

CHAVANETTE ADVISORS - GALACTIC GRID



BRINGING ORDER TO THE CHAOS

**YOUR GUIDE TO THE COMPLEX LANDSCAPE OF
RETAIL CENTRAL BANK DIGITAL CURRENCY (CBDC)
TECHNOLOGY PROVIDERS**

VERSION 1.0 (AS OF 1 JULY 2024)

Introduction

In a rapidly evolving financial landscape, the adoption of retail Central Bank Digital Currencies (rCBDCs) stands as a pivotal development in the modernization of monetary systems worldwide. This initial report provides a comprehensive overview of the Galactic Grid's assessment of the top 20 retail CBDC solutions, highlighting critical technological innovations and vendor capabilities.

Galactic Grid

The Galactic Grid conducts a detailed analysis of the top rCBDC ecosystem players, assessing and scoring them within its framework. This analysis provides insights into each significant retail CBDC solution and their providers' strengths and innovations, particularly focusing on enhancing transaction privacy, scalability, and offline capabilities. It also explores the strategic partnerships and technological advancements that position these vendors at the forefront of the CBDC industry.

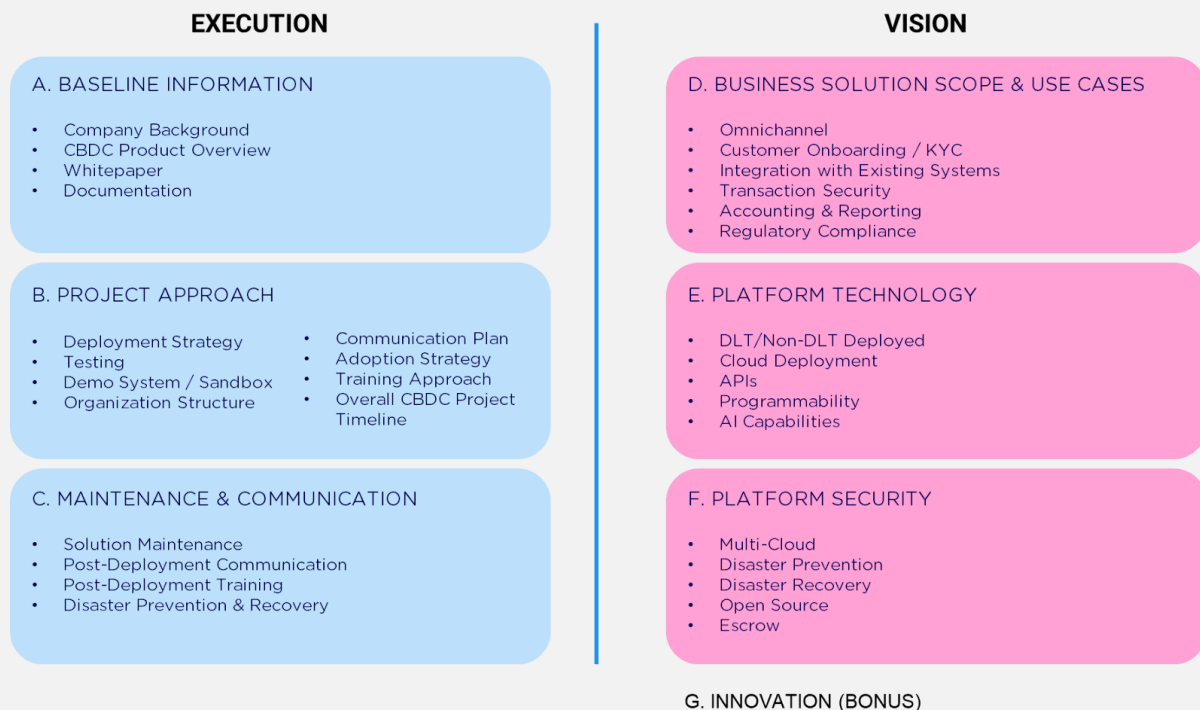


Figure 1: Galactic Grid Axis / Score Components.

Global CBDC Developments

As of mid-decade, over 130 countries, representing 98% of global GDP, are either exploring or actively implementing CBDCs. Notable advancements include China's e-CNY, the world's largest CBDC pilot project, and the European Central Bank's significant strides towards a digital euro. These developments underscore a strong global commitment to embedding digital currencies into the mainstream financial systems, with efforts ranging from research to full-scale pilot testing.

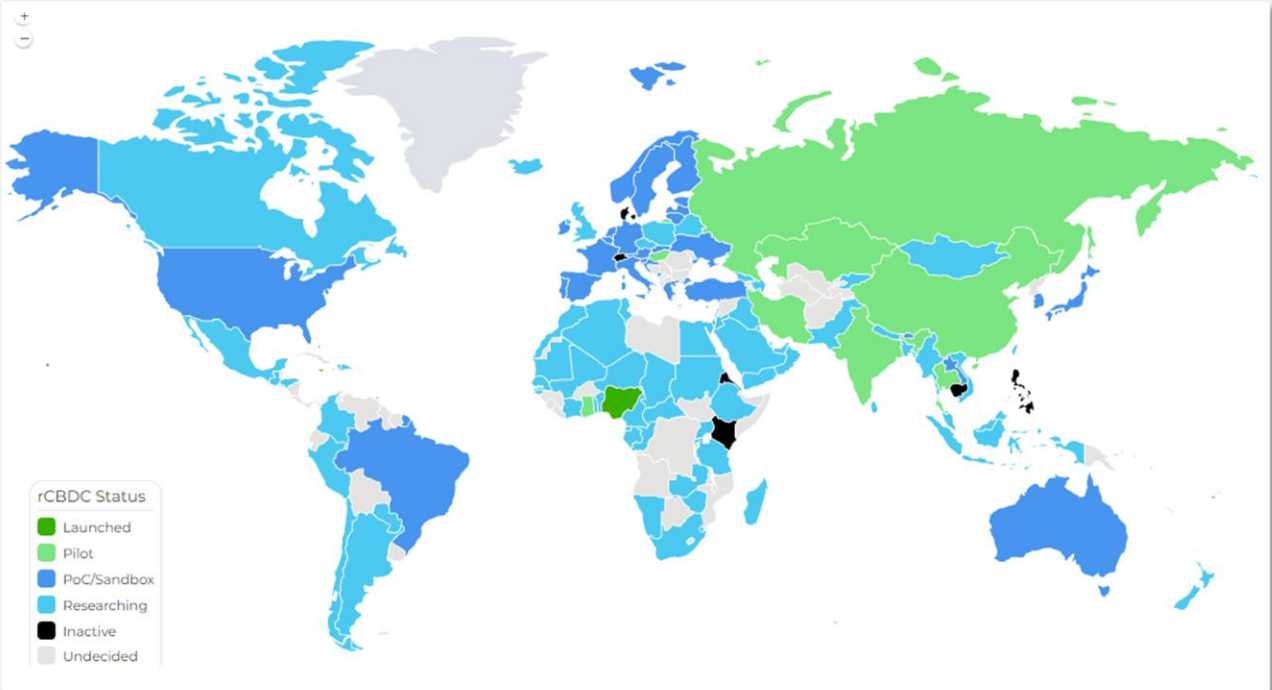


Figure 2: Global retail CBDC Progress | Source: αLP (Alpha Knowledge Platform)

Galactic Grid: Assessing CBDC Technology and Vendor Capabilities

The Galactic Grid methodology offers a structured framework to evaluate the complexities of the retail CBDC ecosystem. It includes a comprehensive scoring system that assesses vendors across various dimensions, including technological robustness, implementation strategies, and compliance with international standards. This approach aids central banks and financial institutions in navigating the crowded CBDC market, ensuring the selection of technologies that are efficient, secure, and strategically aligned.

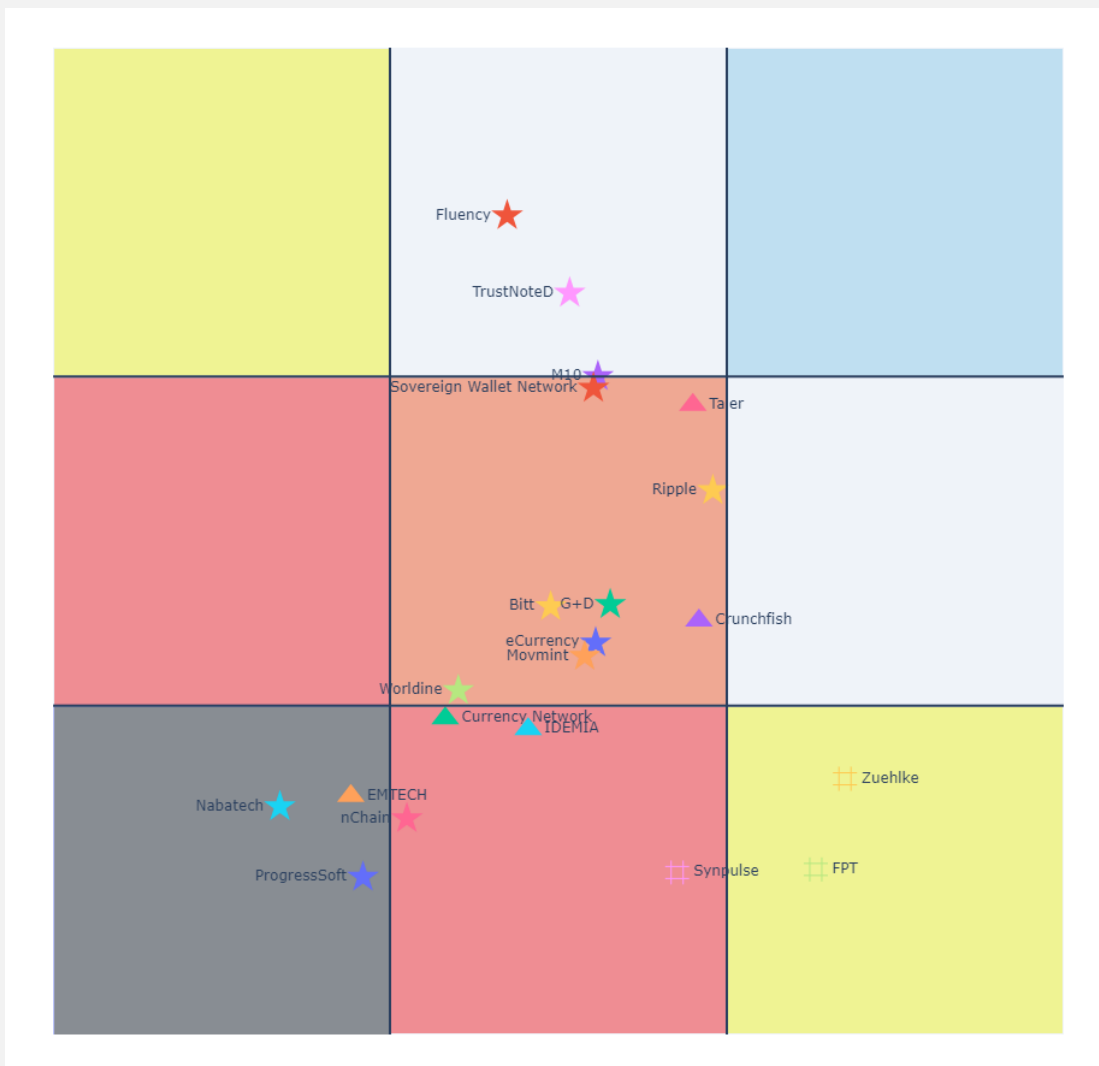


Figure 3: Galactic Grid Spatial Regions and Brief Descriptions.

Vendor Landscape and Top Solutions

The CBDC vendor and ecosystem players landscape is diverse, featuring solutions that range from comprehensive 360-degree platforms to specialized components aimed at enhancing privacy and supporting offline capabilities. The top solutions identified by the Galactic Grid include leaders in blockchain technology, digital security, and financial services innovation, rigorously evaluated based on their operational history, technological innovation, and capacity to deliver scalable and secure CBDC infrastructures.

The Galactic Grid retail CBDC Top 20



Legend: ★: Platform Player; ▲: Component Player; #: Technical Assistance & System Integrator Player

Figure 4: The Galactic Grid¹.

¹ This reflects the information available as of July 1, 2024.

Strategic Objectives and Regulatory Considerations

The adoption of CBDCs requires strategic planning and regulatory foresight. Governments and central banks must establish clear guidelines that facilitate the integration of CBDCs into existing financial ecosystems without compromising national sovereignty or financial stability. This post emphasizes the necessity of creating interoperable systems capable of operating across jurisdictions and seamlessly connecting with legacy financial infrastructures.

Innovation and Standards in CBDC Technologies

Innovation lies at the heart of the CBDC evolution, focusing significantly on ensuring that digital currencies can handle high transaction volumes and maintain robust security protocols. The need for standards is critical, as they ensure that CBDC technologies not only meet current regulatory and operational requirements but are also adaptable to future advancements. Standards foster interoperability and enhance the security landscape by establishing common protocols for privacy, transaction verification, and risk management.

CBDC PLATFORM PLAYERS

Score Components / Vendors	Bitt	eCurrency	Fluency	G+D	M10	Movmint	Nabatech	nChain	Progress-Soft	Ripple	SWN	TrustNoteD	Worldline
Baseline Information	●	●	●	●	●	●	●	●	●	●	●	●	●
Project Approach	●	●	●	●	●	●	●	●	●	●	●	●	●
Maintenance and Communication	●	●	●	●	●	●	●	●	●	●	●	●	●
Business Solution Scope and Use Cases	●	●	●	●	●	●	●	●	●	●	●	●	●
Platform Technology	●	●	●	●	●	●	●	●	●	●	●	●	●
Platform Security	●	●	●	●	●	●	●	●	●	●	●	●	●
Innovation	●	●	●	●	●	●	●	●	●	●	●	●	●

Legend: ●: HIGH | ●: MEDIUM | ●: LOW

CBDC COMPONENT PLAYERS

Score Components / Vendors	Crunchfish	Currency Network	EMTECH	IDEMIA	Taler
Baseline Information	●	●	●	●	●
Project Approach	●	●	●	●	●
Maintenance and Communication	●	●	●	●	●
Business Solution Scope and Use Cases	●	●	●	●	●
Platform Technology	●	●	●	●	●
Platform Security	●	●	●	●	●
Innovation	●	●	●	●	●

Legend: ●: HIGH | ●: MEDIUM | ●: LOW

CBDC TECHNICAL ASSISTANCE & SYSTEM INTEGRATOR PLAYERS

Score Components / Vendors	FPT	Synpulse	Zuehlke
Baseline Information	●	●	●
Project Approach	●	●	●
Maintenance and Communication	●	●	●
Business Solution Scope and Use Cases	●	●	●
Platform Technology	●	●	●
Platform Security	●	●	●
Innovation	●	●	●

Legend: ●: HIGH | ●: MEDIUM | ●: LOW

The Sticky Issue of Vendor Lock-In

Vendor lock-in poses a significant risk in the CBDC space, where reliance on a single technology provider can limit flexibility and innovation. The document advises on strategies to mitigate these risks, including advocating for open-source solutions and emphasizing the need for CBDC platforms to support modular and component-based architectures. This approach enables central banks to adapt or replace technologies without extensive overhauls, promoting technological sovereignty and operational continuity.

Conclusion

The adoption of CBDCs represents a transformative shift in the financial sector, offering potential benefits such as enhanced transaction efficiency, improved financial inclusion, and strengthened economic stability. The Galactic Grid Top 20 Retail CBDC Solutions provides essential insights and strategic guidance to stakeholders involved in the design, implementation, and regulation of digital currencies. As the CBDC landscape continues to mature, the role of informed decision-making guided by comprehensive assessments such as the Galactic Grid will be crucial in shaping the future of digital finance.

Further Information

Details and in-depth vendor analyses are available through our website and the Alpha Knowledge Platform (www.chavanette.com/alpha).