SPSS Descriptive Analytics

WEEK 1

Data Science Academy

Disclaimer: While the case and data is real, case study modified for educational purposes.

You have been given telecommunication data. Answer following questions.

1. How can data science help businesses? Give one real world example.
2. For your example list possible important variables to get meaningful insight for the company. You may conduct internet research to find out for popular data science use cases and commonly used variables for them.
3. Indicate numerical, categorical, nominal and ordinal variables in your list.
4. Explain importance of Statistics to solve your business problem. Use fundamental statistical terms (sample, population, inference, significance and sampling) in your explanation.
5. Describe average revenue per user for each COS (class of service) in telecommunication data. Use box plot for your analysis and include mean, median, mode, quartiles, percentiles and standard deviation in your report. Explain which COSes are performing well and poor.
6. Show outliers for each COS.
7. For each COS recode average revenue to 5 different subcategory. Data range should be split equally according to distribution of data.*
8. Open Telecommunication_Case_1.sav in SPSS Modeler and create a table that lists all values in your data.
9. Provide a comprehensive first look at the data using Data Audit node.

*Clues
Sturges' rule is a rule for determining how wide to choose bars (i.e. of the bins) when visually representing data by a histogram.

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