Fractional Ownership of Real Estate Assets
Group 2 | FT5001

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Problem Statement:

Real estate property investing though one of the most coveted and low-risk investment class, has always been relatively inaccessible for retail investors. This is primarily because the ownership of real estate has traditionally been in full to one principal owner. This means only a handful of high-net worth individuals could only play in the real estate market and the entry to small retail investors is almost impossible to these potentially high returns investment class, due to high cost barrier. Furthermore, retail investors would want to spread the risk by purchasing different real estate assets.

Market Landscape Research:

The global real estate market is a significant and valuable sector, projected to reach a value of US$613.60 trillion in 2023 (Statista Market Insights, 2023). The market is expected to grow steadily at a rate of 3.52% from 2023 to 2028, reaching a volume of US$729.40 trillion by the end of the forecast period (Statista Market Insights, 2023).

In Singapore, the real estate market is projected to grow from USD 43.71 billion in 2023 to USD 60.09 billion in 2028, with a compound annual growth rate of 6.57% (Mordor Intelligence, 2022). Despite the impact of COVID-19, the non-landed residential segment experienced growth in 2021, with a significant increase in transactions and sales. However, various factors such as regulatory measures, rising interest rates, and weak foreign demand are expected to slow down property price growth in 2023. The luxury end of the market may see a dip, while overall property prices are estimated to grow at a slower pace of +1% to +3% per year (DBS, 2022).

The tokenized asset market, a subset of the digital asset market, has significant potential for growth. As of Q4 2020, the tokenized asset market was valued at US$18.1 billion, representing only 0.14% of real estate tokenization (Forkast, n.d.). Binance estimates that the tokenized assets market could reach a valuation of US$16 trillion by 2030, accounting for 10% of global GDP (Binance, 2023). This would include on-chain asset tokenization and traditional asset fractionalization, such as exchange-traded funds and real estate investment trusts. Even capturing a small portion of this market would be advantageous for the blockchain industry.

In summary, the global real estate market offers immense potential for investors, developers, and consumers, with residential real estate playing a dominant role. The Singapore real estate market has witnessed growth, particularly in the non-landed residential segment, although property price growth is expected to slow down in 2023. The tokenized asset market has substantial room for growth, and its potential valuation by 2030 presents a significant opportunity for the blockchain industry.

Ideal Customer Profile:

Retail investors:

- Who want to invest in real estate assets worth SGD$1M to SGD$10M
- Who can invest at least $20K to $200K – upper limit to achieve financial inclusion
- Who operate in high investment property markets like Singapore
- Who are looking to diversify their portfolio away from stock markets thereby reducing risk and volatility

In addition, a relatively more active investor group called “Accredited Investors” recognized by the Monetary Authority of Singapore (MAS) is also considered a potential user group of our platform. Accredited Investors are a special status investor group who voluntarily register their interest in investing with the MAS and hence have access to a wide range of investment products and also require less regulatory protection.

The platform would also enable such potential investors to connect with private real estate asset developers who are qualified to coordinate and execute such fractional real estate transactions.

Key Transformation in Real Estate Ownership:

Fractional real estate investing is not a new concept and the lifecycle is similar to the established REIT market. In both cases, assets need to be scrutinized and the investment deal structured under prevailing regulations.

Current fractional real-estate investing options:

- Private equity. With a private equity investment, a Limited liability company (LLC) will buy a commercial property and raise equity by allowing investors to purchase shares. Then, all the investors earn rental income and get profits when the property eventually sells.
- Real Estate Investment Trusts (REITs). These companies own several properties and sell shares of their company to investors.

Publicly listed Real Estate Investment Trusts (REITs) can be an option for tradeable, digital, institutional real estate. However, they have several challenges.

REIT investors do not own property. Instead, they own shares in a company, aka REIT, that owns the properties. In a similar vein, when investing in a real estate fund, investors merely own units of the professionally managed fund and do not directly own any of the underlying assets. The main difference is that the investors are subscribed to shares in the investing organization that owns the assets or a stake in the entity that ultimately owns the property. Because of this, the income from property (rental or capital gains) is not directly transferred to the investors.

Proposed Solution Overview:

The business model is a full-service real estate investment platform that have experienced teams curating quality assets and co-investing in the properties alongside investors to ensure the alignment of interest. Compared to existing players in the market, it is more than just a marketplace that only offers listings of tokenized properties similar to the modern equivalent of a real estate agent. The platform offers real estate investment experience of the team behind the platform with on-the-ground networks and relationships to provide access to the best deals on the market. It will be using a decentralised peer-to-peer platform and blockchain technology to make it more efficient by reducing the transaction costs in private housing markets and resolving information asymmetries in real estate markets by making transaction records and price information more accessible via decentralised public ledgers. It will also be using smart contracts on blockchain to resolve inefficiencies in funding, payment tracking, escrow and verification.

Impacts of Fractional Real Estate Ownership in Singapore and Globally:

Fractional ownership offers many of the same advantages as physical property ownership, without the hassle and high costs. Through fractional ownership of real estate, investors are actually owning a certain number of shares of the property. Investors are able to invest in different real estate assets that sit within the private markets. It makes it possible for investors to own physical real estate assets and gain exposure to potential capital gains and rental income.

One of the main adoption measures of the platform would be the increase in the purchase of property shares by persons belonging to relatively lower income brackets than the current purchasers. This is exactly what the platform attempts to achieve - democratizing the ownership of real physical assets to small retail investors, which allows their portfolios to be diversified and hence reduces overall investment portfolio risk and volatility. Another measure is that as the real estate market would witness a lot of new entrants, the demand for real estate would increase and the current property owners could see their assets at a better price than before.

Value Proposition:

- Property Tokenization – enables real estate owners and traders to find more opportunities to trade fractional real estate ownership
- Token Exchange – provides a secure and transparent exchange method for the real estate
- Credible Maintenance – automates the execution with smart contracts

Channels:

- Asset Valuation – reaches potential real estate owners and gives a professional and trustworthy valuation of the real estate
- Token exchange platform – enables investors to trade tokens directly

Revenue Model:

Two major sources of revenue are tokenization fees and transaction fees.

- Tokenization fees are incurred when the real estate is tokenized to cover the cost of infrastructure, token development, and asset valuation. The amount of the tokenization fees depends on the total value of the real estate at the pre-set standard percentage.
- Transaction fees are incurred when the tokens are traded or transferred to cover the cost of compliance, infrastructure, and ongoing maintenance. The amount of the transaction fees depends on the total value of the tokens involved at the pre-set standard percentage. Both tokenization fees and transaction fees will be deducted after corresponding actions.

Required Resources in the Value Chain:

The following are the required resources in the proposed fractional real estate ownership value chain:

- Compliance cost - including legal fees, licensing fees and reporting obligations to ensure product compliance with the regulatory framework
- Blockchain Infrastructure - Build a secure infrastructure to tokenize the assets and build smart contracts
- Token Development - Develop and deploy the mechanism of the token issuance and exchange
- Asset Valuation and Due Diligence - including the cost of conducting valuation assessments and due diligence provided by appraisers and legal experts

- Marketing and Investor Outreach - Attract potential customers and establish a trustworthy reputation
- Ongoing Maintenance - Make necessary technology updates and ensure compliance

Conclusion:

Implementing fractioning property using blockchain technology offers numerous benefits, including enhanced transparency, security, and efficiency in real estate transactions. By dividing property ownership into digital fractions, blockchain ensures accurate record-keeping, reduces the need for intermediaries, and enables broader access to real estate investments. However, challenges such as regulatory considerations and potential technical complexities must be carefully addressed for the widespread adoption of this innovative approach.

Timelines and Task Allocation:

The timeline for the project completion is estimated as six weeks approximately. A high-level overview of the project phases timelines are as follows. Persons mentioned against each task will taking ownership of those tasks, though everyone will be involved in all tasks.

1. Detailed requirements gathering and analysis – 2 weeks (Wong Kit Long, Varun Karthik)
2. Customer journey mapping – 1 week (Balu Babu)
3. Low-fidelity designs covering all cases – 1 week (Robin Mak Heng Mun)
4. Solutions design – 2 weeks (Chao Lei)

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