

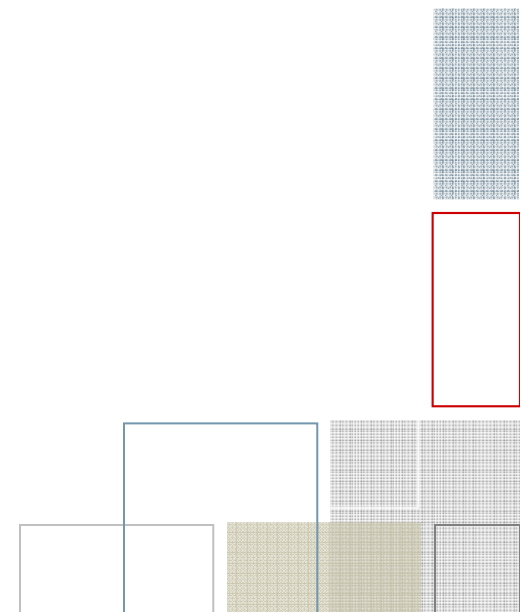
> Analytics in Enrollment Management: Revolutionizing Decision-Making and Accountability

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> Overview

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- TMCC Institutional Overview
- Growing 'Culture of Evidence' in Higher Education
- Lack of Meaningful Data in the Institutional Decision-Making Processes
- Action-focused, SPSS-based Research Model at TMCC
 - Types of Research Conducted
 - Data Warehouse Considerations
 - Architecture of the IR Data Warehouse
 - Project Syntax Library
- Outcomes-based Research (examples)
- Questions



> Organization's Overview

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Regional Profile

- Truckee Meadows Community College (TMCC) located in Reno, NV
- Population of Washoe County: 415,776
- Growth: 5th fastest growing county in Nevada
- Participation Rate: 16% of the 18-24 yr olds in Washoe County attend TMCC
- TMCC is one of the top 50 fastest growing community colleges in the nation (among community colleges with 10,000+ students)
- 11% unemployment rate



> Organization's Overview

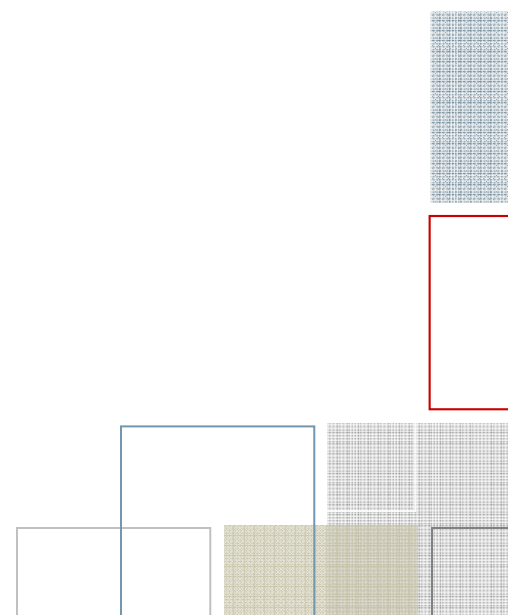
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Institutional Profile (Fall 2008)

- Headcount: 13,137
- Total Budget: \$52 million
- 5 campus sites throughout the service area
- 181 Full-time Faculty and 336 Part-time Faculty

Student Profile (Fall 2008)

- 56% between 18-24 years of age
- 25% minority students
- 25% attempt full load (18% earned)
- 91% Nevada residents



> 'Culture of Evidence' in Higher Education

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- Higher Education – the largest investment of the tax-paying public
- Competition for funding with other local, state and federal agencies
- Multiple constituencies: students, parents, faculty, external agencies and public at large
- Increased pressure to use data in decision-making and demonstrate evidence of effectiveness

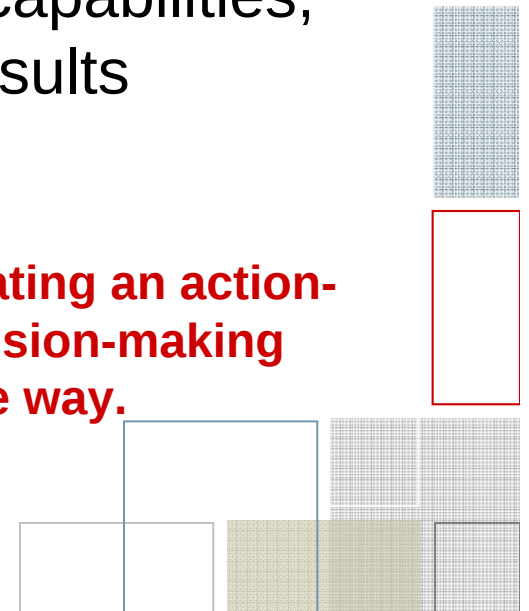


> Lack of Meaningful Data in Higher Education Organizations



- Highly compartmentalized handling of data
- Struggles with mining, processing, analyzing and applying data in a meaningful way
- Inability to provide timely on-demand research and data analysis
- Disconnect between institution's technical capabilities, analysis and appropriate interpretation of results
- Mainframe constraints

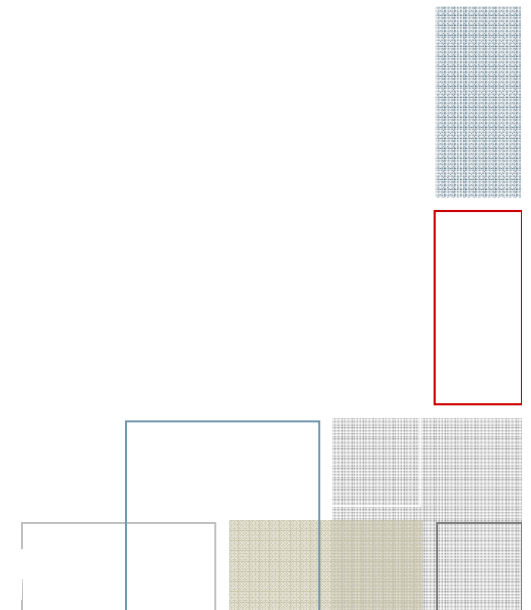
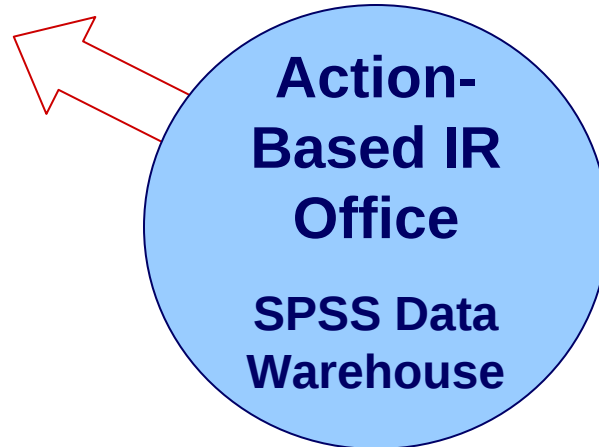
SPSS proved to be a powerful and effective tool in creating an action-based research model to support institutional decision-making processes in a highly dynamic and versatile way.



> Institutional Research Model

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**Traditional
Institutional
Research**



> Traditional Institutional Research

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Research to Inform & Describe

Types of Research:

Access to Data for Faculty and Staff

- Fact Book, Ad hoc Reports

Accountability Reporting

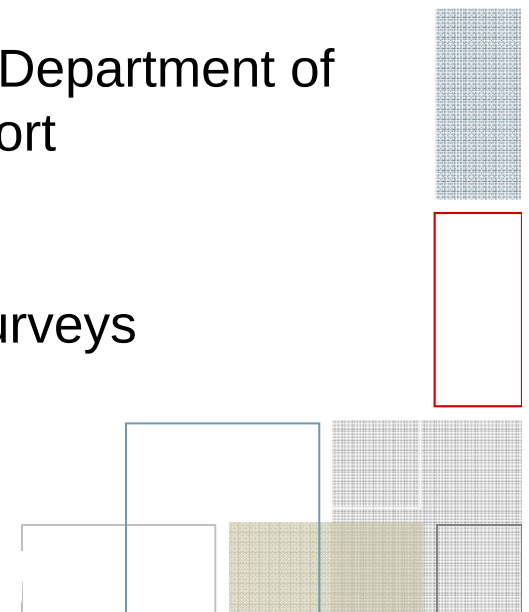
- Board of Regents/State Legislative Reports, Department of Education, IPEDS, Annual Accreditation Report

Survey Research

- Climate, Satisfaction, Graduate/Follow-up Surveys

Historic and Static

- Demographics, Longitudinal Trends

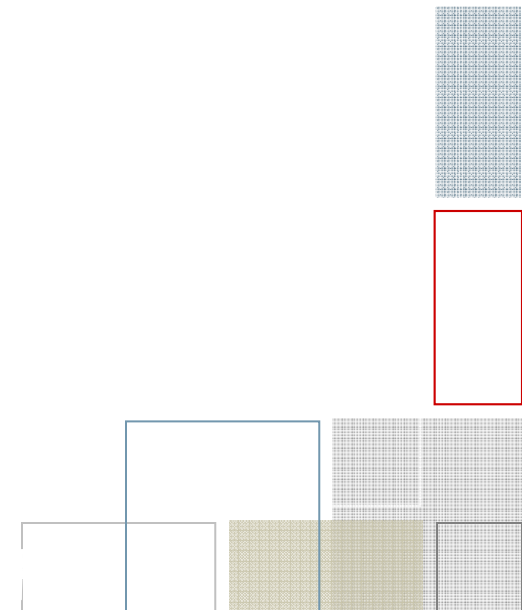
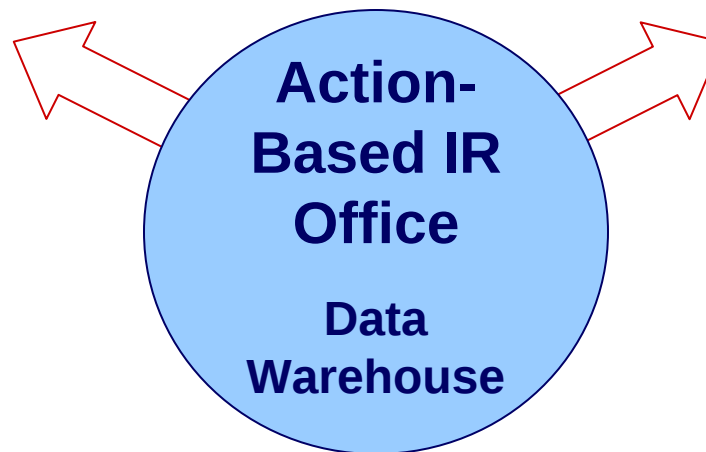


> Institutional Research Model

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**Traditional
Institutional
Research**

**Student
Success
Research**



> Student Success Research

Research to Assess Student Performance

Types of Research:

Institutional Level

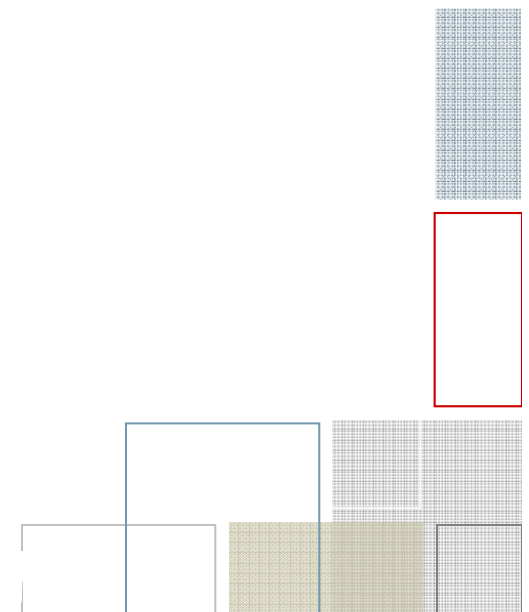
- Performance Indicators

Programs & Services Level

- Program & Discipline Review
- Administrative Unit Review

Student & Course Level

- Cohort Tracking Analysis
- Basic Skills Success

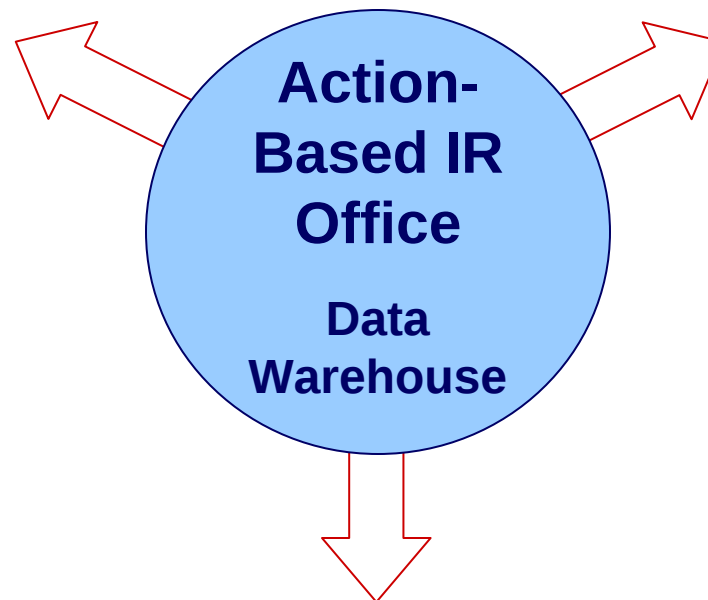


> Institutional Research Model

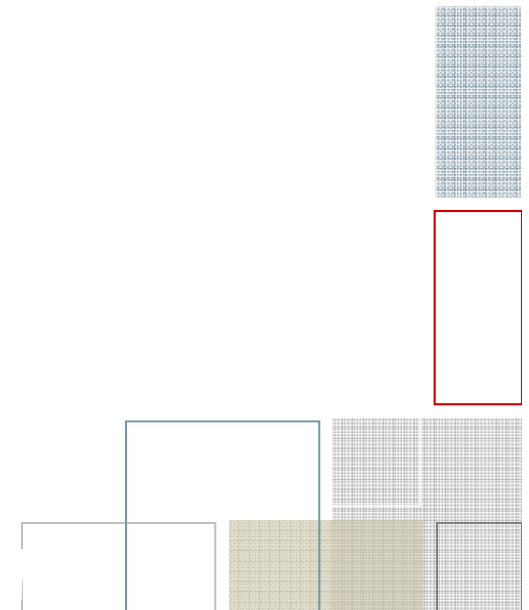
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**Traditional
Institutional
Research**

**Student
Success
Research**



**Supporting College
Operations,
Planning and
Decision-Making**



> College Operations, Planning, Decision-Making

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Research to Increase Efficiency & Effectiveness

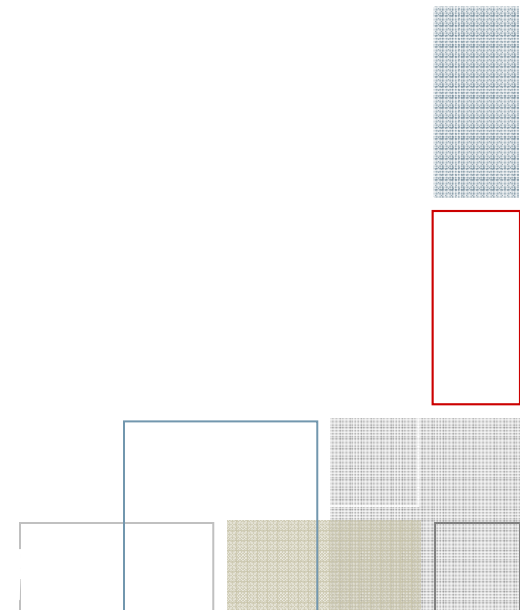
Types of Research:

Internal Operations

- Scheduling
- Space Utilization
- Faculty Workload Analysis
- Enrollment Analysis

External Environment

- Environmental Scanning



> Data Warehouse Considerations

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Research Environment

Internal Analysis, External Analysis

Data Sources

Resident Data Bases
Internal Program Reviews
Self-study
Local Labor Market
External Sources & Literature

Data Elements

Student, Faculty, Staff Demographics
Scheduling
Finance
Population Statistics
Employment & Industry Trends

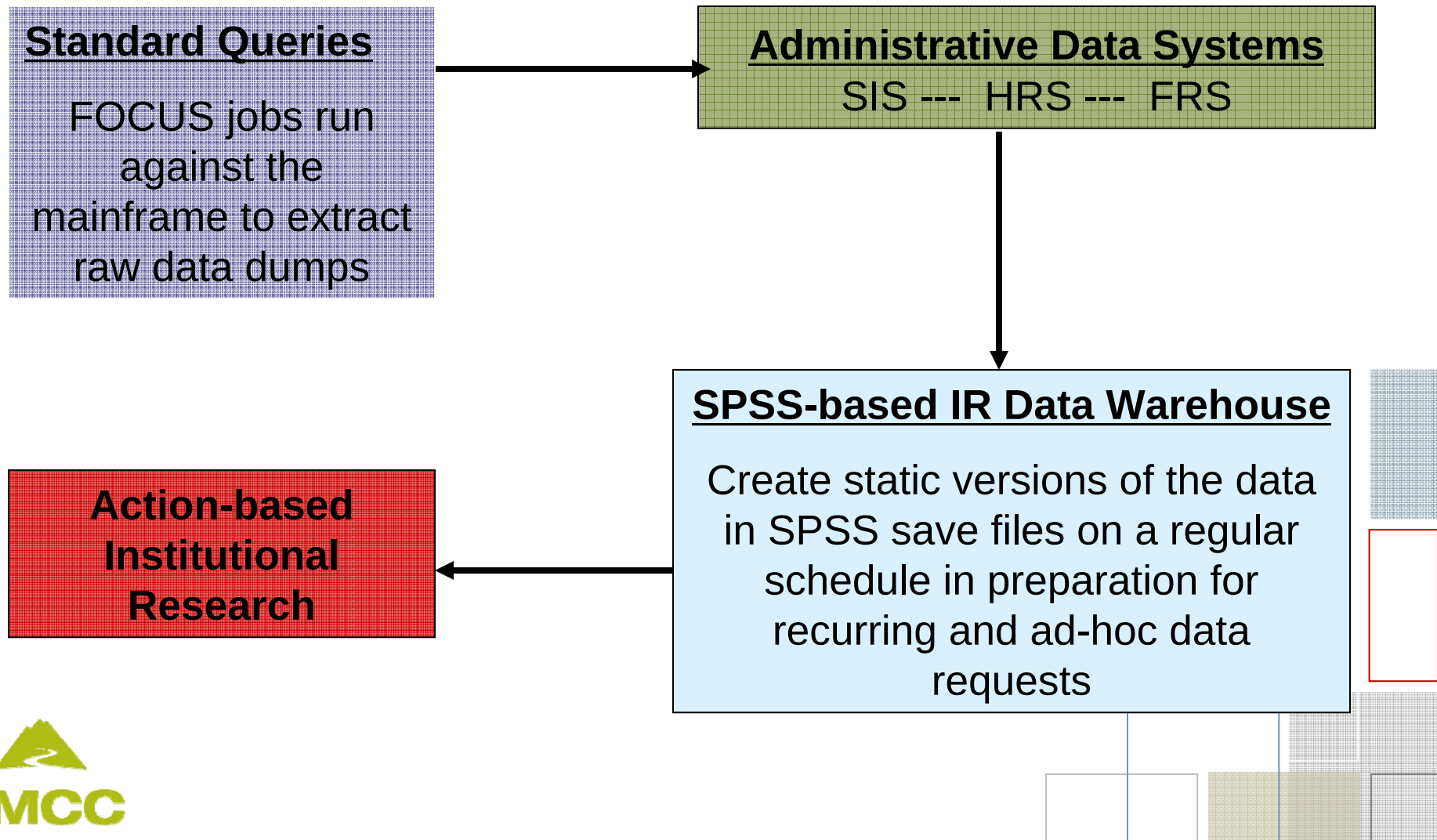
Data Analysis Needed

Need to answer questions dynamically when issues and discussions are occurring; ability to project, answer questions from various perspectives and run multiple scenarios

SPSS Base proved to be highly versatile and efficient application for housing and processing large data sets

> Architecture of the IR Data Warehouse

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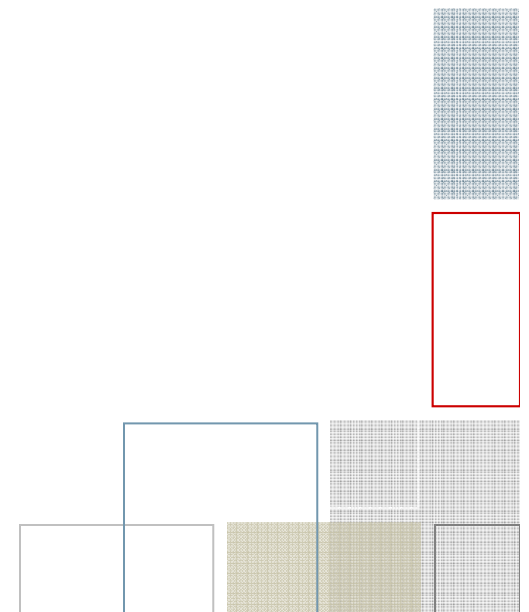


> Project Syntax Library

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Benefits of saving project-specific SPSS commands into a “Project Syntax Library”:

- Clear project documentation (processes, instructions, data assumptions)
- Streamlining standard and compliance reporting to maximize efficiency
- Hypothesis testing (multiple re-runs of the same project with different criteria)

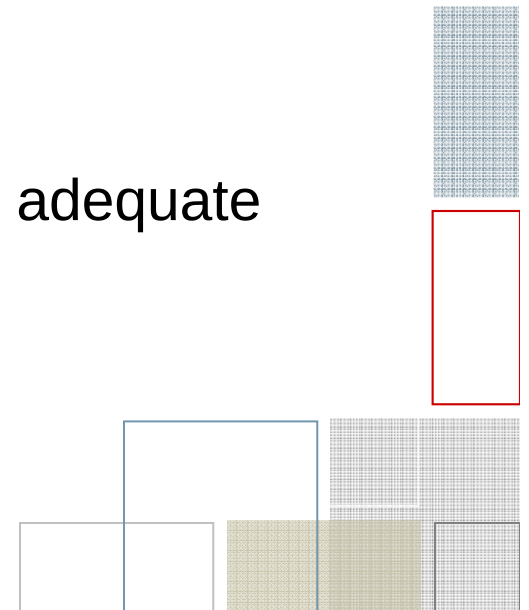


> Outcomes-Based Research

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Enrollment Projections

- Utilizing SPSS to accurately project enrollment
- Student enrollment (FTE) – primary funding criteria in higher education
- Result:
 - Early warning on potential shortfall allowed for adequate budget response (contingency fund)
 - **\$750,000 budget shortfall prevented**

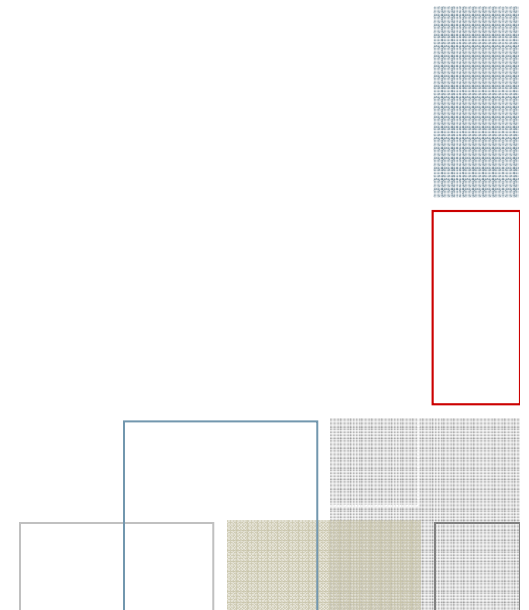


> Outcomes-Based Research

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Student Demand

- Utilizing SPSS to estimate unsuccessful enrollment attempts into section/course
- Result:
 - Dynamic monitoring of course offerings; ability to add/cancel courses based on demand
 - Better served students
 - **\$438K of potential revenue**

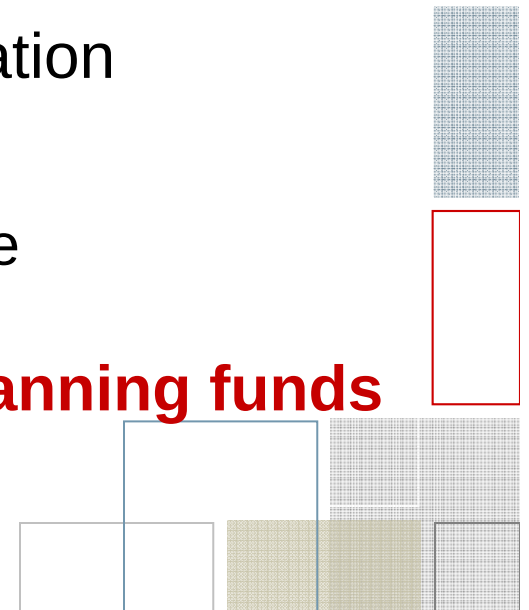


> Outcomes-Based Research

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Facilities Utilization

- Instructional Space Utilization Standard for labs and classrooms
- SPSS allowed us to zero in on rooms with low, improper utilization
- Space utilization data is a factor in CIP allocation
- Result:
 - More efficient scheduling of instructional space
 - Data-driven capital improvements
 - **\$500K approved & \$500K pending in planning funds for a \$40M new building**

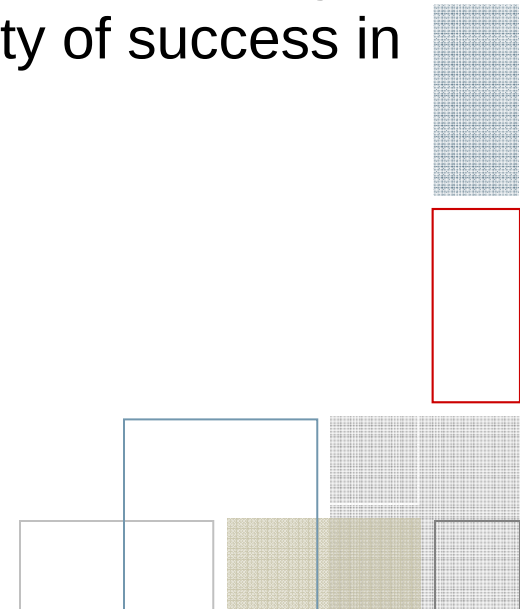


> Outcomes-Based Research

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Student Success Research

- Used SPSS to investigate correlation between placement test scores and student academic success
- Result:
 - Ensured proper placement of students in courses matching their skill level thereby increasing the probability of success in their studies
 - **Student Success: Priceless ...**

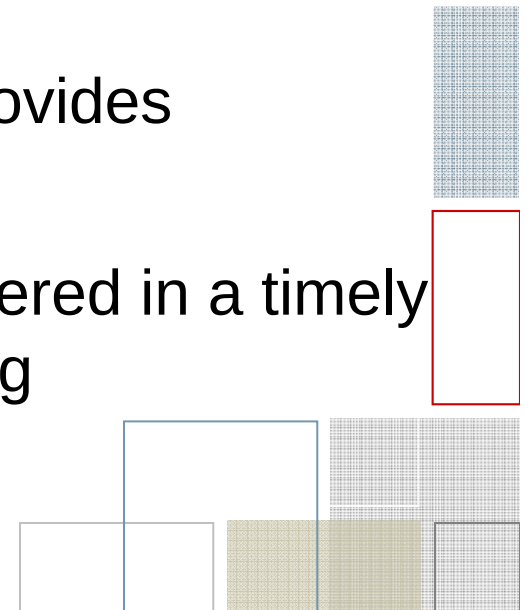


> Outcomes-Based Research

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SPSS software can be a Powerful Force in Higher Education

- Don't need to be a power user or a programmer
- Basic to intermediate SPSS skill level will put you on the organizational map
- Data warehouse in an SPSS environment provides accuracy, efficiency, independence
- Accurate, relevant and meaningful data delivered in a timely fashion is the key to effective decision-making



QUESTIONS??

