INDIVIDUAL ESSAY



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"You said you understand if you really do." You said you don't understand if you really don't. Then it is just the real understanding of knowledge" "知之爲知之,不知爲不知,是知也"

~~~ Confucius

# A. Introduction

Life is really full of things beyond our control. Having passed half of my life and been encouraged by my boss, I started my first semester at IIMBA of NCKU as a graduate student. Majoring in English literature at the University, I am strange to the statistic analysis. Maybe you do not believe that learning statistics is one of my objectives to return school again. When I saw my colleague familiar with the tools of statistics, I always feel jealous. How wonderful if I can enter the world of statistics. Therefore, I took Business Decision Method this semester to evaluate my capability in this field.

#### B. the Professor of BDM

Prof. Pan gives me great impact on statistics, so I have to mention him in my individual essay. Before taking this course, some seniors told me that this course is too hard for a junior and Prof. Pan is a very strict teacher. I have to admit it is not so easy to pass this course if the student does not study hard. Nevertheless, I think such a professor would really concentrate on teaching. Prof. Pan explained every concept and model very clearly in the class. It is too clear to say you cannot understand. When we forgot or neglected some important concepts, he always repeated and repeated. He always said "if you make clear the input, process, and out of everything, it is not so difficult to understand". Statistics is like that, and life is just like that, too. I admire his attitude toward teaching, which is my model as I teach English. By the way, I also want to show my appreciation to Hsiao-Chien. She is a nice and kindhearted assistant. She always patiently taught me what I cannot understand or the mistakes in my assignments.

#### C. Helpful Subjects of BDM

I benefit a lot from BDM class. At least, I get useful concepts and models from

BDM. I work as a department head at the hospital. There are several parts useful to my job.

# (A) Single and multiple regression models

With the regression analysis, I can find out the correlation between the dependent variable and the independent variables. For example, I can check whether the hospital revenue has a linear relation or strong correlation with the quantity of outpatients, inpatients, or the revenue of some departments such as cardiology or gastroenterology.

# (B) Linear programming

The hospital just purchased two large equipment, computerized tomography (CT) and magnetic resonance imaging (MRI), in the Radiology department. How to arrange the schedule within limited time and technicians is a big issue. Linear programming can help solve this problem. First, we can check the unit charge of the health insurance, and then we calculate the maximum working hours of technicians and the time to perform CT and MRI. Last, we can get the result about how many cases we can arrange everyday without influencing the accuracy of the equipment and get the maximum profits.

#### (C) Transportation and assignment

This method can be used in patient transfer by ambulances. I can calculate how three ambulance companies can transfer patients to another three hospitals with the lowest cost. Then I can decide how to distribute the patients to these ambulance companies according to the distance and prices. On the other hand, when I want to arrange the nurses to send patients with the ambulances, I can also use assignment method to reduce the cost according to their wages.

#### (D) Decision analysis

The hospital top managers are thinking to build an oncology building. We listed the possible alternatives, identified the possible outcomes, and calculated the payoff or profit of each alternative through decision analysis. Finally, we decide to develop the oncology because it is helpful to patients' health care and we still can get some profits, even if the medical environment is not so good in Taiwan and the government suffers from poor financial condition.

# (E) Thinking Process

Besides the models or analysis, BDM provides good training in process of thinking. I just read too many foreign poems, novels, and essays with existentialism, classicalism, and abstractionism at the university, so my way of thinking is too sensitive. I need the rational training. Even I got poor grades in BDM examination, but I still consider BDM a good medium of rational training.

#### D. Benefits of life from BDM

In my studying or work period, I found nothing difficult for me. However, I have to admit BDM is very difficult for me. I finally see the upper limit of my capability and know how to be humble toward the knowledge. The grades are one thing, what I really learn is another and the most important thing. I make a SWOT for myself as follows:

| Strength    | I learn some methods of statistics and logical way of thinking. |
|-------------|-----------------------------------------------------------------|
| Weakness    | I cannot solve complicated problems.                            |
| Opportunity | BDM can enhance the ability in my job.                          |
| Threat      | I am a little afraid of statistics.                             |

#### E. Conclusion

Confucius said thousands years ago, "You said you understand if you really do". I want to say "I do". Even I may fail from the course, but I know that I really do my best and study hard. I am glad to understand myself more and I know how to improve my weak points. That is what I really concern. Finally, I would like to thank Prof. Pan for his wonderful teaching and also Hsiao-Chien for her assistance. BDM gave me a very good start in learning statistics. I hope I can continue making progress in this field.