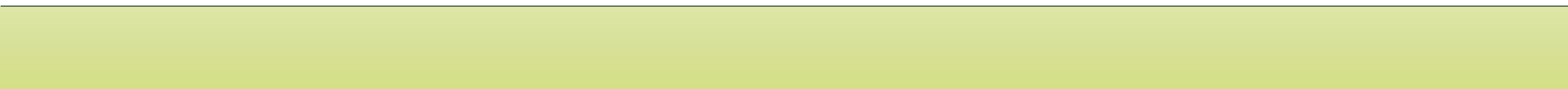




**ACS-1803**  
**Introduction to Information  
Systems**

Instructor: Kevin Robertson

Functional Area Systems  
Human Resource Systems  
Lecture Outline 5 – Part 2



# System Examples: Functional Area Info Systems

Functional Area	Information System	Examples of Typical Systems
Accounting and Finance	Systems used for managing, controlling, and auditing the financial resources of the organization	<ul style="list-style-type: none"><li>■ Inventory management</li><li>■ Accounts payable</li><li>■ Expense accounts</li><li>■ Cash management</li><li>■ Payroll processing</li></ul>
Human Resources	Systems used for managing, controlling, and auditing the human resources of the organization	<ul style="list-style-type: none"><li>■ Recruiting and hiring</li><li>■ Education and training</li><li>■ Benefits management</li><li>■ Employee termination</li><li>■ Workforce planning</li></ul>
Marketing	Systems used for managing new product development, distribution, pricing, promotional effectiveness, and sales forecasting of the products and services offered by the organization	<ul style="list-style-type: none"><li>■ Market research and analysis</li><li>■ New product development</li><li>■ Promotion and advertising</li><li>■ Pricing and sales analysis</li><li>■ Product location analysis</li></ul>
Production and Operations	Systems used for managing, controlling, and auditing the production and operations resources of the organization	<ul style="list-style-type: none"><li>■ Inventory management</li><li>■ Cost and quality tracking</li><li>■ Materials and resource planning</li><li>■ Customer service tracking</li><li>■ Customer problem tracking</li><li>■ Job costing</li><li>■ Resource utilization</li></ul>

# Functional Area Information Systems

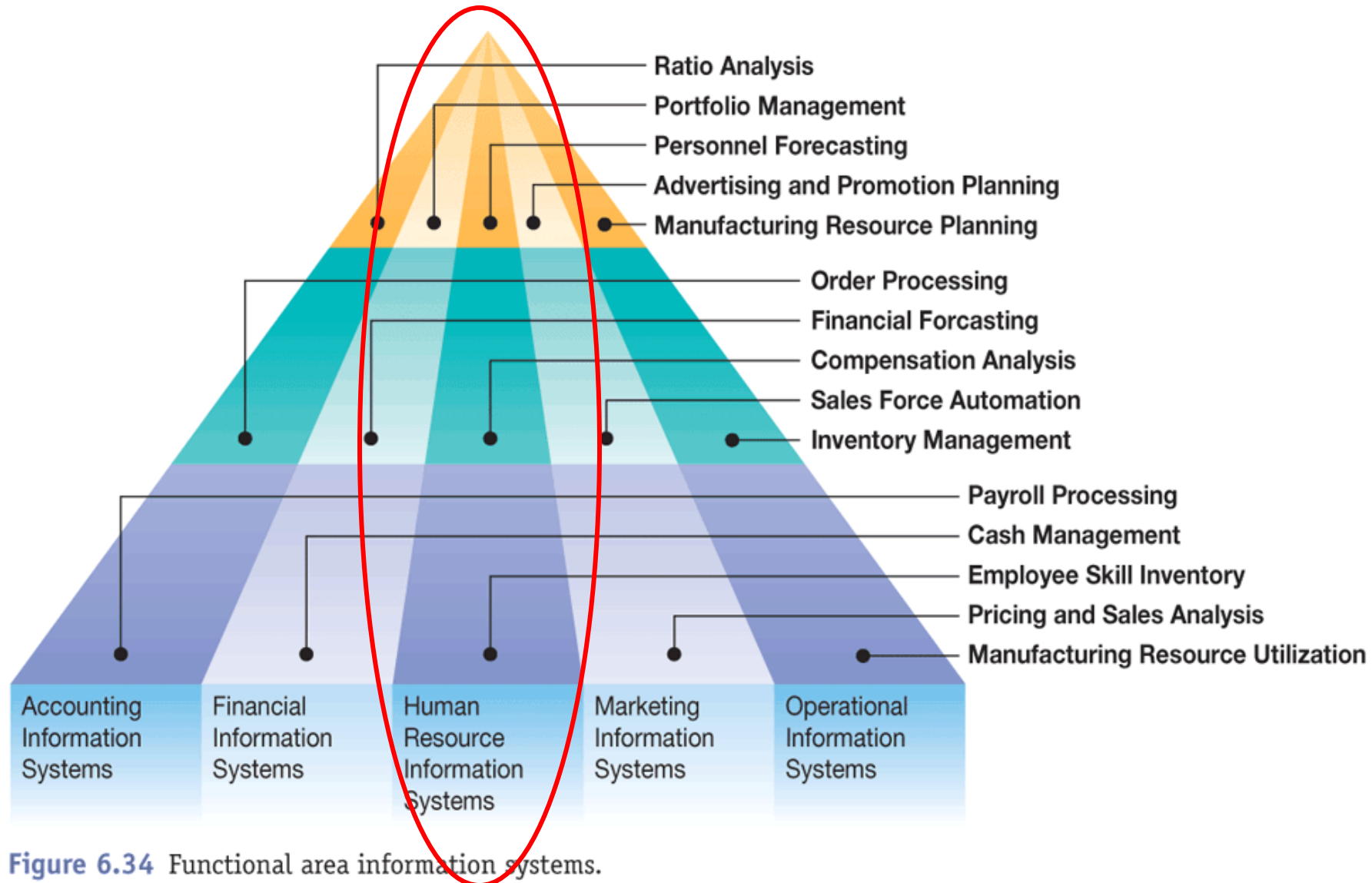


Figure 6.34 Functional area information systems.

# Human Resource Management Systems (HRMS)

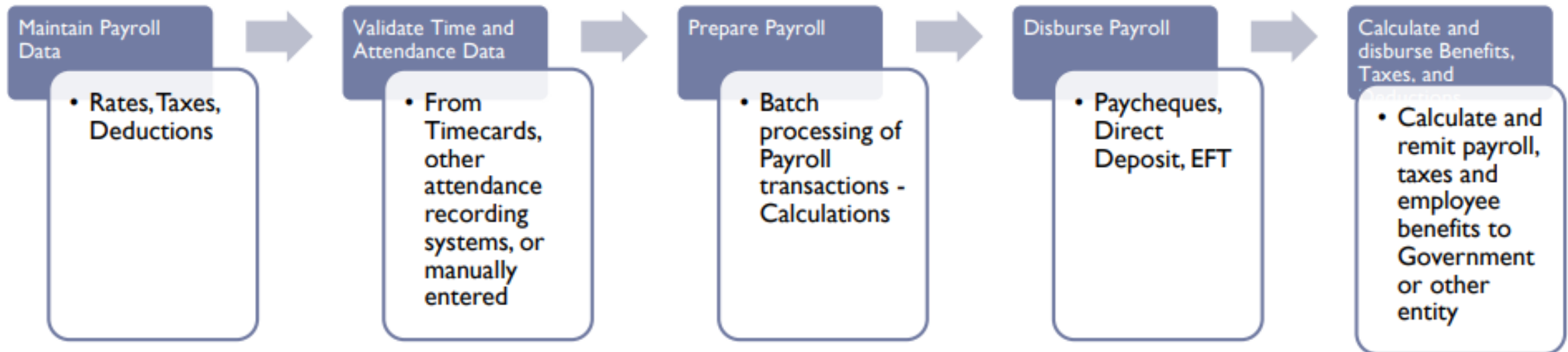
- Combination of systems and processes that connect human resource management and information technology through human resource management software/hardware.
  - Managing payroll
  - Recruitment and onboarding
  - Gathering, storing, and accessing employee information
  - Keeping attendance records and tracking absenteeism
  - Performance evaluation
  - Benefits administration
  - Learning management
  - Employee self-service
  - Employee scheduling
  - Analytics and informed decision making

# Operational Systems in HR

- Historically, **payroll** was the first
  - But, we consider it to be part of the AIS
    - Related to expenditure cycle
- **Employee information systems**
  - Maintain information on every employee for various reporting purposes
  - Employee profile: basic personal data, education, previous experience, employment history in org., preferred location for work ....
  - May contain skills inventory component
    - Employee's work experience, work preferences, test scores, interests, special skills
    - How could this be used

# HR Transaction Processing

## Payroll



# Operational Systems in HR

- **Attendance recording systems**
  - May use negative reporting (only when absent)
  - Include overtime credits etc.
- **Employee Scheduling Systems**
  - Can get complex with shift work (e.g, nurses)
  - Must adhere to union regulations

# Operational Systems in HR

- **Performance Management Systems**
  - Collect and store textual data e.g., written comments of supervisor
  - Appraisal data can be filled out on special screens
  - Need careful documentation of employee performance and how performance was measured (e.g., for grievance hearings)
  - May have tactical components
    - *Which supervisors give high number of poor evals.*
    - *Which labour sources provide unacceptable workers*
  - Performance measures (no. of purchase orders processed per day) may be included



# Tactical Systems in HR

- **Position control systems**
  - Keep data on each job position in the org.
    - E.g. task content
  - Can be useful for job redesign
    - Which job positions require data entry?
    - Which require statistical analysis
- **Recruiting systems**
  - Provide list of planned retirements
  - List skills, preferences of current employees
  - Analyze turnover rates among various classes of employees

# Tactical Systems in HR

- **Compensation and benefit systems**
  - “cafeteria style benefits” for employees to choose from
  - Considerable data storage here
  - Tactical:
    - how much to increase compensation plans to attract high quality employees
    - What kind of benefits are different categories of employees choosing?
  - May be available on organizational intranet

# Strategic Systems in HR

- **Long-term workforce planning**
  - What are the HR needs to meet organization's strategic plan for next 5-10 years?
  - *Forecasting* supply and demand of required workforce
- **Labour negotiation support systems**
  - Must be timely and have ad hoc capacity
  - Assist in bargaining sessions with unions

# HRMS Software

- HR systems store much more textual data than other functional systems
- There are specific HR systems for sale
- Use of HRMS is not as widespread in small to medium businesses

# Human Resource Management System

The screenshot displays a web-based Human Resource Management System interface. The main window is titled "Baraza Project" and contains a sidebar menu on the left and a central form for editing an employee record. The sidebar menu includes categories like "Human Resources", "Administration", "Casuals", "Leave", and "Reports". The central form is titled "Employees" and has tabs for "Employees", "Education Class", "Kin Types", and "Skill Category". The form fields are organized into sections: "Personal Information" (Employee ID, First Name, Date of Birth, Nationality, Appointment Date, Contract), "Identification" (Surname, Middle Name, Gender, Marital Status, Exit Date, Contract Period), "Employment" (Department Role, Employment Terms, Basic Salary, Bank Account, Bank Branch, Language), and "Security" (Identity Card, Active status). A vertical sidebar on the right contains tabs for "Details", "Address", "Projects", "Education", "Skills", "Employment", "References", and "Kins". At the bottom of the form are buttons for "Save", "Cancel", "Delete", and "Audit". A data grid at the very bottom shows a summary row for the employee.

Employee ID	First Name	Surname	Gender	Basic Salary	Department	Role	Active
3	Nancy	Kpirash	Female	38,000	Development	System Developer	Yes

# Functional Area Systems – Human Resource Systems

End of Lecture 5 – Part 2