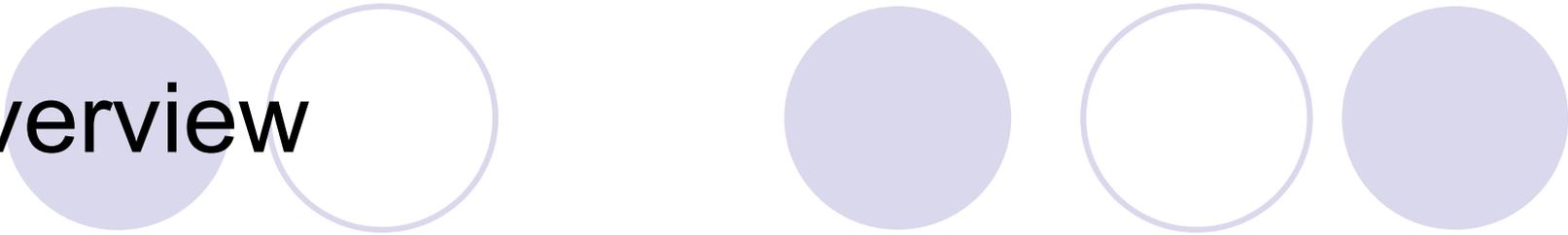


# **Using XBRL to Reengineer a Data Collection and Collaboration Process**

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IASSIST Conference May 2008

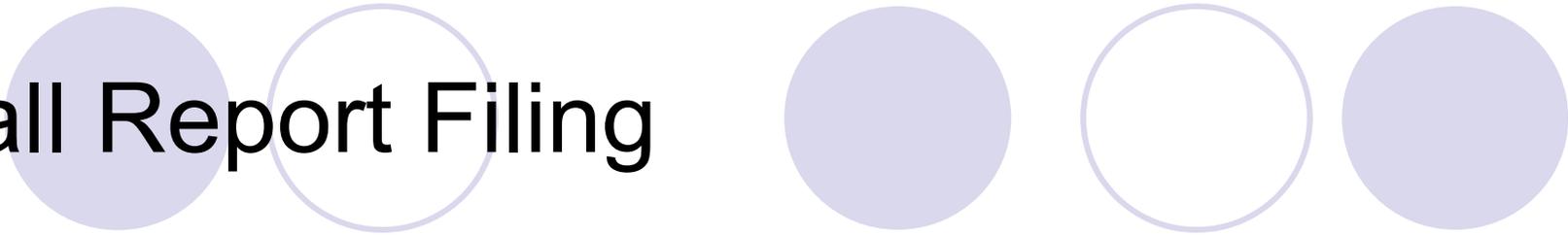


# Overview

In 2003, three U.S. banking regulatory agencies combined resources to modernize the collection, editing, storage, and dissemination of Commercial Bank Reports of Income and Condition.

- Historical Process and Business Problems
- Evolution of Technology
- Modernized Process
- Benefits of Standardization
- XBRL

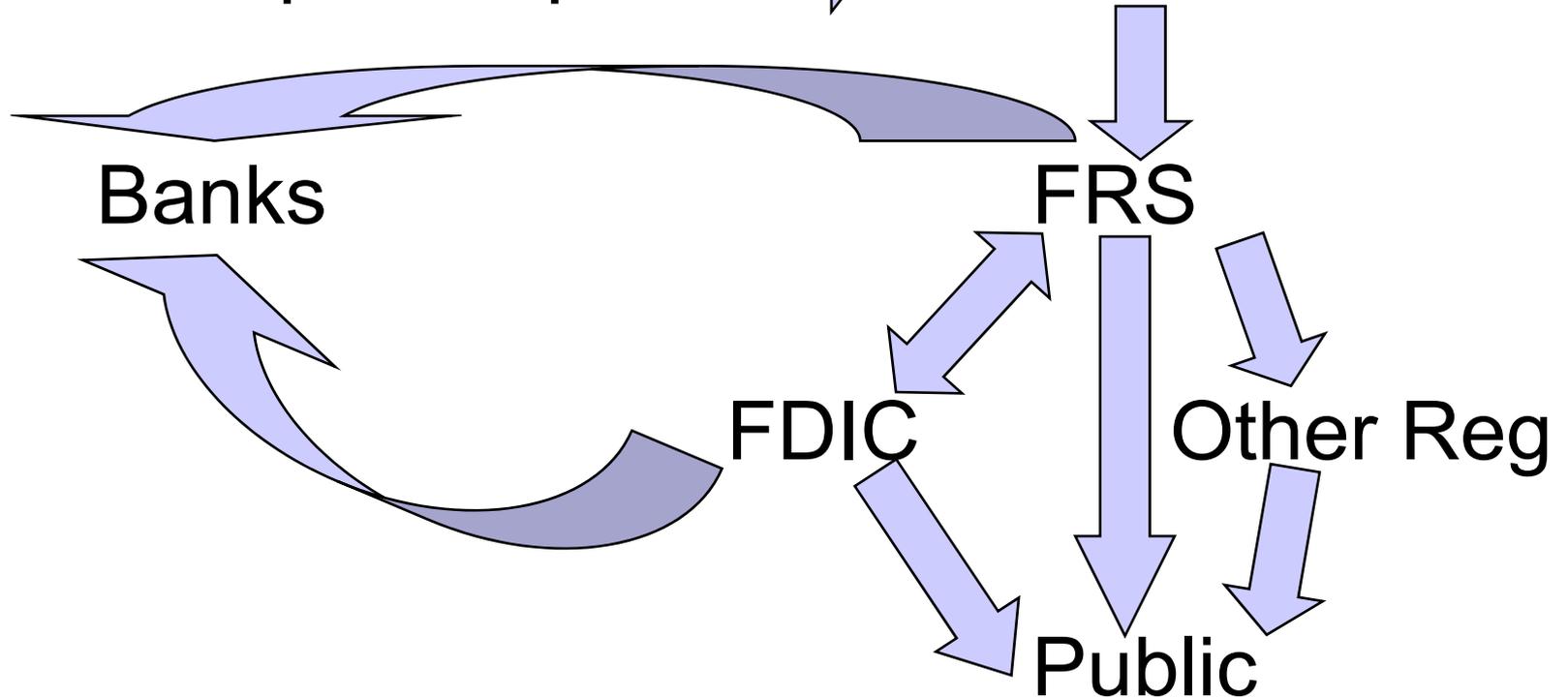
# Call Report Filing



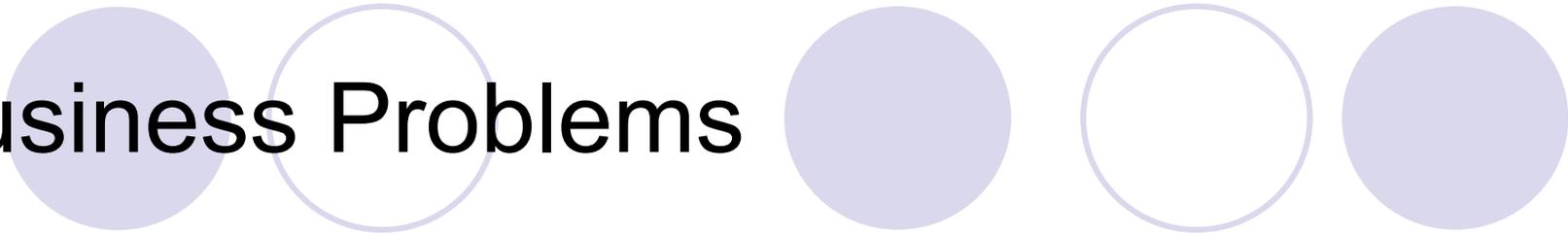
- Three U.S. bank regulators coordinate to collect financial statement data from 8,000 banks
- Over 2,000 variables are collected from each bank
- Reports are filed quarterly
- Extensive rules regarding what and how to report

# Historical Collection Model

Bank compiles report → Collection Vendor

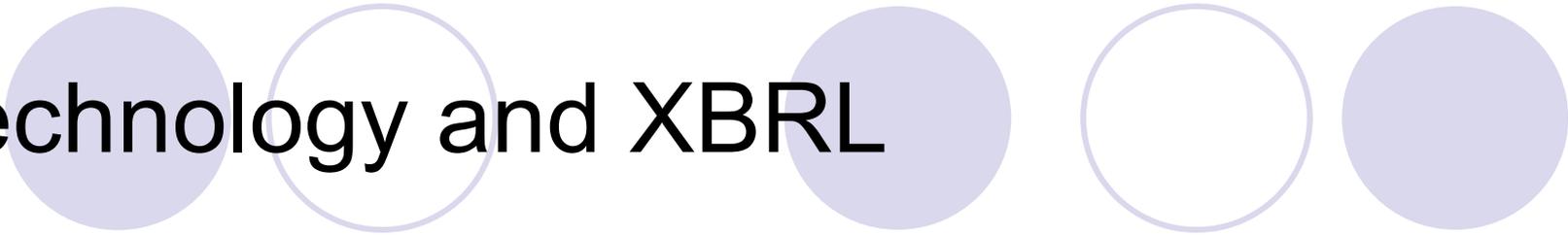


# Business Problems



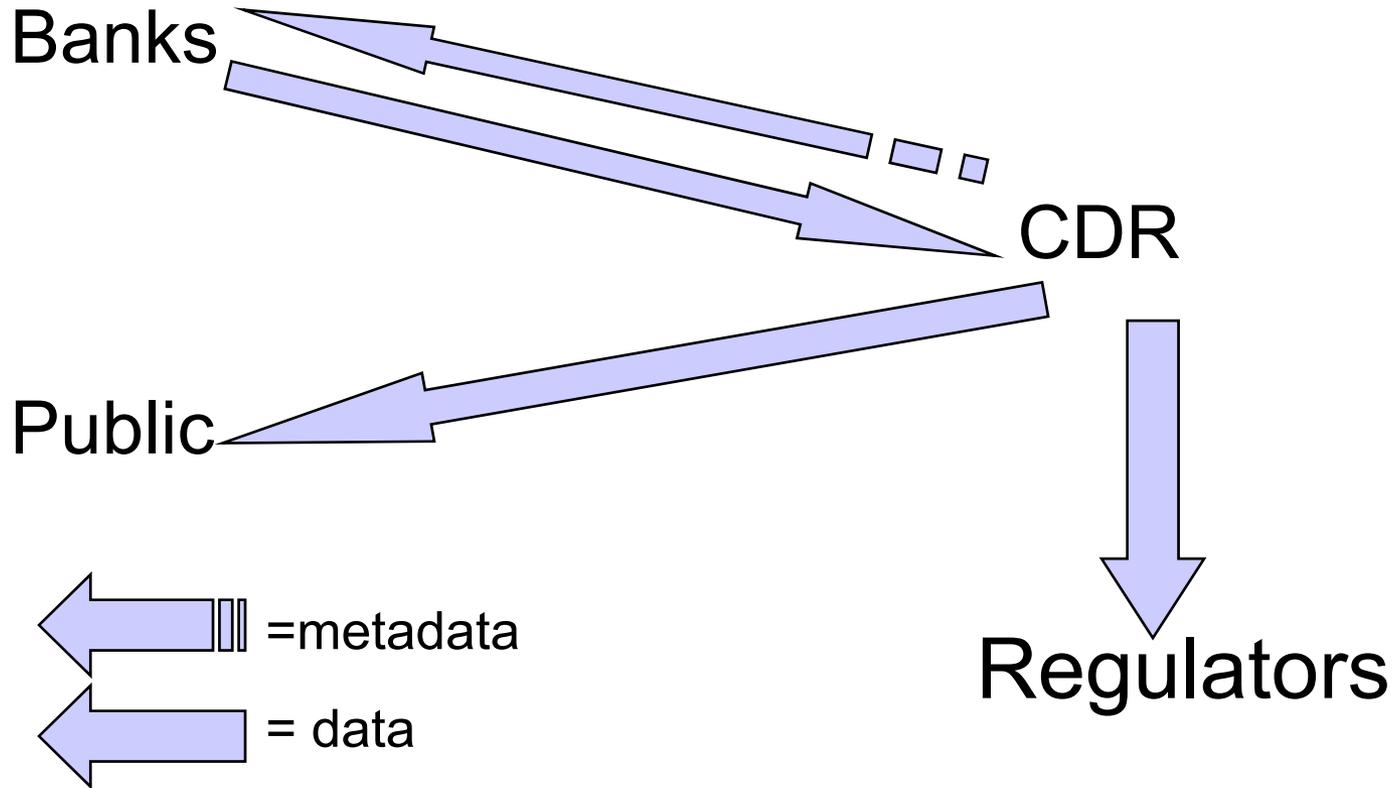
- Maintaining multiple collection and storage sites
  - Keeping data revisions between the agencies in synch
  - Transmitting data between agencies
  - Publishing different data due to timing differences or communication breakdowns
- Disseminating changes to the report collection
  - Communicated changes in PDF, Word, Federal Register
  - Each regulator, bank, and software vendor had to compile and translate the changes into their collection or reporting systems
- Improving data quality is always good
  - Editing was performed weeks at the data were compiled
  - Edits were not uniform between agencies

# Technology and XBRL



- Before 1995 data were transmitted over direct communication lines or by swapping tapes or discs.
- In 1995 the internet achieved common acceptance and static reports could be published.
- Late 1990s XML evolves to common use.
- Beginning in 1998 XBRL marries new technology with business rules and practices.

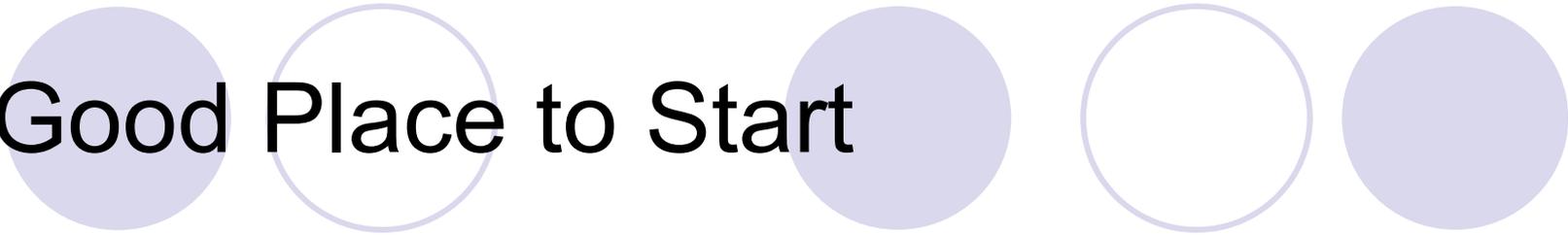
# Call Modernization (New Collection Model)



# Call Modernization (New Collection Model)

## Problems Solved

- Maintaining multiple collection and storage sites
  - All regulators, the public, and banks pull data from the same repository
  - Redundant collection and editing applications eliminated
- Disseminating changes to the report collection
  - Metadata that are machine readable are distributed
- Improving data quality is always good
  - Edits are resolved before the bank files the Call report
  - Data submissions with edit failures are rejected
  - Data anomalies are answered when the data are compiled rather than after the fact
  - Uniform edits across regulators



# A Good Place to Start

XBRL was a good fit for the Call report because:

- Financial statement data
- Existing metadata (FRS' MDRM)
- Highly structured reports with quantifiable rules

# Protocol vs. Custom Built

## Protocol Pluses

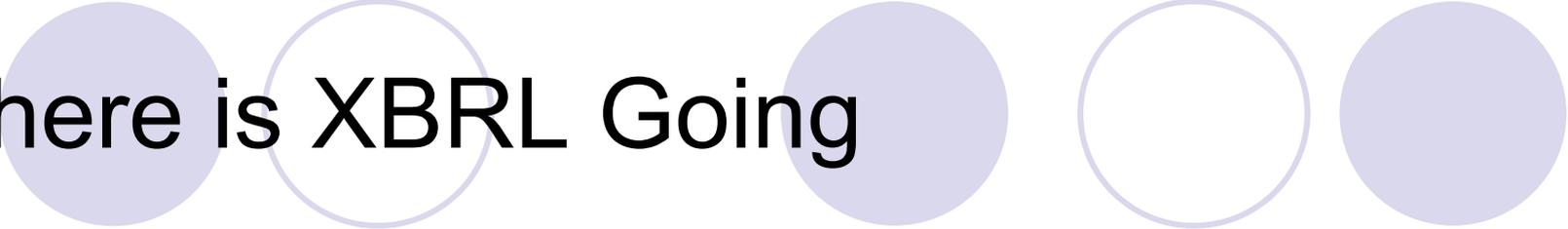
- Required metadata
  - E.g. is deposit an asset or liability
- Standards
  - Hardware requirements
  - Software requirements
- Others can use the standardized data

## Custom Pluses

- Don't have to follow standards when they aren't convenient
  - Call data could have been transmitted in thousands of dollars rather than dollars as required by XBRL

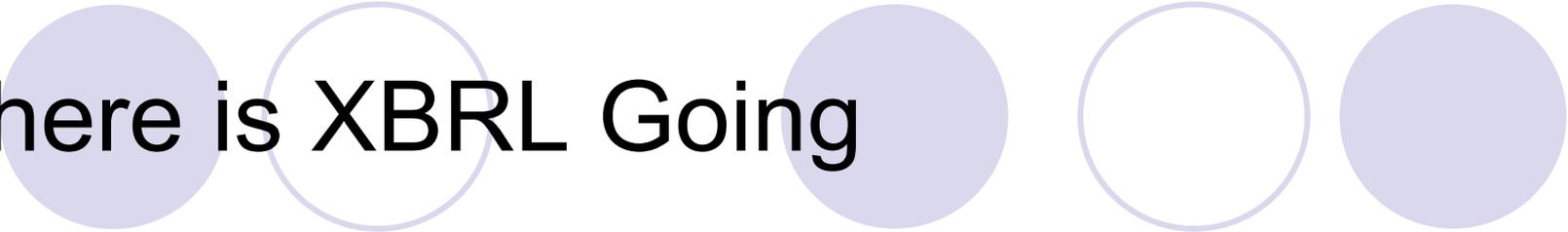


# Where is XBRL Going



- Academic Research - Standardization
  - Standardized data leads to better financial decisions
  - Accounting standards allow the same information to be represented different ways
    - E.g. stock option compensation can be in the financial statement or disclosed in a footnote.
  - When the data are standardized across firms investors make better informed decisions
- XBRL provides data standardization

# Where is XBRL Going



- Academic research – Timeliness
  - In theory real time data flows lead to better fair market valuation and asset pricing
  - However psychological factors resulting from real time data can exacerbate price volatility
  - Optimal frequency for financial data reporting needs further research
- XBRL enables any reporting frequency



# Additional Collection Efforts

1. The Australian Prudential Regulation Authority (APRA) to collect data from Australia's super funds, insurers, and banks,
2. The U.K Inland Revenue Services,
3. The Bank of Japan to gather data from financial institutions in February of 2006.
4. Japan's Financial Services Agency's launch of the Electronic Disclosure for Investors' NETwork (EDINET) system in March of 2008,
5. The Netherlands' data collection process for corporate tax, business financial, and business statistical data in 2007.
6. US Generally Accepted Accounting Practices (GAAP) and The International Accounting Standards Committee (IASC) taxonomies.
7. SEC voluntary program for reporting financial information on the agencies EDGAR system started in February of 2005. Their Financial Explorer website was launched in February of 2008.

# Conclusion



- There is a sustained need for faster, better, and easier data in the financial industry.
- Governments and regulators have an ongoing desire to improve the efficiency of data collection and consumption.
- Improved data flows may also help to improve market efficiencies, as they rely on current and accurate data.
- Although the need and desirability of financial data reporting on a continuous basis is debatable, the current technological environment of XBRL facilitates that option.
- Using the evolving technology while enforcing compliance with transmission protocol standards may take our information highway to destinations that we are currently unable to envision.