

**Assignment:**  
**Information Competency**  
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**Course:** MGT 360  
**Title:** Management and Organizational Behavior (3 units)

“Without data, you’re just another person with an opinion.”  
---W. Edwards Deming (1900-1993)

**Goal:**

The goal of this assignment is to ensure that you have the requisite skills to acquire and manage information in your professional environment. Information competency is one part of strong management decision-making, communication, and overall professional development.

**Instructions:**

In general, your task is to answer each of the questions below. In addition to the answer for each question, I want you to write two or three sentences about your general search strategy, analytic approach, or computational formula for that particular section (that is, group of questions). The sentences can describe “what technique you used that was successful,” “what technique you used but wasn’t successful,” “what other technique might be useful,” “what technique you would like to try in the future,” “how you do this differently at work,” “how I learned it in a different class,” etc. You might also include technical details, such as the version of the software you used. There should be only one “correct” answer *per se*, but there may be more than one “correct” search path and analytic technique for each question.

Please read the following two documents before attempting to answer the questions.

<http://www.ala.org/ala/mgrps/divs/acrl/standards/standards.pdf>  
<http://www.sec.gov/investor/pubs/begfinstmtguide.htm>

**Deliverable:**

The due date is listed on the course outline. Before that due date, there should be enough time in or out of class to go over any questions you may have.

**Length:**

The length varies depending on what the student wants to say and how the student structures the narrative. My experience has been that most students turn in a report that is between two and four pages.

**Performance Measurement:**

The scoring rubric for each question on this assignment is two points for each individual question in each section:

- 2 - correct
- 1 - partially correct
- 0 - incorrect

**I. Quantitative—small business consulting (10 points)**

*Issue:* A local hot dog vendor near campus sells hot dogs and related items to students and others. The daily sales figures for a recent month are located in an Excel spreadsheet at the following location:

<http://ocw.smithw.org/2009fall/mgt360-12609/hotdogs.xls>

All answers are to be rounded to two decimal places.

*Question 1:* Compute the descriptive statistics (“summary”) of dollar sales for the hot dog stand. For the purposes of this question, the descriptive statistics are the highest (the “maximum”), the lowest (the “minimum”), the arithmetic mean (the “average”), the median (the “middle”), and the standard deviation (use the formula for the “sample” standard deviation, that is, the “n-1” method).

*Question 2:* What is the average dollar sales for Monday’s only?

*Question 3:* Expressed as a positive (or negative) dollar amount, how much higher (or lower) is Tuesday’s average dollar sales as compared to Monday’s average dollar sales?

*Question 4:* Assume you are the operations manager for this hot dog stand (this hot dog stand is part of a regional chain of similar hot dog stands). Explain the concept of “standard deviation” to another manager in the hot dog organization who has a Bachelor’s degree in business, understands mathematics well, and has worked in the hot dog stand company for 10 years.

*Question 5:* Assume you are the operations manager for this hot dog stand (this hot dog stand is part of a regional chain of similar hot dog stands). Explain the concept of “standard deviation” to another manager in the hot dog organization who has a Bachelor’s degree in English, doesn’t understand mathematics well, and has worked in the hot dog stand company for 10 years.

*Hint:* At a minimum, you’ll need to download the spreadsheet file from the web address listed above. If you don’t have access to a spreadsheet application, such as MS-Excel, you’ll need to work with a student colleague and/or use the COBAE lab in JH2129 to complete this part of the assignment. Alternatively, you could download and install the freely-available, open source spreadsheet application OpenOffice. You could also use Google Docs.

**II. Quantitative—public firm financial statements (12 points)**

*Issue:* Apple (formerly, Apple Computer) is a publicly-traded corporation. As such, Apple is subject to a broad range of accounting and legal obligations with respect to the disclosure of financial information. While it may be possible to find key financial data on Apple’s own internal pages, the marketplace typically relies on data obtained at an “arm’s length” distance to

ensure objectivity, accuracy, and impartiality. One of the obligations of a publicly-held firm is to submit financial statements (called “filings”) to the Securities and Exchange Commission (SEC) in a specific format. Such filings follow the guidelines of Generally Accepted Accounting Principles (GAAP).

The SEC maintains a web service that provides public access to this reported data. This service is referred to as the Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system.

*Question 1:* For the annual period ended September 27, 2008, what were Apple’s Net Sales (expressed in dollars)?

*Question 2:* For the annual period ended September 27, 2008, what was the relationship (expressed as a percent) of Gross Margin to Net Sales?

*Question 3:* For the annual period ended September 27, 2008, what was the relationship (expressed as a percent) of Operating Income to Net Sales?

*Question 4:* As of September 27, 2008, what was the “Current Ratio”—i.e., the fraction of total current assets divided by total current liabilities (expressed as a decimal)?

*Question 5:* Between the annual period ended September 29, 2007 and the annual period ended September 27, 2008, what was the percent change in Retained Earnings (obviously, expressed as a percent)?

*Question 6:* Different company; related question. What were the net sales for the 99 Cent Only stores (ignore the “Bargain Wholesale” subsidiary) for the annual period ended March 28, 2009 (expressed in dollars)? (the stock symbol is “NDN”)

*Hint:* You can probably find the EDGAR web site ([edgar.sec.gov](http://edgar.sec.gov)) using Google or a similar strategy. After you search for “Apple Computer” on EDGAR Web page, search for the filing type (Form) “10-K”—(“K” is short for “annual” report). Use the latest Form 10-K. Also, be careful with your millions/billions dollar conversions. Be sure to double-check your analysis (both data and formulas). For some students, working with another classmate may be beneficial.

### **III. Quantitative—public business and economic data (8 points)**

*Issue:* Assume that you are the marketing analyst at a medium-size firm that provides custodial services to airports in California. Your firm already has operations at LAX and San Diego International Airport. Your firm just received a new, five-year contract for San Francisco International Airport and Oakland International Airport. You need to prepare a summary of some airport data to the operations management team at a briefing next week.

RAND is a “think’tank” in Santa Monica. Among other things, RAND tracks all types of data, including data on airport and passenger traffic. This data is available through the CSUN Library database system.

*Question 1:* What was the number of Total Domestic Passengers for 2003 for San Francisco International Airport?

*Question 2:* What was the change (expressed as a percent) in the number of Total International Passengers for San Francisco International Airport for the two periods August, 1990 and August, 2003?

*Question 3:* Compute the descriptive statistics (“summary”) of the Total Domestic Passengers for the year 1999 for Oakland International Airport. For the purposes of this question, the descriptive statistics are the highest (the “maximum”), the lowest (the “minimum”), the arithmetic mean (the “average”), the median (the “middle”), and the standard deviation (use the formula for the “sample” standard deviation, that is, the “n-1” method).

*Question 4:* Compute the descriptive statistics (“summary”) of the Total International Passengers for the year 1999 for Oakland International Airport. Describe any noticeable differences between the descriptive statistics for the Domestic passengers and the descriptive statistics for the International passengers.

*Hint:* From the CSUN Library, you can access the RAND California data. The airport data is under “Databases | Business and Economics.” Be sure to double-check your analysis (both data and formulas). For some students, working with another classmate may be beneficial.

#### **IV. Qualitative—Peer-Reviewed Literature (4 points)**

*Issue:* Professor Daniel Kahneman won the 2002 Nobel Prize in Economics chiefly for his work in a field of study he and a colleague created entitled “prospect theory.” Prospect Theory augments traditional utility theory in Economics by helping to explain how individuals occasionally make less-than-perfectly-rational choices when faced with certain kinds of decisions (his work is referenced in the HBR “decision traps” article that we read earlier in class). His original paper on the subject is:

Kahneman, D., and Tversky, A. (1979) “Prospect theory: An analysis of decisions under risk”, *Econometrica*, 47(2), pp. 263-291.

*Question 1:* What are the first two sentences of the abstract (the paragraph just below the title and just above the main body) of this seminal paper?

*Question 2:* Ken Arrow, a Professor of Economics at Stanford, has won the Nobel Prize in Economics as well. Just coincidentally, Dr. Arrow and a colleague also have a paper in the same issue of *Econometrica* as the Kahneman and Tversky “Prospect Theory” paper. What is the title of the paper by Arrow and his colleague in that same issue of *Econometrica*?

*Hint:* For some older, but important papers, an academic journal may reproduce them in a newer issue of the journal. These “recent” issues are available in Library databases such as ABI/Inform. But many older papers, especially before 1986, are often only available online in the CSUN Library database called “JSTOR.”

**V. Technological (4 points)**

*Issue:* Gordon Moore is one of the co-founders of the large semiconductor firm Intel. In the mid-1960's, he posited that the number of transistors the semiconductor industry would be able to place on a computer chip would double approximately every eighteen months. This estimate has come to be known as "Moore's Law." It is striking that this estimate has remained relatively consistent for nearly four decades.

*Question 1:* What is the speed of the computer you are using to complete this assignment?

*Hint:* On Windows, this information can usually be found by using the "System" icon of the "Control Panel." On MacOS, this information can usually be found by using the "About this Mac" menu choice in the Finder.

*Question 2:* What is the make (manufacturer) and model (type) of the printer you are using to complete this assignment? What is the rated speed in pages per minute (if two numbers are listed, use the most conservative, that is, the smallest, number).

*Hint:* You may need to look in the manual or online to determine the answer to this question. Asking a more knowledgeable friend can also be helpful.