

# **Road Map to Statistical Data Warehouse**

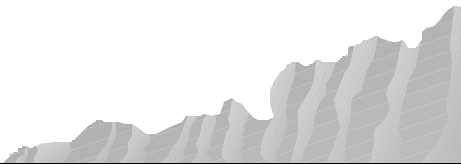
**UN Workshop on the good practices  
for dissemination of Official Statistics  
in the ESCWA Countries**

Doha/Qatar, February 2003

**Dr. Salem Al-Naemi**  
Director of Statistics Dept.



## **Agenda**

- ◆ **Qatar's Statistics Dept.**
  - ◆ **Ways We Disseminate Data**
  - ◆ **Requesting Data Flow**
  - ◆ **architecture Needed**
  - ◆ **Information System's Criteria**
  - ◆ **Proposed Technology**
  - ◆ **Data Warehousing**
  - ◆ **Conclusion**
- 

## **Qatar's Statistics Dept.**

- ◆ **The Statistics Dept. collect timely (monthly, quarterly, yearly, and periodically) social and economical data within Qatar.**
- ◆ **This creates massive amount of data,**
  - **which makes the job of analyzing and disseminating it difficult if not impossible.**

## **Qatar's Statistics Dept.**

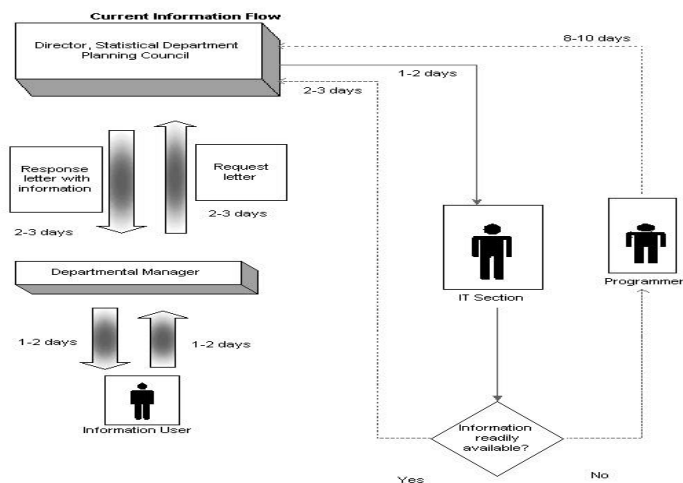
- ◆ **Also, one of the main objectives of the Dept. is to facilitate access to data from anywhere and at any time to interested**
  - **researchers,**
  - **socialists,**
  - **economists,**
  - **planners,**
  - **and businesses.**

# Ways We Disseminate Data

- ◆ Hard Copy Publications
- ◆ Member of GIS Net
- ◆ Soft Media
- ◆ Web Site
- ◆ Upon Request

# Requesting Data Flow

Proposal to Statistics  
Department  
The Planning Council, State of Qatar




## **Architecture Needed**

- ◆ **In the never-ending quest to access any information, anywhere, anytime, architecture is needed**
  - that includes data from both internal and external sources in a variety of formats.
- ◆ **It must include**
  - operational data,
  - historical data,
  - legacy data, and
  - databases from the internet.


## **Architecture Needed**

- ◆ **It must also include**
  - a comprehensive,
  - easily understood, and
  - accessible metadata.

## **Information System's Criteria**

- ◆ **Information systems need to support at least four levels of analytical processing in a Statistical Center:**
    - **Simple queries and reports against current and historical data.**
    - **The ability to do “what if” processing across dimension of data stored.**
- 

## **Information System's Criteria**

- **Analyze what has previously occurred to bring about the current state of the data.**
  - **Analyzed what has happened in the past and what needs to be done in the future to bring about a specific change.**
- 

## Proposed Technology

- ◆ **Statistical Centers should begin to position themselves to move into an overall architecture that**
  - **will eventually support all levels of data access and analysis against internal and external data in a variety of formats.**
- ◆ **The technology that would help in this direction is the concept of Data Warehousing (DW).**

## Data Warehousing

- ◆ **Data warehousing is a powerful technology that is being used by many organizations to meet strategic objectives.**
  - improving services for customers and end users,
  - reducing costs of business processing,
  - meeting increased global competition,
  - responding faster to competitive challenges,
  - providing transparent access to data,
  - and unlocking data trapped in host environments.

## Data Warehousing

- ◆ **A data warehouse is a repository of information extracted from other corporate systems; be the transactional systems, departmental databases, or the company's intranet; and accessible to business users.**

## Data Warehousing Difficulties

- ◆ **What makes data warehousing difficult:**
  - The sheer size of the database involved.
  - The database design problem.
  - The problem of integrating data from many sources as well as historic data.
  - The quality of the data and the variations in its form are the toughest obstacle to building good data warehouses.
  - Cost of Building it.

## **Conclusion**

- ◆ **Studying the characteristics of data warehousing and realizing that they are needed for Qatar's statistic department.**
- ◆ **Working on evaluating different Solution.**

**THANK YOU**