Internet, Intranet and Extranet

Andreas Soegandi
Applied Technology Laboratories
Universitas Bina Nusantara

Network Advantage

- Resource Sharing
  - Programs, data and peripherals are available to all parties without physical dependencies

- High Reliability
  - Data replication and availability on more than one computer

- Saving Money
  - Price – performance ratio of small scale(personal) computers is higher than large scale computers

- Communication Medium
  - Make communication process easier
Business Challenges

- Globalization
- Deregulation
- Rising customer expectations
- Merger / acquisitions
- Speed

Definitions

- **Internet**
  Internet is a network of networks of computer hosts able to seamlessly communicate, usually through the Internet protocol (IP) and Services

- **Intranet**
  An intranet is an exclusive version of internet on an organization which enables people inside the organization to share information easily
Extranet
An extranet is a private network that uses the Internet Protocol and the public telecommunication system to securely share part of a business information or operations with suppliers, vendors, partners, customers or other businesses.
Intranet Infrastructure

- Internet
  - Firewall
  - External FTP Server(s)
  - Gateway
  - External Web Server(s)
  - Corporate Web Server(s)
  - Corporate DB Server(s)
  - Mail / News Server(s)
  - Gateway
  - Corporate Web Server(s)
  - Corporate DB Server(s)
  - Web Server(s)
  - FTP Server(s)
  - Database Server(s)
  - Users

Frameworks

- Management
  - Policies and Standards
  - Network Management Software
  - Security
  - Content and Data
  - Software Tools
  - Firewalls
  - Passwords
  - Encryption
  - Authoring Tools
  - Development Tools
  - Search Engine
  - Infrastructure
  - TCP/IP Network
  - Hypermedia Database
  - Servers
  - Browsers
Basic Applications

- Communications and Collaboration
  - Collaborate with mail, discussions, calendaring and conferencing
- Business Operations and Management
  - Universal access to view and use corporate data
- Web Publishing
  - Author, publish and share documents
- Network Management
  - Centrally administer clients, security, directory and traffic

Establishing ROI

Sample (simplified) calculation:
- number of transactions per day without an extranet = 1,000,000
- number of transactions per day with an extranet, if increased 10 percent = 1,100,000
- delta before and after extranet = 100,000
- charge per transaction cleared = $50
- total amount charged for additional transactions per day = $5 million (100,000 transactions x $50 per transaction)
- number of trading days per year = 252
- total amount of new business earned from the extranet in one year = $1.2 billion
- total amount spent on all extranet-specific solutions = $10 million
Competitive Advantage

- Customer Service
- Support
- Order Entry
- Extended Supply Chain
- Remote Development Projects

Risks

- Security
- Dependence of computer
- Time lost to learning new tools and methods
- Documents lost in transition
- Change!
Rewards

- Improve communications
- Track documents
- Work together
- Project memory
- Audit trail
- Faster, fewer mistakes
- On time, within budget

Opportunities

- Expanded market coverage through Web storefronts, e-commerce
- Knowledge sharing and productivity gains through intranets
- Streamlined supply chains through extranets
- Improve customer service
What’s Next

- E-Commerce
- Knowledge Management
- Business Intelligence
- E-Service