



Data Mining Task

The Suite Spot leadership has realized it needs better information on how well the hotels in the chain are performing. One executive noticed the concept of Data Mining in an in-flight magazine and suggested it be explored. At this time, Suite Spot does not yet have an infrastructure in place to perform actual data mining; however, we can provide a clear explanation of the concept, as well as an illustration of its potential, to communicate to the executives considering funding a data mining effort.

For this purpose you are asked to submit a two-part deliverable. The first part is a memo which needs to explain the concept of data mining to the executives in clear language. You may wish to build on the foundation of data warehousing which you explored recently, but focus clearly here on the data mining aspect. What would be the benefits of data mining to the company? What questions might the company attempt to answer using data mining? Finally, what information technology infrastructure needs to be in place before the organization can actually perform any data mining activity?

The second part of the memo should illustrate the notion of data mining with an actual example. As mentioned, Suite Spot at this time does not yet employ associates with the statistical background to perform full-on data mining. However, even using basic tools, some data can be analyzed for patterns.

Included with this task is a spreadsheet with data gathered from a representative sample of 1000 dinner guests at five of our properties in the past year. The following variables were recorded:

- Date – date of dinner.
- Location – Hotel in which dinner took place. (1 – Omaha. 2 – Kansas City. 3 – Minneapolis. 4 – St. Louis. 5 – Memphis.)
- Table Size – Size of party of which this dinner was a part, ranging from 1 through 6 guests.
- Appetizer – Type of appetizer ordered.
- Entrée – Type of entrée ordered.
- Dessert – Type of dessert ordered.
- Non-Alcoholic Drinks – Type of non-alcoholic drinks ordered.
- Wine – Type of wine ordered.
- Other Drinks – Type of other drinks ordered.
- Payment Method – Payment method used by this dinner guest.
- Tip – Range of tip included in payment by this dinner guest.

You are not required to perform an advanced statistical analysis of this data. Instead, use the basic spreadsheet features you are familiar with to examine and analyze this data, to see if it has something interesting to convey which Suite Spot may find useful. You may use frequencies, averages, graphics, time or location groupings, etc., to find interesting ideas about our restaurant patrons that might be embedded in this data. You can reorder or summarize the data to look at various food categories per time period or per property. You can graph entire columns or subsets to look for highs and lows. You can integrate columns to see if certain attributes correlate. Be creative. Be inquisitive.

In the end, attempt to find at least three interesting things about this data, and translate these into recommendations for improved operations, lower costs, or higher profitability for the Suite Spot restaurants. Describe these findings and recommendations clearly, and use business graphics for all three items to help make your point.

DELIVERABLE SPECIFICS	
Deadline:	October 9, 2017 – 9:00:00 AM CST
Deliver to:	pvvliet@unomaha.edu or Canvas
Maximum Score:	65