Business analytics Analysis of car advertisement data

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Contents

Li	st of	Figure	es	3							
Li	st of	Tables	3	4							
1	Intr	oducti	on	5							
2	2 Theoretical background										
3	Met	hodolo	\mathbf{p} gy	7							
4	Fine	dings a	and discussion	8							
	4.1	Model	usage	8							
		4.1.1	Assessing expectations	8							
		4.1.2	Usage of example data	8							
	4.2	Findin	gs	9							
		4.2.1	In line with presumptions	9							
		4.2.2	Outliers	9							
5	Con	clusio	ı	10							
	5.1	Furthe	er questions	10							
	5.2	Résum	é	10							
Bi	ibliog	raphy		11							

List of Figures

List of Tables

4.1	Assessing expectations	8
4.2	Assessing model for business use cases	8

1 Introduction

[1]

2 Theoretical background

3 Methodology

4 Findings and discussion

4.1 Model usage

4.1.1 Assessing expectations

Registration year	Mileage	Horsepower	Width (mm)	Length (mm)	Average mpg	Top speed (mph)	Predicted price
2019	60000	135	2027	4284	49	116	17596
2019	130000	135	2027	4284	49	116	15267

Table 4.1: Assessing expectations

4.1.2 Usage of example data

Registration year	Mileage	Horsepower	Width (mm)	Length (mm)	Average mpg	Top speed (mph)	Predicted price (£)
2014	180000	110	1799	4204	45	110	5601
2016	150000	120	2027	4255	48	112	12130
2018	80000	130	2027	4255	50	115	16136
2015	190000	115	1799	4204	44	108	5819

Table 4.2: Assessing model for business use cases

4.2 Findings

4.2.1 In line with presumptions

 $\mathbf{Mileage} \leftrightarrow \mathbf{Price}$

 $\mathbf{Engine} \ \mathbf{size} \leftrightarrow \mathbf{Price}$

4.2.2 Outliers

 $\mathbf{Engine} \ \mathbf{size} \leftrightarrow \mathbf{Price}$

 $\mathbf{Width} \leftrightarrow \mathbf{Price}$

 $\mathbf{Year} \leftrightarrow \mathbf{Price}$

TODO include example of higher influence of mileage the older the car is

5 Conclusion

5.1 Further questions

Assess value depreciation

Inter-model comparison of findings

Lack of sales data regarding advertisement

5.2 Résumé

Bibliography

[1] Industrie-Roboter - Hirata Engineering Europe GmbH. URL: https://www.hirata.de/de/produkte/scara-roboter (visited on 02/02/2024).