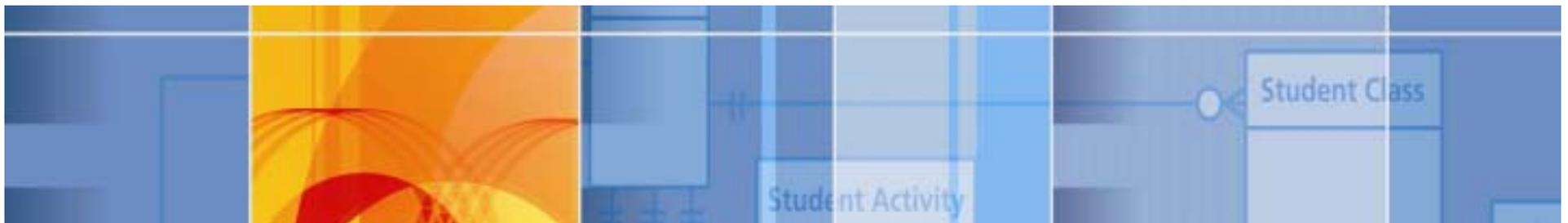# Rhode Island Department of Education

Data Warehouse, SIF and Portal Project Completion Case Study

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July 31, 2008

Project Background

RIDE began with some excellent systems!

- Unique Student Identifier system already implemented

- Data collection was well thought out and districts were already familiar with it

- Reports such as the InfoWorks data contained a great deal of detail and was easy to comprehend

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Data Warehouse

Project Background

What RIDE sought:

- Move from "silos" to warehouse that combined data from various systems and departments

- Longitudinal capability

- Enterprise Portal through which information would be made available

- Easy report generation and dissemination

- Ability to respond to ad hoc queries

- Ultimately, RIDE was looking for increased capacity for school administrators, teachers and parents to use computer software tools to:
    - integrate data,
    - apply standards and measures,
    - analyze results,
    - determine outcomes,
    - explore best practices and adjust education programs and instructional procedures.

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Project Chronology

Spring 2006

- RIDE issues RFP for Central Education Information Warehouse
- Contract awarded to ESP Solutions Group of Austin, TX, who has subcontracted with TetraData of Greenville, SC for part of the work.

Fall 2006

- Initial version of Data Warehouse is deployed
- RIDE agrees to use State Report Manager (SRM) as the data collection and validation tool
- Group of districts identified as User Group for Data Warehouse and data collection tool

Spring 2007

- Statewide roll-out of Data Warehouse and associated ad hoc analysis tool
- SIF component, encompassing about half of the districts is added

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Project Chronology (continued)

Summer 2007
- SRM pilot is launched
- SRM SIF agent is configured

Fall 2007
- First collection through SRM is done
  - (old eRIDE system still available as back-up)
- New data flow for official and unofficial data is created

Winter 2007
- December SPED collection is done exclusively through SRM

Spring 2008
- SIS SIF agent updated to address reporting needs

Summer 2008
- Version 2 of the data warehouse is completed
- DASH tool is installed, awaiting statewide pilot
- This phase of project completed.
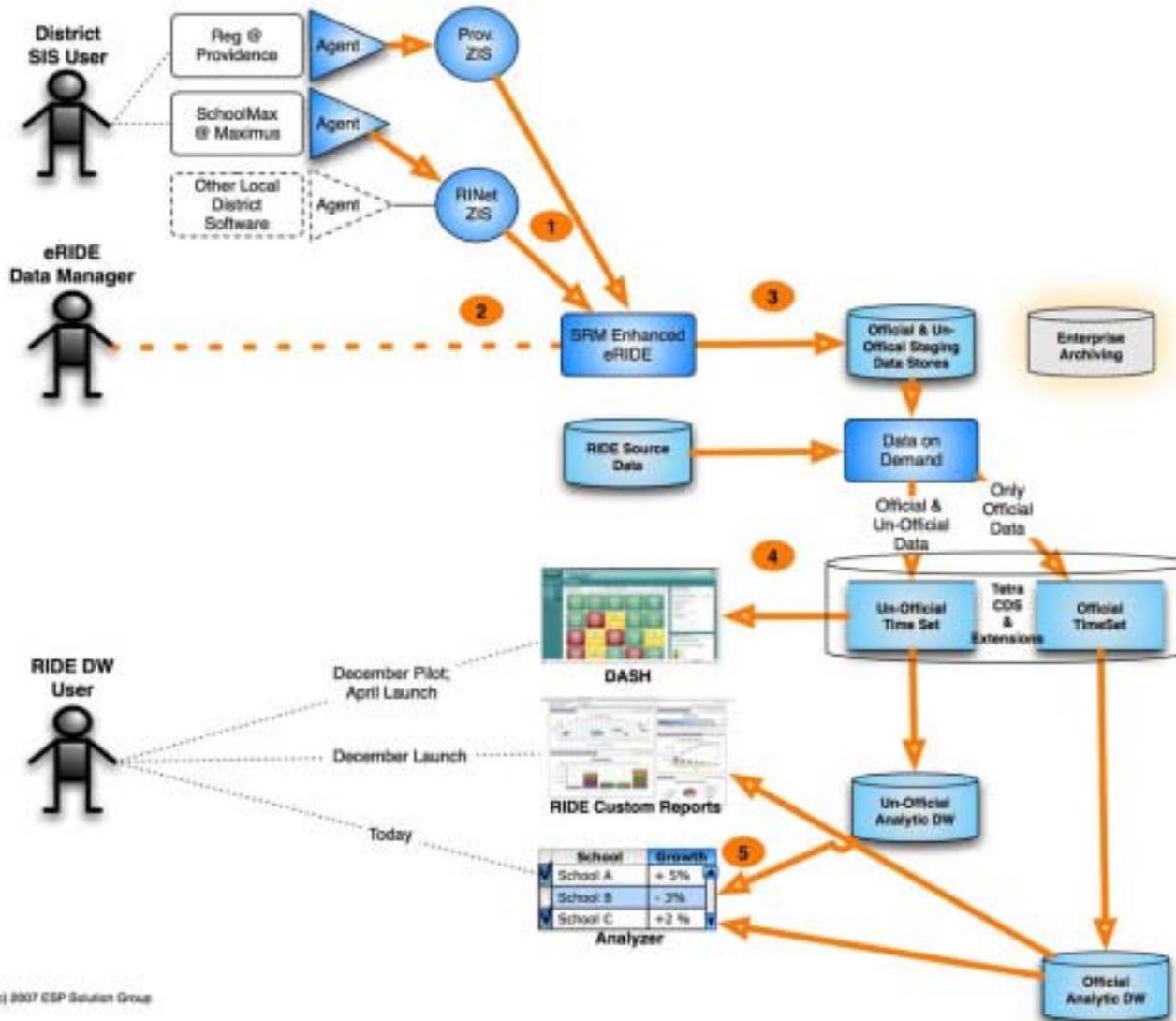
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Component Systems

The RIDE CEIS Project consists of several pieces have been deployed:

- TetraData Analysis Suite
    - Data Warehouse
    - DataAnalyzer
    - DASH
- State Report Manager
- Master Directory
- CEIS Portal
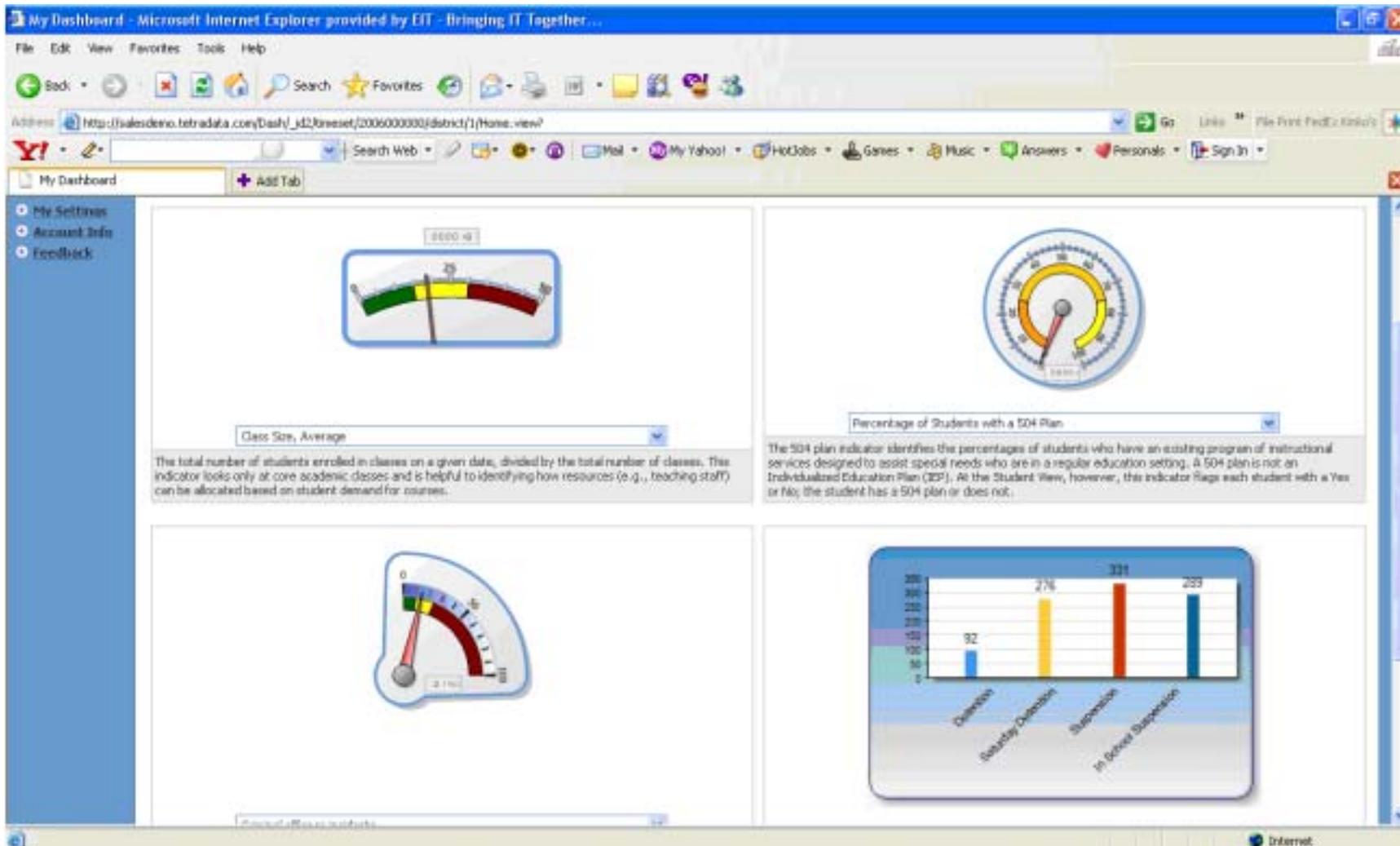- SIF collections for two SIS, accounting for over 50% of students

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RIDE CEIS Components
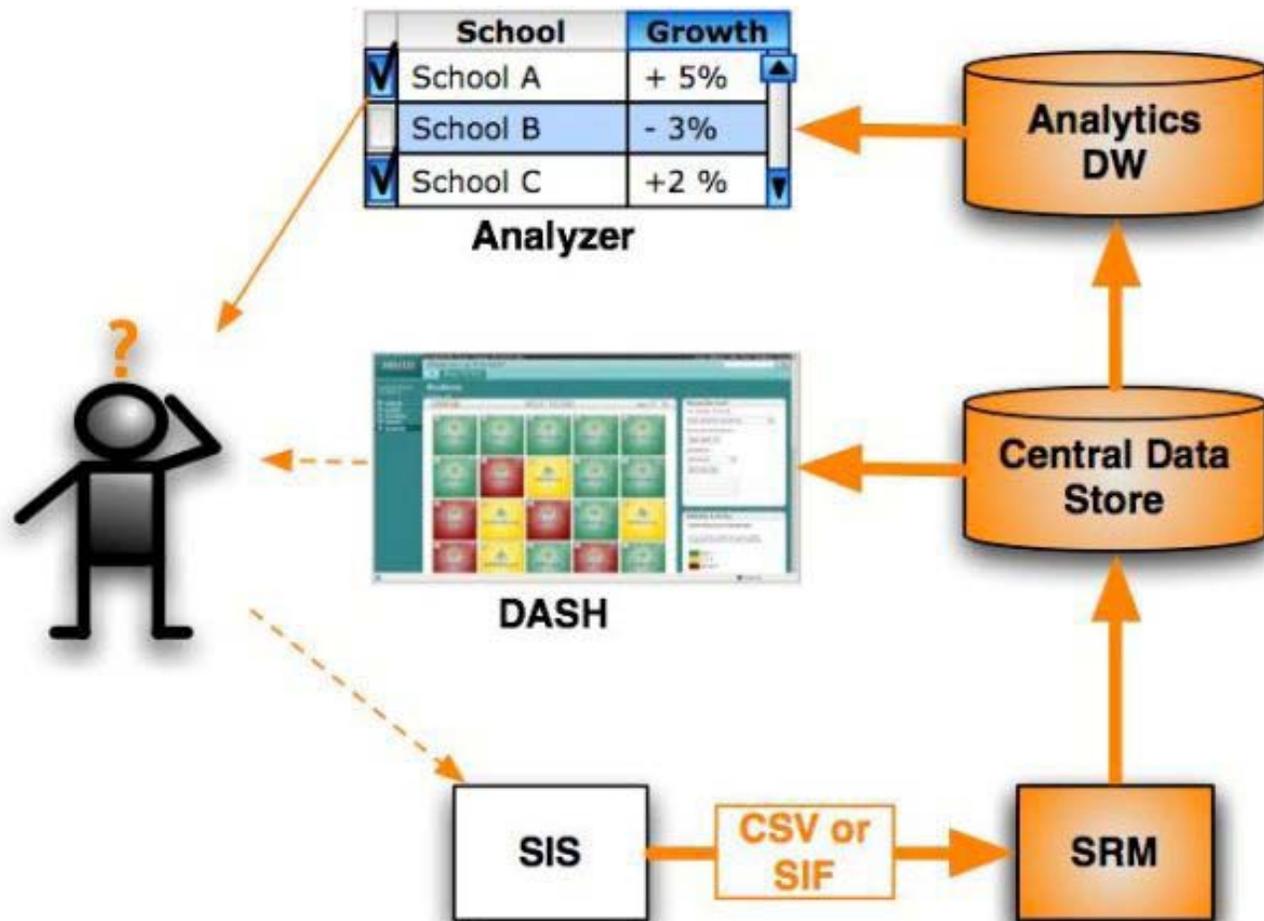
RI Data Flow

TetraData's DASH

Collection Issues

- **Ability of LEA's to provide data**
- **Varying definitions of common terms**
  - – "school," "student"
- **LEA concerns about data they provide will be used,**
  - – Undocumented alien addresses/statuses
- **Varying data quality depending on districts and data sets**
- **Data Reporting requirements exceed limited LEA resources**
- **New data collection system added issues that needed resolution**
- **SIF upstart issues**

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Storage Issues

- **Central Data Repository**
- **Creating a system that address everyone's needs**
- **Ease of use**
- **Importing existing data into new warehouse**
- **Analysis that can be run against it**

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Usage Issues

- Reporting capabilities of system
- Security of information – role-based access to data
- After initial success, limited acceptance and use for analysis
- Political implications of possible reports such as ranking
- Who gets to define indicators
- Limitations on reporting as a result of available data

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Actually, no!

- Resource limitations
  - System people also data people also program people
- Change in people's routines

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The overwhelming lesson from the RIDE CEIS DW project is not about technology. Rather, it is about the complexity of the issues surrounding the collection, storage and usage of data.

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Next Steps

Build on foundation created by initial phase

Take a step back to the original drivers for the project

The technology portion is now in place

Need to incorporate the human elements to move towards our true goal: To give educators the information they need to help each student achieve their potential. We shouldn't settle for anything else!

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