

2021

BCI PROJECT DELIVERABLE
1.0 DOCUMENTATION

JEWEL JOY HOMES

PROPOSED TO:

Bingyang Li
Henry Wang
Peter Yan

TEAM MEMBERS:

Calvin Yew
Ken Ang
Manee P

SGBT COURSE
SINGAPORE

VISION

To create a trusted real estate platform that redefines the way sellers & buyers connect with reduced dependency on intermediaries.

MISSION

Jewel Joy Homes aims to make property transactions transparent and seamless so that any property owner can transact in a quick, cost effective and fair manner. On Jewel Joy Homes, we provide a marketplace where resale property buyers can easily access property information to reduce incidences of fraud by bogus sellers and enjoy cost savings from reduced dependency on intermediaries.

Jewel Joy Homes aims to achieve a 10% market share of the **resale property market** with a turnover of \$18 million per annum targeting **tech-savvy millennials**.

EXECUTIVE SUMMARY

Jewel Joy Homes is a blockchain-powered real estate platform that is revolutionising the way people search, list, buy and sell properties in Singapore. We're using blockchain technology to create a decentralised real-time real estate marketplace that allows DIY buyers or sellers to reduce cost (agent commission), have quick, transparent, verified and genuine property transactions while ensuring buyer/seller privacy.

Through the deployment of our Decentralised Web application Jewel Joy Homes, we will enable anyone to conduct genuine verified real estate buy/sell transactions digitally and securely reducing user dependency on intermediaries.



PROBLEM STATEMENT

How might Jewel Joy Homes provide a decentralised real-time one stop platform for resale property buyers and sellers to undertake genuine transactions that are cost effective and afford them privacy, ease of use and are speedily processed?

MARKET ANALYSIS

Every year in Singapore about 20,000 units of private property are sold at a median price of \$1.2 million (turnover of \$28 billion) and about 20,000 units of resale HDB are sold at a median price of about \$400,000 (turnover of \$8 billion). If Jewel Joy Homes can attain a 10% market share and charge 0.5% of the selling price for listings, there is a potential to have approximately \$18 million turnover per annum.

REVENUE STREAMS

- MVP solution: Registration Fee
- Ideal solution: Registration Fee, Site Commission 0.5%, Advertising for all real estate related entities (renovation, lawyer, bank, developer, real estate agent), Partner Registration Fee (Smart Contract Customisation Lawyers)

EXISTING SOLUTION

Currently real estate agents handle and coordinate the buying & selling transaction, charging 2% commission of the selling price.

EFFECTIVENESS

- Sellers need to engage salesperson to list and market their property for sale online.
- Buyers need to use Singapore Land Authority's Integrated Land Information Service (INLIS) and pay to access property ownership information. This can be a costly and tedious process as buyers apply for multiple properties and have to revisit the INLIS site for each property of interest.
- There is currently no one stop platform solution for property buyers and sellers to undertake property related transactions easily.



IDEAL FUNCTIONS

- **A link to lawyers for the property transaction should buyers/sellers choose to engage one**

A one stop marketplace for all property transactions while providing users the opportunity to engage particular services they need

- **Listing will be refreshed on a needs based priority**
Allows all listings to be circulated well amongst users
- **Record contracts of sale, transfers of title on IPFS**
- **Issue NFT to property buyer**

- **Sellers have to register to list their property and will be verified to be the property owner by Jewel Joy Homes using the Singapore Land Authority INLIS. We charge for registration.**

Higher quality listings prohibiting fake listing to hype up property price and preventing duplicate listings

- **Buyers will have OTP to their address upon ETH transfer. Seller will have a deposit transferred to them.**
Quick verifiable transaction upon payment of deposit.

MVP FUNCTIONS

METHODOLOGY

Sellers have to register to list their property and will be verified to be the property owner by Jewel Joy Homes using the Singapore Land Authority INLIS. Jewel Joy Homes charges for registration and listing. Buyers can register for free on our site.

Sellers can engage lawyers on Jewel Joy Homes for further review and customisation of smart contract of sale and OTP at a fee. Customised OTPs and Smart Contract of Sales are highlighted to be different to potential buyers.

Upon ETH transfer, buyer will receive Option to Purchase (OTP) and seller will receive deposit. Deposit of 1% (for private home sales) and 5% (developers) is calculated based on estimated property price based on locality.

If buyer exercises (digitally signs) OTP within 21 days, smart contract of sale is simultaneously signed and sent to seller. If buyer does not exercise OTP within 21 days, buyer forfeits deposit and property is available for sale.



BUSINESS PROPOSAL IMPLEMENTATION

- **Blockchain Technology**
Solidity and IPFS (backend)
React.js(Front end)
SQLLite3 for buyer and seller registration
GraphQL for querying database
- **Token Economy** - no new token, use ETH

ASSUMPTION

01

Assume bankers and valuers are secured by buyers separately

EVALUATION - LASIC

L

LOW MARGIN

Low profit margin at a user level with a fee of 0.5% of selling price for transactions allows for critical mass accumulation. Subsequent buildup of consumer data can be monetized by cross-selling products such as home and contents insurance.

A

ASSET LIGHT

Low marginal costs as a result of low fixed and initial setup costs by riding on existing Ethereum infrastructure.

S

SCALABLE

Scalability based on Ethereum blockchain development since it runs on Ethereum, blockchain technology allows for alternative use cases such as car resale, membership resale and rental property market to drive adoption without exponential costs. The efficiency of the technology is not compromised with transactions being stored on IPFS as opposed to on the blockchain itself.

I

INNOVATIVE

Solves real tediousness of buy/sell transaction process usually managed by agents, novel solution to transact cheaper in the Singapore resale property market.

C

COMPLIANCE EASY

Singapore Land Authority support needed but lightly regulated environment for the MVP web app proposed.

