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# How Metaverse Will Revolutionize the Future of Customer Experience and Banking Transactions?

Banking in the virtual world is not new, but the metaverse has the potential to change Banking and Financial Services (BFS) forever. A metaverse is a digital economy with immersive experience created by the convergence of augmented reality (AR), virtual reality (VR), mixed reality (MR), extended reality (XR), Web3, artificial intelligence (AI), 5G, Internet of Things (IOT), cloud, edge computing, blockchain and other technologies. In BFS, metaverses seem likely to dramatically change the way banks engage with customers, offer new products and services and enable new marketplaces. Given the demographics of likely metaverse users, it also has great potential to reach new customer segments.

Traditional banking leaders have been among the early adopters of immersive technologies and experience, including Citi's pilot on holographic trading workstations using the Microsoft HoloLens and BNP Paribas' VR app that allows its retail customers to access their transaction records involved in a real estate purchase in a VR environment. BNP Paribas also piloted the use of AR with its banking clients in Asia and the Middle East to discuss real estate opportunities in Europe and provide the ability to see holographic digital objects and models such as buildings, urban environments or apartments. While metaverse is still in its infancy, there's little doubt it has started to garner interest in the Banking and Financial Services industry that has been witnessing real-world benefits with cryptocurrencies and non-fungible tokens (NFTs).

The uptake of NFTs, crypto and central bank digital currencies (CBDC), all enabled by blockchain technology and Web3, has led to a "creator and virtual" economy, unlocking the potential for new assets such as digital art, virtual real estate and play-to-earn (P2E) games. Metaverse, NFTs and decentralized finance (DeFi), which offers financial instruments without relying on intermediaries by using smart contracts on a blockchain, have given rise to a new virtual economy that is becoming more decentralized, inclusive and transparent.

According to Bloomberg Intelligence and other market estimates, the global metaverse revenue opportunity could grow to somewhere between \$800B and more than a trillion dollars, making it the next big tech platform. Sensing this potential, leading banks are exploring metaverse and cryptocurrencies/NFTs with blockchain technology to make their mark in the virtual world.

#### Real-world BFS Metaverse Case Studies

Metaverse forays by financial services firms include JP Morgan's Onyx lounge in the virtual world, Decentraland, HSBC's investment in The Sandbox metaverse to create innovative brand experiences for its customers and a newly launched fund called the metaverse discretionary strategy portfolio for private banking clients in Asia. CaixaBank's imagin launched a metaverse



version of imaginCafé in Decentraland in which users can access immersive content. And Standard Chartered's purchase of virtual land in The Sandbox provides unique experiences via immersive technologies and reimagined client relationships. Leveraging the zeitgeist for crowdsourcing, Banco Santander launched a blockchain challenge, inviting startups and scaleups from 11 countries to address opportunities including improving digital interactions with users through concepts such as Web3 and metaverse, user privacy and security in blockchain networks, DeFi and tokenization.

To avoid disintermediation, cards and payment networks are also pushing into the virtual world with their metaverse and crypto trademark filings. For instance, American Express plans to provide issuing and processing payments of virtual cards, banking services, fraud detection, marketplace for NFTs and cryptocurrency services. Meanwhile, Mastercard plans to extend its payment processing and marketplace for downloadable digital goods, events and more in the new virtual economy. Recently, Worldline launched a virtual showroom in Decentraland, featuring a "merchant of the month" area and a coffee space powered by Payone. Worldline entered a joint venture with the German Sparkassen-Finanzgruppe (DSV) for social interactions, a virtual event stage and a charitable giving platform. By working with its crypto processing partner Bitcoin Suisse, Worldline will enable shoppers to convert fiat to Decentraland crypto currency for purchases in the metaverse stores. Worldline also intends to offer metaverse-related products that are tailored to meet the needs of merchants in the virtual world. This involves the design of metaverse white label stores that includes direct payment connections to Worldline Acquiring and all payment options, allowing for a secure and seamless blend of the real and virtual payment environment.

To address and take advantage of this new market, ISG recommends that traditional banks understand the dimensions and underlying econometrics of metaverse, building blocks, platforms, technologies and ecosystem players to build an experience-driven metaverse strategy.

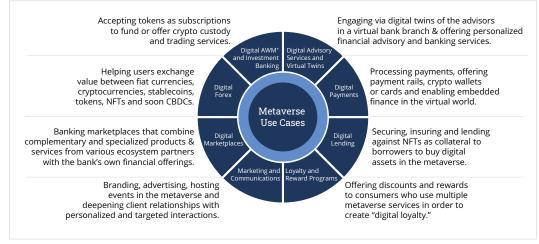


Figure 1: Use Cases for Metaverse in Banking

Source: ISG

Note: \*AWM – Asset and Wealth Management





The metaverse could help banks attract a new generation of users by providing financial products and services in an online virtual economy.

# How Will Metaverse Revolutionize the Future of Banking?

As we mentioned, the Banking and Financial Services industry is being disrupted by digital assets, cryptocurrencies, blockchain technology, decentralized finance (DeFi) protocols, and **distributed autonomous organizations (DAOs).** Although most activities will be conducted using crypto, NFTs and DeFi in the metaverse, this does not necessarily mean traditional banks will lose their relevance. Let us look at what metaverse means for the banking industry.

Metaverse can enable banks to differentiate in many ways. Some will embrace immersive experiences via virtual bank branches with an avatar advisor offering investment or retirement plans. Others will leverage, connect and engage with potential consumers, particularly GenZ and millennials, and target brand new customer segments.

## Attract New Customers with Immersive Virtual Experience and Engagement

Customer expectations and demands evolve every year, and so does the technology to meet these expectations. The metaverse could help banks attract a new generation of users by providing financial products and services in an online virtual economy. Digital and NFT-savvy consumers, particularly Gen Z and millennials are already spending significant periods of time playing games and socializing in virtual world spaces and are predisposed to purchase virtual goods and digital assets. Metaverse therefore provides an opportunity to target new customer segments such as creators, gamers and artists who look for instant loans and multiple sources of income.

For instance, retail brokerage firm Fidelity Investments opened The Fidelity Stack in Decentraland to offer immersive educational metaverse experience to attract younger investors and enable a new way to learn the basics of investing. The Fidelity Stack, featuring Invest Quest with gamified financial education is open to all but primarily aimed at 18- to 35-year-olds, and was launched alongside Fidelity Metaverse ETF, which gives investors the opportunity to invest in businesses involved in the metaverse. Recently, JP Morgan made its annual Summer Reading List available in a curated metaverse library exhibit, created in partnership with metaverse real estate company Everyrealm, for visitors to the Onyx lounge.

Innovative omnichannel engagement strategies can help financial institutions achieve a higher rate of customer engagement and loyalty, and the metaverse serves as an engagement channel or platform that can generate lifetime value. Like the early adopters, with existing metaverse platforms such as Decentraland and The Sandbox, banks can create educational experiences, engage and connect with customers by setting up lobbies and displaying demos on financial wellness and planning or hosting games and contests to earn NFTs.





Leading global banks are already offering digital assets via exchange or custody platforms that can be extended to metaverse requirements. Banks can deliver greater customer experience with value-added engagements and contextual interactions driven by data, analytics and automation. For example, the U.S.-based Quontic Bank, which began as a community bank over a decade ago and evolved into a fully digital national bank, opened its metaverse outpost in Decentral and to connect with customers and offer education with plans to expand into a virtual bank providing all financial services. This demonstrates the importance of brand utility in the metaverse.

#### **Innovative Financial Products and Services**

Leading global banks are already offering digital assets via exchange or custody platforms that can be extended to metaverse requirements. Banks can consider developing their own virtual world platforms, enabling new products and services, or even marketplaces by creating a flexible financial ecosystem and robust technology infrastructure that will allow users to seamlessly connect between the physical and virtual worlds.

According to statistics in August 2022 from the NFT trading platform OpenSea, all-time metaverse property sales on the most popular Ethereum blockchain-based virtual worlds – The Sandbox and Decentraland – totaled approximately 334,000 transactions. Prices of virtual plots have risen consistently in the past and have soared by as much as 700% in 2021. Purchasing land in the metaverse is only possible through cryptocurrencies or NFTs, and the transactions are automated with the help of smart contracts. With the growing market for metaverse real estate, incumbent banks have the opportunity to offer financial products such as commercial real estate lending in the virtual world. Similar to the physical-world practice, where a real estate is purchased by obtaining a mortgage, the metaverse property or virtual plot is bought by securing a metaverse mortgage. TerraZero Technologies claims to offer the first-ever metaverse mortgage for customers looking to buy virtual real estate.

While DeFi facilitates borrowing and lending of cryptocurrency against a collateral like NFTs or blockchain token-based digital assets, decentralized autonomous organizations (DAOs) make metaverse virtual space more accessible and create fairer ways to invest in and monetize digital assets. For instance, platforms such as Decentraland have DAOs that are community-driven with members that have the power to make governance decisions such as content moderation policies and land auction protocols. Organizations like PangeaDAO, governed by the community and a metaverse land investment cooperative, enable users to invest in shared land ownership schemes and aim to create more equitable virtual worlds.

According to a 2021 Digital Banking report, some 47% of bankers believe that customers will use AR/VR as an alternative channel for certain transactions by 2030, and 52% believe that blockchain and DLT will be used by more than 75% of financial institutions. It also claims 51% of respondents see cryptocurrencies surpassing cash use after 2030. To capitalize on these opportunities, banks will need to invest in metaverse for customer acquisition or as a service channel. Of course, digital banks are already in a position to facilitate transactions in the metaverse. For example, MERCO Bank aims to develop virtual environments for enabling its customers to access banking services online and manage financial transactions in the metaverse. The bank is also said to be piloting a digital asset custody service.



# Examples of metaverse-related use cases for banking and financial services:

Digital Twins & Advisory Services	Creating a virtual branch with a digital twin of the bankemployee for underwriting the loan or virtual advisers where customers can use their 3D avatarsto access personalized advisory or digital banking services.
Digital Payments	Onboarding customers through crypto wallets or launching a credit or debit cardthat customers can use in the metaverse and enabling secure payment rails for metaverse products and services. This is particularly fascinating since it is where embedded finance meets the metaverse. Imagine offering a buy-now-pay-later product to a consumer's avatar in a virtual Skechers store.
Digital Lending	Extending custody services to the metaverse for customers' digital assets by securing, insuring and lending against cryptocurrency or NFTs. For example, virtual real estate lending against cryptocurrency or NFTs.
Digital Forex	Helping metaverse users exchange value between fiat currencies, crypto-currencies, stablecoins, tokens (including in-game tokens), NFTs and soon CBDCs. For instance, Lynx Global Digital Finance Corporation recently extended its payment infrastructure to support metaverse-basedservices. Lynx has built metaverse apps for banks that help users sell NFTs and send remittances.
Digital Asset & Wealth Management	Asset managers could accept tokens as subscriptions to funds or conduct games that reward players with fund tokens. As global interest in crypto assets continues to grow, banks and financial institutions could offer crypto custody and trading services for their clients.
Digital Marketplace	Banking marketplaces that combine complementary and specialized product and services from a variety of ecosystem partners, such as virtual real estate providers, with the bank's own financial offerings.  Banks can either set up their own marketplace to create onestopshop experience to address customers' specific needs or offer their products and services via third-party marketplaces.
Loyalty & Reward Programs	Offering bonuses (in the form of NFTs or digital currencies), discounts and rewards to consumers who use multiple metaverse services in order to create "digital loyalty."
Marketing & Communications	Hosting events in the virtual world (including conferences, product presentations and community meetups), using timely targeted messages to make users aware of the new value proposition and sharing knowledge with broader metaverse users.



## Redefine the Future of Workplace from Team Collaboration, Learning and Development

As hybrid and remote work models become the norm, financial institutions are re-examining their workplaces to attract and retain talent. Immersive technologies, such as VR and AR, will be key to fostering creativity, collaboration and inclusivity for employees, regardless of their location. 3D holograms and personalized avatars for immersive meetings are already transforming workplace collaboration. These include Microsoft Mesh for Teams, Meta's Horizon Workrooms with Oculus headsets and Cisco's Webex Hologram.

From boosting employee experience and team collaboration to retaining talent and skills development through virtualization and gamified technologies, the metaverse has the potential to bring new levels of mobility, social connection and collaboration in a virtual work environment. As well as helping mitigate the effects of social disconnection and video meeting fatigue, it has also not escaped the notice of financial institutions that happy, productive employees are more likely to provide a better experience to their customers, which in turn should increase income over time as part of a virtuous circle.

On-demand, Al-powered digital coaches could train employees and provide an interactive and immersive metaverse-based learning experience. Financial firms are already tapping gamified technologies for faster skills acquisition. For example, Bank of America offers immersive and engaging training using VR where employees can learn and develop new skills, such as complex client conversations or other scenarios, via a simulated environment.

Yet another benefit of the metaverse is the Al-powered digital assistants or agents, who act as digital advisors or serve as virtual coworkers, doing much of the repetitive work in the metaverse, while freeing up staff for more productive tasks.

Although time will tell how the metaverse redefines work, we are already seeing the lines blurring between physical and digital worlds as they converge.



# Top 6 Ways Financial Institutions should Prepare for Banking in the Metaverse

Banking and financial services firms planning to enter the decentralized, Web3 economies must consider setting their North Star and executing their mission in a way that creates value for both customers and the enterprise. Here are the necessary steps.

Figure 2: Top 6 Ways Financial Institutions Should Prepare for Banking in the Metaverse



Source: ISG



Banking and financial services firms planning to enter the decentralized, Web3 economies must consider setting their North Star and executing their mission in a way that creates value for both customers and the enterprise.

## Step One: Develop a long-term metaverse strategy

While there are, of course, multiple approaches, banks need to develop a long-term strategy for their metaverse journey, keeping in mind the respective requirements of B2B and B2C segments. Addressing the gaps, identifying opportunities and target demographics and building a long-term plan will be keys to successfully embarking on the metaverse journey. Some principal questions banks should consider as they build this plan include:

- What are the underlying "banking in the metaverse" trends? Are your competitors exploring metaverse opportunities and what are their offerings?
- How will the bank's role evolve in the metaverse in the next five to 10 years, and how will it affect your build, buy or partner strategy?
- What new products and/or services do you want to offer, how should you extend existing offerings in the decentralized virtual world, and who will be your target demographics and segments (consumer/commercial)?
- How should you develop a transformation roadmap that defines the capabilities, skills and operating model necessary to achieve the vision with a focus on the value delivered?
- How will this fit with the broader corporate strategy of your firm?



Banks must quickly build informative guides to train and prepare users on the potential of metaverse, including education on how the metaverse unites users, spaces and things in both physical and virtual worlds and communicate the metaverse strategy, value proposition and vision to customers, investors, partners, employees and communities.

## Step Two: Define success and establish metrics to measure outcomes

How will a financial services firm know if its metaverse strategy is successful? Institutions should build a comprehensive, robust business case and develop measurable goals that are in line with their overall business strategies for monitoring performance and continuous improvement at each phase (emerging, growth and maturity) of metaverse evolution. Questions that are important to answer at this phase include:

- How do you define measurable performance goals centered around metaverse experiences, employee collaboration and engagement, value creation and augmented operations?
- What are the key metrics and KPIs at each phase to monitor outcomes and improve performance?
- As part of a robust governance framework, what tracking tools do you need to measure business outcomes?
- As the metaverse journey develops and matures, how should you benchmark for continuous improvement and plan to scale your metaverse capabilities?

### Step Three: Document the technology plan needed to underpin the metaverse strategy

Crucial to any metaverse strategy is technology, so banks should build a future-proofed technology stack with robust, scalable and flexible infrastructure and a modular architecture that enable users to seamlessly connect between the physical and virtual worlds. As a starting point and foundation to scale the metaverse operating model, financial services firms should develop the right mix of technology capabilities and approaches to meet their objectives. The following questions will help guide those decisions:

- What is the IT architecture and infrastructure required to support the new operating model?
- What Web3-agnostic tools, platforms, decentralized applications (dApps) integrated with automation, processes and management systems should be in place to improve customer journeys and experiences?
- How can you expand advanced analytics and reporting capabilities to process data, generate insights, make recommendations and improve decision-making?
- What are the plug-ins, user experience flows and application programming interfaces (APIs) required to allow third-party providers to connect and leverage banking facilities for the metaverse?
- How can you develop interoperable avatars, user wallets, hardware components, APIs, storage and database solutions, as well as digital assets (cryptocurrencies, collectables, NFTs and other currencies or securities) to build a fully functional and interoperable metaverse?





Financial services firms should carefully evaluate the technology infrastructure landscape and embrace the right partner ecosystem to implement platforms with the potential for self-service, automation and

self-governance.

Banking in the metaverse will require larger processing capacity, high-speed 5G network bandwidth, advanced AI, better UI/UX and improvements to hardware devices from smartphones and VR headsets/ AR glasses/MR/XR to haptic gloves. For instance, Intel claims that the metaverse will require a thousand times more computing power compared to today to reach its potential. Banks can explore the advances in quantum computing that help support the demands of computing speed and processing power for their metaverse project development. In addition, there are many other technologies that need significant breakthroughs, including edge, spatial and cloud computing, generative AI, real-time data reconciliation and data storage solutions.

Interoperability – the interconnectedness of standards, systems and applications that enable seamless mobility and connectivity between different metaverse platforms – remains a key challenge and can apply to various layers of the metaverse. For virtual worlds to be interoperable, banks can choose to build them on an interoperable blockchain ecosystem. Interoperability becomes imperative when, for example, users want to transfer funds from JP Morgan virtual lounge in the Decentraland platform to HSBC virtual branch built on The Sandbox. Unlike a siloed ecosystem, interoperability enables the utilization of services and features of other integrated platforms, cross-chain social interaction, trading and other activities. For instance, users can use a single virtual wallet to store multiple currencies and perform transactions across various metaverse platforms, instead of managing multiple virtual wallets.

Financial services firms should carefully evaluate the technology infrastructure landscape and embrace the **right partner ecosystem** to implement platforms with the potential for self-service, automation and self-governance. The technologies that underpin the real financial world will be key to supporting these processes in the metaverse, as well as providing functionality for embedded finance, securitization, wealth generation and taxation.

#### Step Four: Realign the operating model to accommodate this new channel to market

Financial institutions can gain competitive advantage by incorporating a metaverse strategy in their operating model, which will provide the blueprint for how resources should be organized and integrated to deliver value and achieve stated goals. ISG can help banks realign their operating model and assist with challenges such as:



- Evaluating operational readiness and redesigning the operating model for a fully functional metaverse.
- Identifying the skills needed to implement and maintain this new channel, including content creators; graphic and 3D asset designers; dApps and API developers; experience testers, blockchain, NFT and crypto-token experts; cloud, platform, cybersecurity and AI/ML experts; and DevOps and SRE engineers.
- Developing standards to capture data from both the physical and virtual worlds and generate real-time insights to drive business decisions and facilitate an agile operating model.
- Organizing the workforce and transitioning the work while minimizing disruptions, including a comprehensive people and cultural change management program.
- Developing and implementing the right learning and development framework to expedite throughput and increase the effectiveness of training and upskilling.
- Identifying, selecting and co-innovating with partners, new tools and services to promote agility.
- Establishing controls and governance structure required for a resilient operating model that ensures the metaverse strategy and ecosystem deliver enduring value.

All the elements of an operating model, including the structure, accountability, standards, governance and resources (people, process and technology) must be designed to deliver Web3 capabilities and support future growth avenues, including new products, new customer segments, new business models and new use cases. Reskilling and upskilling are crucial, and enterprises must develop a culture of continuously adapting and building the skills of their people.

### Step Five: Implement a robust governance, risk and compliance framework

In a time of rapid innovation and uncertainty, as well as unprecedented scrutiny from regulators, banks must ensure resilience and agility in the metaverse to deal with all the challenges ranging from credit and market risk to cybersecurity and compliance. Enterprises must understand the implications of various risks such as virtual property rights, multi-jurisdictional considerations, credit risk, market risk in trading NFTs, cyber risk, regulations such as anti-money laundering/combating the financing of terrorism (AML/CFT) and know your customer (KYC), tax laws and accounting. Although DLT and blockchain technologies inherently reduce transaction risks, firms must prioritize the development of a robust governance framework. They need to document risks, including cyber threats, privacy issues, identity theft, loss, fraud and reputational risk, prepare a mitigation plan and work with regulators to ensure compliance with all applicable standards. Some of the key concerns include:

- How to give users more choice and build transparency and control into your products.
- How to ensure privacy and security of the users in the metaverse and give them the tools to take action against abuse, loss or fraud.
- Putting into place financial best practices to prevent fraud and avoid regulatory pitfalls.





To mitigate these risks and ensure the enduring value of a metaverse strategy, an effective governance framework is essential.

To mitigate these risks and ensure the enduring value of a metaverse strategy, an **effective governance framework** is essential. Such a framework creates the guardrails within which metaverse monitoring, measurement and course correction can take place and will typically include elements such as business case tracking, performance measurement (versus internal expectations and peers), and effective management of ecosystem partners, as well as comprehensive change management. In the decentralized economy, governance is crucial to provide a secure user experience across multiple metaverse platforms.

Decentralized governance structures – where DAOs issue NFTs that give community members with voting and governance rights – is different from the centralized model in the real world. Banks could ensure governance across virtual worlds through product design by applying uniform industry standards and protocols to XR hardware and software. By creating strong governance processes and controls around IP, digital ownership, identity, privacy, security, dApps and platforms, interoperability and accessibility, banks can secure interactions and transactions in the decentralized web.

Secondly, the reputations of enterprises will depend on their data privacy and security practices, including **secure digital identity management,** assets and applications to ensure safe interactions and transactions in the metaverse. Cryptocurrency crimes are on the rise, with blockchain-based crime hitting \$14B in 2021, according to the crypto crime **report** by Chainalysis. DeFi protocols accounted for a growing share of funds stolen from cryptocurrency platforms, while it was also used for laundering illicit funds – underlining the cybersecurity risk in the metaverse.

A recent Global Banking & Finance Review **article** reported that attacks targeting metaverse pioneers increased by 40% in Q1 2022 over Q4 2021. Scams, microtransaction abuse and unfair play will likely be the top threats that banks face in the metaverse. Whether it is identity theft or account fraud, virtual worlds are no different from the real world when it comes to cybersecurity issues. Banks venturing into the metaverse can learn from the experience of gaming companies to strengthen their own cybersecurity posture and prevent fraud, such as social engineering, volumetric and synthetic account attacks, to protect their consumers in the metaverse.

With advancements in AI and the misuse of deep fakes, it will become more challenging to know whether it is a human or AI algorithm behind the metaverse's security outbreaks. Issues related to data privacy and data ownership rights need to be addressed, while ensuring that data is collected fairly and transparently with user consent and better controls in place. ISG recommends banks adopt a zero-trust security approach right from conceptualization and design of hardware, applications and networks through to deployment and maintenance. Banks should also create remediation measures to make the metaverse as safe and secure as possible. Creating trust is the best way to attract and retain metaverse users.

The **regulatory status** of crypto-tokens or NFTs remains murky, with differing jurisdictional frameworks around the globe making banking in the metaverse more complex and risky. AML/CFT compliance, KYC requirements, taxation, accounting and reporting will have their place in the metaverse as it evolves, but for now the regulators are (to some extent) playing catch-up. The European Union (EU) may adopt new rules for NFTs, which could broaden the current scope of **MiCA** regulation (introduced in 2020) that applies to only





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certain cryptocurrencies like stablecoins (referenced as e-money tokens or asset-referenced tokens) and utility tokens. The U.K. government intends to **regulate stablecoins** and mint its own NFT in an attempt to take the lead in the emerging DeFi marketplace. Meanwhile in the U.S., regulatory frameworks proposed for stablecoins include the **Stablecoin Innovation and Protection Act of 2022**, introduced in the House of Representatives, and the **Stablecoin Trust Act of 2022**, introduced in the Senate. Although some of the cryptocurrency exchanges engage with securities regulators and stablecoins will be subject to bank-like regulation, DeFi and NFTs seem to be in a regulatory blind spot for now.

Given the community-based and borderless nature of the metaverse, it will take time to establish common global standards and international collaboration on regulatory approaches. For instance, J5 – an international tax consortium made up of representatives of tax agencies from Australia, Canada, the Netherlands, the U.K. and the U.S. – released a **document** that listed red flags in NFT marketplaces to help banks and other participants fight fraud, tax crime and money laundering. With lack of supervision over the metaverse, banks should take proactive steps such as setting standards by joining forces with other players to form an industry body and create their own "metacode of conduct" to protect users from fraud, loss and abuse. Some of the financial best practices include KYC requirements that can make metaverse users verify their physical-world identity, track and comply with the existing and new laws to avoid any regulatory pitfalls, strengthening their cybersecurity posture and maintaining a cross-industry database of threat actors and their identities.

#### Step Six: Select the right partners to execute the strategy

Financial institutions looking to capitalize on the business potential of decentralized economies need to create an ecosystem of hardware, content, platforms, infrastructure, enablers and service integration partners to support metaverse experiences. From selecting AR/VR/MR hardware components and creating applications such as digital twins to customizing and implementing platforms and integrating technologies to work seamlessly, the opportunities for value-creating partnerships are immense. For instance, creator economy vendors such as Roblox, Unity and Epic offer tools, dApps and APIs to develop virtual and augmented environments, much like the content creator web.

It is essential to build (via a combination of hiring and training) a core team with the required skills and identify, select and then partner with the right providers to co-create and develop pilot programs, either internally or externally. While many technology providers have begun to offer metaverse capabilities – including services and solutions that span architecture, cloud infrastructure, computing, storage and network capabilities, there are a number of considerations banks should evaluate before building their Web3 stack and community development. These include:



- Partners with whom to engage for powering a secure and sustainable metaverse ecosystem that comprises hardware (devices, chipsets) for immersive experience, content, tools and platforms, infrastructure (cloud, network) and enablers of Web3 functionalities.
- The providers' range of crypto-native services, bespoke solutions and ready-to-apply uses cases.
- Service providers that can manage, maintain and support the metaverse ecosystem.
- Support for enhancing interoperability and orchestration of the metaverse infrastructure.

ISG helps banking and financial services firms reimagine and plan their business strategy, future operating model and technology investments related to the metaverse. By leveraging the market insight and expertise of ISG Research, we support enterprises in examining the tools and technologies required to bridge physical worlds with virtual worlds, as well as helping create real business value in the decentralized, user-driven space and meeting new challenges such as privacy, cybersecurity and regulatory compliance that may arise in the virtual environment.

If you are seeking to understand the business potential of decentralized economies and wish to know more about how the metaverse can deliver value to your organization, please contact us.

# ABOUT THE AUTHORS

## What Does the Metaverse Mean for the Banking and Financial Services Industry?



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As ISG's Lead Partner for Banking & Financial Services, Owen Wheatley has built a decorated career, serving major clients around the world, advising them on a broad range of market trends, emerging technologies and associated strategies. With responsibility for senior client relationships, business growth, go to market strategy and delivery excellence through the management of high-performance advisory teams across multiple regions, he sits on ISG Executive Committees in both the USA and Europe, and continues to be a widely published thought leader in the industry.



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## **ABOUT ISG**

**ISG (Information Services Group)** (Nasdaq: III) is a leading global technology research and advisory firm. A trusted business partner to more than 800 clients, including more than 75 of the top 100 enterprises in the world, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 digital-ready professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, www.isg-one.com.

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