

# An Approach to building an Online Data Mart:

By GEORGE, I think we've got it!

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# Institutional & Office Profile

## **USC Aiken**

- 3,350 Headcount
- 150 Graduate students
- 680 Residential students
- Carnegie: Baccalaureate (diverse fields)
- NCAA Division II
- ERP = Custom system on IBM Mainframe (c. 1981)

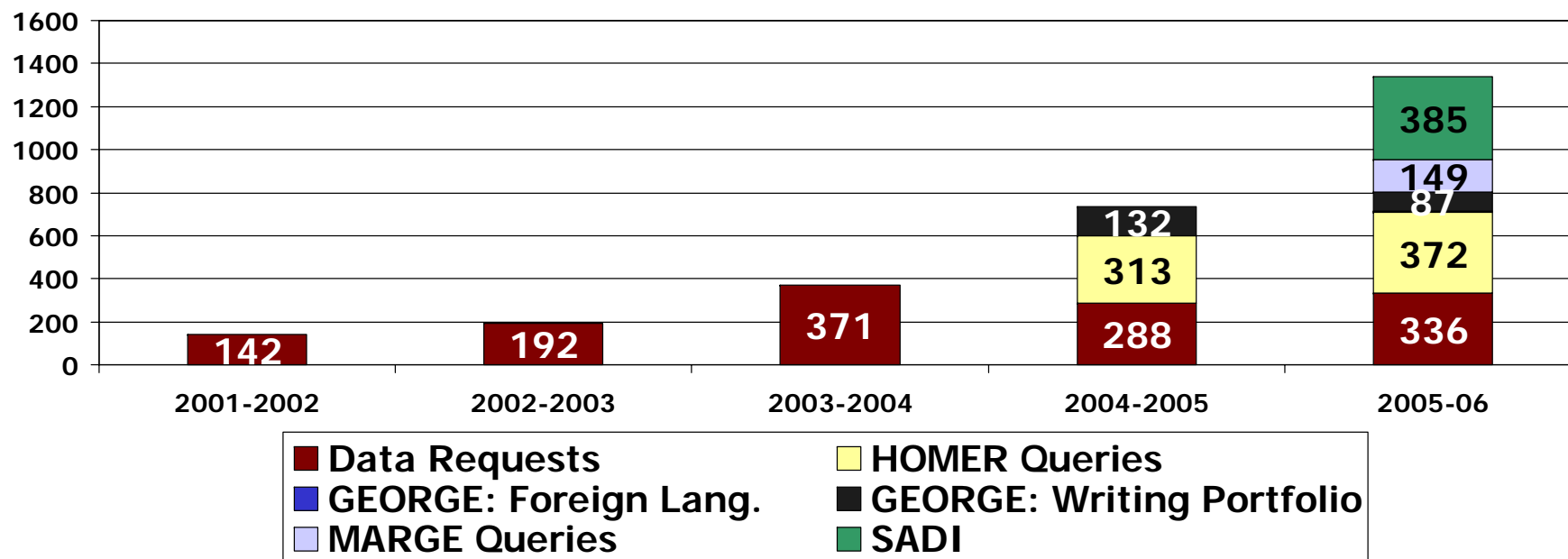
## **Office of Institutional Effectiveness**

1. External reporting & compliance
2. Internal reporting & operational data
3. Assessment
4. Research

# The Problem: Ineffective Data Delivery

- Sharpen your saw  
(Steven Covey's *Seven Habits of Highly Effective People*)

Data Requests Processed Over Time



Source: USC Aiken IE Office Program Review, 2005-06



# The Idea

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- 3 Things to take away from this presentation
  - Planning – the hard part
  - Development – documentation is the key
  - Implementation – promotion and training



# Plan, plan, plan

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- Journalism and Party Planning

Why Who What Where When How



# Data Mart?

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- Not synonymous with Data Warehouse or database.
- Think of it as a data storage closet.
- A step in the right direction with the outcome being a Data Warehouse.



# Design Methodology

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- Kimball vs. Inmon

- Ralph Kimball-

- a collection of data marts
    - intention of delivering business objectives for departments in the organization

- Bill Inmon –

- ground-up approach
    - subject-by-subject area, subject areas are added as the needs arise.



# The usefulness of Data Marts in Institutional Effectiveness

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- A Proactive, instead of Reactive, approach to data requests.
- Particularly useful for small IE/IR offices with frequent and/or routine data requests.
- Information at the users' fingertips





# “Knowledge is Power”

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- Know who to talk to
- Know what the users really want
- Know where the data should come from
  - Data reliability, data clean up
- Know when to set deadlines



# The Key

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- Start small
- Build upon a solid foundation
- At the starting line...
  - consultation with a representative from the user group
  - a needs analysis



# What you'll need... technologically speaking

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- Place to live: Server
- Security: Secure Channel (SSL), authentication
- Database: Access, SQL, etc.
- Languages: HTML, Script Language

# What we used...

## technologically speaking

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- Place to live: Windows Server 2003 backend
- Security: IIS6 (Internet Information Services)
- Database: MS SQL Server 2003
- Languages: HTML, ASP, VBScript, and SQL



# Development

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- Most important part of development is not what you might think
- Documentation
  - Not just what you did
  - Why you did it



# About our Data Marts

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- One big happy family...
  - **HOMER**: Helpful Online Multiyear Enrollment Reports
  - **GEORGE**: General Education Outcome Report GEnerator
  - **SADI**: Statistical Admissions Data Interface



# Demonstration

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- By GEORGE, I think we got it!
- [USCA Office of Institutional Effectiveness](#)



# Implementation

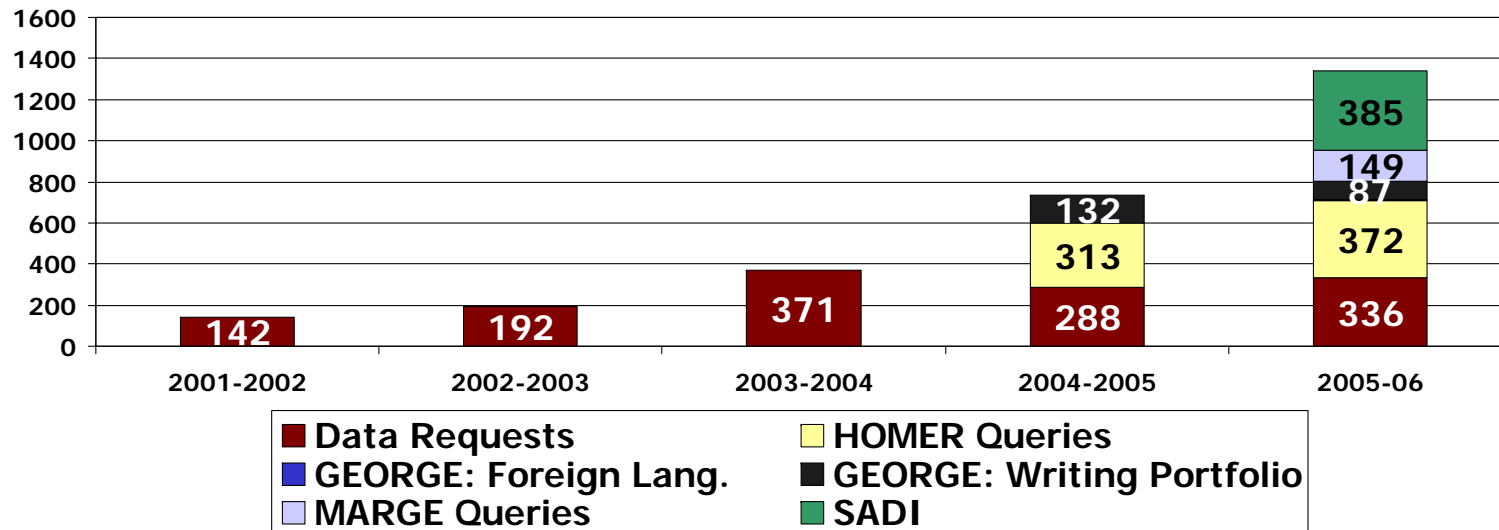
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- A data mart is only useful if it's being used.
- Never ending process
- Promote from the top down
- Training should be provided on how to "ask" the interface the right questions



# Success Measures

## Data Requests Processed Over Time



Source: USC Aiken IE Office Program Review, 2005-06