Abstract

Can a bank finance the Non-Fungible Token (NFT) lending? Can this be an innovation added into their portfolio to deliver value and build competitive advantage. If “Yes” what should be the prerequisite checks which banks should follow to ensure the proper evaluation of the associated risk? This paper will cover the business model and framework which can help the bank to truly evaluate the risk associated with the NFT lending.
Non-Fungible Tokens (NFTs) have been in news for a couple of years for good and bad reasons. They have raised the curiosity in banking fraternity to check if they form a viable new line of business. NFTs use blockchain hash algorithm and can be associated with files containing media such as images, videos, and audio, or even physical objects.

While NFTs use the same blockchain technology that cryptocurrencies use, they are not a type of currency themselves. Each NFT is attached to a specific digital asset and can be anything - a painting, video game content, music or anything – these are digitally linked with the NFT contract and Ethereum Request for Comment (ERC)-721 (the proposal identifier number).

We believe, lending to NFT acquirers is the next big opportunity for banks. Considering the projected growth of NFTs, CAGR of 33.9% from 2022 to 20301 - this lending business can be a strong business driver for banks. Some of the use cases for bank participation are:

- **Working Capital**: NFT creators are in a continuous roll out business. They need to keep coming up with new assets for a sustainable outcome. However, not all NFTs are sold at the same time. To maintain operations and manage cash flows, they would need working capital. As the demand for newer assets increase, many new organizations are expected to come up. This presents a big opportunity for banks.

- **Financing Real Estate Transactions**: As in the physical world, prime real estate is limited in the virtual world. With increasing demand, prices are expected to rise sooner than later. This is bolstered by the fact that organizations are lining up to establish themselves in the metaverse. All these factors point towards a potential increase in large ticket real estate transactions. Banks can capitalize on this by financing such transactions by securing loan amount with collateral in form of NFTs.

- **Financing NFT acquisition**: In the short history that NFTs have come to being, the highest price of an NFT sold is $91.8 million!2 With the ever-growing NFTs and subsequent demand for them, the price of NFTs is expected to move upwards. Banks can lend for such acquisitions with these NFTs- as collaterals

- **Financing Operations**: Some of the world’s top events are moving to the metaverse.3 Multiple participants make an event successful. This presents a great opportunity for banks to experiment with lending to metaverse by taking NFT sales, ticket sales as collaterals.
These are just a few opportunities for banks to explore lending to NFTs and related operations. There could be multiple opportunities in the form of making co-branded credit cards for metaverse, crypto denominated credit cards or wallets which could then be used for acquisition of NFTs.

**Sample Illustration**

**Scenario 1**

Sameer plans to acquire an NFT and monetize it based on usage. He has projected a cash flow statement. However, he needs a working capital loan to start. He approaches the bank for extending a loan. What should the bank do?

**Scenario 2**

ABC company plans to open a new retail outlet in the virtual world to capture the audience. They would sell exclusive merchandise and conduct music concerts. They need a loan to set up the shop and start operations. How would the bank evaluate this opportunity?

These and more such scenarios are expected to hit the market sooner rather than later. While the dynamics of each scenario are different, banks can consider preparing to tackle the situation based on their risk appetite.
Banks are noticing NFT marketplace booming but are they discerning the risk and challenges associated?

NFTs are a $50 billion business today and present several opportunities to banks to build new products & services around them, one of which is lending, with focus on revenue generation through funding NFT purchase / transactions. As an asset, they will, in general, form a portfolio of high-risk assets for banks and though, the risk mitigation mechanism may get stronger through governance measures, they will continue to be a high-risk asset given the challenges in assessing their true market value.

But before a bank can lend against or for an NFT, several challenges must be addressed:

- What are the pragmatic set of NFTs that can considered for banking business?
- What banking products can be offered for these digital assets?
- How should banks assess the value of NFTs?

- What would a typical valuation framework look like for a bank to evaluate the NFTs accurately?
- What kind of assets can be used as collateral for NFT acquirers/borrowers?
- How should banks determine credit amount, rate and term accounting for risks, terms & conditions?
- How should banks ascertain the financial soundness of buyers – Would banks rely on transactional records in virtual world or real-world credit scores of a buyer or both?
- How can banks authenticate the legitimacy of an NFT transaction done in virtual world?
- How can banks underwrite NFTs based on the prices?

While the list is not exhaustive, banks must list and address these questions for creating an appraisal framework for offering products & services around NFTs.
Business Models and Framework for Banks to truly evaluate the risk associated with the NFT lending

Options available for banks range from providing custodial service to developing lending as a service to NFTs. Various factors such as risk appetite, technology readiness, business understanding, strategic alignment to the goals etc. will dictate the path that banks choose.

Custodial services could be a great starting point for banks wherein they ensure availability of the asset and at the same time provide authentication services. Banks can integrate with various market leading platforms providing trading and transaction services. These platforms would then talk to custodians of the asset (banks in this case) to ascertain ownership, get details of the owner, authenticate the transaction etc.

A natural extension of the custodial services is to venture into the transactional services space. In addition to providing authentication, transactional services can be added to the offerings. This would enable placing orders for assets and store them on a single platform.

Custodial services and transactional services are efficient ways of collecting data and creating a transaction history / borrower history. This data can be utilized to offer lending services. The next step in this journey is to offer lending services to customers who do not use the bank’s custodial or transactional services. The growing number of NFT transactions as well as the value of transactions, lending services for NFT has the potential to be a big new line of business for the banks.

While the custodial and transactional services would not entails high risk, it would provide an avenue to start recording the transactions of an NFT. These in turn would help the banks to assess the creditworthiness of an asset and its applicant paving the way for an opportunity to provide lending services.

Depending on the outlook of the bank towards NFTs, it could choose to provide lending services to an NFT asset as like it provides mortgage services for home buyers. This would come with its own set of challenges, primarily on valuation of the asset itself. A framework for valuation of the asset would mature with time and experience but identifying the parameters would be essential.

Like any other asset there are several parameters which affect the value of an asset. For example: value of a home would be influenced by the locality, size, built-up area etc. At the same time price of the mortgage depends on the creditworthiness of the buyer, prevailing interest rates etc. Similarly, an NFT asset will be influenced by a wide range of parameters. Below are the parameters and the influencers associated.
As with lending for any asset, there are associated risks. Along with the unknown risks of a new asset class like NFT, some risks that can impact the business would be unavailability of borrower history, unavailability of transaction history, unpredictable demand of the asset, volatility, anti-money laundering norms etc. These risks have to be factored into when dealing with valuation and the lending decision-process.
Conclusion

This new world presents an opportunity for banks to be at the forefront of technology innovation and create a new business line. At present, everything in the NFT is centralized and controlled by a very few entities. With research around the architecture of blockchain and associated services, things are bound to change soon. For example: Hamilton papers suggest that the different aspects of a crypto lifecycle need to be separated to increase the efficiency and make it mainstream. Banks can play a big role in creating this ecosystem and lead the change.

Bank should embark on their journey or accelerate their journey in the crypto space through the following framework. One can:

• Evaluate the markets
• Qualify NFT types for your business consideration
• Develop business models – Revenue models, risk models, servicing framework
• Risk and regulatory construct alignment
• Develop go to market strategy
• Develop a business case and complete the product prototype
• Validate, test, and certify the model, product, and market strategy

The bottom-line is NFTs are an exciting space for banks to explore. However, as with any new exploration comes higher risk. These risks could be mitigated by various mechanisms such as capping the lending per transaction, having stricter norms, collaterals.
About the Authors

Siddharth Sharma
Principal – Business Consulting FSI Domain

Sameer Chhappar
Senior Consultant – Business Consulting FSI Domain

Sumeet Verma
Senior Consultant – Business Consulting FSI Domain

Practice Leaders

Sridhar Bhagwan
Senior Principal – Business Consulting FSI Domain

Manishi Verma
Partner – Business Consulting FSI Domain

Rajesh Menon
Partner – Business Consulting FSI Domain

References

1. Non-fungible Token Market Size & Share Report
2. Top 10 most expensive NFTs ever sold, Jacob Hale, Mar 15, 2022, dexerto
3. TOP 10 METAVERSE CONFERENCES TO NOT MISS OUT IN 2022, Apoorva Bellapu May 29, 2022, analyticsinsight
4. NFTs ballooned to a $41 billion market in 2021 and are catching up to the total size of the global fine art market, Natasha Dailey, Jan 7, 2022, maket.businessinsider