

Data Access

Past, Present, Future

National Air Quality Conferences
March 2009

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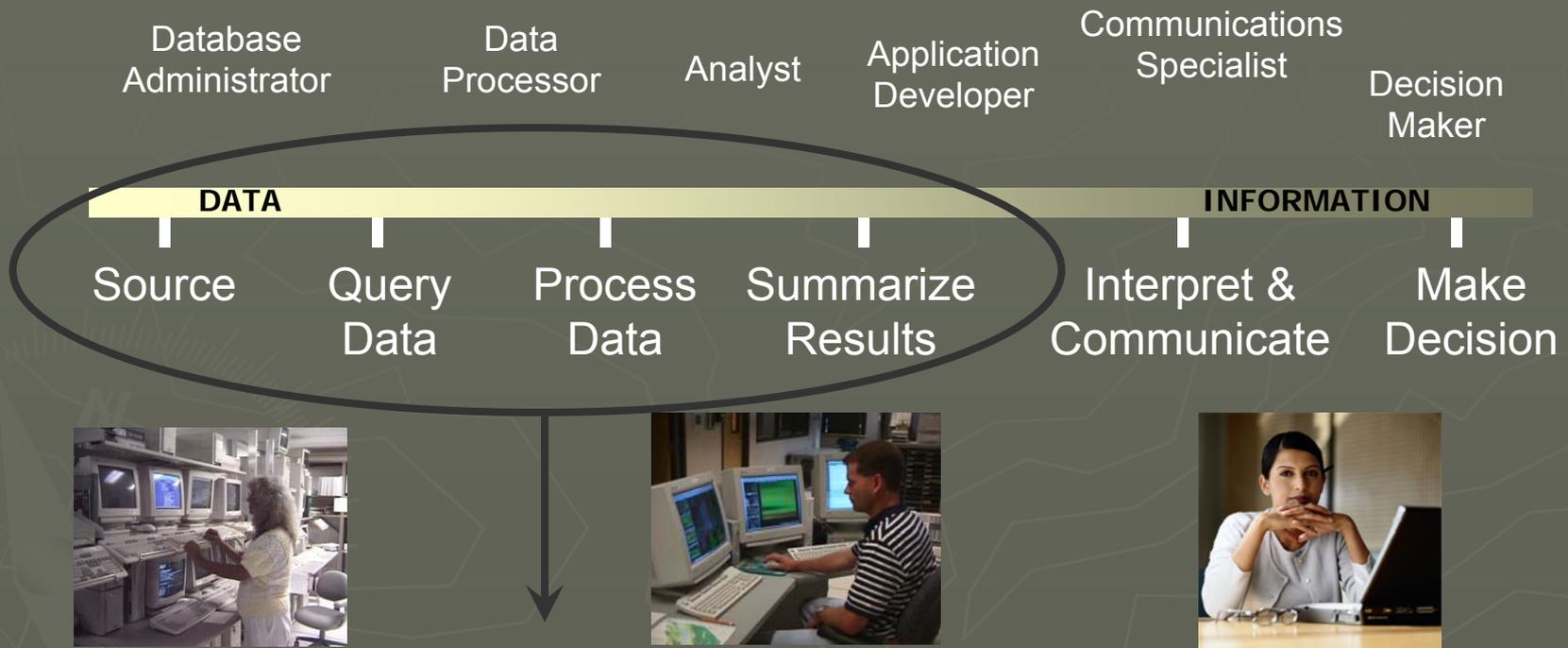
Overview

- ▶ Why do we need data?
- ▶ Data vs. Information
- ▶ How we access data – Past, Present, Future
- ▶ What are we doing to shape our future?
- ▶ What does this mean to data users?

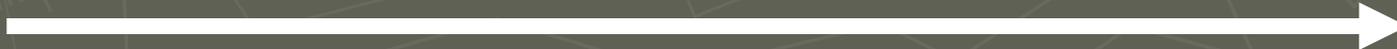
Why do we need data?

- ▶ Different reasons
 - Answer a question (who won the game last night?)
 - Assess change (sales up or down, 401k, stock market)
 - Make comparisons (buying a car, refinancing a home)
 - Make a decision (which running back to start in my fantasy football league, where should we put a monitor, tomorrow's forecast)
- ▶ Rarely do we use raw data
- ▶ More often we use highly processed data -> information for decision-making

Turning Data into Information



Technology has helped us gain efficiencies
We all want “faster” “better” “easier”



10-15 years ago

- ▶ Mainframe report, flat file
- ▶ Lot of time spent from source to results



Generate report
Download it
Read it into software
Process, merge, process
Generate result

Today

- ▶ Direct Access to databases – SQL, ODBC
- ▶ Web applications - Web services, APIs
- ▶ Less time from source to results



~~Generate report
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Tomorrow

- ▶ Cloud Computing, Service Oriented Architecture
- ▶ Technology is not the limiter
- ▶ Common goals, resources limited
- ▶ Coordination is the key

“The future will be better tomorrow.”
– Dan Quayle

“The best way to predict the future is to create it.”
– Peter Drucker

What are we doing to create our future?

- ▶ Data Summit in RTP, Feb 2008
 - Convene organizations with key roles
 - Assist OAQPS in honing its role in the AQ data community
 - Begin to establish a community-wide dialogue
 - Begin to define our “preferred future”

- ▶ Assessment of 10 major Air Data Systems, Jun-Nov 2008
 - Systems operating independently without a common vision
 - Basic infrastructure is being implemented, but with limited coordination

- ▶ EPA OAQPS data systems strategy in progress, target July 2009
 - Identify primary needs
 - Provide a roadmap to align data with needs
 - Prioritize activities
 - Facilitate coordination

What can you do to help?

- ▶ Don't support the proliferation of data systems
- ▶ Seek to coordinate with ongoing efforts
- ▶ Think about the broad community of users
 - "How can I build/design in such a way that others may benefit?"

What will this mean for data users?

- ▶ “Faster, better, easier” access to data
- ▶ Better stewards of our resources
- ▶ Satisfaction of working together
- ▶ Users at all levels will benefit



Summary of Key Points

- ▶ We all use data at some level
- ▶ Technology continues to improve data access
- ▶ Coordination is key to “preferred future”
- ▶ Users at all levels will benefit

