

各機關因公出國報告書  
(出國類別：考察)

考察國外業者電子商務之經營方式及營運經驗

出國報告書

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## ABSTRACT

此次總公司郭吉松工程師與研究所孫三為主任赴 IBM、SAP、與 Nortel 考察，IBM demo 技術 (如 Java card、facial recognition、)，SAP 介紹企業軟體應用實例與技術，Nortel 介紹 IDC/ASP 服務提供、系統整合與網路設備。IBM 與 SAP 是希望別人推廣與使用它們產品、它當地主別人做佃農、稻子收成抽成，Nortel 利用合縱連橫進入新市場與推銷原電信與網路產品、它已認為以後的大餅將逐漸移轉到應用到上層客戶面。職以為 CHT 目前內部多資訊系統多網站、對外少資訊服務與商務業務，如何倒過來?如何依據市場趨勢準備與進行? 建議 IDC/ASP 業務初期仍應優先 co-location 與 hosting，千萬 web site 不賺錢、我仍收場地與入出 bandwidth 租金，投入 ASP 需建立可大可久的 ASP 維運系統、需掌握自己使用自己控制的少數主流應用 ASP 產品 (如 video conference、SME e\_mart、wireless e-booking mart、community/virtual enterprise ERP 等。) 如何讓員工先一步熟悉這些產品、公司使用這些產品、研究所研發可 ASP 化之產品、用網路商業新服務產品降低公司營運成本與資產人力，並作為公司經營賺錢的新產品，其實有些產品與電信服務事有密切關係的更應加強、如 110/119、113 等 wide area 企業與政府服務等。毛董之新世紀願景提出價值創造、提出垂直水平分工數據業務價值鏈，Nortel 很快投入 EC, IDC/ASP 等資訊領域、正是毛董所寫之建立虛擬企業新商務模式範例。

1. 前言與行程:

依據總公司(89/11/16)信人三字第 89A3002564 號函，職孫三為與總公司郭吉松工程師自民國八十九年十一月十八日至十二月一日赴瑞士與德國考察國外業者電子商務之經營方式及營運經驗。此次參訪 IBM Zurich Industry Laboratory, SAP 在德國電信的 ASP 服務應用及其總公司之 ERP 與 ASP 討論，及 Nortel 法蘭克福 IDC 技術中心。此兩周之主要行程概述於後:

	日期	地點	主要行程概述
出國行程說明	89.11.18-11.19	台北—蘇黎世	台北—阿姆斯特丹—瑞士蘇黎世行程
	89.11.20	蘇黎世	拜訪 IBM 公司 Lab 考察電子商務技術研發及服務
	89.11.21	蘇黎世	拜訪 IBM 公司 Lab 考察電子商務技術研發及服務
	89.11.22	蘇黎世—法蘭克福	蘇黎世—德國法蘭克福行程
	89.11.23	法蘭克福	拜訪 SAP 公司觀摩廠商德國電信公司考察 ASP 之應用
	89.11.24	法蘭克福	拜訪 SAP 公司考察網際網路應用服務提供者(ASP)之服務
	89.11.25-11.26	法蘭克福	例假日資料整理
	89.11.27	法蘭克福	拜訪 Nortel 公司考察網際網路資料中心(IDC)服務
	89.11.28	法蘭克福	拜訪 Nortel 公司考察電子商務服務
	89.11.29	法蘭克福	拜訪 Nortel 公司考察 M-commerce 服務
	89.11.30-12.01	法蘭克福—台北	法蘭克福——台北行程

2. 觀察與建議:

***ASP application selection shall be practical and tangible:***

Bandwidth cost a lot. Like voice traffic, fixed wire traffic within a location centralized enterprise will be solved via PBX, or centrex. Enterprise with several sites is like to rent leased line to reduce comm. Cost. Since mobile phones are now popular, Mobile VPN is now

becoming a hot topic to serve enterprise customers, e.g. pico cell to free the cost for internal wireless traffic, mVPN/eVPN to reduce the cost for outbound wireless traffic.

Internet traffic as the same situation, the communication might be end to end, however the largest share of traffic is client to server. Although the mobile businessmen are increasing, most clients are still within the enterprise building. Access link to internet is regarded as the major cost. This concludes that the server to support internal traffic (ERP, OA, ...) is best Located within a company, i.e. free of communication cost.

So ASP market shall focus on global/distributed enterprises or virtual enterprises/virtual communities. What are the applications for our IDC/ASP? Can we provide a free and personal portal for each VIP ADSL customer, with e-mail 、 business news 、 links for his vertical 、 horizontal 、 geographic 、 and district value chain neighbors, and the associated CNM/CRM we need to support.

***Java Card emerging means the time coming for personalized, secure, portable e-service and e-commerce era :***

IBM people demo a 8-queen problem and Travel Salesman Problem using the CPU of a Java card, which is either contact or contact-less. The demo shows that (1) the programming and interface with a PC is flexible and interoperable, and (2) the execution or the power is good enough. The basic component is already there, what are the applications?

In addition, IBM labs also demo a target eye-ball tracking system, I think this technology can be used in bio-metric security system, e-toy, and more advanced intelligent agent

applications. Interesting enough, the guy introduces the 3G wireless technology doubts the popularity of his potential multimedia wireless applications, I think the same question is now troubling many business and technology people in this value chain.

IBM lab people also demonstrates a tablet PC with pen and paper pad, the ink of pen will transfer to the connected PC for further recognition or imaging. Months later, I saw its commercial product, IBM 'Thinktransnote PC' on IBM web page. The commercialization step looks very efficient. I also saw a demo of IBM robot which will track and recognize a person's face, I think it will also be manufactured soon for some intelligent toy robots.

***OSS realizes an effective ASP/CSP business:***

Nortel demos the MASP, a service managing tool, to integrate service ordering, grouping, integrating, billing, and customer relationship management. The MASP proposes a serviceware concept to build a middleware between the Telecomm. Infrastructure and applications. There are interfaces with upper layer applications, interfaces with other component, i.e. LDAP, in the middle, interfaces with telecomm. Channels. I think a well-run ASP business need to construct a common platform for long-term and maintenance efficiency.

***Nortel Alliance with IT company means we CHT need e-sourcing to speed up and energize:***

Nortel invests a lot in IT and Internet business section. Nortel says he is now a IT company, covers telecomm. Internet, and IT businesses. Nortel expands his business very ambitious. Nortel invents MASP with cooperation of EBA, iPlant; gets Customer OSS from Portal Infranet; ERP applications from EBA, iPlant; system management tool from HP openview

Vantagepoint; the CRM system from Clarify eFrontOffice Product Suite.

IBM Global Services general manager Andrea Pontremoli calls “on demand IT services”, purchasing IT infrastructure as a service will be the new alternative to investing in capital and skills, and to IT outsourcing. To keep corporate “core competence” and e-source others will be the way to speed up business, make organization alive.

Furthermore, internet is now the center of business, customers, suppliers, and business partners deal directly with a firms web server. CNM/CRM needs a web site to personalize the care or service to targeted person. Digital Nervous System emphasizes the real time digital information flow and process within a company, and digital dashboard emphasizes a business personal portal to present computerize business view and guide the business process for a dedicated employee. It is to say the major player for a manager, a representative, or an agent is now transferred from a person to a IT.

***To run a business, we need to do our homework and use our own services corporate-wide:***

Years ago, we CHT people sales mobile phone service without having a mobile phone himself. Now, we sale IN service without enough IN usage experience internally, we sale video conference services and we do not use the service we provide. How about ADSL services?

We know Microsoft product is first widely used with MS company, IBM notebooks are first used IBM company. I saw every IBM people has a notebook and PDA wordpad accompanying , they share and exchange their business information by just put two wordpads face2face. Now we are going to sale ASP services without an well-run ERP and eletronic counter/business experience.

SAP likes to invite his users as his partner. We visited Deutch Telecom. to see his ASP business using SAP applications. DT has been a long time users of SAP ERP software, so

DT has enough qualified employees and experience to run the business.

We need to have a policy to use our services, our IDC, our ASP, our Vconference, our VPN, our IN, our VoIP, etc.; furthermore, to use commercial services, to rent, to e-source, to share, etc. We need to integrate or cooperate outside resources horizontally and vertically.

### ***3. IDC/ASP 服務產品 for CHT:***

- **Data Center Facility** – where the physical infrastructure, plus environmental systems and network connectivity are provided to the customer as the platform for all other products.
- **Co-location** – where HiNet houses equipment owned and managed by a customer.
- **Dedicated Web Hosting** – where HiNet provides a server configuration to meet the hosting needs of a single customer.
- **Shared Web Hosting** – where many customers share a single server to meet their hosting needs.
- **Managed Email** – Providing an Email service, a unique address, connection to the Internet, and mail storage. Product tiers include shared email hosting, where several companies reside on the same server, sharing disk space and hardware components, or dedicated email hosting, whereby a customer has a unique mail server.
- **Storage On Demand** – providing a remote storage solution to customers up to pre-agreed limits.
- **Remote Site Mirroring** – providing geographically dispersed web content for

redundancy and network efficiency.

- **Tape Back-up & Recovery** – providing a data archival service for record keeping and data recovery in the event of a disaster or system failure.
- **Dedicated eCommerce** – where HiNet provides and manages a unique eCommerce server per customer.
- **Shared eCommerce** - where HiNet provides and manages an eCommerce server utilized by multiple customers
- **Application Management** – where HiNet hosts software applications designed to monitor and update / replace software components on customer workstations.
- **Collaboration Tools** – where HiNet hosts software applications designed for internet based collaboration e.g. net-meeting, iplanet.
- **Content Delivery Solution (CDS)** - to push replicated content close to the network edge, monitor server load, geography, congestion and traffic statistics, as well as decide 'best' way to deliver requested content to users/subscribers.

#### ***4. Nortel ASP Serviceware MASP***

MASP addresses the following functional areas:

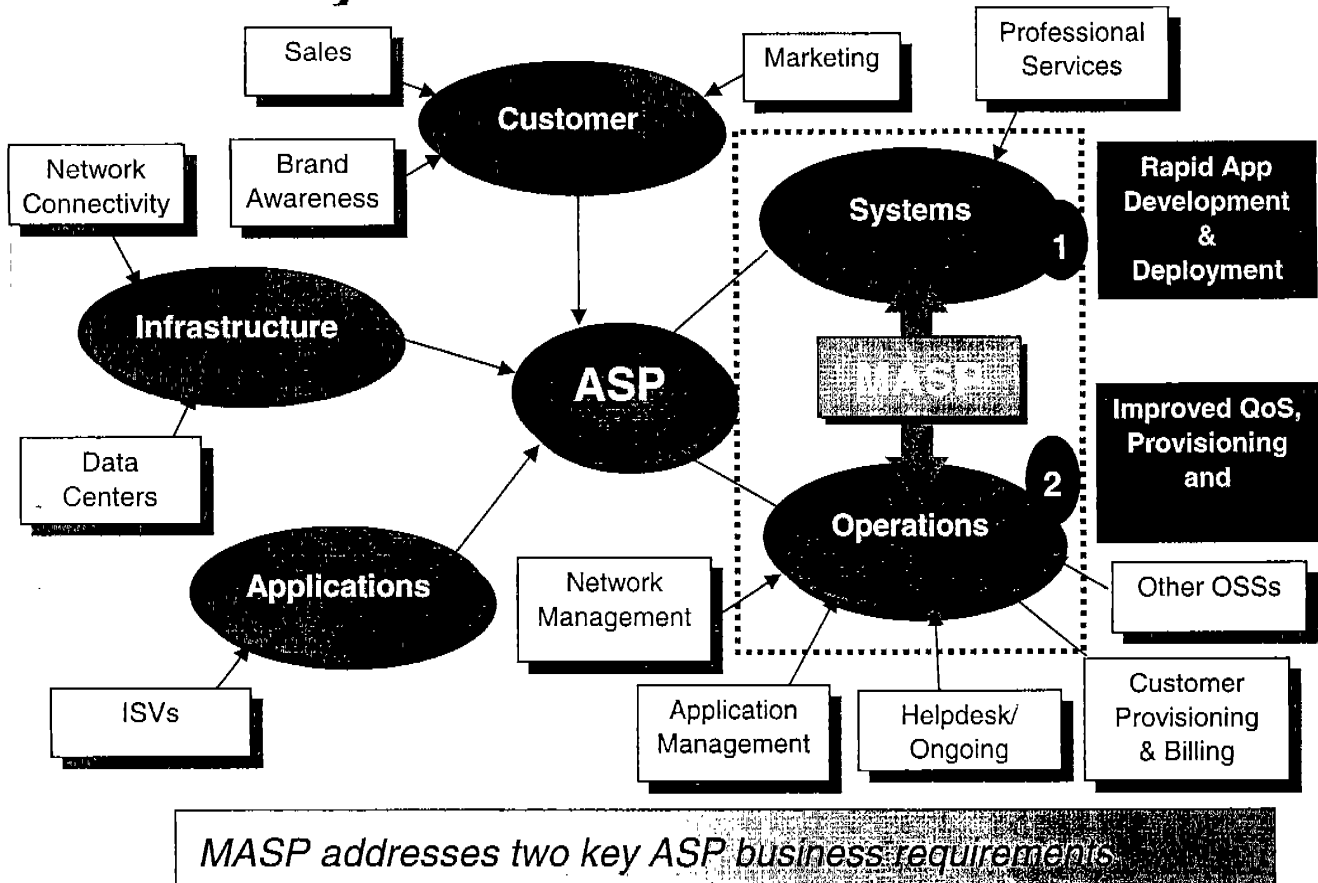
- **Application Access:**
  - Access security, remote access, multi-channel access, custom portals
- **Customer Administration:**
  - Customer provisioning, CRM
- **System Administration:**
  - Application provisioning, application management, version monitoring and control,



system upgrades, patches, partitioning, data management

- Operations:
    - Logs, outage management, alarms, audits, usage monitoring, billing event capture, system management
  - System Performance:
    - QoS, SLA, load balancing, network aware applications, software distribution
- End-user applications, workflow, application interactions, adapters
- Application Integration:

## Key Areas for ASP Success



## ***5. SAP's Solution for IDC/ASP***

### **MySAP.com**

SAP's solution for Internet marketplaces is mySAP.com. mySAP.com forms the foundation for business collaboration scenarios with a reach from back-end to front-end. There are four components in the mySAP.com solution – Workplace (the enterprise portal), Marketplace (the live e-Market), Business Scenarios (Industry ERP applications in the e-platform), and Application Hosting, which in combination offers the full spectrum of solution for SAP's customers.

### **mySAP.com Application Hosting Service Offering**

The SAP service offering, mySAP.com Application Hosting, marks the fourth main building block of mySAP.com, along the Marketplace, the Workplace, and the Business Applications. It is a comprehensive offering of hosting services, provided by SAP and its partners, that spans the entire solution life cycle of mySAP.com: from evaluation to implementation, operations, and continuous improvement. mySAP.com Application Hosting enables companies to plug into the Internet community more easily and faster than ever by simultaneously accelerating the implementation process, reducing costs, and increasing the quality of the solution. Customers now have higher flexibility regarding how the solution is provided to them - only parts of it or the entire suite - and can decide the level of hosting they want. They can defer hardware investment or even avoid it entirely by choosing the service offering that best fits their needs.

As there is a significant demand for web-based hosting solutions, SAP formed a new company, SAPHosting, dedicated to this rapidly growing business. Together with its partners the SAP owned-company will help to satisfy the exploding demand for professional Internet business solutions. SAPHosting and its mySAP.com Hosting Partners offer full high-quality hosting services for enterprises of all sizes.

The following services are offered:

#### **Application Service Provision (ASP)**

The SAP ASP offering combines software, implementation, infrastructure, service, and support. It is backed by a rapid implementation philosophy that enables one-stop shopping at the lowest cost of operation and implementation. With the one-to-many SAP ASP model, customers can have a standardized full service pack-age that is accessible via networks and the Internet at any time, from any place, by any person. SAP and its mySAP.com Hosting Partners will offer Application Service Provision (ASP) based upon SAP applications and Internet technologies. With the hosting solution ASP customers can achieve the productive usage of the mySAP.com solution in as little as ten days. ASP covers generic and industry solutions. The mySAP.com ASP solution is fully web enabled and is supported 24hx7. Via ASP, companies of all sizes especially small & midsize enterprises - can gain greater access to software that they could otherwise not afford. Large companies benefit from ASP because it removes the maintenance consideration of software upgrades and distribution. It also helps large companies to standardize the same software applications and versions. ASP solutions offer the possibility to get e-business solutions up and running quickly and by this accelerate

the speed to market for new business functionalities.

### **Application Hosting**

If customer's configuration requirements go beyond the scope of the packaged ASP solution, SAPHosting can implement the more specific solution, and -if requested - hosts it afterwards. Full applications are run and maintained in a central processing facility. The basis for pricing is either a paid-up or per-user/per-month license pricing. In the Application Hosting model, the licenses are owned by the customers. With Application Hosting customers benefit from significantly decreased implementation costs. If the customer decides to buy own hardware, this decision can be postponed to a later date, so customers will have no upfront investments. The training efforts can be decreased when the implementation phase is hosted.

### **Application Management**

Application Management provides focused and trained personnel and tools to maintain applications processing. This service is available at off-site data centers, or performed at a customer<sup>TM</sup>s site. Customers may own and operate hardware separately and usually already own the licenses. With Application Management, enterprises can concentrate on their core business processes and do not have to invest a great deal of time and money to get specialized expertise for the operation of the SAP System. Companies get greater flexibility - also depending on the type and scope of Application Management. High-quality services from specialists boost performance of the relevant processes. The customer gets excellent value for cost by utilizing the synergies offered by SAP<sup>TM</sup>s Hosting Partners.

## **Hosting of Marketplaces**

SAP Hosting hosts your own marketplaces or business communities with your individual partners, customers, vendors and builds Marketplaces in cooperation with SAP Markets. Marketplaces and business communities offer a unique platform for business-to-business processes and collaboration, as well as for business-to-consumer transactions. They will open up a world of possibilities for shared business operations – such as virtual inter-company personnel departments.

## **Applications**

In addition to the business directory and the possibility to exchange structured business documents, the mySAP.com portal also provides a wide variety of additional applications that the visitors can use. Below examples include customer relationship management and distributor reseller management.

- **Customer relationship management (CRM):** The Internet is a critical platform for CRM. The CRM solution at mySAP.com supports this platform by providing self-service tools for existing and prospective customers.
- **Distributor reseller management (DRM):** DRM is a mySAP.com application that supports the negotiation process for agreements between producers, distributors, and traders. This Web-based solution can enormously reduce both the time needed for negotiations and the number of individual communications that are required. mySAP.com contains various other marketplace applications as well. In a further area, SAP partners offer their services directly through mySAP.com.

## 6. 結論

AT&T 10 月底分家，bundling service 不再被視為客戶重視的價值(商業週刊 678 期林亞偉)，summed value > original value。對照 1984 年 7 baby bells split、1995 年 Lucent 及 NCR split；看來 split、alliance、joint venture，本身具有 core competencies 是電信資訊業界趨勢；也有人提到現在是以 share information、以客為師的資本主義原則。為 E Business/Commerce 重點的網路資料庫、供應鏈、價值鏈、與 e-mart 已提供一個 information sharing、專而美、服務導向的開放競爭與合作市場。此次與總公司郭吉松工程師赴 IBM、SAP、與 Nortel 考察，IBM demo 技術 (如 Java card、facial recognition、EC)，SAP 介紹企業軟體應用，Nortel 介紹系統整合與網路。IBM 與 SAP 是希望別人推廣與使用它們產品、它當地主別人做佃農，Nortel 利用合縱連橫進入新市場與推銷原電信產品、它已認為以後的大餅在應用在上層。職以為 CHT 目前少資訊服務與商務業務，故 IDC/ASP 業務初期仍應優先 co-location 與 hosting，千萬 web site 不賺錢、我仍收場地與入出 bandwidth 租金，投入 ASP 需建立可大可久的 ASP 維運系統、需掌握自己使用自己控制的少數主流應用 ASP 產品(如 video conference、SME e-mart、wireless e-booking mart、community/virtual enterprise ERP 等。) 如何讓員工先一步熟悉這些產品、如何用網路商業新服務產品即時化公司資訊流、委外或 e-source 以降低公司營運成本與資產人力？毛董之新世紀願景提出價值創造、提出垂直水平分工數據業務價值鏈，Nortel 很快投入 EC, IDC/ASP 等資訊領域、正是毛董所宣示建立虛擬企業新商務模式之範例。