

# HDB Prices: What counts?

Diving deeper into resale HDB flat  
prices in Singapore

A workshop for WoW agents based on  
data-driven insights & predictive  
modelling



# Deck Outline

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01

# Key Factors



# The Headline

Six factors explain 78% of HDB resale price variation

## Strongest Predictor

### Floor Area (sqm)

Every additional sqm adds value.  
10 sqm = \$20K-\$30K difference

## Major Impact

### Flat Type

Starting from 1 Room, every step ↑  
~\$100k (demand dependent)

## Location Premium

### Central Region

Versus other regions - up to \$100k difference

## Height Premium

### Floor/Storey

Higher = better views, less noise.

## MRT Premium

### Distance to MRT

300m vs 1km from MRT = ~\$40K premium

## Depreciation

### HDB Age

Newer = premium.  
But location can offset age entirely

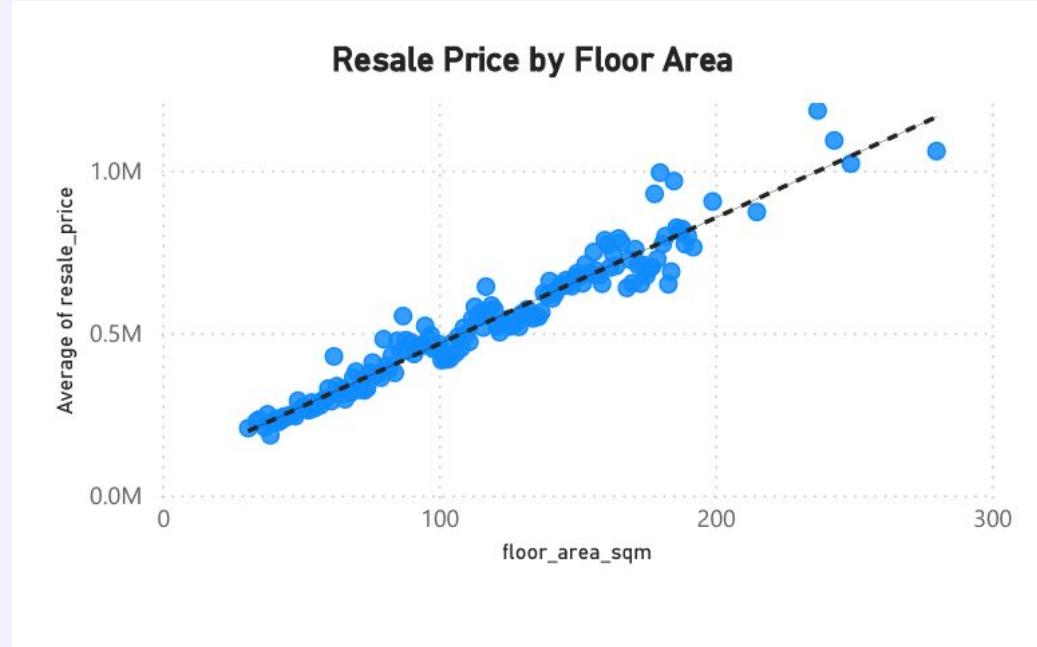
# Resale Price vs Floor Area

infinity  
wow!



Average Floor Area  
150 sqm

Average Resale Price  
\$700,000



**Positive correlation** between floor area and resale price

- Indicates that larger flats tend to sell at higher prices
- Outliers suggest that factors such as location and flat age may also influence resale price



# Resale Price vs Flat Type

Resale Price vs Flat Type by Town

Town	1 ROOM	2 ROOM	3 ROOM	4 ROOM	5 ROOM	EXECUTIVE	MULTI-GENERATION
ANG MO KIO	\$241,879	\$323,939	\$478,951	\$672,460	\$811,221		
BEDOK	\$240,144	\$314,469	\$444,494	\$581,996	\$711,731		
BISHAN		\$365,179	\$550,054	\$748,421	\$885,512		\$880,000
BUKIT BATOK		\$289,907	\$401,074	\$541,841	\$635,521		
BUKIT MERAH	\$207,015	\$263,451	\$389,032	\$645,159	\$766,499		
BUKIT PANJANG		\$235,920	\$306,904	\$397,619	\$493,704	\$597,939	
BUKIT TIMAH		\$415,921	\$629,277	\$815,721	\$950,414		
CENTRAL AREA	\$268,732	\$425,633	\$731,434	\$930,111			
CHOA CHU KANG	\$236,233	\$298,507	\$374,584	\$444,369	\$556,242		
CLEMENTI	\$295,143	\$348,169	\$547,137	\$719,607	\$826,257		
GEYLANG	\$225,405	\$305,497	\$513,589	\$678,429	\$734,457		
HOUGANG	\$240,600	\$309,326	\$409,664	\$527,441	\$674,708		
JURONG EAST	\$239,868	\$308,577	\$419,843	\$536,012	\$676,953		
JURONG WEST	\$232,456	\$287,973	\$390,236	\$464,877	\$564,594		
KALLANG/WHAMPOA	\$249,084	\$354,739	\$554,815	\$722,382	\$781,149		
MARINE PARADE	\$260,200	\$400,253	\$523,294	\$809,381			
PASIR RIS	\$261,889	\$351,662	\$429,869	\$501,285	\$629,323		
PUNGGOL	\$255,775	\$360,391	\$458,140	\$504,146	\$570,895		
QUEENSTOWN	\$259,377	\$382,650	\$698,598	\$843,100	\$982,720		
SEMBAWANG	\$225,590	\$298,547	\$371,232	\$428,959	\$508,836		
SENGKANG	\$252,307	\$349,018	\$435,607	\$483,101	\$580,221		
SERANGOON	\$239,250	\$332,755	\$466,191	\$572,011	\$735,255		
TAMPINES	\$265,383	\$343,804	\$447,486	\$552,715	\$680,004	\$780,429	
TOA PAYOH	\$232,557	\$313,113	\$564,466	\$753,534	\$801,196		
WOODLANDS	\$224,566	\$284,238	\$364,772	\$433,516	\$609,168		
YISHUN	\$223,981	\$297,039	\$372,462	\$480,336	\$593,488	\$740,616	

2 Room ~ \$200k - \$300k

3 Room ~ \$300k - \$420k

4 Room ~ \$400k - \$700k

5 Room ~ \$500k - \$930k

Executive ~ \$500k - \$950k

- A clear upward trend in resale prices as flat type increases.
- 4-Room / 5 Room flats form the demand core with strong price stability.
  - 3-Room → 4-Room :Largest and most consistent price jump
  - 4-Room → 5-Room:Steady but controlled increase. Buyers pay a premium for space and comfort
- Executive flats command the highest prices due to size and scarcity.



# Resale Price vs Region



Central \$500,000

North East \$460,000

East \$460,000

West \$420,000

North \$400,000

- Flats in the Central region command the highest resale prices followed by the North-East, East, West and North regions.
- This shows that **location significantly influences resale value**, with more central locations being more desirable and costly.



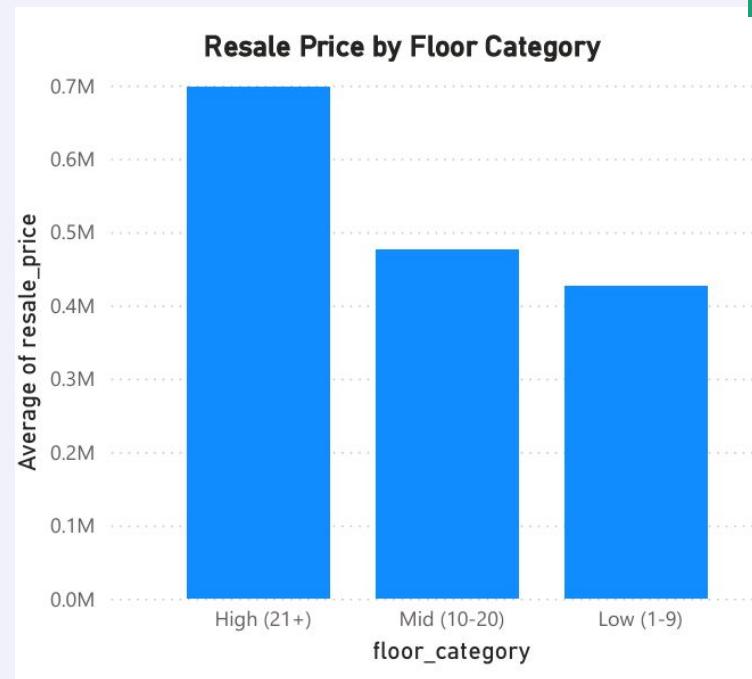
# Resale Price vs Floor Category



Low Storey ~ \$430,000

Mid Storey ~ \$480,000

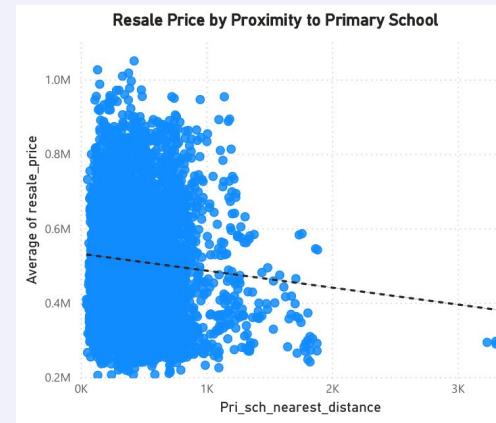
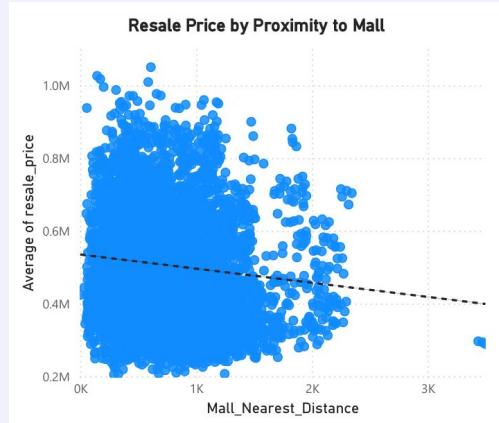
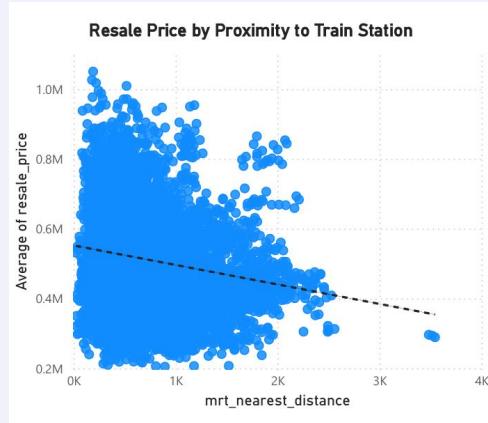
High Storey ~ \$700,000



- Resale price tends to **increase steadily** with floor level up to mid-storey. Beyond that, high storey flats experience an **exponential increase**, with prices higher due to better views and higher demand.



# Resale Price vs Proximity to Amenities



- The charts illustrate a **negative correlation** between HDB resale prices and distance to nearby amenities such as MRT stations, schools, and malls.
- Order of importance: 1. Train (MRT) Station 2. Mall 3. Primary School
- Flats located closer to these amenities generally have **higher resale prices**, reflecting the premium buyers place on convenience and accessibility.
- As the **distance increases**, resale prices tend to **decrease**, though some outliers may exist due to factors like flat age, floor level, and location.

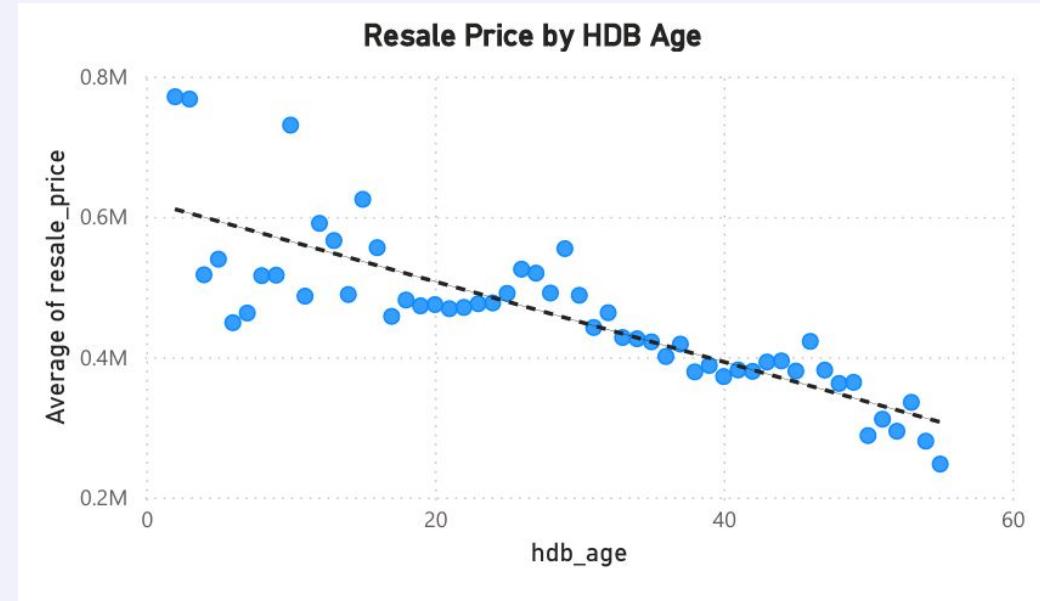


# Resale Price vs HDB Age



Average HDB Age  
30 Years

Average Resale Price  
\$500,000



**Negative correlation** between HDB Age and resale price

- Indicates that older flats tend to sell for lesser than newer ones
- Outliers suggest that other factors such as location, floor level, and renovations can influence resale value

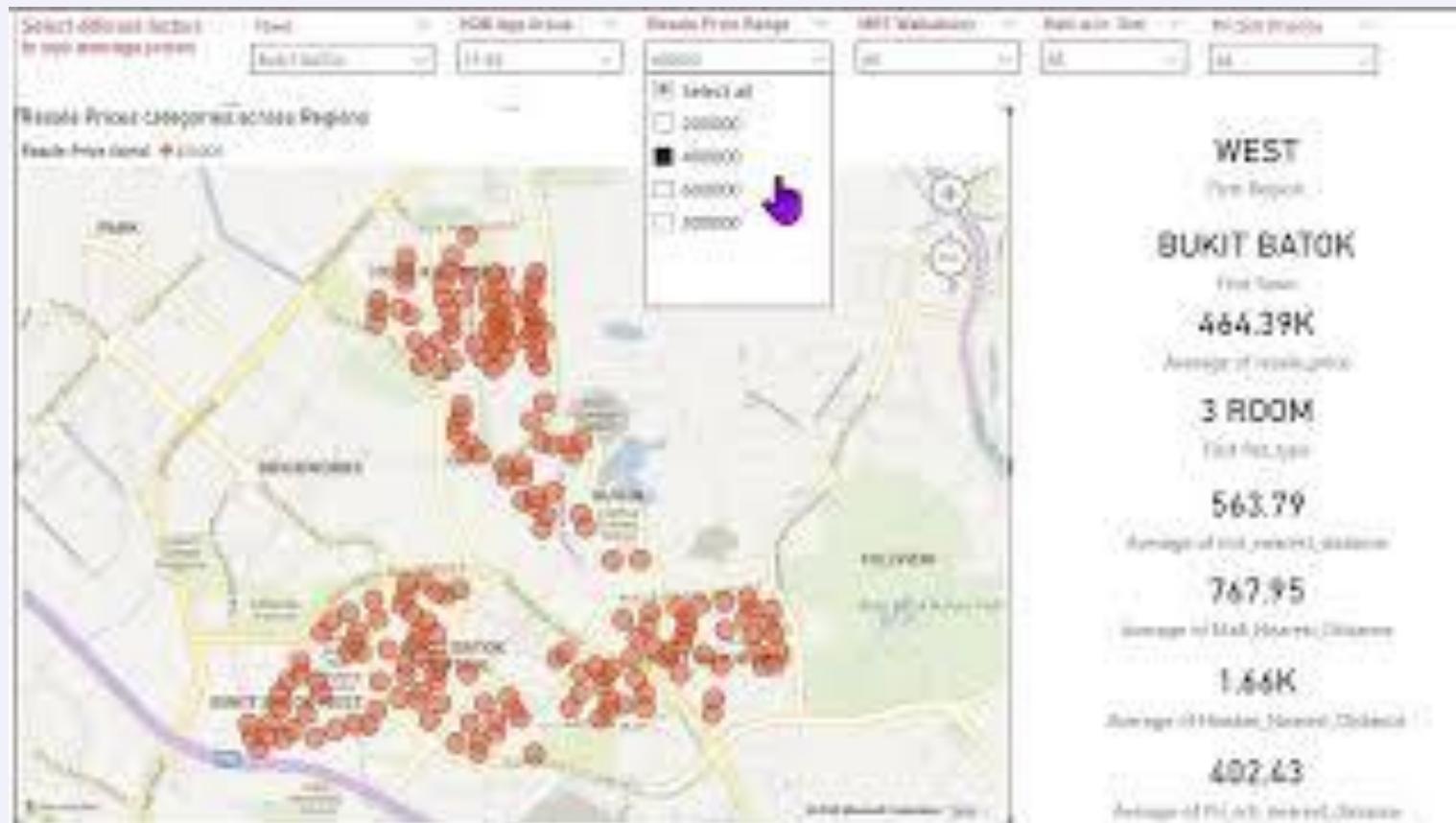


02

## Interactive Dashboard



# Interactive Dashboard





03

# Predictive Model Explained



# 3 Recommended Use Cases



## Pricing a Listing

Eg "How much should I price my flat in Tampines that is close to a MRT?"

Model Output: \$465k  
MRT 'Premium'



## Advising a Buyer

Eg ""Bishan \$550K vs Jurong \$420K — which has better value?"

Central 'Premium': +\$100k+

$$\text{Bishan} - \text{Jurong} = \$550k - \$420k = \$130k$$

Recommendation: Both are fairly priced. The difference is due to the central location



## Negotiation Support

Eg ""Seller asking \$500K but I think it's too high"

Model prediction - \$470k

Overpriced by: \$30k

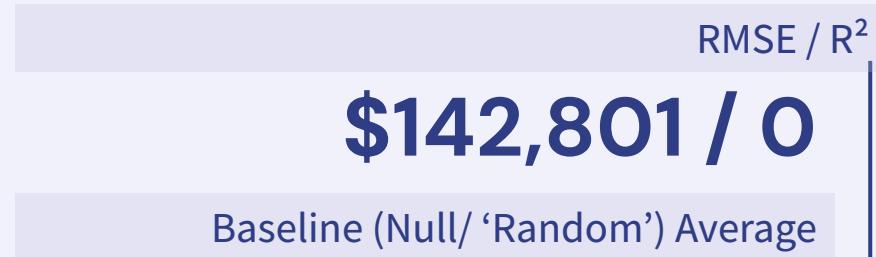
Recommendation: Buyer is right, it is overpriced by \$30k

**Key principle - Model is a starting point.**

**Combine data-backed estimates with local knowledge and specific factors.**



**Model reduces  
prediction error by 53%  
— from \$143K to \$72K  
average error**





04

# Limitations

# Limitations & Disclaimers



## External Economic Factors

Factors like inflation over the years will most definitely directly affect the resale prices, with later years being 'more expensive'. Other economic events like recession will also affect housing prices



## Government Cooling Measures

Data has transactions between years 2012-2021

- MOP policy - 2010 - some transactions from 2010-2015 might not have been subjected to MOP policy, which may result in higher-priced flats (since these flats are newer than the rest from 0-5 years, at point of sale)
- Cash Over Valuation policy - started Dec 2021



## Less quantifiable factors

Subjective factors like value placed on views, condition of unit, mood of a neighbourhood, corner unit or not, and most of all, timing of purchase



05

Q&A



06

# Lessons Learned

# Lessons Learnt



## Experience on Data Modelling

- Need to read up on the existing literature, especially if the subject is not our usual area of expertise - we found more factors to include in our model
- Even if we had the best data set, there are still things that are difficult to be observed or quantified, like negotiation power, timing, flat condition, racial quota

## Sprint Experience

- Set structure of sprint and future sprints from Day 1
- It pays to start early, get as much out of Day 1 as possible
- Running different model versions take time - need to think through what we might have missed out, research, and then run model again, and again



# Thanks!

We hope we have empowered you as agents to be more accurate in terms of estimating resale prices, so that you can serve your clients better, and you can earn more commission!

Your Data Team: Glory, Ram, Sirhan, Cheryl

