**IBM SPSS STATISTICS PROJECTS**

BIG DATA EMERGING TECHNOLOGIES

**PROJECT 1: IBM SPSS STATISTICS SUBCRIPTION**

**PROJECT 2: DATA ANALYSIS ON INCOME, RESIDE AND CARCAT**

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**PROJECT 1: IBM SPSS STATISTICS SUBSCRIPTION**

Producing the output in form of variable element

Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

Data that have been generated into graph

Interfaz de usuario gráfica, Texto, Aplicación

Descripción generada automáticamente Interfaz de usuario gráfica, Texto, Aplicación, Correo electrónico

Descripción generada automáticamente

Statistics

Tabla

Descripción generada automáticamente

Frequencies

Tabla

Descripción generada automáticamente

*Gender*

Tabla

Descripción generada automáticamente

*Income category in thousands*

**Graph**

Gráfico, Gráfico de barras

Descripción generada automáticamente

The chart above shows that people with wireless phone services are far more likely to have PDAs which are Personal Digital or Data Assistant than people without wireless services.

**PROJECT 2: DATA ANALYSIS ON INCOME, RESIDE AND CARCAT**

In this first project, the task given was still related to the same process, but now we needed to change the variables to **income**, **reside**, and **carcat**. Basen on the Project 2 requirements, the income refers to the household income in thousands, the reside refers to the number of people in the household, and finally, the carcat refers to the primary vehicle price category.

Interfaz de usuario gráfica, Aplicación, Tabla

Descripción generada automáticamente

*Selecting the variable*

The frequencies are the following:

Tabla

Descripción generada automáticamente

*Statistics*

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente con confianza baja

Tabla

Descripción generada automáticamente con confianza media

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente

Tabla

Descripción generada automáticamente

*Household income in thousands*

*Tabla

Descripción generada automáticamente*

*Number of people in household*

*Tabla

Descripción generada automáticamente*

*Primary vehicle price category*

**Graph Result**

**Gráfico, Gráfico de barras

Descripción generada automáticamente**

Based on the bar chart above, we can see that the price of primary vehicle increases when the number of people in household decrease. This occur logically because spending rates increase when having a family. As we can see, the pattern is almost the same for every category of vehicles and only people with lesser number in household are able to own a vehicle. There’s a minor difference in the standard category vehicle which is 4 people in household able to buy standard vehicle which is differ to others category. The Standard Car price category increases with the increase in the number of people per household.

Gráfico, Gráfico de barras

Descripción generada automáticamente

The graph above shows the household income in thousands versus the primary vehicle price category. As we can see from the graph, the bigger household income, the more common it is to buy a luxury car. The minimum income capacity for being able to afford a luxury car is about 874,000.

Based on both of graphs shown above, there is a lot of correlation between the price category of vehicle with 2 different variables.

Gráfico, Gráfico de barras

Descripción generada automáticamente

Based on the graph above, we can see that when the three variables combine altogether in one graph, which is income, reside and carcat, it shows a lot of changes compared to the previous graphs.

From this graph, we can conclude that income increase influences an increase in carcat. Logically, people will buy luxury cars if they have a lot of income. The effect of the variable referring to the number of people in household doesn’t have a lot of impact regarding the primary vehicle price category factor. Therefore, if they live in a household with many people, they still can buy expensive vehicles if they have a big income. When reside increase, income does decrease but only a little bit, unless they live in a household with over 6 people.

The comparison, in general, illustrates the correlation as changes in ownership as a function of average per-capita income, income dispersion, and the "Cost/utility" ratio of owning a car. This means that families with fewer people could buy more vehicles and more luxury cars, but households with more people owned fewer overall cars and fewer luxury cars. This can be ascribed to an increase in disposable income proportional to a decrease in the number of persons per family.

This comparison, in general, illustrates the correlation between the changes in ownership of cars with varying price categories, the amount of people that live in a household, and the income of said household. We could see that families with higher income are able to afford luxury cars, even when living in a household where many people reside. This changes when there are more than 6 people living in said household, where the income starts to decrease, but still, we can see that even in families with few people living in the same household, they can’t afford to buy luxury cars unless they have a pretty big income.