haus, 2021).

Given the novelty of the technology, there was no need to account for outdated sources (Behl et al., 2022). Previous findings indicate that the earliest relevant publications date back to 2013 (Baur et al., 2015; Sousa et al., 2022), and I aimed to minimize restrictions on the number of sources analyzed (Snyder, 2019). Therefore, I did not impose any date range limitations (Cruz-Cárdenas et al., 2021). Further filtering was necessary based on the review of specific sources (Cruz-Cárdenas et al., 2021; Hanelt et al., 2021), although incorporating additional keywords was not required (Cruz-Cárdenas et al., 2021). The primary exclusion criterion was whether a paper did not investigate cryptocurrencies within an empirical research framework focused on consumer adoption (Eime et al., 2013).

An important part of the research was to define the selection criteria as precisely as possible (Bommer et al., 2023; Casino et al., 2019; Siddaway et al., 2019) (see Table 2):

The precise definition and documentation of criteria are crucial for the reproducibility and future handling of the research by others (Siddaway et al., 2019). Throughout the filtering process, I closely followed the predefined inclusion and exclusion criteria, allowing the removal of not only irrelevant records but also sources deemed unsuitable after detailed analysis. A key issue encountered was the frequent

conflation of cryptocurrencies with digital currencies. In several cases, even in the introduction of the paper, a significant focus was placed on cryptocurrencies, but the subsequent research was centered on digital currencies, either in general or specifically. However, these are clearly distinguishable concepts. Cryptocurrencies are decentralized, blockchain-based digital assets that often ensure anonymity (Nakamoto, 2008). While they are considered digital money, not all digital currencies are cryptocurrencies. Digital currencies, such as central bank digital currencies (CBDCs), are digitally created and managed payment systems that do not necessarily use blockchain technology (Jaiswal, 2020).

To ensure consistency in data extraction, a structured coding scheme was developed. The included studies were systematically categorized based on key dimensions, including: publication characteristics (year, source type); methodological approach (quantitative, qualitative, mixed); theoretical framework (e.g., TAM, UTAUT, extended models); sample characteristics (target group, country); research focus (e.g., a specific cryptocurrency, cryptocurrencies in general).

As the second step (2), the data collection was conducted on March 11, 2024, based on the previously defined criteria. In Web of Science, the search returned 343 results for “cryptocurrenc\* AND accept\*” and 465 results for “cryptocurrenc\* AND adoption\*”. In Scopus, the same queries yielded 441 and 656 results, respectively.

For comparison, the keyword “cryptocurrenc\*” alone resulted in

7246 hits in WoS and 12,289 in Scopus. This means that the area I investigated, focusing on cryptocurrency acceptance, accounted for less than 10% of the total research in the field of cryptocurrency technology. These results were before the two-round filtering.

After the initial screening based on titles, abstracts, and keywords, 122 relevant records remained in WoS and 167 in Scopus. In the second stage, full-text screening was conducted, during which all studies were reviewed multiple times and evaluated against the predefined inclusion and exclusion criteria. This process resulted in 103 sources in WoS (88 articles, 14 conference papers, and 1 record initially indexed as a review article but reclassified as an empirical study) and 137 sources in Scopus (107 articles, 29 conference papers, and 1 similarly reclassified record). It is important to note that these two records refer to the same study indexed in both databases. Although it was originally labeled as a review article, full-text analysis revealed that it is in fact an empirical study, including primary data collection and quantitative analysis. Therefore, it was retained in the final sample based on its methodological characteristics rather than its database classification.

The screening and eligibility assessment were initially conducted separately for each database to allow for a comparative evaluation of their individual contributions. Following this process, the records were merged, and duplicate entries were removed at the final stage. This approach enabled an additional comparison of database-specific results prior to consolidation.

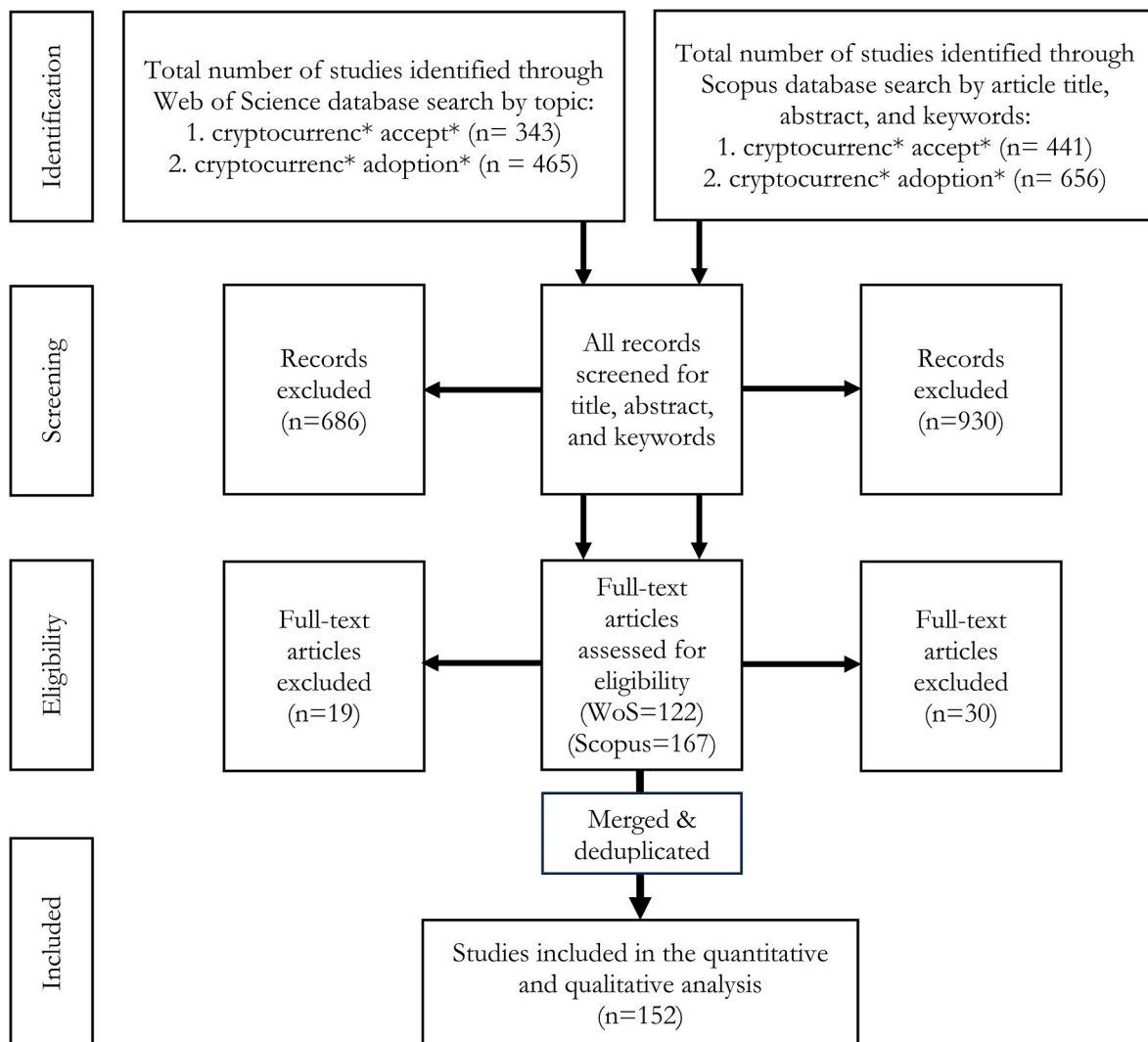


Fig. 1. Diagram showing the four stages of the data collection based on the PRISMA statement (Moher et al., 2009; Page et al., 2021).

The final dataset consisted of 152 unique studies, including 120 journal articles and 32 conference papers (Fig. 1).

The screening and coding process was conducted by a single researcher. To enhance consistency and reliability, predefined inclusion and exclusion criteria and coding rules were strictly followed throughout the process. The coding process was iterative, with multiple rounds of review applied to ensure consistency. Although a formal risk-of-bias assessment was not conducted, the quality of the included studies was ensured by limiting the sample to peer-reviewed journal articles and conference proceedings indexed in Web of Science and Scopus.

I have summarized additional exclusion criteria, borderline cases, and the associated filtering recommendations in the table showcased in Appendix A (Table A1) (Siddaway et al., 2019).

### 3. Results and discussion

#### 3.1. Descriptive and bibliometric analysis

##### 3.1.1. Selected articles per year

The distribution of publications over time indicates that research on cryptocurrency adoption remained limited until 2018. From that point onward, as shown in Fig. 2, publication output demonstrates a clear upward trajectory over time, with a particularly notable increase in recent years. The pattern suggests a growing academic interest in the topic, especially after 2020. While early 2024 data already indicate continued research activity, no conclusions are drawn regarding the full-year trend.

##### 3.1.2. Citations

Citations are commonly used to assess the academic impact of publications, providing an overview of influential works within a given field (Suban, 2023). Citation data were primarily obtained from Scopus, with unavailable records supplemented using WoS (all databases). As shown in Fig. 3, citation counts vary across publication years, with earlier studies generally accumulating more citations.

To further examine the citation structure, publications were grouped into categories based on citation counts (Table 3) (Suban, 2023). The results indicate that most studies fall into lower citation ranges, while only a small number of papers can be considered highly cited.

Among the most cited studies, several focus on consumer adoption using extended versions of established acceptance models such as TAM and UTAUT.

##### 3.1.3. Journal article-conference paper ratio

Conference papers were relatively prominent in the earlier stages of the cryptocurrency adoption field. However, as shown in Fig. 4, the number of journal articles has increased significantly since 2021, while

conference publications have remained relatively stable.

While this pattern may reflect a gradual shift toward more formalized and peer-reviewed research outputs, it should be interpreted with caution and does not necessarily indicate theoretical advancement. Instead, it highlights a change in publication practices as the field evolves.

##### 3.1.4. Journals

The results indicate a high level of dispersion across journals, with most outlets contributing only a single publication. This suggests that no single journal or clearly defined group of journals dominates the field. A detailed overview of journal-level results is provided in Appendix B (Table B1).

A small number of journals appear more frequently, such as Human Behavior and Emerging Technologies, indicating emerging focal points within the literature. The identified outlets span multiple disciplines, including finance, information systems, marketing, and psychology. In addition, many of the most frequently represented journals are ranked in higher SCImago Journal Rank (SJR) quartiles (Q1–Q2) (SCIMAGO RESEARCH GROUP, S.L., n.d.), suggesting that the topic is increasingly present in established academic outlets. Overall, the distribution reflects the interdisciplinary nature of cryptocurrency adoption research.

##### 3.1.5. SCImago ranking

An additional perspective on publication quality is provided by the SCImago Journal Ranking (SJR), which allows journals to be categorized into quartiles (Q1–Q4) (Scimago Research Group, S.L., n.d.).

Fig. 5 presents the distribution of journal articles across quartiles over time. The results indicate a gradual increase in the proportion of Q1 publications, particularly from 2021 onwards. At the same time, the share of conference papers and lower-ranked journal articles (Q3–Q4) appears to decline.

Similarly to the journal article–conference paper ratio, this shift does not necessarily provide direct evidence of the development of the research field. However, it represents an important observation regarding the distribution of publications across journal quality categories. Nevertheless, the increasing presence of Q1 publications may indicate increasing visibility rather than definitive evidence of qualitative advancement.

##### 3.1.6. Analysis of keywords

Like others (Behl et al., 2022; Bejjani et al., 2023; Cruz-Cárdenas et al., 2021; Sousa et al., 2022), I used the VOSviewer software for keyword analysis (van Eck & Waltman, n.d.; Van Eck & Waltman, 2010). VOSviewer was employed to visualize bibliometric networks, particularly term co-occurrences, using a default threshold of five - retained for optimal clarity and connectivity (Behl et al., 2022). The analysis was

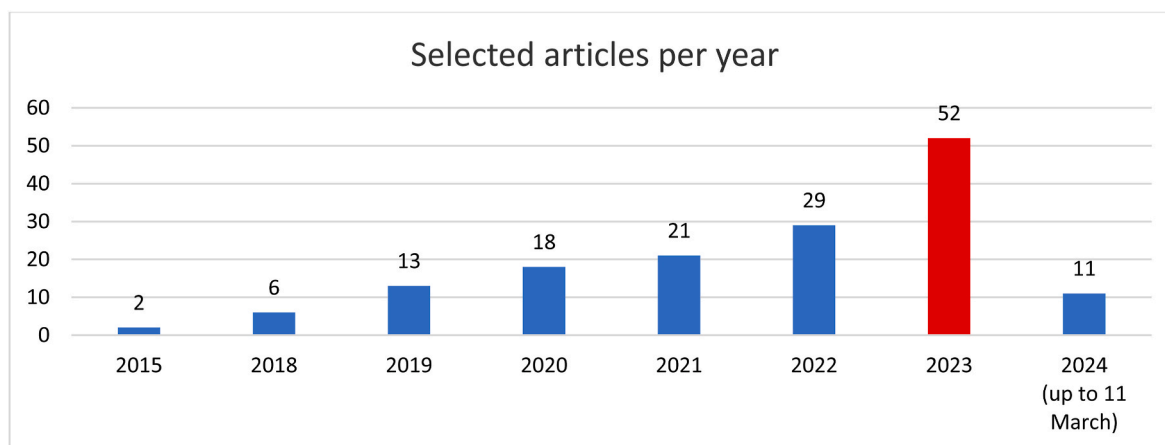


Fig. 2. Diagram showing the selected articles per year.

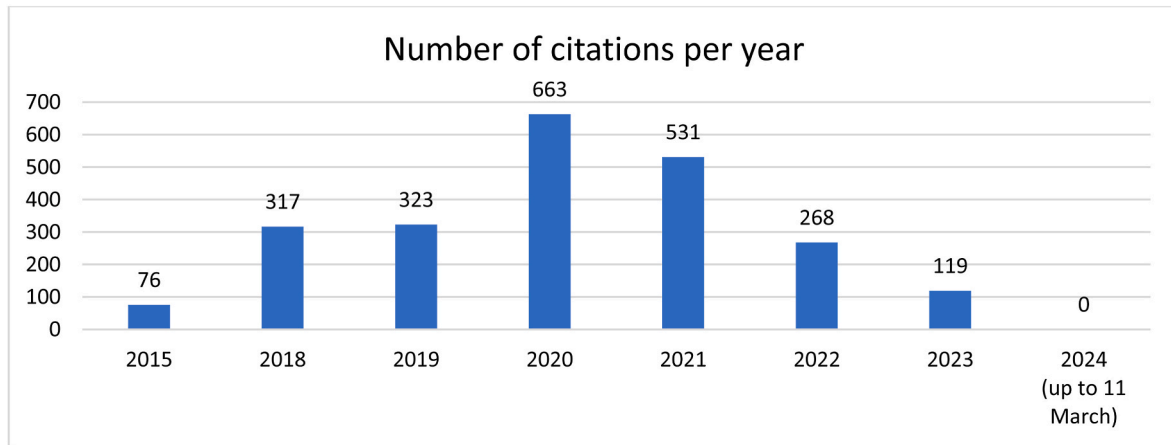


Fig. 3. Diagram showing the number of citations per year.

**Table 3**  
General citation structure in cryptocurrency acceptance.

Number of citations	Number of articles	Percentage of articles
≥100	4	2,63%
≥50	6	3,95%
≥25	17	11,18%
≥20	6	3,95%
≥10	26	17,11%
≥5	15	9,87%
<5	78	51,32%
Total	152	100,00%

based on author keywords from Scopus and Web of Science. To enhance consistency, manual harmonization was applied: “block chain” was merged into “blockchain,” “cryptocurrencies” unified as “cryptocurrency,” and all variations of “TAM” and “technology acceptance model” consolidated as “technology acceptance model (TAM)” (van Eck & Waltman, n.d.; Van Eck & Waltman, 2010).

Ultimately, 23 items were selected and grouped into five clusters (Table 4). Fig. 6 presents the resulting clusters.

Cluster 1 emphasized cryptocurrency, behavioral intention, and adoption models (TAM, UTAUT), highlighting a focus on acceptance theory. Cluster 2 focused on Bitcoin, blockchain, and methodological

terms (e.g., PLS-SEM). Cluster 3 grouped psychological variables such as trust, perceived risk, and financial literacy. Clusters 4 and 5 addressed general adoption concepts and core adoption-related terms. Overall, the literature is structured around established technology acceptance models and their application to cryptocurrencies.

Keyword frequency analysis revealed that “cryptocurrency” was the most frequently occurring term (109 occurrences), followed by “Bitcoin” (41) and “blockchain technology” (39). The “technology acceptance model (TAM)” appeared 20 times. Other recurring terms included “adoption” and “trust” (13 each), as well as “acceptance” and “technology adoption” (10 each), all reflecting core theoretical frameworks. Despite the presence of over 400 unique keywords, these terms highlight the dominant themes in the field. Emerging niche terms included “sustainability”, “tourism”, and demographic groups like “Generation Z”, suggesting diversification in both context and population studied.

Temporal analysis (Fig. 7; Appendix B Table B2) shows that early literature focused on Bitcoin, whereas over time, “cryptocurrency” became dominant. Mentions of “blockchain” have also increased, reflecting the broader technological relevance beyond cryptocurrencies.

3.1.7. Analysis of abstracts

To explore conceptual trends, I analyzed all 152 abstracts using *Voyant Tools* (Sinclair & Rockwell, 2016), with input from linguistic

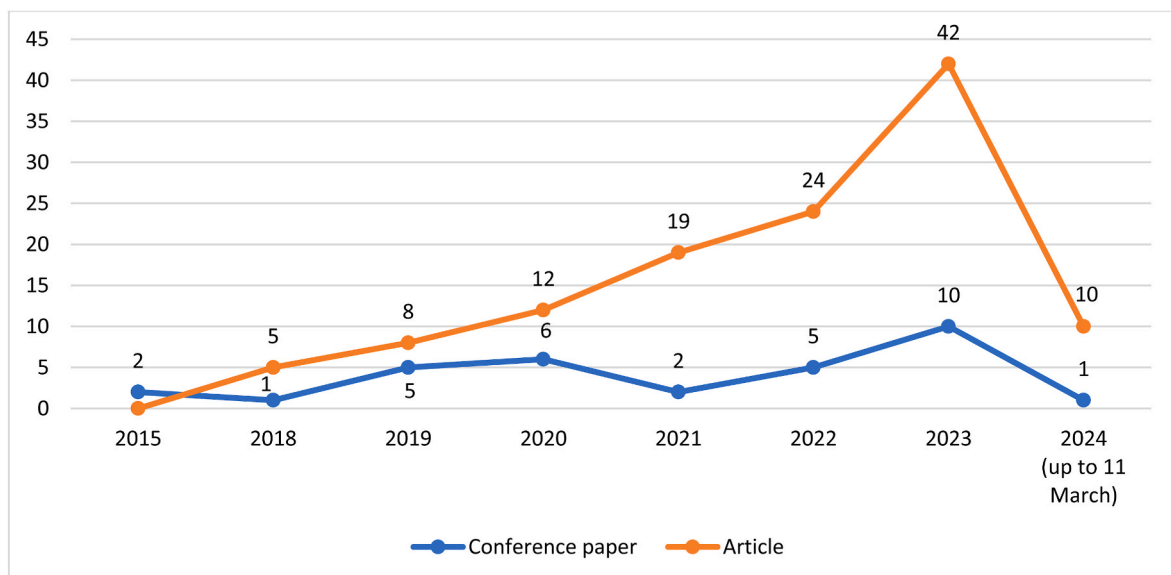


Fig. 4. Diagram showing the number of journal articles and conference papers.

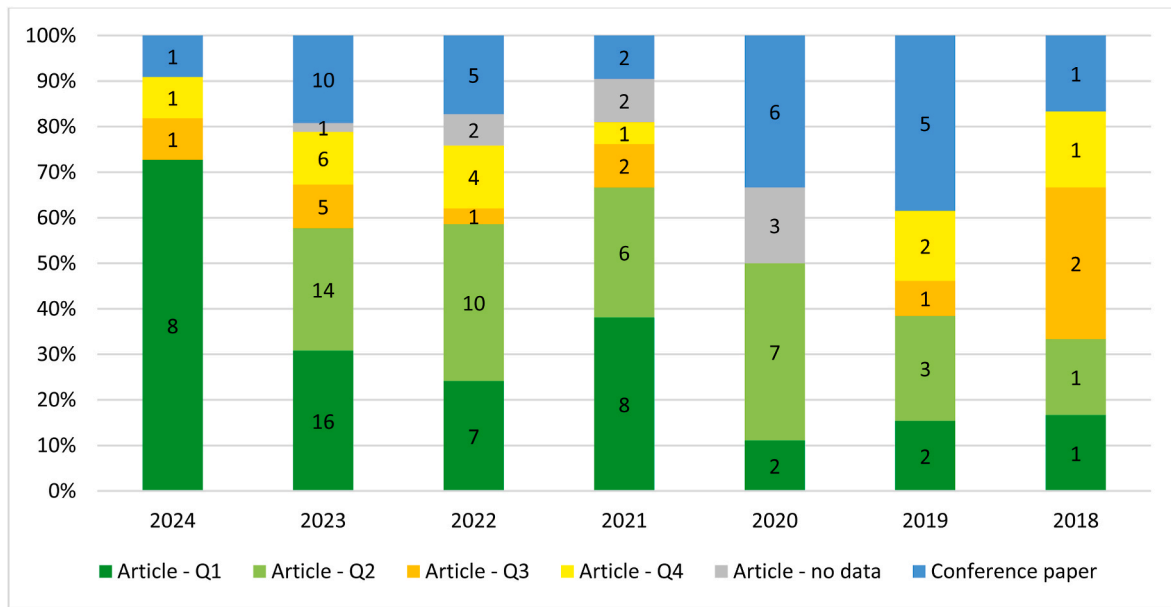


Fig. 5. Diagram showing the journal article and conference paper ratios by year.

Table 4  
Keyword clusters.

Cluster	Keywords
Cluster 1 (7 items)	Attitude, Behavioral intention, Cryptocurrency, Malaysia, Social influence, Technology acceptance model (TAM), UTAUT
Cluster 2 (6 items)	Acceptance, Bitcoin, Blockchain, Continuance intention, Fintech, PLS-SEM
Cluster 3 (4 items)	Financial literacy, Perceived risk, Perceived value, Trust
Cluster 4 (3 items)	Digital currency, Technology acceptance, Technology adoption
Cluster 5 (3 items)	Adoption, Intention, Technology

experts. The abstracts were compiled chronologically and processed to examine term frequency patterns.

The 50 most frequent terms (Fig. 8) mirror the keyword analysis, with “cryptocurrency” (478 mentions) and “cryptocurrencies” (293) dominating, followed by adoption-related concepts. Bitcoin (155) shows a declining relative frequency over time (Fig. 9).

Key adoption factors - “trust” (122) and “risk” (97) - appear prominent. Methodologically, structural equation modeling (e.g., “SEM”, “PLS”, “structural equation”, “modeling”) dominates, whereas regression appears rarely (6 mentions), indicating the field’s methodological preferences.

Overall, abstract analysis corroborates prior findings: the shift from Bitcoin-specific research to broader cryptocurrency topics, the rising prominence of blockchain, and the continued emphasis on established technology acceptance constructs.

### 3.1.8. Analysis by continent and country

The literature suggests that in consumer behavior and technology adoption research, the country of origin of the sample and the location of the research play a significant role, as cultural and regional differences can influence the results (H. M. Kim et al., 2025; Youn & Luan, 2024). This is supported by studies demonstrating that country-specific factors, such as religion, local market characteristics, and cultural dimensions, affect technology acceptance and consumer behavior (J. J. Kim et al., 2023; Nguyen & Rudawska, 2022).

For this reason, I have examined the distributions by continent and by country separately during the literature review process. It is

important to point out that I have not used the country data reported by Scopus or WoS, as this does not refer to the origin of the sample but to the affiliation of the authors, which in many cases can lead to misunderstandings. In my case, I was specifically interested in identifying the country where the research sample was collected, meaning the country where consumers were located at the time of data collection.

The analysis highlights a strong geographic concentration of studies, with more than half of the reviewed publications originating from Asia (80 records) (Appendix B Table B3). Since 2020, Asia has consistently played a leading role, while Europe represents the second most studied region (26 records), albeit with more fluctuating publication patterns (Fig. 10). In contrast, North America shows relatively stable but limited output (10 records), while South America (0), Africa (7), and Australia (2) remain underrepresented. A number of studies did not clearly specify the origin of the sample, although this issue appears to decrease over time, suggesting improving reporting practices. It is also important to note the increasing number of multi-continent studies (11 records), indicating a gradual shift toward more geographically diverse research designs.

At the country level, the distribution is similarly uneven, with a small number of countries accounting for a substantial share of the literature. At the same time, many countries appear only once or are entirely absent from the dataset (Table 5; Appendix B Table B4).

### 3.2. Systematic review findings

This section presents the results of the systematic review, summarizing the key characteristics of the 152 analyzed studies, organized according to the predefined analytical dimensions. The focus is on reporting the main patterns identified in the dataset, while a more detailed interpretation is provided in the Conclusion section. A more detailed elaboration of the components, along with the individual identification of sources, is provided in Appendix C.

#### 3.2.1. Sampling strategies in the reviewed studies

An important aspect of the systematic analysis was the examination of sampling strategies applied in the reviewed empirical studies. Based on the analysis of 152 publications, six main categories of sample selection criteria were identified (Table 6), reflecting substantial diversity in how researchers approach participant recruitment in cryptocurrency adoption research.

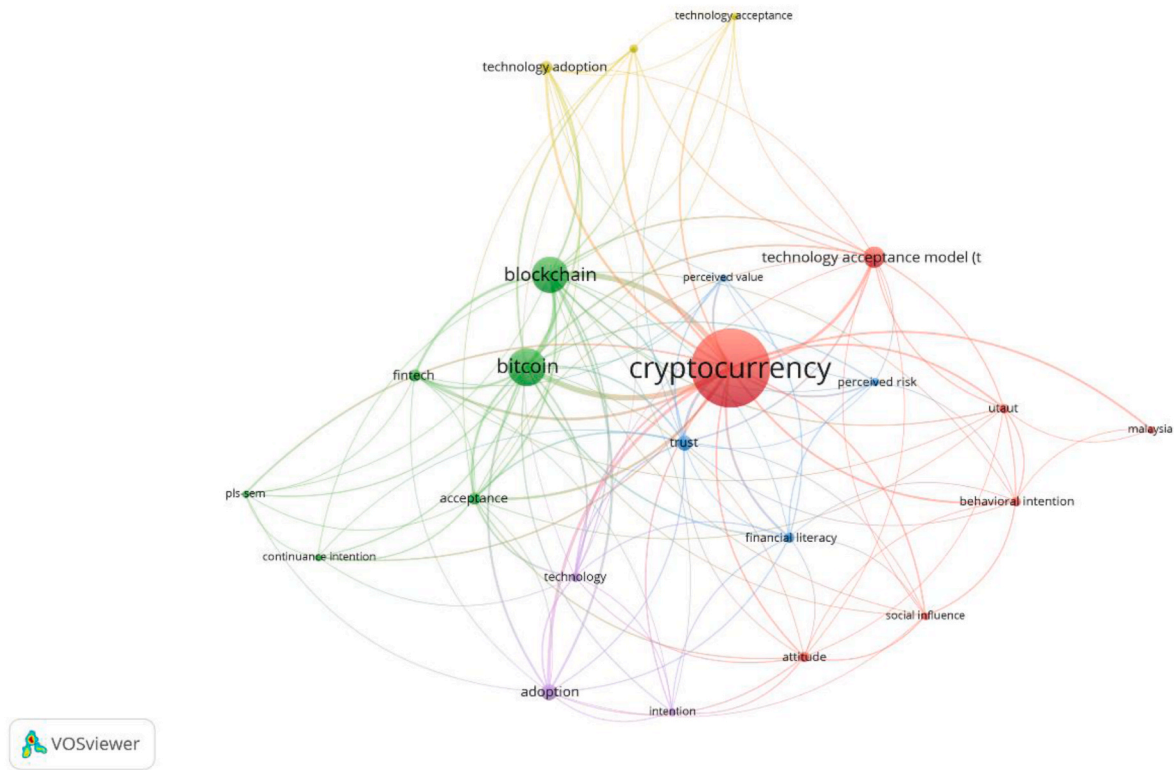


Fig. 6. Diagram showing the main keywords by VOSviewer.

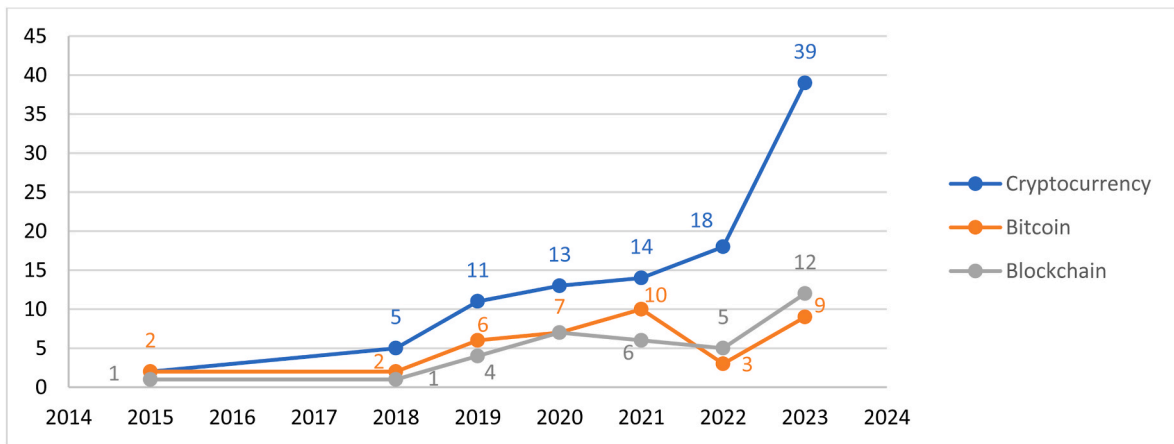


Fig. 7. Diagram showing the occurrences of the terms “cryptocurrency”, “Bitcoin”, and “Blockchain” by year.

The largest group (Group 5) consists of studies targeting general or non-specified populations, often applying minimal selection criteria. While this approach may support broader coverage, it may also limit the interpretability and comparability of findings when sampling procedures are not clearly reported. A similarly prominent group (Group 2) focuses on cryptocurrency users and/or non-users, frequently aiming to capture different stages of adoption. This reflects the underlying logic of technology adoption research, where distinctions between potential and actual users play a central role. Targeted sampling strategies are also evident, particularly in studies requiring prior cryptocurrency knowledge (Group 1) or focusing on younger populations such as students (Group 4). While these approaches may enhance response quality or reflect digitally engaged groups, they can also reduce generalizability.

More specialized samples, including business-oriented participants

(Group 3) or unique niche groups (Group 6), represent a smaller but important segment of the literature. These studies tend to provide more context-specific insights, often linked to practical applications or emerging use cases.

Overall, the findings indicate considerable heterogeneity in sampling practices. While general population studies remain dominant, the growing use of more targeted and context-specific samples suggests an increasing effort to capture different dimensions of cryptocurrency adoption. At the same time, inconsistencies in reporting sampling procedures in some studies may limit comparability and indicate the need for greater methodological transparency in future research.

### 3.2.2. Research focus and subject of analysis

Another key dimension of the systematic analysis was the



Fig. 8. Diagram showing the main terms from the abstracts by Voyant Tools  
Note: Common stopwords (e.g., “and”, “the”, “of”) were excluded from the analysis.

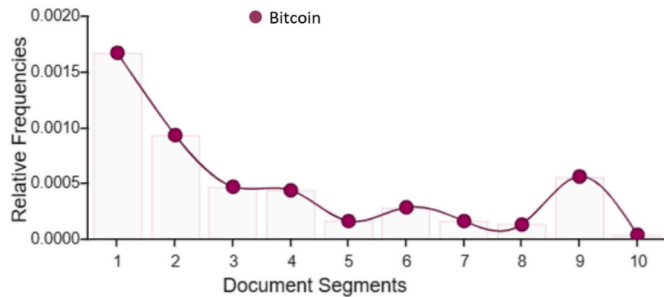


Fig. 9. Diagram showing the relative frequency of the term “Bitcoin” over the years.

identification of the primary focus of the selected studies. Although all 152 publications address cryptocurrency adoption, their specific subject of analysis varies considerably.

As shown in Table 7, the majority of studies (123 cases) do not focus on a specific cryptocurrency but instead examine cryptocurrencies in a

general sense. Within this group, a substantial proportion adopts a highly abstract perspective, focusing on overall attitudes, behavioral intentions, or adoption mechanisms without linking these to a particular technological solution or application context.

Among studies that specify a particular cryptocurrency, Bitcoin clearly dominates, appearing in 23 cases. This reflects its historical role as the first and most widely recognized cryptocurrency, as well as its continued prominence in both academic research and public discourse. Other cryptocurrencies or projects appear only sporadically, indicating that research attention remains concentrated rather than evenly distributed across the broader ecosystem.

Beyond specific coins, a number of studies examine cryptocurrencies within particular application contexts. These include their use as a payment method, transactional tool, or investment asset, as well as their integration into specific platforms or services. Tourism and e-commerce also emerge as recurring contexts, highlighting the relevance of cryptocurrencies in selected industry settings. In addition, several studies focus on specific conceptual or contextual dimensions, such as trust, regulatory or religious considerations, and the relationship between cryptocurrencies and broader technological systems (e.g., blockchain or digital currencies).

It is important to note that these categories are not mutually exclusive, as many studies address multiple aspects simultaneously (e.g., investment behavior within a specific platform or application context). Overall, the findings suggest a shift from an early concentration on Bitcoin toward more generalized and increasingly application-oriented research. More recent studies tend to explore specific use cases and

Table 5  
Origin of the sources by country.

Category	Country/Region	Records	
<b>Top contributors</b>	Malaysia	19	
	India	11	
	Spain	9	
	USA	8	
	Pakistan	7	
	Indonesia, Germany	6	
	UAE, Saudi Arabia	5	
	China, Taiwan, Thailand	4	
	<b>Other countries</b>	Various (mostly 1 occurrence)	26
		Not specified	19
<b>Multi-country studies</b>		Multiple/cross-country	19

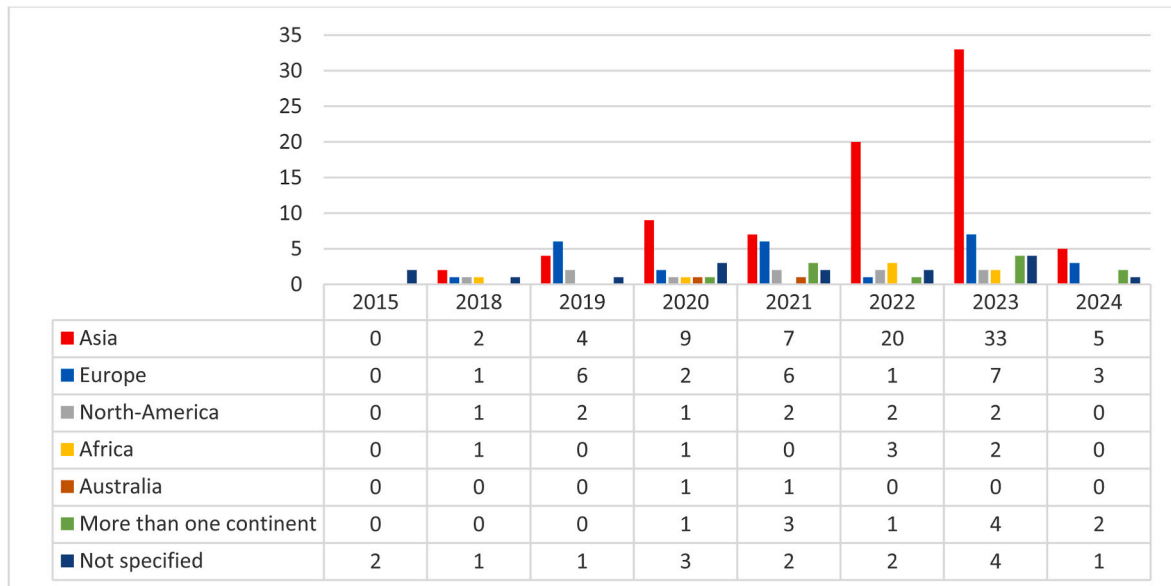


Fig. 10. Diagram showing the origin of the sources by continent and year.

**Table 6**  
Groups based on sample selection criteria.

Name of the group	Description	Number of papers
1. Cryptocurrency Knowledge	To ensure the success of the survey, researchers established a criterion requiring participants to have at least basic cryptocurrency knowledge, even if they were not actual users.	24
2. Cryptocurrency Users and/or Non-Users	Several publications specifically aimed to assess the attitudes of cryptocurrency or Bitcoin users, leading to the exclusion of participants who did not indicate ownership of any cryptocurrency at the beginning of the survey. On the other hand, certain studies focused explicitly on measuring the intentions of non-users.	38
3. Business Connection	Some publications linked cryptocurrency to specific business activities. As a result, the selected sample primarily consisted of investors or members of a business entity, such as retail investors, executives, entrepreneurs, etc.	13
4. Youth/Students	Students, university attendees, and younger generations (such as Generation Z) were frequently the subjects of these studies. The rationale behind this selection was that younger individuals tend to be more open to innovations and possess higher levels of technical knowledge.	23
5. General or Non-Specified Population	In many cases, there were no specific criteria for survey participation, and data collection was conducted broadly, sometimes with only country-specific restrictions. Another category included studies where the publication did not specify the exact sample characteristics, only providing details on the sample size or the country of data collection without additional restrictions (with demographic data presented in a general manner in the results).	39
6. Unique Approaches	Sampling practices that do not fit into any of the aforementioned categories or are worth highlighting due to a distinctive methodology or selection criteria.	15

**Table 7**  
The featured cryptocurrencies under study.

Examined cryptocurrency	Frequency
Not specified/general	123
Bitcoin	23
Hypothetical cryptocurrencies (Recskó & Aranyossy, 2024; Salcedo & Gupta, 2021)	2
DDKOIN (Bakri et al., 2023)	1
Diem (former Libra) (Willems et al., 2021)	1
Bitcoin Green (BITG) (Mnif et al., 2021)	1
Bitcoin, Ethereum, and Ripple (Mattke et al., 2020)	1

contextual factors, indicating a gradual diversification in how cryptocurrency adoption is conceptualized and investigated.

**3.2.3. Data collection approaches used in the literature**

To better understand methodological patterns within the literature, the data collection approaches applied were also examined. The analysis reveals a clear dominance of quantitative methods, which are used in the vast majority of studies (132 cases). In contrast, only a limited number of studies rely exclusively on qualitative approaches (12 cases) or on

mixed-methods designs (8 cases), combining qualitative and quantitative elements.

Qualitative studies primarily employ interviews, focus groups, or the analysis of online content. These approaches are typically used to explore perceptions, experiences, and underlying motivations related to cryptocurrency adoption. Semi-structured interviews appear to be the most common qualitative technique, allowing for flexibility while maintaining a consistent analytical framework.

Mixed-methods studies generally combine qualitative insights with quantitative validation. In most cases, qualitative methods are used either to support the development of survey instruments or to complement statistical findings with deeper contextual understanding.

Within quantitative research, survey-based data collection clearly dominates. In this context, Likert scales are the most widely used measurement tool, enabling the quantification of attitudes, perceptions, and behavioral intentions. Both odd- and even-numbered scales are applied; however, odd-numbered formats - particularly those including a neutral midpoint - are more common. Likert scales are a fundamental instrument in psychological and social science research, designed to capture subjective evaluations in a structured and quantifiable form (Joshi et al., 2015).

While 5-point Likert scales remain the most widely used format - commonly ranging from “strongly disagree” to “strongly agree” - alternative configurations are also applied. These include shorter formats (e.g., 3- or 4-point scales) as well as extended versions (e.g., 7-, 10-, or higher-point scales) (Joshi et al., 2015; Pearse, 2011).

As illustrated in Fig. 11, the 5-point Likert scale is the most frequently used format, followed by the 7-point scale. Together, these two account for the vast majority of applications (90%). Other scale types (e.g., 4-, 6-, 9-, or higher-point scales) appear only sporadically, and in some cases, multiple scale formats are used within a single study to measure different constructs.

Overall, the findings indicate a strong methodological preference for quantitative, survey-based approaches in cryptocurrency adoption research. While qualitative and mixed-methods designs are present, they remain comparatively underutilized. This pattern suggests that the field is largely oriented toward theory testing and model validation, with relatively less emphasis on exploratory or interpretive methodologies.

**3.2.4. Sample size characteristics of the reviewed studies**

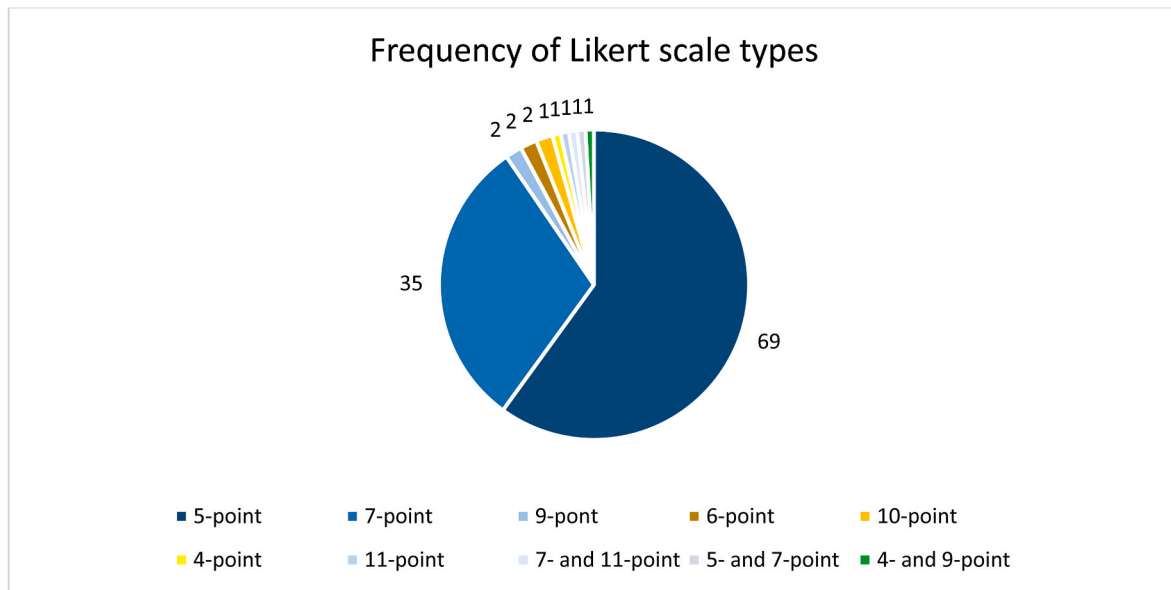
In qualitative studies, sample sizes vary considerably, reflecting the flexible and exploratory nature of these methods, which is consistent with qualitative research principles, where adequacy is determined by data saturation rather than statistical representativeness (Hennink et al., 2017). Prior literature suggests that saturation is often achieved within a relatively limited number of interviews, meaning that smaller samples can still provide meaningful and valid insights (Young & Casey, 2018).

In contrast, quantitative studies - primarily based on survey methods - tend to employ substantially larger samples. Most studies fall within a mid-range interval, typically involving a few hundred respondents, while only a limited number use very small or exceptionally large samples (Fig. 12).

Overall, the findings suggest that sample sizes across both qualitative and quantitative studies are generally aligned with methodological expectations. However, as with other aspects of the reviewed literature, inconsistencies in reporting and justification of sample size decisions indicate potential areas for improvement in future research practices.

**3.2.5. The chosen main analytical methodology and software**

The analysis of the selected studies reveals clear patterns in the applied analytical methodologies. In qualitative research, data analysis is most commonly based on coding techniques and thematic analysis. These approaches enable researchers to structure and interpret textual data by identifying recurring themes and patterns. This process is sometimes supported by qualitative data analysis software (e.g., NVivo or Atlas.ti), or complemented by more advanced techniques such as



\*Categories such as “5 and 7-point Likert scale” indicate that multiple scale formats were used within the same study (e.g., for measuring different constructs).

Fig. 11. Diagram showing the prevalence of different types of Likert scales

\*Categories such as “5 and 7-point Likert scale” indicate that multiple scale formats were used within the same study (e.g., for measuring different constructs).

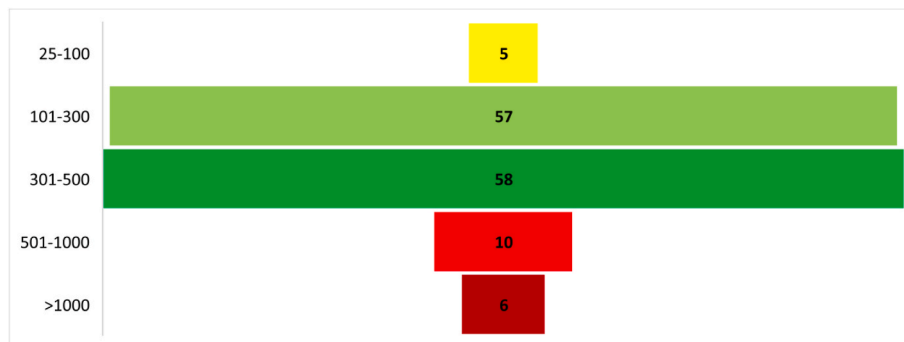


Fig. 12. Diagram showing the sample sizes along intervals.

topic modelling or sentiment analysis. Overall, qualitative methodologies remain relatively diverse, reflecting the exploratory nature of this research approach.

In contrast, quantitative studies show a strong methodological concentration. Structural Equation Modeling (SEM) clearly dominates the field, appearing in the majority of the reviewed studies (98 out of 152). Within this category, Partial Least Squares SEM (PLS-SEM) is by far the most frequently applied technique (in 67 cases), while covariance-based SEM (CB-SEM) and other variants appear only occasionally. This dominance reflects the widespread use of technology acceptance models, where SEM-based approaches are particularly well-suited for testing complex relationships between latent variables.

Beyond SEM, a range of additional statistical methods is applied, including regression analysis, factor analysis, and group comparison techniques. However, these methods typically play a secondary or complementary role. In some cases, SEM is combined with advanced techniques such as artificial neural networks (ANN) or fuzzy-set qualitative comparative analysis (fsQCA), indicating attempts to extend traditional model-testing approaches.

In terms of software, SmartPLS is the most frequently used tool, largely due to the dominance of PLS-SEM. Other commonly used

software includes SPSS (and its extensions, such as AMOS), while alternative tools (e.g., STATA, R, or MPlus) appear less frequently.

### 3.2.6. Underlying framework

Technology acceptance research provides the theoretical foundation for understanding how individuals adopt and use innovations. Core frameworks such as the Diffusion of Innovation (DOI) (Rogers, 1962), Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975), and Theory of Planned Behavior (TPB) (Ajzen, 1991) have been widely applied to explain user behavior, while the Technology Acceptance Model (TAM) (Davis, 1985) and its extensions (TAM 2 (Venkatesh & Davis, 2000) and TAM 3 (Venkatesh & Bala, 2008)) remain among the most influential models in this domain. Building on these, the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) and UTAUT2 (Venkatesh, & Xu, 2012)) integrates multiple prior approaches and is particularly relevant in consumer-focused contexts.

As illustrated in Fig. 13, within the reviewed studies, TAM emerged as the most frequently applied framework (45 occurrences), often serving as a baseline even in studies adopting alternative models. UTAUT, TPB, DOI, and TRA also appeared regularly, confirming their continued relevance. While extended models such as TAM2 and TAM3

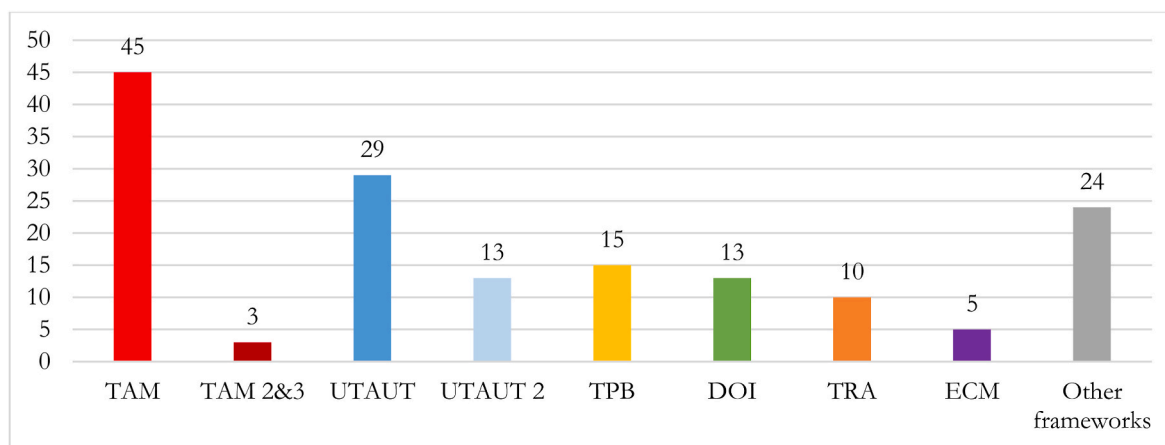


Fig. 13. Diagram showing the frequency of the underlying frameworks.

were only rarely used, UTAUT2 showed a stronger presence, thereby emerging as one of the most popular foundational models.

At the same time, the findings indicate an increasing tendency to combine and extend established models rather than rely on a single theoretical framework. Several studies integrate additional perspectives - such as expectation-confirmation, information systems success, or technology readiness approaches - to better capture specific aspects of user behavior. This pattern suggests a degree of theoretical diversification; however, it also reflects the absence of a unified framework capable of fully explaining cryptocurrency adoption across contexts.

A detailed overview of the applied theoretical frameworks and their corresponding sources is provided in [Appendix C \(C5 and Table C1\)](#).

An important observation concerns the conceptual overlap between related constructs. In the reviewed literature, acceptance, adoption, and continuance are frequently used interchangeably or without a clear distinction. Acceptance typically refers to attitudes and behavioral intentions, adoption to the initial decision to use a technology, and continuance to sustained usage over time. However, many studies treat behavioral intention as a proxy for adoption, which introduces conceptual ambiguity and may limit the interpretability of findings.

Overall, while a growing variety of theoretical approaches is present, the field remains structurally dependent on a limited set of dominant models - particularly TAM - and characterized by recurring patterns of model application and extension. This suggests that, despite increasing research activity, theoretical development remains incremental, highlighting the need for clearer conceptual distinctions and more context-specific theoretical advancements in future research.

#### 4. Conclusion

This study provided a comprehensive review of the literature on cryptocurrency adoption by combining bibliometric analysis with a systematic literature review. By examining 152 studies from the Web of Science and Scopus databases, the research aimed to map the structure, methodologies, and key characteristics of adoption-focused research in the field.

##### 4.1. Main findings and contributions

Cryptocurrencies continue to gain traction in both business and academic contexts, and the analyzed publication patterns indicate increasing research activity in recent years. While this trend does not in itself imply theoretical advancement, it reflects growing scholarly engagement with the topic and suggests that continued research attention may be warranted. Building on this, the present study contributes by identifying patterns, challenges, and research gaps, and by providing a structured synthesis aligned with the objectives outlined in the

introduction. Importantly, the analysis focuses specifically on cryptocurrency consumer acceptance, distinguishing it from broader cryptocurrency research that primarily addresses technical, financial, or regulatory aspects.

A key contribution of this study lies in the combined application of bibliometric analysis and systematic literature review within a rigorous, multi-stage methodological framework. This integrated approach enables both a structural overview of the field and a more detailed synthesis of its methodological and theoretical characteristics. In contrast to prior reviews, which often focused on specific aspects such as trust, security, or general adoption trends, this study provides a more comprehensive mapping of research designs, theoretical frameworks, and sampling strategies within the context of consumer adoption.

Consistent with earlier reviews, the findings of this study confirm that cryptocurrency adoption research has entered a phase of increasing activity. For instance, Al-Amri et al. (Al-Amri et al., 2019) highlighted the limited number of studies focusing specifically on consumer adoption, while more recent work (Sousa et al., 2022) already identified the beginning of a growth phase. The present analysis not only supports these observations but also indicates a continued and accelerating expansion of the field.

Extending beyond the findings of prior reviews, citation patterns, the ratio of journal articles to conference proceedings, and the proportion of Q1 publications collectively indicate an expansion in publication activity within the field. However, these metrics primarily reflect changes in publication output and visibility, and do not necessarily imply theoretical advancement.

Analysis of abstracts, keywords, and study subjects shows that most studies address cryptocurrencies in general terms or focus specifically on Bitcoin (Armani Dehghani et al., 2025; Pattnaik et al., 2023), thereby reinforcing its previously established prominent role (Pattnaik et al., 2023), while also indicating an emerging shift in focus. Some studies have begun to explore more specific applications, including transactional use, tourism, and hypothetical systems (White et al., 2020). Still, the relatively limited number of studies focusing on alternative projects or specific use cases indicates a potential gap in the literature.

Significant imbalances were also observed in the geographical distribution of the reviewed studies, with a strong dominance of Asia and a limited number of countries. Certain regions - such as South America - appear underrepresented in the reviewed studies. Even within the highlighted regions, studies often focus on a limited number of countries, which may affect the generalizability of findings. Contrasting this geographic output with Statista data (Statista, 2024) on cryptocurrency ownership reveals significant gaps. For instance, Portugal, with one of the highest ownership rates in Europe (~20%), has no recorded scholarly publications in the dataset. Similarly, Switzerland (19%), the Netherlands (16%), Belgium (15%), Poland (15%), and Austria (14%)

are underrepresented in the sample. This mismatch between real-world adoption and research attention indicates potential blind spots in the literature, and confirms previous findings (Arias-Oliva et al., 2019; Armani Dehghani et al., 2025; Palos-Sanchez et al., 2021; Yeong et al., 2019). These differences suggest that current research coverage may not fully align with real-world adoption patterns, indicating potential areas for future research.

Earlier reviews already highlighted the dominance of the TAM framework and recommended greater theoretical and methodological diversification, including the adoption of alternative models such as UTAUT, TPB, DOI, and TRA (Al-Amri et al., 2019). The present study confirms that these frameworks are indeed increasingly represented; however, TAM continues to dominate the field. The frequent application of models such as TAM and UTAUT (Mendoza-Tello et al., 2018) in highly cited studies also highlights their continued prominence, while also suggesting that methodological diversification remains limited. This persistence is also reflected at the level of examined latent variables. Core constructs derived from these foundational models - such as performance expectancy, effort expectancy, facilitating conditions, and social influence - remain consistently central across the reviewed studies, as also emphasized in recent literature (Bommer et al., 2023). At the same time, commonly applied extensions, including perceived risk, trust, and financial literacy, appear frequently, yet typically within the same overarching model structures. Although more novel variables and perspectives - such as fear of missing out (FOMO), design-related factors, or cybersecurity concerns - have begun to emerge, these approaches remain relatively fragmented and are only more recently gaining attention. This suggests that, despite signs of diversification, the field continues to rely heavily on established theoretical foundations, limiting the development of more context-specific or conceptually distinct approaches. Similarly, while previous reviews called for stronger methodological diversity and greater presence in high-impact journals, current trends suggest that these developments have begun to emerge, although there remains substantial room for further advancement.

Important differences emerge when comparing the focus of prior reviews. While some studies have concentrated primarily on intention to use within technology acceptance frameworks (Bommer et al., 2023), and others have emphasized constructs such as trust and security (Sousa et al., 2022), the current review adopts a broader perspective. By synthesizing methodological approaches, theoretical frameworks, sampling strategies, and research contexts, it provides a more comprehensive overview of how consumer adoption has been studied.

While prior work called for expansion toward new sectors or characteristics—such as sustainability-related applications in specific industries (Sousa et al., 2022)—, this study emphasizes the need for a deeper and more structured understanding of consumer adoption itself. The findings suggest that, despite the growing volume of research, the field remains characterized by fragmented results, recurring applications of similar models, and a limited number of studies focusing on specific projects, use cases, or diverse sampling strategies.

For example, the majority of the examined studies apply rather general approaches in terms of both sample and subject of analysis. On the one hand, samples often consist of general populations or insufficiently defined user groups; on the other hand, cryptocurrencies are typically examined as a broad technological concept, without more precise or differentiated interpretations. Similarly, the dominance of SEM-based methodologies can be observed, while methodological extensions are represented by the inclusion of additional techniques, such as ANN, MGA, and IPMA. In this context, PLS-SEM - along with its frequent implementation through SmartPLS - stands out as a key reference point, enabling comparability across studies, but also suggesting a potential saturation of approaches. The relatively small number of purely qualitative studies indicates a potential imbalance in methodological approaches. While qualitative elements are sometimes used to complement quantitative analyses, they are often limited in scope. This observation may point to opportunities for further methodological

diversification, including the use of more in-depth qualitative or mixed-method approaches.

These identified dominant patterns are also reflected in the most recent studies published in 2026. Recent research continues to focus on general cryptocurrency usage contexts, frequently applying frameworks such as UTAUT and UTAUT2, while emphasizing constructs including trust, perceived risk, and financial literacy. Methodologically, SEM remains the prevailing analytical approach (Gazi et al., 2026; Jegerson & Mertzanis, 2026; Sukontip Wongpun et al., 2026), indicating that despite the expansion of the field, methodological and theoretical diversification remains limited.

Taken together, these comparisons indicate that, although the field has expanded considerably in terms of volume, many of the structural characteristics identified in earlier reviews continue to persist. By systematically mapping these patterns, the study contributes to a clearer understanding of how the field is currently structured and where further development may be needed. In particular, the results highlight the need for greater theoretical diversification, more context-specific research, and stronger synthesis of existing findings.

Finally, it is important to note that the findings of this study are primarily descriptive, reflecting patterns in the existing literature rather than providing direct evidence. The following table (Table 8) synthesizes the main empirical patterns identified in the review, along with their interpretations and implications for future research.

The methodological recommendations are presented in Appendix A3, where they are discussed in more detail with regard to future research practices.

#### 4.2. Limitations

This study is subject to several limitations related to both methodological design and conceptual scope.

##### 4.2.1. Technical and data-related limitations

A key limitation of this study is that, although the PRISMA framework (Moher et al., 2009; Page et al., 2021) was applied, the selection of keywords and sources ultimately involved individual judgment by the

**Table 8**  
Synthesis of key patterns, interpretations, and research implications.

Pattern (data)	Interpretation	Research implication
Increasing number of publications	Growing research activity and interest	Need for synthesis of existing knowledge and diversification of new research
Increasing citation counts		
Increasing proportion of journal articles		
Increasing share of Q1 journal publications		
Presence across diverse journals	Multidisciplinary nature of the field	Encouraging interdisciplinary collaboration and integration
Dominance of Asia and selected regions	Geographical imbalance in research coverage	Greater geographical diversification and increased international collaboration
General focus on cryptocurrencies	Accumulation of broad but loosely defined findings/Lack of specificity	More focused research with clearly defined constructs and research contexts
Focus on non-specified user groups and general populations		
Dominance of TAM	Limited theoretical diversity	Need for new or adapted theoretical frameworks
Dominance of quantitative approaches	Limited depth of insight	Greater use of qualitative and mixed-method approaches

researcher. As a result, some sources that were not fully relevant may have been included, while others that could have been pertinent may have been excluded.

The choice of databases also represents a limitation, as the use of WoS and Scopus inherently excludes grey literature and studies not indexed in these platforms (Sabando-Vera et al., 2025). In addition, the restriction to English-language journal articles and conference papers may have further limited the scope of the dataset. While these decisions ensured a consistent and high-quality sample, they may affect the completeness of the literature coverage.

Furthermore, the selected analytical dimensions constrained the types of comparisons that could be made. Alternative analytical frameworks or methodological approaches might have yielded different insights. In addition, a more focused examination of the underlying variables could have provided further valuable insights. While these factors may affect the generalizability of the findings, the application of systematic documentation procedures and alignment with established review standards helped mitigate bias and enhance credibility and replicability. These limitations may influence the interpretation of the findings, particularly in terms of the completeness of the literature coverage and the generalizability of the identified patterns.

#### 4.2.2. Conceptual limitations and scope constraints

Another limitation relates to the narrow focus on research explicitly addressing cryptocurrency adoption. Broader studies on related financial, legal, or technological topics were excluded (Alalwan et al., 2017), which may limit interdisciplinary perspectives. Maintaining a focused scope was necessary for this review, but future research may benefit from drawing on complementary literature to provide additional methodological or conceptual insights.

More broadly, the findings of this study are primarily descriptive, reflecting patterns in the existing literature rather than providing direct evidence of theoretical advancement or research quality. As a result, the conclusions of this review should be interpreted as indicative of dominant trends rather than exhaustive representations of the entire research field.

Finally, given the rapid evolution of the cryptocurrency domain, new studies likely emerged during the review process. This highlights the need for periodic updates to ensure that future reviews reflect the most recent developments in the field.

#### 4.3. Future implications

Although cryptocurrencies have existed since 2008 (Nakamoto, 2008), their slow initial adoption (Baur et al., 2015) may partially explain why many research areas remain underexplored. Despite increasing adoption and societal relevance, scholarly coverage of the technology remains uneven. This suggests that more targeted and empirically grounded research efforts are needed to better understand the field.

Building on the findings of this review, several implications can be derived more directly from the observed patterns. For example, the strong dominance of well-established models such as TAM and UTAUT, alongside the repetition of similar methodological approaches, suggests a preference for incremental research designs. This highlights the need for more innovative and theoretically diverse approaches. Similarly, the identified imbalance in geographical coverage and the limited focus on non-user populations suggest that future studies should prioritize broader and more diverse sampling strategies. Furthermore, a shift is needed from general cryptocurrency research to the assessment of more specific projects and applications. In this context, future research could focus not only on examining interconnections and practical applications but also on deepening insight into consumer attitudes and behaviors.

Such studies may support the evolution of the field, inform technological development, and contribute to a more nuanced understanding of adoption dynamics.

The following directions are directly linked to the empirical patterns identified in the review:

- Deeper synthesis of existing research findings, building on the structured overview provided by this review.
- Increasing international collaboration and expanding global coverage through more country-specific studies, particularly in response to the identified geographical concentration of studies in a limited number of countries.
- Broadening research on the potential practical applications of the technology, given the current dominance of general or investment-focused analyses.
- Broadening the target population, especially in light of the observed dominance of studies focusing on existing users rather than potential adopters.
- Increasing the share of studies investigating specific projects or coins, beyond general or Bitcoin-focused analyses.
- Promoting qualitative approaches, given the strong dominance of quantitative, survey-based methodologies identified in the review.
- Strengthening academic dialogue and collaboration within the field, building on the increasing proportion of high-quality journal publications, while also encouraging greater engagement in conference-based research dissemination.

The present findings not only contribute to academic knowledge but may also prove useful to companies, developers, regulators, investors, and policymakers - offering guidance on technology development, responsible governance, and strategic decision-making. Looking forward, the study's insights into geographical focus, user groups, and application areas may serve as important reference points for future academic and market-oriented initiatives.

#### Ethical statement

Ethical approval is not applicable to this manuscript.

#### Declaration of the use of AI assisted technologies

During the preparation of this work the author used ChatGPT 4 and 5 in order to improve the readability and language of the manuscript. After using ChatGPT 4 and 5, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article.

#### Funding statement

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

#### Declaration of competing interest

The author declares that he has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Acknowledgements

I would like to thank to Márta Aranyosy (Corvinus University of Budapest) and Lili Hargitai (Eötvös Loránd University) for their valuable suggestions and comments on earlier and final versions of this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.ssaho.2026.102976>.

## Data availability statement

Data will be made available on request.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Al-Amri, R., Zakaria, N. H., Habbal, A., & Hassan, S. (2019). Cryptocurrency adoption: Current stage, opportunities, and open challenges. *International Journal of Advanced Computer Research*, 9(44), 293–307. <https://doi.org/10.19101/ijacr.p143>
- Alalwan, A. A., Rana, N. P., Dwivedi, Y. K., & Algharabat, R. (2017). Social media in marketing: A review and analysis of the existing literature. *Telematics and Informatics*, 34(7), 1177–1190. <https://doi.org/10.1016/j.tele.2017.05.008>
- Ancillai, C., Sabatini, A., Gatti, M., & Perna, A. (2023). Digital technology and business model innovation: A systematic literature review and future research agenda. *Technological Forecasting and Social Change*, 188, Article 122307. <https://doi.org/10.1016/j.techfore.2022.122307>
- Arias-Oliva, M., Pelegrín-Borondo, J., & Matías-Clavero, G. (2019). Variables influencing cryptocurrency use: A technology acceptance model in Spain. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.00475>
- Armani Dehghani, M., Karavidas, D., Reese, A., & Acikgoz, F. (2025). Bridging the adoption gap for cryptocurrencies: Understanding the affordances that impact approach–avoidance behavior for potential users and continuation usage for actual users. *Information Technology & People*, 38(1), 497–530. <https://doi.org/10.1108/ITP-10-2022-0821>
- Bakri, M. H., Abdul Aziz, N. A., Md Razak, M. I., Abdul Hamid, M. H., Md Nor, M. Z., & Iskandar Mirza, A. A. (2023). Acceptance of ddkoin Blockchain using utaut model: A customer perspective approach. *Quality - Access to Success*, 24(192), 103–121. <https://doi.org/10.47750/QAS/24.192.13>
- Baur, A. W., Bühler, J., Bick, M., & Bonorden, C. S. (2015). Cryptocurrencies as a disruption? Empirical findings on user adoption and future potential of bitcoin and Co. In M. Janssen, M. Mäntymäki, J. Hidders, B. Klievink, W. Lamersdorf, B. Van Loenen, & A. Zuiderwijk (Eds.), *Open and big data management and innovation*, 9373 pp. 63–80. Springer International Publishing. [https://doi.org/10.1007/978-3-319-25013-7\\_6](https://doi.org/10.1007/978-3-319-25013-7_6)
- Behl, A., Jayawardena, N., Pereira, V., Islam, N., Giudice, M. D., & Choudrie, J. (2022). Gamification and e-learning for young learners: A systematic literature review, bibliometric analysis, and future research agenda. *Technological Forecasting and Social Change*, 176, Article 121445. <https://doi.org/10.1016/j.techfore.2021.121445>
- Bejjani, M., Göcke, L., & Menter, M. (2023). Digital entrepreneurial ecosystems: A systematic literature review. *Technological Forecasting and Social Change*, 189, Article 122372. <https://doi.org/10.1016/j.techfore.2023.122372>
- Bhimani, H., Mention, A.-L., & Barlatier, P.-J. (2019). Social media and innovation: A systematic literature review and future research directions. *Technological Forecasting and Social Change*, 144, 251–269. <https://doi.org/10.1016/j.techfore.2018.10.007>
- Bommer, W. H., Milevoj, E., & Rana, S. (2023). The intention to use cryptocurrency: A meta-analysis of what we know. *Emerging Markets Review*, 55, Article 100962. <https://doi.org/10.1016/j.ememar.2022.100962>
- Caputo, A., & Kargina, M. (2022). A user-friendly method to merge Scopus and Web of Science data during bibliometric analysis. *Journal of Marketing Analytics*, 10(1), 82–88. <https://doi.org/10.1057/s41270-021-00142-7>
- Casino, F., Dasaklis, T. K., & Patsakis, C. (2019). A systematic literature review of blockchain-based applications: Current status, classification and open issues. *Telematics and Informatics*, 36, 55–81. <https://doi.org/10.1016/j.tele.2018.11.006>
- Chauhan, C., Parida, V., & Dhir, A. (2022). Linking circular economy and digitalisation technologies: A systematic literature review of past achievements and future promises. *Technological Forecasting and Social Change*, 177, Article 121508. <https://doi.org/10.1016/j.techfore.2022.121508>
- Crosby, M., Nachiappan, Pattanayak, P., Verma, S., & Kalyanaraman, V. (2016). Blockchain technology: Beyond bitcoin. *Applied Innovation Review*, (2), 6–19.
- Cruz-Cárdenas, J., Zabelina, E., Guadalupe-Lanas, J., Palacio-Fierro, A., & Ramos-Galarza, C. (2021). COVID-19, consumer behavior, technology, and society: A literature review and bibliometric analysis. *Technological Forecasting and Social Change*, 173, Article 121179. <https://doi.org/10.1016/j.techfore.2021.121179>
- Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results [Thesis]*. Massachusetts Institute of Technology. <https://dspace.mit.edu/handle/1721.1/15192>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Echchakoui, S. (2020). Why and how to merge Scopus and web of science during bibliometric analysis: The case of sales force literature from 1912 to 2019. *Journal of Marketing Analytics*, 8(3), 165–184. <https://doi.org/10.1057/s41270-020-00081-9>
- Edwards, J. (2025). *Bitcoin's price history*. Investopedia. <https://www.investopedia.com/articles/forex/121815/bitcoins-price-history.asp>
- Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: Informing development of a conceptual model of health through sport. *International Journal of Behavioral Nutrition and Physical Activity*, 10 (1), 98. <https://doi.org/10.1186/1479-5868-10-98>
- ElBahrawy, A. (2017). Bitcoin is not alone: Quantifying and modelling the long-term dynamics of the cryptocurrency market. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2969708>
- Fisch, C., & Block, J. (2018). Six tips for your (systematic) literature review in business and management research. *Management Review Quarterly*, 68(2), 103–106. <https://doi.org/10.1007/s11301-018-0142-x>
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.
- García-Corral, F. J., Cordero-García, J. A., De Pablo-Valenciano, J., & Uribe-Toril, J. (2022). A bibliometric review of cryptocurrencies: How have they grown? *Financial Innovation*, 8(1), 2. <https://doi.org/10.1186/s40854-021-00306-5>
- Gazi, M. A. I., Laradi, S., Elfekair, A., Ahmed, A., Amin, M. B., & Senathirajah, A. R. B. S. (2026). Explaining continued cryptocurrency use: A UTAUT-based insights into Malaysian users. *Telematics and Informatics Reports*, 22, Article 100320. <https://doi.org/10.1016/j.teler.2026.100320>
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A systematic review of the literature on digital transformation: Insights and implications for strategy and organizational change. *Journal of Management Studies*, 58(5), 1159–1197. <https://doi.org/10.1111/joms.12639>
- Hauss, K. (2021). What are the social and scientific benefits of participating at academic conferences? Insights from a survey among doctoral students and postdocs in Germany. *Research Evaluation*, 30(1), 1–12. <https://doi.org/10.1093/reseval/rvaa018>
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 591–608. <https://doi.org/10.1177/1049732316665344>
- Jaiswal, M. (2020). Cryptocurrency an era of digital currency. 8(1).
- Jegerson, D., & Mertzanis, C. (2026). Assessing the role of gender in cryptocurrency adoption and usage. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-026-03133-0>
- Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396–403. <https://doi.org/10.9734/bjast/2015/14975>
- Kim, J. J., Kim, S., Sam, Hailu, T. B., Ha, H., & Han, H. (2023). Impacts of UAM on tourism: The roles of innovative characteristics, motivated consumer innovativeness, attitude, problem awareness, and cultural differences. *Asia Pacific Journal of Tourism Research*, 28(12), 1452–1472. <https://doi.org/10.1080/10941665.2023.2293810>
- Kim, H. M., Kim, J., Sunny, Joo, K., & Hwang, J. (2025). Investigating the technology acceptance model, image congruence and cultural differences in facial recognition payment adoption. *Asia Pacific Journal of Marketing and Logistics*, 37(1), 20–41. <https://doi.org/10.1108/apjml-01-2024-0123>
- Lisée, C., Larivière, V., & Archambault, É. (2008). Conference proceedings as a source of scientific information: A bibliometric analysis. *Journal of the American Society for Information Science and Technology*, 59(11), 1776–1784. <https://doi.org/10.1002/asi.20888>
- Marikyan, D., Papagiannidis, S., & Alamanos, E. (2019). A systematic review of the smart home literature: A user perspective. *Technological Forecasting and Social Change*, 138, 139–154. <https://doi.org/10.1016/j.techfore.2018.08.015>
- Martín-Martín, A., Thelwall, M., Orduña-Malea, E., & Delgado López-Cózar, E. (2021). Google scholar, microsoft academic, scopus, dimensions, web of science, and OpenCitations' COCI: A multidisciplinary comparison of coverage via citations. *Scientometrics*, 126(1), 871–906. <https://doi.org/10.1007/s11192-020-03690-4>
- Matte, J., Maier, C., & Reis, L. (2020). Is cryptocurrency money?: Three empirical studies analyzing medium of exchange, Store of value and unit of account. *Proceedings of the 2020 computers and people research conference* (pp. 26–35). <https://doi.org/10.1145/3378539.3393859>
- Mendoza-Tello, J. C., Mora, H., Pujol-Lopez, F. A., & Lytras, M. D. (2018). Social commerce as a driver to enhance trust and intention to use cryptocurrencies for electronic payments. *IEEE Access*, 6, 50737–50751. <https://doi.org/10.1109/access.2018.2869359>
- Miau, S., & Yang, J.-M. (2018). Bibliometrics-based evaluation of the Blockchain research trend: 2008 – March 2017. *Technology Analysis & Strategic Management*, 30 (9), 1029–1045. <https://doi.org/10.1080/09537325.2018.1434138>
- Mnif, E., Lacombe, I., & Jarboui, A. (2021). Users' perception toward Bitcoin Green with big data analytics. *Society and Business Review*, 16(4), 592–615. <https://doi.org/10.1108/SBR-02-2021-0016>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group, T. P. (2009). Preferred reporting items for systematic reviews and Meta-Analyses: The PRISMA statement. *PLoS Medicine*, 6(7), Article e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. <https://bitcoin.org/bitcoin.pdf>
- Nguyen, N., & Rudawska, E. (2022). Integrated cultural theories on Mobile marketing acceptance: Literature review. *Central European Management Journal*, 30(3), 112–135. <https://doi.org/10.7206/cejm.2658-0845.84>
- Nofer, M., Gomber, P., Hinz, O., & Schiereck, D. (2017). Blockchain. *Business & Information Systems Engineering*, 59(3), 183–187. <https://doi.org/10.1007/s12599-017-0467-3>
- 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*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Palos-Sanchez, P., Saura, J. R., & Ayestaran, R. (2021). An exploratory approach to the adoption process of bitcoin by business executives. *Mathematics*, 9(4), 355. <https://doi.org/10.3390/math9040355>
- Pattanaik, D., Hassan, M. K., Dsouza, A., Tiwari, A., & Devji, S. (2023). Ex-post facto analysis of cryptocurrency literature over a decade using bibliometric technique. *Technological Forecasting and Social Change*, 189, Article 122339. <https://doi.org/10.1016/j.techfore.2023.122339>
- Pearse, N. (2011). Deciding on the scale granularity of response categories of likert type scales: The case of a 21-Point scale. *Electronic Journal of Business Research Methods: EUBRM*, 9(2), 159–171.
- Polizu, C., de la Mata, M., Verma, P., Koutelidakis, Y., O'Neill, A., & Guadagnuolo, L. (2026). Bitcoin volatility trends: A deep dive into market dynamics and risk. *S&P Global*. <https://www.spglobal.com/en/research-insights/special-reports/bitcoin-volatility-trends-deep-dive>.
- Pranckutė, R. (2021). Web of science (WoS) and scopus: The titans of bibliographic information in today's academic world. *Publications*, 9(1), 12. <https://doi.org/10.3390/publications9010012>
- Recskó, M., & Aranyosy, M. (2024). User acceptance of social network-backed cryptocurrency: A unified theory of acceptance and use of technology (UTAUT)-based analysis. *Financial Innovation*, 10(1), 57. <https://doi.org/10.1186/s40854-023-00511-4>
- Rogers, E. M. (1962). *Diffusion of innovations*. Free Press.
- Sabando-Vera, D., Montalván-Burbano, N., Parrales-Guerrero, K., Yonfá-Medrandá, M., & Plaza-Úbeda, J. A. (2025). Growing a greener future: A bibliometric analysis of green innovation in SMEs. *Technological Forecasting and Social Change*, 212, Article 123976. <https://doi.org/10.1016/j.techfore.2025.123976>
- Salcedo, E., & Gupta, M. (2021). The effects of individual-level espoused national cultural values on the willingness to use Bitcoin-like blockchain currencies. *International Journal of Information Management*, 60, Article 102388. <https://doi.org/10.1016/j.ijinfomgt.2021.102388>
- Scimago Research Group, S.L. (n.d.). Scimago journal & country rank. SCLMago. Retrieved April 30, 2025, from <https://www.scimagojr.com/>.
- Siddaway, A. P., Wood, A. M., & Hedges, L. V. (2019). How to Do a systematic review: A best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. *Annual Review of Psychology*, 70(70), 747–770. <https://doi.org/10.1146/annurev-psych-010418-102803>
- Sinclair, S., & Rockwell, G. (2016). *Voyant tools*. <https://voyant-tools.org/>.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Sousa, A., Calçada, E., Rodrigues, P., & Pinto Borges, A. (2022). Cryptocurrency adoption: A systematic literature review and bibliometric analysis. *EuroMed Journal of Business*, 17(3), 374–390. <https://doi.org/10.1108/emjb-01-2022-0003>
- Statista. (2024). Share of respondents who indicated they either owned or used cryptocurrencies in 56 countries and territories worldwide from 2019 to 2024. *Statista*. <https://www.statista.com/statistics/1202468/global-cryptocurrency-ownership/>.
- Statista. (2025). *Number of identity-verified cryptoasset users from 2016 to April 2025, with a forecast for 2025 (in millions) [Graph]*. Statista. <https://www.statista.com/statistics/1202503/global-cryptocurrency-user-base/?srsltid=AfmBO0q7eWKHyu8cl3ZUv-ZhgOO2-H1v3UkRy5thMMVBLEX0jondhS99>
- Statista, CoinGecko. (2025). *Overall cryptocurrency market capitalization per week from July 2010 to April 2025 (in billion U.S. dollars)*. Statista. <https://www.statista.com/statistics/730876/cryptocurrency-maket-value/>.
- Steinmetz, F., Von Meduna, M., Ante, L., & Fiedler, I. (2021). Ownership, uses and perceptions of cryptocurrency: Results from a population survey. *Technological Forecasting and Social Change*, 173, Article 121073. <https://doi.org/10.1016/j.techfore.2021.121073>
- Suban, S. A. (2023). Bibliometric analysis on wellness tourism – Citation and co-citation analysis. *International Hospitality Review*, 37(2), 359–383. <https://doi.org/10.1108/ihr-11-2021-0072>
- Sukontip Wongpun, S. W., Athanasios Podaras, A. P., Rungsan Suwannahong, R. S., & Sureerut Inmor, S. I. (2026). Cryptocurrency adoption among generation X: The mediating role of cashless payment acceptance in Thailand. *Global Business Finance Review*, 31(3), 1–14. <https://doi.org/10.17549/gbfr.2026.31.3.1>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- van Eck, N. J., & Waltman, L. (n.d.). VOSviewer Manual 1.6.19, 2023.
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204.
- Venkatesh, M., Davis, & Davis. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425. <https://doi.org/10.2307/30036540>
- Venkatesh, T., & Xu. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157. <https://doi.org/10.2307/41410412>
- White, R., Marinakis, Y., Islam, N., & Walsh, S. (2020). Is Bitcoin a currency, a technology-based product, or something else? *Technological Forecasting and Social Change*, 151, Article 119877. <https://doi.org/10.1016/j.techfore.2019.119877>
- Willems, K., Holstein, I., Finzel, L., Fritsch, A., & Michelis, D. (2021). Study of student acceptance of the cryptocurrency diem based on the TAM. *Proceedings of the European conference on innovation and entrepreneurship 2021. European conference on innovation and entrepreneurship 2021*. <https://doi.org/10.34190/EIE.21.076>
- Yeong, Y.-C., Kalid, D. K. S., & Sugathan, D. S. K. (2019). Cryptocurrency acceptance: A case of Malaysia. *International Journal of Engineering and Advanced Technology*, 8(5c), 28–38. <https://doi.org/10.35940/ijeat.e1004.0585c19>
- Youn, S., & Luan, C.-C. (2024). Soft biometrics in retail service: Understanding privacy paradox and cross-cultural differences regarding 3D body scanning technology. *Clothing and Textiles Research Journal*, 42(3), 222–241. <https://doi.org/10.1177/0887302x231220616>
- Young, D. S., & Casey, E. A. (2018). An examination of the sufficiency of small qualitative samples. *Social Work Research*. <https://doi.org/10.1093/swr/svy026>
- Yuan, Y., & Wang, F.-Y. (2018). Blockchain and cryptocurrencies: Model, techniques, and applications. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 48(9), 1421–1428. <https://doi.org/10.1109/tsmc.2018.2854904>
- Zupic, I., & Cater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>

## Glossary

- AHP: Analytic Hierarchy Process  
 ANN: Artificial neural network  
 ANOVA: Analysis of Variance  
 BCM: Browser-Based Cryptocurrency Mining  
 BITG: Bitcoin Green  
 BNUG: Blockchain Nigeria User Group  
 CA: Correspondence Analysis  
 CBDs: Central bank digital currencies  
 CB-SEM: Covariance-based Structural Equation Modeling  
 CBT: Consumer Behaviour Theory  
 CFA: Confirmatory Factor Analysis  
 CVT: Consumption value theory  
 DOI: Diffusion of Innovation Theory  
 ECM: Expectation-Confirmation Model  
 ECT: Expectation-Confirmation Theory  
 EFA: Exploratory Factor Analysis  
 FAHP: Fuzzy Analytic Hierarchy Process  
 fsQCA: Fuzzy-set Qualitative Comparative Analysis  
 GLM: Generalized linear model  
 GRiPS: General risk-taking propensity scale  
 HDM: Hierarchical Decision Model  
 ICOs: Initial Coin Offerings  
 IPMA: Importance-Performance Map Analysis  
 IRT: Innovation resistance theory  
 ISSM: Information Systems Success Model  
 LMM: Linear mixed model  
 MCDM: Multi-criteria decision-making  
 MENA: Middle East and North African region  
 MGA: Multi-group analysis  
 MLE: Maximum likelihood estimation  
 MLP: Multilayer Perceptron  
 MLR: Multiple linear regression analysis  
 ML-SEM: Maximum Likelihood Structural Equation Modeling  
 NFTs: Non-fungible tokens  
 OLS: Ordinary least squares  
 PCM: Pairwise Comparison Method  
 PLS-SEM: Consistent PLS-SEM  
 PLS-SEM: Partial Least Squares Structural Equation Modeling  
 PPM: Push-pull-mooring  
 PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses  
 QUOROM: Quality Of Reporting Of Meta-analyses  
 RQ: Research questions  
 RTI: Risk-taking index  
 SDT: Self-Determination Theory  
 SEM: Structural equation modeling  
 SJR: SCLMago Journal Rank  
 SLR: Systematic literature review  
 TAM: Technology acceptance model

*TPB*: Theory of Planned Behavior  
*TR*: Technology Readiness  
*TRA*: Theory of Reasoned Action  
*TRI*: Technology Readiness Index  
*TTT*: Trust transfer theory  
*U&G*: Uses and Gratifications  
*UAE*: United Arab Emirates  
*UEQ*: User experience questionnaire  
*UTAUT*: Unified theory of acceptance and use of technology

WoS: Web of Science

Márk Recskó is a PhD student at Ghent University, Belgium, and Corvinus University of Budapest, Hungary. His research focuses on consumer behavior, technology adoption, digital and disruptive technologies, with a particular emphasis on cryptocurrencies and generative AI. Additionally, he is involved in a research group specializing in strategic technology management and places great importance on scientific outreach.