科目　資訊管理導論　類組別　022　　　　　　　　　　　　　共 二 頁 第 1 頁

＊ 請在試卷答案卷（卡）內作答

一、名詞解釋（20分）

1. 網路釣魚（5分）

2. 阻斷服務攻擊（5分）

3. 特洛伊木馬（5分）

4. 麥考夫(Metcalfe)定律（5分）

二、簡答題（40分）

1. 請說明顧客關係管理（customer relationship Management, CRM）系統，它如何為企業帶來價值？（10分）

2. 請從技術與管理層面說明企業要如何避免電腦駭客入侵。（10分）

3. 何謂自然人憑證？請說明自然人憑證目前已有的應用以及在管理上該注意的問題。（10分）

4. 組織在導入應用系統或是進行企業流程再造專案時，應注意哪些問題？（10分）

注意：背面有試題

三、個案（40 分）

Web Services at Work

Why are Web services being adopted around the world? The answer seems to be that a company can connect to many organizations while programming only once. Consider two examples. In Europe, there are at least 6,000 retailers selling home appliances, and no home appliance manufacturer wants to spend the time and money to set up or operate 6,000 separate programs to connect to each retailer. Frederic Marie, the e-business director of Electrolux, explained that the home appliance business has "a very fragmented base in Europe, different from North America." He pointed out that for each retailer "there are different sign-ons, different passwords." So in 2002 his company joined with Whirlpool Europe, Merioni Elettrodomestici, Phillips, and Bosch Siemens to set up Tradeplace.

Tradeplace was designed to add value to both retailers and manufacturers while minimizing investment. The group hired e-business specialist Hubspan to build an industry consortium net marketplace based on Web services technology for the home appliance retail market. Tradeplace includes TradeXML and support for electronic data interchange (EDI), both tailored for the home appliance market. Retailers can use Tradeplace to perform a number of tasks, ranging from merely accessing data to integrating with a manufacturer's enterprise resource planning system. Now, according to Gustavo Minacci, the e-business director of Whirlpool Europe, "If a consumer comes

in [to a retail store] looking for a specific model that the retailer doesn't carry, the retailer can check from their own system." Web services give Tradeplace an open architecture and standardized messaging that keeps costs low for participating manufacturers and retailers. Every retailer can program a single connection to Tradeplace and connect to any of the manufacturers that are part of the consortium. Retailers do not have to log in and out of each manufacturer's separate system. Retailers can access Tradeplace using a standard Web browser and search for product information and availability and place orders. Eventually, it will be possible to connect retailers' order-processing systems directly to Tradeplace using XML.

In Queensland, Australia, the state government agency enforcing food safety standards is called SafeFood. Queensland has more than 60,000 food producers and retailers. SafeFood's 20 food safety officers are charged with visiting and auditing all these producers and retailers to ensure the safety of the food they produce and sell. Such a task is enormous, but it was made more difficult and challenging by the fact that the system had to rely heavily on paperwork. The auditors had to write up what they found, and the producers and retailers had to wait for extended periods of time to receive the results of the audits.

How could SafeFood simplify its immense task so that the system could work more quickly and efficiently? First, it turned to PDAs to help solve the portability problem. It assigned its field staff members PDAs running Microsoft's Pocket PC operating system to capture and transmit information. Second, it

turned to DCG, a small Microsoft developer in Brisbane, the capital of Queensland. DCG's offices are right across the street from SafeFood. DCG was already skilled in Web services that are part of Microsoft's .NET platform and used these tools to develop systems for SafeFood's PDAs. As Ben Shapiro, DCG's chief executive, explains, using Web services, "We can take information from one system and translate it to another." Using PDAs, the information can be transmitted to the SafeFood offices without concern for connection disruptions. Using Web services, SafeFood can distribute the information to the Queensland government and to any other organization that requires it, including a company just audited. Third, using Web services helps SafeFood exchange information with other food safety authorities. The other organizations simply need to use UDDI to adopt or develop their own SafeFood communication program. SafeFood's task is still enormous, but it is quicker and more manageable to handle than in the days before the PDAs and Web services.

1. What are the benefits of using Web services technology? (10 分)
2. How can it provide value to firms? (10 分)
3. What organization and management issues must be addressed when implementing Web services? (20 分)