

# OUR WH3 METHODOLOGY

PREDICTIONS TO SUCCEED IN THE HOME SALES BUSINESS.

BY DIEGO VALLEJOS

# OUR PURPOSE

ADVISE YOU ON DECISION MAKING IN THE BUYING  
AND SELLING HOUSES BUSINESS THROUGH OUR  
PREDICTIVE METHOD.



# WH3 METHOD TELLS YOU:

WHEN

TO BUY A HOUSE

WHAT

TO DO WITH THE HOUSE

WHEN

TO SELL THE HOUSE



THIS MODEL WORKS WITH HOUSES WITH A MAXIMUM  
PRICE OF \$ 1,500,000



101001101001000101010011101  
010110010100110101001001101  
110100110000101110010101101  
001101001000101010011101010  
1010100110101001001101110  
10110000101110010101101001  
101001000101010011101010110  
010100110101001001101110100

# IT MATTERS HOW

WE HAVE PROCESSED OVER 21K OF DATA ABOUT THE  
BUSINESS OF SELLING HOUSES

**BIG DATA**



THIS IS AN EXAMPLE OF HOW WE  
RECEIVE THE DATA, THIS IMAGE SHOWS  
US NULL DATA IN THE SET.

WE USED DIFFERENT TECHNIQUES TO  
CLEAN IT.

```
In [6]: df.isna().sum()
```

```
Out[6]: date           0  
price                0  
bedrooms            0  
bathrooms           0  
sqft_living          0  
sqft_lot             0  
floors              0  
waterfront          2376  
view                63  
condition            0  
grade               0  
sqft_above           0  
sqft_basement        0  
yr_built             0  
yr_renovated         3842  
zipcode              0  
lat                  0  
long                 0  
sqft_living15        0  
sqft_lot15           0  
dtype: int64
```

# WE CLEANED THE DATASET IN ORDER TO OPTIMIZE RESULTS



LET'S EXPLORE  
A LITTLE BIT





# LET'S APPLY OUR MODEL

FIRST FACTOR: GRADE

THE PRICE INCREASES BY 125123\$ IF YOU UPGRADE THE HOUSE.

SECOND FACTOR: FOOTAGE OF THE HOME.

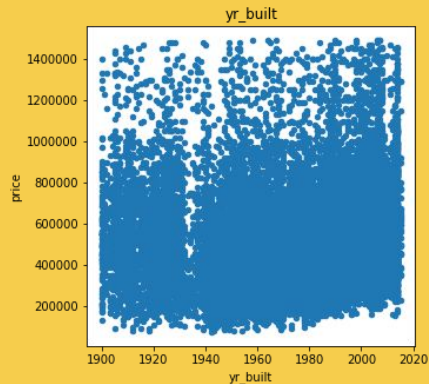
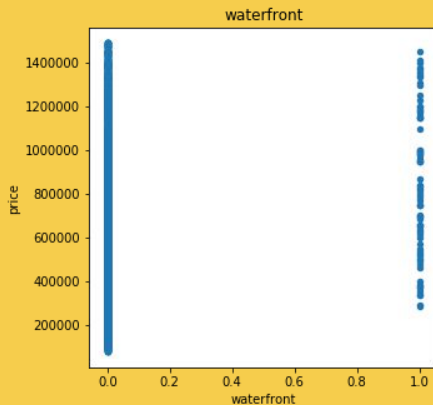
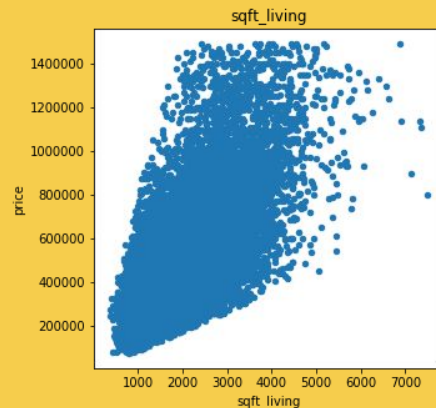
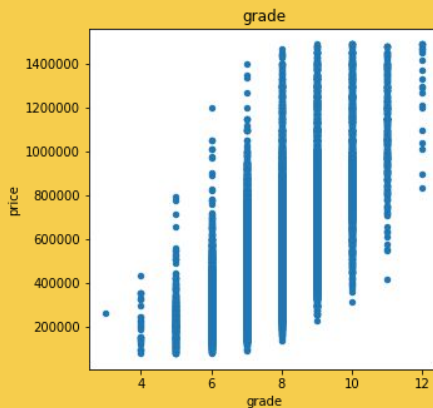
THE PRICE INCREASES BY 109\$ PER EACH SQUARE FEET

THIRD FACTOR: WATERFRONT

THE PRICE INCREASES BY 297419\$ IF THE HOUSE HAS A WATERFRONT VIEW

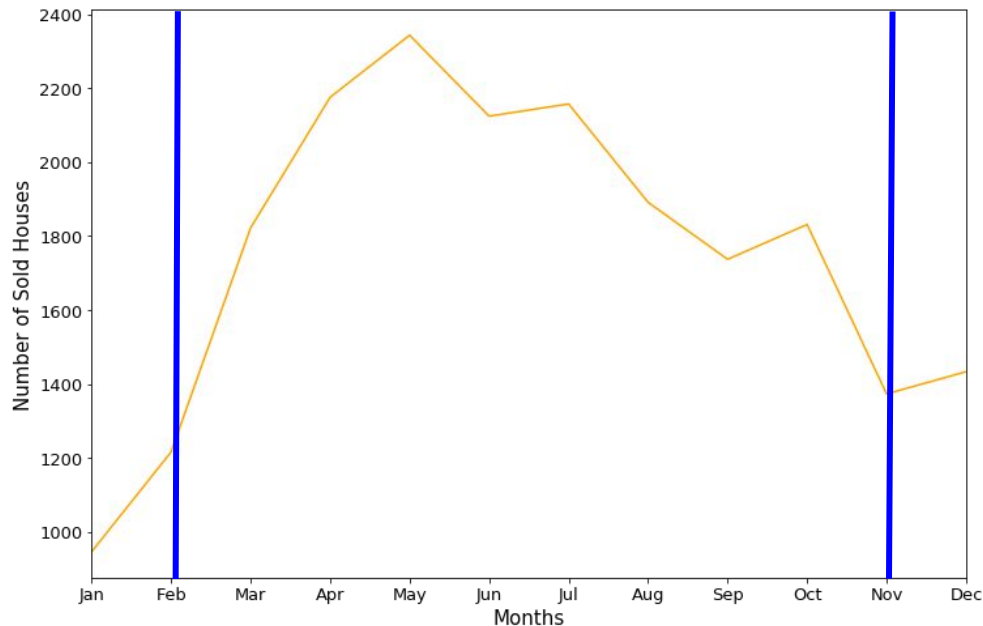
FOURTH FACTOR: BUILT YEAR

THE PRICE DECREASES BY 2751\$ FOR EACH YEAR THAT PASSES



# WHEN TO BUY?

AS WE CAN SEE, THE BEST MOMENT FOR BUYING HOUSES IS BETWEEN NOVEMBER AND JANUARY. THIS IS BECAUSE OF THE LOWER DEMAND. WE CAN TAKE ADVANTAGE ON THIS TO NEGOTIATE THE PRICE LOOKING FOR MORE PROFITS.



# WHEN TO SELL?

THE BEST MOMENT FOR SELLING HOUSES IS BETWEEN APRIL AND JUNE. THIS IS BECAUSE OF THE HIGHER DEMAND. AGAIN, TAKE ADVANTAGE ON THIS.

# CAN WE TRUST IN THIS MODEL?

ADJ R SQUARED = 0.593

THAT NUMBER  
MEANS YES!





# WHAT TO DO?

BUY BETWEEN NOVEMBER AND JANUARY. TAKE ADVANTAGE OF LOW DEMAND TO NEGOTIATE BETTER.

BUY HOUSES WITH LARGE LOT FOOTAGE, THEN **YOU CAN BUILD MORE LIVING AREAS** SO INCREASE THE PRICE.

**UPGRADE THE HOUSE**, INVEST IN DECORATION, IMPROVE SOME AREAS WITH BETTER MATERIALS AND MODERN DESIGNS.

IF POSSIBLE, BUY HOUSES WHERE YOU CAN **ADD A WATERFRONT VIEW**.

DON'T BUY NEW HOUSES, IMPROVE THEM.



THANK YOU  
FOR YOUR TIME

