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E-book

# Two Critical Trends Transforming Financial Institutions





### Introduction

Banks and their customers are already well into the age of the “cashless” society. The European Central Bank’s 2022 study of Euro area consumers found that 55% preferred to make in-store purchases using cards and other cashless payments.<sup>1</sup>

Globally, between 2018 and 2021, according to a McKinsey study, emerging markets are also leading the way to a digital economy. “While globally we have perceived an increase in contactless payments at a compound annual growth rate of 13 percent, that figure is 25 percent for emerging regions. Countries in Africa (Morocco, Nigeria, and South Africa) and Asia showed the strongest growth and it is expected to continue at a CAGR of 15%.”

The move away from cash is the edge of a digital wave affecting banking and financial institutions. This e-book will explore two digital trends with long-term impact: Cryptocurrency and Central Bank Digital Currency (CBDC).

Cryptocurrency has been growing since 2009 and it’s estimated that there are over 420 million cryptocurrency owners worldwide.<sup>2</sup> One type of cryptocurrency, stablecoins, surpassed \$7 trillion in settlements, or transactions, in 2022.<sup>3</sup> The first CBDC pilot in a large economy was launched by China in April 2020, and the IMF reports that 100 more are exploring CBDCs at some level.<sup>4</sup>

## What is cryptocurrency?

Cryptocurrency is a digital asset that functions as a store of value and exchange medium in a decentralized network environment run by blockchain technology. No central government backs or controls these assets.

Cryptocurrency transactions are stored on a blockchain – a publicly distributed

ledger containing the details of all the transactions made on the network. All users who are part of the ecosystem can access this ledger and view all the transactions stored within it.

The lack of a central issuing authority makes cryptocurrencies highly volatile. The bankruptcy of the FTX cryptocurrency

exchange in late 2022 increased volatility to the point that predictions of the 2023 price for popular Bitcoin cryptocurrency ranges from \$5,000 to \$250,000.<sup>5</sup> Even the value of stablecoins – which are pegged to Euros, dollars, and other government-issued currencies – was affected in 2022, though late in the year, many had begun to re-stabilize.<sup>6</sup>





## What are CBDCs?

CBDCs are a virtual form of a country's fiat currency and a store of value that can be used to make digital payments for goods and services. They are issued and controlled by the central bank of a nation, and increasingly seen as the next step in the evolution of sovereign currency that is programmable, digitally.

They are intended to provide businesses and consumers with privacy, transferability, convenience, accessibility, and financial security. They may also reduce the maintenance of complex financial systems, reduce cross-border transaction costs, and enable lower-cost money transfer methods.



## Comparing cryptocurrencies and CBDCs

While both cryptocurrencies and CBDCs are digital currencies, they differ in many ways. Here are three of them.

### 1 Issuer

**CBDCs** are issued by a nation's central bank with the full faith and backing of that government.

**Cryptocurrencies** are issued by the Bitcoin or Ethereum networks who mine or create them. They range from "public" cryptocurrencies like Bitcoin to a rapidly growing number of privately owned cryptocurrencies like Monero.

### 2 Anonymous transactions

Because **CBDCs** are centralized and regulated, they are not designed to anonymize transactions as cryptocurrencies do.

Most **cryptocurrency** is designed to be decentralized, removing the need for banks and other traditional, regulated intermediaries, and to enable anonymous transactions of any size. While transactions appear in the public ledger, the people who made them remain anonymous.

### 3 Potential impact on financial system

**CBDCs** may change how currency is distributed and impact the traditional roles of financial institutions, but, fundamentally, they are an evolution designed to work within stable financial environments.

**Cryptocurrencies** have long been hailed as an innovation that would disrupt the traditional financial system with decentralization. By design, they bypass the established regulation and control arrangements that ensure the integrity and stability of the monetary and financial ecosystem.



## Types of CBDCs

There are two types of CBDCs, each with a distinct audience and purpose.

### Wholesale CBDCs

Wholesale CBDCs are primarily used by financial institutions. The central bank grants an institution an account for depositing funds or settling interbank transfers, then uses monetary policy tools such as reserve requirements or interest on reserve balances to influence lending and set interest rates.

### Retail CBDCs

Retail CBDCs are used by consumers and businesses, much like physical currency. There are two types of government-backed retail CBDCs.

- **Token-based retail CBDCs** are like banknotes but in a digital form. So, whoever holds the tokens is presumed to own them and a person receiving a token will have to verify that their ownership of the token is genuine.
- **Account-based retail CBDCs** are a system that requires records to be maintained of all holders' monetary balances and transactions and to indicate the ownership of the balances. An intermediary i.e., a financial institution, verifies the account holder's identity.

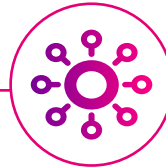


**CBDC**  
Central Bank Digital Currency



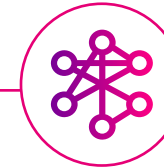
## CBDC issuance and management models

**As central banks develop CBDCs, they have to decide which of two issuance and management models to use.**



### Direct model

In a direct or single-tier model, the central bank is responsible for all aspects of the CBDC system, including issuance, account-keeping, and identity verification.



### Indirect model

In an indirect or two-tier model, the central bank issues CBDC to consumers indirectly through banks, service providers, and other intermediaries, who then manage any claims by consumers. This model is akin to the current system of physical currency management where banks distribute money to the public, keep accounts, ensure regulations are met, and verify transactions.



## Three considerations for CBDC development

Three things central banks must consider as they plan for their CBDC are: technological infrastructure, instrument design, and degree of anonymity.

### Technological infrastructure

A CBDC infrastructure can be based on a conventional centrally controlled database or on a distributed ledger technology. As they make infrastructure decisions, central banks need to account for strong cybersecurity, technical stability, resilience, and sound technical governance standards.



### Instrument design

The central bank must decide if the CBDC will serve simply as a store of value or if it will also pay interest. The CBDC can provide an experience like physical cash, which doesn't carry any interest. Or the central bank can choose a more "deposit-like" interest-bearing design, that may increase the attractiveness of the CBDC, but also may result in loss of deposits by banks.



### Degree of anonymity

When consumers use physical currency for small purchases, they are anonymous. Ensuring a level of anonymity for a similar purchase made with digital currency is a challenge since all digital transactions leave some trail. Yet, the ability to provide this reasonable anonymity may be critical to CBDC adoption by consumers.



## Benefits of CBDCs

While many countries are exploring CBDCs, it's an individual journey for each, based on the many factors that go into this digital currency. Each will need to meet develop a currency that meets the needs of its government and citizens. But these individual currencies offer shared benefits.

### As a monetary class, CBDCs promise to:

- Eliminate the third-party risk of events like bank failures or runs. Any residual risk in the system rests with the central bank.
- Lower cross-border transaction costs by reducing complex distribution systems and increasing jurisdictional cooperation between governments.
- Expand the financial structure in a country to extend financial access to the unbanked population.

### Unique benefits they offer may include:

- Payment Systems: CBDCs could provide a faster, cheaper, and more secure way to transfer money.
- Know-your-customer (KYC) Compliance: Cryptocurrency exchanges or remittance providers, could benefit from increased efficiency and cost savings on the KYC compliance ecosystem that CBDCs provide.
- Funding: CBDCs could potentially provide new sources of funding for private businesses, as they could access liquidity directly from the central bank.



## Action financial institutions can take now

Much of the impact of CBDCs on banks will depend on the issuance and management model chosen by each central bank. A central bank choosing to work with the existing payment system and issuing non-interest-bearing currency would offer the least disruption. But central banks choosing to go directly to current banking customers or offering interest on the CBDC could change the entire banking model.

It's important for banks and financial institutions to take advantage of this window while CBDCs are under development to prepare themselves, without knowing how much disruption lies ahead.



Here are five things they can do now:

1

### **Understand the implications of CBDCs**

As a foundation, banks need to understand the technical, legal, and operational implications of CBDCs. This requires engaging with central banks and regulators to stay updated on the latest developments and requirements.

2

### **Update technology systems**

Banks will need to upgrade their technology systems to support CBDC transactions, including updating payment and settlement systems to be compatible with CBDCs. The time to start assessing the bank's needs and exploring possible solutions is now.

3

### **Ensure compliance**

It's critical to ensure that banks and financial institutions are in compliance with relevant regulations and standards for CBDCs. This includes understanding the legal framework for CBDCs, ensuring the security of transactions, and complying with anti-money laundering (AML) and know-your-customer (KYC) regulations.

4

### **Develop new products and services**

Banks can get out ahead of the changes by developing new products and services that will be able to leverage CBDCs when they are available, such as digital wallets and payment apps. These products should be designed to be user-friendly, secure, and compliant with relevant regulations.

5

### **Partner with other institutions**

Banks can partner with other institutions, such as payment processors and technology providers and even the central bank, to develop and implement value-added CBDC-related products and services that can build customer loyalty and expand the customer base.



Banks who don't start preparing now are already behind. The Atlantic Council reports that "all of the G20 countries are now in the advanced stage of CBDC development."<sup>7</sup> The Bank of Japan will launch the pilot of its digital yen in April.<sup>8</sup> According to a White House briefing from September 2022, "the U.S. has been closely examining the implications of, and options for, issuing a CBDC."<sup>9</sup> In the meantime, the Federal Reserve is targeting mid-2023 for the launch of its FedNow real-time payment service.<sup>10</sup> The EU has been investigating a digital euro since 2021, plans to propose legislation around it this year,<sup>11</sup> and a coalition of more than two dozen banks is already testing the impact of a digital euro.<sup>12</sup>





## Finding the Right Partner to Bridge the Transition to CBDC

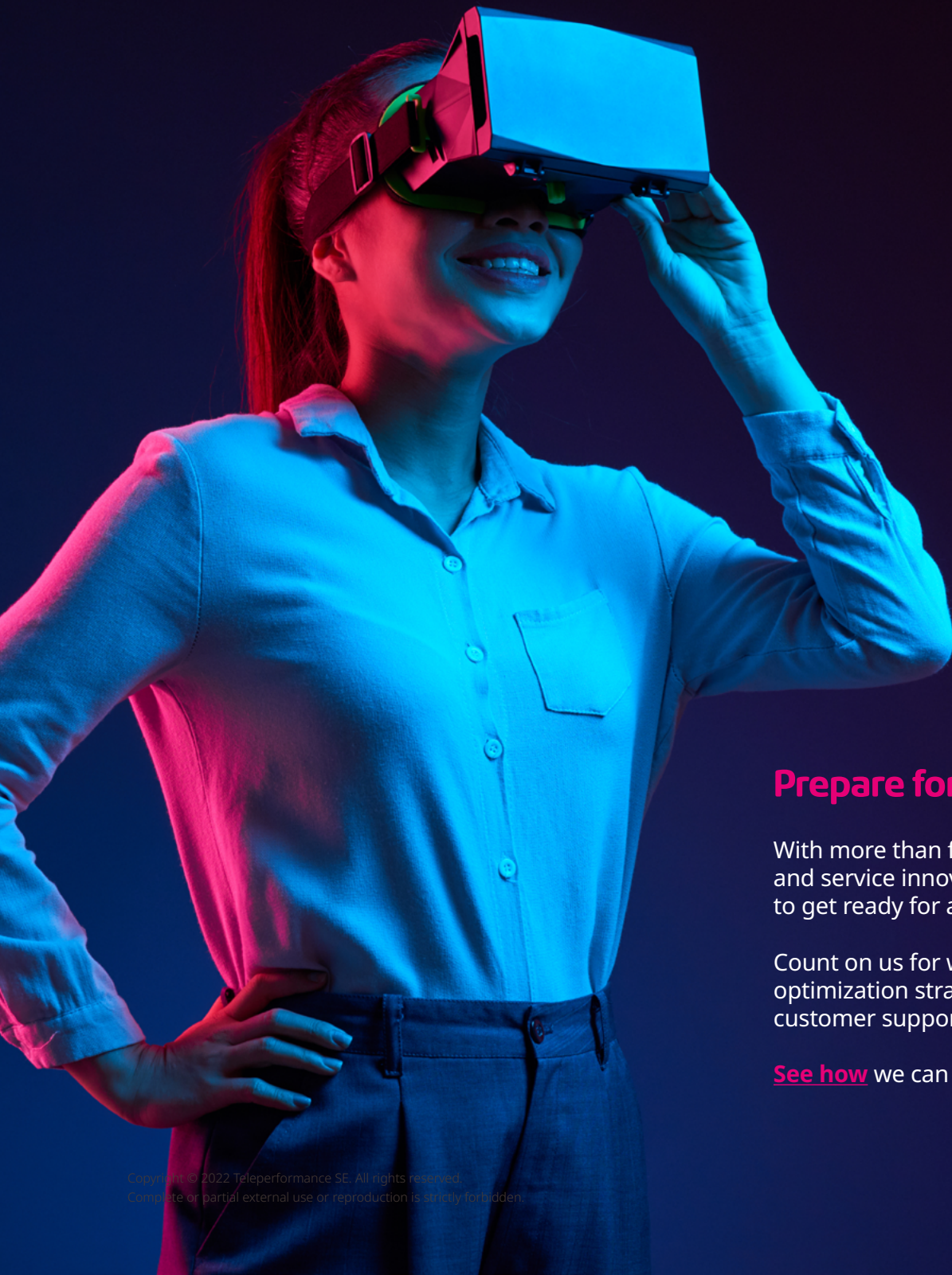
When planning on incorporating new products and features into their portfolios, financial institutions also need to consider the whole consumer journey, seamless integration provided between services, and required support. According to the Forbes Agency Council, understanding the

buying journey, securing online identity, continuous testing and brand voice alignment are among the top priorities any company should take into account for successful portfolio expansion.

But no bank or financial institution has to do these by themselves.







## Prepare for the future with Teleperformance

With more than four decades of deep, industry-specific expertise and service innovation, Teleperformance understands what it takes to get ready for a future that still seems uncertain.

Count on us for what you need: solution design, business optimization strategies, back-office services, and front-office customer support.

[See how](#) we can help you prepare for the arrival of CBDCs

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#### NOTES

- <sup>1</sup> European Central Bank, "Study on the payment attitudes of consumers in the Euro area (SPACE)," December 2022.
- <sup>2</sup> TripleA, "Cryptocurrency Ownership Data," last updated January 4, 2023.
- <sup>3</sup> CoinTelegraph, "Stablecoin settlements can surpass all major card networks in 2023," December 22, 2022.
- <sup>4</sup> Kristalina Georgieva, IMF Managing Director, Atlantic Council, Washington, DC, "The Future of Money: Gearing up for Central Bank Digital Currency," February 9, 2022.
- <sup>5</sup> Forbes, "Bitcoin Is In for a Wild Ride in 2023: Here Are The Predictions," January 5, 2023.<sup>6</sup> Fitch Ratings, "Stablecoin Assets Begin to Stabilise After Recent Volatility," November 14, 2022.
- <sup>7</sup> Atlantic Council, "Central Bank Digital Currency Tracker," 2023.
- <sup>8</sup> CNBC, Bank of Japan to launch pilot program for issuing digital yen in April," Updated February 17, 2023.
- <sup>9</sup> The White House, "Technical Possibilities for a U.S. Central Bank Digital Currency," September 16, 2022.
- <sup>10</sup> Modern Treasury, "What is FedNow?"
- <sup>11</sup> Ledger Insights, "Digital euro legislation planned for 2023. LaGarde confirms wholesale CBDC considered," September 27, 2022.
- <sup>12</sup> American Banker, "CBDC project pick up pace as 2023 kicks off," January 2, 2023.