

# 國立中央大學八十七學年度碩士班研究生入學試題卷

所別： 資訊管理研究所 乙組 科目： 管理資訊系統 共 2 頁 第 1 頁

第一部份、問答題（◎請注意：第 1, 2 題二中選一，第 3, 4 題必答）

1. 說明如何評估資訊部門的績效？（10 分）
2. 說明如何從事資訊系統發展專案的成本效益分析？（10 分）
3. 資訊系統開發有所謂的 IPO(input process output)方法、生命週期法、雛型法和物件導向的系統開發方法。請說明這四種方法有什麼不同，各適用於何種環境？（20 分）
4. 資訊系統開發的方式有資訊部門開發、用戶單位自行開發、委託軟體公司開發以及合作開發等方式。請說明這四種方式的優缺點，各適用於何種系統？（20 分）

第二部份、個案

United Parcel Service, the world's largest air and ground package distribution company, started out in 1907 in a closet-sized basement office. Jim Casey and Claude Ryan – two teenagers from Seattle with two bicycles and one phone – promised the “best service and lowest rates.” UPS has used this formula successfully for nearly 90 years.

UPS still lives up to that promise today, delivering close to 3 billion parcels and documents each year to any address in the United States and to more than 185 countries and territories. Critical to the firm's success has been its investment in advanced information technology. Technology has helped UPS boost customer service while keeping costs low and streamlining its overall operations.

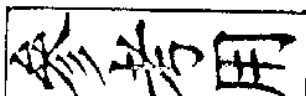
Using a handheld computer called a Delivery Information Acquisition Device (DIAD), UPS drivers automatically capture customer's signatures along with pickup, delivery, and time card information. The drivers then place the DIAD into their truck's vehicle adapter, an information-transmitting device that is connected to the cellular telephone network. Package tracking information is then transmitted to UPS's computer network for storage and processing in UPS's main computer in Mahwah, New Jersey. From there, the information can be accessed worldwide to provide proof and delivery to the customer. The system can also generate a printed response to queries by the customer.

Through its automated package tracking system, UPS can monitor package throughout the delivery process. At various points along the route from sender to receiver, a bar code device scans shipping information on the package label; the information is then fed into the central computer. Customer service representatives can check the status of any package from desktop computers linked to the central computer and are able to respond immediately to inquiries from customers. UPS customers can also access this information directly from their own microcomputers, using either the Internet or special package tracking software supplied by UPS.

UPS's Inventory Express, launched in 1991, warehouses customers' products and ships them overnight to any destination the customer requests. Customers using this service can transmit electronic shipping orders to UPS by 1:00 A.M. and expect delivery by 10:30 that same morning.

UPS is enhancing its information system capabilities so that it can guarantee that a particular package or group of packages will arrive at its destination at a specified time. If requested by the customer, UPS will be able to intercept a package prior to delivery and have it returned or rerouted.

Sources: Laudon, K. C. and Laudon, J. P., “UPS Competes Globally With Information Technology”, Window on Technology, Chapter 2 of Essentials of Management Information Systems, 2nd ed., 1997, pp. 8.



注意：背面有試題

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## 問題：

1. UPS 的包裹追蹤系統(package tracking system)所支援的組織層級為何？所涉及的決策問題的結構特性為何？請用 Gorry, G. A. and Scott-Morton, M. S. 的 MIS 分類架構(1971)繪圖說明包裹追蹤系統的位置，並說明其所屬資訊系統的類型？請簡述您的理由。(15 分)

2. UPS 的企業策略為何？請從競爭策略的觀點說明包裹追蹤系統如何支援其企業策略？請簡述您的理由。(15 分)

3. UPS 的包裹追蹤系統後端的資料庫是集中式或分散式的？上傳包裹條碼資料所使用的通訊網路為何？使用的網路交換技術是哪一種？請根據個案內容簡述您的理由。(10 分)

4. UPS 的 Web 站提供了良好的客戶服務，使用者可以透過這個 Web 站，追蹤查詢託寄的包裹狀態。UPS 所提供的包裹追蹤服務屬於哪一種類型的電子商務(Electronic Commerce)？如果您是 UPS 的管理者，除了上述的電子商務應用外，還可以發展何種電子商務的應用以充分運用網際網路的好處？請簡述應用的方式以及您的理由。(10 分)

