System Design and Integration: The Flexibility of ABS in a Multi-Mode Survey Approach

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Innovative solutions in research and technology

Presentation Outline

Background

Telephone Challenges / Solutions

System Integration Challenges / Solutions

Take-Away Points

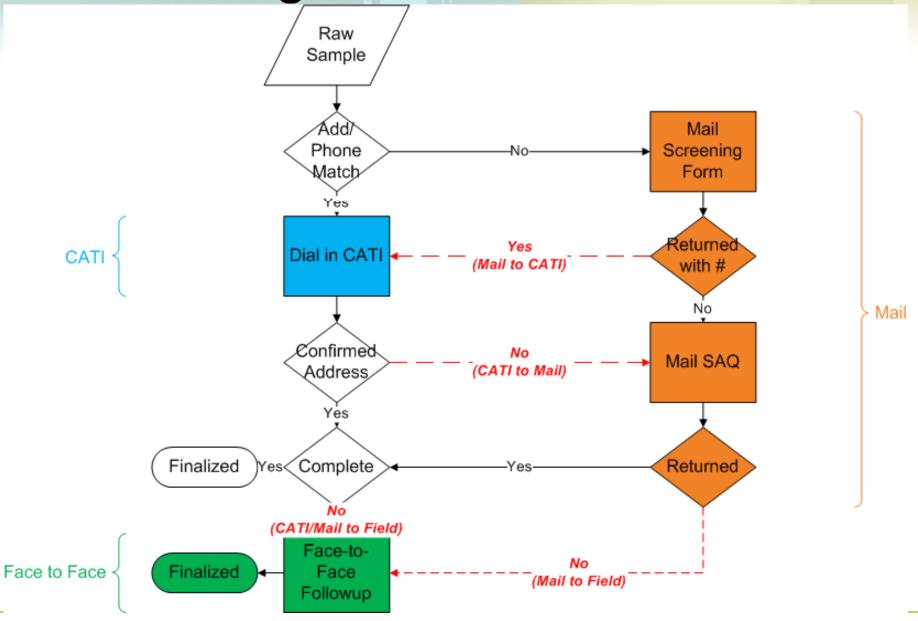
Background: Intro to ABS

- ABS = Address-Based Sampling
 - Frame: U.S. Postal Service addresses

Historically Used for Field Work

- Alternative to RDD
 - Adapted using reverse look-up

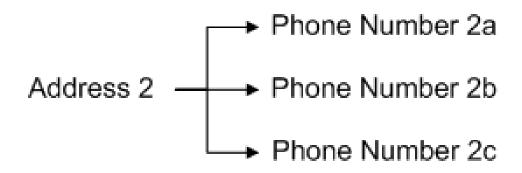
Background: Case Flow



Challenges: Telephone Number Management

Matching

Address 1 — →



Address 3 — → Phone Number 3a

Solutions: Telephone Matching

- Maintained One Number in CATI
 - Prevented complications
 - Improved flexibility
- Business Rules Prioritized Numbers
 - Swamped new number into CATI as needed
 - Managed nightly
- CATI Managed Live Updates

Challenges: System Integration

System Choice

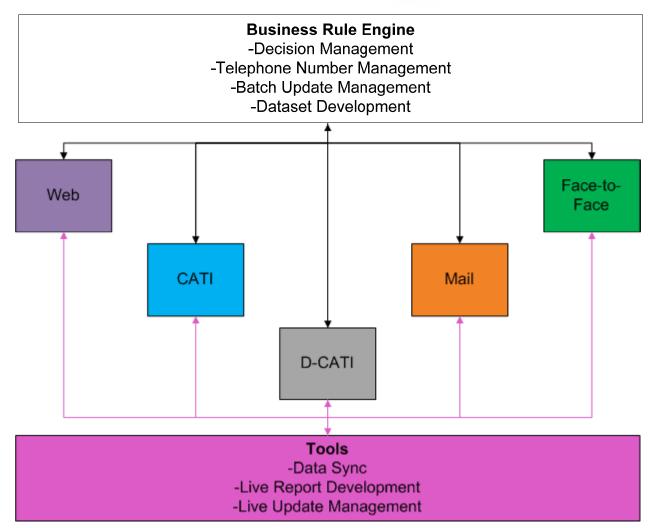
- Data Syncing and Swapping
 - Business rule management
 - Resource restrictions and data volume
 - Data overlap

Solutions: System Choice

- Best of Breed
 - High volume CATI plus CAPI, Mail
 - No adequate alternative for size
 - Flexibility to add web or D-CATI
- Share data and status among systems



Solutions: Business Rule Management



Solutions: Resources and Volume

- Conduct scalability tests to reveal limits in excess of project requirement
- Preprocess large batches
 - e.g., initial sample load
- Batch Nightly Updates
 - Ad-hoc live updates available
- Optimize software, hardware, network

Solutions: Data Overlap

- Business Rule Engine settles common overlaps
 - Ex: Respondent reported phone number beats locating phone number
- Tools Provide Overlap Reports
- Manual Fixes
 - Tools allow one-off fixes
 - Business Rule Engine updated for global rule changes

Take-Away Points

Understand Full Scope and Requirements

Collaborate with IT

Adapt Existing Technology



Thank You

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