# Database Systems:

Module 15, Lecture 1 – Careers In Database Technologies

Instructor: Alan Paradise



#### LESSON OBJECTIVES

 Describe the major career paths available for computing professionals who specialize in "Database Technologies".

#### Introduction:

Why are you taking this course?

What are your hopes and expectations in learning about databases and database software?

Think about your "why".

Your passion drives the reasons why you do what you do,

including taking this course.

What is your vision of who you want to be?

What will be your next career move?



#### Information Technology (IT)

- Organizations use computing technologies ("IT") to achieve their objectives
- Organizations typically create a structure for their IT workers

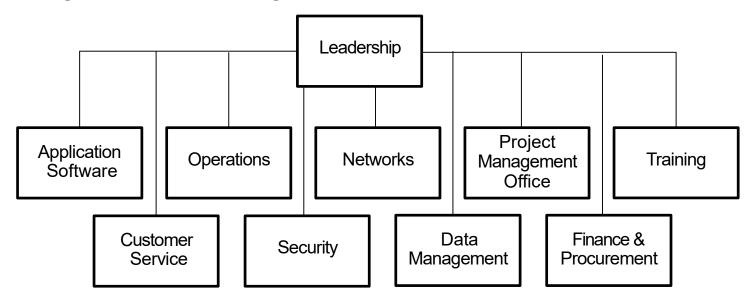


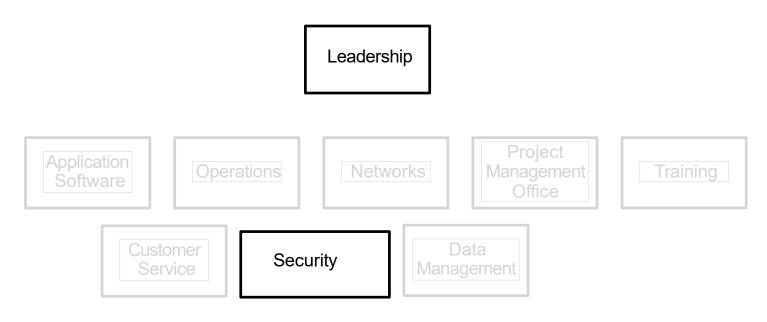
Leadership

CO-Chief Information Officer

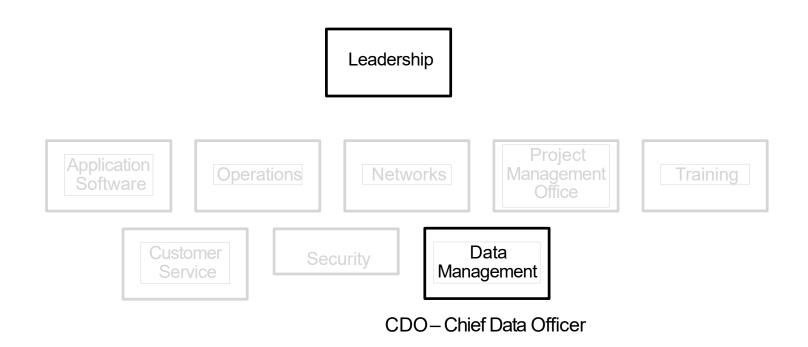
CTO-Chief Technology Officer

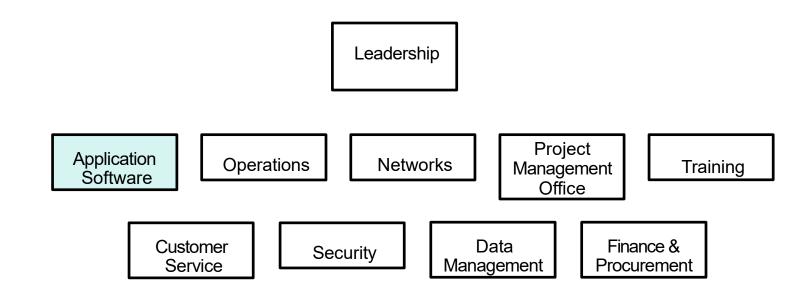
# A typical IT Organization "Org" Chart

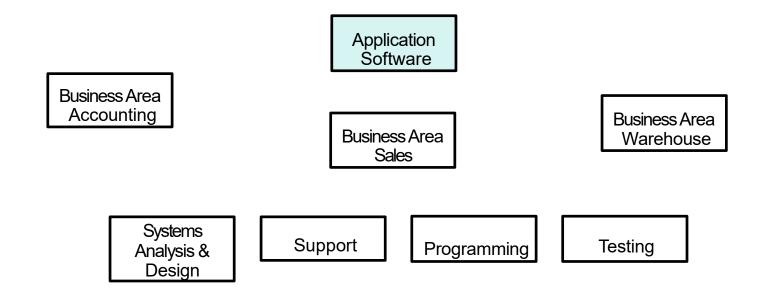


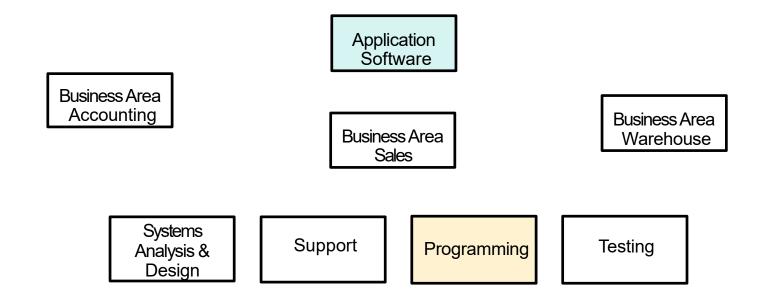


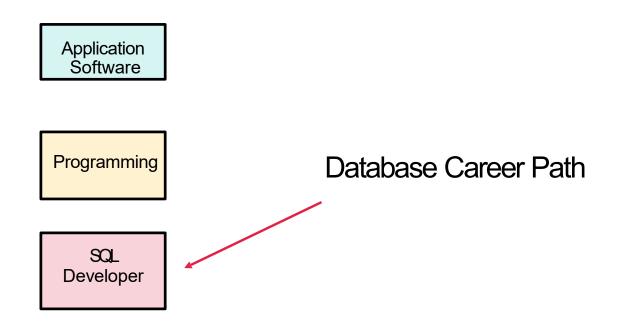
CISO - Chief Information Security Officer









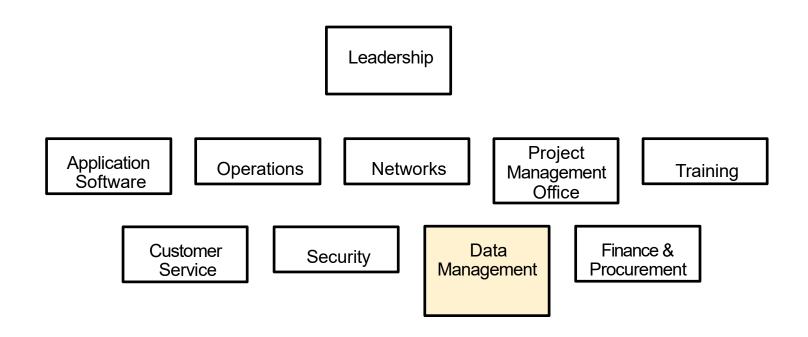


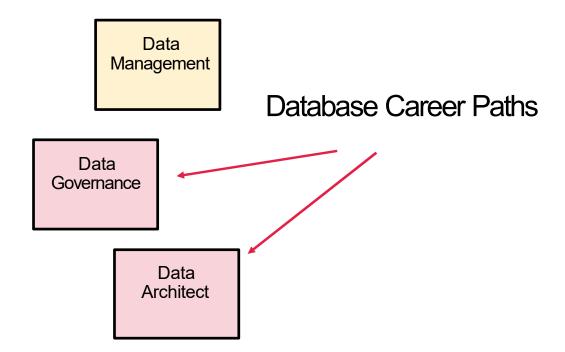
Application Software

Programming

SQL Developer

- Member of an application development team
- Works with programmers and analysts
- Codes and tests the database components of the application



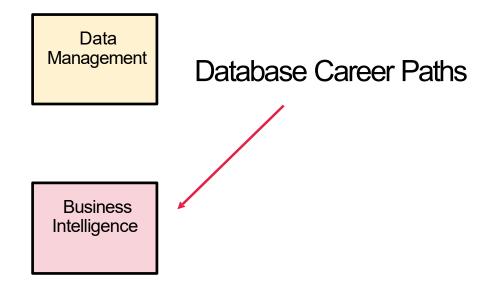


Data Management

Data Governance

- Design Databases
- Create Data Models
- Sets and enforces data definitions and standards
- Maintains Data Repository (where data models are kept)

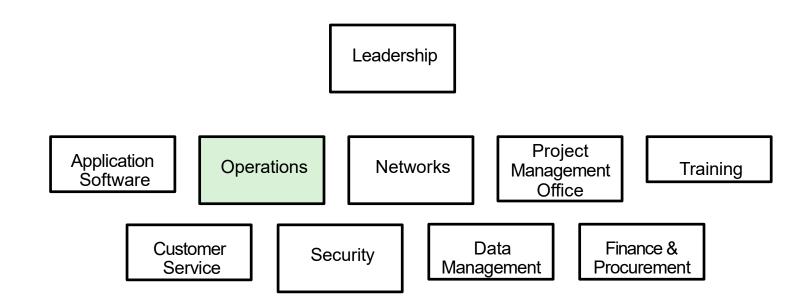
Data Architect



Data Management

Business Intelligence

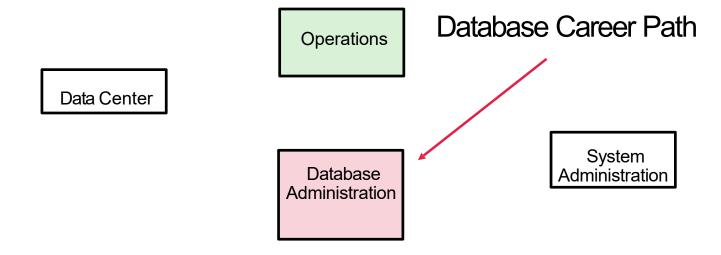
- Conduct Data Science & Analytics
- Data Mining
- Data Reporting: Dashboards & Visualization
- Trend Analysis & Forecasting



Data Center

Operations

Database Administration System Administration



Operations

Database Administration

- Work with Application Development Teams
- · Work with Data Architects
- Maintain DBMS Software
- Manage Database Backup & Recovery
- Ensure Proper DBMS Software Licensing

Summary

You *can* pursue a career in database technologies

Job Titles / Roles:

- SQLDeveloper
- Data Architect
- Data Scientist / Data Analyst
- Database Administrator

