# Database Tutorials

## October

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All tutorials in Ming Ong PC lab in Merrill Room 103
Class Announcements

- **Project proposals due on 10/18!!**
  - 2-3 pages
  - Give a plan what you will cover in report
  - Cite some references, and show that you have started your research!
  - Remember *references must be cited in the body of the text* with footnotes or end notes.
Proposal Submission:
- Designate 1 group “leader”
- Each group’s “leader” submits electronically on e-commons
ERP

- How would you design an ERP?
- Design a user interface for each module
  - Ask user to fill in certain “fields” at particular times.
  - Set up a sequence of events
    - When the sales department enters an order, that event triggers an event at the manufacturing department.
- But by doing this, aren’t we presuming a particular business process?
Questions

How standardized are organizational processes?

- Customer service
- Finance
- Manufacturing
Fundamental options

- Customize the application to existing organization?
- Mold organization to off-the-shelf application?
  - Is software a good way to propagate best practices?
What Is Customer Relationship Management?

- Knowing the customer
  - In large businesses, too many customers and too many ways customers interact with firm

- Customer relationship management (CRM) systems
  - Capture and integrate customer data from all over the organization.
  - Consolidate and analyze customer data.
  - Distribute customer information to various systems and customer touch points across enterprise.
  - Provide single enterprise view of customers.
CRM Software

- CRM packages typically include tools for:
  - Sales force automation (SFA)
    - E.g., sales prospect and contact information, and sales quote generation capabilities
  - Customer service
    - E.g., assigning and managing customer service requests; Web-based self-service capabilities
  - Marketing
    - E.g., capturing prospect and customer data, scheduling and tracking direct-marketing mailings or e-mail
This process map shows how a best practice for promoting customer loyalty through customer service would be modeled by customer relationship management software. The CRM software helps firms identify high-value customers for preferential treatment.
Operational and Analytical CRM

• **Operational CRM:**
  - Customer-facing applications such as sales force automation, call center and customer service support, and marketing automation

• **Analytical CRM:**
  - Analyzes customer data output from operational CRM applications
  - Based on data warehouses populated by operational CRM systems and customer touch points
  - Customer lifetime value (CLTV)
Analytical CRM uses a customer data warehouse and tools to analyze customer data collected from the firm’s customer touch points and from other sources.

Figure 8-11
Business Value of Customer Relationship Management

• **Business benefits:**
  - Increased customer satisfaction
  - Reduced direct-marketing costs
  - More effective marketing
  - Lower costs for customer acquisition/retention
  - Increased sales revenue

• **Churn rate:**
  - Number of customers who stop using or purchasing products or services from a company
  - Indicator of growth or decline of firm’s customer base
Enterprise Application Challenges

- Highly expensive to purchase and implement enterprise applications—total cost may be four to five times the price of software
- Technology changes
- Business process changes
- Organizational changes
- Switching costs, dependence on software vendors
- Data standardization, management, cleansing
Extending Enterprise Software

• To bring greater value from enterprise applications
  • **Enterprise solutions/suites**: make applications more flexible, Web-enabled, integrated with other systems
  • **Service platform**: integrates multiple applications to deliver a seamless experience for all parties
    • Order-to-cash process
    • Portal software
Cisco Case