

# 九十九學年度國立勤益科技大學碩士在職專班招生入學考試

## 研發科技與資訊管理研究所 B 組

### 【案例評述/B 卷：資訊管理】 試題

准考證號碼(請考生自填)：□□□□□□□□

注意事項	1. 考試時間 100 分鐘 2. 禁止使用計算機、翻譯機或相當功能之裝置。
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#### 第一題 中鋼公司案例(50%)

傳承老師傅技術 解決人力斷層危機

本篇文章摘自：商業周刊第 1072 期

中國鋼鐵煉鋼廠正進行煉焦工程，隔壁煤化學課辦公室裡，電腦停格在網路留言板上，七十年次的技術人員陳君彥，正在回覆今早凌晨七點零一分的最新一筆留言。仔細一看，討論主題是「如何減少 TAR (煤焦油) 的水分？」觀看人數達七百五十六人，留言者從三十八年次的工廠領班，到七十一年次的新手工程師都有。

這是中鋼實行「知識管理」以來，推動線上學習的一部分，像這樣的網路知識社群就有四十七個。中鋼知識管理系統，至今已儲存一萬五千多筆煉鋼技術文件；前年和今年招募逾千名的中鋼新人，皆以此進行新生訓練，新人使用線上學習時數已占總訓練時數三分之二。

中鋼九千名員工，平均年齡四十九歲，平均年資二十三年，民國一百零一年起，每年將有近六百名員工退休，等於十年後，近一半擁有煉鋼技術的資深員工就不再是公司資產。

#### 內隱知識文字化 將建廠以來各項技術做系統化整理

為避免退休潮帶來的人力斷層，中鋼從民國九十二年開始推動知識管理，然而，如何讓新人快速有效吸收資深同仁經驗？人力資源處人力發展組組長兼訓練中心主任趙立功表示，要「用年輕人的頻道把知識傳給年輕人。」

第一步，進行知識庫建構。由各部門挑選出五、六項關鍵專業技術，以大、中、小分類進行盤點，將民國七十年建廠以來的報告做系統化整理。比如，「煉鐵技術」項下，有「煉焦技術、燒結」等中分類，煉焦技術又有「配煤、爐溫技術」等至多五個小分類。

#### 關鍵技術影音化 由資深同仁拍攝、編輯數位教材

中鋼不僅將內隱知識文字化，更進一步將關鍵技術「影音化」。由資深同仁用數位照相機、攝影機自行製作數位影音教材。公司規定每部門每年至少產出「二十人一堂課」數位教材，假若設備處有兩百人，每年最少要產出十門影音課程。影音內容的產出，與主管考績連動，因此，三十九個一級單位主管需負起推動、執行多媒體知識的創造。

主管決定拍攝主題後，任命具備此項技術的員工擔任製作小組，製作前，成員受訓兩天，學習用影像處理軟體編輯教材。實際製作時數，還可額外領取一小時兩百元的獎勵獎金。六年來，中鋼已完成五百七十六門數位學習課程，培訓八百五十六人次的課程製作人。

「文字的東西，最怕光有東西卻沒效果，」煉鐵廠廠長林弘男解釋，影音檔成為知識庫的內容，對經驗傳承更具說服力。比方，點選煉鋼廠在民國九十二年拍攝「爐牆修補工程」的每個步驟，清楚的以畫面、搭配旁白記錄下來。有了數位教材，類似這種二十多年才一次的大型爐體維修，就算老師傅退休，後進新人也不會再在純文字的知識文件中迷失。

此外，中鋼去年成立「網路知識社群」，包括四十個各部門的內部社群、和六個外部社群（可由公司外的網域連結），建立網路討論區，提供平台給跨部門討論工作技術。

### 成立四十七個社群 彙整討論區精華，再納入知識庫

中鋼煤化學二課的陳君彥說，在沒有知識社群以前，大家只會按表抄課，「公司規定怎樣做就怎樣做，」不會多去思考改進工作的新方法。

現在，跨部門成員加入社群互動，同樣的工作內容，卻有了不同技術面的意見交流，因此能在過程中聚焦出新的想法。譬如，研發部門參與煉鋼團隊在社群上對煉焦爐清洗的討論，後來煉鋼廠將原本一年兩次固定淋洗的頻率變更為一年一次，以此降低焦爐故障頻率。

每個討論主題最後產生結論報告，主管自行判斷可行性，再試行到工作流程中。社群的討論區精華，則會再進入知識庫，讓遇到同樣困難的同仁有前人的軌跡可循。

中鋼自實施知識管理第二年起，每年舉辦「知識管理績優頒獎暨成果發表會」，由董事長親自頒發個人獎、團體獎、和知識社群獎，四次頒獎共發出五十七萬元的獎金。去年獲得個人獎，在中鋼服務三十四年的設備處機械設備技術組組長徐榮盛說，「將自己的技術貢獻出來，是留給中鋼的紀念品。」

「成效在員工退休後才看得見，」趙立功說，現在是先將學習資源準備好。未來，這些前人智慧，能否在師徒制外發揮傳承效果，仍有待觀察。

問題：閱讀以上的文章後，請說明至少三項中鋼推動知識管理成功的關鍵因素？

## 第二題 Amazon.com 案例(50%)

Amazon.com made Internet history as one of the first successful enterprises to sell over the Web. It has grown to become one of the largest Internet retailers on earth. In 1995, former investment banker Jeff Bezos took advantage of new business opportunities created by the Internet by setting up a Web site to sell books directly to customers online. There were three million titles in print, and any one physical bookstore could only stock a fraction of them. A “virtual” bookstore could offer a much larger selection of titles. Bezos believed consumers did not need to actually “touch and feel” a book before buying it, and Amazon.com provided online synopses, tables of contents, and reviews to help with selection. Amazon.com was able to charge lower prices than physical bookstores because it maintained very little of its own inventory (relying instead on distributors) and did not have to pay for maintaining physical storefronts or a large retail sales staff.

Amazon tried to provide superior customer service through e-mail and telephone customer support, automated order confirmation, online tracking and shipping information, and the ability to pay for purchases with a single click of the mouse using credit card and personal information a customer had provided during a previous purchase. This was called “1-Click” express shipping, and it made the shipping experience even more convenient.

In 1998, Amazon started selling music, CDs, videos, and DVDs, revising its business strategy “to become the best place to buy, find, and discover any product or service available online” – the online Wal-Mart. Its offerings grew to include electronics, toys, home improvement products, video games, apparel, gourmet food, and jewelry. It also introduced Amazon.com Auctions (similar to those offered by eBay), and zShops (online storefronts for small retailers). To service these new product lines, Amazon significantly expanded its warehouse and distribution capabilities and hired large numbers of employees. These moves strained its ability to adhere to its original vision of being a “virtual” retailer with lean inventories, low head count, and significant cost saving over traditional bookstores.

In 2001 and 2002, Amazon tried to increase revenue by cutting prices, offering free shipping, and leveraging its technology infrastructure to provide e-commerce services to other business. Amazon’s Merchants@ and Amazon Marketplace allow other businesses to fully integrate their Web sites into Amazon’s site to sell their branded goods using Amazon’s fulfillment and payment systems. Nordstrom, Toys’R’Us, The Gap, and Target stores use Amazon to sell their goods and then pay Amazon commissions and fees. In the Amazon Marketplace program, individuals are encouraged to sell their used or new goods on Amazon’s Web site even when they compete directly with Amazon’s sales of the same goods. Sales by third parties now represent 25 percent of Amazon’s revenues.

Amazon refined its business model to focus more on efficient operations while maintaining a steady commitment to keeping its 49 million customers satisfied. In early 2001, Amazon closed two of its eight warehouses, laid off 15 percent of its workforce, and consolidated orders from around the country prior to shipping to reduce shipping costs. Amazon used six sigma quality measures to reduce errors in fulfillment. These measures reduced fulfillment costs from 15 percent of revenue in 2000 to 10 percent by 2003.

Amazon has finally become profitable and remains an online retailing powerhouse. But it faces powerful online retail competitors such as eBay and Yahoo! Who keep innovating? Amazon is countering with new offerings, such as digital mapping service with street-level photographs and selling short stories online for 49 cents apiece, along with additional expenditures to improve customer convenience and the shopping experience. The question is this: can Amazon keep adapting its strategy to remain profitable and powerful?

Questions: (1) Identify the business problem they are facing, how they solve the problem, what are the benefits, what did they do to solve the problem in terms of people, organization, and technology?

(2) In early 2001, why did Amazon close two of its eight warehouses, lay off 15 percent of its workforce, and consolidate orders from around the country prior to shipping to reduce the shipping costs?

(3) What is its business model and how will they make profits?

(4) Can Amazon keep adapting its strategy to remain profitable and powerful? and why?