# PROVENANCE

CREATING THE FUTURE OF FINANCE

# CONTENTS


**MISSION** 3

**ABOUT FIGURE TECHNOLOGIES** 5

**INEFFICIENCIES IN FINANCIAL SERVICES** 6

**THE POWER OF BLOCKCHAIN** 7

**PROVENANCE** 8

**PROVENANCE USE CASE: LOAN ORIGINATION, SERVICING AND SECURITIZATION** 10

Loan Origination and Servicing 10

Securitization 10

Sample Securitization 11

ADDING A LOAN ORIGINATOR MEMBER 14

ORIGINATING LOANS 15

RECEIVING LOAN PAYMENTS 16

BUYING / SELLING LOANS 17

FINANCING LOANS 18

SECURITIZING LOANS 19

PAYING TRANSACTION FEES 20

VALUE PROPOSITION 21

**INITIAL PARTICIPANTS** 22

**LEGAL STANDING** 23

Exchange Operator and Qualified Custodian 24

**GLOBAL MARKET OPPORTUNITIES** 25

**ROADMAP** 27

**COMPETITIVE LANDSCAPE** 28

**HASH** 29

Hash Economics 29

Hash as Digital Equity 30

Initial Hash Allocation 30

Offering Hash 31

**PROVENANCE ADMINISTRATOR** **32**
Financials & Capitalization 32
Provenance Administrator Governance 33

**CONTACT INFO** **34**

**DISCLAIMER** **34**

# MISSION

Blockchain has the potential to change the world of finance.

The $300+ trillion in global financial markets incur hundreds of billions of dollars in audit, custody, trustee, reconciliation and administrative costs each year. Many of these markets suffer from significant friction, lack of transparency and limited liquidity. Figure Technologies, Inc. (Figure™) has launched a production blockchain, Provenance™, to transform financial services. Provenance will dramatically reduce costs, improve liquidity, reduce risk and open new financial markets.

Provenance is a proof of stake, public but permissioned blockchain based on three key concepts:

- **Distributed** - No entity owns Provenance, and identical information is held across multiple stakeholders.
- **Immutable** - Information is time stamped and cannot be changed.
- **Trustless** - Truth replaces trust in information.

Provenance acts as ledger, registry and exchange across financial assets and markets. Permissioning on Provenance is done through the Provenance administrator, a Delaware non-stock corporation.

The initial use case for Provenance is demonstrating how the blockchain can eliminate fees and inefficiencies in the loan origination, servicing and securitization markets. In July of 2018, Figure began generating home equity loans and subsequently selling them to financial buyers on Provenance – an industry first. Loan origination, payments, sales, financing - and in Q3 2019 loan securitization – happen entirely on Provenance. The immutable ledger, registry and exchange significantly cut costs, reduce fees, eliminate rent seeking and improve liquidity. We have identified up to $90 billion or more in value in the securitized product space that can go back to the ecosystem - and the blockchain technology that disrupts the old way of doing things.

Legal analysis and advice on contract enforceability and other pertinent issues coupled with regulatory feedback have paved the way for broad support of Provenance. In addition to Figure, multiple asset originators are in various stages of onboarding to generate assets on chain, with the first securitization on blockchain planned for Q3 2019. Several national banks will be participating as omnibus banks for Provenance, providing a bridge between the blockchain and fiat currency. Multiple buy and sell side firms are able to buy and finance assets on Provenance, and some of those firms are also stakeholders, hosting smart contracts and the resulting encrypted data they produce for the blockchain. Figure plans to operate as a qualified custodian and exchange operator (via ATS exemption) on Provenance in late 2019.

While initially focused on the loan and asset backed securitization ecosystem, Provenance has application across debt, equity, remittance and payment markets. Figure has identified over $300 billion in annual fee reductions, liquidity improvements and other benefits Provenance can deliver to global financial markets, and more use cases are being identified daily. One of the first areas beyond securitization where Provenance is being applied is in pooled investment vehicles. A leading hedge fund is in the process of moving asset custody and administration entirely to Provenance, a first for blockchain. Multiple funds – retail and institutional – are in discussion to follow this lead and use Provenance as a way to reduce costs, improve transparency and increase secondary market liquidity.

Hash™ is the digital token native to Provenance and represents a share of the fees paid to transact on the blockchain. Provenance fees are targeted to be roughly 1/3 of the economic benefit of using the blockchain (estimated at $36 billion or more annually). Fees paid go to the Provenance administrator, stakeholders and Hash holders, with the majority of the economics accruing to the latter. Hash is tradeable, comes with voting rights for the governance of the administrator and is non-dilutable. The market capitalization of Hash should be commensurate with the present value of the fees paid to transact on Provenance.

While created by Figure, Provenance has no owner. The Provenance administrator is a non-stock corporation responsible for setting the fees to use Provenance, the distribution of Hash to Hash holders from these fees, and smart contract review to ensure integrity to the blockchain. Governance of the administrator is in the form of one Hash, one vote. The administrator is set to operate sustainably initially through its cash reserves and over time through its share of payments to transact on Provenance.

The administrator will conduct an offering of Hash, both for capitalization and to provide sufficient Hash to support the Provenance ecosystem. There is 100 billion Hash and that amount is fixed. The administrator has roughly 24% of the Hash stock, stakeholders hold 5%, and Figure holds the remaining 71% in consideration for the Provenance technology. The administrator is allocating 5% of the total Hash stock to strategic partners and anticipates selling 14% in a reg-D/S private placement(s). Proceeds from the offering will go to finance the administrator and to facilitate development and greater adoption of use cases for Provenance across global financial markets.

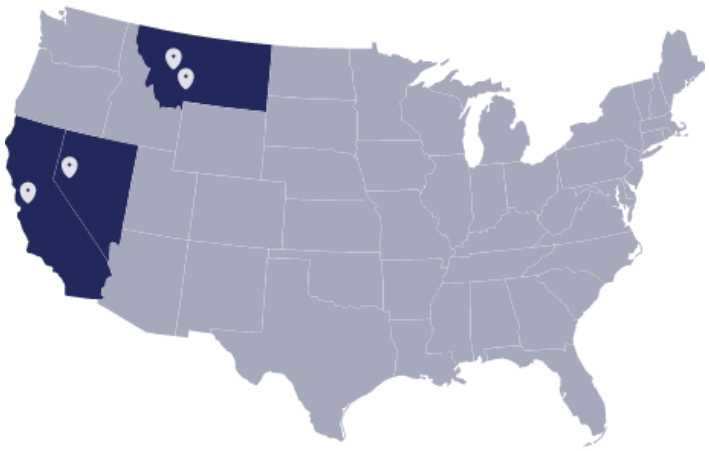
# ABOUT FIGURE TECHNOLOGIES

Figure is a financial technology company co-founded in 2018 by Mike Cagney, the founder and former CEO of SoFi, along with a team of accomplished executives from SoFi, PeerStreet, Lending Home, State Farm, Franklin Templeton, NYSE and other leading firms. Figure advisors include former SEC chairman, Arthur Levitt, former FDIC Chairwoman Sheila Bair, former Digital Asset CEO Blythe Masters, Global Atlantic CIO Anup Agarwal and Andy Sandler, founder of Buckley Sandler.

Figure's mission is to build and promote innovative financial products and solutions on blockchain that eliminate rent seeking, illiquidity and other inefficiencies present in current financial markets. Figure created the Provenance blockchain and currently provides technical, business development and other services to the Provenance administrator through a shared services agreement, though over time, the administrator will take these responsibilities on itself. Figure intends to be both a qualified custodian and exchange operator (via ATS exemption) on Provenance.

Figure currently offers an innovative home equity loan product that is originated, financed, serviced, sold and securitized exclusively on Provenance. Figure recently launched a sale/lease-back alternative to a reverse mortgage that also exclusively uses Provenance for custody and administration. Over time, Figure will expand its product set to include services such as banking and asset management, all of which will also exclusively use Provenance as ledger and registry. As the first member of Provenance, Figure has built broad support in the financial markets for the blockchain across asset originators, buy-side and sell-side firms, rating agencies and regulators.

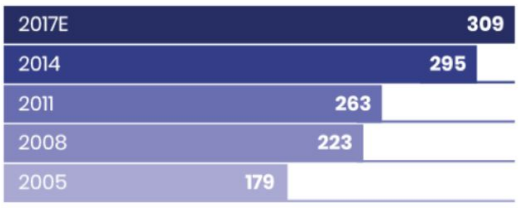
Figure is backed by a group of leading venture firms, including Ribbit, DCM, partners at DST, HCM|Foxconn Technology Group and others and raised over $138 million of equity capital in series A and B financing. As of July 2019, Figure has over 170 employees, primarily in San Francisco, California; Helena and Bozeman, Montana; and Reno, Nevada.



# INEFFICIENCIES IN FINANCIAL SERVICES

Economist Joseph Stiglitz describes rent seeking as an action to take from the economic pie, rather than making the pie bigger. The $309 trillion of global financial assets involve lots of rent seeking.

**Global Financial Assets in Trillions of USD**




*Source: McKinsey Global Institute, Haver, BIS, Deutsche Bank estimates*

Each financial asset class requires some combination of custody, trustee, administrative and reconciliation functions that are not accretive to the consumer, asset originator or investor. Further, each class is often burdened with aspects of illiquidity, opaqueness, additional costs and risk. Non-securitized loans have no formal trading platform, and trades can take up to 100 days or more to settle. Securitization is burdened with audit, underwriting and trustee fees. Stocks require expensive custody and transfer infrastructure. Corporate bonds have limited pricing transparency. Pooled vehicles require trust, custodial and administrative fees. And exchanges - when available - charge for liquidity.

To understand how big intermediation is in financial services, one simply has to look at the market capitalization of some of the largest custodians, trustees and administrators. Seven of the largest firms providing these services have attributable market capitalization of over $75 billion.

**Top Custodians**

| Custodian | Market Capitalization ($mm, 1) | Assets under administration or Custody ($bn) | Servicing, trustee and custodial Services Market Value ($mm, 2) |
|---|---|---|---|
| BNY Mellon | $57,538 | $31,100 | $34,315 |
| State Street | 35,934 | 29,833 | 17,424 |
| Northern Trust | 24,934 | 9,294 | 10,261 |
| BNP Paribas | 67,578 | 9,070 | 8,439 |
| Brown Brothers Harriman | N/A | 4,800 | N/A |
| Societe Generale | 29,880 | 4,240 | 3,945 |
| UBS | 58,748 | 3,700 | 3,433 |
| **Total** | **$274,612** | **$92,037** | **$77,827** |

*Source: Public Filings, Equity Research Reports*

*(1) Market cap as of 6/15/2018 (2) Market cap attributable to servicing, trustee and custodial services calculated based on comparable market values of these businesses relative to total assets under administration or custody*

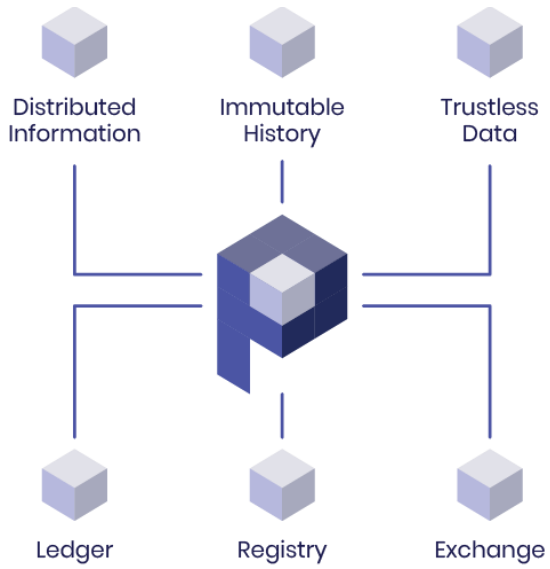
# THE POWER OF BLOCKCHAIN

Many intermediaries argue that their services are necessary for the market to function. Who else will safeguard investors if not a trusted third party? But such an argument is a false dichotomy as it presumes trust is necessary.

The blockchain has three key attributes: **Distributed Information**, **Immutable History** and **Trustless Data**. Information cannot be held in one location. Distributed content provides defense against hackers and eliminates agency problems that can lead to malfeasance, supporting enforceable digital contracts. Data must not be changed. Immutable information is critical in establishing asset provenance. And information must be true. Having to rep and warranty data—analogous to "trust me"—undermines the system and introduces risk to those who provide these attestations.

These attributes are necessary, but not sufficient, to eliminate rent seeking and bring incremental value to financial markets. To transform financial services, the blockchain must also perform three key functions: ledger, registry and exchange.

- **Ledger** – Movements of value are done on blockchain, delivering true economies of scale. Immutable records reduce or eliminate the need for trustees and reconciliation and provide real time visibility to information.
- **Registry** - Ownership is determined solely on blockchain, allowing T+0 pledging and sales of assets. Chain of custody is immutable, and recording and conveyance are the same thing, eliminating latency/discrepancies.
- **Exchange** - Price discovery becomes transparent, eliminating the need for market making intermediaries. Assets can be tokenized, allowing fractionalized sales and creating liquidity in illiquid asset classes.



# PROVENANCE

Provenance is a public but permissioned, distributed stakeholder blockchain. It was built in-house at Figure but uses the consensus module from Hyperledger. While initially focused on asset originators, buy-side and sell-side firms and their investors, Provenance is accessible to anyone (entity or individual) that is permissioned. Provenance embodies the attributes of blockchain (distributed, immutable and trustless) with the features necessary to impact financial services (ledger, registry and exchange).

Provenance has four major participants: the administrator, members, omnibus banks and stakeholders ("nodes").

The administrator is responsible for granting permissions (transactions) to members and approval of stakeholders. The administrator may create but will always review smart contracts related to these permissions that each node holds to process transactions. The administrator is also responsible for determining the cost of transactions on the protocol and for the amount of stake nodes must hold. There is only one administrator and its board is elected by the Hash holders.


Members are entities that transact on Provenance, including Hash investors. Members can also be nodes. Members pay transaction fees to use Provenance. Members can have private conversations between themselves that are not part of the immutable record held by nodes. Members can be institutions or individuals. Members who hold Hash can participate in the daily Hash auction, and over time any member will be able to buy or sell Hash directly by showing bids and/or offers in the Provenance marketplace.

Omnibus banks are the gateway to Provenance. Any transaction that involves fiat originates through an omnibus bank. Members may have an account directly with the omnibus bank or send/receive fiat through another bank to the omnibus bank. Omnibus banks are responsible for the KYC/AML of members on Provenance. The administrator may perform additional KYC/AML checks if needed.

Nodes host, through a 3rd party cloud service provider, hashed representations of all documents, data, transactions and smart contracts (for validating documents, data and transactions) that are added to the blockchain. Nodes are paid Hash for this service. Nodes put up a stake of Hash to ensure good behavior (e.g., that they do not try to hack the smart contracts or alter the blockchain). Nodes do not validate transactions themselves and are not privy to the documents, data and smart contracts that govern the transactions. Instead, they serve as an immutable and authoritative registry of the hashed output of these objects, allowing third party transaction participants to authenticate the accuracy of the documents, data and smart contracts they use to execute transactions.

# PROVENANCE USE CASE: LOAN ORIGINATION, SERVICING AND SECURITIZATION

The Figure team has extensive global capital markets expertise, including work in the consumer loan space. To demonstrate the benefits of Provenance to the financial ecosystem, Figure is originating, servicing, financing, selling and securitizing its loans exclusively on blockchain.

### Loan Origination and Servicing

Loan originators define an underwriting box that generally includes external data and proprietary analytics. As consumers apply for loans, the loan originator pulls relevant information, determines whether to extend credit and at what price, and delivers an offer to the consumer. This offer can require a set of disclosures that need to be delivered in relevant time frames (such as with TRID). When an offer is selected, the originator generates a funding transaction to fund the loan. Originators audit their process, often paying third parties to randomly sample loan production against underwriting criteria and regulatory requirements.

Once funded, the loan goes to servicing. The loan originator can retain servicing, retain the economics as master servicer but assign functional servicing to a sub servicer, or sell servicing outright. Loan payments are collected and aggregated through a remittance agent, who owns the float on the payments and remits in bulk. Remittance reports are generally up to or in excess of 30 days old. As payments are made, loans amortize. Under/over payments have particular rules around application of interest and principal, and certain states prohibit capitalization of interest that the servicer must take into account. Delinquent loans go to special servicing, often another entity, which then manages a heavily regulated process to try to get the borrower current. Servicing requires significant staff for audit, reconciliation and processing.

Loan originators will either retain their loans or sell them to loan buyers. There is no exchange for loans, so sellers often generate a CUSIP for the loans and pay to settle trades through DTC. For offshore capital or buyers who can't own loans outright, originators often put loans in a trust and issue trust certificates, paying for the trust and financing the risk retention the trust triggers. Many loans are ultimately sold through securitization.

### SECURITIZATION

Securitization is the creation and issuance of debt securities where the payment of principal and interest is derived from cash flows tied to a pool of underlying assets exclusively pledged to these securities. Nearly $3 trillion in securitized products were originated in 2017, with the majority coming from the U.S.

Securitized products include all ABS, MBS and CLOs (source: SIFMA). Securitizations have a sponsor who is responsible for the reps and warranties of the transaction, and for risk retention.

Because of the fixed costs involved, securitization sponsors (and other loan holders who contribute collateral to the securitization) generally aggregate assets to reach a critical mass ahead of securitization. This aggregation happens through asset-based warehouse lenders. Such lenders provide short-term, floating-rate financing against the assets. Because of the complexity of perfecting title, warehouse lenders generally take pledges of new assets once every 3-4 days, requiring the originator to fund loans from its balance sheet for short periods of time. The warehouse provider regularly audits – and re-audits – the collateral. For digital assets, the warehouse provider takes on risk of double-pledging. The high costs of perfecting title, audit and pledging risk are passed on to the originator through fees charged in the warehouse.

To initiate a securitization, the sponsor must first create a special purpose vehicle (SPV) or trust. This vehicle is the legal holder of the assets and is generally administered by a custodian or trustee. The sponsor (and other contributors) will sell the assets to the SPV, and the payment streams generated by the assets can then be repackaged to back an issue of bonds. The SPV is administered by a custodian for a fee.

As part of the sale process, an auditor validates loan terms, and an underwriter re-underwrites the assets to ensure conformity to the originator's policies. Both charge for these services. The underwriter often structures the number and seniority of bonds tied to the pool of assets and might facilitate rating the bonds through one or more rating agencies. Rating agencies have to also audit the loans and the originator. For example, a securitization backed by $400MM in loans might look like the following:

### Sample Securitization

| TRANCHE | Size (mm) | Percentage | Rate | Comments |
|---|---|---|---|---|
| AAA | $ 250 | 62.50% | Libor + 200 | Has 37.50% credit enhancement. Safest bond so receives lowest return |
| AA | $ 100 | 25.00% | Libor + 350 | Has 12.50% credit enhancement. More risky than AAA tranche but safer than Equity tranche |
| Equity | $ 50 | 12.50% | Receives all excess cashflows | All initial loan losses are absorbed by this tranche. Highest risk / highest reward. |
| **Total** | **$ 400** | **100.00%** | | |

Counsel is paid to document the transaction, and the underwriter will then sell these bonds to investors in exchange for cash. Unlike corporate bonds, securitized bonds usually pay both interest and a portion

of the principal to investors on a monthly basis. A trustee is established to administer cash flows to bond holders, in accordance to the terms of the securitization. The trustee charges a fee for this service and the sponsor pays for trustee counsel.

Securitization offers asset originators a number of benefits, including:

- **Gain on sale** - Originators earn fees upfront from the proceeds of the securitization, rather than having to wait over the life of the asset.
- **Transfer risks** - Securitization transfers credit and prepayment risk from the originator to the security buyers, freeing up capital.
- **Liquidity** - Securitization gives the originator cash for the loans they originated to allow them to originate more loans.
- **Reduced funding costs** - Securitizations tend to have a lower implied funding cost than other asset-based lending (e.g., warehousing) and originator's cost of capital.

While asset originators realize significant benefits from securitization, they incur real costs as well. Rent-seeking and other notable limitations of securitization include:

- **Origination costs** – Audit, reconciliation, compliance and fraud introduce significant cost to the originator.
- **Aggregation costs** - Title perfection, audit and fraud require significant investment in technology and people and translates to higher costs to fund the loans during aggregation.
- **Asset-sale friction** - Most assets underlying securitizations do not have a CUSIP and settle over-the-counter. Settlement times can be long (up to 100 days) and introduce counterparty and settlement risk. Using CUSIP and DTC costs money and still settles over two days. Trusts and trust certificates have both explicit costs and risk retention costs.
- **Securitization costs** - Auditors, underwriters, custodians, trustees, and lawyers can run over 1%, costing global securitization issuers up to $30 billion a year in fees.
- **Ratings** - In addition to the cost of ratings, new issuers face ratings challenges and rating caps around originating and servicing assets.
- **Liquidity** - Securitized bonds on assets with credit/prepayment risk tend to trade monthly when the remittance report is published. Limited liquidity translates to wider spreads.
- **Ongoing costs** - Servicing, custody, reporting and trustee costs can run up to 0.50% of outstanding balances.

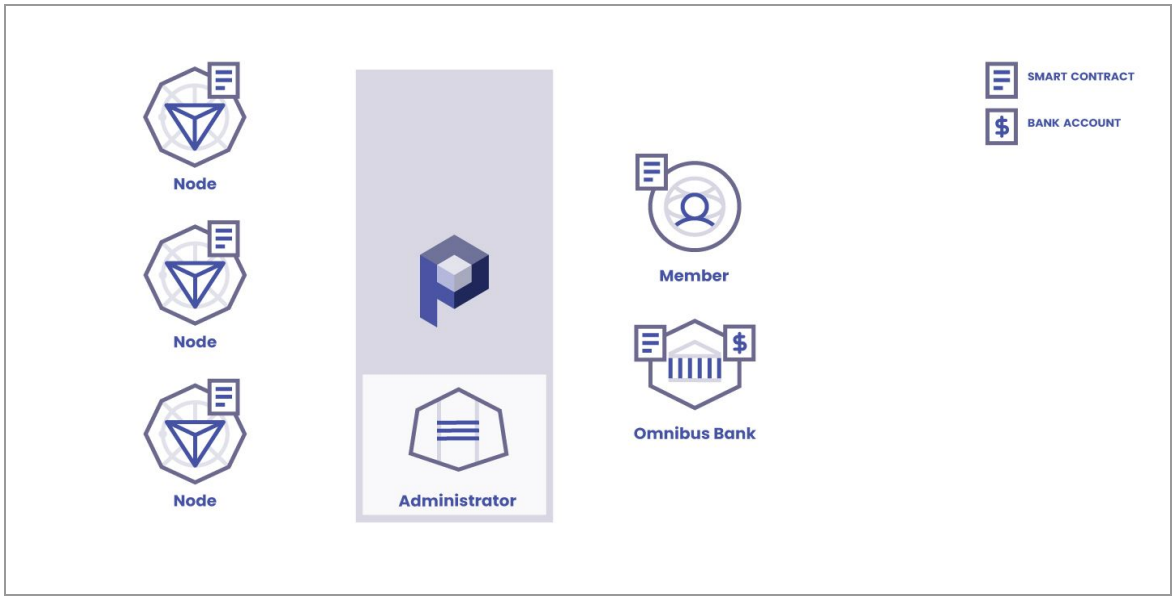
- **Communication costs** - Bonds sold downstream (e.g., by the original buyers) are generally not tracked, introducing costs and risks to establish a quorum for voting on issues such as changing servicers or collateral modification.

Provenance provides a way for asset originators to capture the upside of securitization, while eliminating much of the cost, friction and inefficiencies in the market today. We will use the example of a loan originator to demonstrate how a member is approved to originate loans, service loans, sell loans, warehouse loans and securitize loans on Provenance, and the resulting benefits.

# ADDING A LOAN ORIGINATOR MEMBER

An applicant who wishes to originate a loan on Provenance is permissioned by the administrator and known to all members. The administrator approves a set of transactions available to each member. This can include originating a loan (and the underwriting box), selling a loan, financing a loan, etc. The administrator or a third party creates smart contracts related to these transactions. Smart contracts take encrypted data from the member and transform that information to encrypted data in the blockchain. The member is responsible for the accuracy of the smart contract, though the administrator reviews each contract to ensure operability on Provenance. The member may also create smart contracts to perform various tasks related to their business that may not be part of the immutable record on the blockchain, (e.g., private conversations may be excluded from the immutable record).

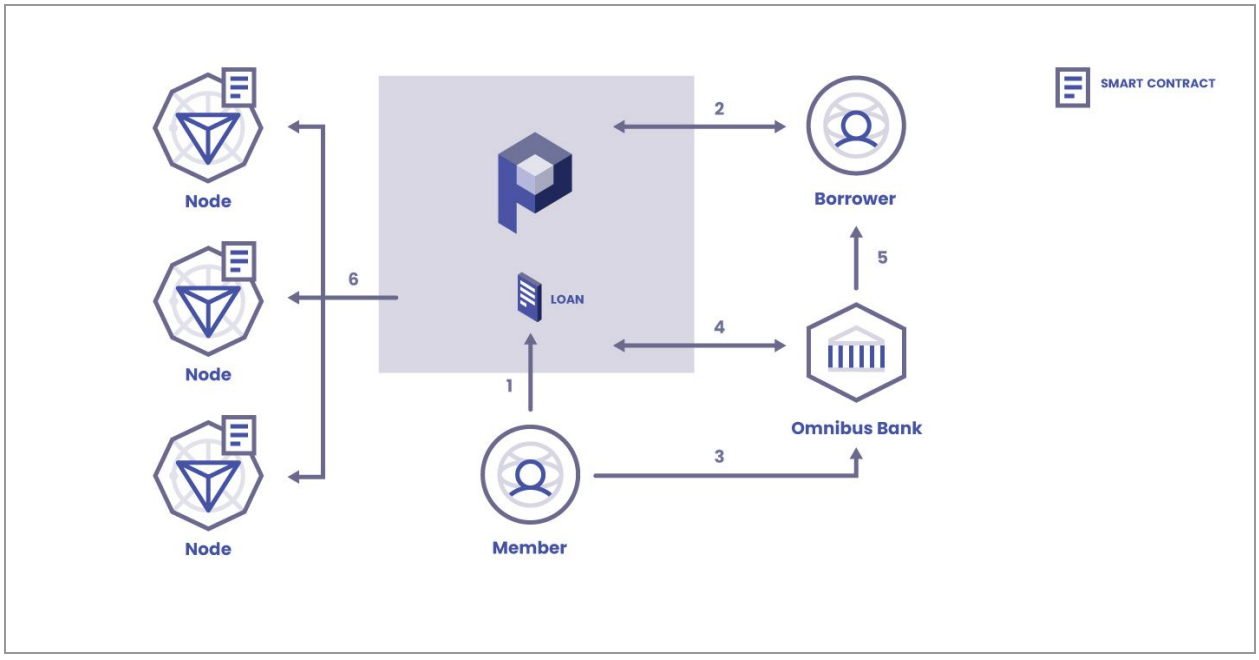
The member sets up an account (if it does not have one already) at one of the omnibus banks integrated into the protocol. The omnibus bank performs KYC/AML as part of onboarding the member. The omnibus bank facilitates fiat settlement on Provenance. When members transact in fiat, they ensure that the appropriate amount is present in their omnibus bank accounts. The omnibus bank creates a settlement token, backed by the fiat in the sending member's account, which is passed instantly to the receiving member to memorialize the transaction on the blockchain. The receiving member can then redeem the settlement token for the fiat in the sending member's account. Members do not need to buy/sell Hash to use Provenance.



# ORIGINATING LOANS

Members can originate and fund loans on the protocol.

1. A member loan originator submits a loan packet to the protocol. This packet includes all inputs digitally signed from source (e.g., title, credit, income, etc).
2. The member has the borrower sign, delivers disclosures (Truth-in-Lending Act, etc.), and waits out rescission period (if relevant).
3. The member moves fiat to fund the loan into the omnibus bank.
4. The omnibus bank holds fiat in escrow and delivers a settlement token to the member to represent these funds.
5. That token is immediately sold back to the bank with instructions to release fiat from escrow and fund the loan. Steps 3-5 happen real time, and neither member sees Hash in the transaction.
6. Smart contracts create an immutable record of the loan, including whether underwriting was done correctly, if the promissory note was signed, disclosures were sent, funds disbursed, etc. This record is the first link in a chain that is specific to this loan.

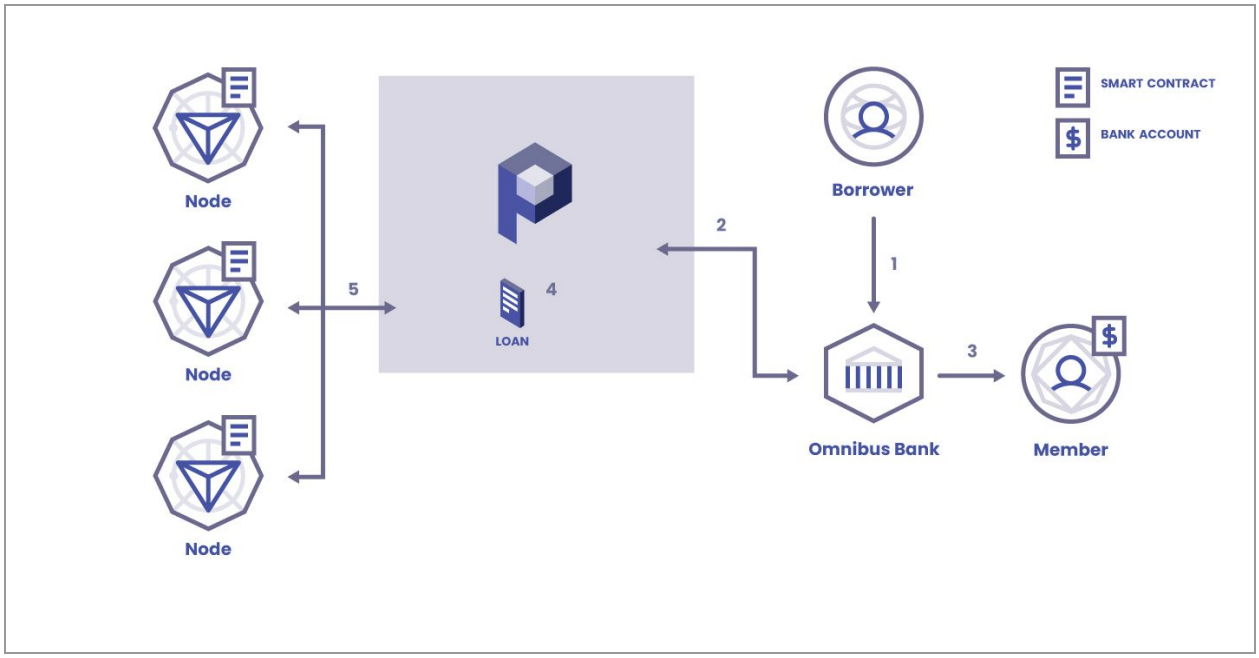


# RECEIVING LOAN PAYMENTS

Loan payments are captured in the protocol for proof of receipt. Provenance acts as a ledger and servicing platform, with smart contracts applying payments to principal and identifying missing/late payments.

1. A borrower sends a payment to an omnibus bank acting on behalf of the servicer (ACH or lockbox).
2. The omnibus bank holds fiat in escrow and delivers a settlement token to the member loan owner.
3. That token is sold back to the omnibus bank, releasing fiat to the member. Steps 1-3 happen real time.
4. Smart contracts amortize the loan, managing over/under payment.
5. Smart contracts capture payment history by adding a link to the loan chain.

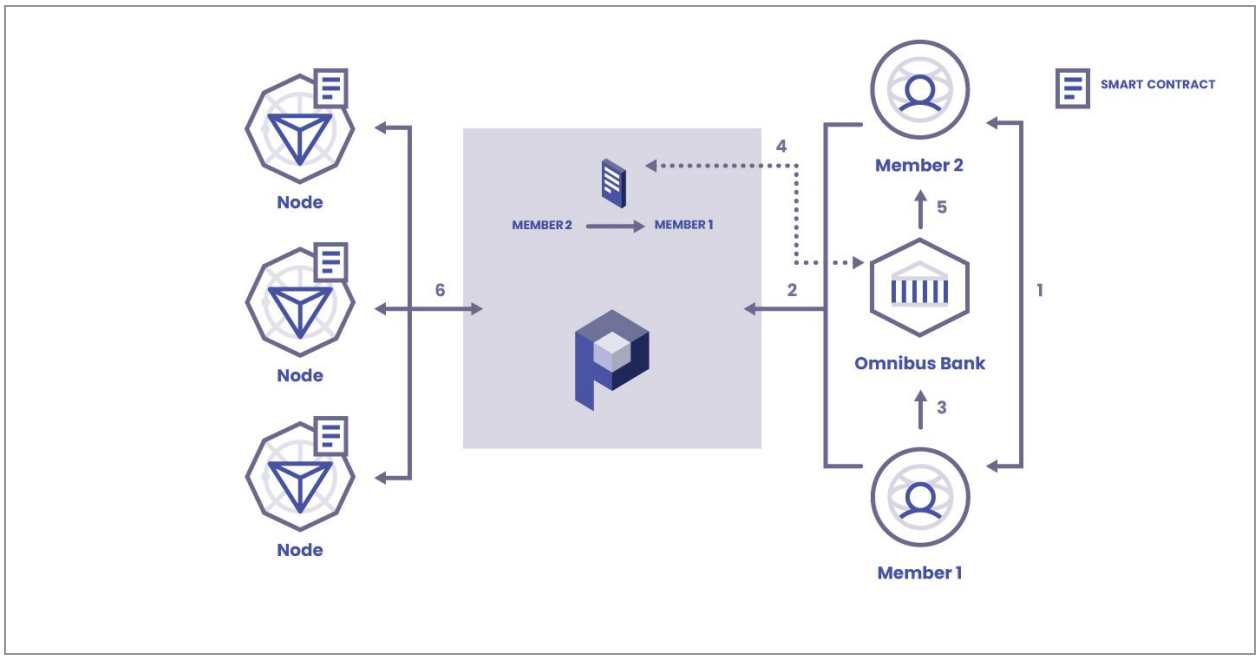
The protocol knows when a loan should receive payment and can create links related to late, missing or partial payments. The protocol becomes the sub-servicer of the loan with real time remittance to the loan owner, with the master servicer controlling statements, outreach and pulling non-performing loans off for special servicing.



# BUYING / SELLING LOANS

Provenance acts as a distributed registry of ownership for assets, providing for exchange without settlement risk or counterparty risk.

1. Member 1 and Member 2 have a private conversation and agree to sell a loan for a given fiat amount, subject to terms and conditions.
2. Both members notify the blockchain of their intent.
3. Member 1 moves fiat to the escrow account at the omnibus bank.
4. The omnibus bank delivers a settlement token to Member 1, which goes to Member 2 in exchange for the loan.
5. Member 2 redeems that token for the amount in escrow. Steps 3-5 happen real time.
6. Smart contracts change loan ownership and memorialize the transaction by adding a link to the loan chain.

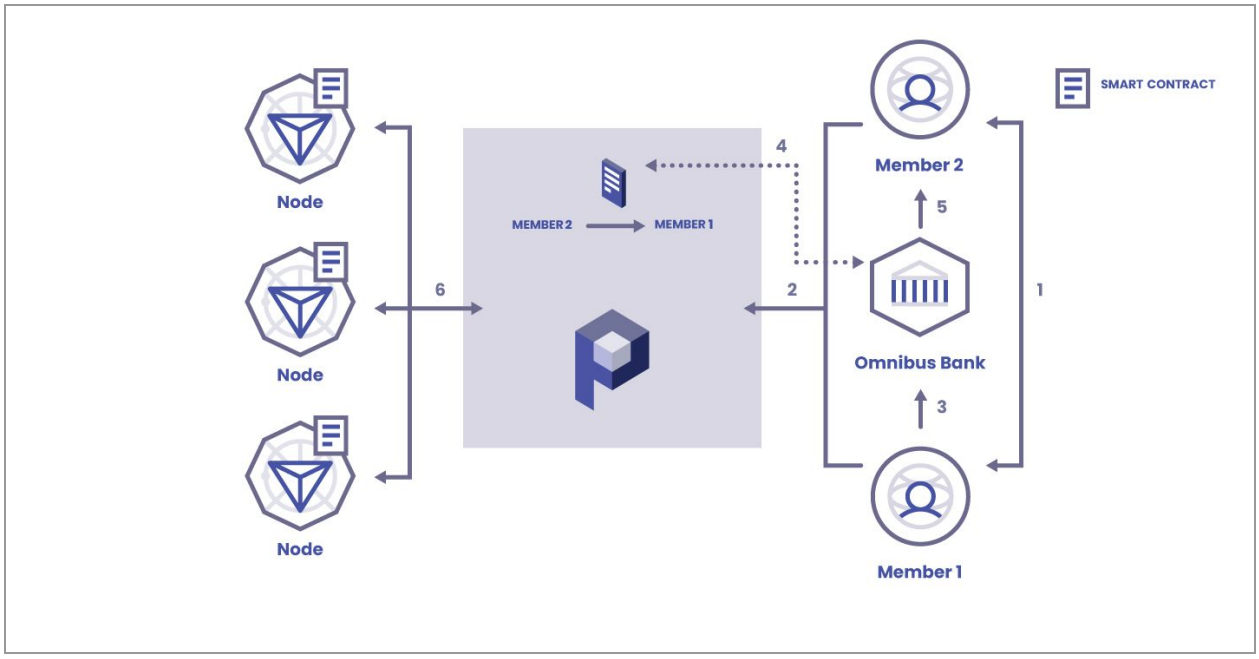


# FINANCING LOANS

Members finance assets through warehouse agreements with other members. Members have smart contracts to manage where to pledge assets to optimize return on equity or liquidity (loan holder) and manage concentration and other limits (warehouse provider). Pledged assets are recorded in the Provenance registry.

1. Member 2 (loan holder) has a private conversation with Member 1 (warehouse provider) to finance a loan, with an agreed upon advance rate, funding rate, etc. subject to terms and conditions.
2. Both members notify the protocol of their intent to pledge the loan in exchange for fiat, and at what terms.
3. Member 1 delivers fiat advance amount to the escrow account in the omnibus bank.
4. The omnibus bank delivers a settlement token to Member 1, who then exchanges that token with Member 2 for the pledged asset.
5. Member 2 redeems the token from the bank to release fiat to their account. Steps 3-5 happen real time.
6. Smart contracts confirm ownership of loan, encumbrance and exchange of value by adding a link to the loan chain. Pledged loans cannot be sold or pledged to another party.

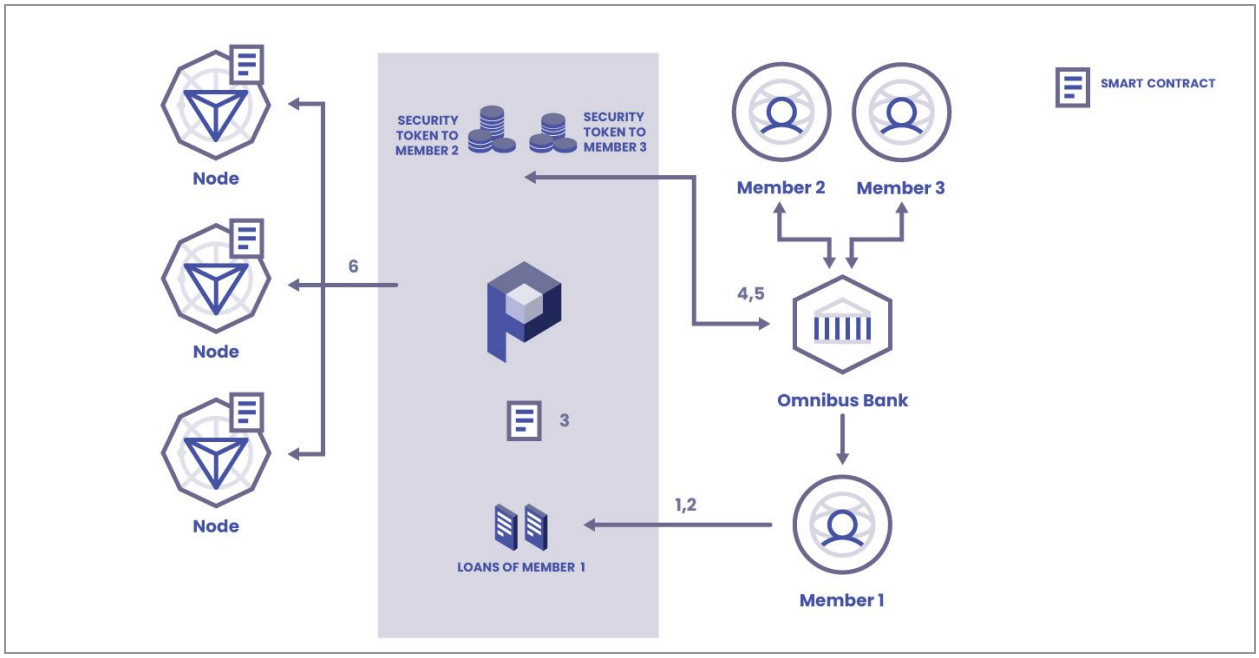
If the lender has unilateral authority to claim the loan, then that is part of the smart contract governing the transaction. The lender's smart contract can automatically (or manually) adjust advance rates, interest, etc. subject to asset performance or other criteria.



# SECURITIZING LOANS

Members can securitize loans by issuing security tokens. Security tokens reference specific assets (loans) on Provenance. Provenance acts as an exchange for these tokens. Security tokens can be rated and can have a CUSIP.

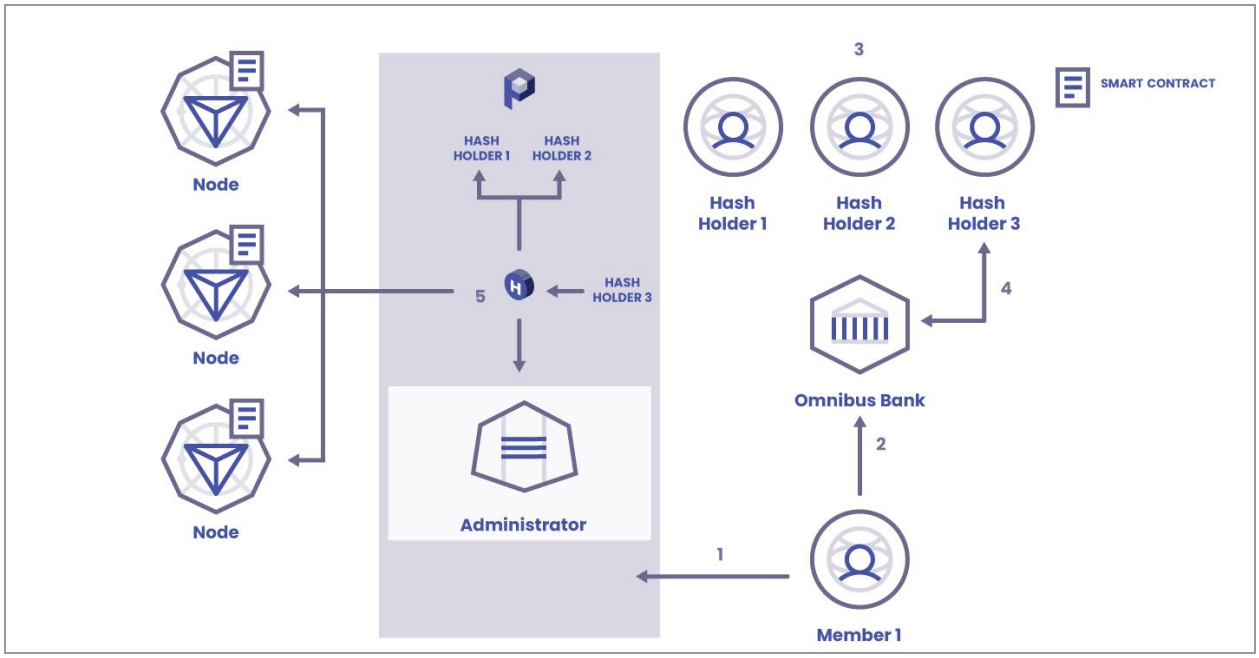
1. Member 1 notifies the protocol of a securitization sale, including loans supporting the securitization and the types of security tokens and cash flow waterfall to support them.
2. Loans are moved into an SPV to support bonds.
3. A smart contract is created to distribute cash flows to security tokens. The smart contract can include features such as turbo prepayment or other adjustments tied to collateral performance.
4. Security tokens are sold similarly to how loans are sold, through the omnibus bank.
5. Payments are aggregated and distributed against the waterfall.
6. Smart contracts record encumbrance of assets and registry and security token ownership by adding a link to the loan and securitization chain.



# PAYING TRANSACTION FEES

Many transactions, such as buying a loan, financing a loan or securitizing a pool of loan require transaction fees. Transaction fees are paid in fiat, and members never have to trade in Hash to use Provenance.

1. Member enters into a transaction requiring a transaction fee.
2. Member moves the transaction amount and fee amount to the omnibus bank, which directs the protocol that the requested transaction can be executed. The member's role in the transaction is now complete.
3. Each Hash holder (investors, nodes and administrator) sets a reserve offer (or offers) at which they will sell Hash.
4. Provenance uses the transaction fee to buy the Hash from the best offer. If the best offer isn't sufficient to clear the amount, Provenance moves to the next best offer, aggregating both offers at the higher price and clearing pro-rata.
5. The member(s) winning the auction receive the fiat from the transaction fee in return for the amount of Hash determined by the auction clearing price. The purchased Hash is distributed to the remaining hash holders in proportion to their ownership percentage, after first deducting the amount due the nodes and the administrator.



# VALUE PROPOSITION

The actions outlined herein create a perfectly immutable record of loan provenance on a distributed system that acts as a ledger, registry and ultimately, exchange. The warehouse, securitization and liquidity benefits alone represent up to $90 billion or more in reduced fees, technology and personnel costs and improved transparency and liquidity in the $3 trillion annual securitization space. These benefits primarily encompass:

- **Lower origination and aggregation costs -** Trustless and immutable origination results in the reduction of QC, compliance and upfront audit costs. Ability to pledge real time with complete chain of custody reduces custody, payee agent and administrative costs for the warehouse provider while providing significant capital efficiency to the originator. Embedded servicing eliminates standalone servicing platform and personnel costs. Estimated benefit of 50-125 bps annually ($15 to $37.5 billion).

- **Lower deal costs -** Smart contracts and immutable data provide certainty to assets, reducing audit scope from the loan level to the smart contract level. Blockchain acts as custodian and payee agent, and legal documents can come from a smart contract tied to the collateral and resulting loans, saving significant fees. Deals can be done instantaneously, rather than in weeks. Estimated benefit of 20-20 bps annually ($6 to $9 billion).

- **Improved and more efficient ratings -** Data certainty reduces deal risk and scope of ratings work. Knowledge of bondholders eliminates quorum risk for deal votes (changing servicers, modifying collateral, etc.) Blockchain derisks new originators, servicers and lifts rating caps. Estimated benefit TBD.

- **Improved liquidity -** Real time transparency of underlying collateral eliminates reliance on monthly remittance reports, allowing for continuous pricing and eliminating information asymmetry. Estimated benefit 100-150 bps annually ($30 to $45 billion).

# INITIAL PARTICIPANTS

Provenance has a group of leading financial institutions participating across functions, including:

- Members who put assets on Provenance. Asset originators (loans), funds (investments).
- Members who purchase/finance assets on Provenance. Banks and funds.
- Nodes/Stakeholders. Buy side, sell-side firms and other financial services companies who independently host smart contracts and the encrypted blockchain.
- Omnibus Banks who provide a bridge between fiat and Provenance.

Members are informed of which firms are stakeholders today, and any changes in stakeholders should they occur.

# LEGAL STANDING

There are three pertinent legal points related to Provenance:

First, loan/security holders are used to having one enforceable contract relating to a unique asset. On Provenance, there are multiple copies of the contract, held by the nodes. The primary laws governing electronic contracts include the Electronic Signatures in Global and National Commerce Act (E-SIGN), 15 U.S.C. § 7001 et seq. (2000), and the Uniform Electronic Transactions Act (UETA); each of these provide a market standard for establishing control over an electronic record. Both E-SIGN and UETA utilize the same test for establishing control: "A person has control of a transferable record if a system employed for evidencing the transfer of an interest in the transferable record reliably establishes that person as the person to which the transferable record was issued or transferred." The person in control of the single "authoritative copy" is in control of the electronic record.

Combined, the goal of these standards is to ensure control of the single "authoritative copy" of the transferable record that is unique, identifiable, and except as permitted by the party in control, unalterable. Provenance meets these conditions to be suitable as a digital platform for custody, warehousing and securitizing assets.

In addition, the Uniform Commercial Code would categorize any electronic note, whether negotiable or non-negotiable if it were in writing, as a payment intangible as to which a secured party must perfect by filing. It is common practice for a secured party to obtain control over an electronic record if the payee of the electronic record is borrowing funds secured by a pledge of the electronic record or the electronic record is an asset being conveyed in a securitization. Similarly, for assets held on Provenance, a filing will be made in the jurisdiction in which the applicable member is located.

Second, certain investors have limitations holding certain assets directly. For example, for tax purposes, many investors cannot own whole loans. Instead, they have a sponsor create a trust, and issue trust certificates. This introduces both the cost of setting up and administering the trust, as well as the cost of risk retention born by the sponsor. With Provenance, a security token can replace the trust certificate, eliminating the majority of these costs.

Finally, multiple nodes are critical to the distributed ledger of Provenance. Given that nodes simply host the hashed output of smart contracts, the members will indemnify the nodes should such contracts fail to perform as anticipated. The onus of the smart contract accuracy is on the member.

### Exchange Operator and Qualified Custodian

Provenance can support multiple custodians and exchanges but does not act as a custodian or exchange operator. Figure is in the process of securing regulatory approval for a broker dealer to secure an Alternative Trading System exemption to operate an exchange and to be a qualified custodian for certain activities on Provenance. This approval is gating to certain activity – such as moving funds on to Provenance – but does not limit the operations around loan origination, servicing, trading and securitization.

# GLOBAL MARKET OPPORTUNITIES

The securitization use case represents savings upwards of $90 billion or more in annual fees and servicing costs as well as economic benefits from improved warehousing and liquidity. There are many other regions and markets in which Provenance can eliminate rent seekers and inefficiencies.

The value of a distributed, immutable and trustless blockchain that acts as ledger, registry and exchange is not limited to the U.S. or U.S. dollar markets. Provenance can have significant impact on the broader $233 trillion fixed income market and the $72 trillion public and private equity markets. Some examples of the impact of Provenance are presented in the following table.

| Market | Outstanding ($tr) | Provenance Benefit ($bn) | Provenance Opportunity ($bn) |
|---|---|---|---|
| Securitized Loans | $13 | $75 | $25 |
| Non Securitized Loans | 63 | 100 | 33 |
| Corporate Bonds | 94 | 100 | 33 |
| Public Debt | 63 | 15 | 6 |
| Public Equity | 71 | 18 | 6 |
| Private Equity | 1 | 3 | 1 |
| **Total** | **$305** | **$311** | **$104** |

*Source: Public Filings, Equity Research Reports*

*Note: Numbers may appear not to tie due to rounding*

To help demonstrate some of the $300 billion in benefits outlined above, Figure is pursuing several opportunities beyond securitization in H2 2019 to demonstrate the value of Provenance. These include:

- **Fund issuance** - Figure recently launched a sale/leaseback product as an alternative to reverse mortgages. The properties—and related financing—will be held on Provenance. Figure will form a REIT and issue a security token against these assets to represent REIT ownership, eliminating the need to set up a custodian, trustee and administrator. This should provide a template for any pooled asset issuance, from mutual funds to ETFs to hedge funds.

Figure is also working with one of the original marketplace lending hedge funds to put their fund - and the relating sell-side warehouse - on blockchain. Assets consist of marketplace loans and other securities. This should dramatically reduce custody and administrative costs while improving investor reporting.

- **Debt issuance** - Figure is planning on working with a major Asian conglomerate to issue commercial paper on Provenance, with bids submitted through a Dutch Auction. This leverages the robust participation on Provenance, while significantly reducing issuing costs, eliminating ticket errors and providing secondary liquidity to the debt. This should provide a template for any type of corporate debt offering

- **Eliminating trust certificate**s - Figure is working with another loan originator and a buy-side firm to replace their current trust and trust certificate structure with a security token on blockchain. This significantly reduces costs while providing faster settlement and better liquidity. This has significant application to the global buy-side market.

- **Title** – Figure is working with one of the largest mortgage agencies and two counties to do real estate title on chain. This potentially eliminates the $15 billion/year title insurance industry and allows mortgages to be digital assets.

The motivation in creating Provenance was not to merely deliver a competitive advantage to a subset of the financial ecosystem through lower costs, improved liquidity and greater transparency. Rather, the motivation was to make *not* using Provenance a competitive disadvantage. Each day Figure identifies incremental use cases, building on $97 billion in annual value by eliminating rent seeking and introducing significant improvements to the securities markets.

Moving beyond financial assets, global financial firm adoption of Provenance opens up use cases for remittance ($31 billion a year in fees) and payments ($324 billion a year in interchange and merchant acquiring fees alone). Virtually any rent-seeking or inefficiency in financial services is at risk from this technology.

# ROADMAP

## 2018

Q1
- Figure Technologies founded

Q3
- First loans originated native on blockchain
- Initial nodes established
- First loan sales native on blockchain

## 2019

Q1
- First warehouse on blockchain
- 10 stakeholders from leading financial firms on Provenance

Q2
- First securitizations on blockchain
- White papers on origination and aggregation efficiencies, deal cost improvement, ratings enhancement and improved market execution tied to securitizations

Q3
- First hedge fund on blockchain
- Additional originators added to chain

Q4
- First real estate title entirely on blockchain
- First digital mortgage on blockchain
- Provenance Hash IPO

# COMPETITIVE LANDSCAPE

Given the exchange nature of Provenance, first mover advantage is critical, and the resulting network effect serves as a strong barrier to entry. Figure is uniquely positioned to deliver Provenance, given the combination of the firm's technical ability, asset generation ability and capital markets relationships. Provenance is the only comprehensive solution for asset origination, trading, financing and securitization - in production in July of 2018 with significant industry participation.

# HASH

The primary purpose of Hash is as a governance and equity medium on the blockchain. Hash holders receive fees members pay to transact on Provenance, and vote on the Provenance administration board. Hash has a secondary function of being used for each node's stake. Each node is required to put up a stake of Hash on which they earn a return for their services. The stake is set by the administrator and is subject to forfeiture in certain situations, such as termination of services.

Provenance has a fixed token stock of 100 billion Hash. Hash cannot be created or destroyed. While the price of Hash will ultimately float, today each Hash holder sets a reserve price (or declines to participate) and fees paid to access Provenance go to the best offer(s) of Hash.

### Hash Economics

When members use Provenance, they pay a fee in fiat which is designed to be commensurate with the economic benefit of using the blockchain. Fees are set by the administrator and range from 25% to 40% of the economic benefit. Each Hash investor can set a reserve offer price (or prices) at which they will sell Hash. As fees are paid, the administrator conducts a reverse Dutch Auction to purchase hash from the Hash investors offering the lowest price. If there isn't sufficient Hash at the lowest price, the next highest price is chosen, with the previous lower price now getting the higher price, and the allocation being pro-rata. For example, if a member was paying $1000 in fees and the lowest price offered by an investor was 500 Hash for $1/Hash and the next lowest price was 500 Hash for $2/Hash, the clearing price would be $2 and each investor would sell 250 Hash.

The administrator distributes the purchased Hash to the nodes, the administrator and the remaining Hash holders. Distributions are set by the Provenance administrator, with initial distributions of 5%, 15% and 80%, respectively. As node and administrator costs are generally fixed, as use of Provenance grows, the amount allocated to each will fall to the benefit of the Hash holders.

For example, in the securitization example, Provenance provides upwards of 250 bps in value. To access the blockchain, the administrator charges 33% of that benefit, or ~83 bps. That 83 bps would purchase Hash at the best clearing price, and the administrator would distribute the purchased Hash to the nodes, administrator and Hash holders.

### Hash as Digital Equity

Hash is digital equity. The following table identifies the differences in digital equity and traditional private equity.

| | Private Equity | Digital Equity |
|---|---|---|
| **Valuation** | Present value of net income | Present value of revenue |
| **Dividends** | Subject to the company, but usually only when profitable | Paid on all revenue |
| **Liquidity** | Illiquid | Liquid – multiple use cases tied to blockchain |
| **Voting Rights** | Varies | One token, one vote |
| **Dillution** | Yes | No |

Digital equity takes on no idiosyncratic risk of the firm, yields on the first dollar of revenue, is non-dilutive and is liquid. However, one limit on digital equity is there are no capital protections, such as liquidity preference.

Given the simplicity of digital equity, the market capitalization of Hash is simply the present value of the fees paid to access Provenance that is realized by Hash holders. Such fees are a percentage (35-40%) of the economic value captured by Provenance members from using the blockchain. For example, if Provenance was solely used for securitization and captured 100% of the securitization market, the amount paid each year to use Provenance would be $25 billion (83 bps fee capture x $3 trillion in annual production.). Ignoring the small amounts paid to nodes and the administrator and using a 20% discount rate and treating the fees as a perpetuity, the market capitalization of Hash (i.e., the present value of fees) if Provenance was used only for securitization would be $125 billion.

The market capitalization of Hash could rise as new use cases (addressable market) are identified and de-risked. Figure has identified $97 billion in value today that Provenance can deliver to financial markets, and that number grows daily as more use cases are identified. Figure is working to identify new use cases and de-risk them through real-world adoption. Figure anticipates other members will participate in this function by utilizing Provenance in ways that demonstrate enhanced value to the ecosystem.

### Initial Hash Allocation

The initial Hash allocation will be 71% to Figure (in exchange for intellectual property), 24% to the administrator and 5% to the initial nodes in the form of their stake. The administrator plans to allocate 5% of the total stock from its position to strategic partners (i.e., other members including loan

originators, warehouse providers, etc.). Initial Nodes must maintain their stake, which can be less than but never more than the initial grant.

### Offering Hash

The administrator plans on selling Hash in two offerings. The initial offering will be done as a reg-D/reg-S private placement. The second offering is intended to be done as a public security offering (IPO). Figure is working with the SEC on behalf of Provenance to determine the appropriate process to file an S-1 for the general offering.

The administrator and Figure plan to sell enough of their Hash allocation in the two offerings to result in a post allocation of <50% Figure, 35% or more to Hash investors, 5% to the administrator, 5% to nodes and 5% to strategic partners. It is Figure's intent to not own a majority of Hash – and thereby not have control of the administrator – post offering and Figure may participate in the IPO and/or sell Hash against member fees.

# PROVENANCE ADMINISTRATOR

Provenance is administered by a Delaware non-stock corporation. The administrator is responsible for:

- Assigning permissions for all members.
- Reviewing smart contracts relating to member permissions.
- Setting fees for using Provenance.
- Approving, setting stakes and monitoring nodes.
- Expanding use cases, members and nodes.

In addition, the administrator may write smart contracts for members on a time and material basis.

The administrator will have its own staff. As it builds it staff through 2019, the administrator will augment staff through a shared services agreement with Figure. The shared services agreement will provide engineering, business development, legal and compliance support to the administrator.

### Financials & Capitalization

The administrator will be initially capitalized through its sale of Hash. The administrator can also take up to 15% of the Provenance transaction fees (through Hash distribution), and over time will finance 100% of its costs through this fee share. Illustrative financials – assuming only securitization on Provenance with a 3% market capture in 2022, are as follows.

# Provenance Economics

($millions)

| Year | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|
| Securitization Market | 3,000,000 | 3,150,000 | 3,307,500 | 3,472,875 |
| x Market Capture | 0.02% | 0.75% | 2.00% | 3.00% |
| Provenance Securitization | 600 | 23,625 | 66,150 | 104,186 |
| Securitization (Lifecycle) Fees | $1.7 | $68.5 | $191.8 | $302.1 |
| | | | | |
| Stakeholder Fees (10) | 0.09 | 0.75 | 0.75 | 0.75 |
| % of Fees | 5.0% | 1.1% | 0.4% | 0.2% |
| | | | | |
| **Hash Holders** | **$1.4** | **$57.5** | **$179.5** | **$289.3** |
| % of Fees | 80.0% | 83.9% | 93.6% | 95.7% |
| | | | | |
| **Administrator Fees** | **$0.3** | **$10.3** | **$11.6** | **$12.1** |
| % of Fees | 15.0% | 15.0% | 6.0% | 4.0% |
| | | | | |
| **Administrator** | | | | |
| Compensation | 6.4 | 6.8 | 6.9 | 7.3 |
| Facility | 0.2 | 0.3 | 0.3 | 0.3 |
| Legal Fees | 1.0 | 1.4 | 1.0 | 1.1 |
| G&A | 0.9 | 2.4 | 3.3 | 3.5 |
| **Total Expenses** | **$8.6** | **$10.9** | **$11.6** | **$12.1** |
| | | | | |
| **Net Income** | ($8.3) | ($0.6) | $0.0 | $0.0 |
| | | | | |
| **Capital** | 8.4 | 7.8 | 7.8 | 7.8 |

### Provenance Administrator Governance

The Provenance administrator is governed by a board of directors ("Board") consisting initially of two external board members and an Executive Director. By 2020, the board will grow to 4 external directors. The Executive Director is appointed by the 2 board members, who are, in turn elected by the holders of Hash. The Executive Director is responsible for day to day management, policies and procedures of the administrator and serves at the direction of the 2 other board members. The Board is responsible for approving budgets and setting permissioning requirements and economic allocation for ecosystem. The administrator will have other support staff including engineering, finance, legal and compliance, which for the first year will be a shared service with Figure.

Each Hash holder has one vote per Hash. All voting will be majority (50% plus one), including a proposal to replace the board members. In casting votes in an election for the board seats, each Hash holder may allocate its votes among candidates for election in such amounts per candidate as it chooses. For example, in an election for two directors, a holder of 100 Hash may cast 100 votes exclusively for a candidate for one seat and no votes for candidates for other seats, or may allocate its 100 votes among the candidates (e.g., 70 votes for a candidate for the first director seat, 30 votes for a candidate for the second director seat). The administrator will own Hash but is excluded from voting.

Figure will never vote more than the equivalent of non-Figure Hash. For example, if non-Figure entities hold 35% of the Hash, Figure will only vote 35% - not its 65% - of its Hash stock.

# CONTACT INFO

Figure Technologies, Inc.
650 California St., Suite 2700
San Francisco, CA 94018
tel: 888.819.6388

For questions related to the whitepaper or digital equity offering, please contact Jennifer Mitrenga, VP of Investor Relations and Strategic Initiatives at Figure.

email: jmitrenga@figure.com
tel: 628.236.5830

# DISCLAIMER

This document and the material provided herein (the "Document"), current as of the date hereof, have been prepared by Figure Technologies, Inc. and its affiliates (collectively, the "Company") solely for informational purposes. The Document does not constitute an offer to sell or a solicitation of an offer to buy or sell or a solicitation of an offer to buy or sell Hash or any other security or to participate in any trading strategy. The transactions set forth herein are in the initial structuring phase and there may be material changes to the structure prior to a participant becoming a member or a node and/or the digital offering of Hash. All parties should be aware of increasing scrutiny by governmental authorities and the potential for enforcement proceedings against sellers of digital equity.

This Document is not intended to be relied upon as the basis for an investment decision and is not and should not be assumed to be complete. In making an investment decision, prospective investors must rely on their own examination of the merits and risks involved. The contents herein are not to be construed as legal, financial, business, or tax advice, and each prospective investor should consult its own attorney, business advisor, and tax advisor in order to make an independent determination of the suitability and legal, financial, business, and tax consequences of any investment. The Company makes no representation or warranty as to the accuracy or completeness of this information and shall not have any liability for any representations (expressed or implied) regarding information contained in, or for any omissions from, this document or any other written or oral communications transmitted to the recipient in the course of its evaluation.

This Document includes certain statements and estimates provided by the Company with respect to the projected future performance of the Company, Hash and Provenance. Such statements, estimates and

projections reflect various assumptions by management concerning possible anticipated results, which assumptions may or may not be correct. No representations are made as to the accuracy of such statements, estimates or projections. In addition, this Document may contain statements that are not historical facts, referred to as "forward looking statements" which are subject to uncertainty and contingencies outside the Company's control. The actual future results of the Company, Hash and/or Provenance may differ materially from those suggested by such statements.

This Document is intended solely for the recipient hereof. Its content is legally privileged, proprietary and/or confidential. By accessing or accepting possession of any information in this Document, the recipient agrees that it will (i) not copy, reproduce, or distribute this Document, in whole or in part, to any person or party (including any employee of the recipient, other than on a confidential basis and subject to this sentence without the prior written consent of Figure Technologies, Inc. and (ii) keep permanently confidential all information contained herein that is not already public. Additionally, by accessing or accepting possession of any information in this Document, the recipient further agrees that such access or possession is not prohibited or restricted by any applicable laws, regulations or rules in any applicable jurisdiction, and where any restrictions in relation to possession are applicable, the recipient represents, warrants and covenants that it will have observed and complied with all such restrictions at its own expense and without liability to Company.