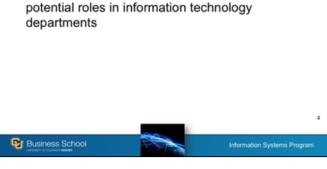


Welcome to Lesson 2 of Module 2 on organizational roles

What organizational roles interacting with databases do you want to play?

# Lesson Objectives

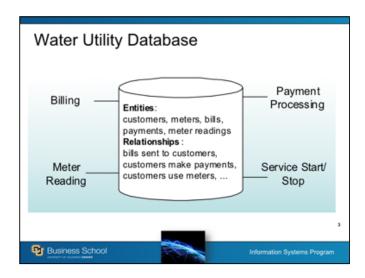
- · Discuss organizational roles in functional areas and information technology departments
- · Think about your career interest especially your potential roles in information technology departments



#### Discussion questions

- How does the size of an organization impact differentiation between functional areas and IT departments?
- How does the size of an organization impact the amount of specialization in IT roles?
- Do you want to be more focused on people skills and interaction or technical skills and tasks?

2



Review of database characteristics from lesson 1

Persistency: long term memory for customer interactions (water usage, billing, payments, repair); triggered by service stop/starts;

Functions: billing, payment processing, meter reading, service; functions are rather complex

Many simultaneous users

Relationships provide glue among entities: connect customer to meter, bills, and payments; complex database (hundreds of entities and relationships)

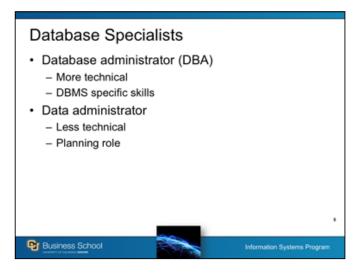


Because databases are pervasive, there are a variety of ways in which you may interact with databases. The above classification distinguishes between functional users who interact with databases as part of their work and information systems professionals who participate in designing and implementing databases. Each box in the hierarchy represents a role that you may play. You may simultaneously play more than one role. For example, a functional user in a job such as financial analysis may play all three roles in different databases. In some organizations, the distinction between functional users and information systems professionals is blurred. In these organizations, functional users may participate in designing and using databases.

Functional users can play a passive or an active role when interacting with databases. Indirect usage of a database is a passive role. An <u>indirect</u> user is given a report or some data extracted from a database. Aparametric user is more active than an indirect user. A <u>parametric</u> user requests existing forms or reports using parameters, input values that change from usage to usage. For example, a parameter may indicate a date range, sales territory, or department name. The <u>power</u> user is the most active. Because decision making needs can be difficult to predict, ad hoc or unplanned usage of a database is important. A power user is skilled enough to build a form or report when needed. Power users should have a good understanding of non-procedural access, a skill

3

described in the first part of this book.



## DBA:

- focused on individual databases and DBMSs
- Need strong skills in specific DBMSs

## Data administrator

- Planning: databases and technology
- Standards setting
- Computerized and non-computerized databases

Large organizations have separate positions; small organizations combine roles Both positions require more than 1 db course

- 2<sup>nd</sup> course
- certification
- lots of experience
- management experience for data administration

4

# Summary

- Databases and database technology vital to modern organizations
- Database technology supports daily operations and decision making
- Active working with database technology as developer, data specialist, or power user
- · Many opportunities to work with databases



Database technology is fundamental to modern organizations

- -Daily operations: ecommerce and batch processing
- -Decision making: medium term (products to stock, costs to monitor,  $\dots$ ) and long term (new plants, new lines of business,  $\dots$ )

#### Organizational roles

- User departments most common especially indirect usage
- Power users may use tools to use database
- Database developers important IT role
- Opportunities for more specialized positions as a database administrator and data administrator
- Both technical (product and computing skill focused) and non product positions (planning and people oriented)

What roles in an organization do you want to play?