

Session 5: Is “Tokenization” the Next Great Leap Forward Needed to Make Homeownership More Appealing to Millennials and Gen Zs?

Summary of Proceeding by Bianca Tillman

Featured Speaker: Joseph M. Vincent, Adjunct Professor of Law, Seattle University School of Law; Director of Regulatory & Legal Affairs and a member of the Executive Team of the Washington Department of Financial Institutions

Abstract: If single-family homeownership and time-sharing had a love child, what would it look like? Is it possible to adapt successful models for office sharing to homeownership so renters who lament not owning an appreciating asset could have a stake in “something” while not being tied down to one specific residential structure or a single geographic location, to make homeownership more attractive to younger generations? And, if so, does blockchain technology hold the key to fractional ownerships in real estate that might make this hybrid homeownership model both possible and more practical than the current system of land title recordations and transactions?

I. Introduction

After witnessing the devastating aftermath of the 2008 financial crisis on the prospects and feasibility of homeownership in the United States, Joseph Vincent, the Director of Regulatory and Legal Affairs at the Washington Department of Financial Institutions, began thinking of ways in which the advent of new technologies could help ease the path to homeownership and prosperity among future generations. As he witnessed the immense damage of the underwater housing market, Mr. Vincent observed that many Millennials now felt trapped in the rental market, paralyzed by the thought of buying, and then losing their investment in, a home. With home prices in a record free-fall, homeowners were left on the hook for mortgages on assets that could no longer be sold back to cover the full cost of the loan. The life-savings of middle-income families were suddenly evaporated, and many families have yet to recover more than a decade later. After experiencing this devastation how could future generations ever regain the confidence and mobilize the capital necessary to eventually become home owners? Mr. Vincent believes that blockchain technology might hold the answer.

Through the tokenization of real estate and the conveyance of digital assets, potential homebuyers could have the opportunity to enter the housing market earlier by investing in real estate tokens as a first step towards acquiring growth capital. Alternatively, perhaps blockchain tokenization can be used to create a representative new model of equity sharing through which new home buyers can more easily obtain the necessary down payment for their first home. By eliminating and/or reducing substantially transaction costs, and allowing for smaller initial investments, real estate tokenization could provide Millennials, Gen Zs, and future generations of homebuyers with a more accessible entry point to a housing market that feels increasingly out of reach. Through his SITIE symposium presentation on the tokenization of real estate, Mr. Vincent hoped to demonstrate how blockchain technology could shape the future of affordable homeownership in Seattle and beyond.

II. What is blockchain and cryptocurrency?

Blockchain is a distributed, peer-to-peer technology, first designed as a digital system in which information can be recorded, distributed, and timestamped, but not easily edited or changed. The system works by utilizing a network of individual computers, sometimes called nodes, which make their computational resources (e.g. processing power, storage capacity, data, or network bandwidth) directly available to all other members of the network without the use of a central point of coordination. Once information is added to the system, it is saved in a “block” that is added to a “chain,” copies of which are saved on every node within the network. Once added, the information is virtually unchangeable (and therefore highly secure) because any changes must be made individually on every copy throughout the network. Blockchain is a useful technology because it can be applied to offer digital proof of existence, time, order, identity, authorship, and ownership.

Cryptocurrencies such as Bitcoin are built on blockchain technology as a means to eliminate or bypass the centralized banking ledger system currently in use in countries around the world. In his [2009 white paper](#) introducing the digital currency, Bitcoin’s pseudonymous creator Satoshi Nakamoto referred to it as “a new electronic cash system that’s fully peer-to-peer, with no trusted third party.” Unlike cash, debit, or credit card transactions that are verified through a bank or other central authority, cryptocurrencies are verified through a distributed blockchain network. When a good or service is paid for using a cryptocurrency, computers on the cryptocurrency network are tasked with solving a complex algorithmic equation, or “hash.” Once a computer successfully “hashes” a block, the completed transaction is publicly recorded and stored as a block on the blockchain.

While cryptocurrency transactions are publicly recorded on the blockchain, user data is encrypted and disaggregated onto a public key and a private key. The public key is the location from which deposits and withdrawals can be made. It is also the key that appears on the blockchain ledger as the user’s digital signature. The private key is the long or full version of the public key, but it is created through a complicated mathematical algorithm to ensure confidentiality and security. In order to conduct transactions on a cryptocurrency network, a person must run a digital “wallet” holding both keys. This wallet offers the digital proof of ownership and identity required to allow peer-to-peer transactions to occur outside the “traditional” centralized systems.

III. What is tokenization?

Cryptocurrencies are generally used as a payment medium representing a store of value, just like cash or currencies have traditionally done. While sometimes referred to as digital tokens, cryptocurrencies are generally considered as assets themselves, with the token merely representing the coin’s stored value. Tangible asset tokenization involves wrapping a real world asset in a sort of “digital wrapper” such that the economic value of the asset is conferred to, or held in, the tokens themselves. Ownership of the asset is represented by ownership of tokens on the blockchain. Tokenization of assets on the blockchain offers compelling and far-reaching implications across many industry sectors because there is virtually no limit to which assets can be tokenized.

Suppose, for example, a \$100,000 painting is up for sale, and rather than a traditional sale, the artist decides to employ tokenization. Tokenization can transform the painting into any number

of tokens. If the artist chooses 100,000 tokens, each token would represent a 0.001% share of the underlying asset, the painting. The artist would then issue the tokens on a cryptocurrency platform, such as Bitcoin or Ethereum, ultimately allowing interested buyers to own a fraction of the artistic work. If the painting appreciates in value over time, the partial owner may be able to sell their token(s) for a profit, like stock on the New York Stock Exchange. By tokenizing an asset, buyers and sellers gain access to previously unattainable capital markets.

IV. Tokenization of Real Estate

Real estate tokenization is the process of creating a virtual token to represent ownership of a real estate interest. Rather than using traditional paper or e-documentation, purchasers, lessees, mortgage lenders, and mortgage-backed security (MBS) investors can receive a cryptographic digital token representing their unique interest in a property. Current experiments with real estate tokenization include special trust vehicles, shares in real-estate funds, timeshares, investments in loans to development projects, and tokenized real estate investment trusts (REITs).

The tokenization of real estate offers several distinct advantages, many of which serve to broaden the pool of potential home buyers and create increased access to the real estate market. First, tokenization lowers the illiquidity of real estate investments because blockchain real estate tokens are easier to buy and sell than traditional real estate titles. Instead of a robust and lengthy process adjudicated by various third parties, a blockchain real estate transaction can occur efficiently, securely, and directly between the buyer and seller. Second, tokenization provides access to additional capital by giving real estate owners and developers the chance to offer smaller investment denominations by fractionalizing the ownership of a property, expanding distribution to a broader and more diverse investor group. Through fractionalization, the cost of entry into the real estate market can be significantly reduced, allowing folks to begin growing their personal capital for future real estate purchases. While many individuals may be barred from purchasing a \$1 Million home on their own, for example, ten individuals could more reasonably unite to jointly own the property for \$100,000 worth of tokens each. When the transaction is complete, the ten buyers enter a multi-signature smart contract designed to govern the ownership and occupancy rights of the property. Third, tokenization offers enhanced price discovery and standardization by making all property and pricing information publicly available in real-time. Rather than relying on a real estate agent or other third-party, potential homebuyers have the autonomy to seek out, assess, and purchase real estate on their own using standardized smart contracts and other secure, automated processes. Finally, tokenization improves transparency by enabling the programming of rights, restrictions, and data associated with the underlying property directly on to the tokenized digital asset.

Ultimately, the tokenization of real estate will enable individuals to trade a broad variety of assets on a secondary market, thereby reducing the spread between illiquid real estate investments and publicly traded investment vehicles while also bringing an asset's executable price closer to its true value.

V. Thoughts & Review

Although thoroughly detailed and narrow in theory, the scope of Professor Vincent's presentation was difficult to follow without at least a rudimentary understanding of blockchain, cryptocurrency, and tokenization. With this technology aimed at making the real estate market more accessible to individuals with otherwise less access to capital, it would seem that a more robust effort needs to be made to simplify and communicate the strengths of this emerging technology to a broader audience. For many, blockchain technology remains as fringe and elusive as their coveted entry into the real estate market. If real estate tokenization is to be used as a path to homeownership for Millennials, Gen Zs, and future generations, it must first become more commonly and readily understood by the masses.