A Database Approach

TODAY:

- Defining “Database Approach”
  - What is a “database approach”? 
  - Go over responses to class prep activity

- Benefits & Costs/Risks of Database Approach
  - Why pursue a database approach? Why not? 
  - Present a business scenario 
  - Discuss costs and risks in terms of scenario

- Database Systems vs. Information Systems
  - What is the difference between a database system and an information system? 
  - Go over responses to class prep activity

ALSO:

1. Handout – Classroom Prep Guide, Week 3
2. Project – Part #2
A Database Approach

*Why pursue a database approach? Why not?*

**Benefits**
- Program data independence
- Minimal data redundancy
- Improved data consistency
- Improved data sharing
- Increase productivity of application development
- Enforcement of standards
- Improve data quality
- Improved data accessibility and responsiveness
- Reduced program maintenance

**Costs/Risks:**
- New specialized personnel
- Installation and management cost and complexity
- Conversion costs
- Need for explicit backup and recovery
- Organizational conflict

**Discussion Question:**
Are these benefits and costs/risks relevant in the chicken processing case study presented in class? How?
Exploring Strengths and Weaknesses of a Database Approach:
Chicken Processing Example

**Manager:**
**Interests:**
- Will we be able to fill orders?
- Will we make profits?
**Data:**
- Number of units packaged?
- Order information

**Floor Manager**
**Interests:**
- Do we need to hire/fire employees?
- What do I need to do to maintain equipment?
**Data:**
- Employee schedules
- Number of accidents reported

**IE - Quality Control & Safety**
**Interests:**
- Is all chicken consumable?
- Are employees safe?
**Data:**
- Sample chicken temperature?
- Number of accidents reported

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**Chicken Processing Production Line**
Exploring Strengths and Weaknesses of a Database Approach: Chicken Processing Example

Manager:
Interests:
• Will we be able to fill orders?
• Will we make profits?

Floor Manager
Interests:
• Do we need to hire/fire employees
• What steps in order to maintain equipment?

IE - Quality Control & Safety
Interests:
• Is all chicken consumable?
• Are employees safe?

A Database that contains:
• Number of units packaged
• Order information
• Employee schedules
• Number of accidents reported
• Sample chicken temperature
• Number of accidents reported
• …

Chicken Processing Production Line
What is the difference between a database system and an information system?