Leaving a Breadcrumb Trail on the Path to Data Quality
Presenters

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Tony Ruggiero, IDEA Data Center
Rachel Wilkinson, IDEA Data Center
Scott Norton, Illinois State Board of Education
Have You Ever Asked…

• Where can I find the trail of data quality?
• How did that data get here?
• Will we ever find our way through the data quality forest?
Business Rules Are…

The breadcrumbs guiding you through the woods…

…and the next frontier in data process documentation.
What to Expect Today

• A brief overview of the role of business rules
• An introduction to IDC’s Business Rules Documentation Protocol
• Sharing of state experiences with business rules
• Small group discussion and reflection on next steps
What Do We Mean by Business Rules?

- Sometimes called “edit checks”
- Logic used to validate data
- Strategy for improving data quality
- Often automated
Ways Business Rules Help Improve Data Quality

- Prevent
- Detect
- Repair
Documenting Business Rules
Why Document Business Rules?

• Ensure common understanding about data requirements
• Improve communication with those submitting data
• Confirm automated business rules are working properly
• Increase transparency with internal and external stakeholders
• Provide data users insight into the quality of the data
Beneficial Outcomes of Documentation

• Ensures consistency
• Provides early detection of potential data issues
• Streamlines postsubmission data processing and validation
• Increases confidence in data used for decisionmaking and results-driven accountability
Other Best Practices

- Create a business rules repository
- Conduct annual reviews and updates
- Create process documentation
- Create data flow diagrams
- Create documentation repositories with versioning (examples: SharePoint, Huddle, Box)
IDC’s Business Rules Documentation Protocol
IDC’s Business Rules Documentation Protocol

• Is an Excel template that states can modify to meet their needs
• Is used to document, record, and communicate business rules
• Includes a change log to track changes over time
Business Rules Documentation Elements

- Rule ID
- Data elements
- Edit type or severity
- Error message
- Error definition or logic
- Topic or content area

- Data steward
- Date first implemented
- Approval required (Y/N)
- Notes
Change Log Elements

- Rule ID
- Date revised
- Revised by
- Changed from
- Changed to
- Reason for change
How IDC Can Help

IDC will help facilitate the process by
• Organizing in-person meetings
• Asking directed questions
• Serving as recorder to document the protocol
• Highlighting areas for further discussion
• Following up to maintain protocol
State Example: Business Rules Documentation in Illinois
Determination of Need

• Data discrepancies among Report Card, 616 data, and 618 data
• Data ownership—review of data prior to submission
• Division of duties for data provisioning
• Risk management—business continuity desired
• Data consistency desired
Approach

• Internal SEA resolution
• IDC resolution—Data Processes Toolkit/Business Rules
• SEA Special Education Data Governance (SEDG)
• SEDG monthly meeting—Issue Log and Accountability
• SEDG in place for 3 or more years—still going strong
Participants

- IDC resources (2–4 people)
- Special education executive director (SEA)
- Special education director (SEA)
- IDEA Part B State Performance Plan (SPP) and State Systemic Improvement Plan (SSIP) coordinator (SEA)
- IDEA Part B data manager (SEA)
- Information technology (IT) resources (employees and contractor) (SEA)
- SEA data governance resource
Outcome

• SPP Indicator Business Rules finalized in 2019
• EDFacts, EMAPS, and Significant Disproportionality Business Rules completed and under review
• Next step identified: Get technical specifications from IT
• Process for annual updates defined
• Data consistency and presubmission approval achieved
Questions?
Small Group Discussions

Create triads and discuss in your small group

- Has your state documented business rules for any data collections? If yes, what were the benefits?
- How do you feel documenting business rules would help your state?
- What are your goals for documentation of business rules?
- If you were to start documenting business rules for a data collection, which rule would it be and why?
  - Who should be at the table to document business rules for the data collection you selected?
- How might documentation of business rules fit in with data process documentation?
Where to Find the Business Rules Documentation Protocol

Located on the SEA Data Processes Toolkit page of IDC’s website:
https://ideadata.org/sea-data-processes-toolkit
Contact Us

Tony Ruggiero, tony.ruggiero@aemcorp.com
Rachel Wilkinson, rachelwilkinson@westat.com
Scott Norton, SNORTON@isbe.net
For More Information

Visit the IDC website
http://ideadata.org/

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**Project Officers:** Richelle Davis and Rebecca Smith