# MODULE 6 UNIT 4

## Capstone project

**Learning outcomes:**

**LO5:** Recommend a solution to a problem encountered in the FinTech sector, based on what you have learned from the cases.

**LO6:** Present a slide deck that proposes a plan of action for overcoming challenges in the FinTech space.

### Name:

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| **Plagiarism declaration** |
| **1. I know that plagiarism is wrong. Plagiarism is to use another’s work and pretend that it is one’s own.**  **2. This assignment is my own work.**  **3. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as their own work.**  **4. I acknowledge that copying someone else’s assignment (or part of it) is wrong and declare that my assignments are my own work.** |

**Problem 4: Next generation lending networks**

**Introduction:**

The US mortgage market, at US$11 trillion, is huge, and continues to grow rapidly with 9% year-on-year growth in 2021. However, it is a very inefficient market, demonstrated by the fact that obtaining a mortgage or refinancing takes up to 45 days and each mortgage loan costs US$7,000–9,000 to originate, as per McKinsey’s 2021 report. The problem is in a highly manual process, with four to five underwriters involved in origination and only 10 to 14 mortgages closed per full-time employee per month.

Furthermore, while mortgages are one of the most securitized assets, this process is also very inefficient and costly, involving the originators, auditing firms, rating agencies, underwriters, trustees, investors, servicers, and broker dealers, each of whom do their own reviews, calculations, and checks, and charge their fees. Not surprisingly, these intermediaries generate close to US$30 billion in annual fees, while the time it takes for the investors to receive the cash-flow from the clients is close to 55 days.

**Proposed plan of action**:

Blockchain has long been called “a solution looking for a problem.” Provenance.io is on a mission to demonstrate that Blockchain can be used to bring significant cost efficiencies, risk reductions, and liquidity to the global financial markets, estimated at US$300 trillion. Provenance.io is a proof of stake, decentralized, permissioned blockchain and can support over 10,000 transactions per second. It acts as a ledger, registry and exchange for financial assets.

The mortgage market is a perfect use case for the blockchain technology. Most of the costs and processes currently involved in the origination and securitization of mortgages stem from the facilitation of “trust.” Each intermediary must manually check and review the files, intermediaries exist to reduce settlement and counterparty risk, and so on.

Blockchain provides a decentralized record keeping that is immutable and trustless, and smart contracts that facilitate instant bilateral settlements massively reduce counterparty and settlement risks.

The company that created Provenance.io is called Figure Technologies (Figure), and while the two companies are independent (Provenance.io is run by a Delaware non-stock corporation), Figure wants to spearhead the adoption of Provenance.io by providing lending, investing, payments, and related solutions. The first market that Figure tackled is the mortgage market.

In March 2020, Figure securitized US$149 million of mortgage securities and demonstrated that they could save 117 basis points in the total cost (across origination, servicing, financing and securitization), which, on a US$3 trillion securitization market can create over US$30 billion in savings.

Moreover, Figure has demonstrated that it is possible to bring down origination from 45 days to less than 5 minutes for most applicants, and the cash flow passthrough from 55 days to instantaneous for the investors in mortgage securities.

Let’s consider the strategy of Provenance.io / Figure. The team uses Figure Lending, Investing, Marketplace, Payments as client facing solutions with the aim of driving the adoption of Provenance.io, to de-risk the adoption for other potential users of Provenance.io, including lenders and borrowers, banks, and DeFi applications, etc. Figure aims to bring down the fees involved in the process by two thirds. The fees on Provenance.io are paid by the Hash token. The current total market cap of the Hash token is US$9.8bln. The goal of the Figure team is to own most of this token, which would keep growing in value as adoption of Provenance becomes ubiquitous.

The traction on the lending part has been growing rapidly, especially with the acquisition of Homebridge, making Figure a top 15 originator of mortgage loans, and generating over US$5 billion in origination, financing and securitization on Provenance.

That being said, they have some important challenges that they need to consider:

* First and foremost, it is regulatory risk. Figure/provenance operates in a highly regulated environment. Currently Figure has over 200 licenses across the US, and has applied for a Bank charter with the OCC in Nov 2020, which could help the company concentrate their regulatory work under one umbrella. However, as of now, the likelihood of obtaining the Bank charter remains unclear. Furthermore, expanding to other countries would be similarly regulation heavy and obtaining required licenses may take long.
* As another example of the regulatory uncertainties, the team had to derail the IPO of the Hash as security, and instead changed its role to become a utility token.
* Provenance.io is actually not truly decentralized, as around 70% of Hash was held by Figure and while that figure was expected to go down, the path towards true decentralization is not clear.
* Figure/Provenance team seems to be doing too many things on too many fronts, from loan origination, to securitization, to exchanges, to payments, to investments, to marketplace, to USDF stable-coin consortium, etc.

**Conclusion:**

Provenance.io is part of an ecosystem, that is trying to disrupt established companies and systems, whose combined value is over trillion dollars:

* Disrupting rent-seeking lending, exchange and payments businesses. Competing with traditional banks, registries, stock exchanges, money transfer businesses, Visa/Mastercard/Paypal, and many other players in this area;
* Creating the go-to platform for DeFi applications, essentially, competing with Ethereum; and
* Growing towards a ubiquitous use of USDF as trusted, bank-minted stablecoin. Competing with USDT, USDC, Terra, etc, none of which are bank minted.

There is a strong visionary team behind the project, that has been able to demonstrate tangible cost and time savings achievable through the use of Provenance.io for mortgage securitization.

However, there are three areas that the team needs to consider for its ultimate success in the long run, making Provenance.io truly ubiquitous and the go-to blockchain for DeFi apps:

* Be careful and proactive with regulatory landscape as it keeps evolving.
* Make Provenance.io truly decentralized: decrease their ownership of Hash or introduce a separate governance token, that would be held more broadly.
* Distance from the direct client-facing part of business to avoid any conflict of interest that may limit the adoption of Provenance.io by other client-facing banks, DeFi apps, exchanges, etc.

**Sources:**

* New York Fed Consumer Credit Panel/Equifax, accessed Mar 2022
* McKinsey & Company, “Five trends reshaping the US home mortgage industry”, Dec 2021
* Provenance white-paper, 2019
* Provenance securitization whitepaper, 2020
* “Finnovators” podcast, Interview with Mike Cagney, Sep 2021
* “The Blockchain Interviews” podcast, Nov 2021