K. J. Somaiya Institute of Management Studies and Research

Program: PGDM-RM 2018 – 20 Trimester II

Subject: Business Research Methods
(End Term Examination)

Maximum Marks: 50   Date: 14th January, 2019
Duration: 3 hours

Notes:
1. **Work on the SPSS file labeled with your roll no. ONLY.**
2. **You have to attempt 5 questions in all.**
3. **Question no. 1 is compulsory and carries 5 marks.**
4. **Ques no. 6 of the case is compulsory and carries 15 marks.**
5. **Attempt any 3 questions out of remaining 5.**
6. **Prepare a word document.**
7. **Make suitable assumptions if required and state them.**
8. **Keep saving your files every ten minutes or so.**
9. **Name the folder consisting of Word document, SPSS output file with your roll number and names. Finally, transfer your folder to an exam folder, as per on-the-spot instructions given to you.**

1. Write a short note on non-probability sampling techniques and their types.

Case: **Dell Direct**

Dell Inc. is the world's number one direct-sale computer vendor and competes with Hewlett-Packard in that segment. Dell offers network servers, workstations, storage systems, and Ethernet switches for enterprise customers, in addition to a full line of desktop and notebook PCs designed for consumers. It also sells handheld computers and markets third-party software and peripherals. Dell's growing services unit provides systems integration, support, and training.

Michael Dell, the flamboyant founder and chairman of Dell, started college at the University of Texas as a premed student but found time to establish a business selling random-access memory (RAM) chips and disk drives for IBM PCs. Dell bought products at cost from IBM dealers, who were required at the time to order large monthly quotas of PCs from IBM. Dell then resold his stock through newspapers and computer magazines at10 to 15 percent below retail. By April 1984, Dell was grossing about $80,000 a month—enough to persuade him to drop out of college. Soon he started making and selling IBM clones under the brand name PC's Limited. Dell sold his machines directly to consumers, rather than through retail outlets as most other manufacturers did. By eliminating the retail markup, Dell could sell PCs at

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about 40 percent of the price of an IBM.

Michael Dell renamed his company Dell Computer and added international sales offices in 1987. In 1988, the company started selling to larger customers, including government agencies. That year Dell Computer went public. In 1996, Dell started selling PCs and notebook computers through its Website. This channel of order confirmation and shipping and handling is still the bread-and-butter means of addressing Dell's consumer and enterprise customers' requirements. In 1997, Dell entered the market for workstations and strengthened its consumer business by separating it from its small-business unit and launching a leasing program for consumers. In order to diversify its revenue sources, in 2001 Dell expanded its storage offerings when it agreed to resell systems from EMC. To grow its services unit, Dell acquired Microsoft software support specialist Plural in 2002.

Despite its success at grabbing PC market share, Dell continues to attack new markets. It has put increasing emphasis on server computers and storage devices for enterprises. Furthering its push beyond PCs, Dell has introduced a handheld computer, a line of Ethernet switches, and consumer electronics such as digital music players and LCD televisions. It originally partnered with Lexmark to develop a line of Dell-branded printers, and it has formed additional partnerships to quickly grow its printing line. On the services front, Dell has mirrored its straight forward approach to hardware sales, embracing a fixed-price model for offerings such as data migration and storage systems implementation. Dell is currently looking to international revenue to supplant sales in the PC-saturated U.S. market. Sales inside the United States were about 53 percent of consolidated net revenue in fiscal 2008.

Dell has thrived as downward-spiraling prices and commoditization washed over the PC industry, benefiting the company's customers and bashing its competitors. Instead of battling the tide by attempting to erect proprietary systems, as HP and IBM often did, Dell used its low-cost, direct-sales model to ride the wave. In 2008, Dell announced Partner Direct, a global program that brought their existing partner initiatives under one umbrella. Dell intends to expand the program globally. Continuing their strategy and efforts of better meeting customers' needs and demands, they began offering select products in retail stores in several countries in the Americas, Europe, and Asia during fiscal 2008. These actions represent the first steps in their retail strategy, which will allow them to extend their business model to reach customers that they have not been able to reach directly.

Of late, with all the brand equity Dell has built up, Dell Inc. is pushing into consumer products. Dell has recently made a move into manufacturing flat-screen TVs. With TVs that use the newest technology, Dell is now diversifying even further. The latest battle in the PC business isn't in computers but in printers. Dell is now waging war on HP's vaunted imaging and printing division, which produces some 70 percent of HP's operating profit. In the case of printers, the printer cartridges is where HP has the biggest margins, and Dell seems to be focused on making inroads into this market, over which HP has had a strong hold. With such an intense competition for market share and customer patronage, Dell is conducting a survey

of recent purchasers of Dell PCs and notebooks. Dell wants to understand their consumers' primary usage of their computers for Internet and other usage. Based on that, Dell wants to understand the satisfaction that their consumers are deriving from Dell products. Dell wants to estimate their customers' probability of repeat buying of Dell products and the extent to which their current customers will recommend Dell to their friends and family. Finally, Dell wants to understand if there is any correlation on any of these identified usage factors and the underlying demographic aspects of the classification of their customers.

Questionnaire

Internet Interview

Thank you for your interest in our study. You will be asked to offer your views about DELL and describe your Internet usage. This survey should only take a few minutes of your time. Unless you give us your permission at the end of the survey to release your name to DELL along with your responses, your individual responses will kept confidential.

INTERNET USAGE

Q1. Approximately how many total hours per week do you spend online? This would be the total from all the locations you might use.

a) Less than 1 hour
b) 1 to 5 hours
c) 6 to 10 hours
d) 11 to 20 hours
e) 21 to 40 hours
f) 41 hours or more

Q2. Following is a list of things people can do online. Please indicate which of these you have ever done on the Internet.

a)	Communicated with others via newsgroups or chat rooms	Yes	No
b)	Looked for a job	Yes	No
c)	Planned or booked trips	Yes	No
d)	Downloaded a picture or graphic	Yes	No
e)	Downloaded sounds or audio clips	Yes	No
f)	Looked up information about a TV show or movie	Yes	No
g)	Downloaded a video clip	Yes	No

Q3. What other type of things do you use the Internet for?

DELL SATISFACTION AND LOYALTY

Q4. Overall, how satisfied are you with your DELL computer system?

a) Very satisfied
b) Somewhat satisfied
c) Somewhat dissatisfied
d) Very dissatisfied

Q5. How likely would you be to recommend DELL to a friend or relative?

a) Definitely would recommend
b) Probably would
c) Might or might not
d) Probably would not
e) Definitely would not recommend

Q6. If you could make your computer purchase decision again, how likely would you be to choose DELL?

a) Definitely would
b) Probably would
c) Might or might not
d) Probably would not
e) Definitely would not

COMPUTER MANUFACTURER IMPORTANCE/PERFORMANCE RATINGS

Q7. The following set of statements refers to personal computer manufacturers. For each statement, please first indicate to what extent you agree that DELL Computers meets that requirement. To do this, please use a scale from 1 to 5, where a "1" means you do not agree at all with the statement, and a "5" means you agree completely.

	5	4	3	2	1
a. Make ordering a computer system easy					
b. Let customers order computer systems customized to their specifications					
c. Deliver its products quickly					
d. Price its products competitively					
e. Feature attractively designed computer system components					
f. Have computers that run programs quickly					
g. Have high-quality computers with no technical problems					
h. Have high-quality peripherals (e.g., monitor, keyboard, mouse, speakers, disk drives)					
i. "Bundle" its computers with appropriate software					
j. "Bundle" its computers with Internet access					
k. Allow users to easily assemble components					

l. Have computer systems that users can readily upgrade					
m. Offer easily accessible technical support					

Q8. If the price of the DELL computer system you purchased had been 5% higher, and all other personal computer prices had been the same, how likely would you have been to have purchased your DELL computer system?

a) Definitely would have purchased
b) Probably would have purchased
c) Might or might not have purchased
d) Probably would not have purchased
e) Definitely would not have purchased

DEMOGRAPHICS

Q9. What was the last grade of school you completed?

a) Some High School or less
b) High School Graduate
c) Some College/Technical School
d) College Graduate or higher

Q10. Your Age

a) Under 18
b) 18-24
c) 25-29
d) 30-34
e) 35-39
f) 40-45
g) 46 or above

Ques 11. Which of the following best describes your household's total yearly income?
a) Under Rs.20,000
b) Rs.20,000- Rs.29,999
c) Rs.30,000-Rs.49,999
d) Rs.50,000-Rs.74,999
e) Rs.75,000-Rs.99,999
f) Rs.100,000 or over

Ques 12. Gender

a) Male
b) Female

EARLY ADOPTER ATTRIBUTES

Q13. Following is a series of statements that people may use to describe themselves. Please indicate how much you agree or disagree that they describe you. To do this, please use a scale of 1 to 7 where a "1" means you disagree completely and a "7" means you agree completely.

	7	6	5	4	3	2	1
a. I like introducing new brands and products to my friends							
b. I like helping people by providing them with information about many kinds of products							
c. People ask me for information about products, places to shop, or sales							
d. My friends think of me as a good source of information when it comes to new products or sales							
e. I like to take a chance							
f. Buying a new product that has not yet been proven is usually a waste of time and money							
g. If people would quit wasting their time experimenting, we would get a lot more accomplished							
h. I like to try new and different things							
i. I often try new brands before my friends and neighbors do							
j. I like to experiment with new ways of doing things							
k. When it comes to computer-related products, my friends are very likely to ask my opinion							
l. I am often used as a source of advice about computer-related products by friends and neighbors							
m. I often tell my friends what I think about computer-related products							

This completes all the questions.

Thank you very much for your assistance with this interview!

The data for 370 respondents is provided in **SPSS File *Dell Computers_Roll No. #*.**

0 in the data indicates missing value.

Question no. 6 is compulsory. Attempt any 3 questions out of remaining 5:

1. Are the number of hours spent online (Ques 1) related to the gender (Ques 12)? Also test the association of this relationship.

2. Is "make ordering a computer system easy" (Ques 7_a) more agreeable by respondents than "bundle its computers with appropriate software" (Ques 7_i)? Formulate the null and alternative hypotheses and conduct an appropriate test.

3. Identify the perception of agreeability of "offer easily accessible technical support" (Ques 7_m).

4. Identify the difference in the average perception of males and females (Ques 12) with respect to agreeability of "feature attractively designed computer system components" (Ques 7_e).

5. Is agreeability of "bundle its computers with appropriate software" (Ques 7_i) independent of "last grade of school completed" (Ques 9)?

6. Are the variables "I like introducing new brands and products to my friends" (Ques 13_a) and "I like helping people by providing them with information about many kinds of products" (Ques 13_b) related? Considering Ques 13_a as dependent variable and Ques 13_b as independent variable run the regression analysis and fit the model.

OR

Can the variables (Ques 13_a through Ques 13_m) be represented by a reduced set of factors? Conduct a factor analysis to extract these factors.

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