

The Modern Organization in the Global, Web-Based Environment

Introduction to Information System

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Learning Objectives

- Describe business processes and discuss business process management.
- Differentiate among data, information, and knowledge.
- Differentiate between information technology architecture and information technology infrastructure.
- Describe the global business environment and the new information technology infrastructure.
- Discuss the relationships among business pressures, organizational responses, and information systems.

Topic

- Business Processes and Business Process Management
- Information Systems: Concept and Definitions
- The Global, Web – Based Platform
- Business Pressures, Organizational Responses, and IT Support
- Why Are Information Systems Important to Me?

Studi Kasus

- Pemanfaatan Teknologi Informasi

Business Processes and Business Process Management

- Is a collection of related activities that produce a product or a service of value to the organization, its business partners, and/or its customers
- A process has inputs and outputs, and its activities can be measured
- Many processes cross functional areas in an organization, such as product development, which involves design, engineering, manufacturing, marketing, and distribution

TABLE 1.1 Examples of Business Processes**Accounting Business Processes**

- Accounts payable
- Accounts receivable
- Bank account reconciliation
- Cash receipts
- Invoice billings
- Petty cash
- Month-end close
- Virtual close

Finance Business Processes

- Account collection
- Bank loan applications
- Business forecasts
- Customer credit approval and credit terms
- Property tax assessments
- Stock transactions
- Financial cash flow reports

Marketing Business Processes

- After-sale customer follow-up
- Collection of sales tax
- Copyrights and trademarks
- Customer satisfaction surveys
- Customer service contracts
- Customer complaint handling
- Returned goods from customers
- Sales leads
- Sales order entry
- Sales training
- Trade shows
- Warranty and service policies

Production/Operations Management Business Processes

- Bill of materials
- Manufacturing change orders

- Master parts list and files
- Packing, storage, and distribution
- Physical inventory procedures
- Purchasing procedures
- Quality control for finished goods
- Quality assurance audit procedure
- Receiving, inspection, and stocking of parts and materials
- Shipping and freight claims
- Vendor selection, files, and inspections

Human Resources Business Processes

- Disabilities employment policies
- Employee hiring policies
- Employee orientation
- Family and medical leave act
- Files and records management
- Health care benefits
- Pay and payroll
- Performance appraisals and salary adjustments
- Resignations and terminations
- Training/tuition reimbursement
- Travel and entertainment
- Workplace rules and guidelines
- Workplace safety

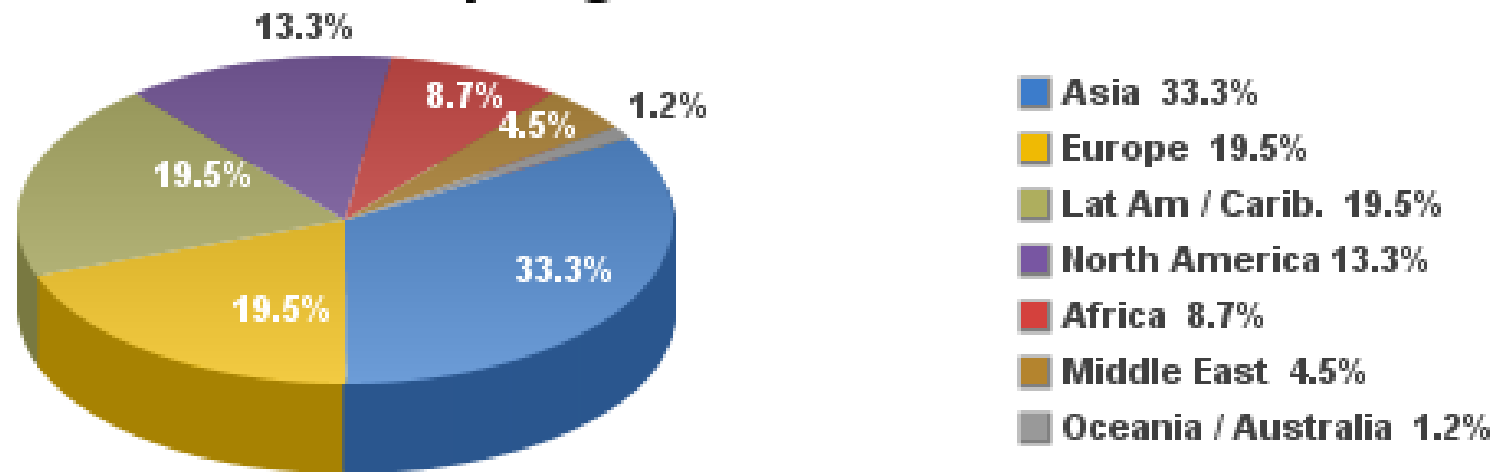
Management Information Systems Business Processes

- Antivirus control programs
- Computer security incident reporting
- Computer user/staff training
- Disaster recovery procedures
- Electronic mail policy
- Internet use policy
- Service agreements and emergency services
- User workstation standards
- Use of personal software

Fact

Latar Belakang

Facebook Subscribers in the World by Regions - June 2016




Source: Internet World Stats - www.internetworldstats.com/facebook.htm

Basis: 1,679,433,530 Internet users on June 30, 2016

Copyright © 2016, Miniwatts Marketing Group

facebook's population

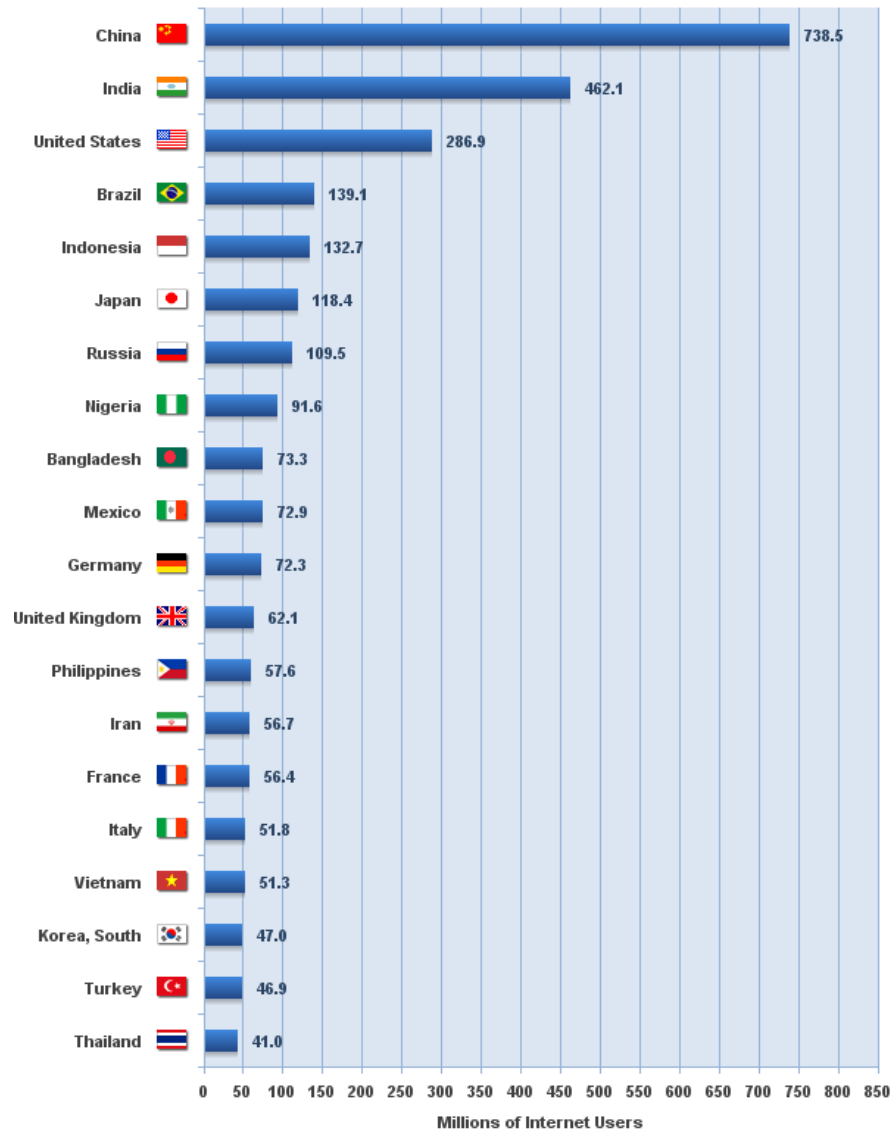
ranked 3rd in the world.

 1. China	1,336,450,000	 6. Brazil	192,651,000
 2. India	1,178,436,000	 7. Pakistan	169,010,500
 3. Facebook	400,000,000	 8. Bangladesh	162,221,000
 4. United States	308,898,000	 9. Nigeria	154,729,000
 5. Indonesia	231,369,500	 10. Russia	141,927,297

Data Source: Wikipedia

Design: TechXav / Zhou Tong

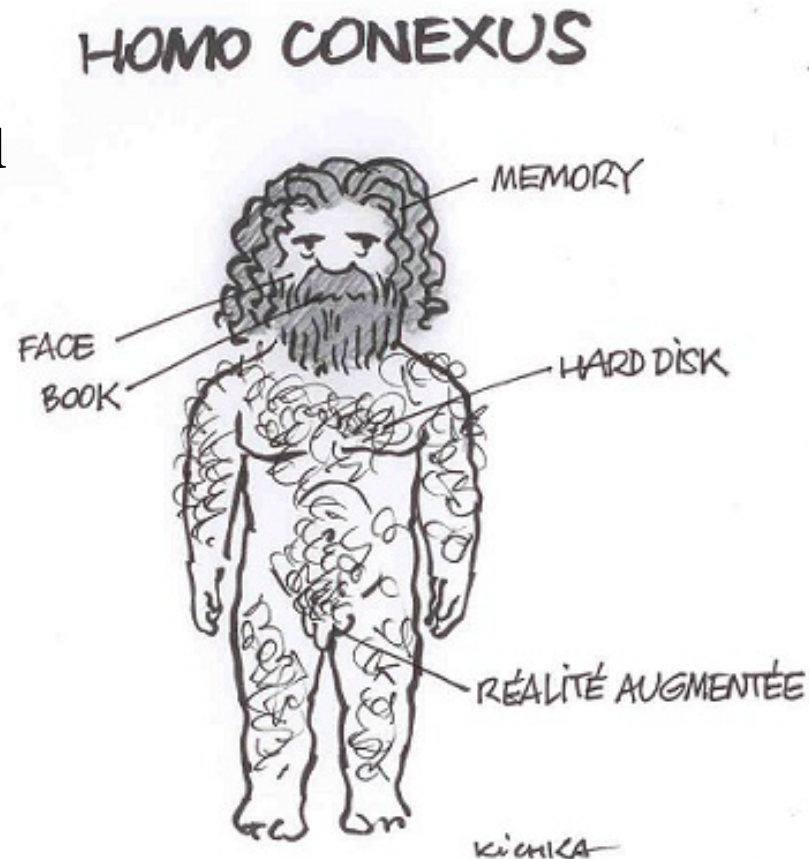
TOP 20 INTERNET COUNTRIES - 2017 With the Highest Number of Internet Users



Source: Internet World Stats - www.internetworldstats.com/top20.htm
2,768,479,939 Internet users in the Top 20 countries as of June 30, 2017
Copyright © 2017, Miniwatts Marketing Group

Homo Conexus

- You are the most connected generation in history
- You practice continuous computing
- You are surrounded by a personal, movable information network



Personal movable information network

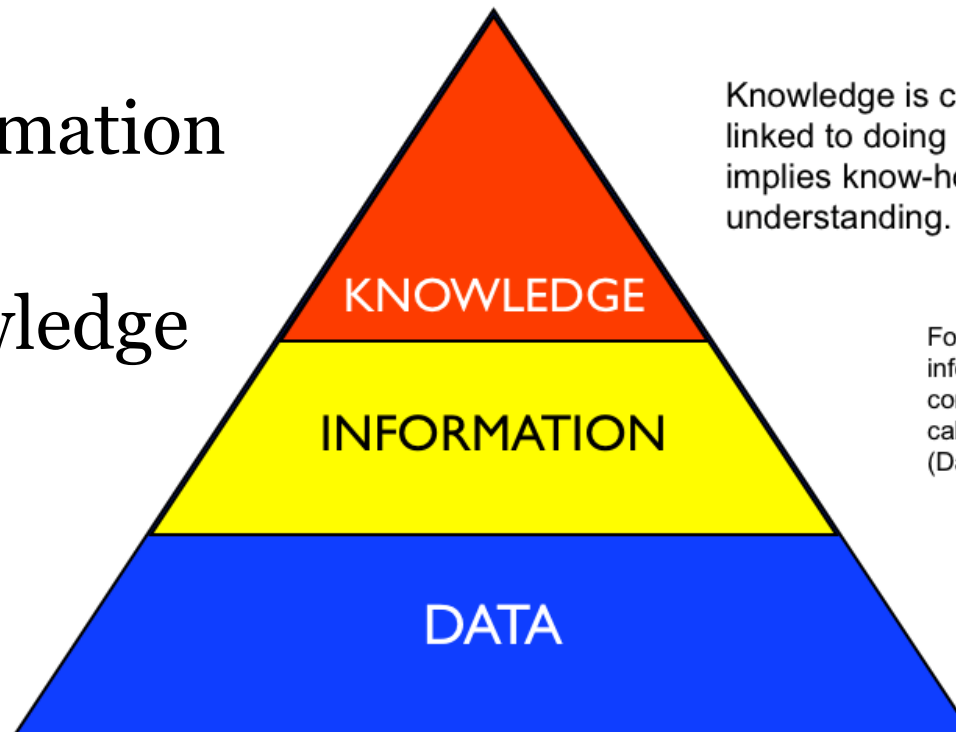


And... Laptop in briefcase!

Information Systems: Concepts & Definitions

Information Systems: Concepts & Definitions

- Data item
- Information
- Knowledge



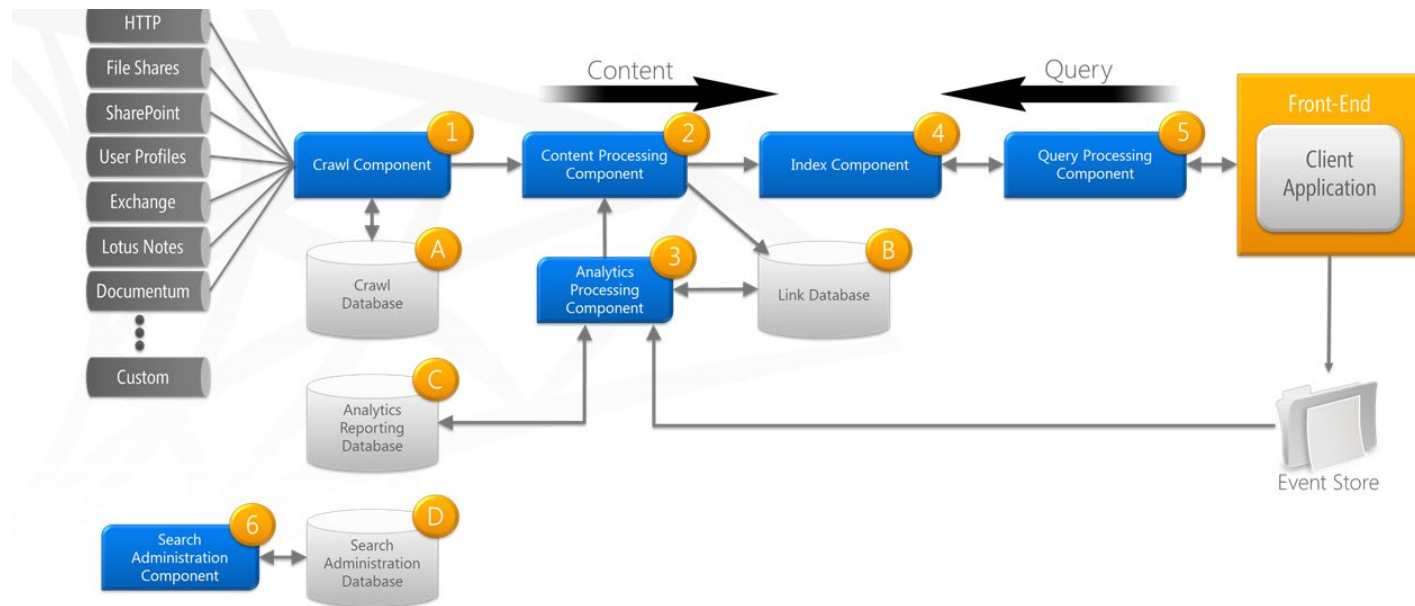
Knowledge is closely linked to doing and implies know-how and understanding.

For data to become information, it must be contextualized, categorized, calculated and condensed (Davenport & Prusak 2000)

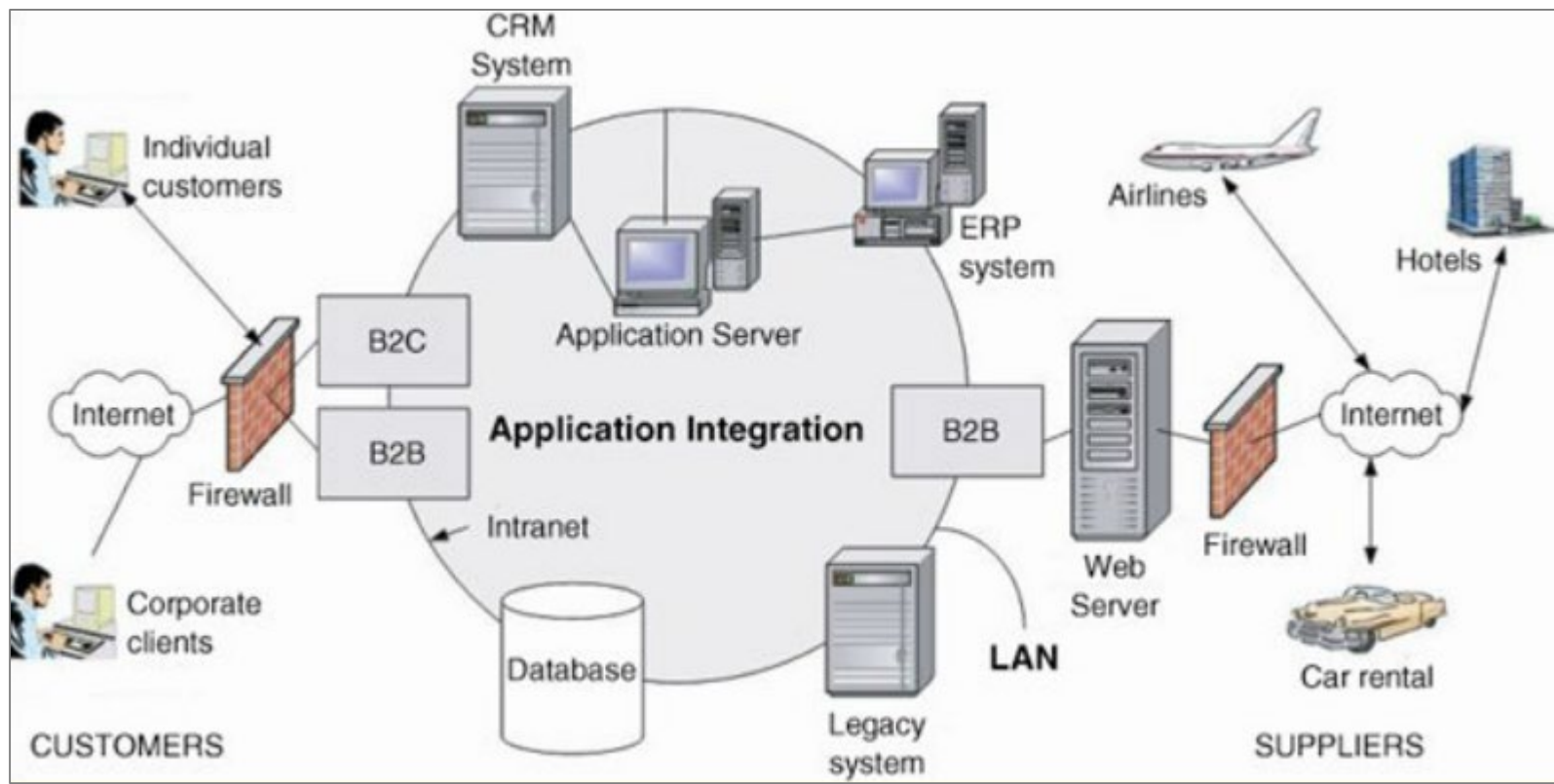
Data is "unstructured facts and figures that have the least impact on the typical manager."
Thierauf (1999)

Information Systems: Concepts & Definitions

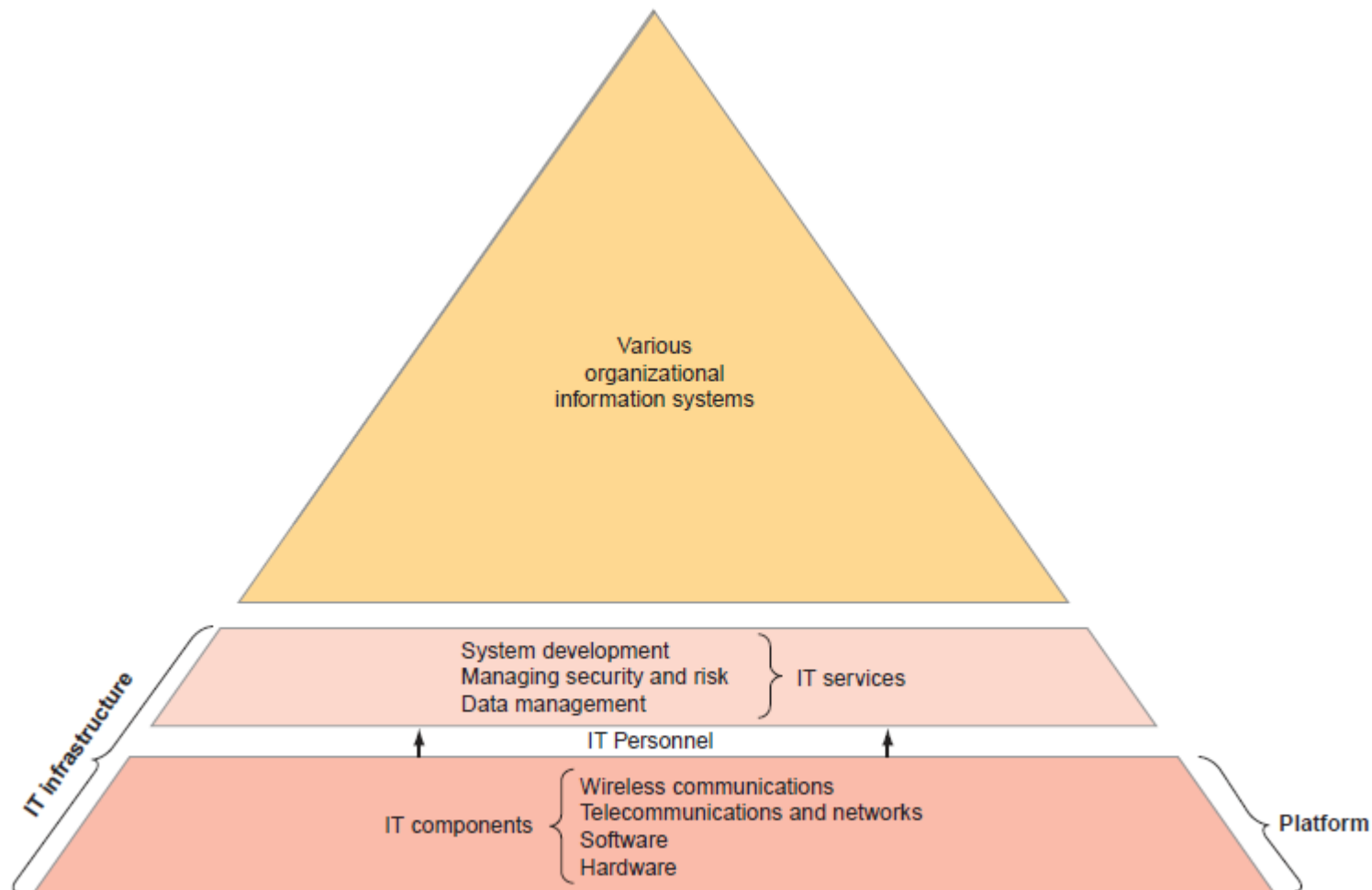
- Information Technology Architecture
- Information Technology Infrastructure



IT Architecture of Online Travel Agency



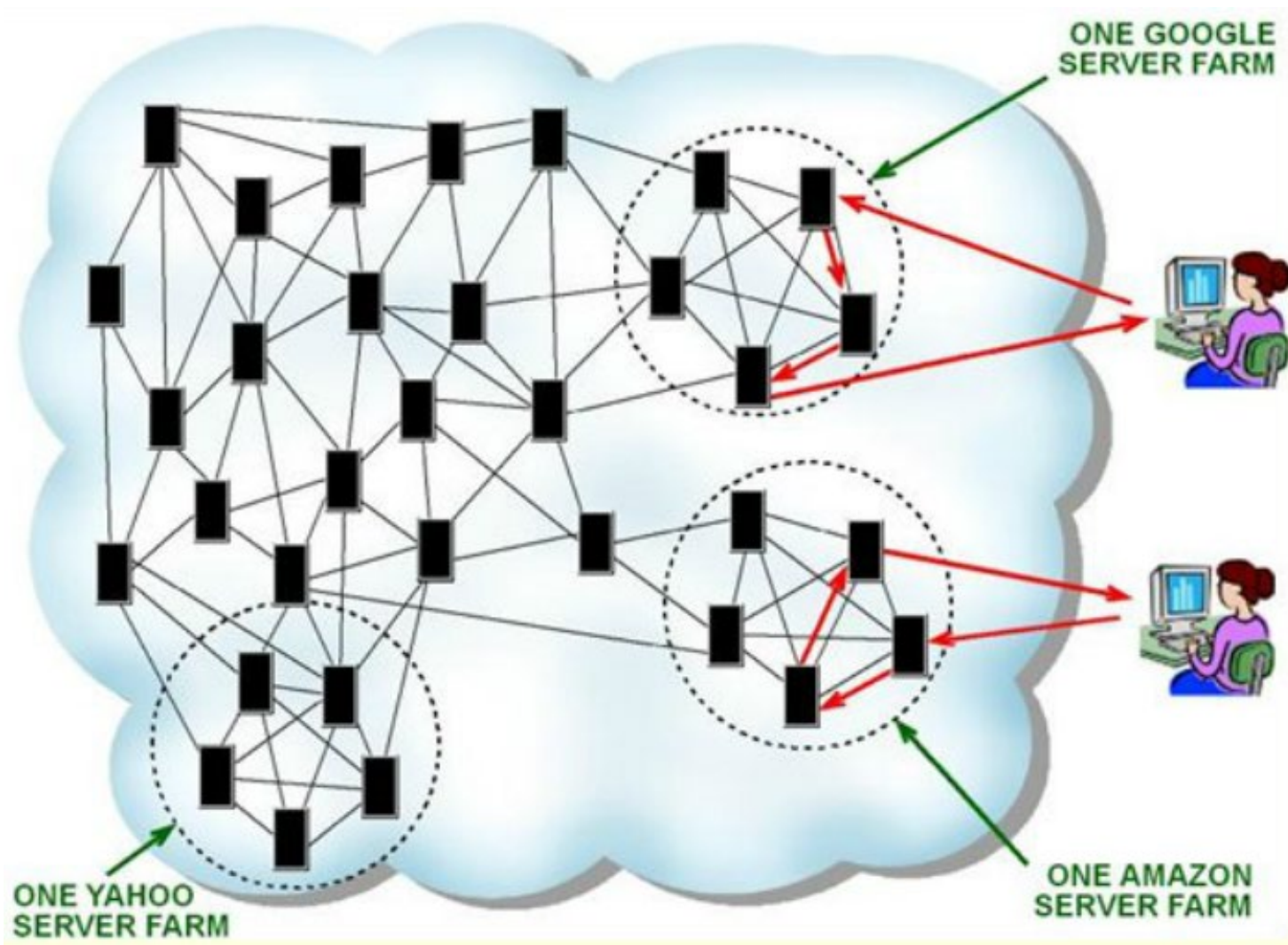
IT Components, IT Platform, IT Services, and IT Infrastructure



The Global, Web-Based Platform

- Best represented by the Internet and the World Wide Web
- Enables us to connect, compute, communicate, collaborate, and compete everywhere and anytime
- Operates without regard to geography, time, distance, and language

The Global, Web-Based Platform



The Stages of Globalization

(From Thomas Friedman in *The World is Flat*)



- Globalization 1.0
(1492 – 1800)
- Globalization 2.0
(1800 – 2000)
- Globalization 3.0
(2000 – present)

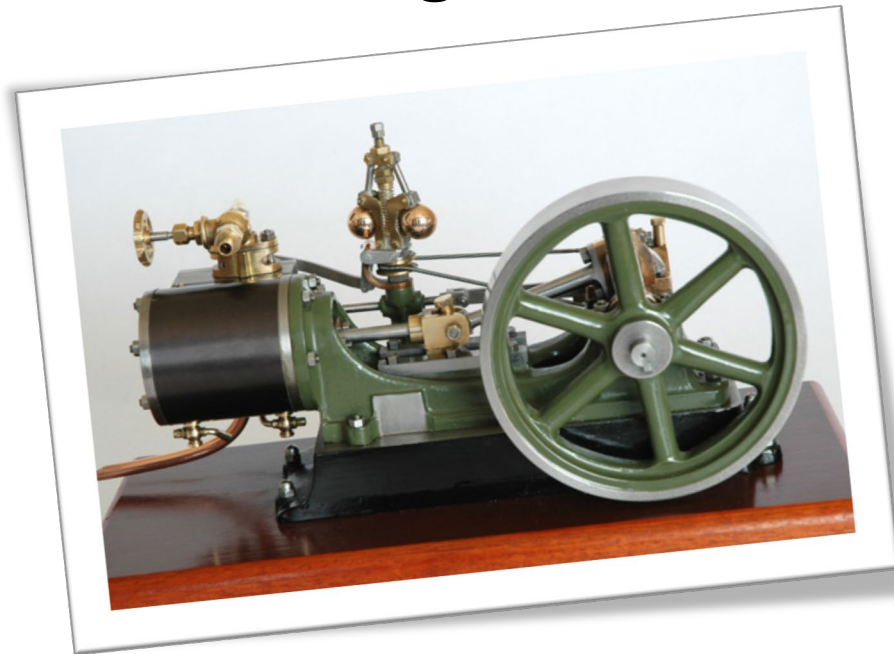
Globalization 1.0



Christopher Columbus

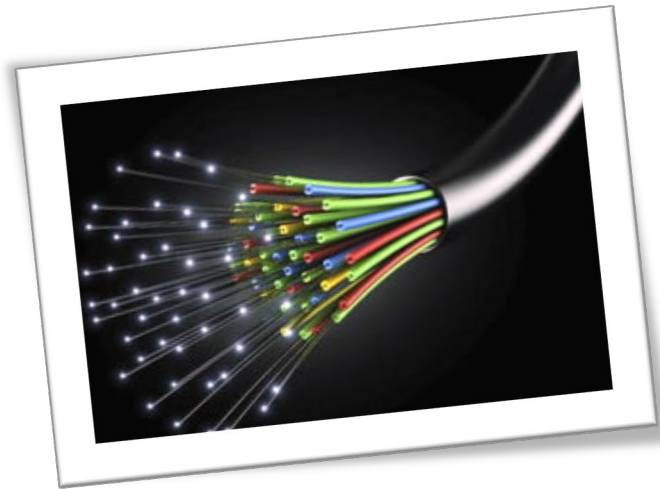
Globalization 2.0 (first half)

Steam Engine

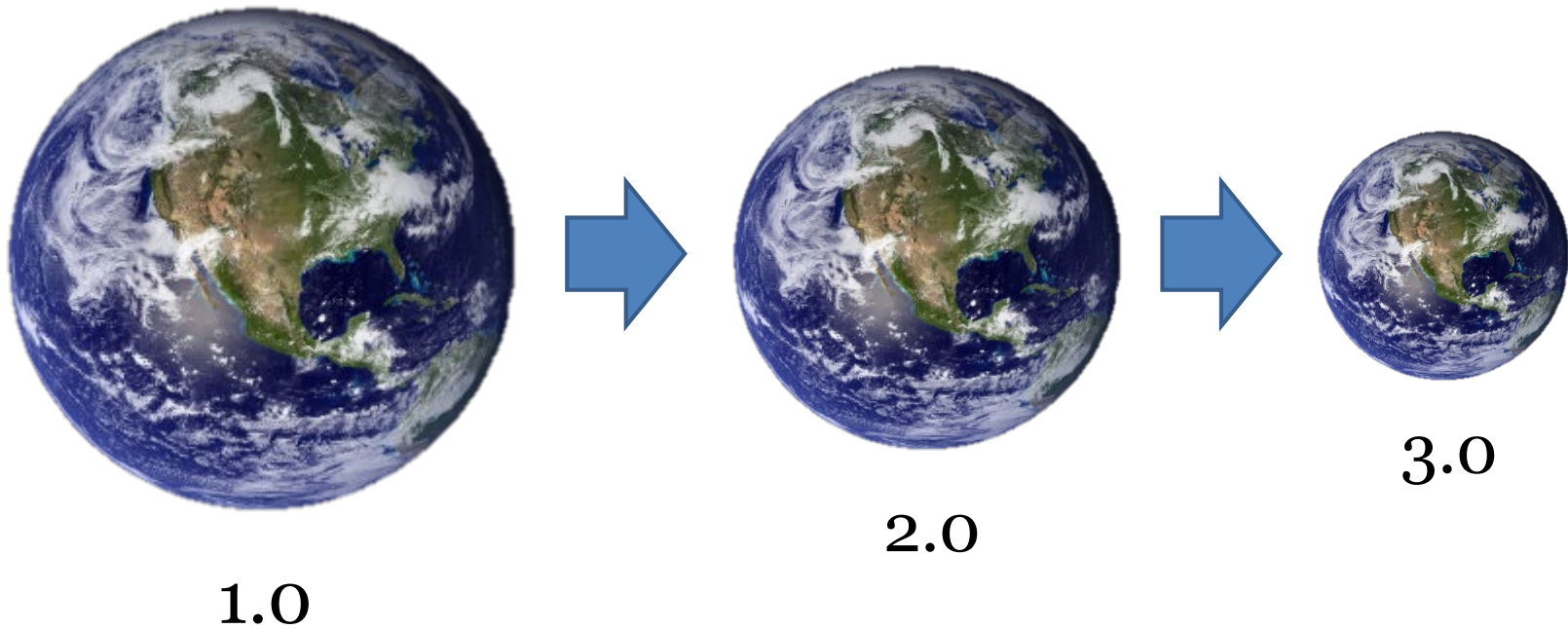


Railroad

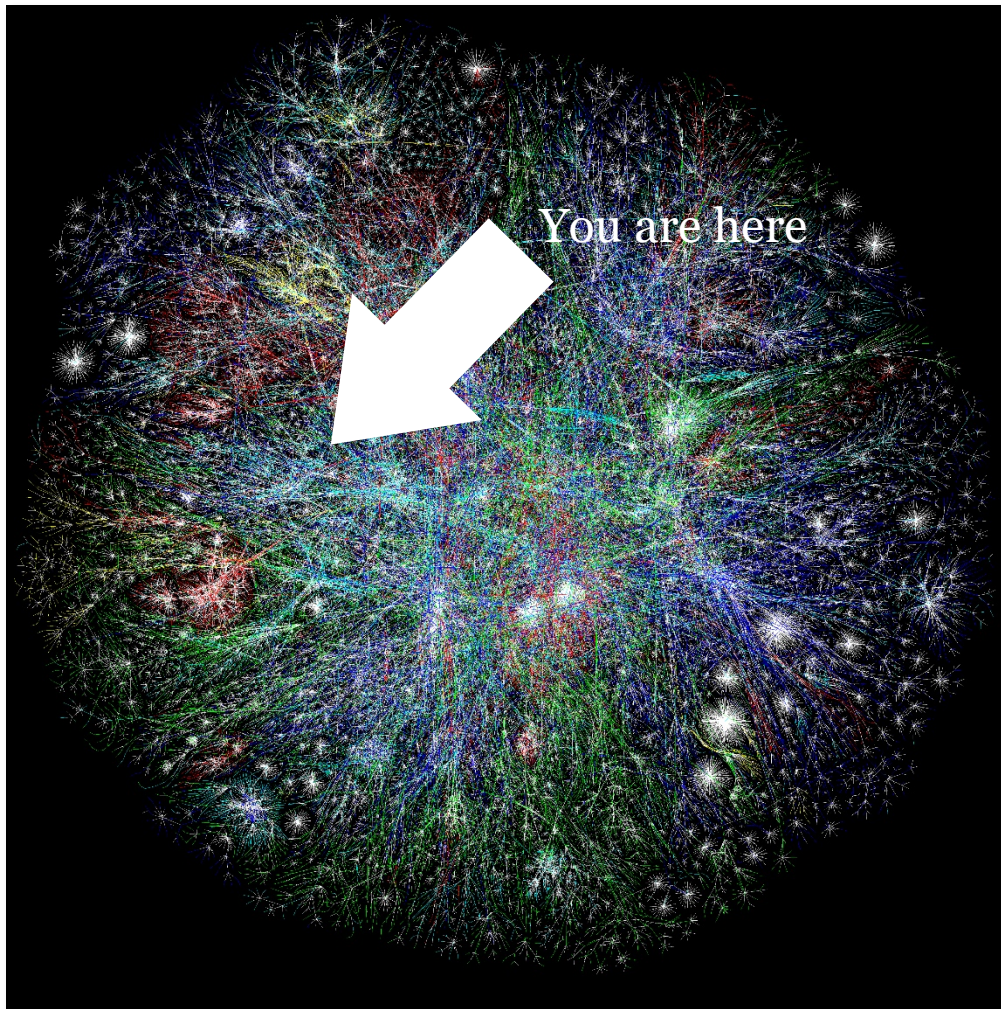
Globalization 2.0 (second half)



Globalization 3.0



Globalization 3.0



schematic map of
the internet

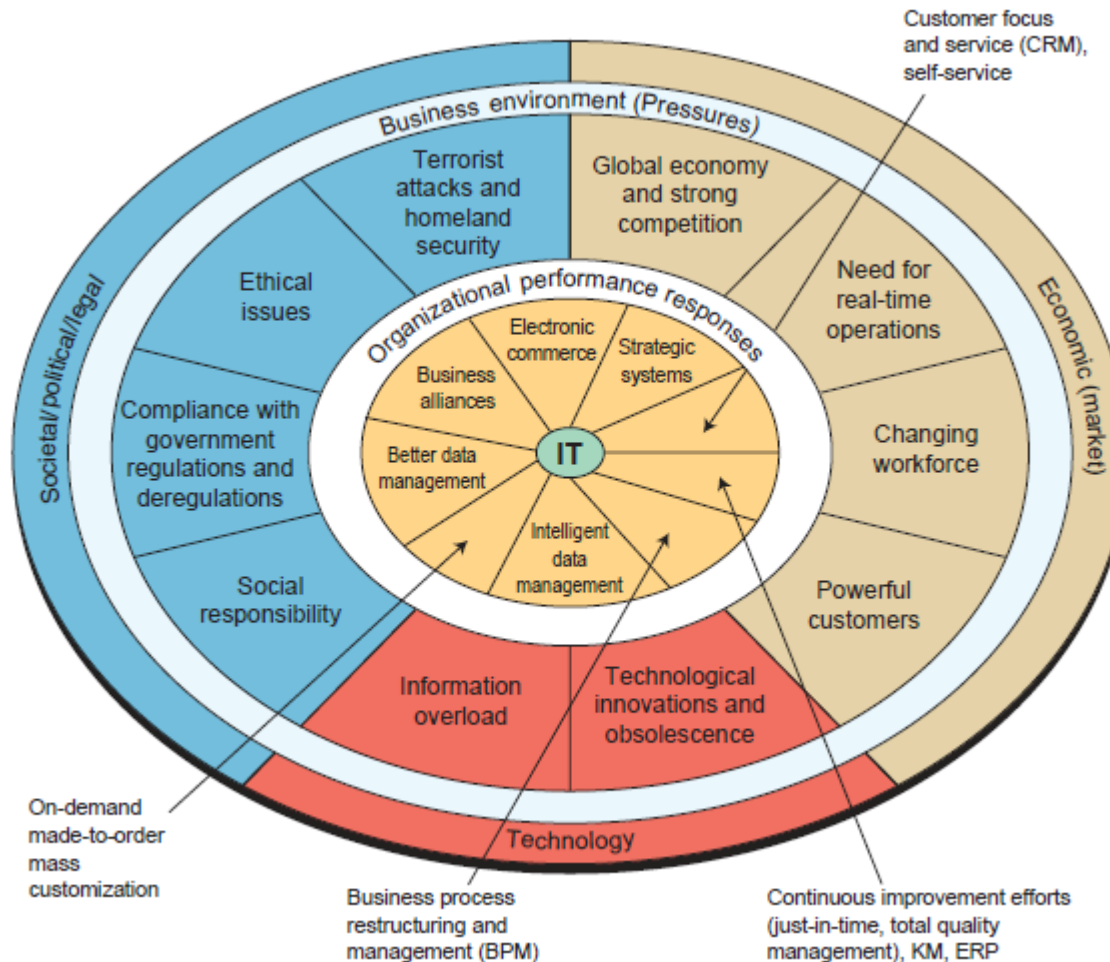
Friedman's Ten Flatteners

- *Fall of the Berlin Wall on November 9, 1989*
- *Netscape goes public on August 9, 1995*
- *Development of work-flow software*
- *Uploading*
- *Outsourcing*
- *Offshoring*
- *Supply chaining*
- *Insourcing*
- *Informing*
- *The steroids*

Business Pressures, Organizational Responses, and IT Support

- **Business Pressures**
 - **Market Pressures**
 - *Global Economy and Strong Competition*
 - *The Changing Nature of the Workforce*
 - *Powerful Customers*
 - **Technology Pressures**
 - *Technological Innovation and Obsolescence*
 - *Information Overload*
 - **Societal/Political/Legal Pressures**
 - *Social Responsibility*
 - *Compliance with Government Regulations and Deregulation*
 - *Protection Against Terrorist Attacks*
 - *Ethical Issues*

Business Pressures, Organizational Responses, and IT Support



Business Pressures, Organizational Responses, and IT Support

- Organizational Responses
 - Strategic Systems
 - Customer Focus
 - Make-to-Order and Mass Customization
 - Bodymetrics

Why Are Information Systems Important to Me?

- Information Systems and Information Technologies are **Integral to Your Lives**
- Information Systems Offers **Career Opportunities**
- Information Systems are **used by all functional areas** in an organization

Misinformation about Information Systems Career Opportunities

- **Myth #1:** There are no computing jobs
- **Myth #2:** There will be no IT jobs when I graduate
- **Myth #3:** All IT-related jobs are moving offshore
- **Myth #4:** Computing and IT salaries are low due to cheaper overseas labor

Any questions?



Referensi

Introduction to Information Systems, Third Edition, R. Kelly
Rainer Jr, Casey G. Cegielski, Wiley

Gracia

Grazie Danke

Thank You

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