Pilot Study on the Second-Hand Car Market: Mercedes-Benz A-Class (2020–2025) in NW10 6RS, London, United Kingdom

Prepared on behalf of Car4All Dealership

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EXECUTIVE SUMMARY

This report explores second-hand car prices for the Mercedes-Benz A-Class in the NW10 6RS region of London. It was prepared for Car4All, a local dealership aiming to make better pricing and stock acquisition decisions. A total of 256 A-Class cars were found within a 15-mile radius, and a random sample of 100 was selected using Excel's RAND() function to avoid selection bias.

The analysis examines how different car variables such as mileage, car age, fuel type, and gearbox type influence resale prices. These features were investigated using descriptive statistics, correlation, and a final price prediction model developed through multiple regression. The model was then converted into a practical Excel-based calculator to help estimate car values.

The report also compares local prices to national averages and offers insights into the structure of the local second-hand market. The dealership can use these results to set more competitive prices, identify undervalued listings, and improve pricing strategies going forward.

INTRODUCTION

This report was created for Car4All, a car dealership interested in better understanding how various car variables affect resale prices in the second-hand market. The focus is on used Mercedes-Benz A-Class (2020-2025) cars listed in the NW10 6RS region, using a sample taken from listings on Autotrader.co.uk.

The study aims to:

- Explore how local prices compare to the wider UK market
- Identify key characteristics that influence price (e.g. mileage, car age, fuel type, and gear type)
- Build a statistical model to estimate resale value based on selected features

DATA COLLECTION AND SAMPLING

Data was collected in March 2025 from Autotrader.co.uk, focusing on used A-Class models (2020–2025) within a 15-mile radius of NW10 6RS. Cars with missing data, modifications, or demo/new status were excluded.

To ensure randomness, each of the 256 listings was assigned a value using Excel's RAND() function, and the top 100 were selected. This process, detailed in the "Sampling Method" Excel sheet, helps ensure transparency and reproducibility.

The sample covers a variety of car features including price, mileage, registration year, car age, gearbox type, fuel type, and number of doors.

DESCRIPTIVE STATISTICS

The tables below provide characteristics of the 100 sampled vehicles

Statistic	Price (£)	Mileage (miles)	Car Age(years)	No of Doors
Mean	18172.93	46202.5	3.92	4.71
Median	17274.5	44000	4	5
Mode	14000	13930	4	5
Standard Deviation	4026.55	26900.2	1.13	0.46
Sample size (n)	100	100	100	100

Minimum	11499	1945	1	4
Maximum	28624	117000	5	5
25th Percentile	15380	26494.5	4	4
75th Percentile	20523.5	65293.8	5	5
Skewness	0.86	0.40	-0.97	-0.94
Kurtosis	0.29	-0.50	0.00	-1.14

Additional Categorical Analysis

Fuel Type, Gear Type, and Registration Year were also analysed to understand how they relate to price:

Fuel Type	Average Price	Count
Petrol	18808.33	81
Diesel	15464.11	19

Gear Type	Average Price	Count
Manual	18474.40	11
Automatic	15733.73	89

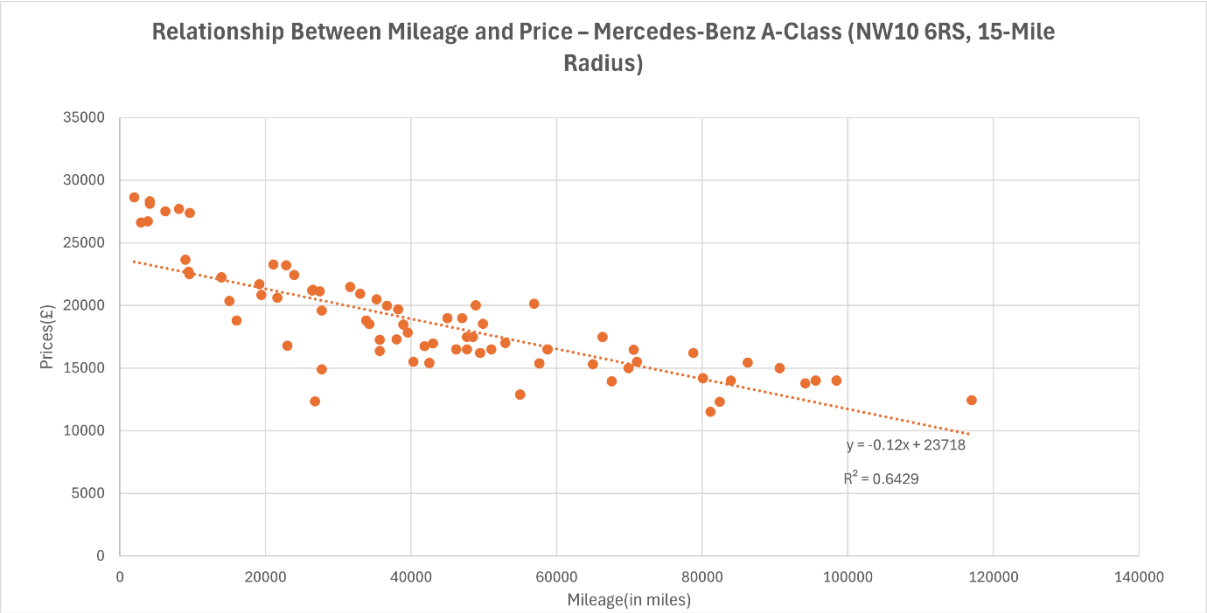
Reg Year	Average Price	Count
2020	16344.11	36
2021	16558.68	40
2022	20991.43	7
2023	24033.64	14
2024	27715.67	3
2025	N/A	0

NOTE: For the year **2025**, the average price returns as **"N/A"**, which is due to **no cars in the dataset** being registered in that year. In Excel, this was handled using an IF statement to prevent the #DIV/0! error when calculating an average from zero values.

DATA VISUALISATION AND EVALUATION

This section includes four visualisations that help explore and understand the key patterns in the dataset. Each graph is assessed using Graphical Integrity, Graphical Excellence, and Gestalt Principles and IBCS Best Practices.

Scatter Plot: Relationship Between Mileage and Price – Mercedes-Benz A-Class (NW10 6RS, 15-Mile Radius)



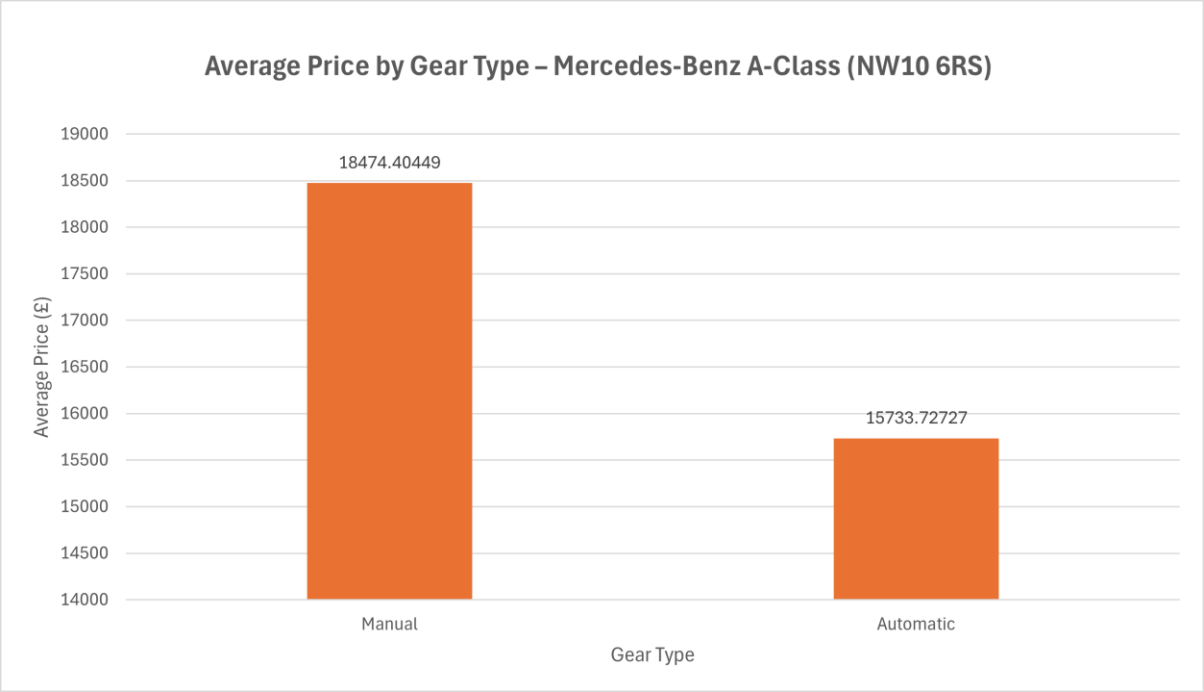
Interpretation
This chart shows a **clear negative relationship** between mileage and car price. As mileage increases, the price tends to decrease, confirming that buyers place higher value on cars with lower mileage.

Graphical Integrity
The graph is proportional with both axes starting at zero, and the trendline enhances understanding of the relationship between mileage and price. A dotted trendline is used to signal estimation. Labelling is clear with a descriptive title, units included (miles and £), and the regression equation is shown for transparency. The data points represent real observed values, and the scale avoids distortion.

Graphical Excellence
A minimalist design approach has been followed: no unnecessary elements are included, and axis gridlines are subtle. The use of a single trendline keeps the focus on the relationship without overloading the chart. It aligns with Tufte's concept of data-to-ink ratio by not distracting from the core insight.

Gestalt Principles and IBCS Best Practice
Proximity between the regression line and data points enhances understanding. Consistent dot size supports uniformity, and the line direction aligns with our expectation (price drops as mileage rises). IBCS time and direction convention is followed on the X-axis, and the axis labelling is clean and minimal.

Column Chart: Average Price by Gear Type – Mercedes-Benz A-Class (NW10 6RS)



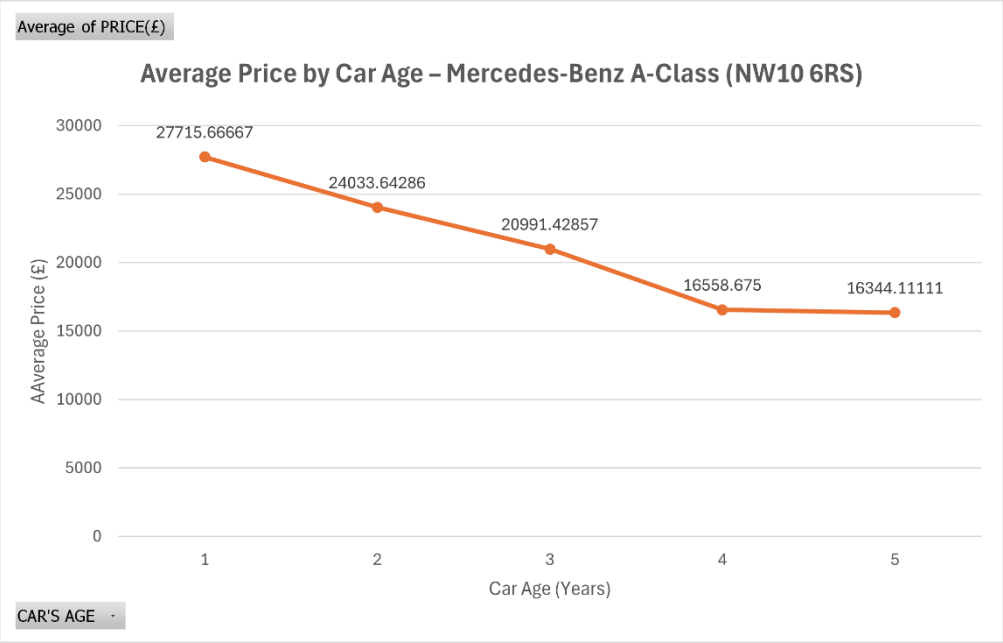
Interpretation
Manual cars have a higher average price (£18,474) compared to automatic models (£15,733). This may reflect lower availability of manual A-Class models or different buyer preferences in the area.

Graphical Integrity
Axis is linear and correctly scaled to reflect the variation in average prices. Bars are labeled with exact values to avoid misinterpretation. Title clearly communicates the insight.

Graphical Excellence
Bar width and spacing are consistent, ensuring readability. The chart uses colour uniformly (orange) to avoid misinterpretation due to unnecessary coding. The vertical design aligns with conventional understanding of magnitude.

Gestalt Principles and IBCS Best Practice
Similarity (same bar colour) reinforces that these values belong to the same category (gear type). There's proximity between each bar and its label. Chart orientation (gear type on X-axis) is aligned with IBCS recommendations. Data density is appropriate for the story being told.

Line Chart: Average Price by Car Age – Mercedes-Benz A-Class (NW10 6RS)



Interpretation

There is a strong downward trend in average price as car age increases. Newer A-Class cars (1–2 years old) have average prices over £24,000–£27,000, while older models (5 years) drop closer to £16,000. This reflects expected depreciation and reinforces the importance of car age in valuation.

Graphical Integrity

Y-axis begins at zero and uses consistent intervals. The line graph is scaled proportionally, and data points are labelled directly. The graph highlights the decrease in price with increasing age, with car age logically placed along the X-axis.

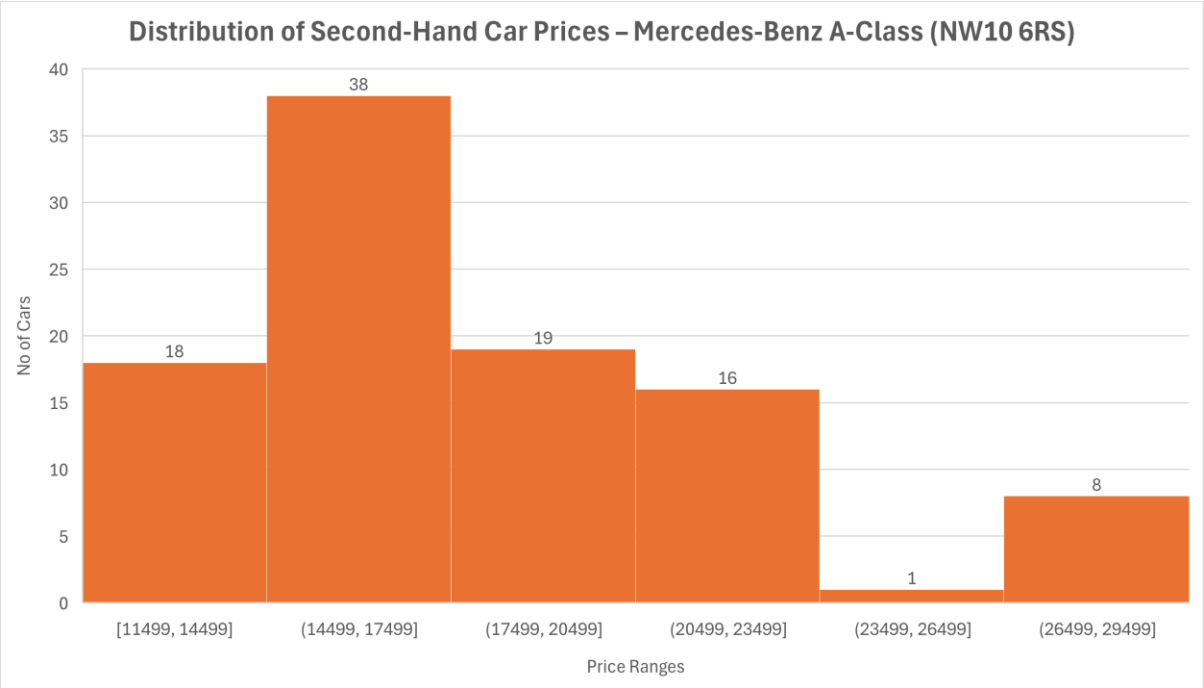
Graphical Excellence

The line chart shows a clear trend with no distractions. Gridlines are minimized and colour is used meaningfully. The simplicity aids interpretation and follows Tufte's recommendation for clarity and minimal ink usage.

Gestalt Principles and IBCS Best Practice

Proximity and continuity help the eye follow the trend line from left to right. Similarity (single colour and uniform line style) keeps the viewer focused on one concept. IBCS principles are followed by placing time-style data (car age) along the X-axis.

Histogram: Distribution of Second-Hand Car Prices – Mercedes-Benz A-Class (NW10 6RS)



Interpretation
The distribution of car prices is not perfectly symmetrical, with most second-hand A-Class cars priced between £14,000 and £20,000. This pattern helps identify pricing clusters in the local market and informs expected price ranges for buyers and sellers.

Graphical Integrity
The bins are clearly labelled and equally spaced, with Y-axis values starting at zero. The price ranges reflect actual groupings within the data. Titles and axes are appropriately labelled to ensure the chart isn't misleading.

Graphical Excellence
The histogram maintains a clean look: bar heights are proportional to the frequency of prices. Labels are included within the bars to avoid clutter. The overall shape communicates the distribution clearly, aiding pattern recognition.

Gestalt Principles and IBCS Best Practice
Similarity is seen in uniform bar colours. Proximity between the bars and internal labels keeps everything accessible. Bars are aligned properly to help the eye group data logically. IBCS guidance on scale and bin width is observed, avoiding excessive granularity.

CONFIDENCE INTERVAL FOR THE AVERAGE CAR PRICE

To estimate the average selling price of second-hand Mercedes-Benz A-Class cars in this local area, a 95% confidence interval was calculated using the 100 cars in the sample.

- The average price in the sample was **£18,172.93**
- The **t-value** for a 95% confidence level and 99 degrees of freedom (n−1) is **1.9842**

- The margin of error: **£798.96**

Putting it all together, the final result was:

Result	Value (£)
Lower Bound	17373.97
Upper Bound	18871.89
95% Confidence Interval	17373.97 – 18871.89

This means that we can be **95% confident** that the average price of a used Mercedes-Benz A-Class in this local area falls somewhere between **£17,373.97 and £18,871.89**.

HYPOTHESIS TESTING: LOCAL vs. UK AVERAGE PRICE

The goal of this test is to find out if the prices in this specific location are high or low compared to the wider UK market. This can help Car4All decide whether to buy stock locally or look elsewhere, depending on price trends.

To get the national average, 20 listings of Mercedes-Benz A-Class cars were manually checked on Autotrader.co.uk. The prices were added together and then divided by 20, giving a UK average of £16,730.90.

A t-test was then used to compare this national figure with the local average from our sample of 100 cars.

Hypotheses

- **Null Hypothesis (H_0):** μ = £16,730.90
- **Alternative Hypothesis (H_1):** $\mu \neq$ £16,730.90

Hypothesis Test Summary

Test	Values
Sample Mean ($\bar{x}$)	£18172.93
National Mean (μ)	£16730.90
Standard Deviation (s)	£4026.55
Sample Size (n)	100
Degrees of Freedom	99
t-Critical (two-tailed, 95%)	1.9842
Standard Error	402.66
t-Statistic	3.58

Conclusion	Reject H_0

Since the **t-statistic (3.58)** is higher than the **critical value (1.9842)**, we can reject the idea that there's no difference between local and national prices.

This means the cars in the NW10 6RS area are likely priced higher than the national average. For Car4All, this could mean that the local market is more expensive, which may affect how they price cars or whether they buy locally.

CORRELATION ANALYSIS

The **Pearson correlation coefficient (r)** was used to measure the strength and direction of the relationship between variables. This is a standard method for comparing how one variable changes in relation to another. The values are interpreted as:

- **+1** = perfect positive relationship (as one increases, the other increases)
- **0** = no relationship
- **–1** = perfect negative relationship (as one increases, the other decreases)

Correlation Matrix

Variables	Price	Mileage	Reg Year	Car Age	Doors
Price	1	-0.8018	0.7481	-0.7481	0.1457
Mileage	-0.8018	1	-0.5626	0.5626	-0.2603
Reg Year	0.7481	-0.5626	1	-1	0.0850
Car Age	-0.7481	0.5626	-1	1	-0.0850
Doors	0.1457	-0.2603	0.0850	-0.0850	1

Mileage has the strongest negative relationship with price (**r = -0.80**). This means that cars with higher mileage tend to be cheaper.

Registration Year shows a strong positive relationship with price (**r = 0.75**), suggesting that newer cars (recently registered) are generally more expensive.

Car Age is negatively related to price (**r = -0.75**) — newer cars (lower age) cost more.

Doors has a very weak positive relationship with price (**r = 0.15**), meaning the number of doors doesn’t really affect the price much in this dataset.

The analysis shows that **mileage**, **registration year**, and **car age** are the most important factors influencing car price.

REGRESSION ANALYSIS

To understand which features most affect second-hand car prices, a multiple linear regression analysis was carried out using SPSS.

Variables Used

- **Dependent Variable**:
  Price (£) – the value we want to predict
- **Independent Variables**:
  Mileage (miles)
  Car Age (years)
  fuel petrol (1=petrol, 0=diesel)
  gear auto (1 = auto, 0= manual).

SPSS Output Summary

a) Model Summary

Metric	Value
R	0.906
R Square (R^2)	0.820
Adjusted R^2	0.813
Std. Error of Estimate	1742.85

This means that **about 82%** of the variation in car prices is explained by the model.

The R value of **0.906** shows a strong overall relationship between the predictors and car price.

b) ANOVA Table

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	1315790574.45	4	328947643.61	108.356	< .001
Residual	288884003.96	95	3040884.25		
Total	1604674578.41	99			

The model is statistically significant with **p < .001**, meaning that the model is reasonable

c) Coefficients Table

Predictor	Coefficient (B)	Std. Error	t-value	Sig.
Constant	24991.48	1030.56	24.24	< .001
Mileage	-0.080	0.008	-10.02	< .001
Car Age	-1509.94	159.38	-9.47	< .001
Fuel_Petrol	+1237.80	473.08	2.62	0.010
Gear_Auto	+2037.77	481.23	4.23	< .001

- **Mileage**: For every extra mile driven, the car's price decreases by **about 8p**. This makes mileage the most influential factor.
- **Car Age**: Each additional year reduces the car's value by around **£1,510**, confirming that newer cars sell for higher prices.
- **Fuel Type**: Cars with **petrol engines** sell for around **£1,238 more** than diesel ones, on average (p = 0.010).
- **Gear Type**: Cars with **automatic transmission** are worth about **£2,038 more** than manual ones.

All variables in this final model are **statistically significant (p < 0.05)** and contribute meaningfully to the prediction.

Final Regression Equation

The model forms the following formula to predict car price by using mileage, car age, and two dummy variables representing fuel and gearbox type.

Predicted **Price (£)** =
24,991.48 multiplied by:

- (-0.080 × Mileage)
- (-1,509.94 × Car Age)
- (1,237.80 × Fuel_Petrol)
- (2,037.77 × Gear_Auto)

Example Output from Excel (Car 6)

Metric	Value
Mileage	41,850
Car Age	5
Fuel-Petrol	1(petrol)

Gear-Auto	1(auto)
Predicted Price	£17,369.37
Actual Price	£16,749.00
Difference	£620.37

Substitute into the formula:

Predicted Price = 24,991.48 – (0.080 × 41,850) – (1,509.94 × 5) + (1237.80× 1) +(2037.77 × 1)

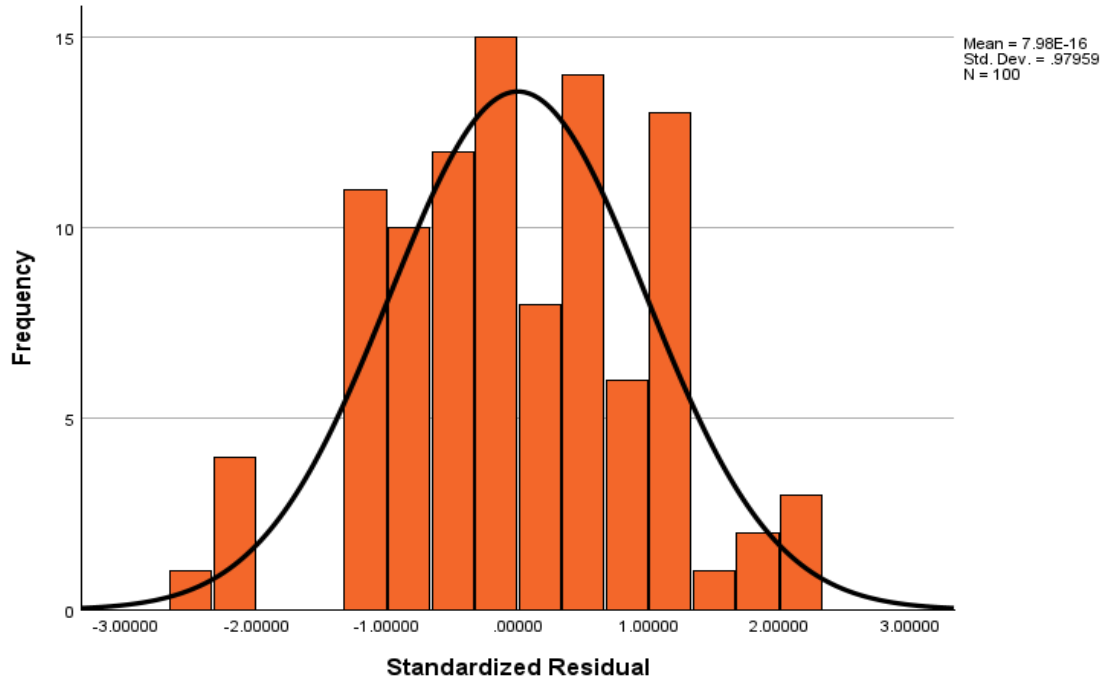
=24,991.48 – 3,348– 7,549.70 + 1237.80 + 2037.77 =£17,369.35

The **predicted price** is **£**17,369.35, while the **actual price** in your dataset is **£16,749,** showing a **reasonable fit** between model and reality. The predicted price was very close to the actual price, with a difference of just **£620**, indicating that the model is quite reliable for estimating real-world prices.

RESIDUAL ANALYSIS

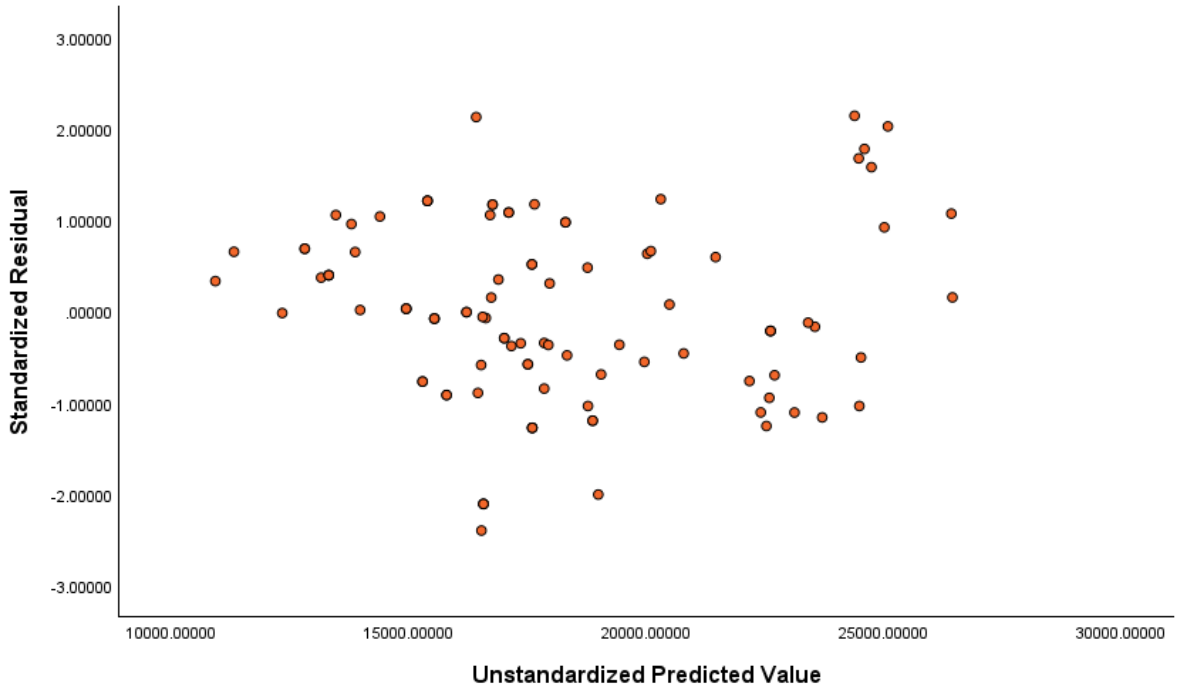
To evaluate how well the final regression model fits the data, a residual analysis was carried out using SPSS.

Histogram of Residuals



A histogram was plotted to check if the residuals are approximately normally distributed. The shape was roughly bell-shaped and symmetrical, suggesting that the normality assumption holds. The mean of the residuals was close to zero, and the standard deviation was approximately 1, which further supports this.

Scatter Plot of Standardized Residuals vs Predicted Values



This plot was used to check for:

- Linearity: The residuals were scattered randomly, showing no clear pattern.
- Homoscedasticity: The spread of residuals was relatively even across all predicted values — indicating constant variance.
- Outliers: All residuals fell within the range of ±3, so there were no extreme outliers.

CONCLUSION

The analysis showed that **mileage**, **car age**, **fuel type**, and **gearbox type** are the strongest predictors of resale value. These four features were used to build a price calculator based on a multiple linear regression model. The model performed well, with over 80% of the variation in car prices explained by these variables.

Descriptive statistics and visualisations helped identify patterns such as:

- Prices tend to drop as mileage and age increase.
- Petrol and automatic cars are generally priced higher than diesel or manual ones.

The model was tested using real cars from the sample, and predicted prices were very close to actual listing prices, giving confidence in its reliability. A simple calculator was also built in

Excel using the model, allowing the dealership to quickly estimate car prices using just four inputs.

Other techniques such as confidence intervals, correlation analysis, and residual checks further confirmed the model's accuracy and fit.

Summary of Practical Benefits for Car4All:

- **Better stock pricing:** The calculator helps estimate fair resale values.
- **Smarter purchases:** By focusing on cars with lower mileage and newer age, or those with petrol engines and automatic gearboxes, the dealership can target higher resale values.
- **Clear guidance:** The analysis offers a data-driven approach to pricing strategy in the NW10 6RS area.

Recommendations

1. Prioritise Petrol and Automatic Cars

Petrol cars and those with automatic gearboxes were shown to command higher prices on average. This suggests stronger demand or perceived value in the local market. Car4All should prioritise sourcing petrol and automatic models for resale.

2. Focus on Low Mileage and Newer Vehicles

Mileage and car age were the strongest predictors of price. Cars with lower mileage and newer registration years tend to attract higher prices. These should be a key focus when acquiring new stock, especially those under three years old with mileage below 40,000 miles.

3. Use the Excel Price Calculator for Stock Valuation

The developed price prediction calculator offers a practical tool for estimating car value. It can be used by sales teams to quickly assess whether a listing is fairly priced or if a car is under/overvalued before purchase.

4. Monitor the Local vs. National Price Gap

Local prices were found to be significantly higher than the national average. Car4All should capitalise on this by sourcing stock from areas where A-Class cars are priced lower, potentially improving margins when reselling in NW10.

5. Deprioritise Less Influential Features

Variables like number of doors and registration year (after controlling for age) had minimal or no significant impact on pricing. These should not heavily influence purchase decisions.

References

Autotrader. (no date). *Used Mercedes-Benz A-Class Cars for Sale*. Available at: https://www.autotrader.co.uk/car-search?advertising-location=at_cars&homeDeliveryAdverts=exclude&make=Mercedes-Benz&model=A%20Class&moreOptions=visible&postcode=NW10%206RS&radius=15&sort=relevance&year-from=2020&year-to=2025 (Accessed 15 March. 2025)

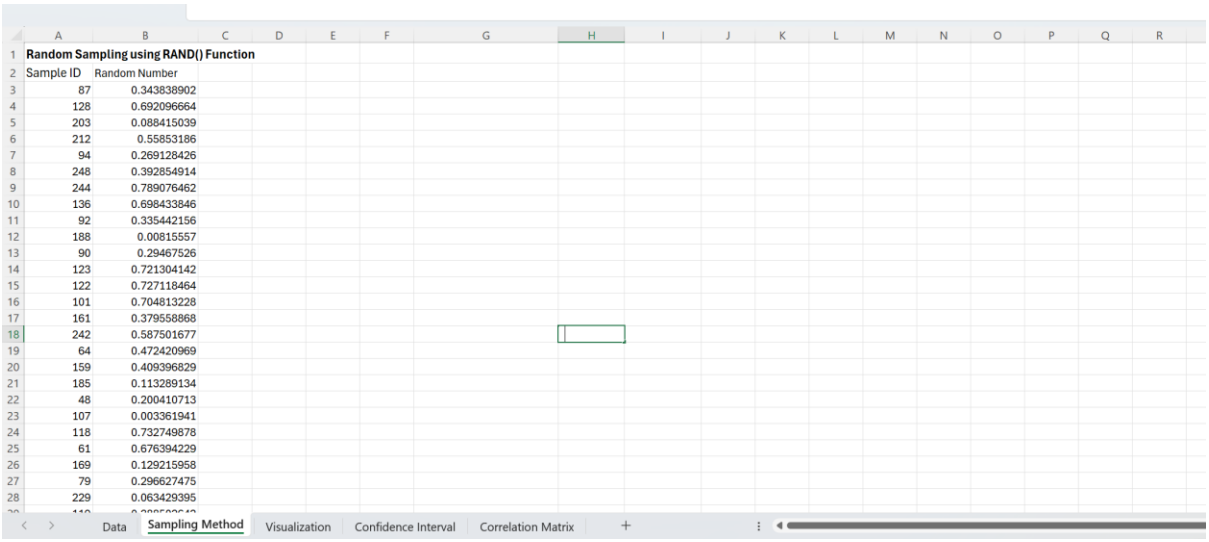
Wyatt, A. (no date) *Two-Level Axis Labels (Microsoft Excel)*. Available at: https://excel.tips.net/T003203_Two-Level_Axis_Labels.html (Accessed 28 March. 2025)

Appendices

This section contains supplementary visuals and evidence used throughout the report. These include random sampling evidence, Excel tables, SPSS outputs, and regression visualisations.

Appendix A: Random Sampling Method

Figure A1 – *Random Sampling using Excel's RAND()*



	A	B
1	**Random Sampling using RAND() Function**	
2	Sample ID	Random Number
3	87	0.343838902
4	128	0.692096664
5	203	0.088415039
6	212	0.55853186
7	94	0.269128426
8	248	0.392854914
9	244	0.789076462
10	136	0.698433846
11	92	0.335442156
12	188	0.00815557
13	90	0.29467526
14	123	0.721304142
15	122	0.727118464
16	101	0.704813228
17	161	0.379558868
18	242	0.587501677
19	64	0.472420969
20	159	0.409396829
21	185	0.113289134
22	48	0.200410713
23	107	0.003361941
24	118	0.732749878
25	61	0.676394229
26	169	0.129215958
27	79	0.296627475
28	229	0.063429395

Data | Sampling Method | Visualization | Confidence Interval | Correlation Matrix

Appendix B: Descriptive Statistics

Figure B1 – *Excel Summary Table of Descriptive Statistics*

	A	B	C	D	E	F	G	H	I	J
	Descriptive Stats for Price			**Descriptive Stats for Mileage**			**Descriptive Stats for Car's Age**			**Descriptive Stats for Doors**
	Label	**Value**		**Label**	**Value**		**Label**	**Value**		**Label**
5	Mean Price (£)	18172.93		Mean mileage	46202.5		Mean car age	3.92		Mean No of doors
6	Median	17274.5		Median	44000		Median	4		Median
7	Mode	14000		Mode	13930		Mode	4		Mode
8	Standard Deviation (£)	4026.552751		Standard Deviation	26900.2		Standard Deviation	1.125283		Standard Deviation
9	Sample Size (n)	100		Sample Size (n)	100		Sample Size (n)	100		Sample Size (n)
10	Minimum Price (£)	11499		Minimum mileage	1945		Minimum car age	1		Minimum doors
11	Maximum Price(£)	28624		Maximum mileage	117000		Maximum car age	5		Maximum doors
12	25th Percentile	15380		25th Percentile	26494.5		25th Percentile	4		25th Percentile
13	75th Percentile	20523.5		75th Percentile	65293.75		75th Percentile	5		75th Percentile
14	Skewness	0.858360378		Skewness	0.397585		Skewness	-0.9683		Skewness
15	Kurtosis	0.293561306		Kurtosis	-0.50186		Kurtosis	0.001526		Kurtosis

Figure B2 – *Categorical Summary Tables*
Fuel Type, Gear Type, Registration Year (showing average price + count for each)

Fuel Type Count		
Fuel Type	**Average Price**	**Count**
Petrol	18808.33333	81
Diesel	15464.10526	19
Gear Type Count		
Gear Type	**Average Price**	**Count**
Manual	18474.40449	11
Automatic	15733.72727	89
Reg Year Count		
Reg Year	**Average Price**	**Count**
2020	16344.11111	36
2021	16558.675	40
2022	20991.42857	7
2023	24033.64286	14
2024	27715.66667	3
2025	N/A	0

Appendix C: Confidence Interval Calculation

Figure C1 – *Excel Table for 95% Confidence Interval Calculation*

95% Confidence Interval for Mean Price	
Label	**Value**
t-Critical Value(95%)	1.984216952
Margin of Error (£)	798.9554225
Lower Bound(£)	17373.97458
Upper Bound(£)	18971.88542

Appendix D: Hypothesis Testing Output

Figure D1 – *Excel Table used for Hypothesis Testing*

Hypothesis Test	
Sample Mean ($\bar{x}$)	18172.93
Population Mean (μ)	16730.9
Standard Deviation (s)	4026.552751
Sample Size (n)	100
Degrees of Freedom (df)	99
t-Critical Value (95%)	1.984216952
Standard Error	402.6552751
t-Statistic	3.581301647
Conclusion	Reject H_0

Appendix E: Correlation Matrix

Figure E1 – *Correlation Matrix Table (Price, Mileage, Car Age, Reg Year, Doors)*

CORRELATION MATRIX

	Price	Mileage	Reg Year	Car Age	Doors
Price	1	-0.80181	0.748047	-0.74805	0.145742
Mileage	-0.80181	1	-0.56263	0.56263	-0.26031
Reg Year	0.748047	-0.56263	1	-1	0.085031
Car Age	-0.74805	0.56263	-1	1	-0.08503
Doors	0.145742	-0.26031	0.085031	-0.08503	1

Appendix F: SPSS Regression Output (New Version)

Figure F1 – *SPSS Output – Model Summary*

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.906[a]	.820	.813	1742.851

a. Predictors: (Constant), GEAR=A, MILEAGE(miles), FUELTYPE=petrol, CAR'S AGE

b. Dependent Variable: PRICE(£)

Figure F2 – *SPSS Output – ANOVA Table*

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1316534389.7	4	329133597.42	108.356	<.001[b]
	Residual	288565188.84	95	3037528.304		
	Total	1605099578.5	99			

a. Dependent Variable: PRICE(£)

b. Predictors: (Constant), GEAR=A, MILEAGE(miles), FUELTYPE=petrol, CAR'S AGE

Figure F3 – *SPSS Output – Coefficients Table (Final model with dummy variables)*

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	24991.484	888.292		28.134	<.001
	MILEAGE(miles)	-.080	.008	-.537	-10.025	<.001
	CAR'S AGE	-1509.937	188.643	-.422	-8.004	<.001
	FUELTYPE=petrol	1237.804	468.770	.121	2.641	.010
	GEAR=A	2037.770	575.058	.159	3.544	<.001

a. Dependent Variable: PRICE(£)

Appendix G: Excel Price Calculator

Figure G1 – *Excel Predicted Price Table*

CARS ID	PRICE(£)	MILEAGE(miles)	REG YEAR	CAR'S AGE	FUEL TYPE	GEAR	DOORS		Fuel_petrol	Gear_auto	Predicted Price(£)	Difference (£)
6	16749	41850	2020	5	petrol	A	5		1	1	17369.373	-620.373
12	16380	35700	2020	5	petrol	A	5		1	1	17861.373	-1481.373
13	18490	38910	2020	5	petrol	A	5		1	1	17604.573	885.427
20	18990	45000	2020	5	petrol	A	4		1	1	17117.373	1872.627
21	16499	46170	2020	5	petrol	A	5		1	1	17023.773	-524.773
22	16495	51000	2020	5	petrol	A	5		1	1	16637.373	-142.373
30	18800	33838	2020	5	diesel	A	5		0	1	16772.529	2027.471
32	22250	13930	2022	3	petrol	A	5		1	1	22622.847	-372.847
34	16789	23000	2020	5	petrol	A	5		1	1	18877.373	-2088.373
39	17499	66301	2020	5	petrol	A	5		1	1	15413.293	2085.707
44	16499	58733	2021	4	petrol	A	4		1	1	17528.67	-1029.67
46	12899	55000	2021	4	diesel	A	5		0	1	16589.506	-3690.506
47	14994	90646	2021	4	petrol	A	4		1	1	14975.63	18.37
48	14000	98449	2020	5	petrol	A	4		1	1	12841.453	1158.547
50	16450	70602	2021	4	petrol	A	5		1	1	16579.15	-129.15
54	19600	27716	2021	4	diesel	A	4		0	1	18772.226	827.774
57	20350	15009	2022	3	petrol	A	5		1	1	22536.527	-2186.527
59	15380	57600	2021	4	petrol	A	5		1	1	17619.31	-2239.31
60	22690	9428	2023	2	petrol	A	5		1	1	24492.944	-1802.944
61	21690	19158	2023	2	petrol	A	5		1	1	23714.544	-2024.544
64	15000	69849	2020	5	diesel	A	5		0	1	13891.649	1108.351
66	16200	49496	2021	4	petrol	M	4		1	0	16229.86	-29.86
71	19690	38239	2020	5	petrol	A	5		1	1	17658.253	2031.747
78	14000	95556	2021	4	diesel	A	4		0	1	13345.026	654.974
79	13950	67574	2020	5	petrol	A	5		1	1	15311.453	-1361.453
83	14994	90646	2021	4	petrol	A	4		1	1	14975.63	18.37
85	14199	80059	2021	4	petrol	A	5		1	1	15822.59	-1623.59
87	15400	42524	2021	4	diesel	M	5		0	0	15549.816	-149.816

Data | Sampling Method | Visualization | Confidence Interval | Correlation Matrix

Appendix H: Residual Analysis Graphs from SPSS

Figure H1 – *Histogram of Standardized Residuals*

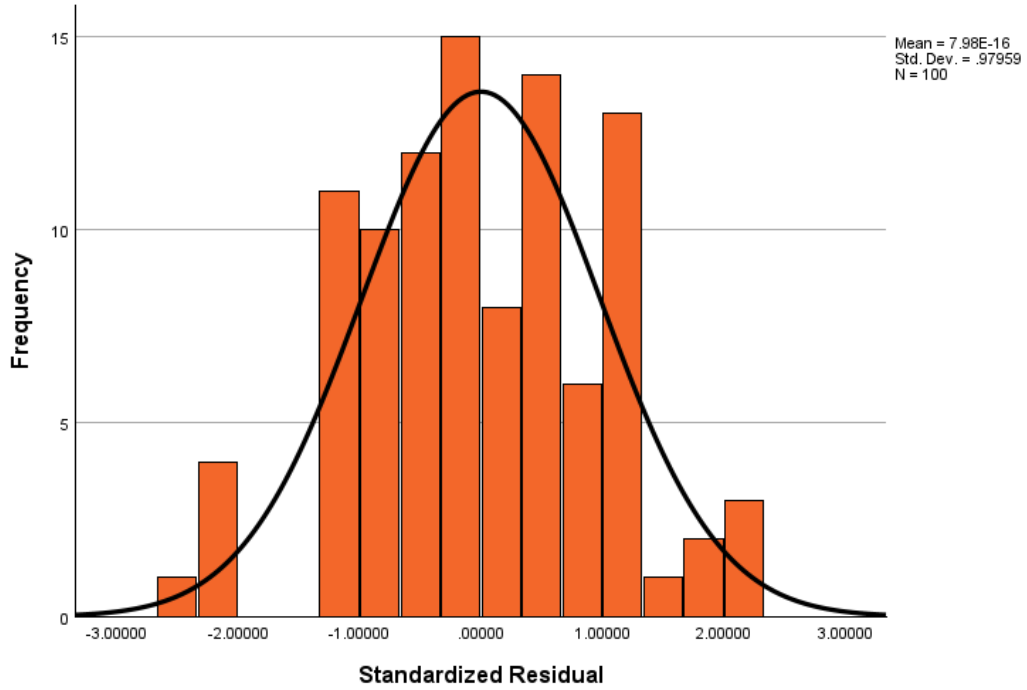


Figure H2 – *Scatter Plot of Residuals vs. Predicted Values*