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**Document Report of Data**

**Summary**

Given is the data of Property Sales in Sydney from September 2018 to April 2020. Data includes the date on which property was sold along with its price, suburb, city, latitude/longitude, bedrooms and loc\_pid/lga\_pid in first sheet. Second sheet contains the Count of price of each month within those 3 years. Finally, the third sheet includes the suburb info along with the property type based on the bedrooms.

The data has been transformed, loaded and modeled in PowerBI before the actual analysis. Using the data in excel sheet, charts have been made in UsableData Tab of the same excel sheet for more information.

**Insights**

Before analyzing the data, we first need to get the data, then transform and load it, then model it and finally we can perform our operations on it. For modelling, we check the relationships between the tables. The relation between Table1 and suburb pivot is based on Suburb with N:1 cardinality, while the relation between table1 and line pivot is based on the Month info with N:1 cardinality again.

Looking at the count values, we can infer that

1. Sum of bedrooms: 39K
2. Count of suburb: 332
3. Earliest date Sold: 02-09-2018
4. Latest date Sold: 16-07-2020
5. First lga\_pid: NSW175
6. Last lga\_pid: NSW335
7. First loc\_pid: NSW1009
8. Last loc\_pid: NSWRE2000
9. Sum of CountOfPrice in 2018: 3555
10. Standard deviation in 2018: 424.92
11. Max of CountOfPrice in 2018: 969
12. Sum of CountOfPrice in 2019: 11K
13. Min of CountOfPrice in 2019: 362
14. Max of CountOfPrice in 2019: 1604
15. Sum of CountOfPrice in 2020: 5698
16. Standard deviation in 2020: 487.04
17. Max of CountOfPrice in 2020: 1357
18. Count of Price: 20.23K
19. Sum of Price: 17bn
20. Sum of GrandTotal: 20K
21. Sum of property type 1: 4305
22. Sum of property type 2: 13K
23. Sum of property type 1: 2801

The total price comes out to be 17bn with 42k as the min value and 9M as the max value. Based on the property type (bedrooms), sum of all type 1 comes out to be 4305 with 147 as max value, sum of all type 2 is 13k with max as 260 while type 3 sum is 2801 with max as 59. Suburb Parramatta has the highest number of bedrooms as 377. The least total bedrooms count is 1 for a few suburbs including Putney, Phillip Bay, etc. The highest sum of price comes out to be in the month of November as 2259051761 with total sum of bedrooms as 4994 during that period. When we see the count of price based on the aggregate of the months of all 3 years, it increases first upto March and then it keeps drops till August after which it again keeps increasing till November while it falls in December. If we see in each year, in 2018 it increases from Sept to November and falls in December, in 2019 there is a good increase with each progressing month while it falls again in Dec, while in 2020, it increases upto March while after that it keeps falling to Jul. overall the good trend is around Sept Oct and Nov, along with a good number in Feb Mar of 2020, while the results are poor around December and January.

**Further Actions**

The data can be further analyzed based on the bedrooms, suburb, price, property type and month/date.

**Next Steps as a Decision Maker**

Based on the data, we can make predictions on the prices and trends of the property sales and customer demand. The environmental conditions matter too, so based on that we can further analyze as when are the sales more and what atmosphere leads to higher counts.