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e-business Infrastructure

"Technology for Business"

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Software Group

- Information Lotus
- Rational
- Tivoli
- WebSphere

IBM Global Services


- Business Consulting
- Integrated Technology
- Strategic Outsourcing

Systems and Storage Group

- System - I
- System - p
- System - x
- System - z
- Blades
- Disk / Tape / ...

Technology Group

- Microelectronics



320,000+ EMPLOYEES
OPERATIONS IN 174 COUNTRIES
> \$90 ANNUAL REVENUE

Industry

- Communications
- Distribution
- Financial Services
- Industrial
- Public
-

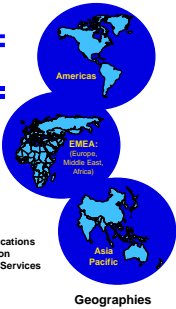
Research

- Zurich, Almaden, Austin, New York, Haifa, Delhi, Beijing, Tokyo

IBM Global Financing

- Leasing
- Financing

Geographies



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IBM Values ...

Dedication to every client's success

Innovation that matters,
for the IBM company and for the world

Trust and personal responsibility in all relationships

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IBM Research Worldwide



5 Nobel Laureates

#1 In U.S. Patents – now 13 years in a row

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IBM Software - Research & Development Locations




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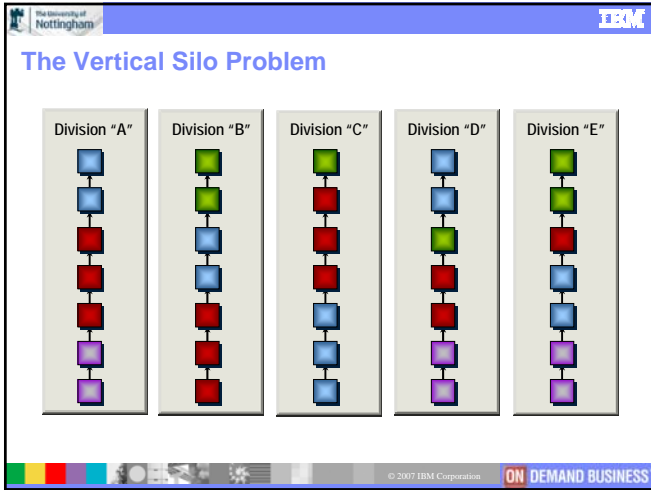
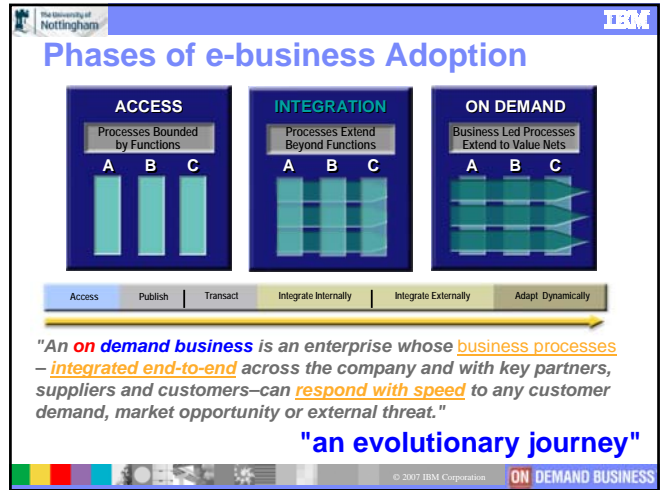
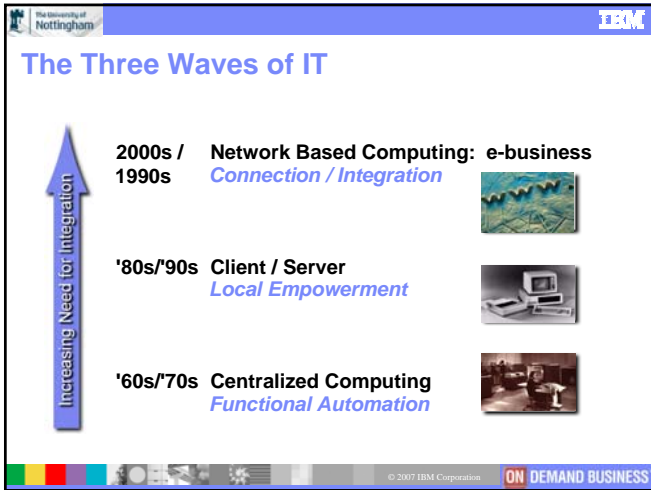
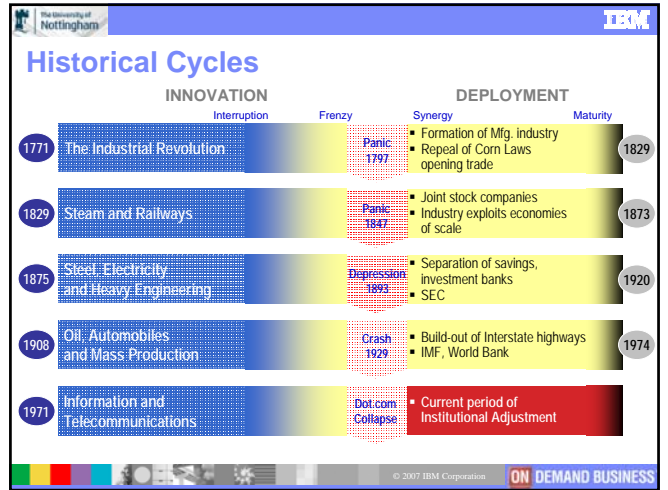
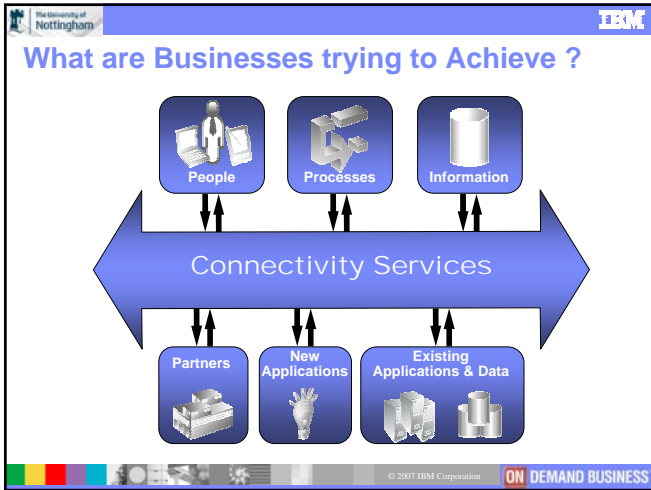
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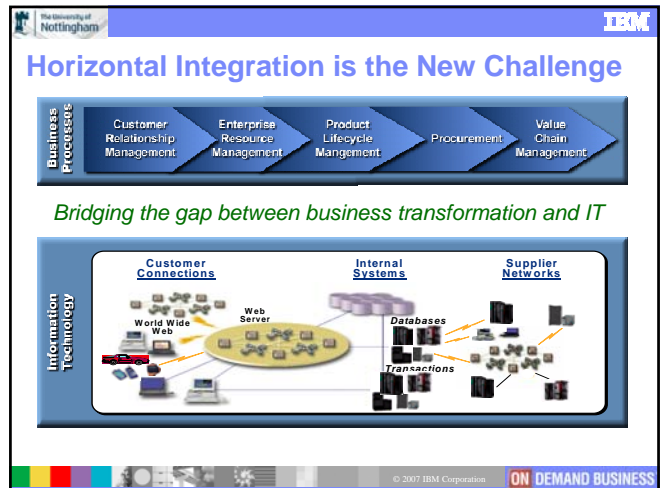
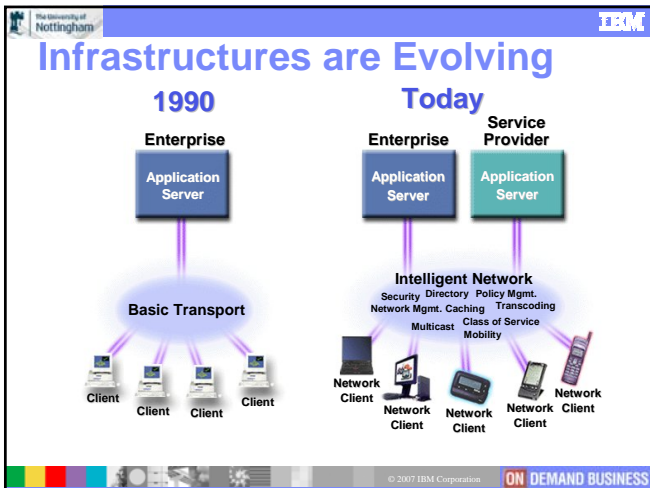
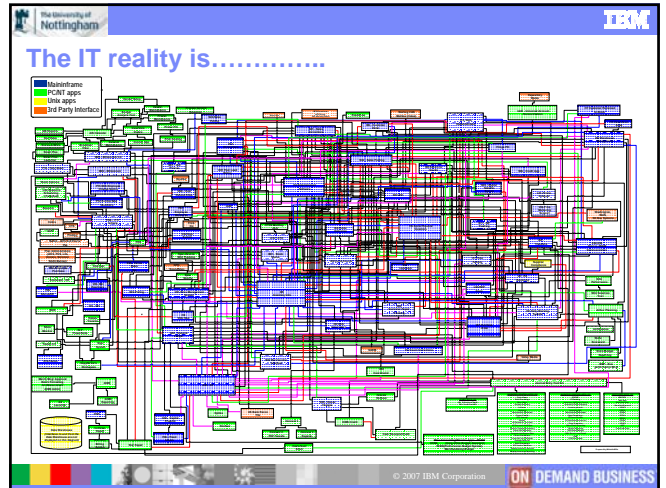
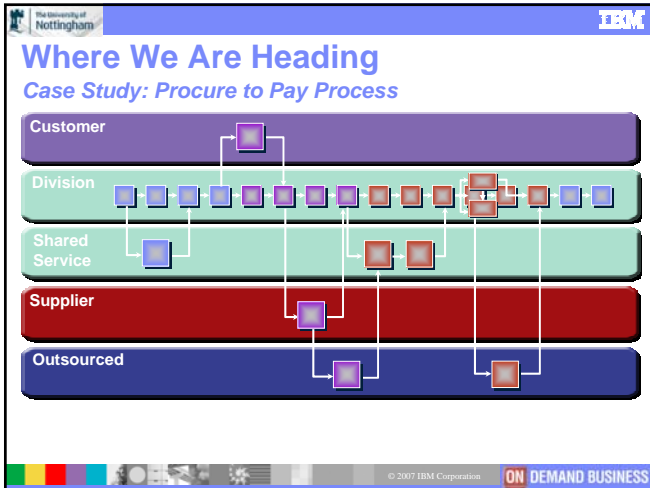
Integration is the Key

Connecting All the Dots



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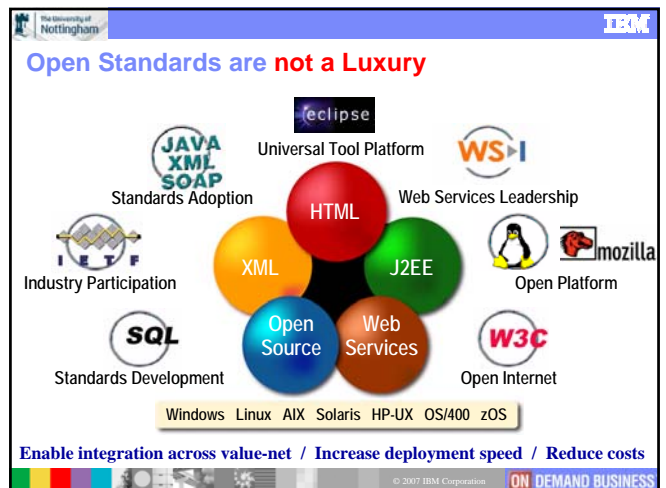




Quality of Service Requirements

	SIMPLE	INTERMEDIATE	ADVANCED
Scalability	200	2,400	18M
Transactions volume/Day			
Interoperability	2	4-8	8-16
Number of participants applications types			
Availability	\$1K	\$200K	\$20M
Cost of outage/Human resources			
Security	\$1K	\$2M	\$20M+
Risk of Breach			
Flexibility	5%	10%	75%
% of data Required			

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Software for an On Demand Infrastructure

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Software Development Drives Innovation

Source: Mercedes
* Gartner, April 2003, Embedded Software Development and Management - Automotive Industry

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Today, many people work like this...

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People could work like this ... personalised and integrated with the business role

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Virtualization of Integration

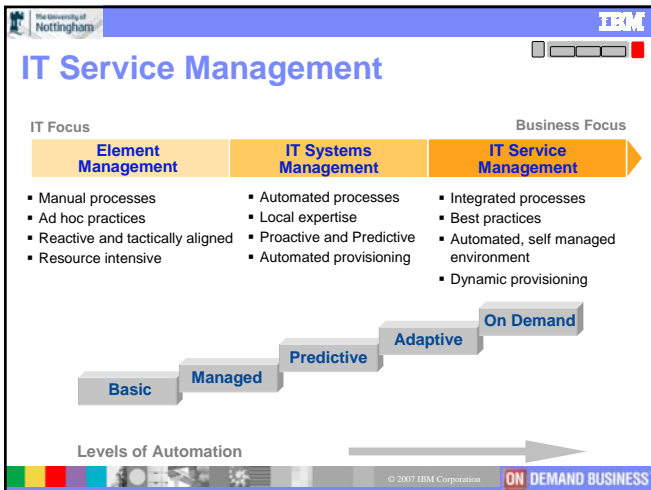
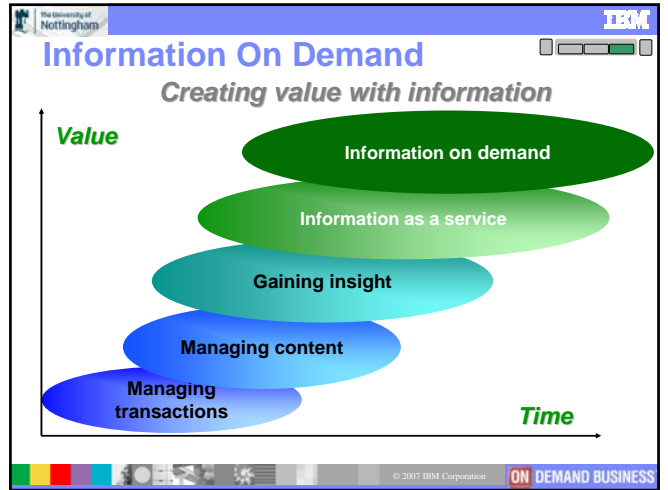
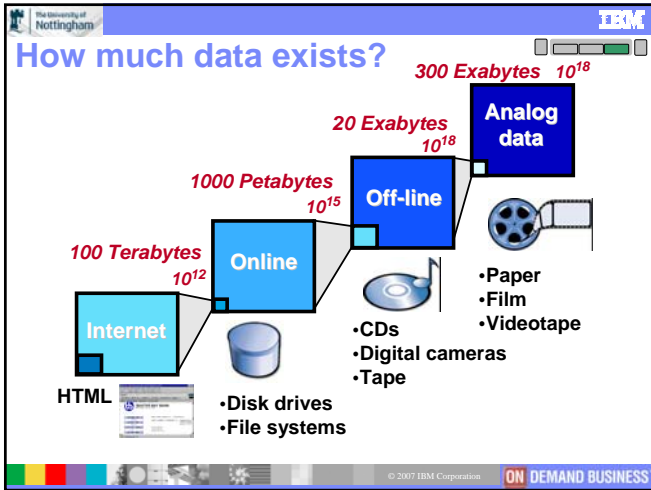
"Desktop of the Future"

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Evolution of integration technologies...

Technology	Lines of code	Degree of Flexibility and Re-use
Direct Connectivity	High	Low
Message Queuing	Medium	Medium
Traditional Message Brokering	Low	High
Enterprise Service Brokering	Very Low	Very High

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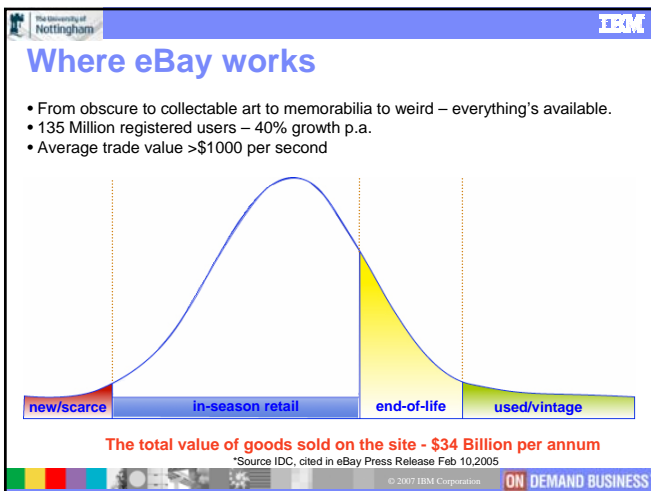


Infrastructure Delivering Business

“With over 8,000 transactions per second, millions of users see how we do our jobs every day.”

- Converted 3 million lines of C++ to Java
- Reuse of Java components driving 1/3 reduction in code base
- 3 times/day, 6 days/week HTML rolls to the site
- Once a week significant feature releases go live-to-site
- Deployed internationally within 3 weeks
- Nearly 30K lines of code change weekly
- 8000 transactions / second
- 1000 million hits per day

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On a typical day, eBay sells.....

- Over 1 million items
- A Video game every 8 seconds
- An article of clothing every 2 seconds
- A car every hour
- A digital camera every minute
- A piece of Jewelry every 80 seconds


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On an average day

- 11 million bids
- makes 9 million database calls
- pumps out 40 million e-mails
- >5 "Libraries of Congress" transmitted
- spews out a log file that's a terabyte in size

> 135 Million users !!

eBay APIs – Driving volumes of transactions



- eBay Web Services supports some 2.5 billion API calls per month
- Approximately half of all listings on eBay.com involve eBay Web Services
- 25,000 outside developers are using the APIs
- Participating developers have produced more than 1,600 applications

