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Data in Brief

Data Article

Statistical analysis of the count and profitability of air conditioners

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A B S T R A C T

This article presents the statistical analysis of the number and profitability of air conditioners in an Egyptian company. Checking the same distribution for each categorical variable has been made using Kruskal–Wallis test.

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Specifications Table

Subject area	Economics
More specific subject area	Business Company, Social Statistics
Type of data	Table and text file
How data was acquired	Collected by the author
Data format	Raw and partially analyzed (Descriptive and Inferential)
Experimental factors	Data sets on devices sold in a different
	Types of air conditioners in an Egyptian Company

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Experimental features	Observations on the number of air conditioners that sold in the company for six different types of air conditioners and its profits.
Data source location	The data was obtained from one of the air conditioner company in Egypt
Data accessibility	All the data are available this data article

Value of the data

- Data are useful in calculating the appropriate quantities of each type of air conditioner.
- The data could be used as one of vital tools in assessing air conditioners companies competitiveness.
- Data analysis can be useful in detecting more and fewer types of demand by consumers.
- Data can be useful in identifying the most profitable species in the organization.
- Data can be used to monitor compliance with the decisions and strategy necessary to determine the price of air conditioning.
- Data can be expanded to include behavioral attitudes and customer preferences types of air conditioners.

1. Data

This is a simple data set that summarizes the performance of a small AC company who went out of business shortly after March 2013. Considering this is a small business that eventually failed. The data in this article represent 1058 units of air conditioner that sailed from July 2007 to March 2013 in an Egyptian company called Pure technology, we decomposed these units as The ISM frequency data on traditional vs. modern views is used, that found in Hunter and Takane [1], the data were as follows (Table 1):

The author collected the data from an Egyptian air conditioner Company called Pure Technology. Where we make the cases constrained (*G*) is:

1. Sex of the client (M=Male, F=Female and C=company)
2. Cordon (the where that the client live) of the client (Y=Yes and N=No)
3. Season of the sale (summer, winter, autumn and spring).

In addition, the variables constrained (*H*) is:

1. 1.5 HP/b represent the air condition with power 1.5 horse and it is hot and cold
2. 2.25 HP/b represent the air condition with power 2.25 horse and it is hot and cold
3. 3HP/b represent the air condition with power 3 horse and it is hot and cold
4. 1.5 HP/c represent the air condition with power 1.5 horse and it is cold
5. 2.25 HP/c represent the air condition with power 2.25 horse and it is cold
6. 3 HP/c represent the air condition with power 3 horse and it is cold

Moreover, the matrix *G* was as follows (Table 2):

The column constrained was making by combining between the power of the unit measuring by **HP** and kind of this unit (cold only or cold and hot) and the matrix **H** was as follows (Table 3):

The H matrix represent combination between (1.5 HP, 2.25HP, 3HP) and the type of air conditioner (b, c). For example for the air conditioner, 1.5HP/b it takes 1 at the column 1.5HP and the column b. otherwise it takes 0

In addition, the next table indicate the profit of the sales units of air conditioner at different cases (Table 4).