

Sistem Informasi

(Arsitektur dan Manajemen SI)

Based on : Management Information System, Second Edition, Effy Oz



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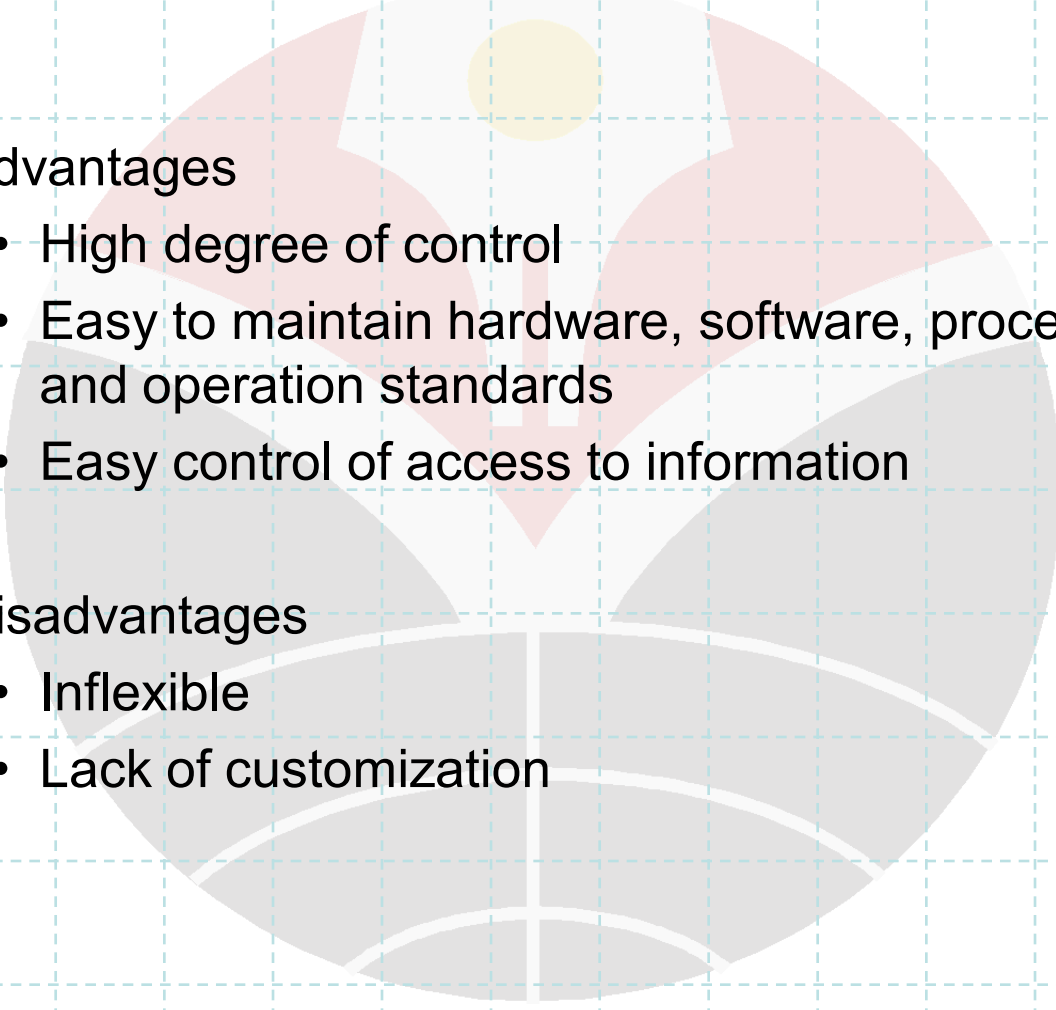


Objektif

- Understand the different ways in which ISs are deployed in organizations.
- Be able to list and explain the advantages and disadvantages of each IS architecture.
- Know the importance of collaboration between IS managers and line managers, and understand the relationships between the two groups.
- Be able to describe career paths and responsibilities in the IS field.



Centralized Information Systems Architecture

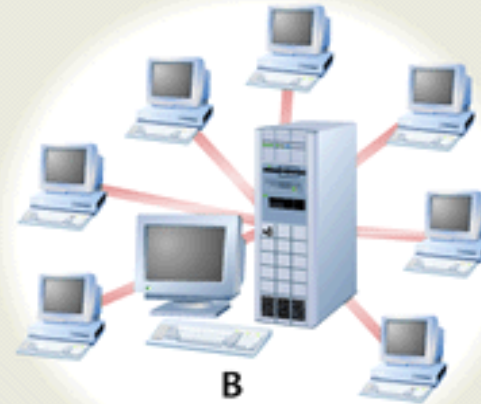
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- Advantages
 - High degree of control
 - Easy to maintain hardware, software, procedure, and operation standards
 - Easy control of access to information
 - Disadvantages
 - Inflexible
 - Lack of customization



Didalam *centralized IS architecture*, sumber daya informasi di kelola dalam satu atau lebih “large computers” sebagai pusat kontrol.

- Allows departments and remote sites independence in organizing and using their ISs
- Local IS department establishes infrastructure
- Disadvantages
 - Difficult to share applications and data among units
 - Expensive to maintain and service different systems

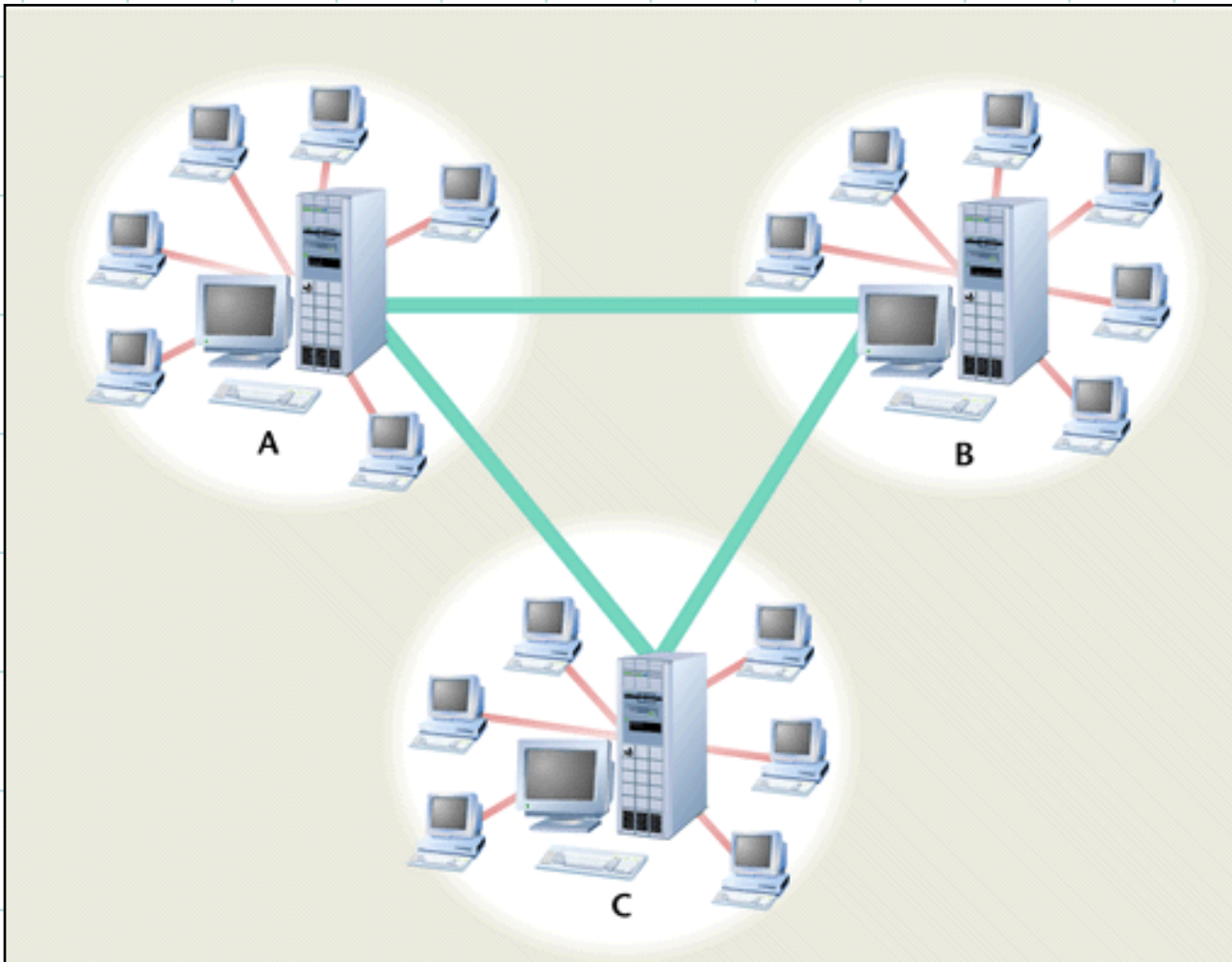
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Didalam *decentralized IS architecture*, setiap karyawan dari setiap departemen (A, B, C) menggunakan data/informasi yang khusus dimiliki oleh departemennya sendiri.

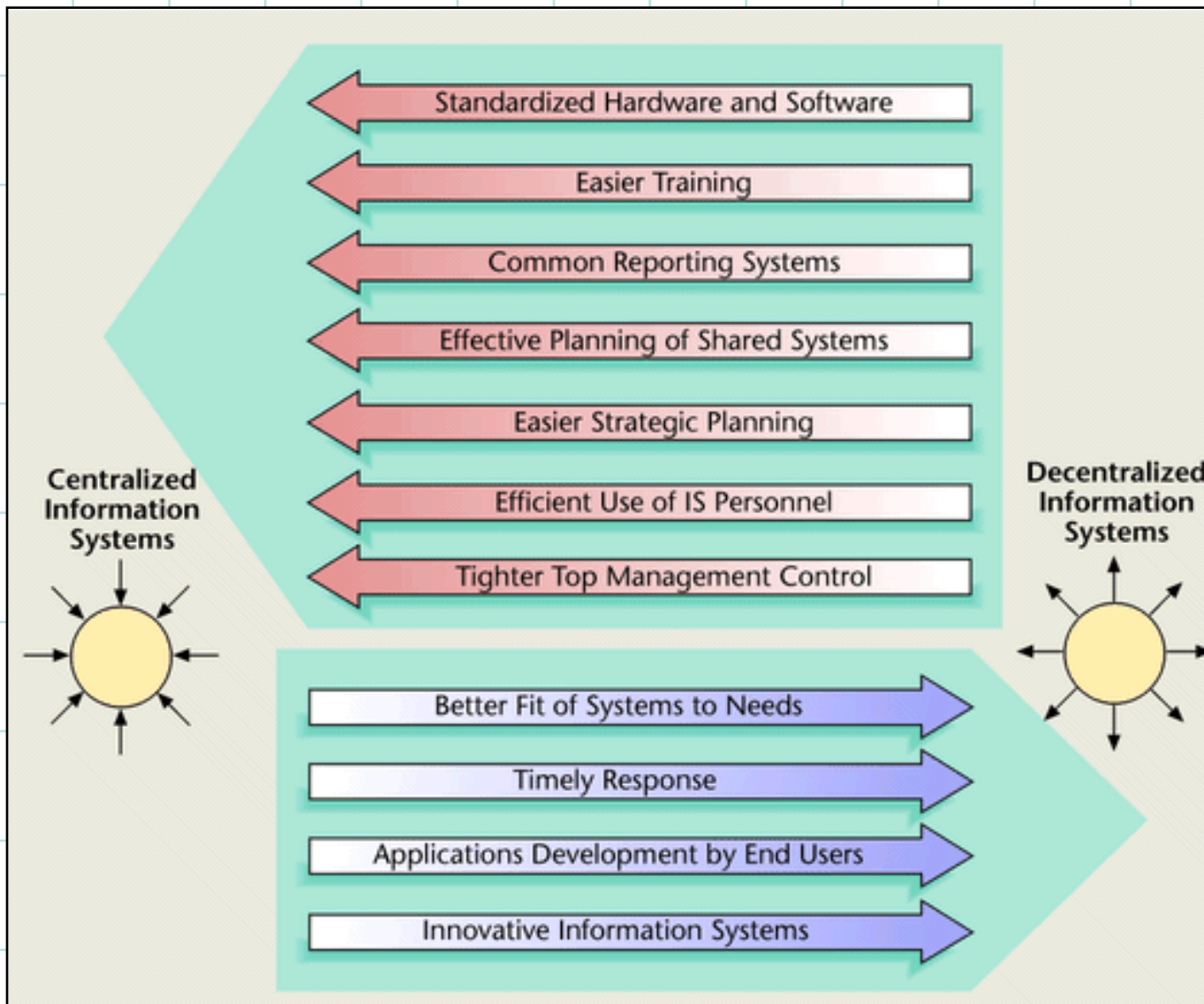
- Each unit selects and implements its own system.
- Remote units can share resources through communication lines.
- Many organizations changing to distributed architecture.
 - Increased reliability and affordability of data communication and PC technology

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Didalam *distributed IS architecture*, setiap karyawan selain dapat menggunakan data/informasi yang dimiliki oleh departemennya mereka juga dapat memanfaatkan data/informasi yang dimiliki oleh departemen lain melalui *communication lines*

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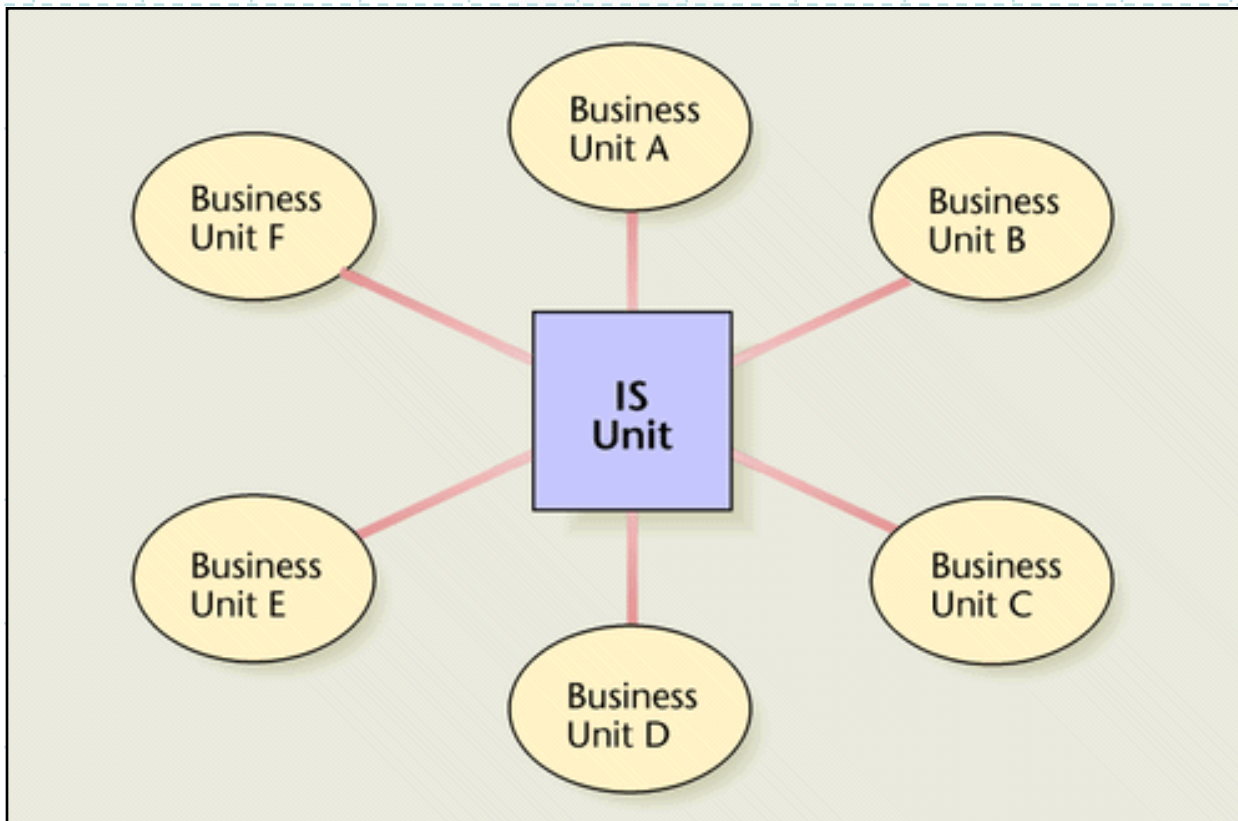
Centralized vs. decentralized IS trade-offs

Centralized vs. Decentralized ISs: Advantages and Disadvantages

Advantages of Centralized IS Management

- Standardized hardware and software
- Easier training
- Encouragement of common reporting systems
- Effective planning of shared systems
- Easier strategic planning
- Efficient use of IS personnel
- Accommodation of tight control by top management

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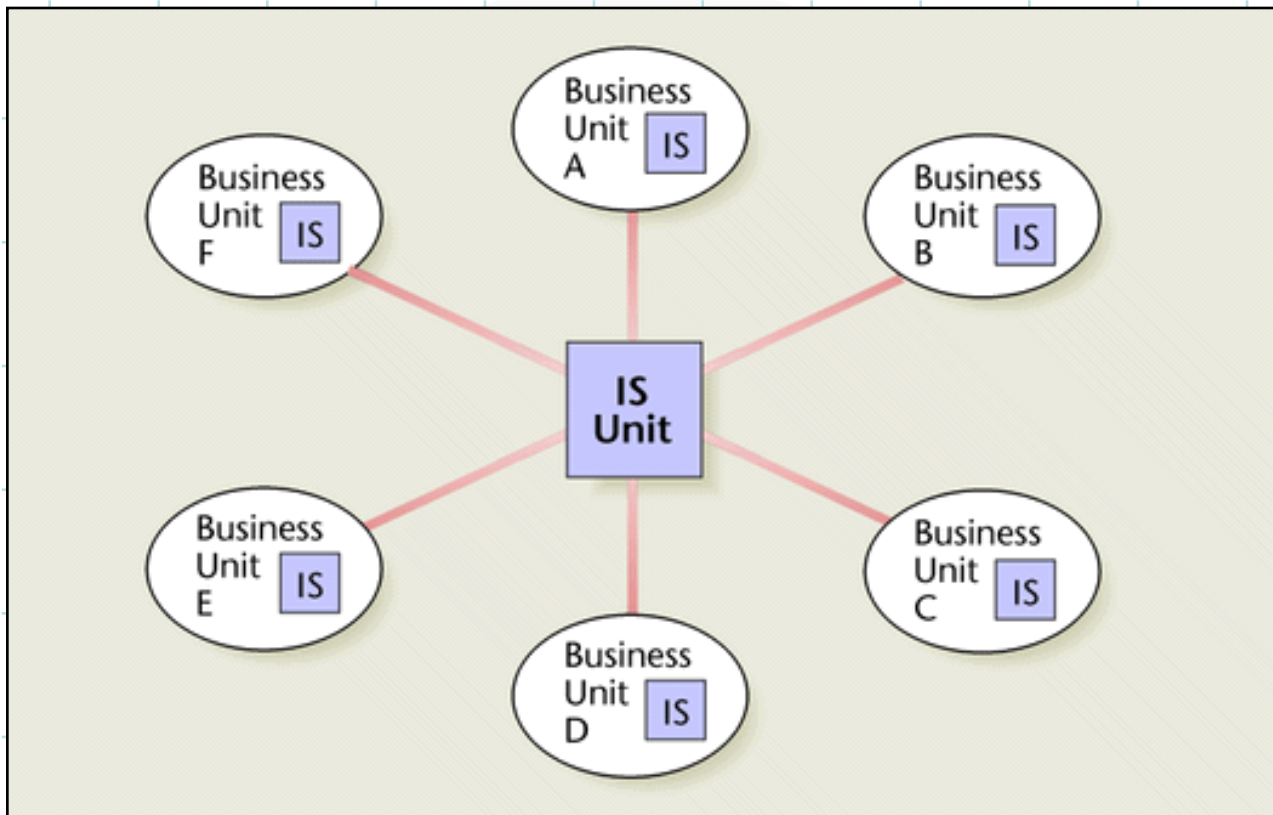
Centralized management of ISs

Centralized vs. Decentralized ISs: Advantages and Disadvantages

Advantages of Decentralized IS Management

- Better fit of ISs to business needs
- Timely responsiveness of IS units to business demands
- Encouragement of end user application development
- More innovative use of ISs
- Support for delegation of authority

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Decentralized management of ISs (in fully decentralized management, the central IS unit would not exist)

– Discarding Big Iron (mainframe computers)

- Switch to PCs brings distributed IS architecture benefits.

– Reengineering with Information Technology

- Effort for breakthrough gains through radical business process and system changes.
- Almost always leads to integrating IT in all processes.

