



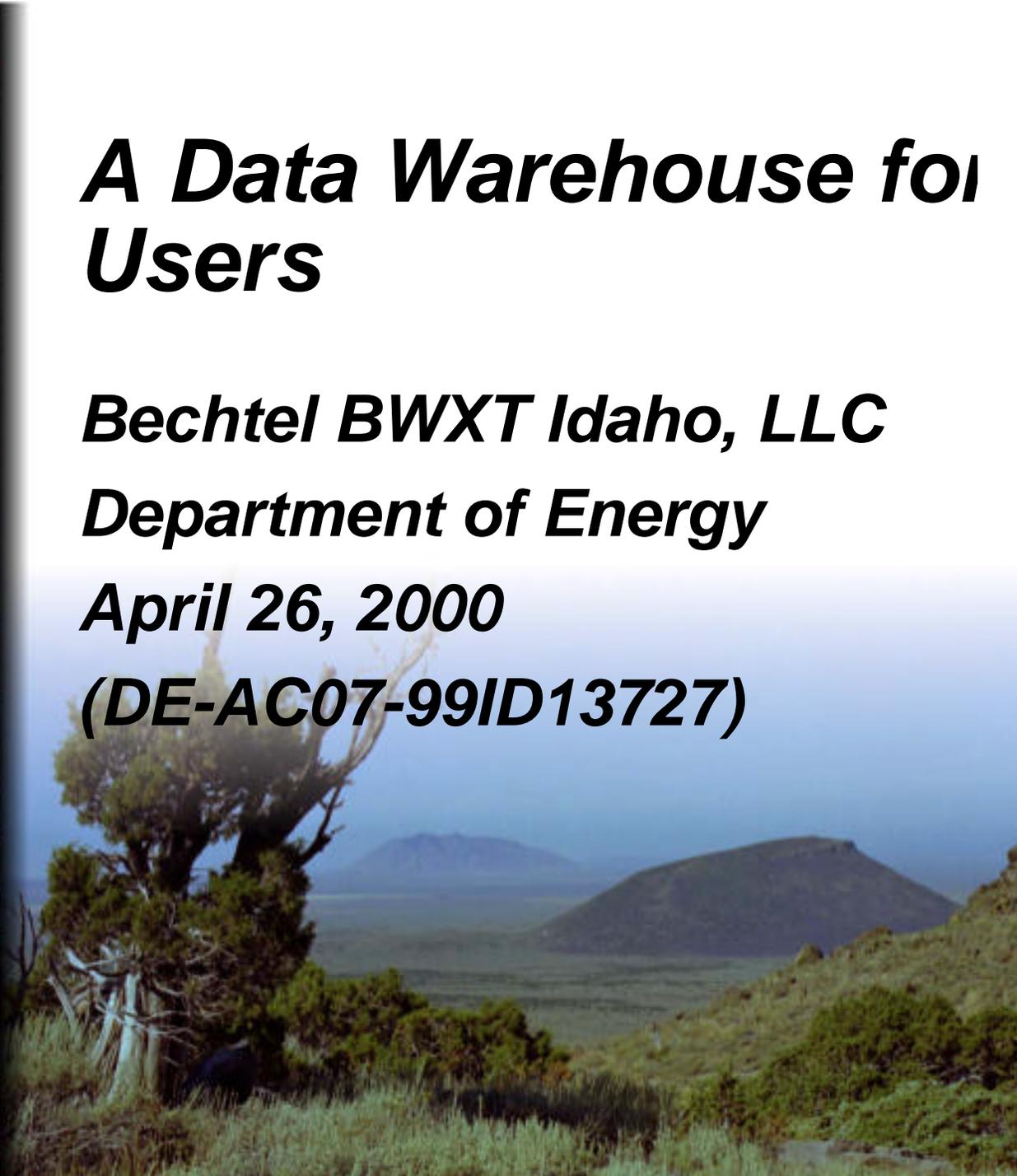
# ***A Data Warehouse for Users***

***Bechtel BWXT Idaho, LLC***

***Department of Energy***

***April 26, 2000***

***(DE-AC07-99ID13727)***



# **Supporting Improvement Initiative- Data in “JAIL”**

## **Barriers**

***Operational Data Systems have very long service lives. Technology updated infrequently***

***Operational and Information Systems have incompatible demands***

## **Issues Created**

***Myriad of financial data collected, transacted and stored independently.***

***Data is difficult to retrieve and report.***

***Different reporting needs and user abilities.***

***Ad hoc requests sometimes difficult.***

***Lengthy report generation cycle time.***

***License Fees and Multiple workstation Platforms***

# Supporting Improvement Initiative-Data in “**JAIL**”

**als:**

***Provide easier access to financial related reporting***

***Integrate different source data into a common interface***

***Utilize off-the-shelf software***

# ***Data warehousing & reporting...why?***

*Products and Process*



# **Supporting Improvement Initiative Findings**

**Use an Incremental Development Approach**

**Most-Effective approach to validate the End-User's productive functions in using a data warehouse**

**Segmented Groups of Users**

**Viewers, Tourists, Surfers**

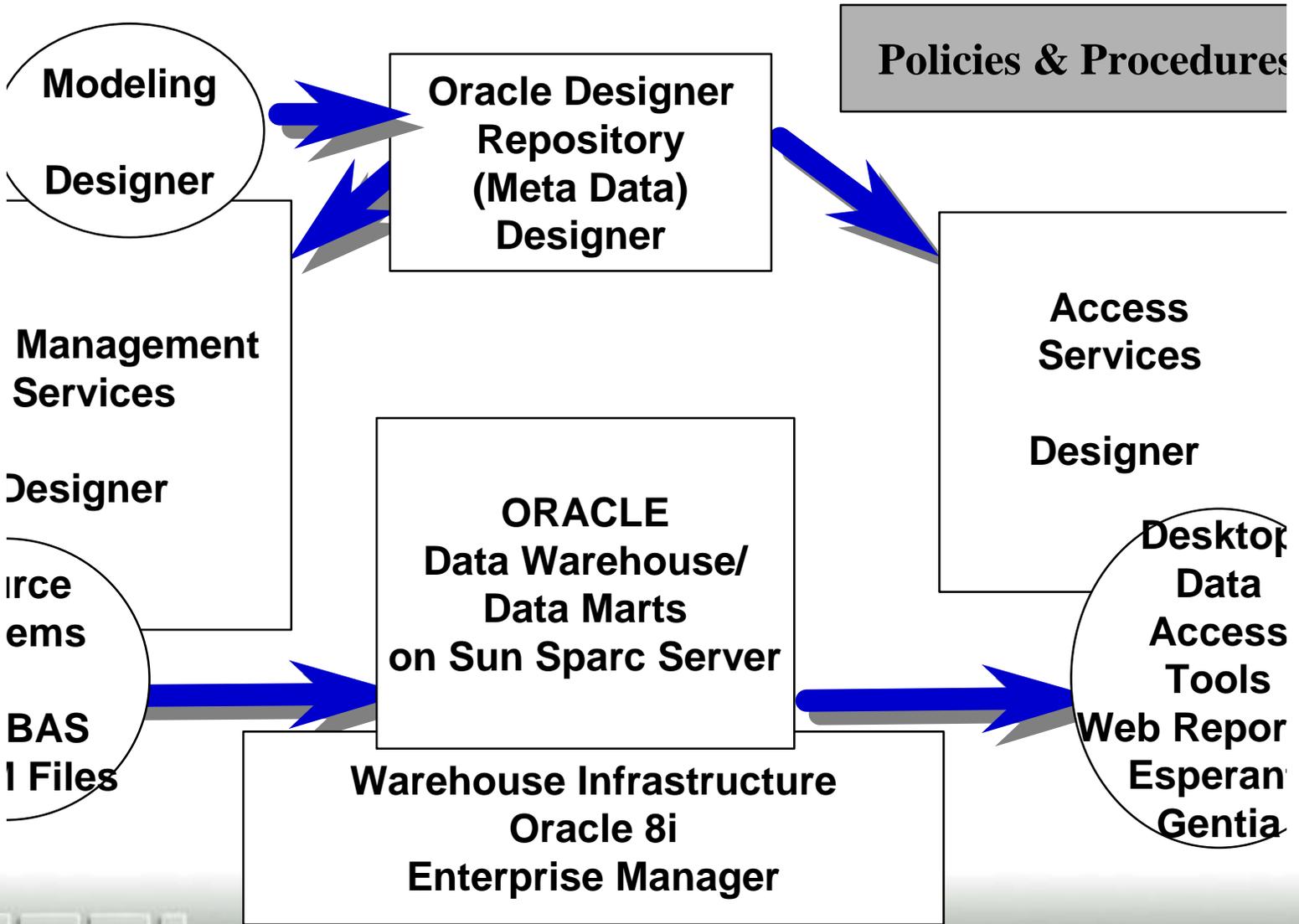
**Provided Different User Solutions**

**Viewers (Executive Users) access to OLAP Technology**

**Tourists (Great Middle) provided WEB based reporting**

**Surfers (Power Users) create their own queries against financial data**

# Complete Warehousing Solution





# ***Reporting Solutions***

***Utilizing the Business Decision Support Information System (BDSIS) Data Warehouse***



# **Reporting Solutions**

**What is a (BDSIS)**

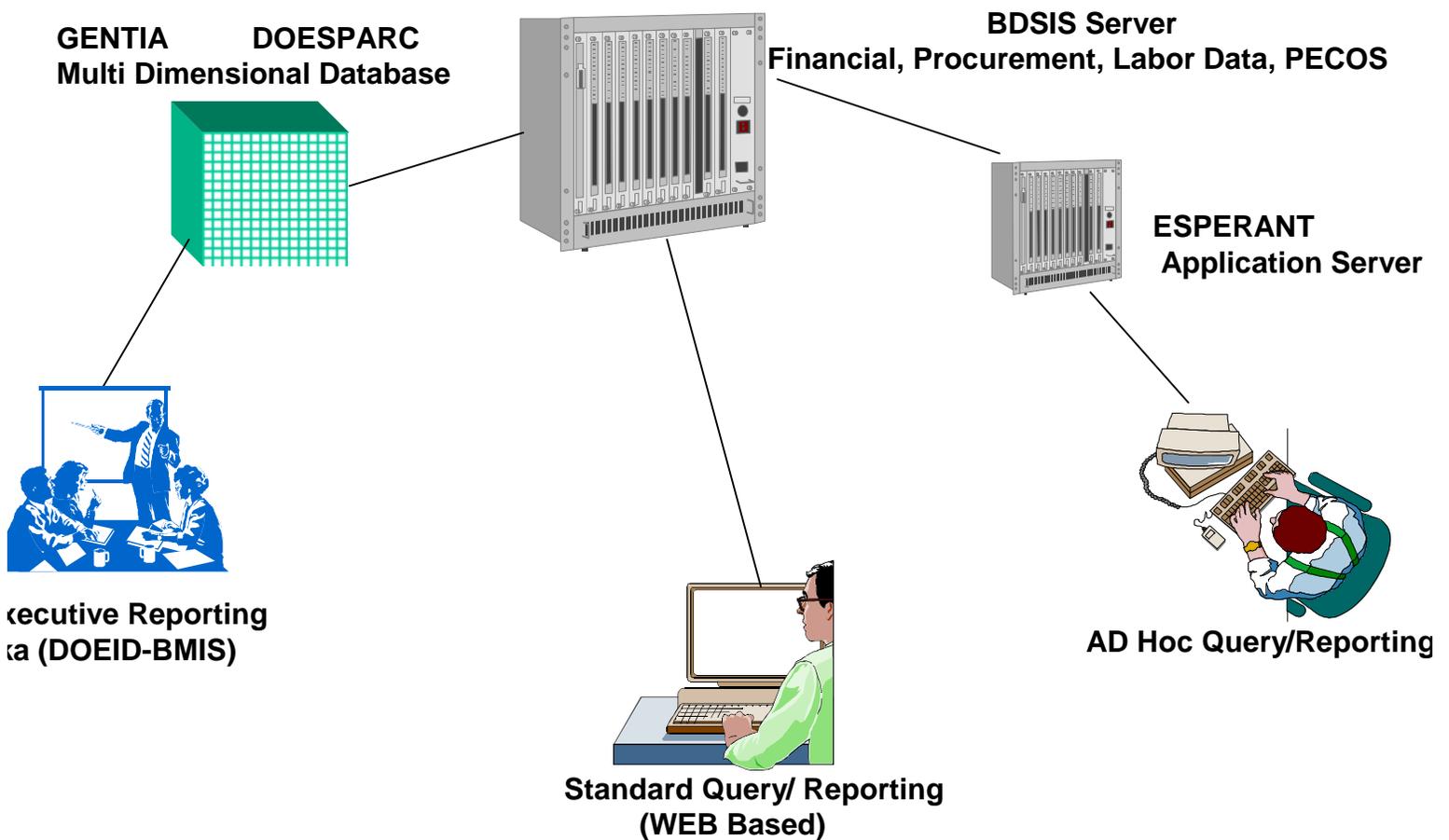
## **Data Warehouse**

- **Financial information**
- **Procurement & Inventory**
- **Accounts Payable**
- **Labor resources**
- **Plant and Equipment (PECOS) data**

## **Reporting and Analysis**

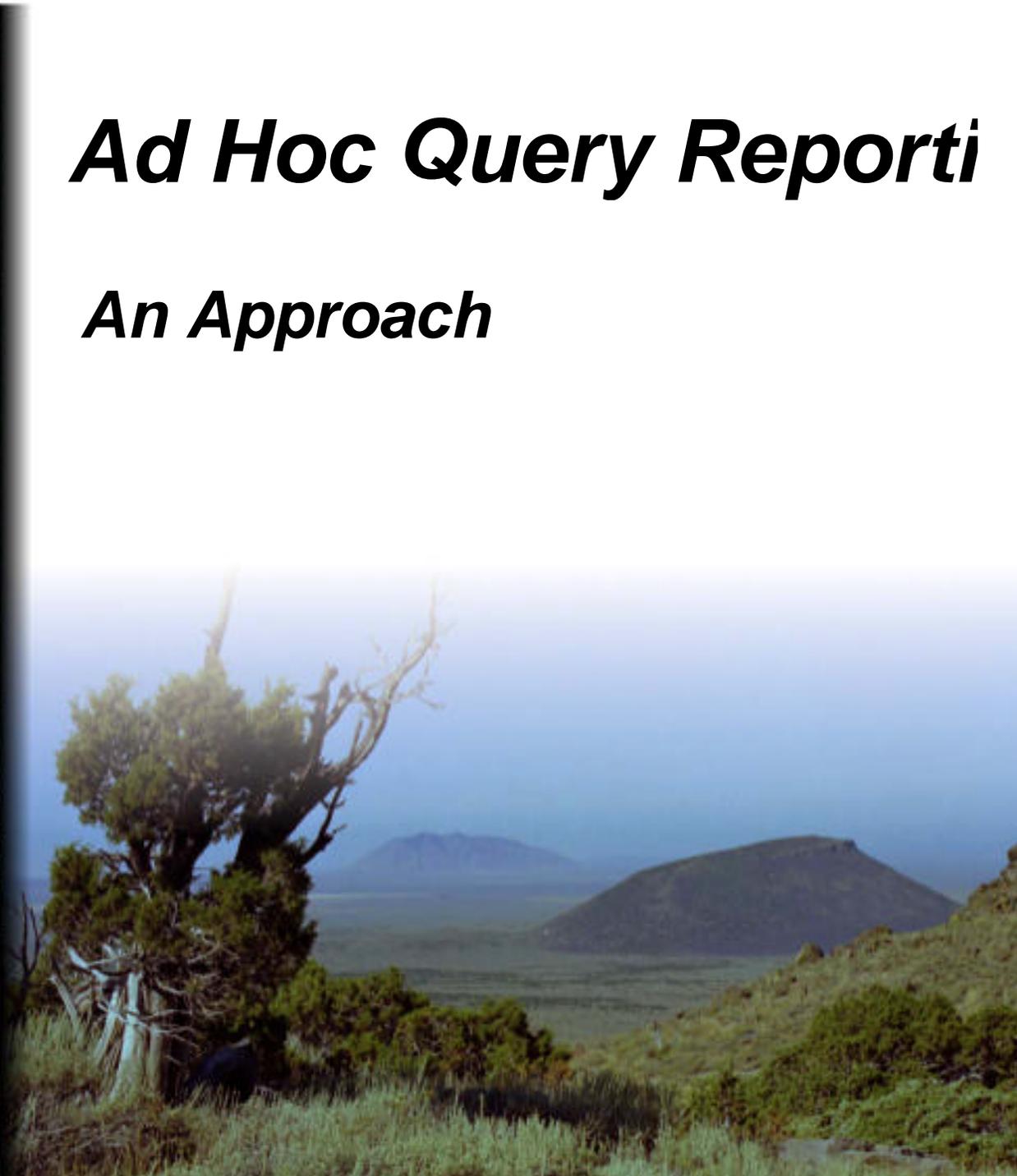
- **Ad Hoc Query Generation**
- **Management Reporting and Analysis**
- **WEB Based Standard Reports**

# **S DATA WAREHOUSE IESS DECISION SUPPORT INFORMATION SYSTEM**



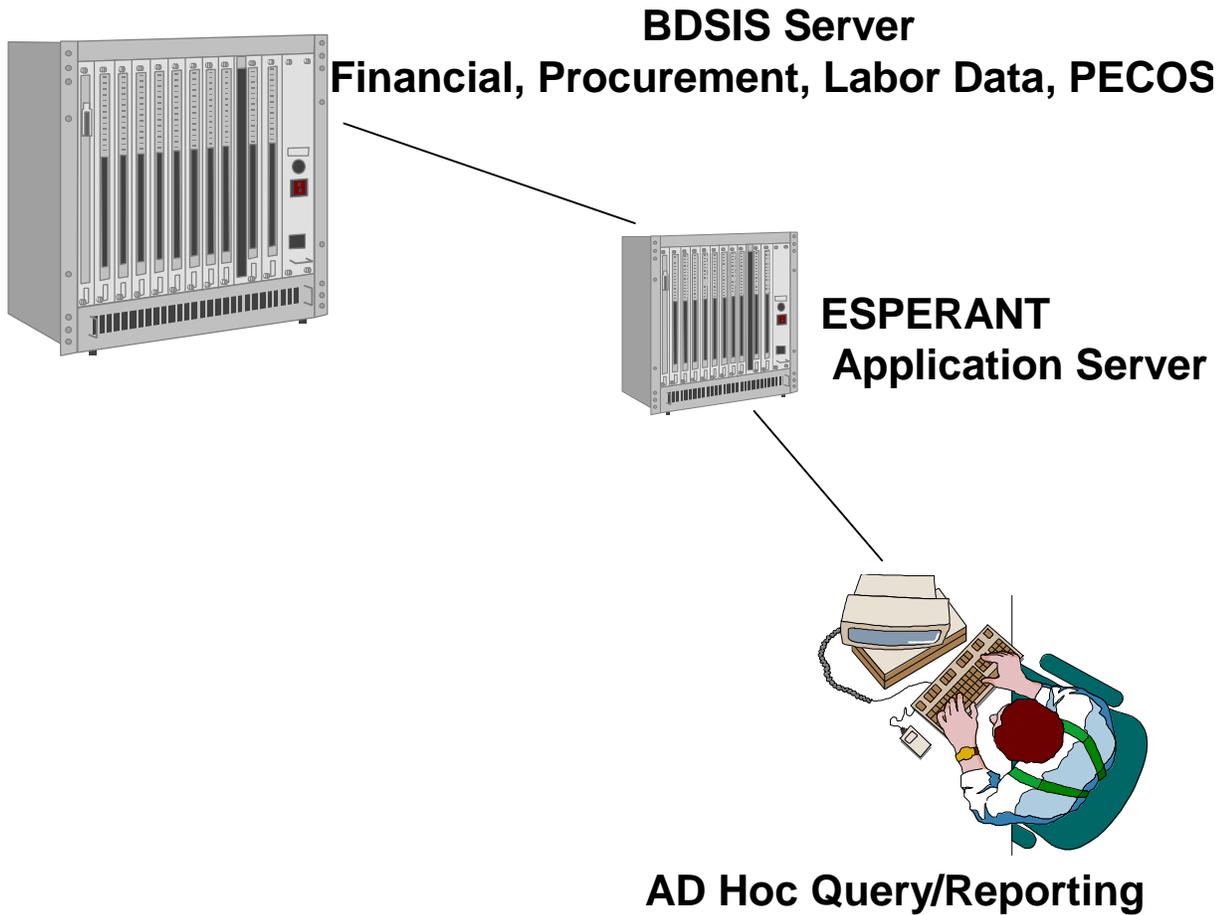
# ***Ad Hoc Query Reporti***

## ***An Approach***



# **BDSIS DATA WAREHOUSE**

## **BUSINESS DECISION SUPPORT INFORMATION SYSTEM**



# ***Hoc Query Reporting***

## ***er Requirements***

***Users create their own Reports***

***Point and Click Interface to generate Query (SQL)***

***Down load to Spreadsheet***

***Information sorted as they wanted***

# ***Hoc Reporting Benefits***

***Users Creating their own reports***

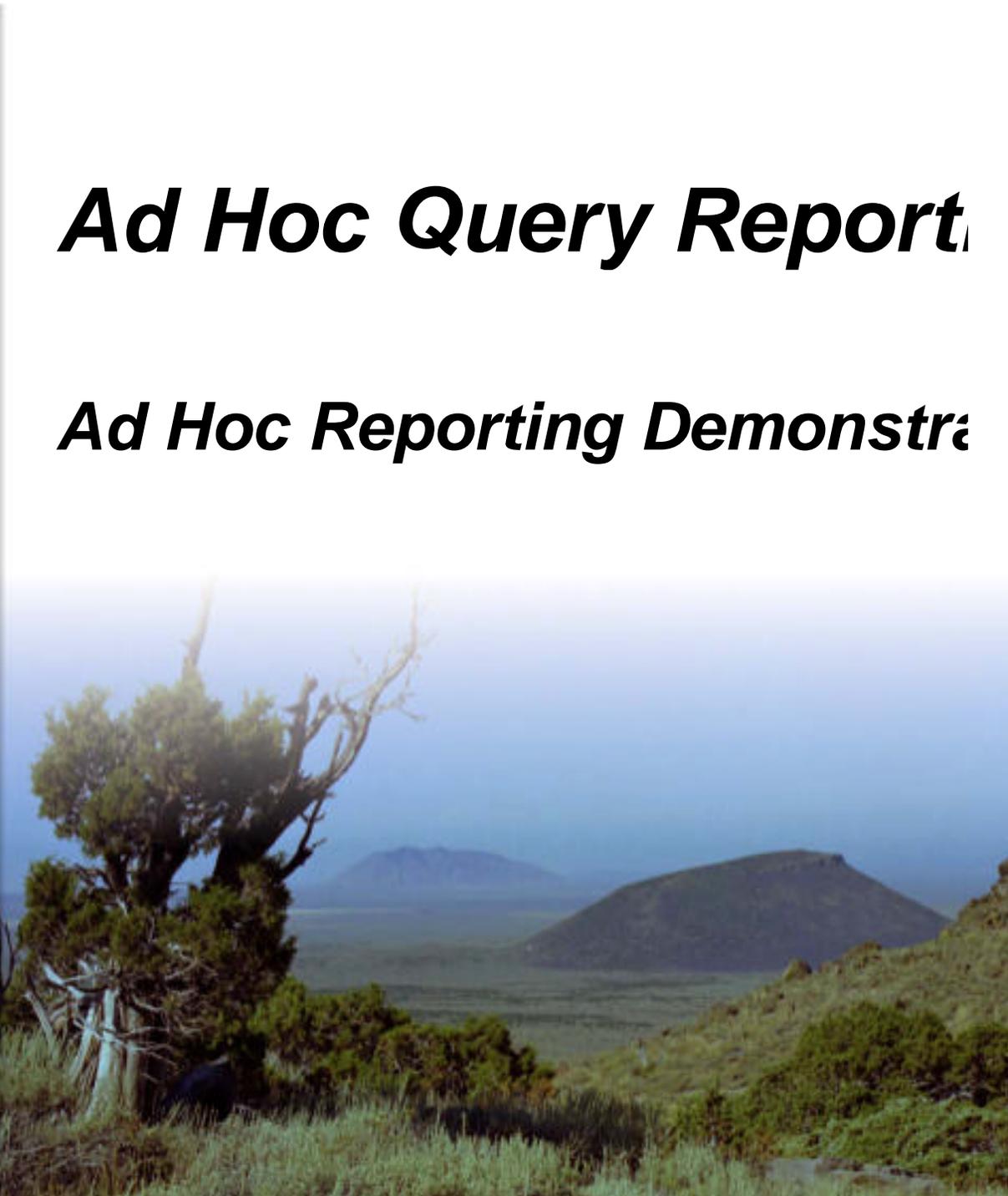
***Reduce backlog of programming requests***

***Reports Customized to Users Need by Allowing :***

- a choice of the attributes***
- sorts of the data based on these attributes***
- download data to a spreadsheet***
- or format report for presentation***

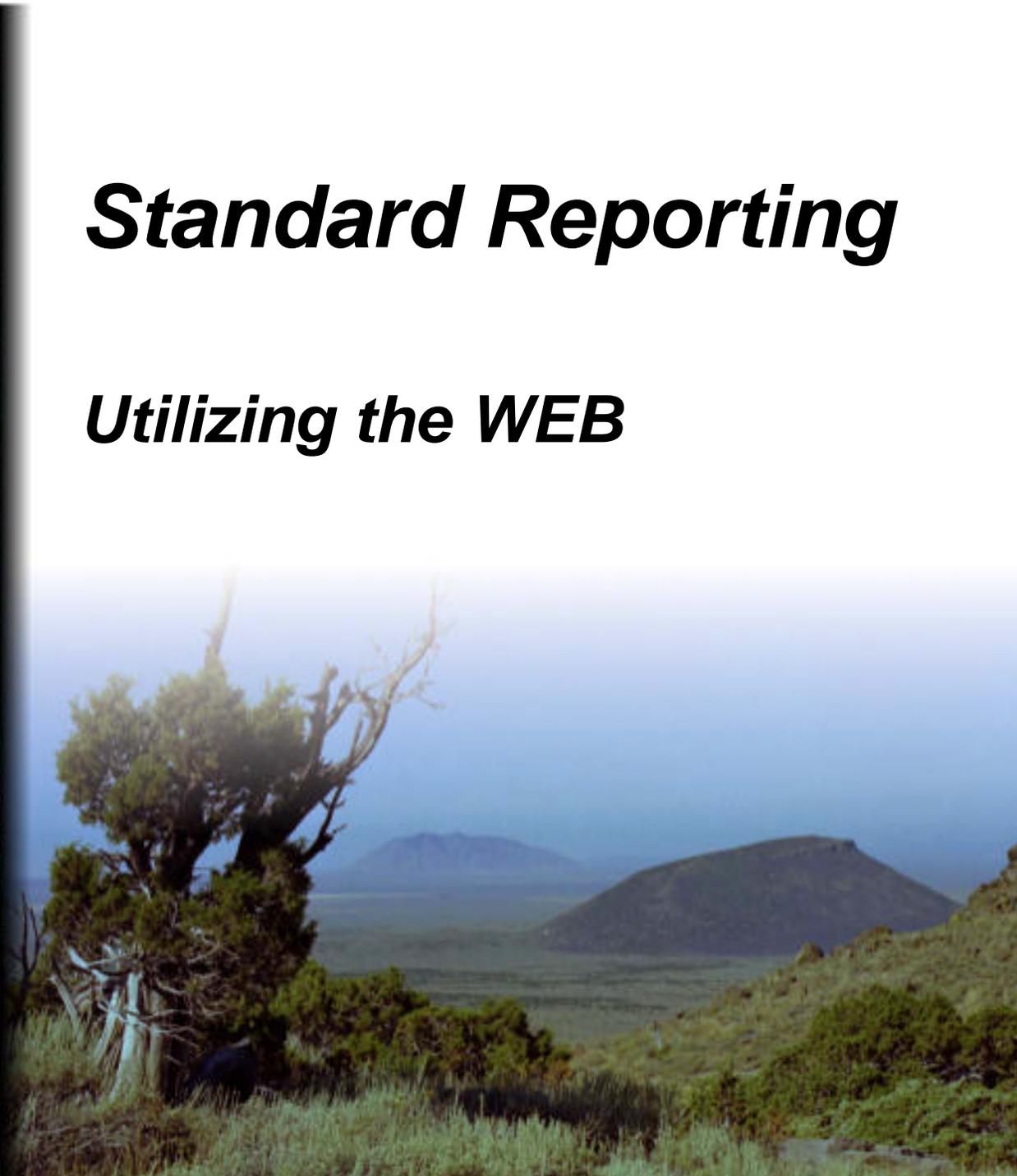
# ***Ad Hoc Query Report***

## ***Ad Hoc Reporting Demonstration***



# ***Standard Reporting***

## ***Utilizing the WEB***



# **BDSIS DATA WAREHOUSE**

## **BUSINESS DECISION SUPPORT INFORMATION SYSTEM**



**BDSIS Server**  
**Financial, Procurement, Labor Data, PECO**



**Standard Query/ Report**  
**(WEB Based)**

# ***Standard Reporting***

## ***Definition/Scope***

***Provide a **user friendly** application that provides the ability to select **frequently needed information** in a **standard format** for a specific area of operation without requiring knowledge of the **database** or **query tool**. The report/query should have applicability across organizations.***

# ***Standard Reporting***

***Definition/Scope (continued)***

***User Friendly***

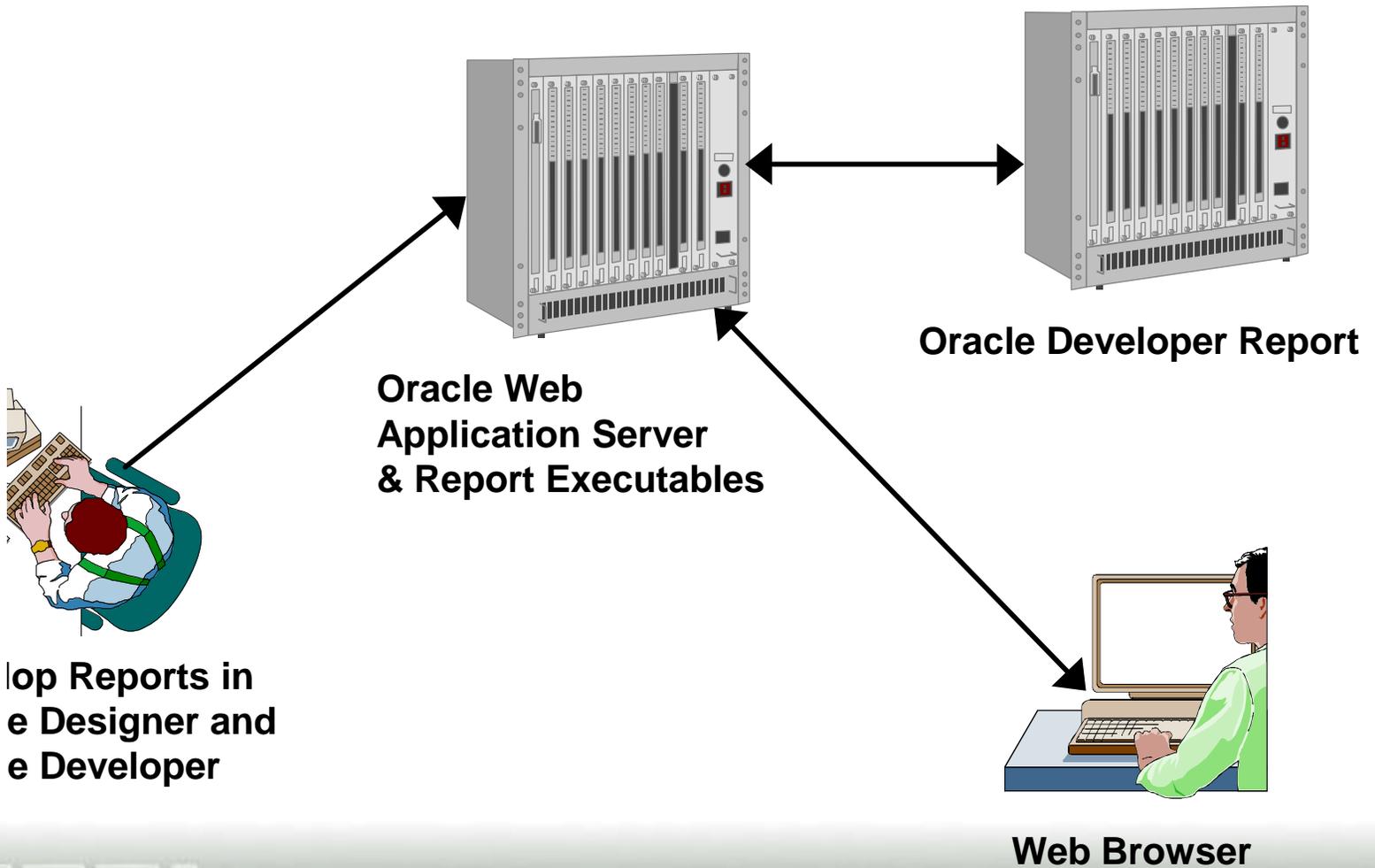
- ***WEB Based/Browser Interface***
  - ***Universal platform***
  - ***Low installation and maintenance requirements***
  - ***No cost to user***
- ***Easy to construct user reports***

***“Official” level of data integrity/security***

***Integrated data and analysis***

- ***Exception identification via variance parameter***
- ***Link reports using drill down***

# Standard Reporting Architecture



# ***Standard Reporting Architecture***

***Develop Reports using Oracle Designer and Develop on Windows NT / 95***

***1 Oracle Developer Reports Server on Sun Solaris***

***1 Oracle Application Web Server on Sun Solaris  
1 Configured for Reports Server and Executables***

***Access Web Standard Reporting via Netscape***

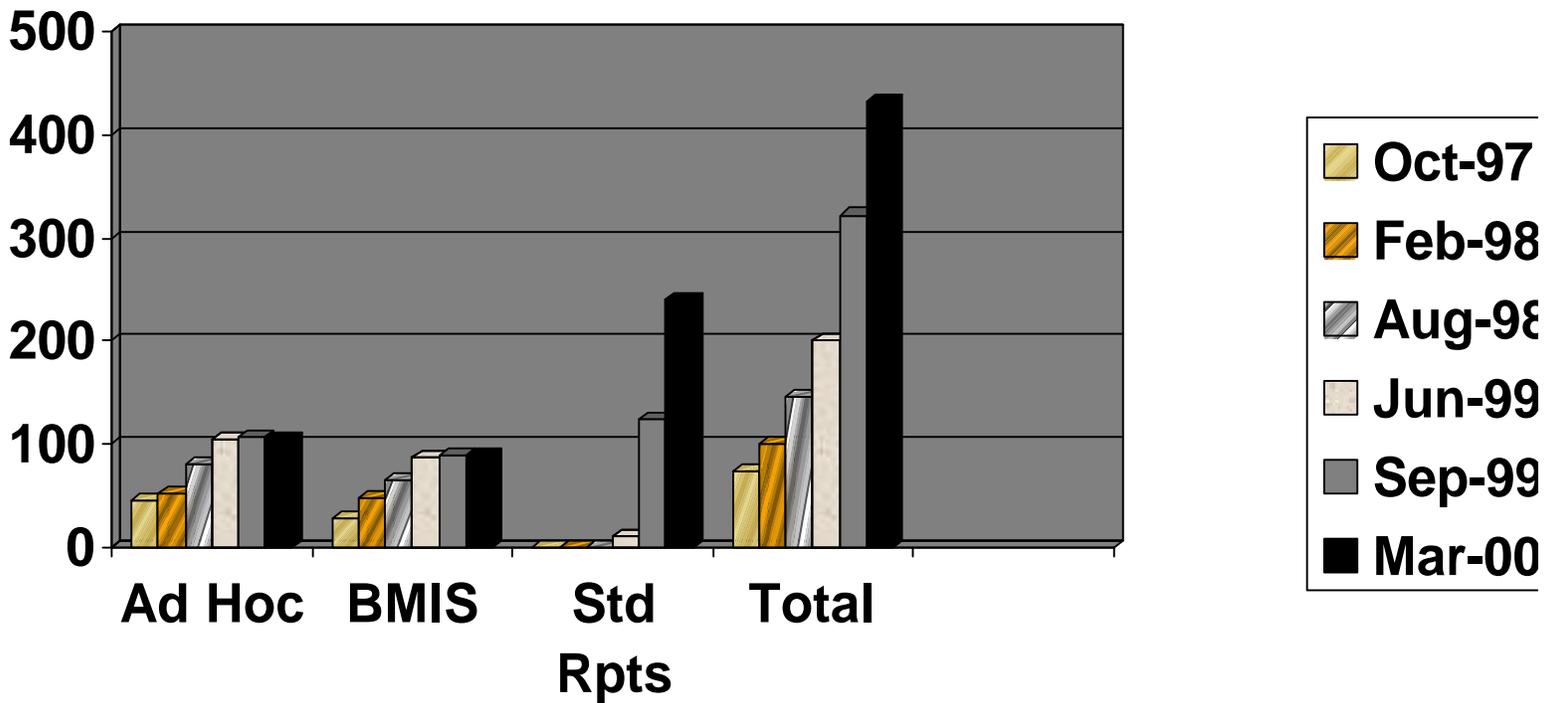
# ***Standard Reporting***

***Demonstration utilizing the V***



# *Application User Growth*

## BDSIS USERS



# ***Warehouse Benefits***

***at INFORMATION as a company asset***

***increase ease of access for data consumers***

***Ad Hoc***

***Multi Dimensional Reporting***

***Web Enabled***

***Integrate data from transaction systems***

## ***Warehouse Benefits (cont'd)***

***Streamline Operational Systems***

***Reduce backlog of operational Service requests***

***Simplify reengineering of application systems***

***Shift IRM programmers to Warehouse development***

***Eliminate need to store summary data***

***Reduce Impact of Changes***

# ***BDSIS Data Warehouse Team***

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# Questions

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