



Information Technology Module

IT Architecture

Materials from:

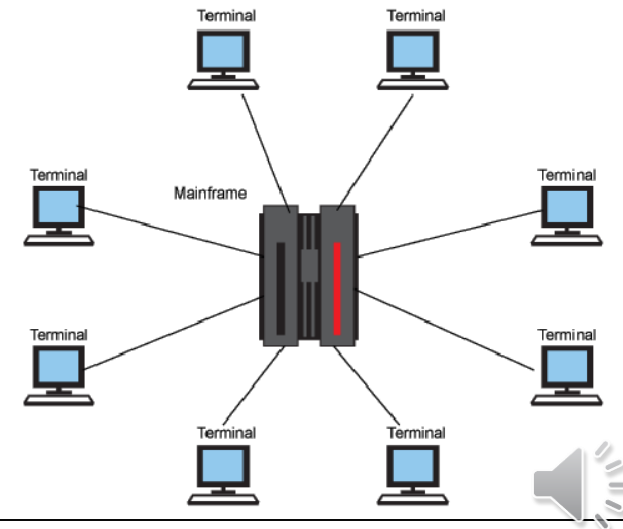
Kenneth, C., LAUDON, L., & JANE, P. (2018). *Management information systems: Managing the Digital firm* (15th ed.). Harlow: Pearson Education Limited, UK.





IT Architectural Models

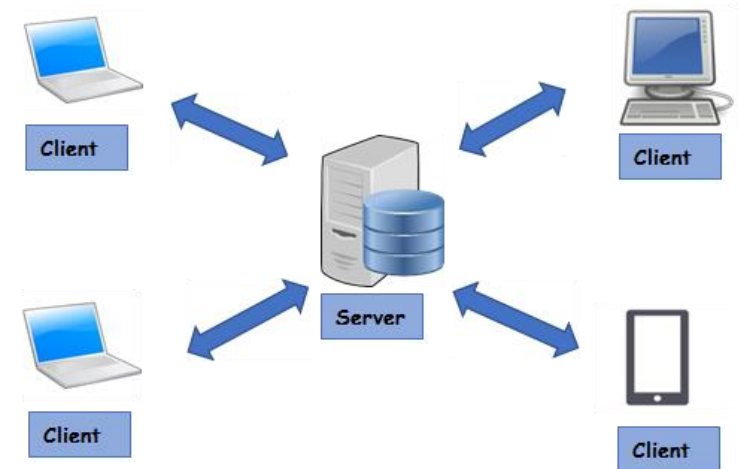
- Centralized Computer (e.g. Mainframe)
 - From 1945 (ENIAC) to present
 - All the processing is centralized (no client processing)
 - Input/output with Dummy Terminals





IT Arquitectural Models

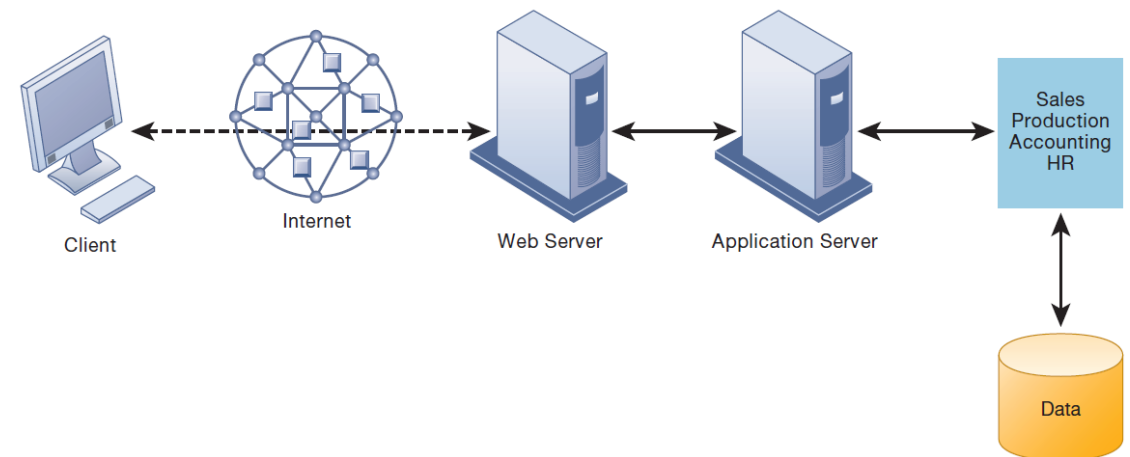
- Client / Server
 - From 1983 to present
 - Processing is split between the server computer and the client computer





IT Arquitectural Models

- N-Tiered Architecture
 - Work is balanced over several different levels:
 - Presentation layer
 - Application layer
 - Business layer
 - Data access layer





Web App vs Native App



- Web Apps
 - Run on a browser
 - Typically written in HTML / HTML5
 - Need permanent Internet Access
 - Multiplatform
 - Same app runs on all platforms
 - Responsive
 - Adapts itself to the size of the screen



Web App vs Native App



- Native Apps
 - Installed on the device
 - computer, tablet, smartphone
 - May or may not need internet access
 - Depending on type of app
 - Have richer user interfaces
 - Specifically designed / programmed for a given platform
 - Windows, iOS/iPadOS, Android, Linux
- Hybrid Apps
 - part native apps, part web apps



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