

國立清華大學命題紙

99 學年度 服務科學研究所乙組(服務系統組) 碩士班入學考試

科目 管理資訊系統 科目代碼 4802 共 2 頁, 第 1 頁 \*請在【答案卷卡】作答

1. Please explain and compare the following terms: (a) Grid Computing, (b) Utility Computing, (c) Cloud Computing. (15 points)  
(d) If you are a CIO of a firm, what factors will you consider to adopt or not to adopt Cloud Computing? You are suggested (but not required) to use a comprehensive framework, bullet points, decision trees, tables, or graphs to illustrate your analysis (10 points)
2. In his article, "IT Doesn't Matter," Nicholas Carr argues that "IT is, first of all, a transport mechanism – it carries digital information just as railroads carry goods and power grids carry electricity."
  - (a). In your opinion, are there any key differences between IT and railroads or electricity in terms of their ability to provide competitive advantage? Or are they the same kind of utility? (7 points)
  - (b). What is IT productivity paradox? (8 points)
  - (c). Please comment the following trends (10 points):
    - (i) Servicization of IT (IT 服務化),
    - (ii) Standardization of Services(服務標準化)
    - (iii) the linkage between the two(上列二者關係)
3. There are many Web 2.0 services these days; for example, facebook, Apple Store, Second Life, etc. Please answer the following questions based on your experiences and academic knowledge. Please select one Web 2.0 service from the above mentioned web sites or other services categorized as a Web 2.0 service. Please introduce the major offerings on this service, which can be justified as Web 2.0 services, and describe main characters of this service which attract you the most. Then
  - (a) Please explain its strategy to establish and maintain the relationship with its users. (5%)
  - (b) Please design a business intelligence system based on data/text mining techniques to enable it to deliver better services to its users (10%)
  - (c) Please propose a revised business model once it adopts the results from your proposed business intelligence system (10%)

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4. In general, the course offered in “System Analysis and Design” introduce the system development methodology to design and implement a system for a specific user group; for example, employees in a business unit which performs specific tasks. For a system analyst, s/he can approach these limited number of future users to extract their needs. Interviews and secondary data collection are the most common approaches used to acquire needs. Then, prototyping or other software development methods are used for system development and testing. Now, given the wide spread of business services on the Web, it is quite impossible to reach all potential customers of the services. Therefore, we need some additional skills to acquire users’ needs in order to make the service meet these users’ needs, and in turn, sustain the built services.

Given the following scenario, please answer the follow-up questions. A new company, called *Health&You\**, aims to provide health improvement services for residences in rural areas of Taiwan. As you may know that most of young generation residences leave their home towns which could be located in agricultural regions or mountain areas to cities for making better living. Due to lack of workforces or short of economic incentives, many farms are abandoned, such that many beautiful rise fields become weeding fields. Moreover, due to short of economic incomes, many residences in these areas who are aged with chronic diseases, such as diabetes, high blood pressure, etc., may have difficulties to get the best care besides going to hospitals with the National Health Insurance (全民健保).

*Health&You* as a profit making company would like to launch a health service for these aging communities. However, the founder of *Health&You* Mr. Tony Lee has his background on MIS and likes to launch online services for these residences who may be aged or not used to using information technologies. Assuming that you are a service designer appointed by Mr. Tony Lee, you are asked to design online services to enhance the health condition of these aged farmers. In order to propose a feasible, profitable, and sustainable service model, you need to tackle the following issues:

- (a) What do these residences need in order to enhance their health condition? Please introduce the approaches which you would like to use to acquire their needs in order to design the services which they need. (10%)
- (b) Please propose a service model you would like to offer based on the needs you acquired in answering question (a).
  - (i) Please describe the service model in terms of service offerings, information flows among service providers, service receivers, and related service stakeholders. (You are welcome to illustrate your service model in figures with your interpretation.) (5%)
  - (ii) Based on the information flows proposed in answering (i), please suggest the information infrastructure which can be built to enable the service. Hint: you may cover the information technologies needed for all stakeholders. (5%)
  - (iii) Please justify the feasibility, profitability, and sustainability of the service model you proposed. (5%)

\**Health&You* company is a hypothetical company created for this question.