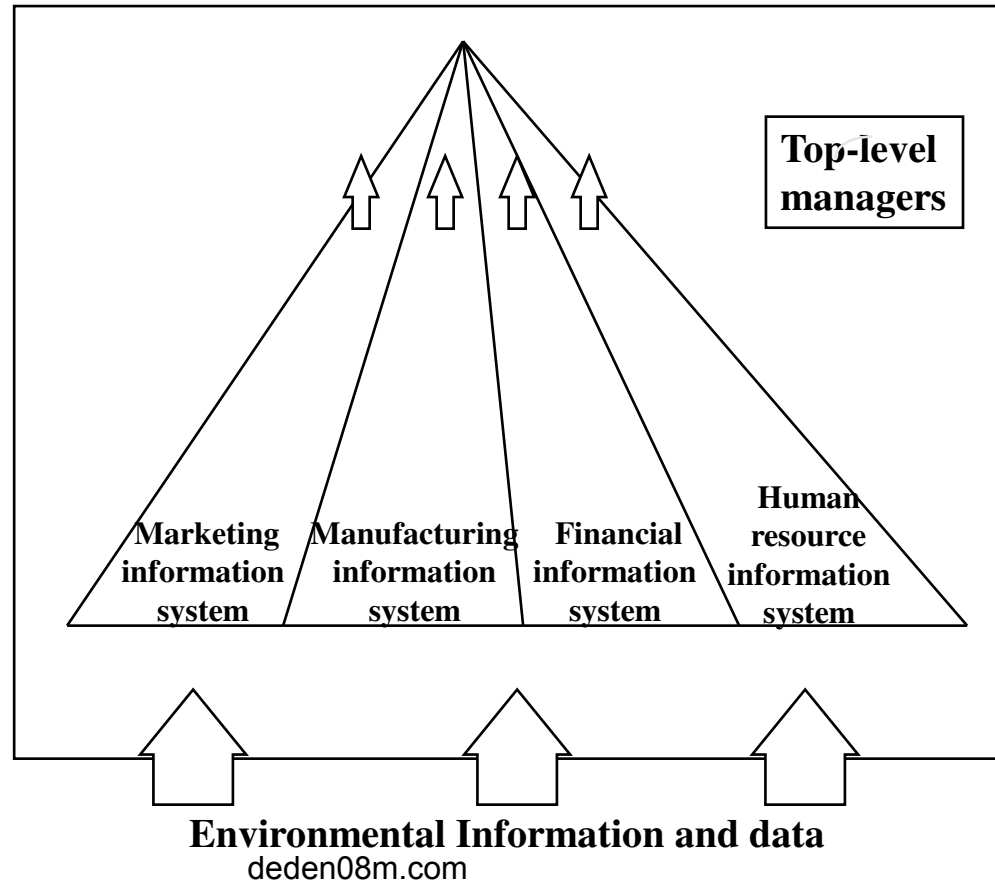
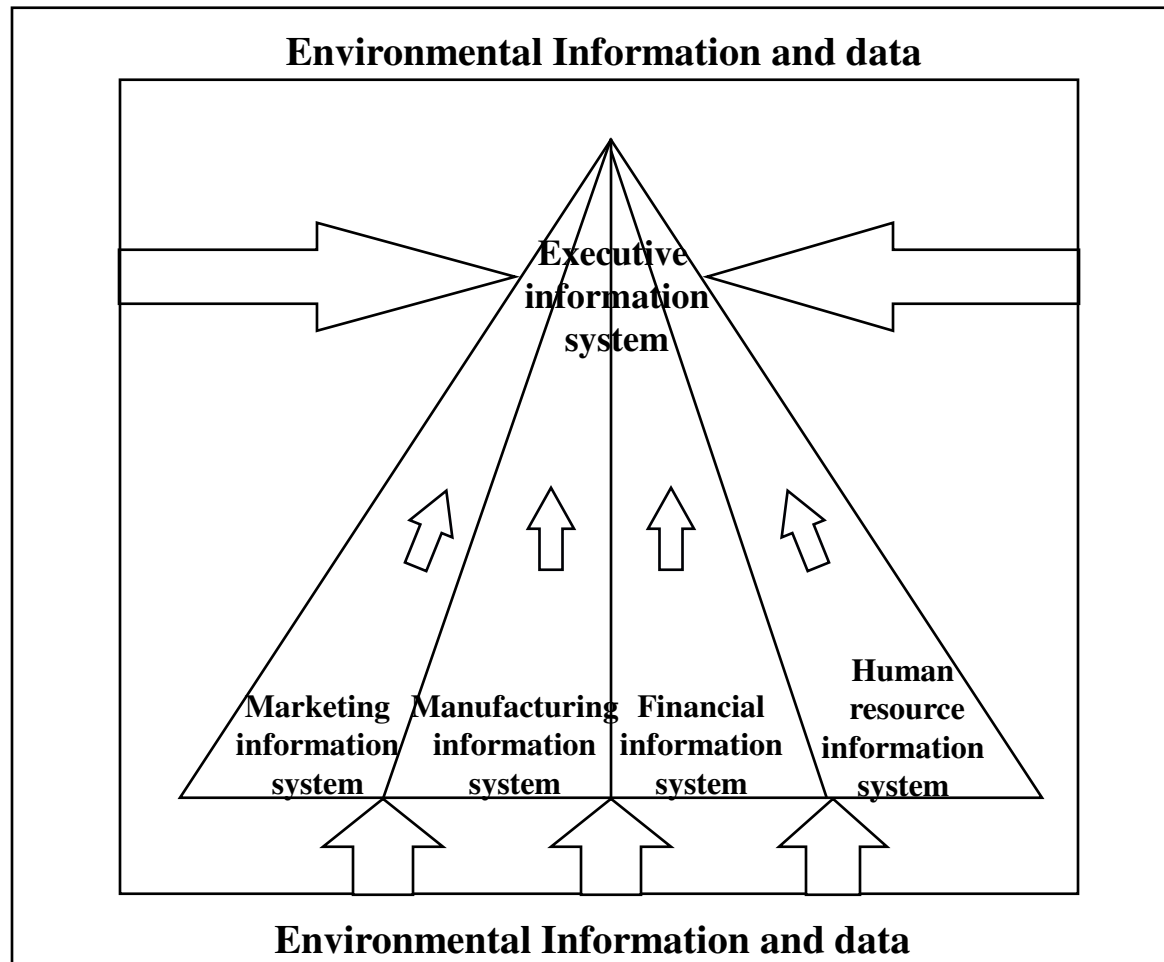


Executive Information Systems

A Firm Without An EIS



A Firm With An EIS



What Do Executives Do? - Definition of Executive

- ☐ Executive manager on the upper level of the organizational hierarchy who exerts a strong influence on the firm.
- ☐ "Company" attitude, long term attitude

Fayol's Management Functions

- ☐ Plan - especially important
- ☐ Organize
- ☐ Staff
- ☐ Direct
- ☐ Control

Mintzberg's Managerial Roles

- ❑ Different levels of management perform the same managerial roles but the relative time spent on roles is different at different levels
- ❑ Long-range, entrepreneurial improvements and responding to unanticipated situations is the focus of high level managers

Kotter's Agenda and Networks

- ❑ John P. Kotter, Harvard professor
- ❑ Executives follow a three step strategy
 - Agenda -- long-range strategy and short
 - Networks -- cooperative relationships
 - Hundreds or thousands
 - Inside and outside the firm
 - Environment -- norms and values

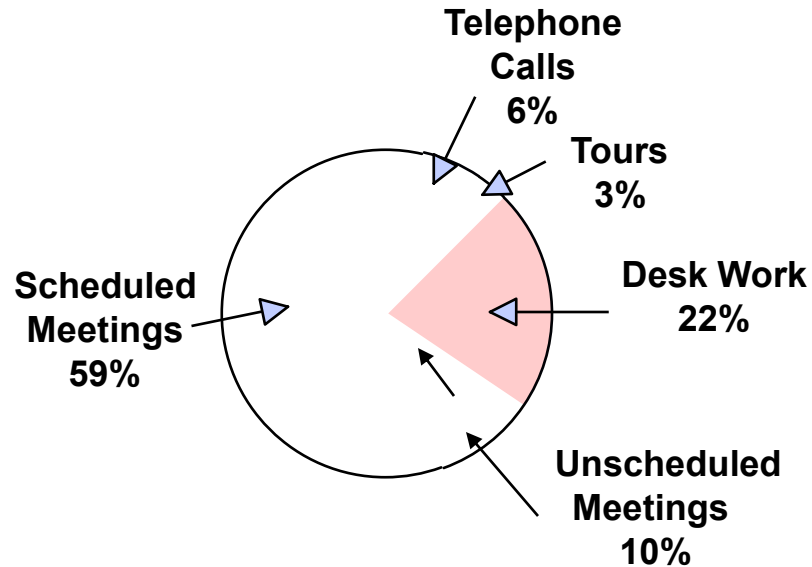
How Do Executives Think?

- ❑ Daniel J. Isenberg, Harvard professor
- ❑ Studied more than one dozen executives over a 2-year period
- ❑ What they think about
 1. How to get things done
 2. A few overriding issues
- ❑ More concerned with the process than the solution
- ❑ Thought processes do not always follow the step-by-step patterns of the systems approach
- ❑ Intuition is used at each step

Unique Information Needs Mintzberg Study

- ❑ Mintzberg was first to conduct a formal study of executive information needs
- ❑ Studied 5 executives in early 1970s
- ❑ Five basic activities
 - **desk work**
 - **telephone calls**
 - **unscheduled meetings**
 - **scheduled meetings**
 - **tours**

Distribution of Hours - Mintzberg

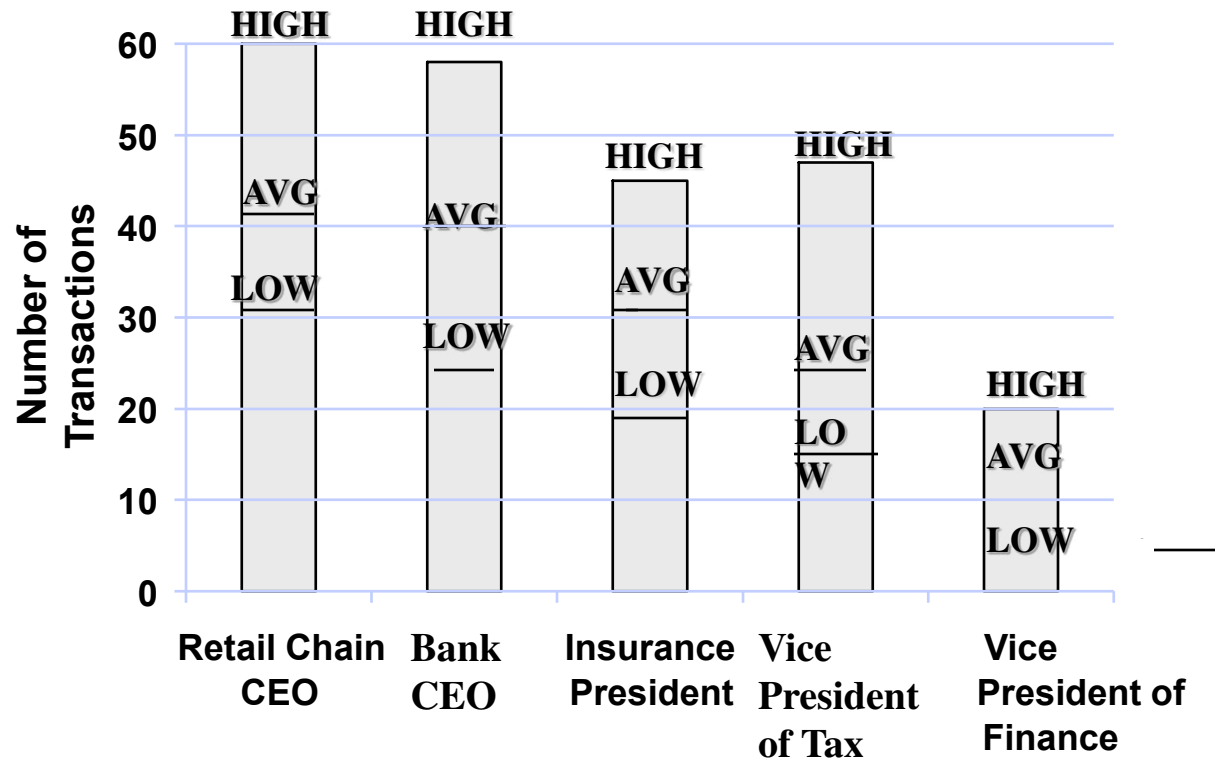


Legend:
 Interpersonal Communication

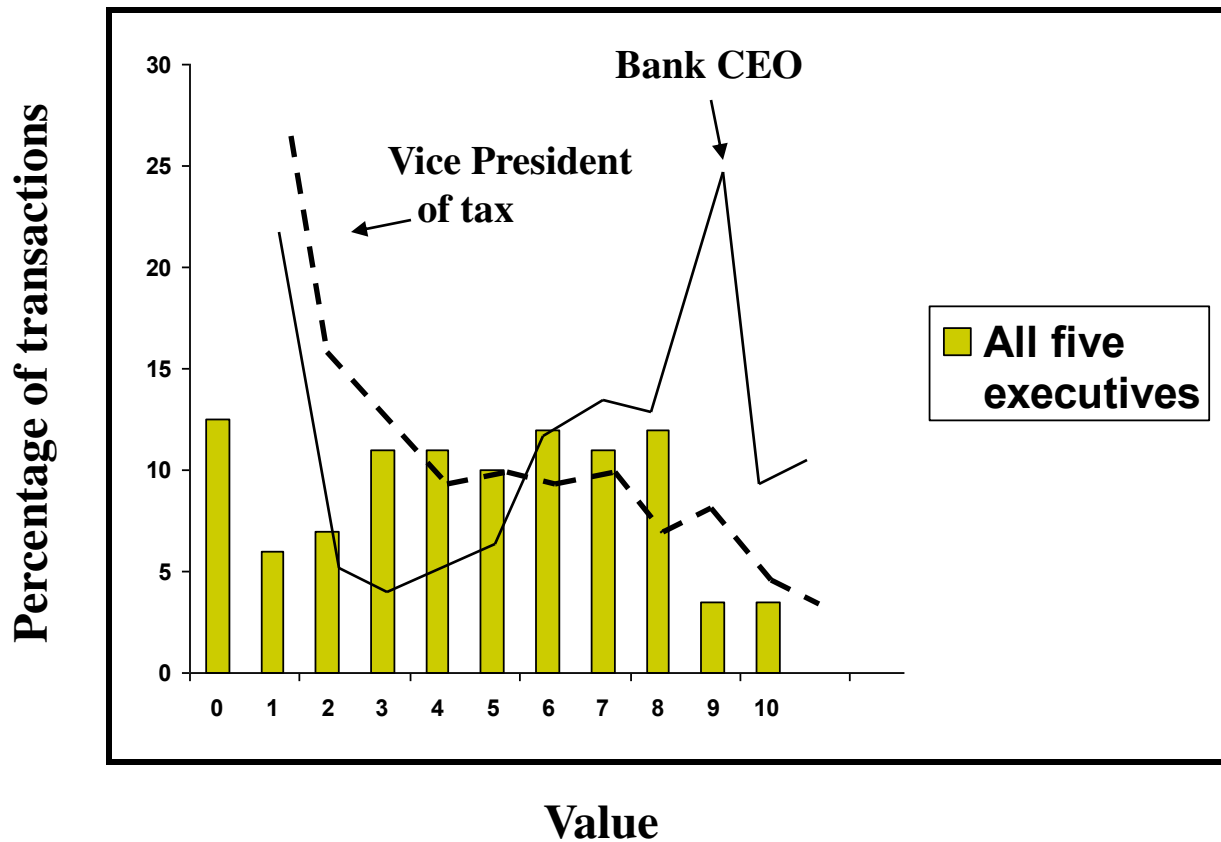
Unique Information Needs Jones & McLeod Study

- ❑ Studied 5 executives in early 1980s
- ❑ Objectives: How much information? Value? Sources Media? Use ?
- ❑ How much information reaches the executive
 - *A transaction - a communication involving any medium*
 - *Daily volume*
 - *Varies from executive to executive*
 - *Varies from day to day*
- ❑ Daily value
 - *The vice president of tax probably had a preceptive information gathering style, accounting for the low values.*

The Volume of Information Reaching the Executives



The Value of Information Reaching Executives



Sources

- ❑ Some executives went down 7 levels to gather information
- ❑ Sources were internal and external
- ❑ External sources provided the most volume but also the lowest average value

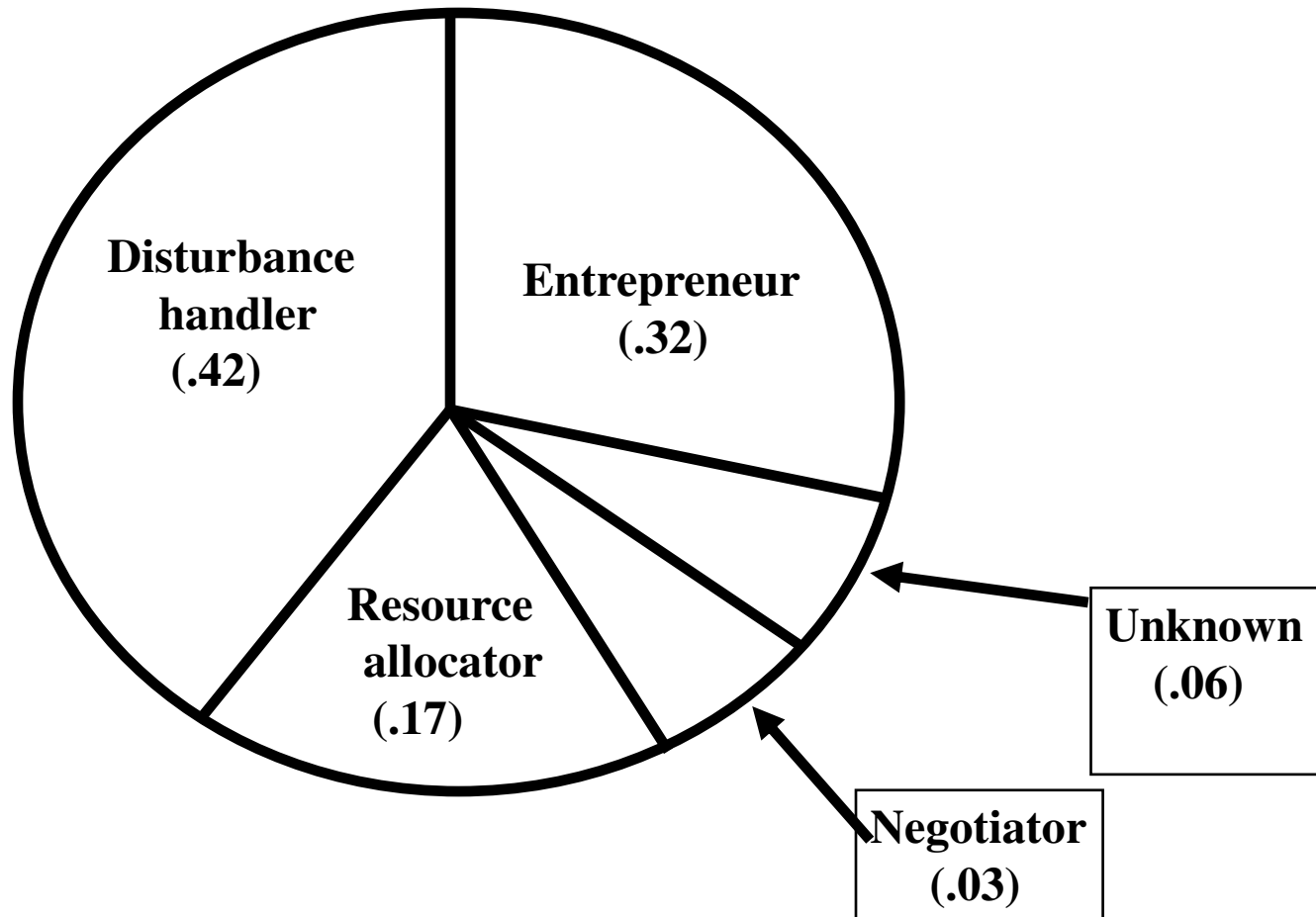
Media Used for Communication

- ❑ Written media accounts for 61% of the transactions
 - Computer reports
 - Letters and memos
 - Periodicals
- ❑ Oral media is preferred by executives
 - Tours
 - Business meals
 - Telephone calls

The Executive Does not Control:

- Letters
- Memos
- Telephone calls
- Unscheduled meetings

Information Use by Decisional Role



Jones & McLeod Study Findings

- ☐ Environmental sources - highest volume
- ☐ Internal sources - highest value
- ☐ Written media- highest volume
- ☐ Oral media -highest value
- ☐ Little information direct from computer

Unique Information Needs Rockart and Treacy Study

- ❑ John Rockart and Michael Treacy, both of MIT
- ❑ Studied 16 companies in early 1980s
- ❑ Found many computer users
- ❑ Found some executives interested in detail
- ❑ Coined the term 'executive information system'

Rockart and Treacy Study EIS

- ❑ A central purpose
- ❑ A common core of data
- ❑ Two principal methods of use
- ❑ A support organization
 - EIS coach
 - EIS chauffeur

Rockart and Treacy Study EIS Characteristics

- ❑ Used for planning and controlling
- ❑ Importance of database
 - Internal/environmental
 - Past/present/future

Rockart and Treacy Study EIS Characteristics (continued)

- ❑ Two principal methods of use
 - Retrieve reports
 - Conduct analyses
- ❑ Support organization
 - EIS coach
 - EIS chauffeur

Putting Computer Use in Perspective

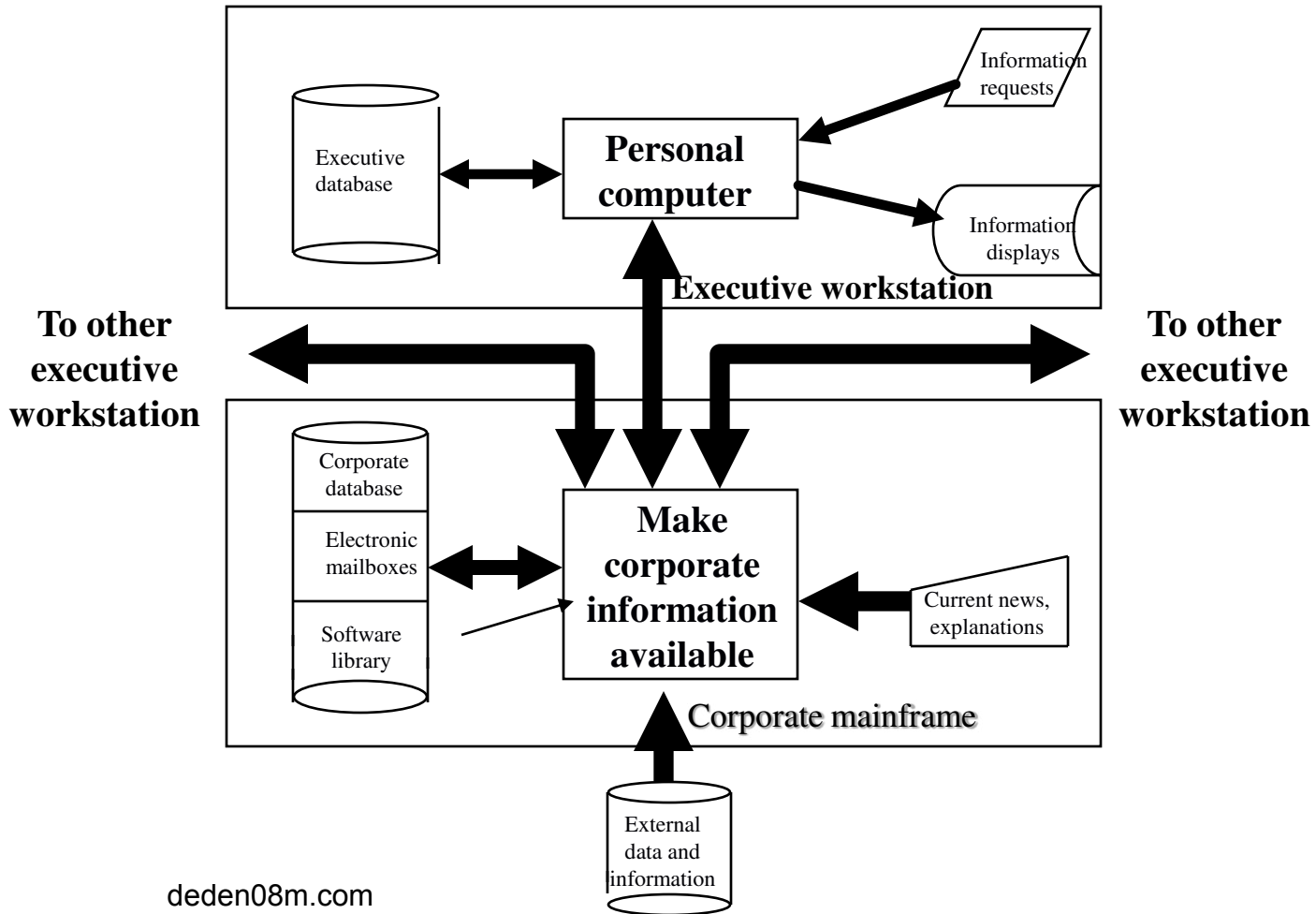
Two key points:

1. Computer use is personal
2. Computer produces only a portion of the executive's information

A Suggested Program

1. Take an inventory
2. Stimulate high-value sources
3. Take advantage of opportunities
4. Tailor the system to the executive
5. Take advantage of technology

An EIS Model



Dialogue Between the Executive and the EIS

- ❑ Typically by a series of menus, keyboarding is minimized
- ❑ Drill down to specific information needed from the overview level

Incorporation of Management Concepts

- ❑ Critical success factors
- ❑ Management by exception
- ❑ Mental model
 - Information compression

EIS Implementation Decisions
Three Key Questions:

1. Do we need an EIS?
2. Is there application-development software available?
3. Should we purchase prewritten EIS software?

Advantages of Prewritten Software

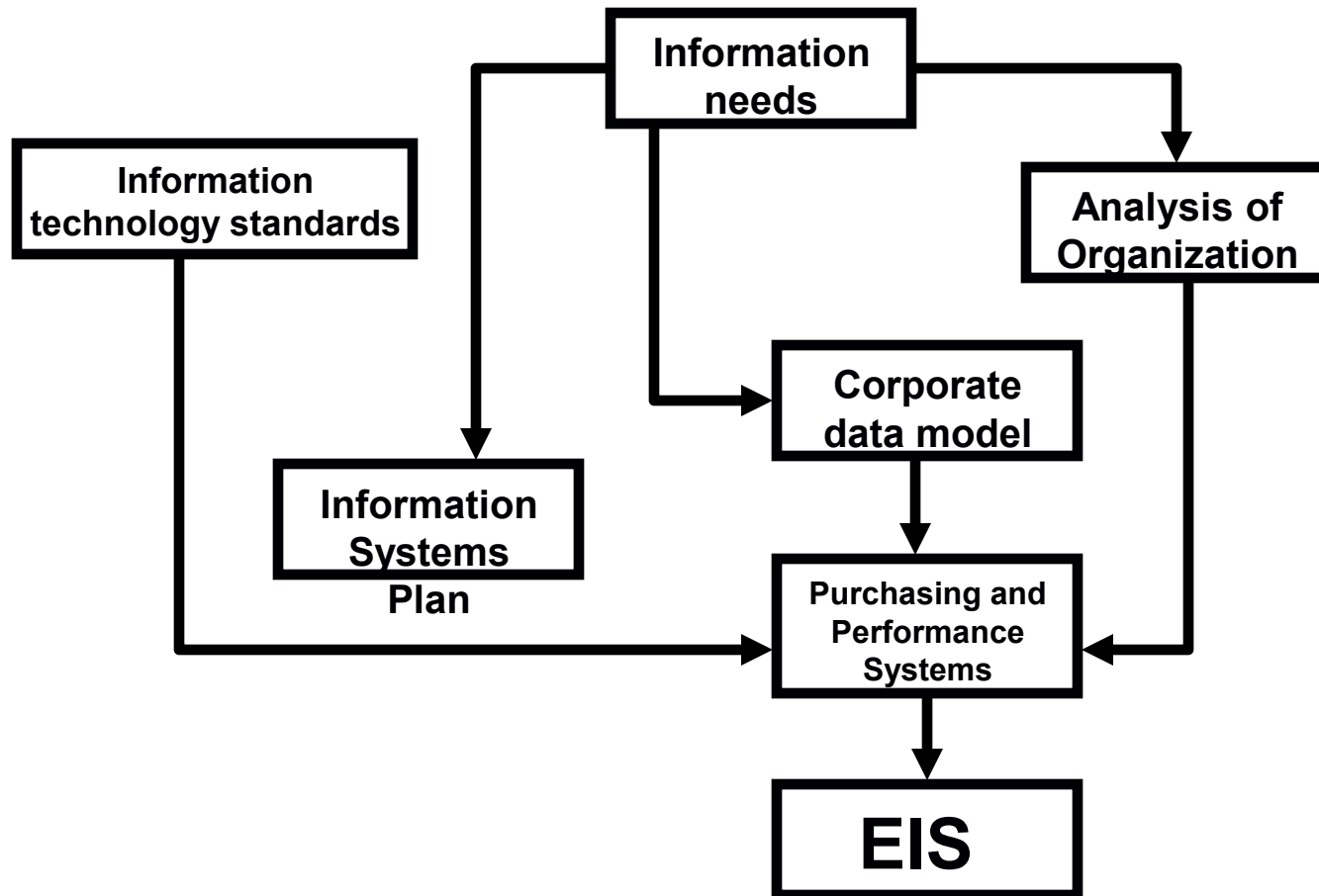
1. Fast
2. Doesn't strain information services
3. Tailored to executives

EIS Critical Success Factors

-Rockart and David DeLong

1. Committed/informed executive sponsor
2. Operating sponsor
3. Appropriate information services staff
4. Appropriate information technology (IT)
5. Data management
6. Link to business objectives
7. Manage organizational resistance
8. Manage the spread and evolution

Prerequisite Activities for the EIS



Future EIS Trends

- ☐ Use will become commonplace
- ☐ Decreasing software prices
- ☐ Will influence MIS/DSS
- ☐ The computer will always play a support role