



The iPad[®] Computer-Assisted Personal Interview System – A Revolution for In-Person Data Capture?

November 6, 2013

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2013 FCSM Conference
Washington, DC

Presentation Outline



- iPad® Computer-Assisted Personal Interview (iCAPI) System
- iCAPI in the Field
- iCAPI Evaluating Results/Project Takeaways
- Is iCAPI Right for Your Project?
- Looking Ahead



iPad® Computer-Assisted Personal Interview System (iCAPI)



- iCAPI (i·kap·e), *n.*

- An iPad® data collection tool that replaces traditional pencil and paper methods

- Potential Advantages

- No printing costs
- No data entry/scanning
- Improved data quality
- GPS navigation capabilities
- Real time quota tracking
- Increased data security

- Anticipated Challenges

- Field viability (ex: battery life, weather conditions, etc.)
- Increased interview time
- Increased programming time
- Training
- Device security
- Connectivity

iCAPI In the Field



■ Fisheries Pilot Tests

- Large-scale intercept survey of recreational saltwater anglers
- Beaches, docks, marinas



■ Pennsylvania Water Trails Survey

- Economic impact study of designated Water Trails
- River access points

■ Context Scan Study (Pricing Component)

- Observation of geographic access to specific food and promotion of healthy and less healthy foods
- Grocery stores and convenience stores



Pilot Tests – Fisheries Intercept

Goal - Determine feasibility of iCAPI for large-scale fisheries intercept survey, including suitability for field conditions, impact on data quality, and cost.



Pilot Test Phase I: Observational Data

- Tested – Functionality
- Data collected
 - Fishing site descriptions
 - Vessel observations
- 1st Generation iPad®
- Web-based survey, SPSS Dimensions

Pilot Test Phase II: Catch Data

- Tested - Productivity (Cost)
 - Interviews per assignment
- Data collected
 - Selecting fish species
 - Recording number of fish
 - Recording weights/lengths
 - Grouped catch
- 1st Generation iPad®
- Custom Apple app

Pennsylvania Water Trails Economic Impact Study



Goal - Estimate the direct, indirect and induced economic impact of water trail visitors on Pennsylvania's economy.



Method - Expenditure survey conducted through intercept interviews at randomly selected access sites.

- 6 weeks of data collection during summer months
- Remote, rural and urban locations



Mode - In-person interviews using iCAPI data collection via a customized application with 2nd generation iPads®.

- 7 iCAPI local interviewers
- Collected 350 in-person interviews

Context Scan Study – Pricing Component



Goal – Assess the availability, pricing and promotion of healthy/less healthy food items

Method – Observation at 450 sampled grocery and convenience stores.

- 15 awardee communities in the National Evaluation of CDC's Community Transformation Grant Program
- 30 stores per community (12 grocery, 18 convenience)
- 15 weeks of data collection
- Remote, rural and urban locations



Mode - In-person observation using iCAPI data collection via Askia Software application with 2nd generation iPads®.



Evaluating Results

Quantitative – Fisheries Pilots

iPad® performed as well or better than paper:

- Interviews per assignment
- Recording number of fish
- Recording fish length and weight
- Number of errors



Qualitative – All Projects

Praise for the iPad®

- Easy to use
- Ability to withstand field conditions

Criticism of iPad®

- Glare
- Speed
- Difficulty holding the iPad®
- Typing



iCAPI Project Takeaways - Benefits



- Performance
 - Demonstrated field durability
 - Instant data transfer
 - Secure data storage if connection is lost
 - Improved communication and navigation in the field
 - Efficient supervision of staff with real-time communication, iPad® tracking
 - Staff enthusiasm
- Improved data quality
 - Survey program reduced interviewer error
- Project cost savings
 - Printing/postage costs (also greener!)
 - Data entry costs
 - Staff time to investigate and resolve possible errors

iCAPI Project Takeaways - Drawbacks



- Project cost
 - Initial cost of iPads® and accessories
 - Data plan for 3G connectivity
 - Programming
- Hardware limitations
 - Glare
 - Typing



Is iCAPI Right for Your Project?



- iCAPI cost effectiveness ultimately depends on layers of scale
 - Project scope
 - iPad® survey development and programming
 - Timeline of future iCAPI projects
- Geographic location and connectivity can be a driver for iCAPI survey design
 - Web-based survey vs. custom application
 - Survey environment
 - Data Plan vs. Wi-Fi
- Intangibles
 - Will an interviewer with an iPad® increase respondent curiosity/response rate?
 - Will green technology appeal?
 - Increase interviewer engagement?



Looking Ahead – Rapidly Changing Market

■ Hardware

- Cheaper tablets and tablet technology has become available
- Does the depreciation of the iPad® or other tablet technology present a cost-prohibitive driver for expanded use?

■ Software

- Will off-the-shelf survey development software provide capability to design effective, tailored instruments?
- Programming across a large variety of hardware - Apple vs. Android





Questions?

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